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Publishing and Promotion in Economics: The Tyranny of the Top Five

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Online Appendix for Publishing and Promotion in Economics: The Tyranny of the Top Five

James J. Heckman & Sidharth Moktan

Monday 17th September, 2018

Contents

1	Data	4
1.1	Roster of Tenure-Track Hires	4
1.2	Work Histories	5
1.3	Estimation of Tenure Decisions	6
1.4	Publication and Citation Histories	14
1.4.1	Python Script For Scraping Data from Scopus.com	15
1.4.2	Categorizing the Journals	19
1.4.3	Evolution of Publication Portfolios	20
2	Estimating the Probability of Receiving Tenure	22
2.1	Linear Probability Model	22
2.1.1	Sensitivity of LPM Estimates to Specification of Control Variables	25
2.2	Logit Estimates of the Probability of Receiving Tenure During First Spell of Tenure-Track Employment	27
2.3	Probability of Tenure Receipt By The 7 th Year of Tenure-Track Employment	32
2.4	Heterogeneity in Probability of Receiving Tenure By Gender	39

2.4.1	The Power of the T5 By Quality of T5 Publications	44
3	Duration Analysis of Time-to-Tenure	45
3.1	Pooled Estimates of Hazard Rates and Time-to-Tenure	45
3.2	Heterogeneity in Relative Hazards By Department Rank	50
3.3	Heterogeneity in Relative Hazards By Gender	54
3.4	Heterogeneity in Time-to-Tenure By Gender	57
4	Sensitivity of Estimates To Treatment of Finance Journals	57
4.1	Sensitivity of LPM Estimates to Treatment of Finance Journals	58
4.2	Sensitivity of Logit Estimates to Treatment of Finance Journals	63
4.3	Sensitivity of Hazard Estimates To Treatment of Finance Journals	67
5	Sensitivity of Estimates To Treatment of Econometrics Journals	71
5.1	Sensitivity of LPM Estimates to Treatment of Econometrics Journals	71
5.2	Sensitivity of Logit Estimates to Treatment of Econometrics Journals	74
5.3	Sensitivity of Hazard Estimates To Treatment of Econometrics Journals	78
6	“Top Five” As a Filter of Quality	80
6.1	Comparison of Citations Between T5 and non-T5 Journals	80
6.2	Impact Factors For Economics and Science Journals	88
6.2.1	Sensitivity of Impact Factors to Citation Year	90
6.3	Where Influential Economists Publish	94
6.4	Journals That Are Most Cited By the Top Journals of Different Fields	102
6.5	The Forgotten (by the Top 5) Classics	105
6.6	Differences in T5 Citations By Gender	111
7	Survey	115
7.1	Response Rates	115
7.2	Data Description	115

7.3 Survey Instrument	123
8 Growing Size of the Profession and Declining Acceptance Rates	131

1 Data

1.1 Roster of Tenure-Track Hires

The roster of tenure-track hires were constructed using publicly available historical snapshots of department webpages archived by [WayBackMachine](#). An individual is categorized as a tenure-track faculty if he/she holds the position of Assistant or Associate Professor¹. Using yearly snapshots of faculty registries for each department, we obtain complete records of new hires for approximately 96% of the total department-year cells. Data on the remaining ~4% of department-year cells were not archived by [WayBackMachine](#).

Online Appendix Table [O-A1](#) presents department- and year-specific tallies of tenure-track hires, sorted by the total number of hires made by each department over the period 1996–2010. The 35 departments hired a total of 866 tenure-track faculty over the 15 year period, with a mean hiring rate of 1.6 faculty per department per year. The minimum and maximum number of yearly hires by any department over the entire period was 0 and 7 faculty per year respectively.

¹Full Professors are categorized as tenured faculty. All other positions including postdoctoral positions, clinical professorships, adjunct professorships, and other research positions are categorized as non-tenure track, and individuals who have only held these positions are excluded from the analysis.

Table O-A1: Tally of New Tenure-Track Appointments by Department and Year

	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	Total	Mean	Min	Max
1. Princeton	4	1	6	3	2	4	2	3	1	3	0	5	3	0	0	37	2.5	0	6
2. UCLA	1	2	2	0	4	3	1	3	2	1	4	5	5	1	0	34	2.3	0	5
3. NYU	1	1	0	1	6	4	0	1	1	4	0	4	5	4	1	33	2.2	0	6
4. Stanford	0	1	3	6	1	1	4	1	2	1	5	4	1	1	2	33	2.2	0	6
5. Duke	2	1	3	1	3	3	4	2	1	1	2	3	1	3	2	32	2.1	1	4
6. Michigan	1	3	1	2	3	1	3	1	0	4	3	5	4	1	0	32	2.1	0	5
7. UPenn	1	2	4	1	1	3	1	3	2	2	2	1	2	4	3	32	2.1	1	4
8. Wisconsin	1	3	2	0	4	2	0	1	3	4	3	5	2	1	0	31	2.1	0	5
9. Virginia	2	3	1	3	4	3	0	1	4	0	5	1	3	1	0	31	2.1	0	5
10. Northwestern	2	1	1	2	4	3	1	2	4	0	2	2	2	2	1	29	1.9	0	4
11. Yale	1	5	0	1	2	2	1	2	4	1	1	4	0	4	1	29	1.9	0	5
12. Columbia	0	1	4	4	1	3	0	5	2	3	0	1	4	0	0	28	1.9	0	5
13. Harvard	1	1	0	2	5	1	1	2	2	7	1	0	3	1	1	28	1.9	0	7
14. UCSD	3	0	0	2	1	0	3	4	4	2	2	4	3	0	0	28	1.9	0	4
15. Cornell	0	2	1	2	2	5	1	7	1	0	0	3	0	1	2	27	1.8	0	7
16. Carnegie Mellon	4	0	1	2	3	0	2	1	1	3	1	2	1	2	4	27	1.8	0	4
17. Rochester	1	1	3	1	2	2	0	1	2	2	2	3	2	2	2	26	1.7	0	3
18. UT-Austin	0	0	6	2	0	2	1	2	4	1	3	2	1	2	0	26	1.7	0	6
19. MIT	2	1	1	3	1	2	2	1	3	2	1	1	2	2	1	25	1.7	1	3
20. Boston University	1	1	0	2	2	2	1	1	1	6	0	2	2	4	0	25	1.7	0	6
21. University of Illinois	2	1	0	4	3	1	2	2	1	3	0	4	1	0	0	24	1.6	0	4
22. Berkeley	2	1	0	0	3	0	2	3	4	1	1	1	1	4	0	23	1.5	0	4
23. Brown	0	0	3	1	1	0	3	2	2	4	1	1	2	1	2	23	1.5	0	4
24. Ohio State	4	0	0	1	3	2	1	0	3	0	1	2	2	0	3	22	1.5	0	4
25. Chicago	2	0	2	4	3	2	2	2	0	3	0	2	0	0	0	22	1.5	0	4
26. Maryland	1	0	2	1	2	1	1	0	1	1	2	4	4	0	0	20	1.3	0	4
27. UNC	0	2	1	1	1	3	1	0	0	2	1	0	5	0	1	18	1.2	0	5
28. Penn State	0	1	2	0	0	1	3	1	1	0	3	0	3	0	3	18	1.2	0	3
29. Michigan State University	0	0	0	1	3	2	3	0	2	1	2	1	3	0	0	18	1.2	0	3
30. Minnesota	0	1	1	0	4	1	1	0	1	0	0	5	3	0	0	17	1.1	0	5
31. Boston College	0	1	1	2	0	2	1	3	0	0	1	1	2	2	1	17	1.1	0	3
32. UC Davis	3	1	0	1	0	1	2	1	1	1	1	1	2	2	0	17	1.1	0	3
33. WUSTL	0	2	0	1	1	1	0	2	1	0	0	0	3	1	0	12	0.8	0	3
34. Johns Hopkins	0	2	1	1	1	0	0	0	1	0	0	2	0	0	3	11	0.7	0	3
35. Caltech	0	0	0	0	0	0	1	1	1	2	1	0	1	1	2	10	0.7	0	2
Total	42	42	52	58	76	63	51	61	63	65	51	81	78	47	35	865	.	.	.
Mean	1.2	1.2	1.5	1.7	2.2	1.8	1.5	1.7	1.8	1.9	1.5	2.3	2.2	1.3	1.0	.	1.6	.	.
Min	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	.	.	0	.
Max	4	5	6	6	6	5	4	7	4	7	5	5	5	4	4	.	.	.	7

Note: This table presents department- and year-specific counts for tenure-track appointments made by the Top 35 departments over the time period 1996–2010. The right hand side of the table presents summary statistics for each department computed over the entire period 1996–2010. The bottom section of the table presents summary statistics for each year, aggregating the hiring tallies over all of the 35 universities. The statistics at the bottom-right corner of the table aggregate over all departments and years.

1.2 Work Histories

Work histories for the sample of tenure-track faculty were primarily constructed using publicly-available CVs hosted in departmental webpages or personal faculty webpages. When the information provided by CVs was incomplete, we supplemented the data with information from other public sources of work-history information including [LinkedIn](#) profiles and yearly faculty registries archived by [WayBackMachine](#). The data collection yielded yearly

information for the following fields: employer name (names of university and non-university employers), department name, and position title. Further, the data collection also yielded information on the following fields for educational background: name of PhD granting institution, and year of graduation.

1.3 Estimation of Tenure Decisions

We rely on multiple sources of publicly available information to estimate tenure decisions. The source of information used to assign tenure status varies by individual, and depends on the type of tenure-relevant information that is available for the individual in question.

Table O-A2 presents detailed explanations for the seven tenure assignment strategies used in our construction of tenure decisions. The assignment strategies can broadly be categorized as Most Reliable or Less Reliable based on the quality of information employed by the assignment strategy. Strategies 1–5 in Table O-A2 comprise our set of Most Reliable strategies. The first four strategies – CV, Rank-Tenure Correspondence, Official Records, and Midpoint– rely on sources of information that allow us to confirm whether tenure was conferred. The fifth strategy – Conditional Exit – uses a decision process similar to that of Sarsons (2017) to assign tenure status based on job switches, conditional on the individual not having received tenure according to strategies 2 and 3. Conditioning on the outcome of strategies 2 and 3 substantively differentiates this strategy from the unconditional strategy used in Sarsons (2017), since the conditioning prevents us from incorrectly assigning tenure denial to individuals who exited to industry or to lesser-ranked departments following the receipt of tenure at their initial institution. The remaining strategies 6–7 in Table O-A2 comprise our set of Less Reliable strategies. These strategies are categorized as less reliable because they utilize information that does not confirm tenure conferral, and thus requires us to make additional assumptions when assigning tenure. These assumptions are outlined in Table O-A2.

Online Appendix Table O-A3 presents department-level tallies for the number of

tenure assignments made for Associate Professors according to each of the seven strategies². The most reliable strategies account for 100% of the assignments for 20 of the 35 departments (approximately 60% of the departments). Among the remaining 15 departments, the most reliable strategies account for at least 70% of assignments across 9 departments, and for at least 50% of assignments across 5 departments.

²The tally excludes assignments made to Assistant and Full Professors because tenure can be assigned to these individuals based on their job titles without uncertainty.

Table O-A2: Strategies of Tenure Assignment

Assignment Strategy	Description
1. CV	CVs for some individuals explicitly state tenure status and year of tenure receipt. When available, this information is used to determine tenure status.
2. Rank-Tenure Correspondence	For 8 of the 35 departments, we assign tenure based on the title of Associate Professor. In these departments, tenure status shares a 1:1 correspondence with the rank of Associate Professor (i.e., either all Associate Professors are tenured or they are not). Promotion to Associate Professor definitively implies either the conferral or non-conferral of tenure.
3. Official Records	17 of the 35 departments in our study publicly announce tenure conferral. Announcements are generally made via minutes of meetings held by Board of Trustees, Regents, Provosts and/or the President's office; via campus-wide newsletters; or through departmental newsletters. When available, tenure is assigned to individuals according to the date of tenure receipt specified in the announcement.
4. Midpoint	Relevant when strategies 1–3 are inapplicable: This strategy assigns tenure during the midpoint of an individual's employment as Associate Professor, if the individual was promoted from Associate to Full Professor within the same department. This strategy assumes that all Full Professors are tenured, which implies that individuals who are promoted to Full Professor within the department must have received tenure during or before their promotion to Full Professor. In the absence of information on the date of tenure conferral, this strategy assumes that tenure was granted at the midpoint between the start of employment as Associate and Full Professor (i.e., midpoint of employment as Associate Professor).
5. Conditional Exit	Relevant for the 25 departments where either strategy 2 or 3 above is applicable: This strategy assumes an Associate Professor did not receive tenure at the original department if he/she exits the original department during years 6-8 of academic employment to join either (i) another department that is ranked at least 5 point lower than the original department, or (ii) an industry position, conditional on the individual not having received tenure according to strategies 2 and 3.
6. Clock	Relevant when strategies 1–5 are inapplicable: Assign tenure if an individual continues to be employed as an Associate Professor for 11 or more years (3 years following the end of the average tenure clock of 8 years) at a single institution. We wait for 3 years following the end of the tenure clock before assigning tenure in order to allow for tenure clock stoppages/extensions for unobserved circumstances such as pregnancies. Individuals who move to new departments are assigned renewed tenure clocks that start at zero at the beginning of new employment.
7. Unconditional Exit Sarsons (2017)	Relevant when strategies 1–6 are inapplicable: This strategy assumes an Associate Professor did not receive tenure at the original department if he/she exits the original department during years 6-8 of academic employment to join either (i) another department that is ranked at least 5 point lower than the original department, or (ii) an industry position. Note that this strategy does not condition on tenure information from prior years since none of the strategies 1–6 are applicable.

Note: This table presents the 7 strategies that are used to determine the tenure status of tenure-track faculty during each year of tenure-track employment. Each strategy relies on publicly available sources of information.

Table O-A3: Tally of Tenure Assignments at Rank of Associate Professor by Assignment Strategy

	Most Reliable Strategies (%)												Other Strategies (%)					
	CV		rankTenure		Records		Midpoint		condExit		Total		Clock		uncondExit		Total	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1. MIT	4	14%	0	0%	25	86%	0	0%	0	0%	29	100%	0	0%	0	0%	0	0%
2. Princeton	2	33%	0	0%	4	67%	0	0%	0	0%	6	100%	0	0%	0	0%	0	0%
3. Harvard	0	0%	17	89%	0	0%	0	0%	2	11%	19	100%	0	0%	0	0%	0	0%
4. Stanford	6	46%	0	0%	6	46%	0	0%	1	8%	13	100%	0	0%	0	0%	0	0%
5. Berkeley	11	48%	12	52%	0	0%	0	0%	0	0%	23	100%	0	0%	0	0%	0	0%
6. Northwestern	5	42%	0	0%	7	58%	0	0%	0	0%	12	100%	0	0%	0	0%	0	0%
7. UPenn	2	12%	0	0%	14	88%	0	0%	0	0%	16	100%	0	0%	0	0%	0	0%
8. Minnesota	0	0%	0	0%	5	83%	1	17%	0	0%	6	100%	0	0%	0	0%	0	0%
9. Michigan	1	6%	0	0%	15	94%	0	0%	0	0%	16	100%	0	0%	0	0%	0	0%
10. Wisconsin	0	0%	0	0%	15	100%	0	0%	0	0%	15	100%	0	0%	0	0%	0	0%
11. UCSD	1	7%	14	93%	0	0%	0	0%	0	0%	15	100%	0	0%	0	0%	0	0%
12. UCLA	6	35%	11	65%	0	0%	0	0%	0	0%	17	100%	0	0%	0	0%	0	0%
13. Maryland	9	47%	10	53%	0	0%	0	0%	0	0%	19	100%	0	0%	0	0%	0	0%
14. Johns Hopkins	2	100%	0	0%	0	0%	0	0%	0	0%	2	100%	0	0%	0	0%	0	0%
15. UT-Austin	1	12%	3	38%	4	50%	0	0%	0	0%	8	100%	0	0%	0	0%	0	0%
16. Ohio State	1	8%	0	0%	11	92%	0	0%	0	0%	12	100%	0	0%	0	0%	0	0%
17. Virginia	0	0%	0	0%	14	100%	0	0%	0	0%	14	100%	0	0%	0	0%	0	0%
18. UC Davis	1	6%	15	94%	0	0%	0	0%	0	0%	16	100%	0	0%	0	0%	0	0%
19. Michigan State University	0	0%	0	0%	14	93%	0	0%	1	7%	15	100%	0	0%	0	0%	0	0%
20. Boston College	1	17%	0	0%	5	83%	0	0%	0	0%	6	100%	0	0%	0	0%	0	0%
21. NYU	1	12%	0	0%	0	0%	6	75%	0	0%	7	88%	0	0%	1	12%	1	12%
22. WUSTL	0	0%	0	0%	6	86%	0	0%	0	0%	6	86%	1	14%	0	0%	1	14%
23. Duke	10	38%	0	0%	2	8%	9	35%	0	0%	21	81%	1	4%	4	15%	5	19%
24. Cornell	3	30%	0	0%	0	0%	4	40%	1	10%	8	80%	0	0%	2	20%	2	20%
25. Rochester	5	50%	0	0%	0	0%	3	30%	0	0%	8	80%	0	0%	2	20%	2	20%
26. Brown	4	44%	0	0%	0	0%	3	33%	0	0%	7	78%	1	11%	1	11%	2	22%
27. University of Illinois	2	17%	0	0%	6	50%	1	8%	0	0%	9	75%	2	17%	1	8%	3	25%
28. UNC	4	50%	0	0%	1	12%	1	12%	0	0%	6	75%	1	12%	1	12%	2	25%
29. Chicago	3	43%	0	0%	0	0%	2	29%	0	0%	5	71%	0	0%	2	29%	2	29%
30. Boston University	0	0%	0	0%	7	54%	2	15%	0	0%	9	69%	1	8%	3	23%	4	31%
31. Caltech	2	33%	0	0%	0	0%	2	33%	0	0%	4	67%	0	0%	2	33%	2	33%
32. Penn State	3	60%	0	0%	0	0%	0	0%	0	0%	3	60%	1	20%	1	20%	2	40%
33. Columbia	13	48%	0	0%	0	0%	1	4%	1	4%	15	56%	0	0%	12	44%	12	44%
34. Carnegie Mellon	8	44%	0	0%	0	0%	1	6%	0	0%	9	50%	1	6%	8	44%	9	50%
35. Yale	3	16%	0	0%	0	0%	3	16%	0	0%	6	32%	0	0%	13	68%	13	68%

Note: This table presents tallies for tenure-status assignments made according to each of the seven strategies described in Table O-A2. For each strategy, the table presents department-specific counts (#) and shares (%) of assignments that were made according to the strategy in question. Strategies are categorized into either a “Most Reliable” or “Other” group. The “Total” columns present aggregate tallies for assignments made according to all of the strategies under the “Most Reliable” or “Other” groups.

Table O-A4 presents the percentage of tenure-track faculty who received tenure during the first spell of tenure-track employment, as well as the percentages of tenure-track faculty who exited to other employment destinations at the end of the first spell of tenure-track employment. Movements to other employment destinations are categorized as follows: (i) downward moves are defined as movements to departments ranked at least 5 points lower than the original department³, (ii) upward moves are defined as movements to departments ranked at least 5 points higher than the original department, (iii) lateral moves are defined as movements to departments within 5 ranks of the original department, and (iv) industry moves are defined as movements to non-academic jobs. This categorization scheme is used throughout the paper.

Table O-A4: % of Tenure-Track Faculty By Tenure Outcome At End of First Spell of Tenure-Track Employment

<u>Departments</u>	<u>Tenured</u>	<u>Exit Without Tenure</u>			
		<u>Down</u>	<u>Lateral</u>	<u>Up</u>	<u>Industry</u>
1. T1–T5	26 %	46 %	21 %	0 %	7 %
2. T6–T15	30 %	40 %	13 %	8 %	9 %
3. T16–T25	27 %	31 %	10 %	16 %	13 %
4. T26–T35	31 %	33 %	6 %	15 %	14 %

Note: This table presents the percentage of tenure-track faculty who were either tenured or who exited without tenure to one of four destination-types.

³Departments are ranked based on an average of the 2008, 2010, and 2015 US News rankings for US Economics departments. The rankings are presented in Online Appendix Table O-A8

Table O-A5: Summary Statistics for Length of First Tenure-Track Employment By Tenure Outcome

Departments	Exit Without Tenure									
	Tenured		Down		Lateral		Up		Industry	
	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.	Mean	s.d.
1. T1-T5	5.6	2.0	6.1	1.9	4.0	1.7			5.8	2.2
2. T6-T15	5.4	2.6	5.9	2.1	4.6	2.8	3.7	1.7	6.4	1.5
3. T16-T25	6.1	3.0	5.9	2.2	4.7	2.5	4.0	2.4	6.1	2.5
4. T26-T35	7.0	2.9	5.4	2.6	5.3	2.1	3.5	2.2	4.7	1.8

Note: This table presents summary statistics for the length of first tenure-track employment by tenure outcome. The statistics are calculated for seven different rank-based groupings of departments.

Table O-A6: % of Tenure-Track Faculty By Tenure Outcome At the End of the Second Spell of Tenure-Track Employment (For Individuals Who Experienced a Second Spell)

Departments	Exit Without Tenure				
	Tenured	Down	Lateral	Up	Industry
1. T1-T5	34 %	50 %	5 %	0 %	8 %
2. T6-T15	54 %	27 %	2 %	11 %	4 %
3. T16-T25	49 %	27 %	6 %	14 %	4 %
4. T26-T35	50 %	23 %	2 %	16 %	7 %

Note: This table presents the percentage of tenure-track faculty who were either tenured or who exited without tenure to one of four destination-types.

Table O-A7: Estimated % of Tenure-Track Faculty By Tenure Outcome, By Department Over all Spells of Tenure-Track Employment

		Exit Without Tenure				
		Tenured	Down	Lateral	Up	Industry
		%	%	%	%	%
1.	Chicago	18 %	58 %	15 %	0 %	3 %
2.	MIT	42 %	42 %	5 %	0 %	0 %
3.	Harvard	18 %	54 %	15 %	0 %	9 %
4.	Princeton	26 %	57 %	7 %	0 %	7 %
5.	Stanford	24 %	42 %	11 %	0 %	13 %
6.	Berkeley	54 %	18 %	7 %	14 %	0 %
7.	Yale	18 %	42 %	10 %	5 %	8 %
8.	Northwestern	31 %	40 %	10 %	2 %	10 %
9.	UPenn	38 %	38 %	3 %	3 %	5 %
10.	Columbia	31 %	51 %	4 %	4 %	6 %
11.	Michigan	38 %	40 %	2 %	10 %	4 %
12.	Minnesota	30 %	25 %	10 %	5 %	25 %
13.	NYU	26 %	21 %	5 %	13 %	10 %
14.	Wisconsin	35 %	38 %	0 %	16 %	5 %
15.	UCSD	45 %	17 %	3 %	31 %	3 %
16.	UCLA	28 %	26 %	4 %	23 %	13 %
17.	Caltech	33 %	25 %	17 %	17 %	0 %
18.	Cornell	28 %	31 %	6 %	8 %	14 %
19.	Carnegie Mellon	30 %	19 %	5 %	19 %	14 %
20.	Duke	43 %	20 %	11 %	9 %	4 %
21.	Brown	19 %	29 %	3 %	10 %	16 %
22.	Rochester	17 %	42 %	8 %	11 %	3 %
23.	Maryland	44 %	29 %	6 %	12 %	6 %
24.	Johns Hopkins	14 %	21 %	7 %	14 %	14 %
25.	Boston University	31 %	34 %	0 %	17 %	6 %
26.	UT-Austin	23 %	37 %	7 %	20 %	3 %
27.	Penn State	12 %	35 %	6 %	18 %	12 %
28.	Ohio State	42 %	25 %	0 %	12 %	12 %
29.	Virginia	40 %	31 %	0 %	6 %	17 %
30.	WUSTL	31 %	31 %	6 %	19 %	6 %
31.	University of Illinois	36 %	24 %	0 %	24 %	12 %
32.	UNC	28 %	44 %	0 %	6 %	11 %
33.	UC Davis	68 %	16 %	0 %	16 %	0 %
34.	Michigan State University	50 %	20 %	0 %	10 %	5 %
35.	Boston College	18 %	26 %	4 %	18 %	22 %

Note: This table presents department-level percentages of tenure-track faculty who were either tenured or who exited without tenure to one of four destination-types. The percentages are computed over all tenure-track faculty hired by the departments, and includes tenure-track faculty at different spells of employment.

Table O-A8: Ranking of Departments

<u>Rank</u>	Department	US News Rankings			
		2008	2010	2015	Average (2008-15)
1	Chicago	1	1	1	1.00
1	MIT	1	1	1	1.00
3	Harvard	3	1	1	1.67
3	Princeton	3	1	1	1.67
5	Stanford	3	5	5	4.33
6	Berkeley	3	6	5	4.67
7	Yale	7	6	7	6.67
8	Northwestern	8	8	7	7.67
9	UPenn	9	9	9	9.00
10	Columbia	11	10	10	10.33
11	Michigan	11	12	13	12.00
11	Minnesota	15	10	11	12.00
13	Wisconsin	11	14	13	12.67
13	NYU	15	12	11	12.67
15	UCSD	10	14	15	13.00
16	UCLA	11	14	15	13.33
17	Caltech	17	14	15	15.33
18	Cornell	17	18	18	17.67
19	Carnegie Mellon	20	19	19	19.33
20	Brown	21	19	19	19.67
20	Duke	21	19	19	19.67
22	Rochester	19	22	22	21.00
23	Maryland	21	22	22	21.67
24	Johns Hopkins	24	25	24	24.33
24	Boston University	25	24	24	24.33
26	UT-Austin	25	25	26	25.33
27	Penn State	28	27	27	27.33
28	Ohio State	28	28	27	27.67
29	Virginia	27	28	30	28.33
30	WUSTL	36	28	27	30.33
30	University of Illinois	28	31	32	30.33
32	UC Davis	28	34	32	31.33
32	UNC	28	34	32	31.33
34	Michigan State University	34	31	30	31.67
35	Boston College	36	31	32	33.00

Note: This table presents the ranking used in the analysis. The first three columns of rankings presents US News rankings for the years 2008, 2010, and 2015 respectively. The last column presents an average of the three rankings. The first column labelled Rank ranks the departments using the average rank computed in the last column. The analysis groups departments based on Rank.

1.4 Publication and Citation Histories

We use data from [Scopus.com](https://www.scopus.com)⁴ to construct publication and citation profiles for the faculty in our sample. Citations are cumulative over time and were collected as of December 2017. Publication and citations data are automatically extracted from Scopus using a Python script that interacts directly with the Elsevier API.⁵ The extraction yields data on article title, journal name, author names, date of publication, and citations for articles published on or after 1996. The data extracted from Scopus is linked with the author-year level work-history data using unique author identifiers assigned by Scopus to each author in its database. Data linkage requires us to manually assign the unique Scopus identifiers to each author in the work-history data. We make the manual assignments by first submitting a search query in Scopus for each author using their full name. We then compare the publications listed under the author profiles returned by Scopus with publications listed in the author's CV or personal website to identify the returned search results that are associated with the author of interest. If we confirm that an author profile belongs to the author of interest, we assign the identifier associated with the confirmed author profile to the author in the work-history data. This manual search and assignment process allows us to distinguish between authors within our sample who share the same name and prevents us from erroneously assigning articles published by out-of-sample authors who have the same names as our authors of interest.

⁴The data was downloaded from the Scopus API between November 2016 and August 2018 via <http://api.elsevier.com> and <http://www.scopus.com>.

⁵Code for the web scraper is available at Online Appendix Section [1.4.1](#).

1.4.1 Python Script For Scraping Data from Scopus.com

C:\Users\smoky\Desktop\pullArticlesByAuthorId_forPrinting.py

Friday, August 3, 2018 9:04 PM

```
import csv
import requests
from lxml import html
import lxml.etree as etree
import lxml.etree as etree
import os
import time
from collections import OrderedDict

klmMexico = os.path.expandvars('$klmMexico')
JournalNetworks = klmMexico+'Sidharth/JournalNetworks/tenureCriteria'
os.chdir(JournalNetworks)

scopusAuthorID = open('pulledArticlesByAUID.csv','wb')
writer = csv.writer(scopusAuthorID)
writer.writerow(['authorname', 'Author ID', 'year', 'article eid',
'citationcount', 'page', 'title', 'journal', 'issn', 'outlettype',
'researchchtype'])

authCounter = 1

rowfill = OrderedDict()

reader = csv.reader(open('articleScrapeList.csv'))
for row in reader:
    start = time.time()
    START=0
    artCount = 2
    while START<artCount:

        link =
        'http://api.elsevier.com/content/search/scopus?query=AU-ID('+str(row[1]).
        strip()+')&view=STANDARD&count=200&start='+str(START)
        req2 = requests.get(link, headers
        ={'Accept':'application/xml','X-ELS-APIKey':'XXXXXXXXXXXXXXXXXXXXXXXXXXXX
        XX'})
        tree2 = html.fromstring(req2.content)

        #print etree.tostring(tree2, pretty_print = True)

        iterator_article = tree2.xpath('count(//search-results//entry)')

        print 'author# ', authCounter, 'numArticle: ', iterator_article
        print 'authorProg: ',

        artCounter = 0
        for article in range(1,int(iterator_article)+1):
            TITLES =
            tree2.xpath('//search-results//entry['+str(article)+']/title/text()')
            titles = ",".join(TITLES)
            Titles = titles.encode('ascii','ignore').strip()

            JOURNAL =
            tree2.xpath('//search-results//entry['+str(article)+']/publicationnam
```

-1-


```
e/text()')
journal = ",".join(JOURNAL)
Journal = journal.encode('ascii','ignore').strip()

ISSN =
tree2.xpath('//search-results//entry['+str(article)+']/issn/text()')
issn = ",".join(ISSN)
Issn = issn.encode('ascii','ignore').strip()

COVERDATE =
tree2.xpath('//search-results//entry['+str(article)+']/coverdate/text()')
coverdate = ",".join(COVERDATE)
coverDate = coverdate.encode('ascii','ignore').strip()
year = coverDate[0:4]

EID =
tree2.xpath('//search-results//entry['+str(article)+']/eid/text()')
eid = ",".join(EID)
Eid = eid.encode('ascii','ignore').strip()

CITATION =
tree2.xpath('//search-results//entry['+str(article)+']/citedby-count/text()')
citation = ",".join(CITATION)
citationCount = citation.encode('ascii','ignore').strip()

PAGE =
tree2.xpath('//search-results//entry['+str(article)+']/pagerange/text()')
page = ",".join(PAGE)
Page = page.encode('ascii','ignore').strip()

OUTLET =
tree2.xpath('//search-results//entry['+str(article)+']/aggregationtype/text()')
outlet = ",".join(OUTLET)
Outlet = outlet.encode('ascii','ignore').strip()

TYPE =
tree2.xpath('//search-results//entry['+str(article)+']/subtypedescription/text()')
type = ",".join(TYPE)
Type = type.encode('ascii','ignore').strip()

AFILLINK =
tree2.xpath('//search-results//entry['+str(article)+']/link[@ref="author-affiliation"]/@href')
afillink = ",".join(AFILLINK)
afillink = afillink.encode('ascii','ignore').strip()

req3 = requests.get(afillink, headers
={ 'Accept': 'application/xml', 'X-ELS-APIKey': '29bd3a045f583292475042af6a60228e' })
```

```

tree3 = html.fromstring(req3.content)

fullID = OrderedDict()
authorIterator = tree3.xpath('count(//authors//author)')
for ai in range(1,int(authorIterator)+1):
    GIVENNAME =
    tree3.xpath('//authors//author['+str(ai)+']/given-name/text()')

    givenname = ",".join(GIVENNAME)
    givenName = givenname.encode('ascii','ignore').strip()

    SURNAME =
    tree3.xpath('//authors//author['+str(ai)+']/surname/text()')

    surname = ",".join(SURNAME)
    surName = surname.encode('ascii','ignore').strip()

    AUID = tree3.xpath('//authors//author['+str(ai)+']/@auId')
    auId = ",".join(AUID)
    auID = auId.encode('ascii','ignore').strip()

    fullID['Name'+str(ai)] = givenName + ' ' + surName
    fullID['auId'+str(ai)] = auID

#print afName
rowfill["authorname"] = row[0]
rowfill["auId"] = row[1]
rowfill["year"] = year
rowfill["eid"] = Eid
rowfill["cite"] = citationCount
rowfill["page"] = Page
rowfill["title"] = Titles
rowfill["journal"] = Journal
rowfill["issn"] = issn
rowfill["outletType"] = Outlet
rowfill["type"] = Type
rowfill.update(fullID)

writer.writerow(rowfill.values())

rowfill.clear()

artCounter = artCounter+1

if artCounter%10==0: print ".",
if artCounter%50==0: print "+",

ARTCOUNT = tree2.xpath('//search-results//totalresults/text()')
artcount = ",".join(ARTCOUNT)
if artcount == "": artCount=0
else: artCount = int(artcount.encode('ascii','ignore').strip())

START = START+200

```

```
authCounter = authCounter+1

end = time.time()-start
print '    time elapsed:', end, 'articles count: ', artCount
```

1.4.2 Categorizing the Journals

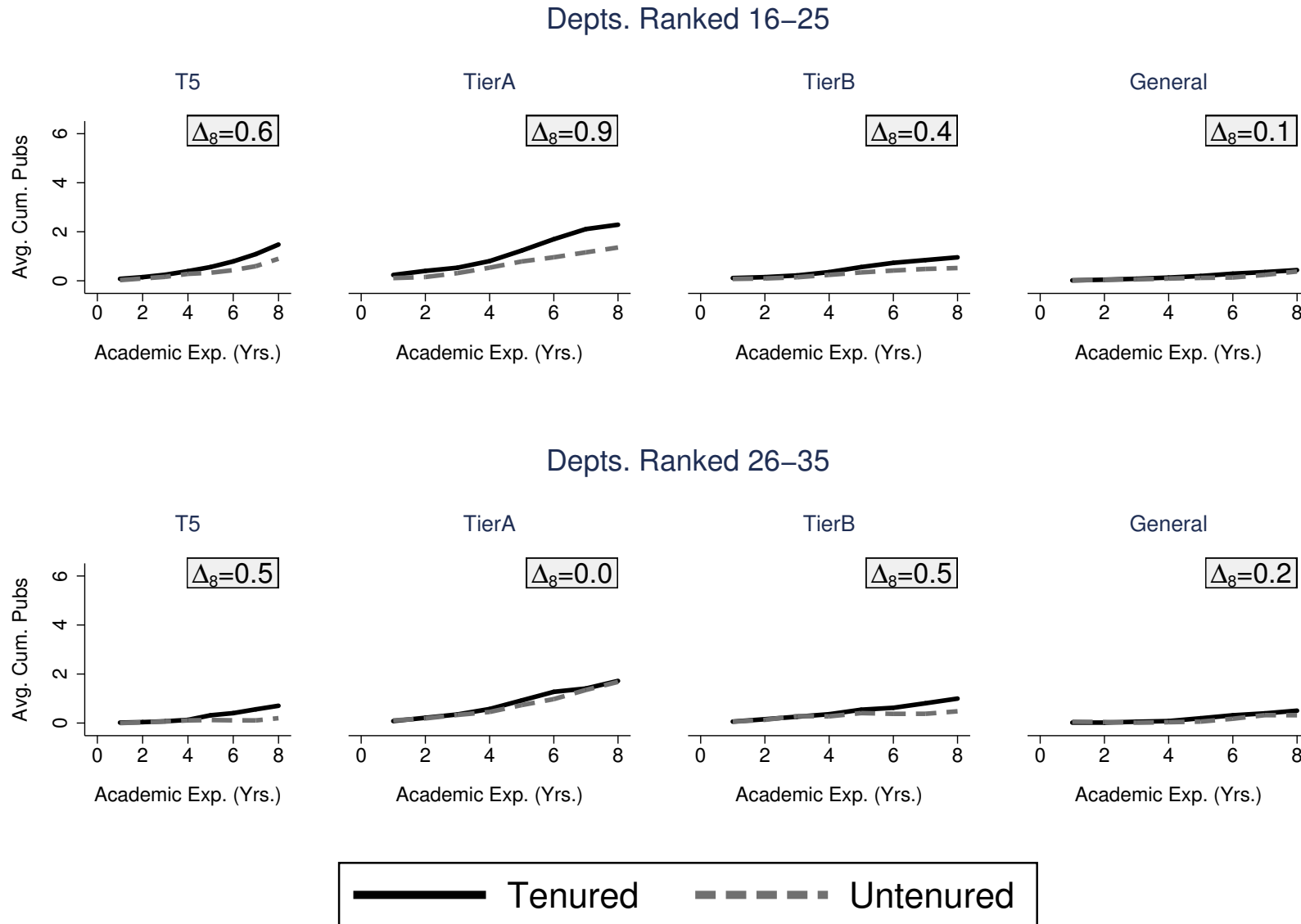
Table O-A9: Categorization of Journals Into Quality-Specific Groups

T5	Non-T5 General
American Economic Review	Review of Economics and Statistics
Econometrica	Economic Journal
Journal of Political Economy	Journal Of The European Economic Association
Quarterly Journal of Economics	European Economic Review
Review of Economic Studies	International Economic Review
Tier A Field	Tier B Field
Journal of Development Economics	World Development
Journal of Economic Growth	Economic Development and Cultural Change
	World Bank Economic Review
Journal of Econometrics	Journal of Applied Econometrics
Journal of Business and Economic Statistics	Econometric Theory
	Journal of the American Statistical Association
Journal of Financial Economics	Review of Financial Studies
Journal of Finance	Journal of Financial and Quantitative Analysis
	Mathematical Finance
Journal of Economic Theory	Journal of Economic Behavior and Organization
Games and Economic Behavior	Economic Theory
	Journal of Risk and Uncertainty
Journal of Health Economics	Health Services Research
Health Economics	Int. Journal of Health Care Finance and Economics
	Economics and Human Biology
RAND Journal of Economics	International Journal of Industrial Organization
Journal of Industrial Economics	Journal of Economics and Management Strategy
	Industrial and Corporate Change
Journal of Labor Economics	Labour Economics
Journal of Human Resources	Industrial and Labor Relations Review
	Industrial Relations
Journal of Monetary Economics	Journal of Economic Dynamics and Control
Journal of Money, Credit and Banking	Review of Economic Dynamics
	Macroeconomic Dynamics
Journal of Public Economics	National Tax Journal
Public Choice	Review of Income and Wealth
	Int. Tax and Public Finance

Note: This table presents the categorization of journals used in the empirical analysis. Field journals are categorized into Tier A and Tier B based on field-specific journal rankings provided in [Combes and Lin-nemer \(2010\)](#). Tier A consists of the two highest-ranked journals in the fields of Development, Econometrics, Finance, Microeconomics/Game Theory, Health Economics, Industrial Organization, Labor Economics, Macroeconomics, and Public Economics. Tier B is composed of journals ranked 3 to 5 in the same fields. The general interest category includes the 5 highest ranked non-T5 general interest journals.

1.4.3 Evolution of Publication Portfolios

Figure O-A1: Evolution of Average Publication Portfolios By Tenure Outcome and by Departmental Ranks



Note: The figures plot the evolution of average publications in four different journal categories by tenure outcome. The plotted means are calculated over tenure-track faculty hired by departments belonging to the referenced department rank-group. Δ_8 denotes differences in average cumulative publications as of year 8 between the tenured and untenured groups.

2 Estimating the Probability of Receiving Tenure

We first specify our linear probability model and then we report estimates from it.

2.1 Linear Probability Model

In this appendix, we report estimates from a Linear Probability Model (LPM). In the main text, we report logit estimates. We estimate the following equation:

$$Tenure_i = \alpha_0 + \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j_i \geq n) \right) + \mathbf{X}\boldsymbol{\beta} + \varepsilon_i \quad (1)$$

$Tenure_i$ is an indicator for receiving tenure by the end of the first spell of tenure-track employment; $\mathcal{J} = \{T5, TierA, TierB, General\}$; $\mathbb{1}(\#j_i \geq n)$ is an indicator variable denoting whether i has n or more publications in journals of type- j by the end of the first spell, where $j \in \mathcal{J}$; \mathbf{X} is a vector of controls that includes a 3rd degree polynomial for years of tenure-track experience, as well as controls for gender, quality of alma mater, department fixed effects, total number of unique co-authors across all articles published in the first spell, the total number of citations received by author i across all articles published in the first spell, and a control for total volume of publication $\ln(\#Total\ Publications+1)$.⁶

Parametrizing the tenure-publication relationship using threshold indicators instead of publication counts allows for the detection of potential non-linearities in the tenure-publication relationship. The coefficient α_j^n on the publication indicator $\mathbb{1}(\#j_i \geq n)$ represents the increase in the probability of receiving tenure associated with increasing one's type- j publications from $n - 1$ to n units:

$$\alpha_j^n = Pr[Tenure \mid \#j_i = n, \mathbf{X}] - Pr[Tenure \mid \#j_i = n - 1, \mathbf{X}]. \quad (2)$$

⁶Table O-A12 gives LPM results for robustness to specification of \mathbf{X} . Removing one element of \mathbf{X} in each iteration while replacing the element that was removed in the previous iteration. The pattern of statistical significance for the publication parameters are almost identical across all specifications.

The sum of coefficients α_j^1 , α_j^2 , and α_j^3 represents the increase in the probability-of-tenure associated with increasing one’s type- j publications from 0 to 3 or more units:

$$\alpha_j^1 + \alpha_j^2 + \alpha_j^3 = Pr[Tenure \mid \#j_i = 3, \mathbf{X}] - Pr[Tenure \mid \#j_i = 0, \mathbf{X}]. \quad (3)$$

Estimates of the parameters of (1) are reported in Table O-A10. The pooled results are obtained by estimating the LPM over the entire sample, and the department rank-specific estimates are obtained by estimating the LPM over sub-samples restricted to only include faculty whose first spell of tenure-track employment occurred in a department that belongs to the rank-based department grouping of interest. Among the pooled estimates, the probability of tenure is most strongly associated with publishing in the “Top Five” journals. Each level of “Top Five” publication is associated with an increase in tenure probability that is statistically significant at the 5% level. Faculty with one, two, and three or more “Top Five” publications face tenure probabilities that are 0.14, 0.34, and 0.54 higher respectively than faculty who never publish in the “Top Five”. Publications in other outlets are less precisely estimated and do not demonstrate consistent increases in tenure probabilities over the three levels of publications.

Table O-A10: Linear Probability Model Estimates For Tenure Receipt During the First Spell of Tenure-Track Experience

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.04)	0.03	(0.06)	0.15	(0.09)	0.21	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.31	(0.06)	0.29	(0.06)	0.00	(0.14)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.07)	0.26	(0.11)	0.20	(0.10)	0.12	(0.18)
$\mathbb{1}(TierA \geq 1)$	-0.02	(0.03)	-0.02	(0.05)	-0.04	(0.06)	-0.01	(0.05)
$\mathbb{1}(TierA \geq 2)$	0.14	(0.04)	0.16	(0.09)	0.10	(0.05)	0.16	(0.07)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.06)	-0.09	(0.11)	0.06	(0.10)	-0.07	(0.12)
$\mathbb{1}(TierB \geq 1)$	0.05	(0.03)	0.10	(0.04)	0.01	(0.06)	0.02	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.04	(0.05)	-0.14	(0.09)	-0.02	(0.09)	0.04	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.14	(0.06)	0.27	(0.09)	0.07	(0.11)	0.18	(0.08)
$\mathbb{1}(General \geq 1)$	0.04	(0.03)	0.10	(0.04)	0.00	(0.05)	0.01	(0.07)
$\mathbb{1}(General \geq 2)$	-0.03	(0.06)	-0.11	(0.15)	-0.02	(0.10)	-0.01	(0.14)
$\mathbb{1}(General \geq 3)$	0.01	(0.09)	-0.20	(0.19)	0.15	(0.17)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.07	(0.04)	0.01	(0.06)	0.10	(0.08)	0.05	(0.06)
R^2	0.52		0.58		0.53		0.57	
N	813		265		268		273	

Note: This table presents Linear Probability Model estimates associated with having 1, 2 or 3 or more publications in the four journal categories. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Estimates are heterogeneous with respect to department rank. For the Top 10 departments, all three levels of “Top Five” publications are associated with significant increases in the probability of tenure. In contrast, only the second T5 publication is statistically significant for departments ranked 11–20, and only the first T5 publication is statistically significant for departments ranked 21–35. Although differences in estimates across department rank groups are apparent, we fail to reject the hypothesis of inter-group equality of the T5 estimates at the 5% level for most of the T5 parameters (see tests in Table O-A11).

Table O-A11: Wald Test For Differences in LPM Partial Effects of “Top Five” Publication Across Department Rank Groups (First Spell)

Base Group	Comp. Group	# T5s	<i>F</i>
Depts 1-10	Depts 11-20	1	1.93
Depts 1-10	Depts 11-20	2	0.19
Depts 1-10	Depts 11-20	3	0.35
Depts 1-10	Depts 21-35	1	9.29
Depts 1-10	Depts 21-35	2	2.58
Depts 1-10	Depts 21-35	3	0.43
Depts 11-20	Depts 21-35	1	0.91
Depts 11-20	Depts 21-35	2	3.39
Depts 11-20	Depts 21-35	3	0.04

Note: This table presents results from Wald tests for the equality across rank groups of LPM Partial Effects for “Top Five” publications. The tests are conducted using rank group-specific estimates obtained from the estimation of a pooled version of Online Appendix Equation 1, where the publication parameters are interacted with indicators for being employed by the three department rank groups. Each row presents test statistics obtained from comparisons of estimates associated with a given number of “Top Five” publication across two rank groups. The first two columns indicate the two rank groups for which estimates are being compared. The third column indicates the level of publication at which the estimates are being compared (to illustrate, the first row compares estimates associated with the first “Top Five” publication between the Top 10 and Top 11-20 departments.). The last column presents *F*-statistics for each Wald test. The *F*-statistic is bolded if the Wald test rejects the null hypothesis of equality between partial effects at the 5% level.

2.1.1 Sensitivity of LPM Estimates to Specification of Control Variables

Table O-A12: Robustness To Specification of Control Variables \mathbf{X} : Linear Probability Model Estimates For Tenure Receipt During the First Spell of Tenure-Track Experience

	Preferred		Alternative 1		Alternative 2		Alternative 3		Alternative 4		Alternative 5		Alternative 6	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.15	(0.04)	0.11	(0.04)	0.14	(0.04)	0.14	(0.04)	0.15	(0.04)	0.16	(0.04)	0.16	(0.04)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.18	(0.05)	0.20	(0.05)	0.20	(0.05)	0.20	(0.05)	0.21	(0.05)	0.21	(0.05)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.07)	0.17	(0.08)	0.22	(0.06)	0.20	(0.07)	0.21	(0.07)	0.20	(0.07)	0.20	(0.07)
$\mathbb{1}(TierA \geq 1)$	-0.02	(0.03)	-0.01	(0.03)	-0.02	(0.03)	-0.02	(0.03)	-0.03	(0.03)	-0.01	(0.03)	0.00	(0.02)
$\mathbb{1}(TierA \geq 2)$	0.14	(0.04)	0.14	(0.04)	0.14	(0.04)	0.14	(0.04)	0.14	(0.04)	0.14	(0.04)	0.15	(0.04)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.06)	-0.02	(0.06)	-0.02	(0.05)	-0.03	(0.06)	-0.02	(0.06)	-0.02	(0.06)	-0.03	(0.06)
$\mathbb{1}(TierB \geq 1)$	0.05	(0.03)	0.06	(0.03)	0.05	(0.03)	0.05	(0.03)	0.05	(0.03)	0.05	(0.03)	0.06	(0.03)
$\mathbb{1}(TierB \geq 2)$	-0.04	(0.05)	-0.05	(0.05)	-0.04	(0.05)	-0.04	(0.05)	-0.03	(0.05)	-0.02	(0.05)	-0.04	(0.05)
$\mathbb{1}(TierB \geq 3)$	0.14	(0.06)	0.16	(0.06)	0.14	(0.06)	0.14	(0.06)	0.13	(0.06)	0.13	(0.06)	0.14	(0.06)
$\mathbb{1}(General \geq 1)$	0.04	(0.03)	0.04	(0.03)	0.05	(0.03)	0.04	(0.03)	0.05	(0.03)	0.06	(0.03)	0.05	(0.03)
$\mathbb{1}(General \geq 2)$	-0.03	(0.06)	0.01	(0.07)	-0.01	(0.07)	-0.03	(0.07)	-0.03	(0.07)	-0.03	(0.06)	-0.03	(0.06)
$\mathbb{1}(General \geq 3)$	0.01	(0.09)	0.00	(0.10)	0.04	(0.10)	0.01	(0.09)	0.00	(0.09)	0.04	(0.10)	0.00	(0.09)
N	813		813		813		813		813		813		813	
R^2	0.52		0.46		0.52		0.52		0.52		0.51		0.52	
Control Variables Included in Specification														
Department FE	✓		x		✓		✓		✓		✓		✓	
Citations	✓		✓		x		✓		✓		✓		✓	
Gender	✓		✓		✓		x		✓		✓		✓	
Almamater	✓		✓		✓		✓		x		✓		✓	
Duration	✓		✓		✓		✓		✓		x		✓	
$\ln(\text{Total Pubs}+1)$	✓		✓		✓		✓		✓		✓		x	

Note: This table presents Linear Probability Model estimates obtained using different specifications for the control variables \mathbf{X} . The bottom panel presents the control variables included in each specification. A ✓ indicates that the checkmarked variable is included in the specification. A ✓ for Department FE indicates that the model includes fixed effects for department, and a ✓ for Duration indicates that the 3rd-degree polynomial for years of tenure-track experience is included. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

2.2 Logit Estimates of the Probability of Receiving Tenure During First Spell of Tenure-Track Employment

This section reports marginal effects from logit models for the probability of receiving tenure in the first spell of tenure-track employment.

Table O-A13: Logit Average Marginal Effects For Tenure Receipt During the First Spell of Tenure-Track Experience

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.13	(0.04)	0.05	(0.10)	0.15	(0.07)	0.15	(0.06)
$\mathbb{1}(T5 \geq 2)$	0.13	(0.04)	0.20	(0.07)	0.16	(0.06)	-0.03	(0.11)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.06)	0.17	(0.10)	0.21	(0.10)	0.14	(0.17)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.02)	-0.05	(0.04)	0.02	(0.04)	0.01	(0.03)
$\mathbb{1}(TierA \geq 2)$	0.09	(0.03)	0.10	(0.06)	0.06	(0.05)	0.10	(0.06)
$\mathbb{1}(TierA \geq 3)$	-0.05	(0.04)	-0.10	(0.06)	0.03	(0.07)	-0.05	(0.09)
$\mathbb{1}(TierB \geq 1)$	0.02	(0.02)	0.06	(0.03)	-0.02	(0.04)	0.01	(0.05)
$\mathbb{1}(TierB \geq 2)$	-0.02	(0.04)	-0.12	(0.05)	0.01	(0.04)	0.02	(0.07)
$\mathbb{1}(TierB \geq 3)$	0.07	(0.04)	0.13	(0.07)	0.01	(0.04)	0.14	(0.13)
$\mathbb{1}(General \geq 1)$	0.00	(0.02)	0.01	(0.03)	-0.01	(0.03)	-0.04	(0.05)
$\mathbb{1}(General \geq 2)$	0.00	(0.04)	-0.02	(0.06)	-0.03	(0.05)	0.08	(0.10)
$\mathbb{1}(General \geq 3)$	0.01	(0.09)	-0.11	(0.09)	0.02	(0.07)	.	(.)
N	813		265		268		273	

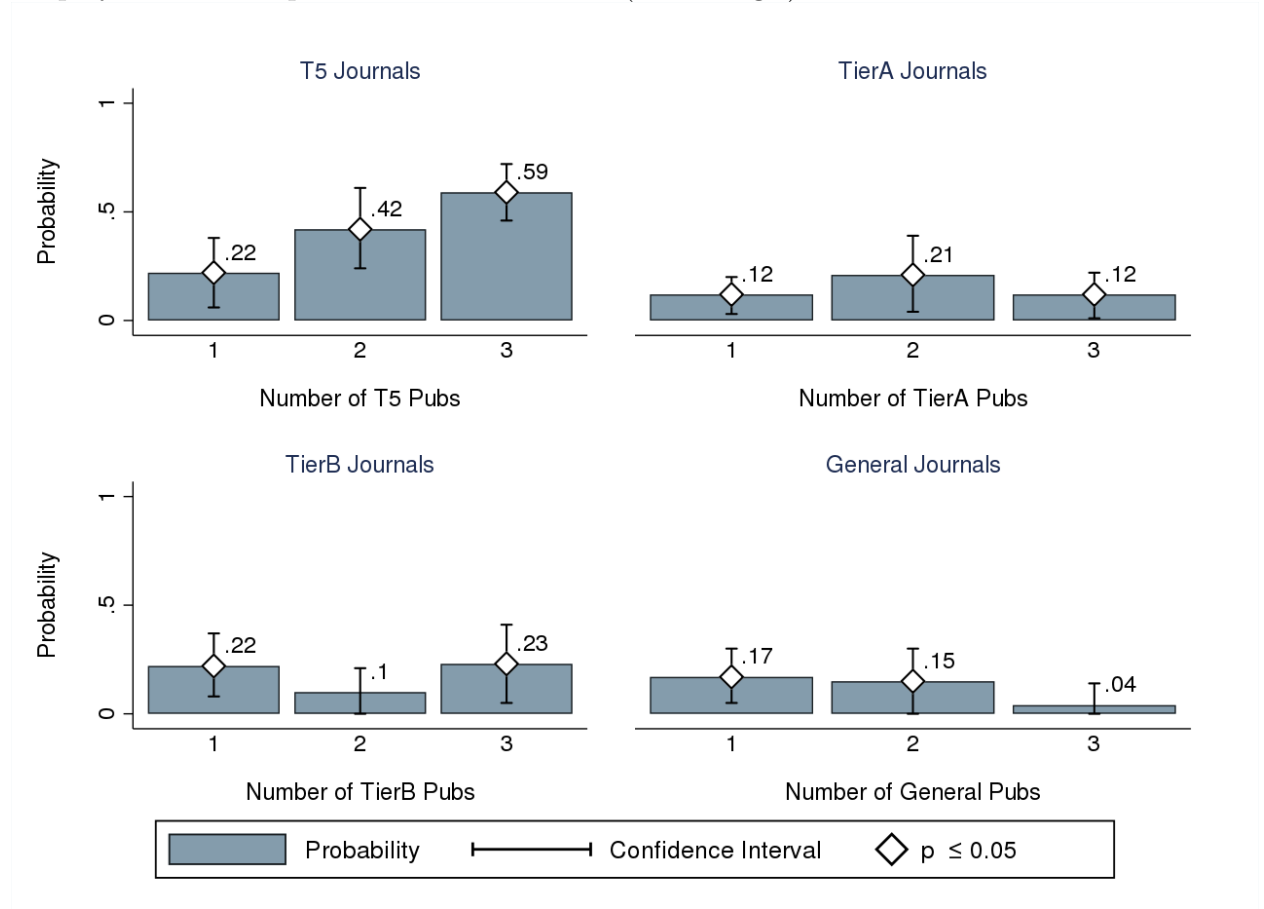
Note: This table presents marginal effects associated with having 1, 2 or 3 or more publications in the four journal categories. The Pooled, Top 15, Top 16-25, and Top 21-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A14: Wald Test For Differences in Marginal Effects (Logit) of “Top Five” Publication Across Department Rank Groups (First Spell)

Base Group	Comp. Group	# T5s	χ^2
Depts 1-10	Depts 11-20	1	0.80
Depts 1-10	Depts 11-20	2	0.32
Depts 1-10	Depts 11-20	3	0.26
Depts 1-10	Depts 21-35	1	1.25
Depts 1-10	Depts 21-35	2	2.19
Depts 1-10	Depts 21-35	3	0.30
Depts 11-20	Depts 21-35	1	0.03
Depts 11-20	Depts 21-35	2	2.96
Depts 11-20	Depts 21-35	3	0.01

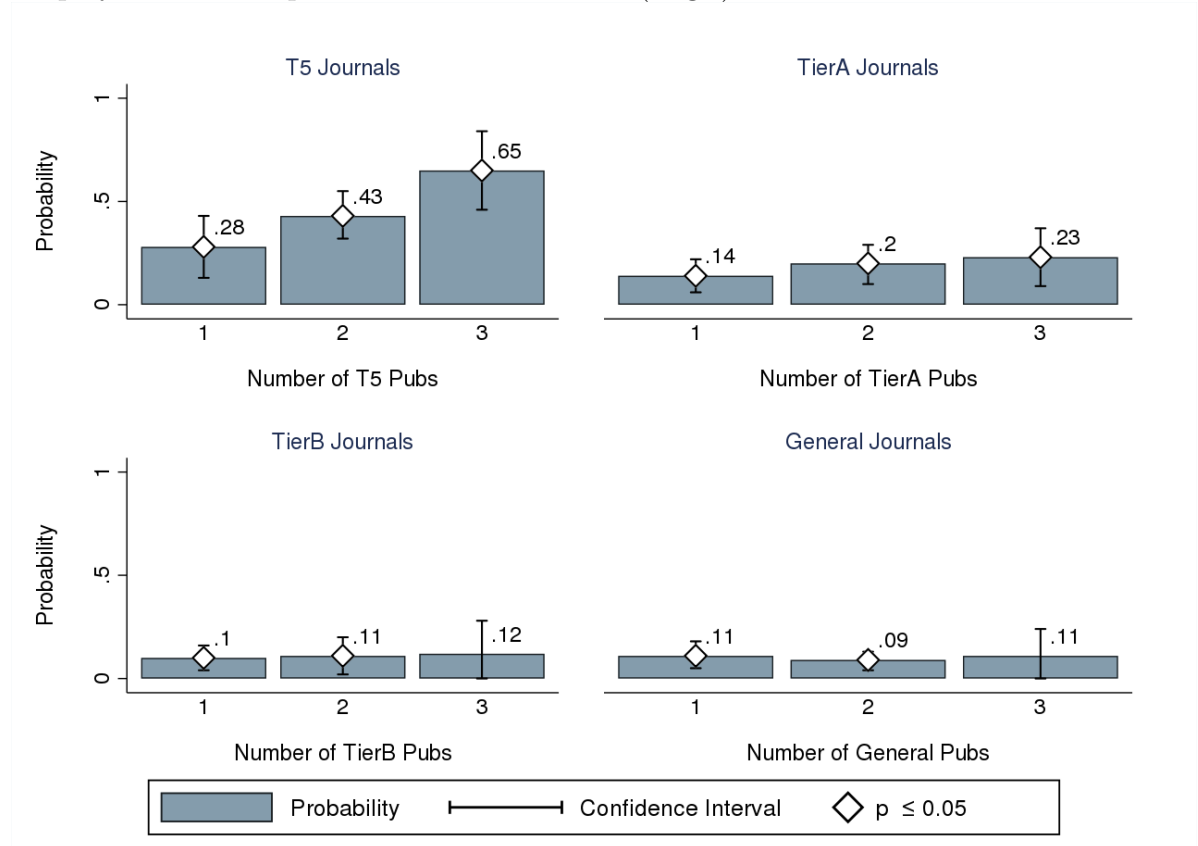
Note: This table presents results from Wald tests for the equality across rank groups of marginal effects estimated for “Top Five” publications. The tests are conducted using rank group-specific marginal effects obtained from the estimation of a pooled version of Equation [TA-1](#), where the publication parameters are interacted with indicators for being employed by the three department rank groups. Each row presents test statistics obtained from comparisons of marginal effects associated with a given number of “Top Five” publication across two rank groups. The first two columns indicate the two rank groups for which marginal effects are being compared. The third column indicates the level of publication at which the marginal effects are being compared (to illustrate, the first row compares marginal effects associated with the first “Top Five” publication between the Top 10 and Top 11-20 departments.). The last column presents the χ^2 statistic for each Wald test. The χ^2 statistic is bolded if the Wald test rejects the null hypothesis of equality between marginal effects at the 5% level.

Figure O-A2: Predicted Probabilities for Receipt of Tenure in the First Spell of Tenure-Track Employment For Departments Ranked 1–10 (From Logit)



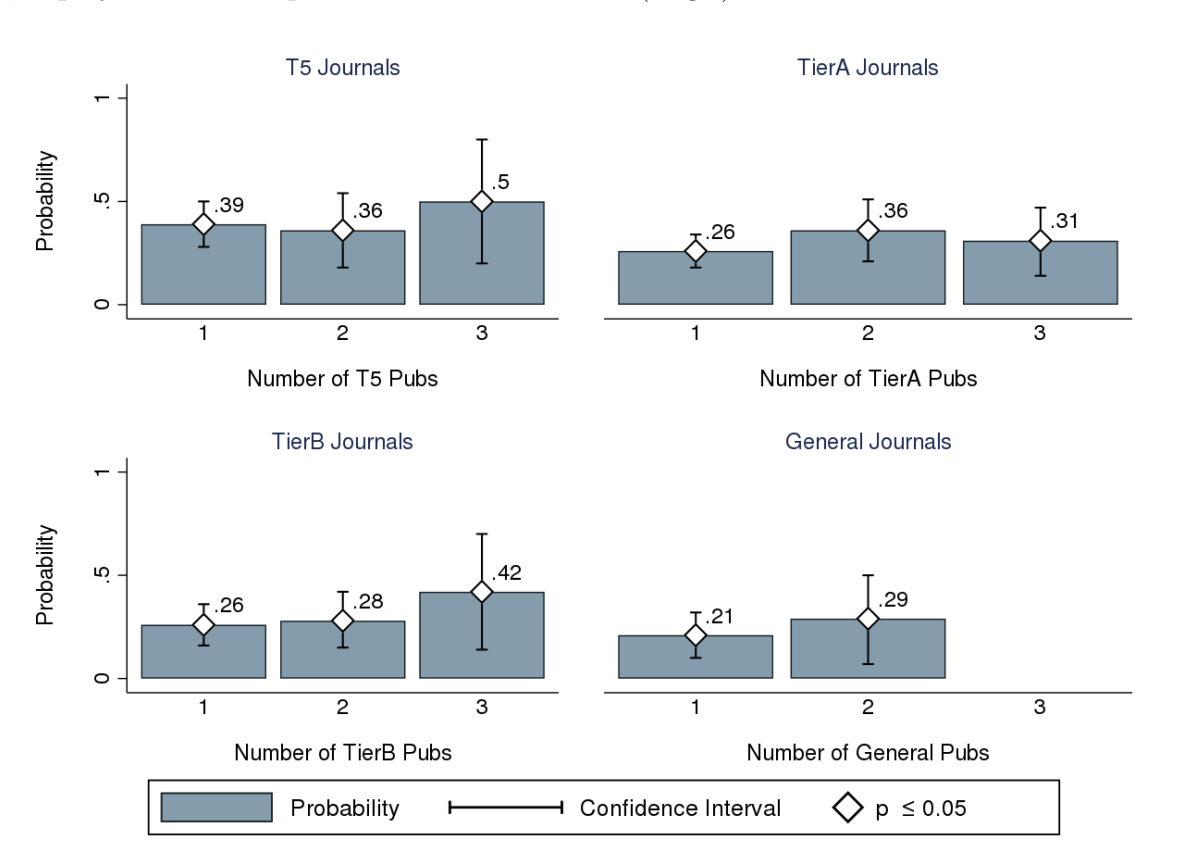
Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A3: Predicted Probabilities for Receipt of Tenure in the First Spell of Tenure-Track Employment For Departments Ranked 11–20 (Logit)



Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A4: Predicted Probabilities for Receipt of Tenure in the First Spell of Tenure-Track Employment For Departments Ranked 21–35 (Logit)



Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

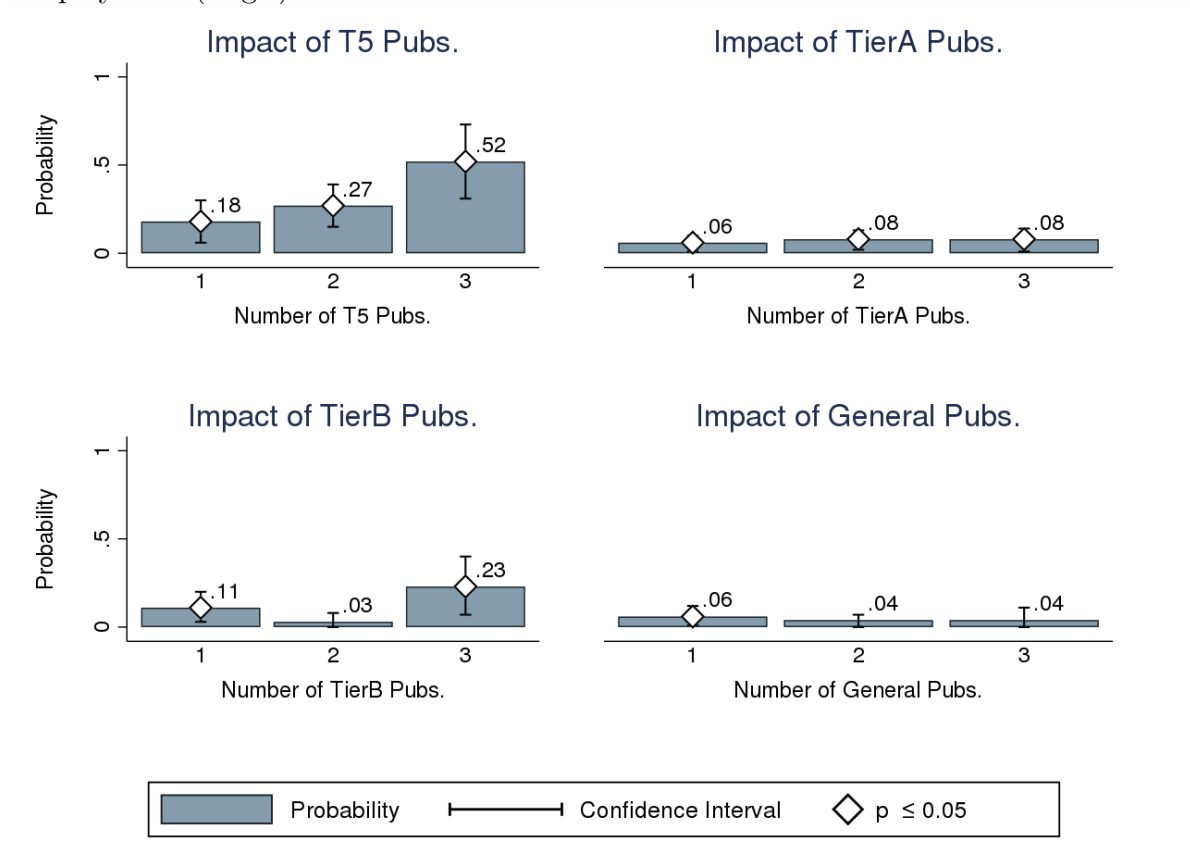
2.3 Probability of Tenure Receipt By The 7th Year of Tenure-Track Employment

We investigate the relationship between publications and receiving tenure by the 7th year of tenure-track experience by estimating a version of Equation TA-1 with the following variable redefinitions: the dependent variable $Tenure_i$ is redefined to be an indicator for having received tenure by the seventh year of tenure-track experience; the vector of controls \mathbf{X} excludes the 3rd degree polynomial for years of tenure-track experience because the estimation is conducted using only observations as of the seventh year of tenure-track experience (when everyone has the same amount of experience); and the variables measuring total number of unique co-authors and total citations are calculated using data for all articles published by the 7th year of tenure-track experience. Given that the estimation requires us to observe whether an individual received tenure by the 7th year of tenure-track experience, the estimation sample does not include individuals who exited the Top 35 departments (exits to industry or departments ranked outside the Top 35) prior to receiving tenure and before the seventh year of tenure-track experience. The relative patterns are similar across both figures. The relative influence of the T5 is large whether we look at tenure rates by first spell of tenure track employment or tenure rates by the seventh year of tenure-track employment. See Online Appendix Figure O-A5

Figure O-A5 plots predicted probabilities for receiving tenure by the 7th year of tenure-track employment. The corresponding marginal effects are presented under the “Pooled” columns of Online Appendix Table O-A15. The previously observed large differences in tenure rates associated with “Top Five” and non-“Top Five” publications persists when we look at tenure rates by the seventh year. Despite the loss in sample size, the probabilities associated with “Top Five” publications continues to remain considerably larger than the probabilities associated with other publications. The probability of 0.52 associated with three “Top Five” publications is approximately 130% greater than the largest non-“Top

Five” estimate of 0.23 associated with three Tier B publications.

Figure O-A5: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment (Logit)



Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). White diamonds on the bars indicate that the prediction is significantly different than zero at the 10% level.

Table O-A15: Logit Average Marginal Effects For Tenure Receipt by the 7th Year of Tenure-Track Experience

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.08	(0.05)	-0.01	(0.06)	0.16	(0.09)	-0.03	(0.04)
$\mathbb{1}(T5 \geq 2)$	0.09	(0.05)	0.23	(0.06)	0.07	(0.06)	0.23	(0.11)
$\mathbb{1}(T5 \geq 3)$	0.24	(0.08)	0.29	(0.07)	0.29	(0.09)	0.43	(0.18)
$\mathbb{1}(TierA \geq 1)$	-0.04	(0.03)	-0.05	(0.05)	-0.04	(0.05)	0.05	(0.10)
$\mathbb{1}(TierA \geq 2)$	0.02	(0.02)	0.04	(0.04)	0.02	(0.02)	0.07	(0.10)
$\mathbb{1}(TierA \geq 3)$	0.00	(0.03)	-0.03	(0.04)	0.03	(0.05)	-0.06	(0.11)
$\mathbb{1}(TierB \geq 1)$	0.01	(0.04)	0.10	(0.07)	0.01	(0.06)	-0.08	(0.05)
$\mathbb{1}(TierB \geq 2)$	-0.08	(0.04)	-0.09	(0.09)	-0.12	(0.06)	0.17	(0.09)
$\mathbb{1}(TierB \geq 3)$	0.20	(0.08)	0.20	(0.12)	0.18	(0.15)	-0.08	(0.12)
$\mathbb{1}(General \geq 1)$	-0.04	(0.02)	0.00	(0.02)	-0.07	(0.06)	-0.11	(0.06)
$\mathbb{1}(General \geq 2)$	-0.03	(0.02)	-0.07	(0.06)	0.03	(0.07)	0.17	(0.16)
$\mathbb{1}(General \geq 3)$	0.01	(0.03)	0.01	(0.01)	-0.05	(0.07)	-0.22	(0.15)
N	506		248		190		148	

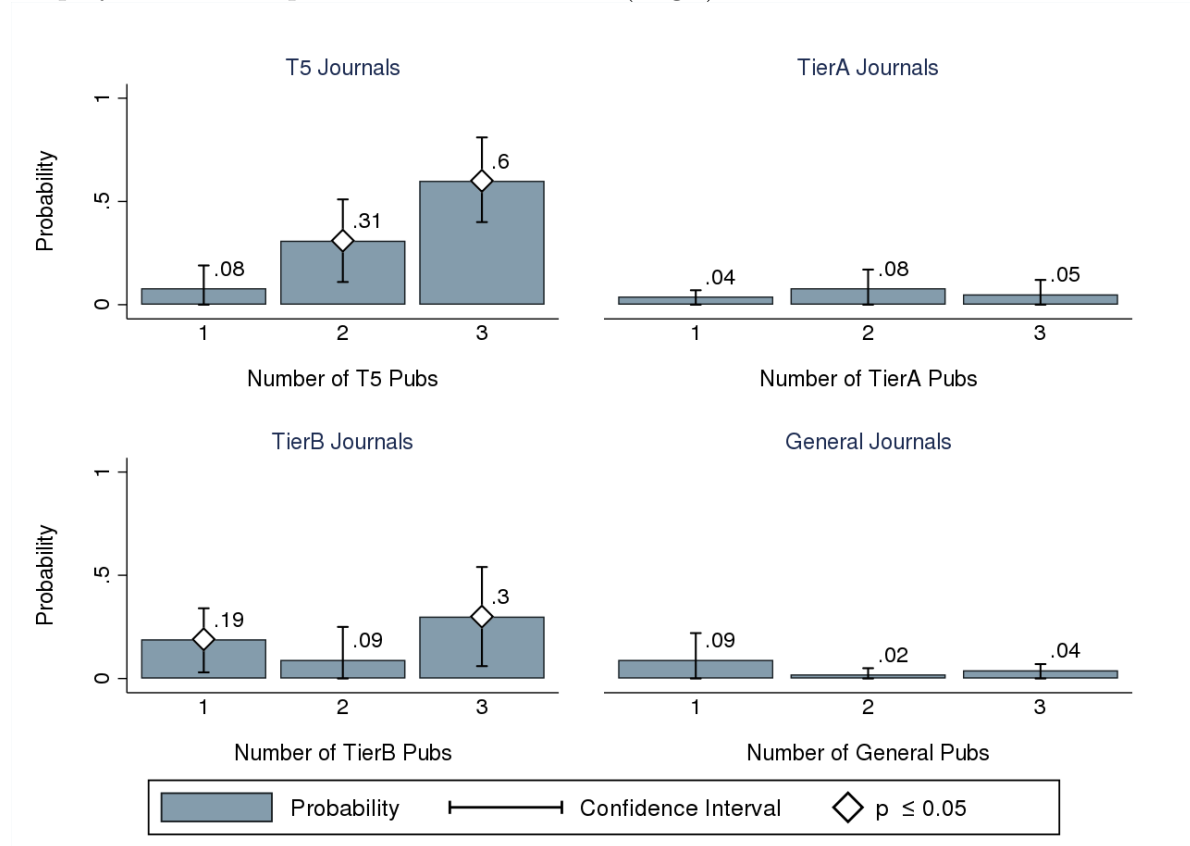
Note: This table presents marginal effects associated with having 1, 2 or 3 or more publications in the four journal categories. The Pooled, Top 15, Top 16-25, and Top 21-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A16: Wald Test For Differences in Marginal Effects (Logit) of “Top Five” Publication Across Department Rank Groups (First Seven Years of Tenure-Track Experience)

Base Group	Comp. Group	# T5s	χ^2
Depts 1-10	Depts 11-20	1	1.95
Depts 1-10	Depts 11-20	2	1.76
Depts 1-10	Depts 11-20	3	0.02
Depts 1-10	Depts 21-35	1	0.63
Depts 1-10	Depts 21-35	2	0.96
Depts 1-10	Depts 21-35	3	0.56
Depts 11-20	Depts 21-35	1	0.58
Depts 11-20	Depts 21-35	2	0.00
Depts 11-20	Depts 21-35	3	0.49

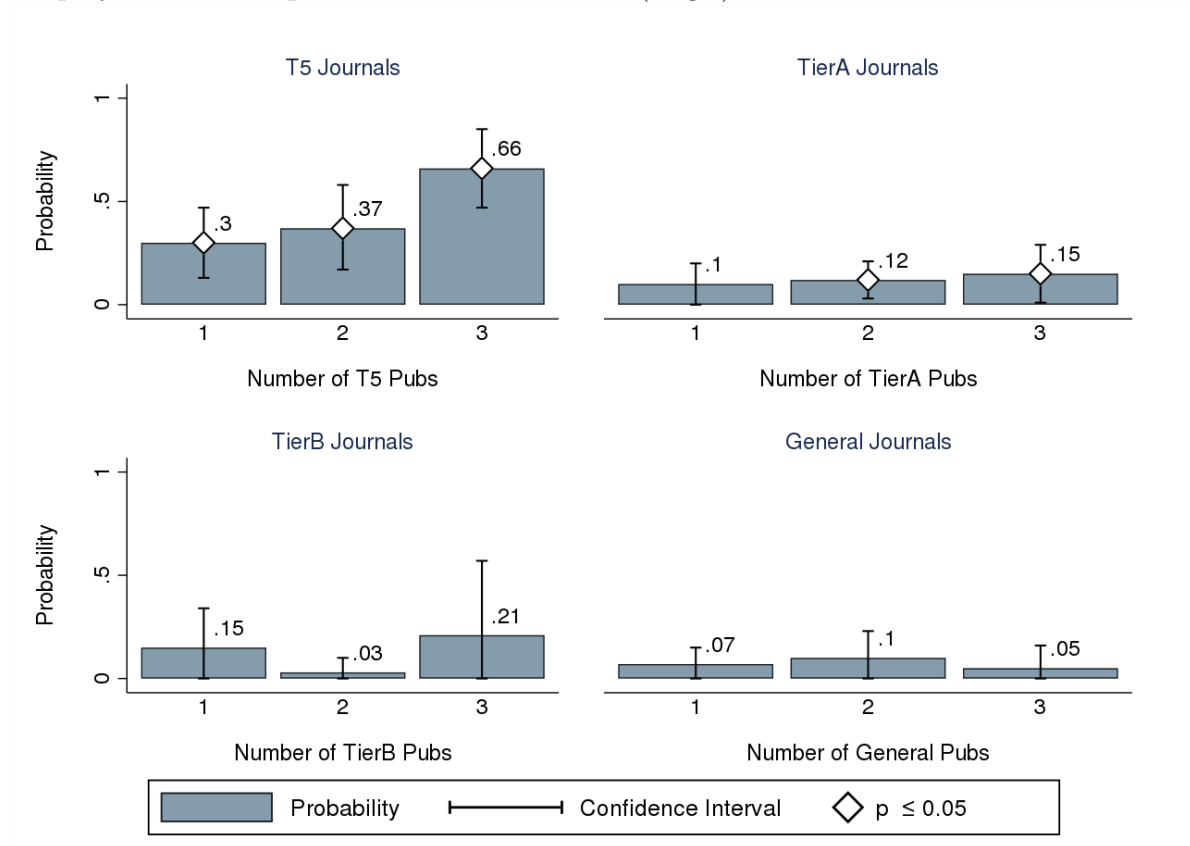
Note: This table presents results from Wald tests for the equality across rank groups of marginal effects estimated for “Top Five” publications. The tests are conducted using rank group-specific marginal effects obtained from the estimation of a pooled version of Equation TA-1, where the publication parameters are interacted with indicators for being employed by the three department rank groups. Each row presents test statistics obtained from comparisons of marginal effects associated with a given number of “Top Five” publication across two rank groups. The first two columns indicate the two rank groups for which marginal effects are being compared. The third column indicates the level of publication at which the marginal effects are being compared (to illustrate, the first row compares marginal effects associated with the first “Top Five” publication between the Top 10 and Top 11-20 departments.). The last column presents the χ^2 statistic for each Wald test. The χ^2 statistic is bolded if the Wald test rejects the null hypothesis of equality between marginal effects at the 5% level.

Figure O-A6: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment For Departments Ranked 1–10 (Logit)



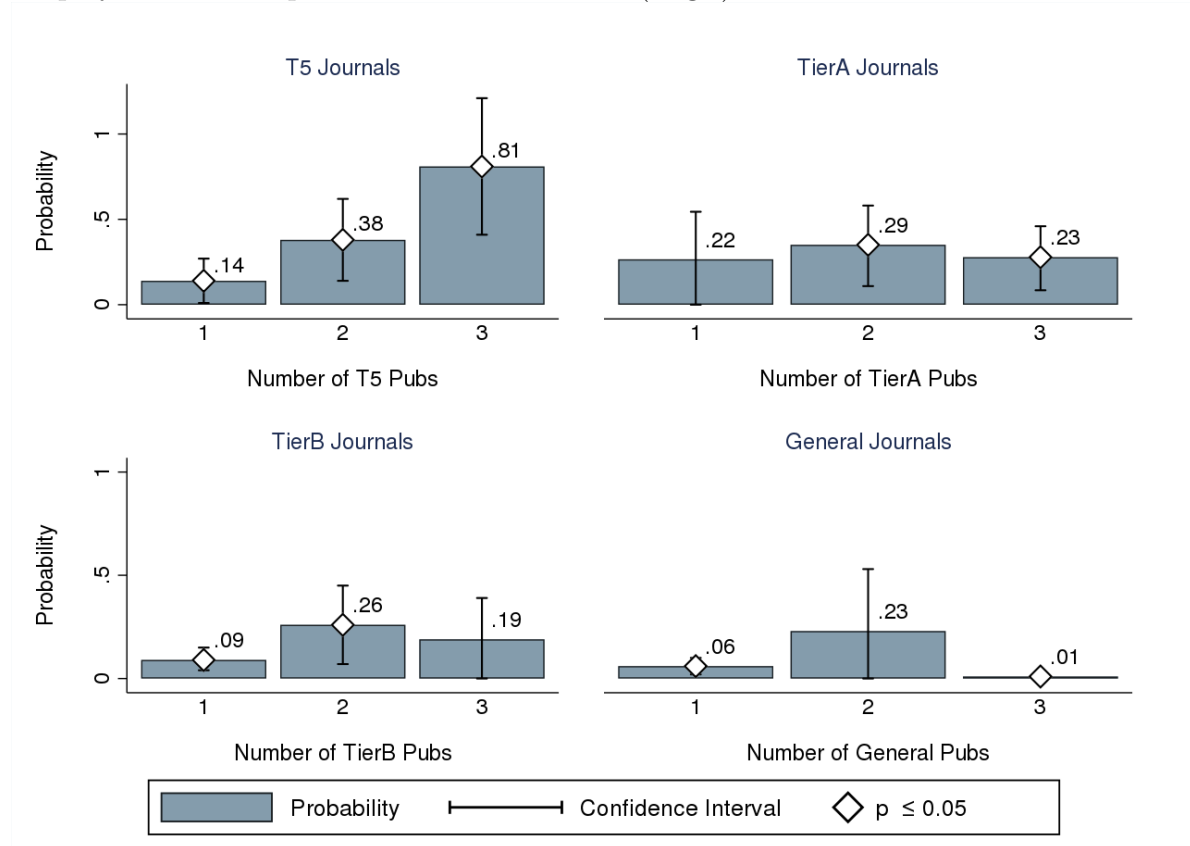
Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A7: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment For Departments Ranked 11–20 (Logit)



Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

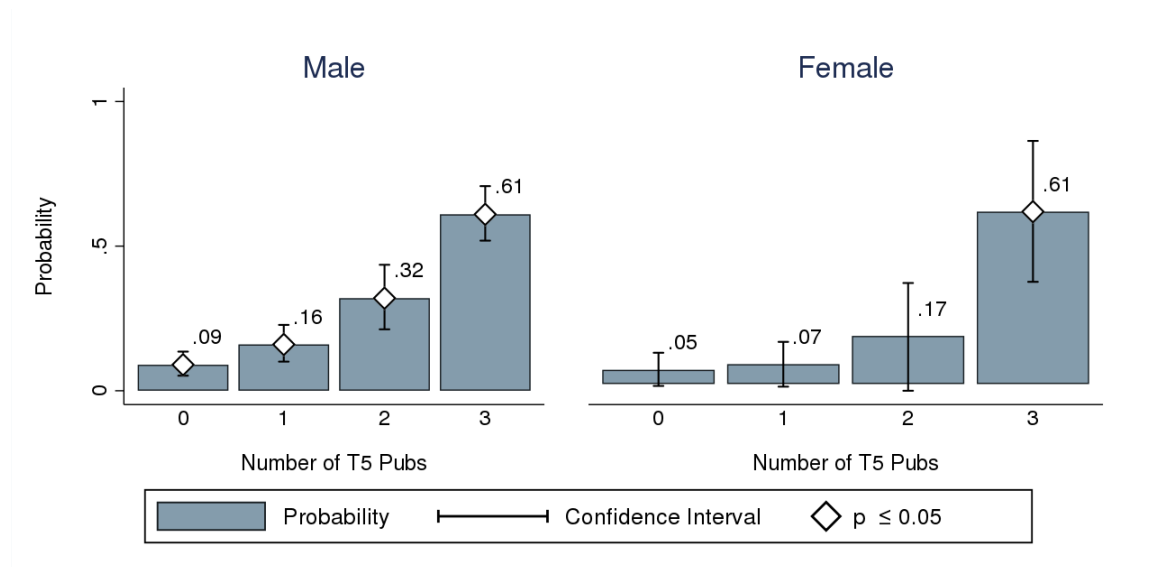
Figure O-A8: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment For Departments Ranked 21–35 (Logit)



Note: This figure plots the predicted probabilities associated with different levels of publications in different journal categories. The predicted probability is defined in Equation TA-2 (Equation TA-2 uses parameter estimates from Equation TA-1). Department rank-specific predictions are obtained by restrictively estimating Equation TA-1 over subsamples of faculty who belong to the department rank group in question. White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

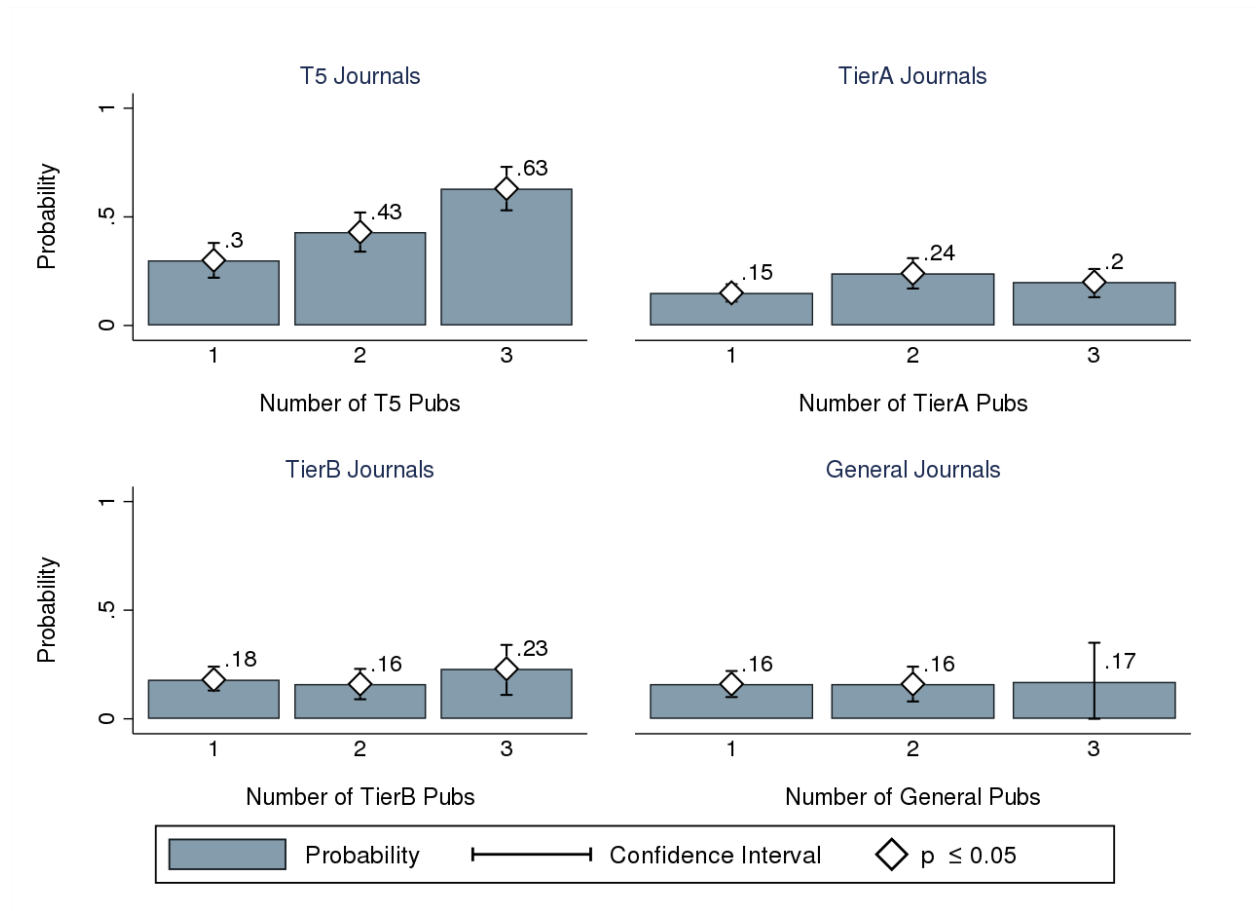
2.4 Heterogeneity in Probability of Receiving Tenure By Gender

Figure O-A9: Conditional Probabilities of Receiving Tenure By the Seventh Year of Tenure-Track Employment Given “Top Five” Publications, by Gender



Note: This figure plots conditional probabilities of receiving tenure by the seventh year of tenure-track employment, given the quantity of “Top Five” publications and gender. The probabilities are estimated as proportions of individuals within each gender-“Top Five” quantity cell who received tenure by the seventh year of tenure-track experience.

Figure O-A10: Predicted Probabilities for Tenure Receipt During The First Spell of Tenure-Track Employment For Males (Logit)

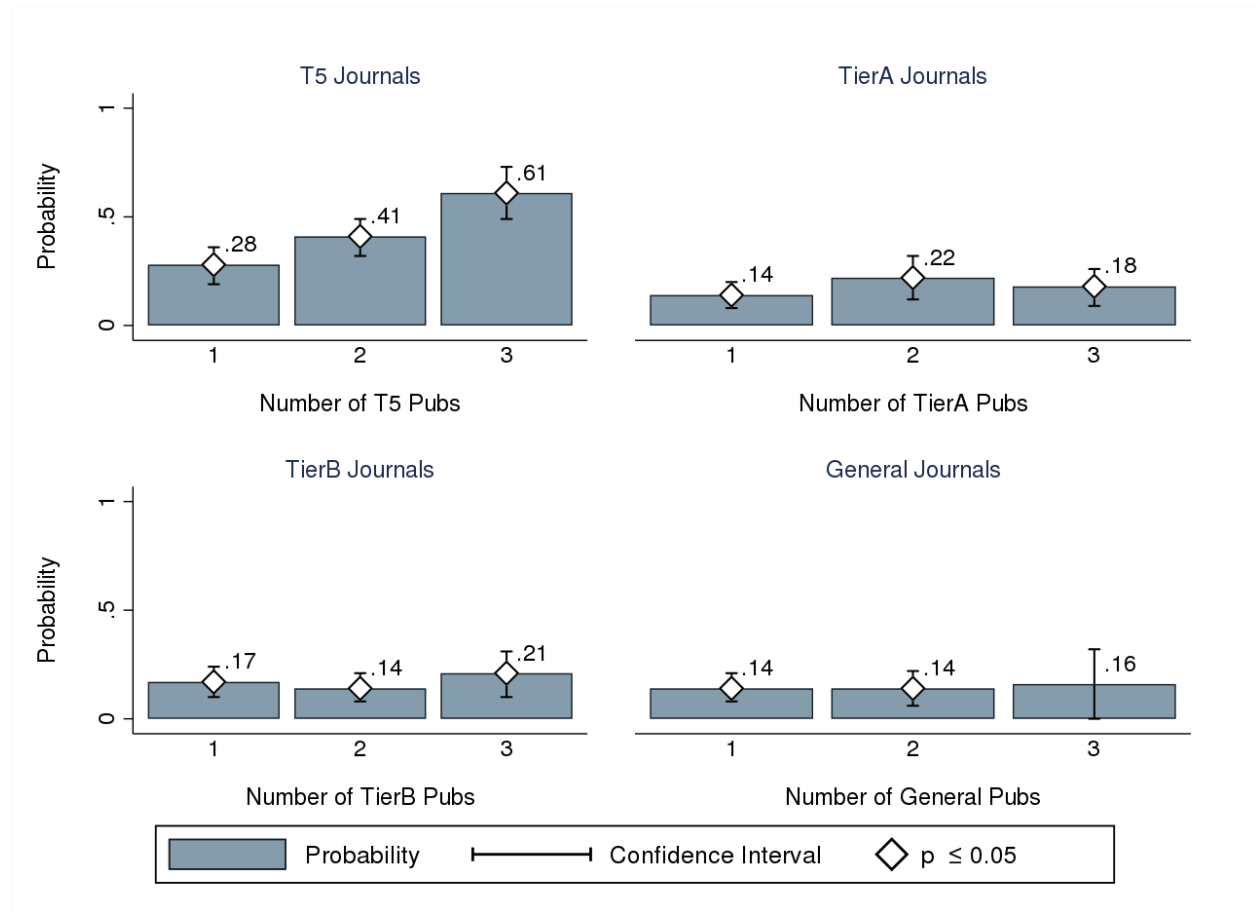


Note: This figure plots predicted probabilities associated with different levels of publications in different journal categories, for male faculty. The predicted probability is obtained by modifying the prediction provided by Equation TA-2 to include a condition for gender:

$$Pr(Tenure = 1 \mid \# \hat{J} = \hat{N}, \# \tilde{J} = 0, \text{Male} = 1, \mathbf{X})$$

White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A11: Predicted Probabilities for Tenure Receipt During The First Spell of Tenure-Track Employment For Females (Logit)

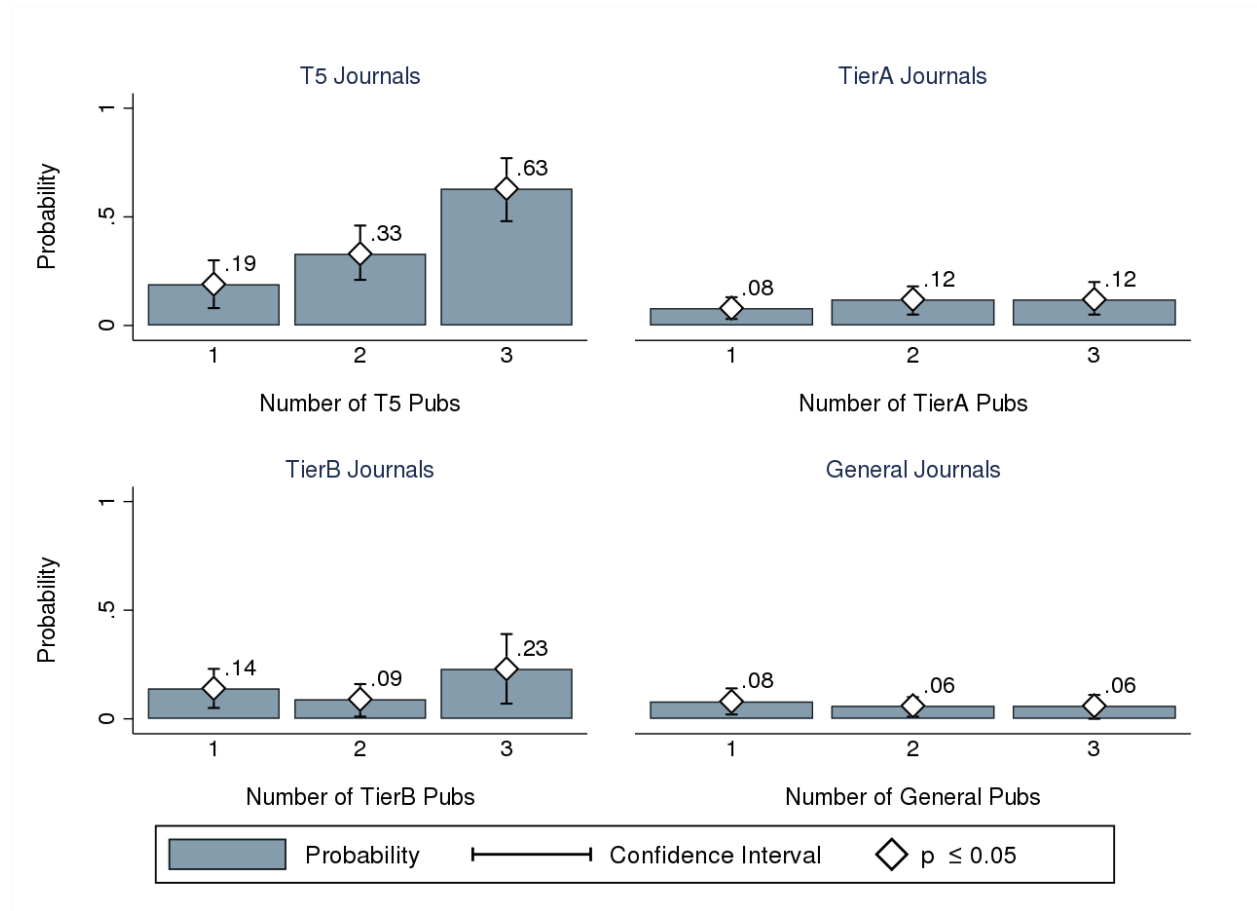


Note: This figure plots predicted probabilities associated with different levels of publications in different journal categories, for female faculty. The predicted probability is obtained by modifying the prediction provided by Equation TA-2 to include a condition for gender:

$$Pr(Tenure = 1 \mid \# \hat{J} = \hat{N}, \# \tilde{J} = 0, Female = 1, \mathbf{X})$$

White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A12: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment For Males (Logit)

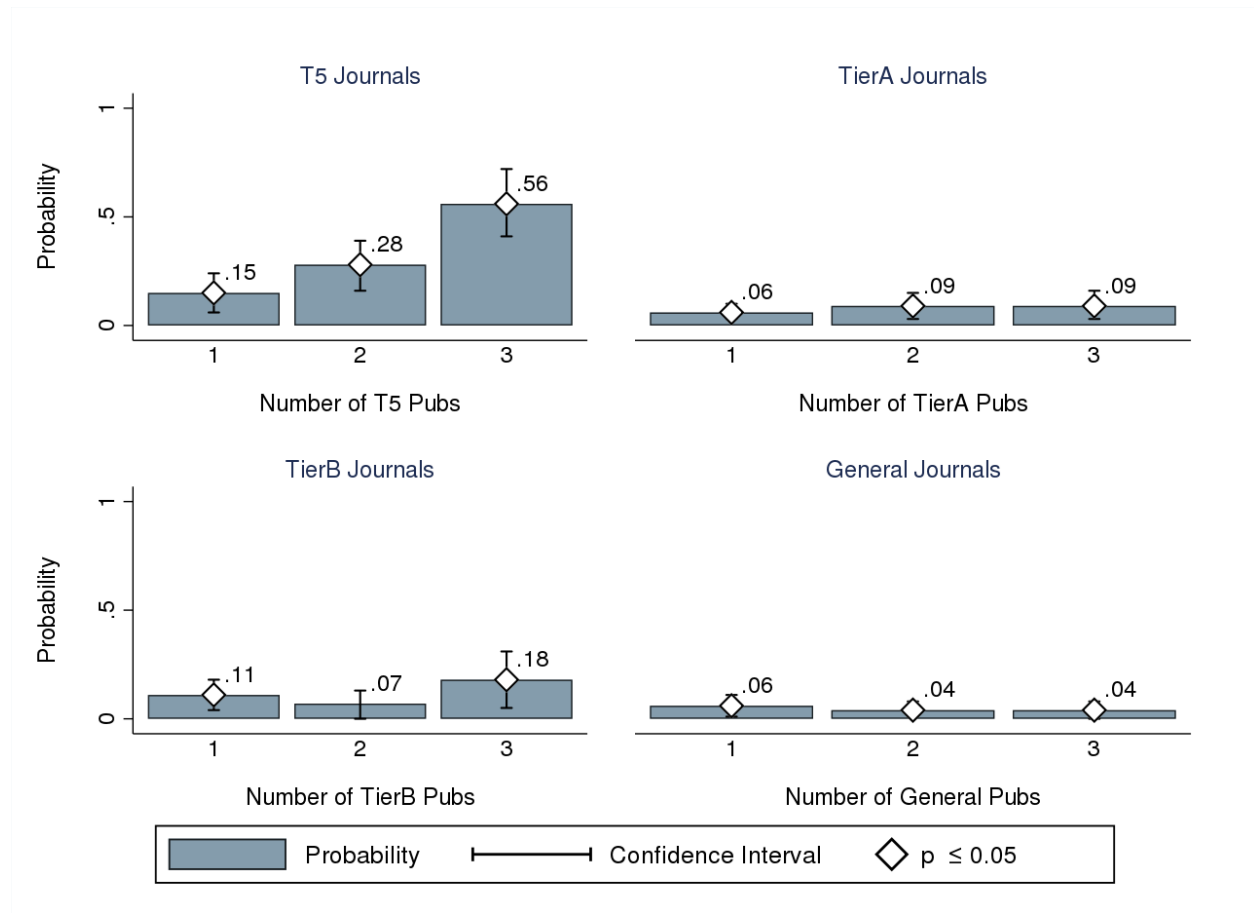


Note: This figure plots predicted probabilities associated with different levels of publications in different journal categories, for male faculty. The predicted probability is obtained by modifying the prediction provided by Equation TA-2 to include a condition for gender:

$$Pr(Tenure = 1 \mid \# \hat{J} = \hat{N}, \# \tilde{J} = 0, \text{Male} = 1, \mathbf{X})$$

White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

Figure O-A13: Predicted Probabilities for Tenure Receipt By the 7th Year of Tenure-Track Employment For Females (Logit)



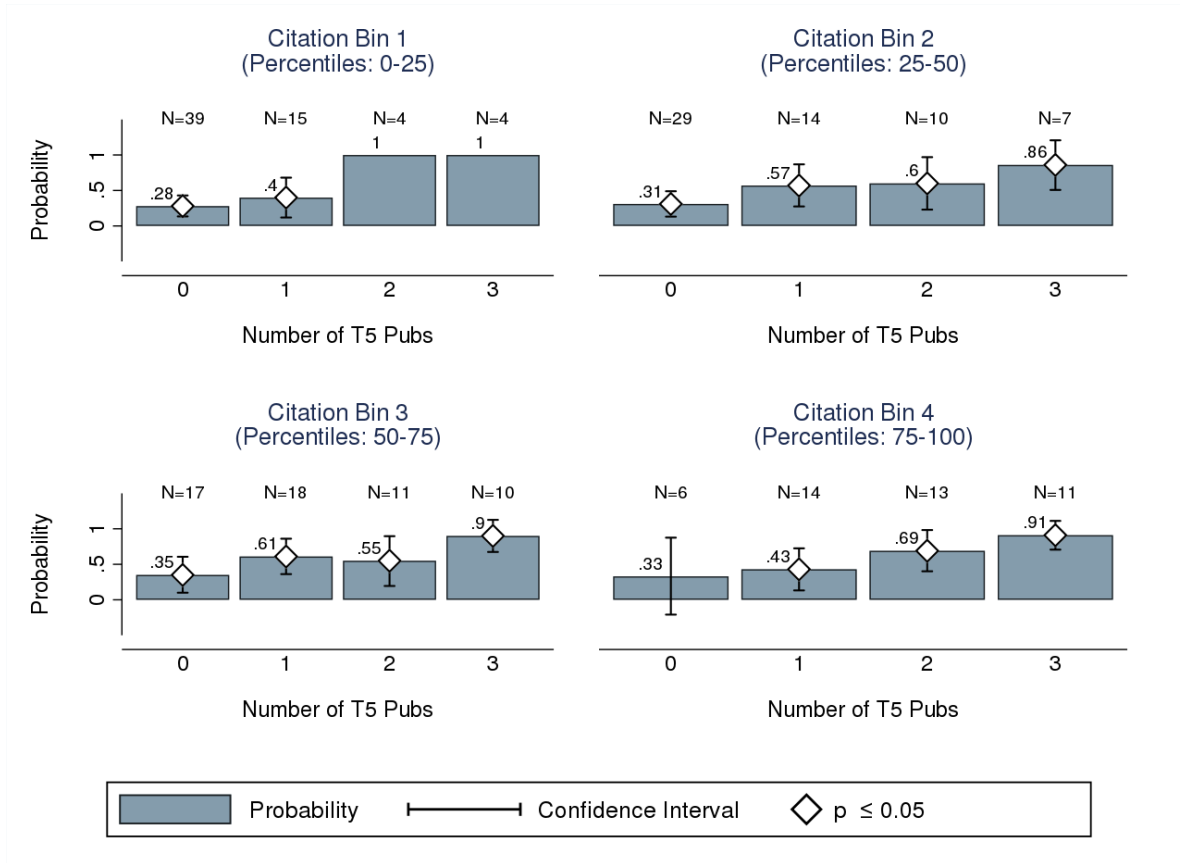
Note: This figure plots predicted probabilities associated with different levels of publications in different journal categories, for female faculty. The predicted probability is obtained by modifying the prediction provided by Equation TA-2 to include a condition for gender:

$$Pr(Tenure = 1 \mid \# \hat{J} = \hat{N}, \# \tilde{J} = 0, Female = 1, \mathbf{X})$$

White diamonds on the bars indicate that the prediction is significantly different than zero at the 5% level.

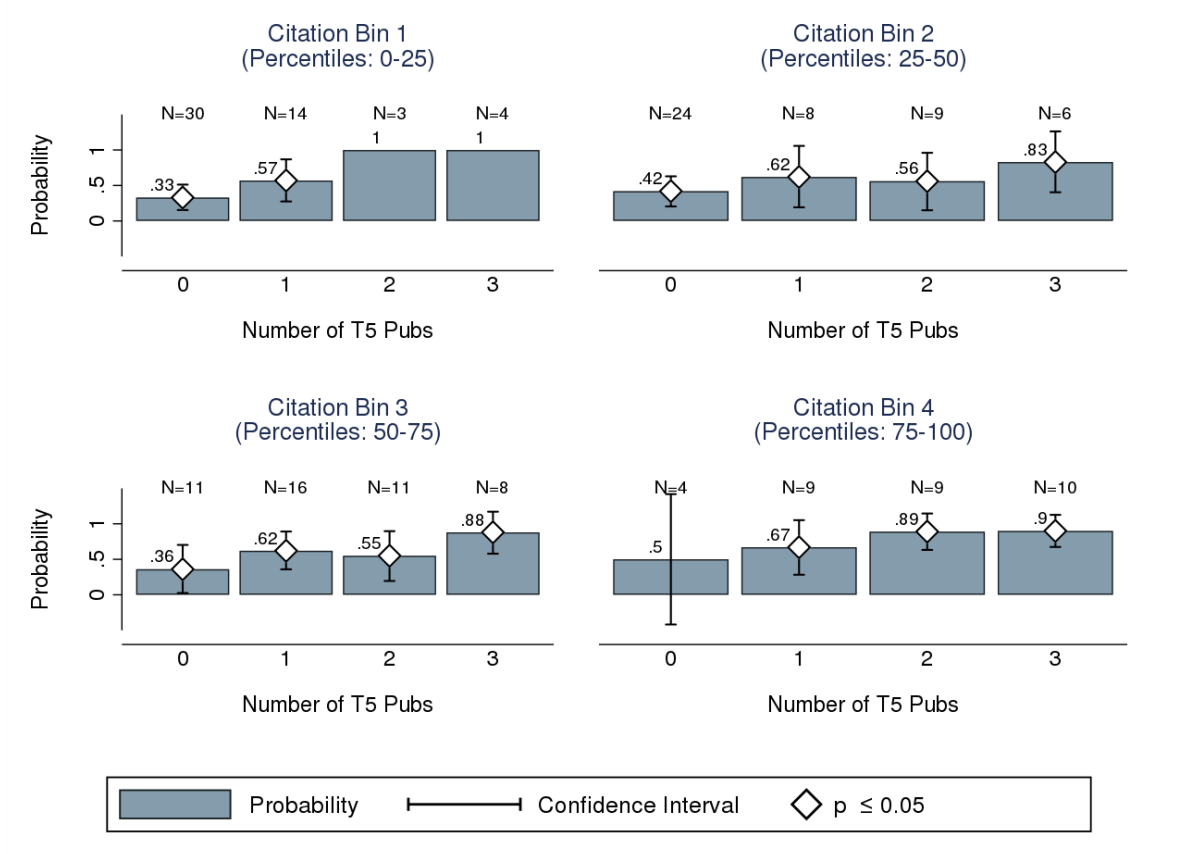
2.4.1 The Power of the T5 By Quality of T5 Publications

Figure O-A14: Raw Probabilities for Tenure Receipt in the First Spell of Tenure-Track Employment, By Quality of Overall Publications For Faculty Whose First Spell Ended by 2008 (Quality Proxied By Average Citations Received Through 2018 By First Spell Publications); Sample Restricted To Faculty With 4 or More Journal Publications By End of First Spell



Note: This figure plots estimates of tenure probabilities (by the first spell) for individuals with different numbers of T5 publications, by the quality of authors' publications as proxied by citations measured through 2018. Faculty are grouped into four quartiles based on average citations accrued through 2018 by all publications during the first spell. The figure plots quartile-specific probabilities of tenure associated with each level of T5 publication. For each quartile, probabilities are estimated as the proportion of individuals with a given level of T5 publication who received tenure during the first spell. The estimation sample is restricted to only include individuals who published four or more journal articles during the first spell. Confidence intervals are not plotted for probability estimates that equal one since tenure was received by every individual within the group in question.

Figure O-A15: Raw Probabilities for Tenure Receipt in the First Spell of Tenure-Track Employment, By Quality of Overall Publications For Faculty Whose First Spell Ended by 2008 (Quality Proxied By Average Citations Received Through 2018 By First Spell Publications); Sample Restricted To Faculty With 5 or More Journal Publications By End of First Spell



Note: This figure plots estimates of tenure probabilities (by the first spell) for individuals with different numbers of T5 publications, by the quality of authors' publications as proxied by citations measured through 2018. Faculty are grouped into four quartiles based on average citations accrued through 2018 by all publications during the first spell. The figure plots quartile-specific probabilities of tenure associated with each level of T5 publication. For each quartile, probabilities are estimated as the proportion of individuals with a given level of T5 publication who received tenure during the first spell. The estimation sample is restricted to only include individuals who published five or more journal articles during the first spell. Confidence intervals are not plotted for probability estimates that equal one since tenure was received by every individual within the group in question.

3 Duration Analysis of Time-to-Tenure

3.1 Pooled Estimates of Hazard Rates and Time-to-Tenure

This section presents pooled results obtained by estimating a multi-spell model over the entire sample of tenure-track faculty in the Top 35 departments using the framework presented in Text Appendix Section 2. Table O-A17 presents three sets of estimates obtained

by estimating versions of Equation TA-13 with different specifications for unobserved heterogeneity.⁷ The columns labelled Hazard present the exponentiated estimates for the hazard ratios. The first, second and third sets of estimates respectively include no heterogeneity, a one-factor individual-level heterogeneity term, and a one-factor individual-spell-level heterogeneity term. Likelihood ratio tests presented at the bottom of the table indicate that the model with the individual-spell level heterogeneity is significantly different than the model without heterogeneity at the 5% level. Among the models that include heterogeneity, the model with individual-spell-level heterogeneity has the highest log likelihood (difference of 1.15) as well as the lowest estimates for both the Akaike and Bayesian Information Criteria. Given this evidence, the model with individual-spell-level heterogeneity is our preferred specification. The remainder of this section focuses on discussing estimates obtained from this preferred model.

The rows under the section titled “Publication Parameters” present exponentiated parameter estimates for the publication parameters α_j^n associated with each publication threshold indicator. The exponent of each parameter α_j^n represents the multiplicative increase in the hazard of tenure receipt associated with an increase in publications in type- j journals from $n - 1$ to n publications:

$$\exp\{\alpha_j^n\} = \frac{h(t \mid \#j_t = n, \mathbf{X})}{h(t \mid \#j_t = n - 1, \mathbf{X})}$$

⁷We use a Weibull specification. See Text-Appendix.

Table O-A17: Weibull Estimates for Transition Type: Untenured Tenure Track→Tenured In T35 Dept.

	Heterogeneity None		Heterogeneity Individual		Heterogeneity Spell	
	Hazard	SE.	Hazard	SE.	Hazard	SE.
Publication Parameters						
$\mathbb{1}(T5 \geq 1)$	1.79	(0.28)	1.87	(0.32)	1.91	(0.33)
$\mathbb{1}(T5 \geq 2)$	1.76	(0.30)	1.83	(0.34)	1.89	(0.36)
$\mathbb{1}(T5 \geq 3)$	1.22	(0.22)	1.27	(0.25)	1.29	(0.26)
$\mathbb{1}(TierA \geq 1)$	0.95	(0.16)	0.90	(0.16)	0.89	(0.16)
$\mathbb{1}(TierA \geq 2)$	1.13	(0.19)	1.15	(0.20)	1.16	(0.21)
$\mathbb{1}(TierA \geq 3)$	1.07	(0.17)	1.09	(0.19)	1.10	(0.20)
$\mathbb{1}(TierB \geq 1)$	1.23	(0.17)	1.25	(0.19)	1.26	(0.20)
$\mathbb{1}(TierB \geq 2)$	0.69	(0.15)	0.71	(0.17)	0.72	(0.18)
$\mathbb{1}(TierB \geq 3)$	1.16	(0.33)	1.23	(0.37)	1.27	(0.40)
$\mathbb{1}(General \geq 1)$	0.97	(0.14)	0.98	(0.15)	0.99	(0.16)
$\mathbb{1}(General \geq 2)$	0.79	(0.19)	0.73	(0.19)	0.70	(0.19)
$\mathbb{1}(General \geq 3)$	0.93	(0.35)	1.01	(0.41)	1.04	(0.44)
Control Parameters						
Cum. Citations	1.00	(0.00)	1.00	(0.00)	1.00	(0.00)
Years Since Grad.	0.96	(0.03)	0.95	(0.03)	0.94	(0.03)
Cum. Coauthors	0.97	(0.02)	0.97	(0.02)	0.97	(0.02)
Male	1.47	(0.22)	1.46	(0.23)	1.46	(0.25)
T10 Alma Mater	0.86	(0.17)	0.87	(0.18)	0.88	(0.19)
T20 Alma Mater	0.79	(0.18)	0.75	(0.19)	0.73	(0.19)
T30 Alma Mater	0.58	(0.18)	0.57	(0.19)	0.57	(0.20)
T40 Alma Mater	0.30	(0.31)	0.28	(0.30)	0.27	(0.30)
$\ln(\text{Total Pubs} + 1)$	3.42	(0.77)	3.52	(0.84)	3.58	(0.89)
Occurrence Parameters						
$\delta_{0,j}$	2.35	(0.34)	2.76	(0.57)	3.02	(0.66)
Duration Parameter						
λ	2.59	(0.16)	2.80	(0.24)	2.96	(0.27)
Unobserved Heterogeneity						
$C_{0,j}$			0.20	(0.17)		
$C_{0,j}^t$					0.65	(0.17)
$\log \mathcal{L}$	-890.34		-889.49		-888.34	
AIC	1896.67		1896.99		1894.68	
BIC	2277.88		2284.77		2282.46	
N	5285		5285		5285	
LR Test: Heterogeneity None vs. Heterogeneity One/Two						
χ^2			1.68		3.99	
$P(\chi^2)$			0.10		0.02	

Note: This table presents results obtained by estimating the model represented by Eq.(TA-13). Each estimate assumes a Weibull distribution for survivor times. The estimates are divided into three groups based on assumptions about unobserved heterogeneity. The “Hazard” columns present the exponentiated hazard ratio for each parameter. Hazard ratios are bolded if significant at the 5% level. The bottom section of the table presents likelihood ratio tests that compare the models that include heterogeneity against the baseline no-heterogeneity model.

Our preferred estimates show that the first two “Top Five” publications are each associated with significant increases in the hazard of tenure for tenure-track faculty in the Top 35 departments. The first “Top Five” publication increases tenure hazards by 91%, and the second publication increases this hazard by a further 89%. The third T5 publication is estimated to increase the hazard by a further 29%, however, this estimate is not significant at the 5% level. The estimates for the other journal categories pale in comparison.

To better illustrate the large difference between “Top Five” and non-“Top Five” publications in terms of their impact on the instantaneous rate of tenure, Figure 6 in the main text presents the combined increase in tenure hazards associated with publishing multiple articles in the four journal categories. The multiplicative increase in the hazard of tenure associated with increasing one’s publications in type- j journals from 0 to 2 publications is obtained as follows:

$$\frac{h(t \mid \#j_t = 2, \mathbf{X})}{h(t \mid \#j_t = 0, \mathbf{X})} = \frac{h(t \mid \#j_t = 1, \mathbf{X})}{h(t \mid \#j_t = 0, \mathbf{X})} \times \frac{h(t \mid \#j_t = 2, \mathbf{X})}{h(t \mid \#j_t = 1, \mathbf{X})}$$

In general, the multiplicative increase in the hazard of tenure associated with increasing one’s publications from m to n publications where $m < n$ is obtained by taking the ratio of hazards associated with n and m publications:

$$\frac{h(t \mid \#j_t = n, \mathbf{X})}{h(t \mid \#j_t = m, \mathbf{X})}$$

Table O-A18: Hazard Estimates for Transition Type: Untenured Tenure Track→
Tenured In T35 Dept. (No Unobserved Heterogeneity)

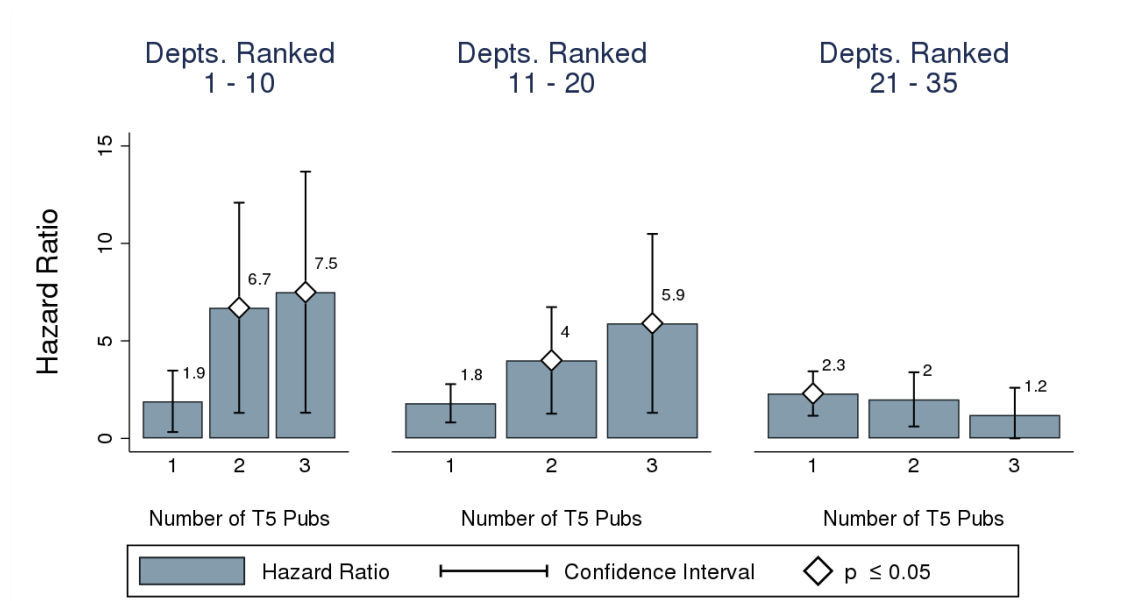
	Exponential		Weibull	
	Hazard	SE.	Hazard	SE.
Publication Parameters				
$\mathbb{1}(T5 \geq 1)$	1.84	(0.29)	1.79	(0.28)
$\mathbb{1}(T5 \geq 2)$	1.68	(0.28)	1.76	(0.30)
$\mathbb{1}(T5 \geq 3)$	1.22	(0.22)	1.22	(0.22)
$\mathbb{1}(TierA \geq 1)$	1.08	(0.18)	0.95	(0.16)
$\mathbb{1}(TierA \geq 2)$	1.21	(0.20)	1.13	(0.19)
$\mathbb{1}(TierA \geq 3)$	1.01	(0.16)	1.07	(0.17)
$\mathbb{1}(TierB \geq 1)$	1.23	(0.17)	1.23	(0.17)
$\mathbb{1}(TierB \geq 2)$	0.77	(0.17)	0.69	(0.15)
$\mathbb{1}(TierB \geq 3)$	0.92	(0.26)	1.16	(0.33)
$\mathbb{1}(General \geq 1)$	1.05	(0.15)	0.97	(0.14)
$\mathbb{1}(General \geq 2)$	0.80	(0.19)	0.79	(0.19)
$\mathbb{1}(General \geq 3)$	0.98	(0.35)	0.93	(0.35)
Control Parameters				
Cum. Citations	1.00	(0.00)	1.00	(0.00)
Years Since Grad.	1.16	(0.02)	0.96	(0.03)
Cum. Coauthors	0.97	(0.02)	0.97	(0.02)
Male	1.35	(0.20)	1.47	(0.22)
T10 Alma Mater	1.01	(0.20)	0.86	(0.17)
T20 Alma Mater	0.97	(0.22)	0.79	(0.18)
T30 Alma Mater	0.70	(0.21)	0.58	(0.18)
T40 Alma Mater	0.29	(0.30)	0.30	(0.31)
$\ln(\text{Total Pubs} + 1)$	3.85	(0.83)	3.42	(0.77)
Occurrence Parameters				
$\delta_{0,j}$	0.83	(0.10)	2.35	(0.34)
Duration Parameter				
λ			2.59	(0.16)
$\log \mathcal{L}$	-960.76		-890.34	
AIC	2035.52		1896.67	
BIC	2410.16		2277.88	
N	5285		5285	

Note: This table presents results obtained by estimating Equation TA-13. Results are grouped into an Exponential and Weibull category. The columns labelled Hazard columns present the exponentiated hazard ratio for each parameter. Hazard ratios are bolded if significant at the 5% level.

3.2 Heterogeneity in Relative Hazards By Department Rank

Online Appendix Figure O-A16 plots department rank-specific relative hazards associated with publishing different numbers of T5 articles. The estimates are obtained according to the method outlined in Text Appendix Section 2.3.

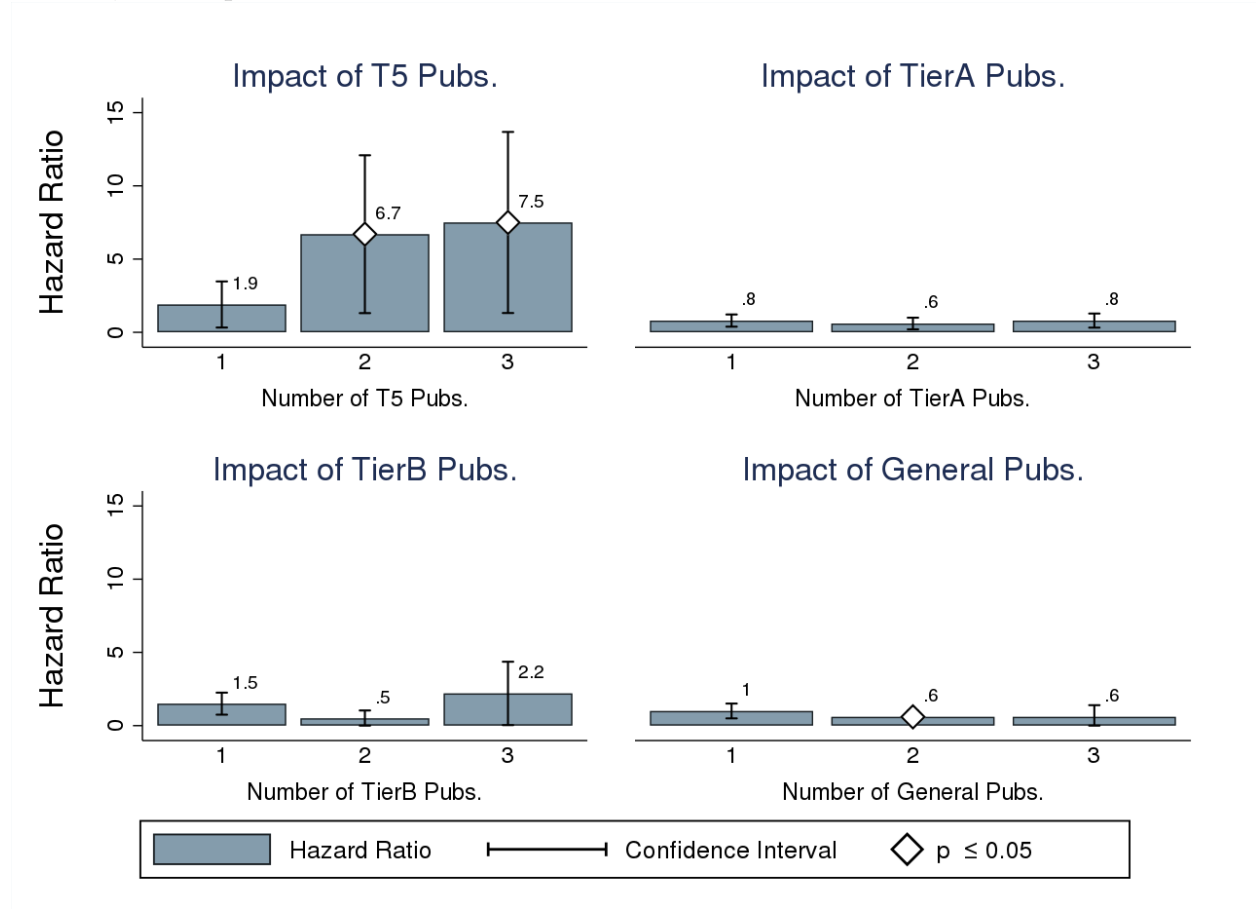
Figure O-A16: Relative Hazards of Tenure Associated With Different Levels of T5 Publications (By Department Rank)



Note: This figure plots department quality-specific hazard rates of tenure associated with different levels of publications in the T5. The department quality-specific hazard rates are estimated by interacting the publication parameters in Equation TA-13 with time-specific indicators for whether an author is hired by a department that belongs to each of the three department-quality groupings.

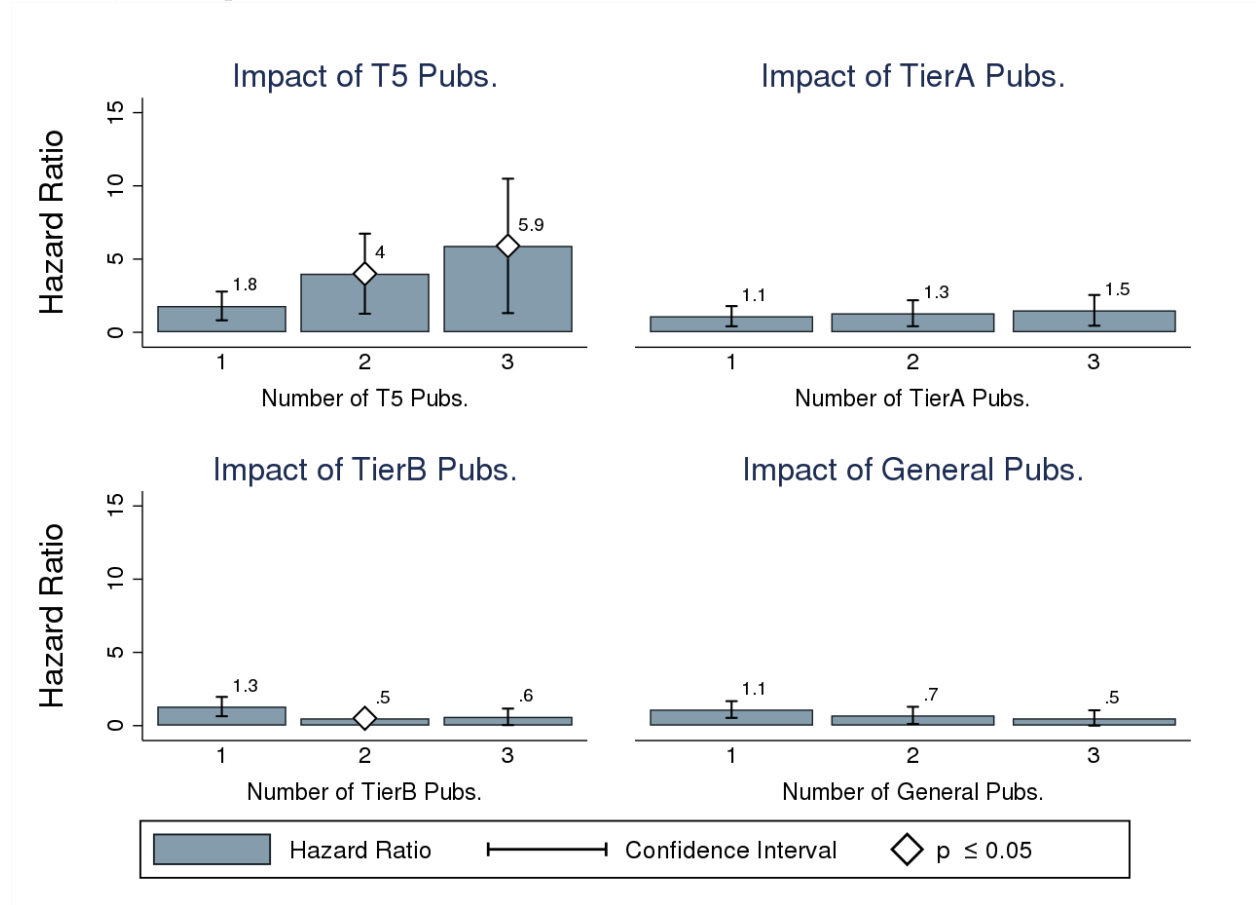
Online Appendix Figures O-A17–O-A19 plot hazard ratios for each of the four journal categories by department rank.

Figure O-A17: Relative Hazards of Tenure Receipt Associated With Publications in Different Outlets, For Departments Ranked 1–10.



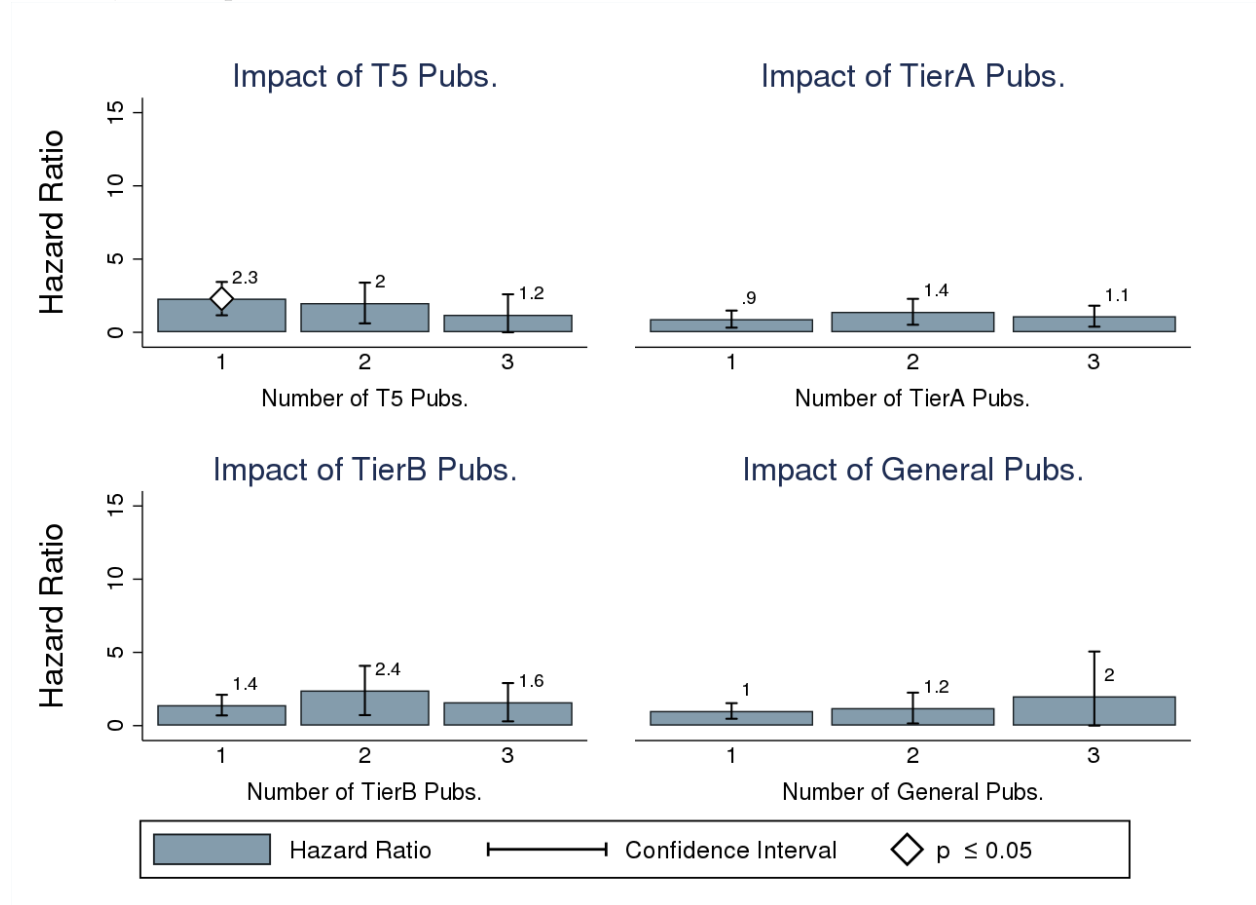
Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with indicators for being employed by one of the three department rank groups in question. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

Figure O-A18: Relative Hazards of Tenure Receipt Associated With Publications in Different Outlets, For Departments Ranked 11–20.



Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with indicators for being employed by one of the three department rank groups in question. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

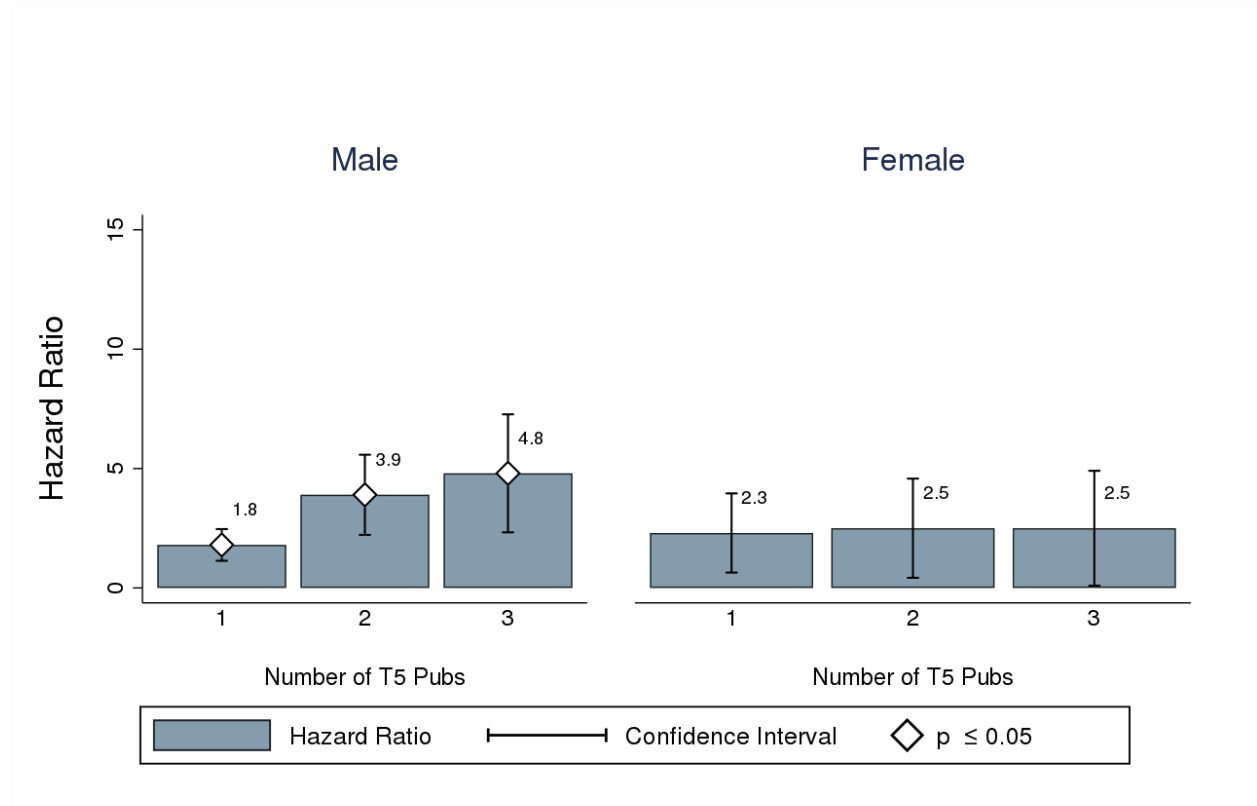
Figure O-A19: Relative Hazards of Tenure Receipt Associated With Publications in Different Outlets, For Departments Ranked 21–35.



Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with indicators for being employed by one of the three department rank groups in question. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

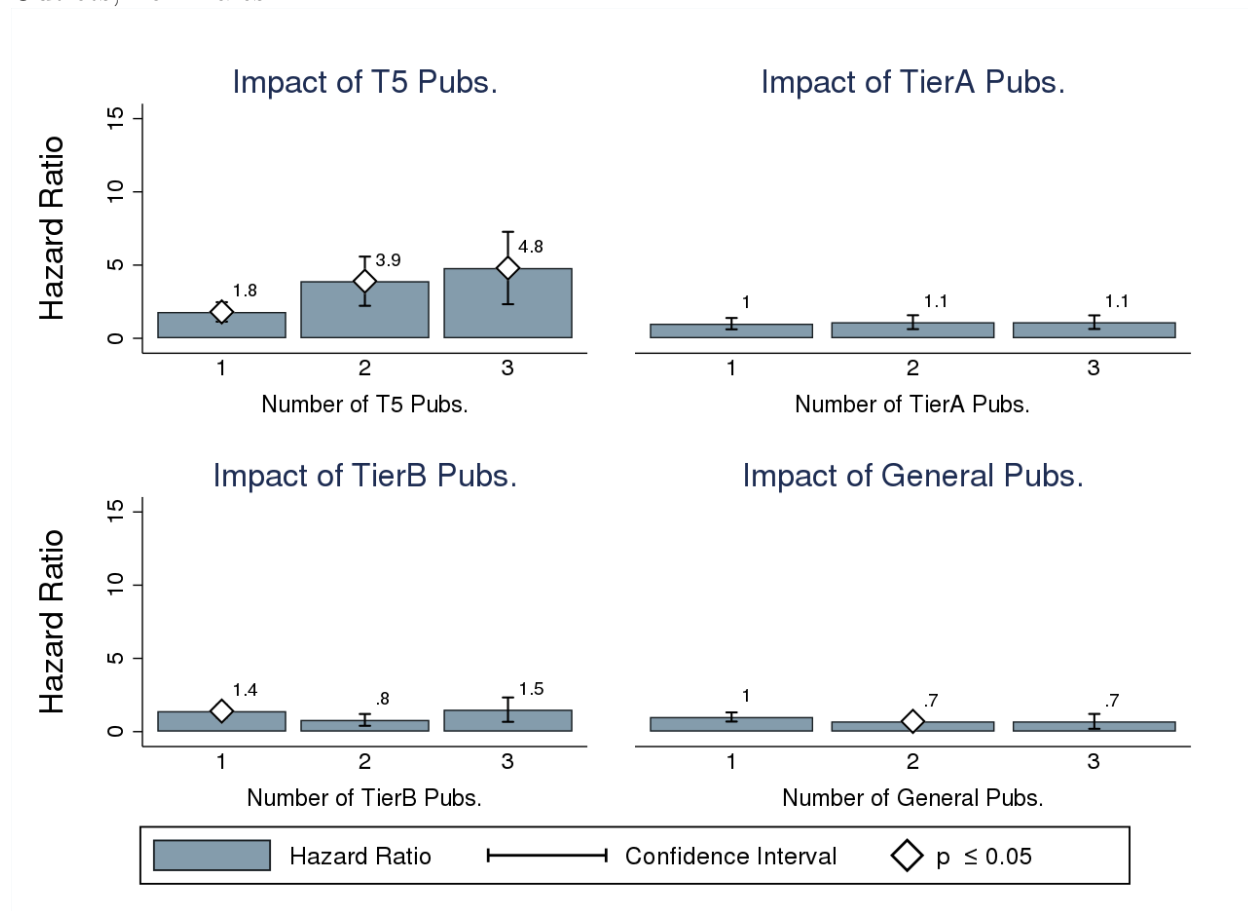
3.3 Heterogeneity in Relative Hazards By Gender

Figure O-A20: Relative Hazards of Tenure Receipt Associated With Publications in “Top Five” Journals, By Gender



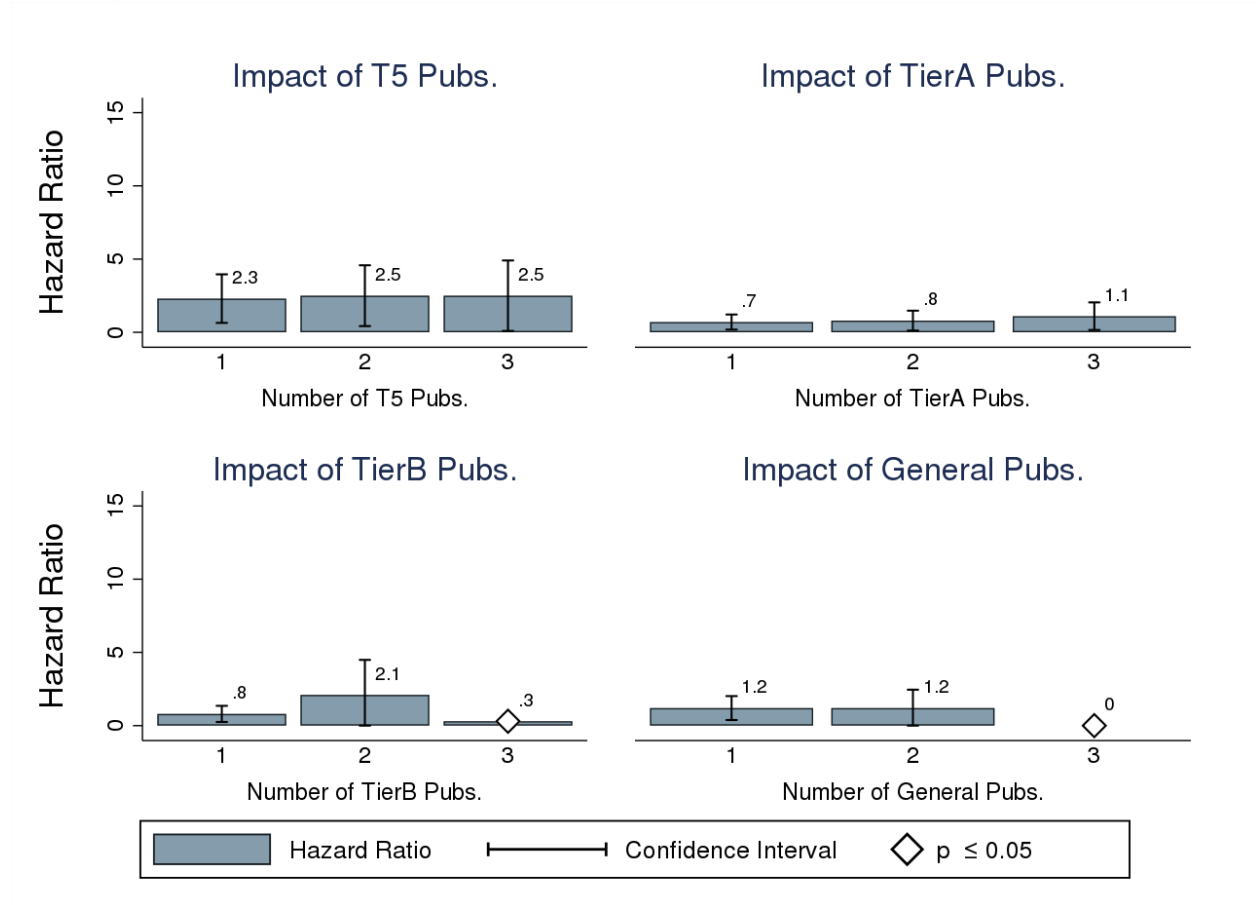
Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with an indicator for gender. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

Figure O-A21: Relative Hazards of Tenure Receipt Associated With Publications in Different Outlets, For Males



Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with an indicator for gender. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

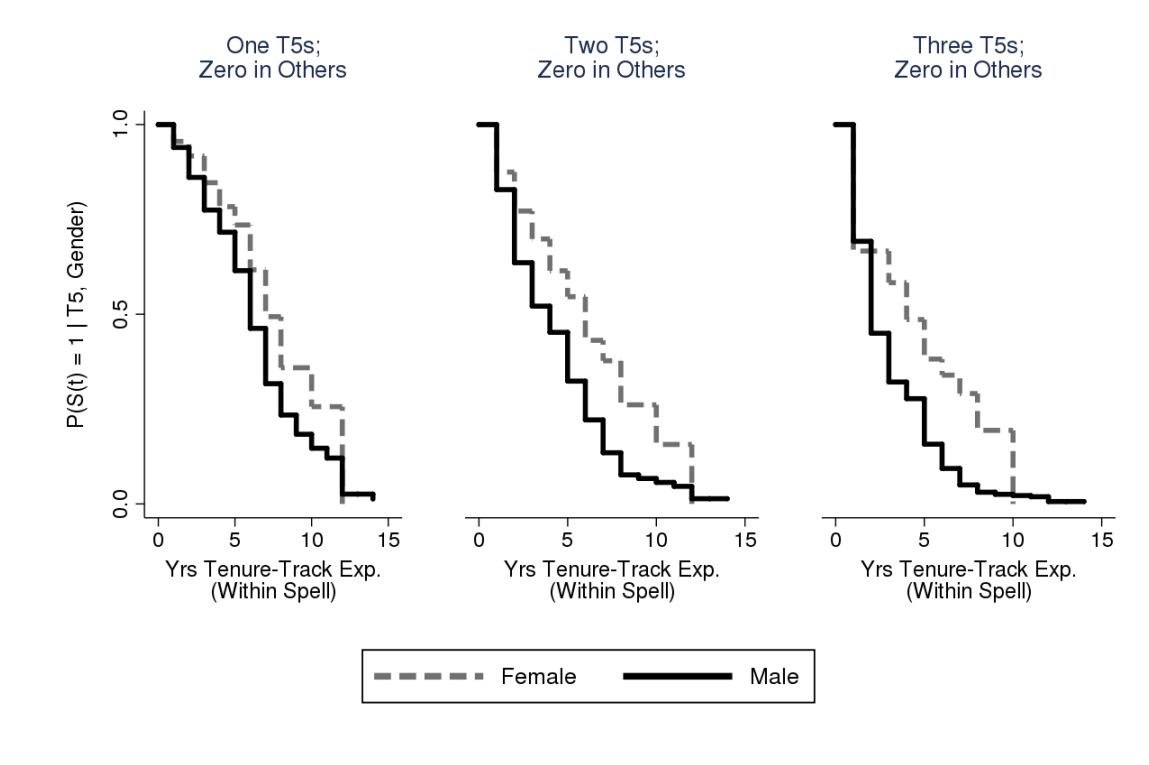
Figure O-A22: Relative Hazards of Tenure Receipt Associated With Publications in Different Outlets, For Females



Note: This figure plots hazard ratios associated with different levels of publications in different outlets. Hazard ratios are obtained by estimating a version of Text Appendix Equation TA-13 where the publication parameters are interacted with an indicator for gender. White diamonds on the bars indicate that the prediction is significantly different than one at the 5% level.

3.4 Heterogeneity in Time-to-Tenure By Gender

Figure O-A23: Non-Parametric Kaplan-Meier Estimates of Survival Function, By Gender and T5 Publication



Note: This figure plots non-parametric Kaplan-Meier estimates of survival probabilities at different years of tenure-track experience by gender and number of Top Five publications.

4 Sensitivity of Estimates To Treatment of Finance Journals

This section presents results that test the sensitivity of Logit, LPM, and hazard estimates to alternative variable specifications for finance journals and to the exclusion of finance journals. Specifically, we present three sets of results for each estimation (Logit, LPM, and hazard) obtained by treating finance journals in three different ways in the model specification. The first set of results excludes finance journals from the Tier A and B field journal categories. The second set of results excludes finance journals from the Tier A and B field journal cate-

gories, and introduces a set of publication threshold indicators that measure publication in these finance journals. We refer to this grouping of the five finance journals as the aggregate grouping of finance journals. The last set of estimates excludes finance journals from the Tier A and B field journal categories, and introduces two sets of publication threshold indicators that measure publication in two tiers of finance journals—the first set of indicators measure publication in Tier A Finance journals (top 2 finance journals), and the second set of indicators measure publication in Tier B Finance journals (finance journals ranked 3–5). We refer to this grouping of the five finance journals as the tiered grouping of finance journals.

4.1 Sensitivity of LPM Estimates to Treatment of Finance Journals

This section presents results obtained by estimating versions of Equation 1 that employ different specifications for the finance journals. To begin, we restate Equation 1 for reference:

$$Tenure_i = \alpha_0 + \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j_i \geq n) \right) + \mathbf{X}\boldsymbol{\beta} + \varepsilon_i$$

Table O-A19 presents results obtained by estimating a version of Equation 1 that excludes finance journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General\}$, where $\overline{TierA} = TierA \setminus finance$ and $\overline{TierB} = TierB \setminus finance$ are the two tiers of field journals with the finance journals excluded.

Table O-A20 presents results obtained by estimating a version of Equation 1 that excludes finance journals from the field journal categories, and introduces a set of publication threshold indicators that measure publication in finance field journals. Specifically, the estimates are obtained by redefining \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, Finance\}$, where *Finance* is composed of the five finance journals that were initially included in *TierA* and *TierB*.

Table O-A21 presents results obtained by estimating a version of Equation 1 that excludes finance journals from the field journal categories, and introduces two sets of publication threshold indicators that measure publication in two different tiers of finance field journals: Tier A finance journals (finance journals ranked 1–2) and Tier B finance journals (finance journals ranked 3–5). Specifically, the estimates are obtained by redefining \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, FinanceA, FinanceB\}$, where *FinanceA* is composed of the top 2 finance journals, and *FinanceB* is composed of finance journals ranked 3–5.

Estimates for the T5 journal categories are largely unchanged between our baseline estimates in Table O-A10 and the sensitivity results in Tables O-A19–O-A21. The parameter associated with three or more T5s in the Top 10 departments is the only T5 parameter that is sensitive to the treatment of finance journals (the magnitude for this parameter remains unchanged, but it loses statistical significance when we introduce separate publication parameters for finance journals).

The pooled results in Table O-A20 shows that a second finance publication is estimated to lead to a statistically significant increase in the probability of tenure. Estimation using the tiered finance categories (see Table O-A21) yields a very similar result for the second Tier A finance publication. Publication in Tier B finance journals are not statistically significantly associated with increases in tenure. Note that many of the Finance-specific parameters are non-estimable in both Tables O-A20 and O-A21 due to sample size issues (the number of individuals in our sample who publish in these journals is small).

Table O-A19: LPM Estimates Excluding Finance Journals From The Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.04)	0.03	(0.06)	0.13	(0.09)	0.22	(0.08)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.31	(0.06)	0.30	(0.06)	0.00	(0.13)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.07)	0.26	(0.11)	0.20	(0.09)	0.12	(0.18)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.03)	-0.06	(0.05)	0.02	(0.05)	-0.01	(0.06)
$\mathbb{1}(TierA \geq 2)$	0.11	(0.04)	0.15	(0.10)	0.01	(0.05)	0.15	(0.07)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.05)	-0.09	(0.10)	0.11	(0.10)	-0.10	(0.11)
$\mathbb{1}(TierB \geq 1)$	0.05	(0.03)	0.09	(0.04)	0.04	(0.07)	0.02	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.05	(0.05)	-0.11	(0.08)	-0.12	(0.09)	0.04	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.16	(0.06)	0.23	(0.08)	0.15	(0.13)	0.17	(0.08)
$\mathbb{1}(General \geq 1)$	0.04	(0.03)	0.09	(0.04)	0.01	(0.04)	0.02	(0.07)
$\mathbb{1}(General \geq 2)$	-0.02	(0.07)	-0.10	(0.15)	-0.01	(0.09)	-0.01	(0.14)
$\mathbb{1}(General \geq 3)$	0.00	(0.09)	-0.22	(0.18)	0.15	(0.15)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.07	(0.03)	0.03	(0.06)	0.10	(0.08)	0.05	(0.06)
R^2	0.52		0.58		0.53		0.56	
N	813		265		268		273	

Note: This table presents LPM results obtained by estimating a respecified version of Equation 1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A20: LPM Estimates Using an Aggregate Finance Field Journal Category (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.15	(0.04)	0.02	(0.06)	0.15	(0.10)	0.25	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.31	(0.06)	0.29	(0.07)	-0.01	(0.12)
$\mathbb{1}(T5 \geq 3)$	0.21	(0.07)	0.26	(0.12)	0.19	(0.10)	0.12	(0.16)
$\mathbb{1}(TierA \geq 1)$	-0.02	(0.03)	-0.07	(0.06)	0.00	(0.06)	-0.03	(0.05)
$\mathbb{1}(TierA \geq 2)$	0.12	(0.04)	0.16	(0.09)	0.03	(0.05)	0.15	(0.07)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.05)	-0.09	(0.10)	0.08	(0.09)	-0.12	(0.10)
$\mathbb{1}(TierB \geq 1)$	0.06	(0.03)	0.09	(0.04)	0.03	(0.07)	0.05	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.05	(0.05)	-0.11	(0.08)	-0.11	(0.09)	0.05	(0.09)
$\mathbb{1}(TierB \geq 3)$	0.16	(0.06)	0.24	(0.09)	0.16	(0.12)	0.16	(0.09)
$\mathbb{1}(General \geq 1)$	0.05	(0.03)	0.09	(0.04)	0.03	(0.05)	0.02	(0.06)
$\mathbb{1}(General \geq 2)$	-0.02	(0.07)	-0.08	(0.16)	-0.05	(0.09)	-0.03	(0.14)
$\mathbb{1}(General \geq 3)$	-0.00	(0.09)	-0.24	(0.19)	0.17	(0.15)	.	(.)
$\mathbb{1}(Finance \geq 1)$	-0.10	(0.05)	-0.06	(0.05)	-0.16	(0.11)	-0.24	(0.10)
$\mathbb{1}(Finance \geq 2)$	0.37	(0.16)	-0.08	(0.16)	0.55	(0.28)	.	(.)
$\mathbb{1}(Finance \geq 3)$	0.13	(0.19)	0.33	(0.31)	.	(.)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.06	(0.04)	0.03	(0.06)	0.09	(0.08)	0.03	(0.06)
R^2	0.53		0.59		0.55		0.59	
N	813		265		266		270	

Note: This table presents LPM results obtained by estimating a respecified version of Equation 1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) a set of publication threshold indicators are added for the 5 finance journals that were previously included in the Tier A and B Field journal categories. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A21: LPM Estimates Using Quality-Specific Finance Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.15	(0.04)	0.01	(0.06)	0.14	(0.10)	0.25	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.32	(0.06)	0.30	(0.07)	-0.02	(0.12)
$\mathbb{1}(T5 \geq 3)$	0.21	(0.07)	0.26	(0.12)	0.20	(0.10)	0.12	(0.16)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.03)	-0.07	(0.06)	0.01	(0.05)	-0.03	(0.05)
$\mathbb{1}(TierA \geq 2)$	0.12	(0.04)	0.16	(0.09)	0.03	(0.05)	0.15	(0.08)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.05)	-0.09	(0.10)	0.09	(0.09)	-0.11	(0.10)
$\mathbb{1}(TierB \geq 1)$	0.06	(0.03)	0.10	(0.04)	0.05	(0.07)	0.04	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.06	(0.05)	-0.12	(0.08)	-0.12	(0.09)	0.05	(0.09)
$\mathbb{1}(TierB \geq 3)$	0.16	(0.06)	0.24	(0.08)	0.15	(0.12)	0.16	(0.09)
$\mathbb{1}(General \geq 1)$	0.05	(0.03)	0.09	(0.04)	0.02	(0.05)	0.03	(0.06)
$\mathbb{1}(General \geq 2)$	-0.03	(0.07)	-0.06	(0.17)	-0.03	(0.09)	-0.03	(0.14)
$\mathbb{1}(General \geq 3)$	-0.00	(0.09)	-0.27	(0.20)	0.17	(0.15)	.	(.)
$\mathbb{1}(FinanceA \geq 1)$	-0.00	(0.07)	0.00	(0.09)	-0.11	(0.11)	-0.07	(0.06)
$\mathbb{1}(FinanceA \geq 2)$	0.36	(0.15)	0.01	(0.13)	.	(.)	.	(.)
$\mathbb{1}(FinanceA \geq 3)$	0.07	(0.23)	0.27	(0.39)	.	(.)	.	(.)
$\mathbb{1}(FinanceB \geq 1)$	-0.06	(0.08)	-0.18	(0.10)	0.30	(0.24)	-0.34	(0.10)
$\mathbb{1}(FinanceB \geq 2)$	.	(.)	.	(.)	.	(.)	.	(.)
$\mathbb{1}(FinanceB \geq 3)$	.	(.)	.	(.)	.	(.)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.06	(0.04)	0.03	(0.06)				
R^2	0.53		0.59		0.54		0.59	
N	813		265		264		270	

Note: This table presents LPM results obtained by estimating a respecified version of Equation 1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) two sets of publication threshold indicators are introduced for two tiers of finance journals– Tier A Finance journals (which includes the top 2 finance journals), and Tier B Finance journals (which includes finance journals ranked 3–5). The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

4.2 Sensitivity of Logit Estimates to Treatment of Finance Journals

This section presents estimates of marginal effects obtained by estimating versions of Equation TA-1 that employ different specifications for the finance journals. To begin, we reproduce Equation TA-1 from the Text Appendix for reference:

$$\log \left(\frac{\Pr(Tenure_i = 1)}{1 - \Pr(Tenure_i = 1)} \right) = \alpha_0 + \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j_i \geq n) \right) + \mathbf{X}\boldsymbol{\beta} + \varepsilon_i$$

Three sets of marginal effect estimates are presented, where each set of estimates uses a different specification for finance journals obtained by redefining \mathcal{J} in an analogous fashion to Section 4.1. These redefinitions are presented below.

Table O-A22 presents results obtained by estimating a version of Equation TA-1 that excludes finance journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General\}$, where $\overline{TierA} = TierA \setminus finance$ and $\overline{TierB} = TierB \setminus finance$ are the two tiers of field journals with the finance journals excluded.

Table O-A23 presents results obtained by estimating a version of Equation TA-1 that excludes finance journals from the field journal categories, and introduces a set of publication threshold indicators that measure publication in finance field journals. Specifically, the estimates are obtained by redefining \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, Finance\}$, where *Finance* is composed of the five finance journals that were initially included in *TierA* and *TierB*.

Table O-A24 presents results obtained by estimating a version of Equation TA-1 that excludes finance journals from the field journal categories, and introduces two sets of publication threshold indicators that measure publication in two different tiers of finance field journals: Tier A finance journals (finance journals ranked 1–2) and Tier B finance journals (finance journals ranked 3–5). Specifically, the estimates are obtained by redefining \mathcal{J} as

$\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, FinanceA, FinanceB\}$, where *FinanceA* is composed of the top 2 finance journals, and *FinanceB* is composed of finance journals ranked 3–5.

Similar to the LPM estimates presented in Section 4.1, marginal effects for the T5 parameters obtained from the logit estimations are robust to our treatment of finance journals (with the exception of the parameter for three T5 publications in departments ranked 11–20. The magnitude of the estimate for this parameter is stable, but it loses statistical significance when the model is estimated using separate parameters for the finance journals). Estimates for the non-T5 non-finance journal parameters are largely unchanged between our baseline estimates in Table O-A13 and the sensitivity results in Tables O-A22–O-A24. Similar to the LPM sensitivity results, the pooled results in Table O-A23 shows that a second finance publication is estimated to lead to a statistically significant increase in the probability of tenure. Estimation using the tiered finance categories (see Table O-A24) yields a very similar result for the second Tier A finance publication. Publication in Tier B finance journals are not statistically significantly associated with increases in the probability of tenure. Note that many of the Finance-specific parameters are non-estimable in both Tables O-A23 and O-A24 due to sample size issues (the number of individuals in our sample who publish in these journals is small).

Table O-A22: Logit Average Marginal Effects Excluding Finance Journals From Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.13	(0.04)	0.06	(0.10)	0.13	(0.06)	0.14	(0.06)
$\mathbb{1}(T5 \geq 2)$	0.13	(0.04)	0.21	(0.07)	0.15	(0.07)	-0.04	(0.10)
$\mathbb{1}(T5 \geq 3)$	0.19	(0.06)	0.16	(0.09)	0.22	(0.10)	0.13	(0.16)
$\mathbb{1}(TierA \geq 1)$	0.00	(0.02)	-0.07	(0.04)	0.08	(0.03)	0.01	(0.04)
$\mathbb{1}(TierA \geq 2)$	0.07	(0.03)	0.09	(0.05)	-0.01	(0.04)	0.09	(0.05)
$\mathbb{1}(TierA \geq 3)$	-0.05	(0.04)	-0.09	(0.06)	0.04	(0.07)	-0.09	(0.08)
$\mathbb{1}(TierB \geq 1)$	0.03	(0.02)	0.05	(0.03)	-0.01	(0.04)	0.01	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.04	(0.04)	-0.11	(0.05)	-0.03	(0.03)	0.02	(0.07)
$\mathbb{1}(TierB \geq 3)$	0.07	(0.04)	0.12	(0.06)	0.04	(0.05)	0.12	(0.12)
$\mathbb{1}(General \geq 1)$	0.00	(0.02)	0.00	(0.04)	-0.01	(0.02)	-0.04	(0.05)
$\mathbb{1}(General \geq 2)$	0.00	(0.04)	-0.01	(0.06)	-0.02	(0.04)	0.08	(0.10)
$\mathbb{1}(General \geq 3)$	0.01	(0.09)	-0.12	(0.09)	0.02	(0.07)	.	(.)
N	813		265		268		273	

Note: This table presents Logit estimates of Marginal Effects results obtained by estimating a respecified version of Equation TA-1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A23: Logit Average Marginal Effects Using Aggregate Finance Category (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.15	(0.04)	0.05	(0.10)	0.15	(0.07)	0.19	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.14	(0.04)	0.22	(0.07)	0.16	(0.06)	-0.07	(0.09)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.06)	0.16	(0.12)	0.21	(0.11)	0.13	(0.13)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.02)	-0.07	(0.04)	0.05	(0.04)	-0.01	(0.03)
$\mathbb{1}(TierA \geq 2)$	0.07	(0.03)	0.10	(0.06)	0.02	(0.04)	0.06	(0.05)
$\mathbb{1}(TierA \geq 3)$	-0.05	(0.03)	-0.09	(0.06)	0.02	(0.07)	-0.07	(0.07)
$\mathbb{1}(TierB \geq 1)$	0.03	(0.02)	0.06	(0.03)	-0.01	(0.04)	0.05	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.04	(0.04)	-0.12	(0.05)	-0.03	(0.04)	0.01	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.08	(0.04)	0.14	(0.08)	0.06	(0.06)	0.07	(0.13)
$\mathbb{1}(General \geq 1)$	0.01	(0.02)	0.00	(0.04)	0.01	(0.02)	-0.03	(0.05)
$\mathbb{1}(General \geq 2)$	0.00	(0.04)	-0.01	(0.06)	-0.04	(0.05)	0.04	(0.09)
$\mathbb{1}(General \geq 3)$	0.00	(0.08)	-0.12	(0.10)	0.03	(0.07)	.	(.)
$\mathbb{1}(Finance \geq 1)$	-0.06	(0.03)	-0.05	(0.03)	-0.06	(0.05)	-0.14	(0.07)
$\mathbb{1}(Finance \geq 2)$	0.27	(0.13)	-0.06	(0.07)	0.29	(0.26)	.	(.)
$\mathbb{1}(Finance \geq 3)$	0.13	(0.24)	0.15	(0.15)	.	(.)	.	(.)
N	813		265		266		270	

Note: This table presents Logit estimates of Marginal Effects results obtained by estimating a respecified version of Equation TA-1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) a set of publication threshold indicators are added for the 5 finance journals that were previously included in the Tier A and B Field journal categories. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A24: Logit Average Marginal Effects Using Tiered Finance Category (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.03)	0.05	(0.09)	0.14	(0.06)	0.19	(0.06)
$\mathbb{1}(T5 \geq 2)$	0.13	(0.04)	0.21	(0.07)	0.15	(0.06)	-0.07	(0.09)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.06)	0.16	(0.10)	0.21	(0.11)	0.14	(0.13)
$\mathbb{1}(TierA \geq 1)$	0.00	(0.02)	-0.07	(0.04)	0.05	(0.04)	-0.01	(0.03)
$\mathbb{1}(TierA \geq 2)$	0.07	(0.03)	0.10	(0.06)	0.01	(0.04)	0.06	(0.05)
$\mathbb{1}(TierA \geq 3)$	-0.05	(0.03)	-0.09	(0.06)	0.03	(0.06)	-0.07	(0.07)
$\mathbb{1}(TierB \geq 1)$	0.04	(0.02)	0.07	(0.03)	0.00	(0.04)	0.04	(0.04)
$\mathbb{1}(TierB \geq 2)$	-0.04	(0.04)	-0.13	(0.05)	-0.03	(0.04)	0.01	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.07	(0.04)	0.13	(0.07)	0.05	(0.05)	0.07	(0.13)
$\mathbb{1}(General \geq 1)$	0.00	(0.02)	0.01	(0.04)	0.01	(0.02)	-0.03	(0.05)
$\mathbb{1}(General \geq 2)$	0.00	(0.04)	-0.02	(0.06)	-0.04	(0.05)	0.04	(0.08)
$\mathbb{1}(General \geq 3)$	0.00	(0.08)	-0.12	(0.09)	0.03	(0.07)	.	(.)
$\mathbb{1}(FinanceA \geq 1)$	0.05	(0.05)	0.07	(0.09)	-0.05	(0.05)	0.00	(0.06)
$\mathbb{1}(FinanceA \geq 2)$	0.80	(0.05)	0.58	(0.23)	.	(.)	.	(.)
$\mathbb{1}(FinanceA \geq 3)$	-0.45	(0.18)	-0.43	(0.33)	.	(.)	.	(.)
$\mathbb{1}(FinanceB \geq 1)$	-0.06	(0.04)	-0.10	(0.05)	0.19	(0.23)	-0.23	(0.04)
$\mathbb{1}(FinanceB \geq 2)$	.	(.)	.	(.)	.	(.)	.	(.)
$\mathbb{1}(FinanceB \geq 3)$	.	(.)	.	(.)	.	(.)	.	(.)
N	813		265		264		270	

Note: This table presents Logit estimates of Marginal Effects results obtained by estimating a respecified version of Equation TA-1 with the following variable redefinitions: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) two sets of publication threshold indicators are introduced for two tiers of finance journals– Tier A Finance journals (which includes the top 2 finance journals), and Tier B Finance journals (which includes finance journals ranked 3–5). . The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

4.3 Sensitivity of Hazard Estimates To Treatment of Finance Journals

This section presents estimates of hazard ratios obtained by estimating versions of Equation TA-13 that employ different specifications for the finance journals. To begin, we reproduce

Equation [TA-13](#) from the Text Appendix for reference:

$$h_{0,j}^l(t_{0,j}) = \exp \left\{ \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j(t_{0,j}) \geq n) \right) + \mathbf{X}_{0,j} \boldsymbol{\beta}_{0,j} + \delta_{0,j}(l-1) + \right. \\ \left. + \gamma_{1,0,j} \frac{(t_{0,j}^{\lambda_{1,0,j}} - 1)}{\lambda_{1,0,j}} + \gamma_{2,0,j} \frac{(t_{0,j}^{\lambda_{2,0,j}} - 1)}{\lambda_{2,0,j}} + V_{0,j}^l \right\}$$

Three sets of hazard ratios are presented, where each set of estimates uses a different specification for finance journals obtained by redefining \mathcal{J} in an analogous fashion to Sections [4.1](#) and [4.2](#). These redefinitions are presented below.

The first column of estimates in [Table O-A25](#) present baseline estimates (these are the same estimates reported in the last column of estimates presented in [Appendix Table O-A17](#)). The second column of estimates in [Table O-A25](#) presents results obtained by estimating a version of [Equation TA-13](#) that excludes finance journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General\}$, where $\overline{TierA} = TierA \setminus finance$ and $\overline{TierB} = TierB \setminus finance$ are the two tiers of field journals with the finance journals excluded. The third column of estimates in [Table O-A25](#) presents results obtained by estimating a version of [Equation TA-13](#) that excludes finance journals from the field journal categories, and introduces a set of publication threshold indicators that measure publication in finance field journals. Specifically, the estimates are obtained by redefining \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, Finance\}$, where *Finance* is composed of the five finance journals that were initially included in *TierA* and *TierB*. The last column of estimates in [Table O-A25](#) presents results obtained by estimating a version of [Equation TA-1](#) that excludes finance journals from the field journal categories, and introduces two sets of publication threshold indicators that measure publication in two different tiers of finance field journals: Tier A finance journals (finance journals ranked 1–2) and Tier B finance journals (finance journals ranked 3–5). Specifically, the estimates are obtained by redefining \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General, FinanceA, FinanceB\}$, where *FinanceA* is composed of the top 2 finance journals, and *FinanceB* is composed of finance journals ranked 3–5.

Similar to the marginal effects presented in Section 4.2, the hazard estimates for the T5 and non-T5 non-finance journal categories are robust to our treatment of finance journals. Estimates for the T5 and non-T5 non-finance journal categories are largely unchanged between the baseline estimates and the alternatives presented in columns 2–4 of the table. The overall relationship between the Top Five journals and non-Top Five non-Finance journals is unaffected by our treatment of finance journals. Publication in finance journals are estimated to make significant contributions towards reduction in the time-to-tenure (see estimates in columns 3 and 4 of the table). The magnitude of the finance-specific estimates are large, suggesting that faculty specializing in finance might have access to viable non-Top Five alternatives through which they can signal their research productivity for tenure or promotion.

Table O-A25: Sensitivity of Weibull Estimates to Varying Treatment of Finance Journals
(Transition Type: Untenured Tenure Track→Tenured In T35 Dept.; Individual-Spell Heterogeneity)

	Baseline		Finance Excluded		Finance Decomposed		Finance Tiers Decomposed	
	Hazard	SE.	Hazard	SE.	Hazard	SE.	Hazard	SE.
$\mathbb{1}(T5 \geq 1)$	1.91	(0.33)	1.89	(0.33)	1.97	(0.34)	1.94	(0.33)
$\mathbb{1}(T5 \geq 2)$	1.89	(0.36)	1.90	(0.36)	1.87	(0.36)	1.89	(0.36)
$\mathbb{1}(T5 \geq 3)$	1.29	(0.26)	1.29	(0.26)	1.33	(0.27)	1.22	(0.25)
$\mathbb{1}(TierA \geq 1)$	0.89	(0.16)	1.04	(0.18)	0.98	(0.17)	1.03	(0.18)
$\mathbb{1}(TierA \geq 2)$	1.16	(0.21)	0.97	(0.18)	1.03	(0.19)	0.98	(0.18)
$\mathbb{1}(TierA \geq 3)$	1.10	(0.20)	1.24	(0.23)	1.21	(0.23)	1.26	(0.23)
$\mathbb{1}(TierB \geq 1)$	1.26	(0.20)	1.21	(0.19)	1.24	(0.19)	1.23	(0.19)
$\mathbb{1}(TierB \geq 2)$	0.72	(0.18)	0.86	(0.21)	0.83	(0.21)	0.85	(0.21)
$\mathbb{1}(TierB \geq 3)$	1.27	(0.40)	1.13	(0.37)	1.23	(0.40)	1.13	(0.36)
$\mathbb{1}(General \geq 1)$	0.99	(0.16)	1.01	(0.16)	1.00	(0.16)	0.99	(0.15)
$\mathbb{1}(General \geq 2)$	0.70	(0.19)	0.69	(0.19)	0.72	(0.19)	0.75	(0.20)
$\mathbb{1}(General \geq 3)$	1.04	(0.44)	1.01	(0.43)	0.95	(0.41)	0.91	(0.38)
$\mathbb{1}(Finance \geq 1)$	.	.	.	.	0.41	(0.14)	.	.
$\mathbb{1}(Finance \geq 2)$	.	.	.	.	3.07	(1.66)	.	.
$\mathbb{1}(Finance \geq 3)$	.	.	.	.	1.52	(0.98)	.	.
$\mathbb{1}(FinanceA \geq 1)$	.	.	.	.	.	.	0.49	(0.18)
$\mathbb{1}(FinanceA \geq 2)$	.	.	.	.	.	.	4.28	(2.69)
$\mathbb{1}(FinanceA \geq 3)$	.	.	.	.	.	.	1.87	(1.33)
$\mathbb{1}(FinanceB \geq 1)$	.	.	.	.	.	.	0.81	(0.32)
$\mathbb{1}(FinanceB \geq 2)$	.	.	.	.	.	.	0.00	(0.00)
$\mathbb{1}(FinanceB \geq 3)$	.	.	.	.	.	.	1.00	.
$\log \mathcal{L}$	-888.34		-889.07		-883.99		-880.14	
AIC	1894.68		1896.14		1891.98		1888.28	
BIC	2282.46		2283.93		2299.49		2308.93	
N	5285		5285		5285		5285	

Note: This table presents results obtained by estimating three versions of the model represented by Eq.(TA-13). The first column of estimates are obtained by estimating the specification used in Equation TA-13 (these are identical to the third column of estimates presented in Appendix Table O-A17). The second column re-specifies Eq.(TA-13) as follows: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) a set of publication threshold indicators are added for the 5 finance journals that were previously included in the Tier A and B Field journal categories. The third column re-specifies Eq.(TA-13) as follows: (i) The Tier A and B Field Journal categories are redefined to exclude all finance field journals, and (ii) the finance field journal category used in the second column is further decomposed into Finance Tier A which includes the top 2 finance journals, and Finance Tier B which includes finance journals ranked 3-5. Separate sets of publication threshold indicators are introduced for both categories of finance field journals. Each estimate assumes a Weibull distribution for survivor times. The “Hazard” columns present the exponentiated hazard ratio for each parameter. Hazard ratios are bolded if significant at the 5% level.

5 Sensitivity of Estimates To Treatment of Econometrics Journals

This section presents results that test the sensitivity of logit, LPM, and hazard estimates to alternative treatment of the econometrics journals. These estimates are obtained by (i) re-defining the Tier A field journal category to include the *Annals of Statistics* and the *Journal of the American Statistical Association* (instead of the econometrics journals that were originally included in the Tier A category); and (ii) by excluding econometrics journals from the Tier A and B field journal categories altogether. T5 estimates are largely unchanged. The T5's relative importance becomes more pronounced in the estimates obtained from models that employ these alternative treatments of the econometrics journals. Most of the Tier B field journal estimates become statistically insignificant in the LPM models that employ these alternative treatments of econometrics journals, suggesting that the positive association observed between tenure decisions and Tier B publications in our baseline estimates are largely driven by the econometrics journals that originally comprised the Tier B category used in our baseline specification (*Journal of the American Statistical Association* in particular).

5.1 Sensitivity of LPM Estimates to Treatment of Econometrics Journals

This section presents results obtained by estimating versions of Equation 1 that exclude econometrics journals. To begin, we restate Equation 1 for reference:

$$Tenure_i = \alpha_0 + \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j_i \geq n) \right) + \mathbf{X}\boldsymbol{\beta} + \varepsilon_i$$

Table O-A26 presents results obtained by estimating a version of Equation 1 that

excludes econometrics journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General\}$, where $\overline{TierA} = TierA \setminus econometrics$ and $\overline{TierB} = TierB \setminus econometrics$ are the two tiers of field journals with the econometrics journals excluded.

Table O-A27 presents results obtained by estimating a version of Equation 1 with the following re-definitions for the Tier A and B field journal categories: (i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition).

Estimates for the T5 journal categories are largely unchanged between our baseline estimates in Table O-A10 and the sensitivity results in Tables O-A26–O-A27. T5 parameters are not sensitive to alternative definitions of top tier econometrics journals (see Table O-A27). The parameter associated with three or more T5s in the Top 10 departments is the only T5 parameter that is sensitive to the exclusion of econometrics journals (the magnitude for this parameter remains similar, but it loses statistical significance when we exclude econometrics journals from the specification).

We note that most of the Tier B field journal estimates become statistically insignificant in Tables O-A26–O-A27. The loss of significance suggests that the positive association observed between tenure decisions and Tier B publications in our baseline estimates (Table O-A10) are largely driven by the econometrics journals that originally comprised the Tier B category used in our baseline specification (*Journal of the American Statistical Association* in particular).

Table O-A26: LPM Estimates Excluding Econometrics Journals From The Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.04)	0.02	(0.04)	0.14	(0.09)	0.22	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.20	(0.05)	0.34	(0.06)	0.29	(0.06)	-0.04	(0.14)
$\mathbb{1}(T5 \geq 3)$	0.19	(0.07)	0.22	(0.10)	0.19	(0.10)	0.15	(0.18)
$\mathbb{1}(TierA \geq 1)$	-0.03	(0.03)	-0.04	(0.06)	-0.06	(0.05)	-0.01	(0.05)
$\mathbb{1}(TierA \geq 2)$	0.10	(0.04)	0.04	(0.10)	0.14	(0.08)	0.06	(0.07)
$\mathbb{1}(TierA \geq 3)$	-0.05	(0.05)	-0.02	(0.12)	-0.06	(0.10)	-0.04	(0.10)
$\mathbb{1}(TierB \geq 1)$	0.04	(0.03)	0.03	(0.06)	0.02	(0.07)	0.06	(0.05)
$\mathbb{1}(TierB \geq 2)$	-0.01	(0.05)	-0.09	(0.11)	-0.06	(0.09)	0.12	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.10	(0.07)	.	(.)	0.06	(0.13)	0.03	(0.08)
$\mathbb{1}(General \geq 1)$	0.05	(0.03)	0.13	(0.05)	0.00	(0.05)	0.00	(0.07)
$\mathbb{1}(General \geq 2)$	-0.02	(0.07)	-0.15	(0.16)	0.01	(0.10)	0.01	(0.13)
$\mathbb{1}(General \geq 3)$	0.02	(0.09)	-0.11	(0.23)	0.14	(0.16)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.09	(0.04)	0.01	(0.06)	0.13	(0.08)	0.06	(0.05)
R^2	0.52		0.57		0.53		0.56	
N	813		258		268		273	

Note: This table presents LPM results obtained by estimating a respecified version of Equation 1 with the following variable redefinition: (i) The Tier A and B Field Journal categories are redefined to exclude all econometrics field journals. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A27: LPM Estimates With Alternative Definition of Top Tier Econometrics Journals In The Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$\mathbb{1}(T5 \geq 1)$	0.15	(0.04)	0.01	(0.06)	0.14	(0.10)	0.24	(0.07)
$\mathbb{1}(T5 \geq 2)$	0.21	(0.05)	0.32	(0.05)	0.31	(0.07)	-0.02	(0.14)
$\mathbb{1}(T5 \geq 3)$	0.20	(0.07)	0.24	(0.10)	0.19	(0.10)	0.13	(0.18)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.03)	-0.02	(0.07)	-0.05	(0.05)	0.02	(0.04)
$\mathbb{1}(TierA \geq 2)$	0.10	(0.04)	0.07	(0.10)	0.15	(0.06)	0.03	(0.07)
$\mathbb{1}(TierA \geq 3)$	-0.03	(0.05)	-0.01	(0.12)	-0.03	(0.10)	-0.02	(0.11)
$\mathbb{1}(TierB \geq 1)$	0.02	(0.03)	0.01	(0.05)	0.03	(0.07)	0.02	(0.05)
$\mathbb{1}(TierB \geq 2)$	0.03	(0.05)	0.06	(0.12)	-0.06	(0.06)	0.17	(0.08)
$\mathbb{1}(TierB \geq 3)$	0.11	(0.08)	0.06	(0.21)	0.16	(0.11)	0.09	(0.08)
$\mathbb{1}(General \geq 1)$	0.05	(0.03)	0.11	(0.05)	0.00	(0.05)	0.01	(0.07)
$\mathbb{1}(General \geq 2)$	-0.02	(0.07)	-0.14	(0.17)	0.00	(0.10)	0.03	(0.13)
$\mathbb{1}(General \geq 3)$	0.01	(0.09)	-0.15	(0.21)	0.10	(0.15)	.	(.)
$\ln(\text{Total Pubs}+1)$	0.08	(0.03)	0.03	(0.05)	0.12	(0.08)	0.05	(0.05)
R^2	0.52		0.58		0.53		0.57	
N	813		265		268		273	

Note: This table presents LPM results obtained by estimating a respecified version of Equation 1 with the following variable redefinition: (i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition). The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

5.2 Sensitivity of Logit Estimates to Treatment of Econometrics Journals

This section presents estimates of marginal effects obtained by estimating versions of Equation TA-1 that exclude econometrics journals. To begin, we reproduce Equation TA-1 from

the Text Appendix for reference:

$$\log \left(\frac{\Pr(\textit{Tenure}_i = 1)}{1 - \Pr(\textit{Tenure}_i = 1)} \right) = \alpha_0 + \sum_{j \in \mathcal{J}} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j_i \geq n) \right) + \mathbf{X}\boldsymbol{\beta} + \varepsilon_i$$

Table O-A28 presents results obtained by estimating a version of Equation TA-1 that excludes econometrics journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{\textit{TierA}}, \overline{\textit{TierB}}, \textit{General}\}$, where $\overline{\textit{TierA}} = \textit{TierA} \setminus \textit{econometrics}$ and $\overline{\textit{TierB}} = \textit{TierB} \setminus \textit{econometrics}$ are the two tiers of field journals with the econometrics journals excluded.

Table O-A29 presents results obtained by estimating a version of Equation TA-1 with the following re-definitions for the Tier A and B field journal categories: (i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition).

Similar to the LPM estimates presented in Section 5.1, marginal effects for the T5 parameters obtained from the logit estimations are largely robust to these alternative treatments of econometrics journals (with the exception of the parameters associated with one and three T5 publications in departments ranked 11–20. The magnitude of the estimate for these parameters are stable, but they lose statistical significance when the model is estimated using the alternative treatments for econometrics journals). Estimates for the non-T5 journal parameters are mostly unchanged between our baseline estimates in Table O-A13 and the sensitivity results in Tables O-A28– O-A29.

Table O-A28: Logit Average Marginal Effects Excluding Econometrics Journals From Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.04)	0.04	(0.09)	0.16	(0.07)	0.13	(0.06)
$\mathbb{1}(T5 \geq 2)$	0.14	(0.04)	0.25	(0.06)	0.15	(0.05)	-0.07	(0.11)
$\mathbb{1}(T5 \geq 3)$	0.18	(0.06)	0.12	(0.08)	0.19	(0.11)	0.16	(0.15)
$\mathbb{1}(TierA \geq 1)$	-0.02	(0.02)	-0.04	(0.04)	0.00	(0.04)	0.02	(0.03)
$\mathbb{1}(TierA \geq 2)$	0.07	(0.03)	0.03	(0.04)	0.09	(0.08)	-0.01	(0.06)
$\mathbb{1}(TierA \geq 3)$	-0.06	(0.04)	-0.04	(0.05)	-0.07	(0.08)	-0.01	(0.09)
$\mathbb{1}(TierB \geq 1)$	0.02	(0.02)	0.00	(0.03)	-0.02	(0.04)	0.07	(0.05)
$\mathbb{1}(TierB \geq 2)$	0.00	(0.04)	-0.07	(0.05)	0.00	(0.05)	0.08	(0.07)
$\mathbb{1}(TierB \geq 3)$	0.07	(0.06)	.	(.)	0.01	(0.07)	0.01	(0.14)
$\mathbb{1}(General \geq 1)$	0.00	(0.02)	0.04	(0.04)	-0.01	(0.03)	-0.04	(0.05)
$\mathbb{1}(General \geq 2)$	0.00	(0.04)	-0.04	(0.06)	-0.02	(0.06)	0.08	(0.07)
$\mathbb{1}(General \geq 3)$	0.02	(0.10)	-0.11	(0.07)	0.03	(0.10)	.	(.)
N	813		258		268		273	

Note: This table presents Logit estimates of Marginal Effects results obtained by estimating a respecified version of Equation TA-1 with the following variable redefinition: (i) The Tier A and B Field Journal categories are redefined to exclude all econometrics field journals. The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

Table O-A29: Logit Average Marginal Effects With Alternative Definition of Top Tier Econometrics Journals In The Field Journal Categories (For Tenure Receipt During the First Spell of Tenure-Track Experience)

	Pooled		Top 10		Top 11-20		Top 21-35	
	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.	Marg. Eff.	SE.
$\mathbb{1}(T5 \geq 1)$	0.14	(0.04)	0.04	(0.09)	0.16	(0.08)	0.17	(0.05)
$\mathbb{1}(T5 \geq 2)$	0.14	(0.04)	0.22	(0.06)	0.17	(0.07)	-0.05	(0.11)
$\mathbb{1}(T5 \geq 3)$	0.19	(0.06)	0.14	(0.09)	0.20	(0.11)	0.18	(0.16)
$\mathbb{1}(TierA \geq 1)$	-0.01	(0.02)	-0.05	(0.04)	-0.01	(0.04)	0.03	(0.03)
$\mathbb{1}(TierA \geq 2)$	0.07	(0.03)	0.06	(0.05)	0.10	(0.08)	-0.01	(0.06)
$\mathbb{1}(TierA \geq 3)$	-0.04	(0.04)	-0.06	(0.06)	-0.05	(0.09)	0.00	(0.10)
$\mathbb{1}(TierB \geq 1)$	0.00	(0.02)	0.00	(0.03)	0.01	(0.05)	-0.01	(0.05)
$\mathbb{1}(TierB \geq 2)$	0.03	(0.03)	-0.02	(0.05)	-0.02	(0.05)	0.12	(0.06)
$\mathbb{1}(TierB \geq 3)$	0.06	(0.05)	0.08	(0.09)	0.07	(0.07)	0.12	(0.10)
$\mathbb{1}(General \geq 1)$	0.00	(0.02)	0.01	(0.05)	-0.01	(0.03)	-0.04	(0.06)
$\mathbb{1}(General \geq 2)$	-0.01	(0.04)	-0.03	(0.08)	-0.02	(0.06)	0.11	(0.09)
$\mathbb{1}(General \geq 3)$	0.02	(0.10)	-0.10	(0.09)	0.01	(0.08)	.	(.)
N	813		265		268		273	

Note: This table presents Logit estimates of Marginal Effects results obtained by estimating a respecified version of Equation TA-1 with the following variable redefinition:(i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition). The Pooled, Top 15, Top 16-25, and Top 26-35 categories present results from four separate estimations on four different samples of tenure-track faculty. Standard errors are reported in parentheses. Bolded estimates are significant at the 5% level.

5.3 Sensitivity of Hazard Estimates To Treatment of Econometrics Journals

This section presents estimates of hazard ratios obtained by estimating versions of Equation TA-13 that exclude econometrics journals. To begin, we reproduce Equation TA-13 from the Text Appendix for reference:

$$h_{0,j}^l(t_{0,j}) = \exp \left\{ \sum_{j \in J} \left(\sum_{n=1}^3 \alpha_j^n \cdot \mathbb{1}(\#j(t_{0,j}) \geq n) \right) + \mathbf{X}_{0,j} \boldsymbol{\beta}_{0,j} + \delta_{0,j}(l-1) + \right. \\ \left. + \gamma_{1,0,j} \frac{(t_{0,j}^{\lambda_{1,0,j}} - 1)}{\lambda_{1,0,j}} + \gamma_{2,0,j} \frac{(t_{0,j}^{\lambda_{2,0,j}} - 1)}{\lambda_{2,0,j}} + V_{0,j}^l \right\}$$

Three sets of hazard ratios are presented. The first column of estimates in Table O-A30 present baseline estimates (these are the same estimates reported in the last column of estimates presented in Appendix Table O-A17). The second column of estimates in Table O-A30 presents results obtained by estimating a version of Equation TA-13 that excludes econometrics journals from the field journal categories. Specifically, we redefine \mathcal{J} as $\mathcal{J} = \{T5, \overline{TierA}, \overline{TierB}, General\}$, where $\overline{TierA} = TierA \setminus econometrics$ and $\overline{TierB} = TierB \setminus econometrics$ are the two tiers of field journals with the econometrics journals excluded. The third column of estimates are obtained by estimating a version of Equation TA-13 with the following re-definitions for the Tier A and B field journal categories: (i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition).

Similar to the marginal effects presented in Section 5.2, the hazard estimates for the T5 journal categories are robust to our treatment of econometrics journals. Estimates for

the T5 and non-T5 journal categories are largely unchanged between the baseline estimates and the alternatives presented in columns 2 and 3 of the table. The overall relationship between the Top Five journals and non-Top Five journals is unaffected by our treatment of econometrics journals.

Table O-A30: Sensitivity of Weibull Estimates to Exclusion of Econometrics Journals (Transition Type: Untenured Tenure Track→Tenured In T35 Dept.; Individual-Spell Heterogeneity)

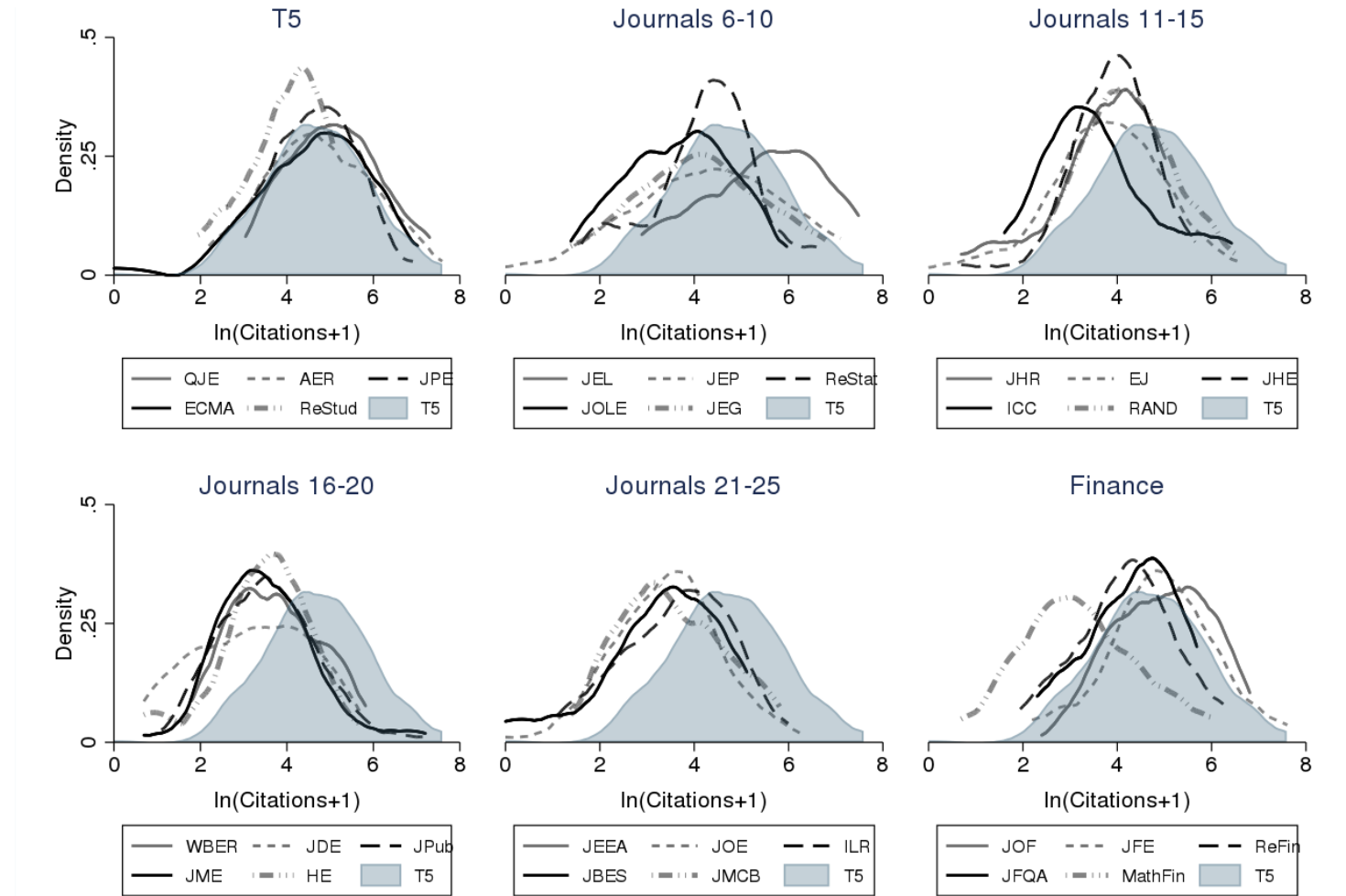
	Baseline		Econometrics Excluded		Econometrics Alternative	
	Hazard	SE.	Hazard	SE.	Hazard	SE.
$\mathbb{1}(T5 \geq 1)$	1.91	(0.33)	1.94	(0.34)	1.95	(0.34)
$\mathbb{1}(T5 \geq 2)$	1.89	(0.36)	1.84	(0.34)	1.86	(0.35)
$\mathbb{1}(T5 \geq 3)$	1.29	(0.26)	1.24	(0.25)	1.27	(0.26)
$\mathbb{1}(TierA \geq 1)$	0.89	(0.16)	0.75	(0.13)	0.77	(0.13)
$\mathbb{1}(TierA \geq 2)$	1.16	(0.21)	1.30	(0.25)	1.24	(0.24)
$\mathbb{1}(TierA \geq 3)$	1.10	(0.20)	1.02	(0.20)	1.07	(0.20)
$\mathbb{1}(TierB \geq 1)$	1.26	(0.20)	1.20	(0.19)	1.16	(0.18)
$\mathbb{1}(TierB \geq 2)$	0.72	(0.18)	0.73	(0.19)	0.88	(0.20)
$\mathbb{1}(TierB \geq 3)$	1.27	(0.40)	1.06	(0.37)	1.05	(0.29)
$\mathbb{1}(General \geq 1)$	0.99	(0.16)	0.97	(0.15)	0.98	(0.15)
$\mathbb{1}(General \geq 2)$	0.70	(0.19)	0.79	(0.21)	0.77	(0.21)
$\mathbb{1}(General \geq 3)$	1.04	(0.44)	0.88	(0.37)	0.86	(0.37)
$\log \mathcal{L}$	-888.34		-888.41		-889.34	
AIC	1894.68		1894.81		1896.68	
BIC	2282.46		2282.60		2284.46	
N	5285		5285		5285	

Note: This table presents results obtained by estimating two versions of the model represented by Eq.(TA-13). The first column of estimates are obtained by estimating the specification used in Equation TA-13 (these are identical to the third column of estimates presented in Appendix Table O-A17). The second column re-specifies Eq.(TA-13) as follows: (i) The Tier A and B Field Journal categories are redefined to exclude all econometrics field journals. The third column of estimates are obtained by estimating a version of Equation TA-13 with the following re-definitions for the Tier A and B field journal categories: (i) Tier A is re-defined to include the following econometrics journals: *Annals of Statistics* and the *Journal of the American Statistical Association* (non-econometrics journals in Tier A are unaffected by this re-definition); and (ii) Tier B is re-defined to include the following econometrics journals: the *Journal of Econometrics*, the *Journal of Business and Economic Statistics*, and the *Journal of Applied Econometrics* (non-econometrics journals in Tier B are unaffected by this re-definition). Each estimate assumes a Weibull distribution for survivor times. The “Hazard” columns present the exponentiated hazard ratio for each parameter. Hazard ratios are bolded if significant at the 5% level.

6 “Top Five” As a Filter of Quality

6.1 Comparison of Citations Between T5 and non-T5 Journals

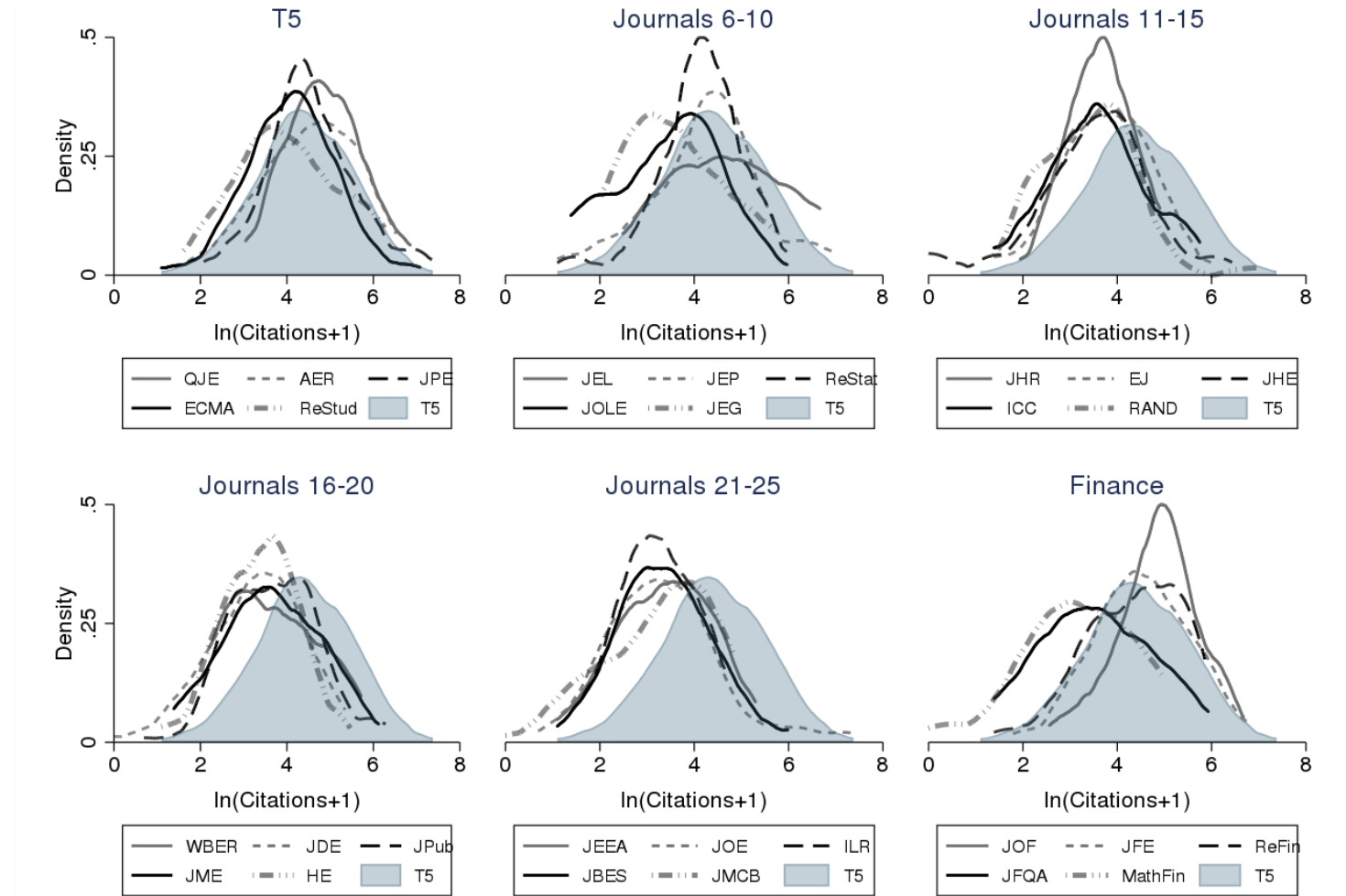
Figure O-A24: Distribution of Log Citations For Articles Published in 2000 (Measured Through July, 2018)



Source: Scopus.com; accessed 07/2018

Definition of journal abbreviations: QJE–Quarterly Journal Of Economics, JPE–Journal Of Political Economy, ECMA–Econometrica, AER–American Economic Review, ReStud–Review Of Economic Studies, JEL–Journal Of Economic Literature, JEP–Journal Of Economic Perspectives, ReStat–Review Of Economics And Statistics, JEG–Journal Of Economic Growth, JOLE–Journal Of Labor Economics, JHR–Journal Of Human Resources, EJ–Economic Journal, JHE–Journal Of Health Economics, ICC–Industrial And Corporate Change, WBER–World Bank Economic Review, RAND–Rand Journal Of Economics, JDE–Journal Of Development Economics, JPub–Journal Of Public Economics, JOE–Journal Of Econometrics, HE–Health Economics, ILR–Industrial And Labor Relations Review, JEEA–Journal Of The European Economic Association, JME–Journal Of Monetary Economics, JRU–Journal Of Risk And Uncertainty, JInE–Journal Of Industrial Economics, JOF–Journal Of Finance, JFE–Journal Of Financial Economics, ReFin–Review Of Financial Studies, JFQA–Journal Of Financial And Quantitative Analysis, and MathFin–Mathematical Finance

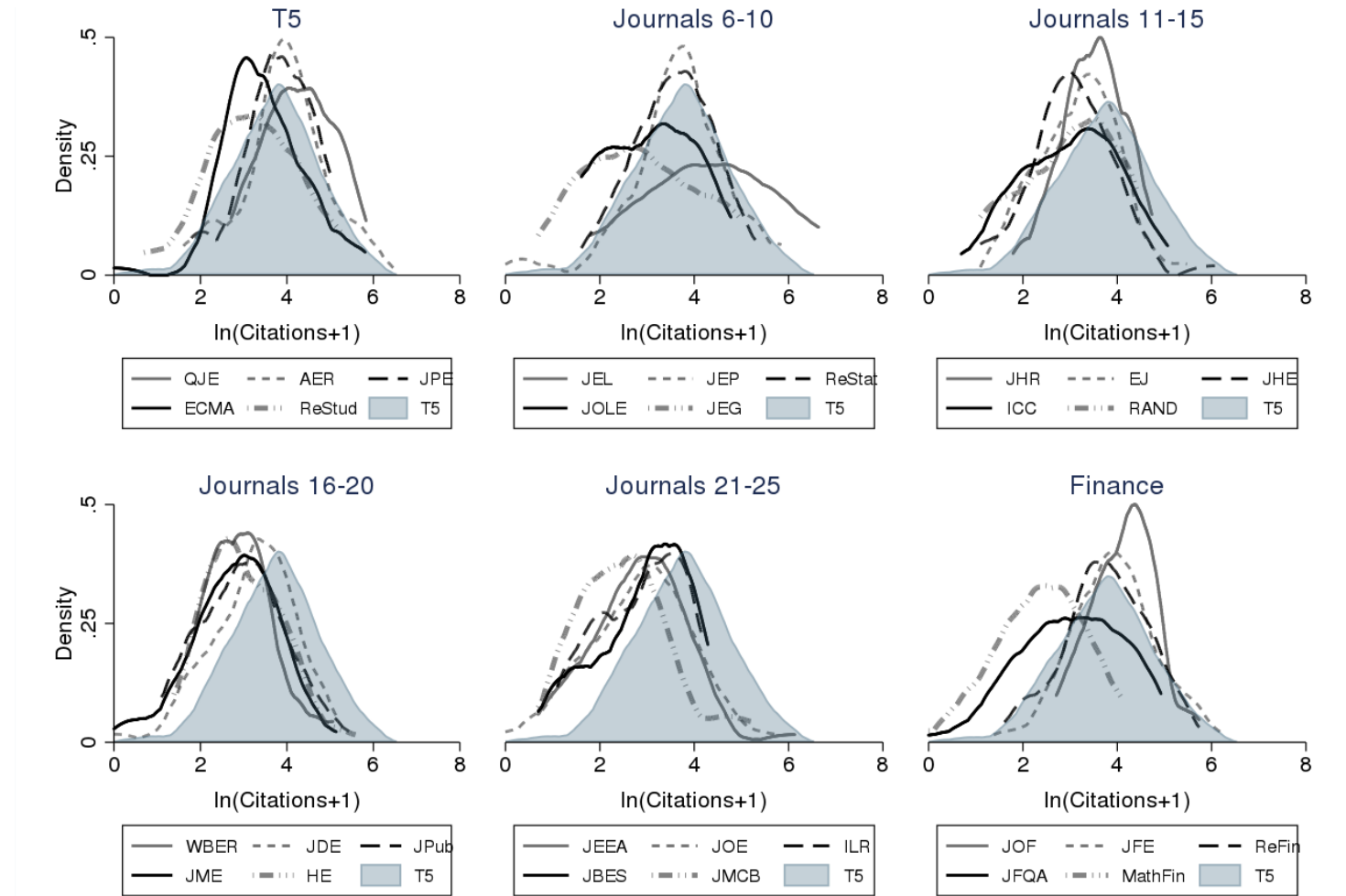
Figure O-A25: Distribution of Log Citations For Articles Published in 2005 (Measured Through July, 2018)



Source: Scopus.com; accessed 07/2018

Definition of journal abbreviations: QJE–Quarterly Journal Of Economics, JPE–Journal Of Political Economy, ECMA–Econometrica, AER–American Economic Review, ReStud–Review Of Economic Studies, JEL–Journal Of Economic Literature, JEP–Journal Of Economic Perspectives, ReStat–Review Of Economics And Statistics, JEG–Journal Of Economic Growth, JOLE–Journal Of Labor Economics, JHR–Journal Of Human Resources, EJ–Economic Journal, JHE–Journal Of Health Economics, ICC–Industrial And Corporate Change, WBER–World Bank Economic Review, RAND–Rand Journal Of Economics, JDE–Journal Of Development Economics, JPub–Journal Of Public Economics, JOE–Journal Of Econometrics, HE–Health Economics, ILR–Industrial And Labor Relations Review, JEEA–Journal Of The European Economic Association, JME–Journal Of Monetary Economics, JRU–Journal Of Risk And Uncertainty, JInE–Journal Of Industrial Economics, JOF–Journal Of Finance, JFE–Journal Of Financial Economics, ReFin–Review Of Financial Studies, JFQA–Journal Of Financial And Quantitative Analysis, and MathFin–Mathematical Finance

Figure O-A26: Distribution of Log Citations For Articles Published in 2010 (Measured Through July, 2018)



Source: Scopus.com; accessed 07/2018

Definition of journal abbreviations: QJE–Quarterly Journal Of Economics, JPE–Journal Of Political Economy, ECMA–Econometrica, AER–American Economic Review, ReStud–Review Of Economic Studies, JEL–Journal Of Economic Literature, JEP–Journal Of Economic Perspectives, ReStat–Review Of Economics And Statistics, JEG–Journal Of Economic Growth, JOLE–Journal Of Labor Economics, JHR–Journal Of Human Resources, EJ–Economic Journal, JHE–Journal Of Health Economics, ICC–Industrial And Corporate Change, WBER–World Bank Economic Review, RAND–Rand Journal Of Economics, JDE–Journal Of Development Economics, JPub–Journal Of Public Economics, JOE–Journal Of Econometrics, HE–Health Economics, ILR–Industrial And Labor Relations Review, JEEA–Journal Of The European Economic Association, JME–Journal Of Monetary Economics, JRU–Journal Of Risk And Uncertainty, JInE–Journal Of Industrial Economics, JOF–Journal Of Finance, JFE–Journal Of Financial Economics, ReFin–Review Of Financial Studies, JFQA–Journal Of Financial And Quantitative Analysis, and MathFin–Mathematical Finance

Table O-A31: Citation Percentile Rank Among “Top Five” Publications of the Median-Cited Article of Individual Journals

	Journal	Publication Year			
		2000	2005	2010	2000–2010 Residuals
1.	QJE	64%	65%	71%	71%
2.	JEL	73%	53%	75%	70%
3.	JOF*	62%	68%	69%	61%
4.	AER	50%	56%	59%	55%
5.	JFE*	56%	53%	56%	53%
6.	JEP	40%	51%	48%	50%
7.	JPE	46%	54%	53%	47%
8.	ReFin*	38%	52%	49%	46%
9.	ECMA	52%	37%	34%	41%
10.	ReStat	43%	45%	44%	38%
11.	ReStud	31%	31%	26%	31%
12.	JEG	27%	19%	14%	30%
13.	JOLE	19%	22%	29%	25%
14.	JHR	22%	24%	38%	24%
15.	JHE	25%	24%	26%	24%
16.	ICC	13%	22%	28%	24%
17.	JFQA*	41%	19%	26%	23%
18.	EJ	23%	27%	30%	23%
19.	WBER	15%	19%	19%	22%
20.	RAND	39%	20%	23%	19%
21.	JDE	13%	19%	33%	19%
22.	JEEA	.%	19%	22%	18%
23.	JPub	16%	27%	23%	17%
24.	JME	15%	22%	19%	17%
25.	JBES	16%	16%	26%	17%
26.	HE	16%	19%	19%	17%
27.	JOE	16%	17%	23%	16%
28.	ILR	26%	15%	29%	13%
29.	JMCB	15%	19%	13%	13%
30.	MathFin*	10%	13%	13%	12%

Source: Scopus.com; accessed 07/2018

Note: This table presents comparisons of median citations across journals with respect to the aggregate “Top Five” distribution of citations. The first three columns present comparisons based on articles published in 2000, 2005, and 2010, respectively. The last column presents comparisons based on residual citations obtained by estimating an OLS regression of $\ln(\text{Citations} + 1)$ on a third-degree polynomial for the number of years elapsed between the year of publication and 2018 (the year when citations were recorded).

Definition of journal abbreviations: QJE–Quarterly Journal Of Economics, JPE–Journal Of Political Economy, ECMA–Econometrica, AER–American Economic Review, ReStud–Review Of Economic Studies, JEL–Journal Of Economic Literature, JEP–Journal Of Economic Perspectives, ReStat–Review Of Economics And Statistics, JEG–Journal Of Economic Growth, JOLE–Journal Of Labor Economics, JHR–Journal Of Human Resources, EJ–Economic Journal, JHE–Journal Of Health Economics, ICC–Industrial And Corporate Change, WBER–World Bank Economic Review, RAND–Rand Journal Of Economics, JDE–Journal Of Development Economics, JPub–Journal Of Public Economics, JOE–Journal Of Econometrics, HE–Health Economics, ILR–Industrial And Labor Relations Review, JEEA–Journal Of The European Economic Association, JME–Journal Of Monetary Economics, JRU–Journal Of Risk And Uncertainty, JInE–Journal Of Industrial Economics, JOF–Journal Of Finance, JFE–Journal Of Financial Economics, ReFin–Review Of Financial Studies, JFQA–Journal Of Financial And Quantitative Analysis, and MathFin–Mathematical Finance

Table O-A32: Citation Percentile Rank Among Top Five Publications (and its Subsets) of the Median-Cited Article of Individual Journals (Articles Published Between 2000–2010)

Journal	Subsets of The T5 Used for Comparison:						
	QJE	AER		JPE		ECMA	
	AER	AER	JPE	JPE	ECMA	ECMA	ReStud
	JPE	JPE	JPE	JPE	ECMA	ECMA	ReStud
	ECMA	ECMA	ECMA	ECMA	ECMA	ECMA	ReStud
	ReStud	ReStud	ReStud	ReStud	ReStud	ReStud	ReStud
1. QJE	71%	75%	79%	82%	87%		
2. JEL	70%	74%	78%	81%	85%		
3. JOF*	61%	65%	70%	73%	79%		
4. AER	55%	60%	65%	68%	74%		
5. JFE*	53%	57%	63%	66%	73%		
6. JEP	50%	54%	60%	64%	70%		
7. JPE	47%	51%	58%	61%	68%		
8. ReFin*	46%	50%	57%	60%	67%		
9. ECMA	41%	44%	51%	55%	61%		
10. ReStat	38%	42%	48%	52%	58%		
11. ReStud	31%	34%	40%	43%	50%		
12. JEG	30%	33%	39%	42%	48%		
13. JOLE	25%	28%	33%	36%	43%		
14. JHR	24%	27%	32%	35%	42%		
15. JHE	24%	27%	32%	35%	42%		
16. ICC	24%	26%	31%	34%	41%		
17. JFQA*	23%	26%	30%	33%	40%		
18. EJ	23%	25%	30%	33%	40%		
19. WBER	22%	25%	30%	33%	40%		
20. RAND	19%	21%	25%	28%	35%		
21. JDE	19%	21%	25%	28%	34%		
22. JEEA	18%	20%	24%	27%	33%		
23. JPub	17%	19%	23%	26%	33%		
24. JME	17%	19%	22%	25%	31%		
25. JBES	17%	19%	22%	25%	31%		
26. HE	17%	19%	22%	25%	31%		
27. JOE	16%	18%	22%	24%	31%		
28. ILR	13%	14%	17%	19%	24%		
29. JMCB	13%	14%	17%	19%	24%		
30. MathFin*	12%	14%	16%	18%	23%		

Source: Scopus.com; accessed 07/2018

Note: The table's top panel lists the subset of Top Five journals included in the comparison against individual journals. The left-most column includes the entire set of Top Five journals. Each column to the right successively removes one additional Top Five journal from the comparison set, in decreasing order of influence as measured by median residual citations. The column labelled "Journal" uses asterisks to denote that a journal specializes in Finance.

Definition of journal abbreviations: QJE—Quarterly Journal Of Economics, JPE—Journal Of Political Economy, ECMA—Econometrica, AER—American Economic Review, ReStud—Review Of Economic Studies, JEL—Journal Of Economic Literature, JEP—Journal Of Economic Perspectives, ReStat—Review Of Economics And Statistics, JEG—Journal Of Economic Growth, JOLE—Journal Of Labor Economics, JHR—Journal Of Human Resources, EJ—Economic Journal, JHE—Journal Of Health Economics, ICC—Industrial And Corporate Change, WBER—World Bank Economic Review, RAND—Rand Journal Of Economics, JDE—Journal Of Development Economics, JPub—Journal Of Public Economics, JOE—Journal Of Econometrics, HE—Health Economics, ILR—Industrial And Labor Relations Review, JEEA—Journal Of The European Economic Association, JME—Journal Of Monetary Economics, JRU—Journal Of Risk And Uncertainty, JInE—Journal Of Industrial Economics, JOF—Journal Of Finance, JFE—Journal Of Financial Economics, ReFin—Review Of Financial Studies, JFQA—Journal Of Financial And Quantitative Analysis, and MathFin—Mathematical Finance.

Table O-A33: Citation Percentile Rank Among “Top Five” Publications of the Median-Cited Article of Individual Journals; Robustness to Residualization Specification

	Journal	Specifications			
		Polynomial 1	Polynomial 2	Polynomial 3	Indicators
1.	QJE	71%	71%	71%	71%
2.	JEL	70%	70%	70%	70%
3.	JOF*	62%	61%	61%	61%
4.	AER	55%	55%	55%	55%
5.	JFE*	53%	53%	53%	53%
6.	JEP	51%	51%	51%	50%
7.	JPE	47%	47%	47%	47%
8.	ReFin*	46%	46%	46%	46%
9.	ECMA	41%	41%	41%	41%
10.	ReStat	40%	39%	39%	38%
11.	ReStud	32%	31%	31%	31%
12.	JEG	29%	29%	30%	30%
13.	JOLE	26%	26%	25%	25%
14.	JHR	25%	25%	25%	24%
15.	JHE	24%	24%	24%	24%
16.	ICC	23%	23%	23%	24%
17.	JFQA*	23%	23%	23%	23%
18.	EJ	23%	23%	23%	23%
19.	WBER	22%	22%	22%	22%
20.	RAND	19%	20%	19%	19%
21.	JDE	19%	19%	19%	19%
22.	JEEA	19%	18%	18%	18%
23.	JPub	17%	17%	17%	17%
24.	JME	17%	17%	17%	17%
25.	HE	16%	16%	16%	17%
26.	JOE	16%	16%	16%	16%
27.	JBES	16%	16%	16%	17%
28.	ILR	13%	14%	14%	13%
29.	JMCB	13%	13%	13%	13%
30.	MathFin*	12%	12%	12%	12%

Source: Scopus.com; accessed 07/2018

Definition of journal abbreviations: QJE–Quarterly Journal Of Economics, JPE–Journal Of Political Economy, ECMA–Econometrica, AER–American Economic Review, ReStud–Review Of Economic Studies, JEL–Journal Of Economic Literature, JEP–Journal Of Economic Perspectives, ReStat–Review Of Economics And Statistics, JEG–Journal Of Economic Growth, JOLE–Journal Of Labor Economics, JHR–Journal Of Human Resources, EJ–Economic Journal, JHE–Journal Of Health Economics, ICC–Industrial And Corporate Change, WBER–World Bank Economic Review, RAND–Rand Journal Of Economics, JDE–Journal Of Development Economics, JPub–Journal Of Public Economics, JOE–Journal Of Econometrics, HE–Health Economics, ILR–Industrial And Labor Relations Review, JEEA–Journal Of The European Economic Association, JME–Journal Of Monetary Economics, JRU–Journal Of Risk And Uncertainty, JInE–Journal Of Industrial Economics, JOF–Journal Of Finance, JFE–Journal Of Financial Economics, ReFin–Review Of Financial Studies, JFQA–Journal Of Financial And Quantitative Analysis, and MathFin–Mathematical Finance

Note: This table presents comparisons of the median residualized citation of individual journals against the median residualized citation of articles published in the “Top Five”. Comparisons in the first column are based on residualized citations that were obtained by estimating an OLS model of $\ln(Citations) + 1$ on a first degree polynomial for the number of years of elapsed between publication and 2018 (exposure). The second and third columns are based on residuals obtained by estimating $\ln(Citations) + 1$ as a function of a second and third-degree polynomial for exposure respectively. The last column is based on residuals obtained by estimating $\ln(Citations) + 1$ as a function of indicators for exposure.

6.2 Impact Factors For Economics and Science Journals

Table O-A34: 2 and 5 Year Impact Factors For Highly Cited Science Journals Constructed Using Citations Data From 2017, Ordered by 5 Year Impact Factor

	2 Year IF		5 Year IF	
	Rank	IF	Rank	IF
1. The New England Journal of Medicine	1	(79.26)	1	(67.51)
2. Lancet	2	(53.25)	2	(52.67)
3. Nature	3	(41.58)	3	(44.96)
4. Science	4	(41.06)	4	(40.63)
5. Cell	5	(31.40)	5	(33.80)
6. Proceedings of the National Academy of Science	6	(9.50)	6	(10.36)

Source: Thomson Reuters, Web of Knowledge; Accessed 08/2018

Note: This table presents 2 and 5 Year Impact Factors for highly cited science journals. Impact Factors are calculated by Thomson Reuters using citations accrued during the year 2017. The table also presents two journal rankings corresponding to each of the two Impact Factors.

Definition of Impact Factor: For any given journal, an x -year Impact Factor as of 2017 is defined as the sum of citations received in 2017 by all articles published in the journal during the time period 2016- x to 2016 divided by the journal's total volume of publications during the same time period:

$$IF_{x,j}^{2017} = \sum_{y=2016-x}^{2016} \frac{\text{citations}_{y,j}^{2017}}{\text{volume}_j}$$

where $\text{citations}_{y,j}^{2017}$ represents the sum of citations received in 2017 by all articles published by journal- j during year y , and volume_j represents journal- j 's total volume of publication during the period 2016- x to 2016.

Table O-A35: 2, 5, 10, 15, and 20 Year Impact Factors For 51 Economics Journals Constructed Using Citations Data From 2017, Ordered by 5 Year Impact Factor, Con't

		2 Year IF		5 Year IF		10 Year IF		15 Year IF		20 Year IF	
		Rank	IF	Rank	IF	Rank	IF	Rank	IF	Rank	IF
26.	Industrial And Corporate Change	25	(2.35)	26	(3.08)	25	(3.91)	24	(4.47)	23	(4.58)
27.	Journal Of Business And Economic Statistics	37	(1.74)	27	(2.99)	23	(3.93)	20	(4.79)	27	(4.26)
28.	Journal Of Public Economics	29	(2.07)	28	(2.87)	24	(3.92)	25	(4.35)	28	(4.15)
29.	Mathematical Finance	22	(2.64)	29	(2.55)	39	(2.48)	39	(2.57)	32	(3.28)
30.	Health Economics	28	(2.20)	30	(2.47)	32	(2.84)	33	(3.05)	35	(2.90)
31.	Industrial And Labor Relations Review	30	(1.92)	31	(2.43)	34	(2.66)	37	(2.74)	38	(2.72)
32.	Rand Journal Of Economics	39	(1.64)	32	(2.41)	31	(3.08)	30	(3.78)	29	(4.11)
33.	Journal Of Money, Credit And Banking	40	(1.58)	33	(2.34)	38	(2.51)	36	(2.75)	34	(2.93)
34.	Journal Of Econometrics	35	(1.78)	34	(2.31)	30	(3.49)	26	(4.34)	22	(4.58)
35.	European Economic Review	33	(1.78)	35	(2.24)	35	(2.58)	35	(2.75)	36	(2.84)
36.	Economic Development And Cultural Change	42	(1.37)	36	(2.23)	37	(2.53)	34	(2.78)	39	(2.66)
37.	Journal Of Economic Behavior And Organization	43	(1.32)	37	(2.22)	43	(2.28)	41	(2.34)	43	(2.28)
38.	Journal Of Risk And Uncertainty	36	(1.75)	38	(2.19)	33	(2.77)	32	(3.10)	33	(3.05)
39.	World Bank Economic Review	31	(1.84)	39	(2.16)	28	(3.56)	28	(3.94)	25	(4.51)
40.	American Economic Journal: Microeconomics	41	(1.49)	40	(2.08)	36	(2.58)	38	(2.58)	41	(2.58)
41.	Review Of Economic Dynamics	32	(1.80)	41	(2.05)	42	(2.33)	44	(2.10)	44	(2.11)
42.	International Economic Review	34	(1.78)	42	(1.98)	40	(2.42)	40	(2.47)	37	(2.75)
43.	Labour Economics	45	(1.16)	43	(1.80)	41	(2.37)	43	(2.32)	42	(2.36)
44.	Journal Of Economic Dynamics And Control	38	(1.71)	44	(1.80)	47	(1.84)	49	(1.78)	48	(1.75)
45.	Industrial Relations	46	(1.15)	45	(1.63)	48	(1.76)	48	(1.85)	50	(1.63)
46.	Journal Of Economic Theory	44	(1.29)	46	(1.63)	45	(1.90)	45	(2.05)	45	(2.05)
47.	Games And Economic Behavior	49	(0.94)	47	(1.55)	46	(1.88)	46	(2.02)	46	(1.95)
48.	Journal Of Industrial Economics	47	(1.05)	48	(1.43)	44	(2.04)	42	(2.32)	40	(2.62)
49.	Econometric Theory	48	(1.04)	49	(1.31)	50	(1.59)	50	(1.78)	49	(1.72)
50.	International Journal Of Industrial Organization	50	(0.77)	50	(1.25)	49	(1.67)	47	(1.90)	47	(1.83)
51.	Macroeconomic Dynamics	51	(0.41)	51	(0.86)	51	(0.98)	51	(0.92)	51	(0.99)

Source: Scopus; Accessed 07/2018

Note: This table presents 2, 5, 10, 15, and 20 Year Impact Factors for 51 different journals. Impact Factors are calculated using citations accrued during the year 2017. The table also presents five different journal rankings corresponding to each of the five Impact Factors.

Definition of Impact Factor: For any given journal, an x -year Impact Factor as of 2017 is defined as the sum of citations received in 2017 by all articles published in the journal during the time period 2016- x to 2016 divided by the journal's total volume of publications during the same time period:

$$IF_{x,j}^{2017} = \frac{\sum_{y=2016-x}^{2016} \text{citations}_{y,j}^{2017}}{\text{volume}_j}$$

where $\text{citations}_{y,j}^{2017}$ represents the sum of citations received in 2017 by all articles published by journal- j during year y , and volume_j represents journal- j 's total volume of publication during the period 2016- x to 2016.

6.2.1 Sensitivity of Impact Factors to Citation Year

Table O-A36: Pairwise Spearman Rank Correlation Coefficients Between 15 Year Impact Factors Computed Using Citations Between 2011–2017

Year	2011	2012	2013	2014	2015	2016	2017
2011	1.00	.	.	.	.	.	.
2012	0.99	1.00	.	.	.	.	.
2013	0.99	0.99	1.00	.	.	.	.
2014	0.99	0.99	0.99	1.00	.	.	.
2015	0.98	0.98	0.99	0.99	1.00	.	.
2016	0.97	0.97	0.98	0.98	0.99	1.00	.
2017	0.96	0.96	0.97	0.97	0.98	0.99	1.00

Note: This table presents Spearman’s ρ (rank correlation coefficient) between pairs of 15 Year Impact Factors computed as of different dates between 2011–2017. Each coefficient is estimated using two sets of year-specific Impact Factors for 44 of the 51 journals listed in Tables 4 and O-A35 (see note below for explanation of why seven journals are excluded). The top row and first column of the table indicate the years used to estimate each correlation coefficient. Let \mathbf{IF}_x be the vector of Impact Factors for the 44 journals as of year- x , and \mathbf{IF}_y the vector of Impact Factors as of year- y . The cell in column x and row y presents $\rho(\mathbf{IF}_x, \mathbf{IF}_y)$, the Spearman rank correlation between 15 Year Impact Factors for years x and y .

Note on journal exclusion: A journal is excluded if citations and publications data for the journal is unavailable at any point during the period 1996–2017. We impose this inclusion restriction in order to ensure that the reported correlations in each cell are estimated using the same set of journals. The 7 excluded journals is composed of: the four American Economic Journals, *JEEA*, *World Development*, and *the Review of Economic Dynamics*.

Table O-A37: Pairwise Spearman Rank Correlation Coefficients Between 10 Year Impact Factors Computed Using Citations Between 2006–2017

Year	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2006	1.00	.	.	.	.	.	.	.	.	.	.	.
2007	0.98	1.00	.	.	.	.	.	.	.	.	.	.
2008	0.98	0.99	1.00	.	.	.	.	.	.	.	.	.
2009	0.96	0.98	0.99	1.00	.	.	.	.	.	.	.	.
2010	0.96	0.97	0.98	0.99	1.00	.	.	.	.	.	.	.
2011	0.94	0.96	0.97	0.98	0.99	1.00	.	.	.	.	.	.
2012	0.93	0.94	0.95	0.96	0.98	0.99	1.00	.	.	.	.	.
2013	0.92	0.92	0.93	0.95	0.97	0.98	0.98	1.00	.	.	.	.
2014	0.91	0.91	0.93	0.94	0.96	0.98	0.98	0.99	1.00	.	.	.
2015	0.90	0.91	0.93	0.94	0.95	0.97	0.98	0.98	0.98	1.00	.	.
2016	0.89	0.90	0.91	0.93	0.95	0.97	0.97	0.98	0.99	0.99	1.00	.
2017	0.88	0.89	0.90	0.92	0.94	0.97	0.97	0.98	0.99	0.98	0.99	1.00

Note: This table presents Spearman’s ρ (rank correlation coefficient) between pairs of 10 Year Impact Factors computed as of different dates between 2006–2017. Each coefficient is estimated using two sets of year-specific Impact Factors for 44 of the 51 journals listed in Tables 4 and O-A35 (see note below for explanation of why seven journals are excluded). The top row and first column of the table indicate the years used to estimate each correlation coefficient. Let \mathbf{IF}_x be the vector of Impact Factors for the 44 journals as of year- x , and \mathbf{IF}_y the vector of Impact Factors as of year- y . The cell in column x and row y presents $\rho(\mathbf{IF}_x, \mathbf{IF}_y)$, the Spearman rank correlation between 10 Year Impact Factors for years x and y .

Note on journal exclusion: A journal is excluded if citations and publications data for the journal is unavailable at any point during the period 1996–2017. We impose this inclusion restriction in order to ensure that the reported correlations in each cell are estimated using the same set of journals. The 7 excluded journals is composed of: the four American Economic Journals, *JEEA*, *World Development*, and *the Review of Economic Dynamics*.

Table O-A38: Pairwise Spearman Rank Correlation Coefficients Between 5 Year Impact Factors Computed Using Citations Between 2001–2017

Year	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
2001	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2002	0.95	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2003	0.93	0.96	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2004	0.94	0.94	0.95	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.
2005	0.93	0.92	0.95	0.97	1.00	.	.	.	.	.	.	.	.	.	.	.	.
2006	0.90	0.89	0.93	0.93	0.97	1.00	.	.	.	.	.	.	.	.	.	.	.
2007	0.88	0.90	0.93	0.93	0.96	0.97	1.00	.	.	.	.	.	.	.	.	.	.
2008	0.90	0.87	0.89	0.90	0.92	0.94	0.95	1.00	.	.	.	.	.	.	.	.	.
2009	0.88	0.86	0.89	0.89	0.91	0.94	0.94	0.97	1.00	.	.	.	.	.	.	.	.
2010	0.87	0.87	0.90	0.90	0.89	0.91	0.93	0.96	0.97	1.00	.	.	.	.	.	.	.
2011	0.88	0.86	0.90	0.89	0.88	0.90	0.91	0.95	0.96	0.98	1.00	.	.	.	.	.	.
2012	0.87	0.86	0.90	0.90	0.89	0.91	0.91	0.94	0.96	0.97	0.98	1.00	.	.	.	.	.
2013	0.84	0.82	0.89	0.87	0.87	0.90	0.90	0.94	0.95	0.96	0.98	0.98	1.00	.	.	.	.
2014	0.85	0.83	0.88	0.87	0.84	0.87	0.87	0.92	0.93	0.96	0.98	0.97	0.98	1.00	.	.	.
2015	0.81	0.81	0.86	0.86	0.84	0.87	0.88	0.92	0.93	0.96	0.97	0.97	0.98	0.98	1.00	.	.
2016	0.85	0.85	0.89	0.88	0.86	0.88	0.89	0.92	0.93	0.96	0.97	0.97	0.98	0.99	0.98	1.00	.
2017	0.84	0.83	0.86	0.88	0.83	0.84	0.86	0.90	0.90	0.94	0.95	0.94	0.94	0.96	0.96	0.98	1.00

Note: This table presents Spearman’s ρ (rank correlation coefficient) between pairs of 5 Year Impact Factors computed as of different dates between 2001–2017. Each coefficient is estimated using two sets of year-specific Impact Factors for 44 of the 51 journals listed in Tables 4 and O-A35 (see note below for explanation of why seven journals are excluded). The top row and first column of the table indicate the years used to estimate each correlation coefficient. Let \mathbf{IF}_x be the vector of Impact Factors for the 44 journals as of year- x , and \mathbf{IF}_y the vector of Impact Factors as of year- y . The cell in column x and row y presents $\rho(\mathbf{IF}_x, \mathbf{IF}_y)$, the Spearman rank correlation between 5 Year Impact Factors for years x and y .

Note on journal exclusion: A journal is excluded if citations and publications data for the journal is unavailable at any point during the period 1996–2017. We impose this inclusion restriction in order to ensure that the reported correlations in each cell are estimated using the same set of journals. The 7 excluded journals is composed of: the four American Economic Journals, *JEEA*, *World Development*, and *the Review of Economic Dynamics*.

Table O-A39: Pairwise Spearman Rank Correlation Coefficients Between 2 Year Impact Factors Computed Using Citations
Between 1998–2017

Year	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
1998	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
1999	0.85	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2000	0.83	0.92	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2001	0.75	0.83	0.82	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2002	0.79	0.79	0.77	0.87	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2003	0.80	0.76	0.75	0.87	0.90	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.	.
2004	0.82	0.80	0.80	0.93	0.82	0.84	1.00	.	.	.	.	.	.	.	.	.	.	.	.	.
2005	0.85	0.82	0.78	0.84	0.75	0.79	0.90	1.00	.	.	.	.	.	.	.	.	.	.	.	.
2006	0.85	0.80	0.85	0.85	0.84	0.84	0.88	0.88	1.00	.	.	.	.	.	.	.	.	.	.	.
2007	0.81	0.75	0.78	0.85	0.89	0.89	0.82	0.84	0.89	1.00	.	.	.	.	.	.	.	.	.	.
2008	0.85	0.80	0.80	0.82	0.81	0.86	0.81	0.87	0.89	0.93	1.00	.	.	.	.	.	.	.	.	.
2009	0.81	0.74	0.74	0.82	0.81	0.85	0.84	0.89	0.89	0.89	0.92	1.00	.	.	.	.	.	.	.	.
2010	0.79	0.77	0.78	0.81	0.73	0.75	0.80	0.90	0.87	0.85	0.89	0.89	1.00	.	.	.	.	.	.	.
2011	0.79	0.76	0.78	0.82	0.75	0.82	0.83	0.87	0.87	0.85	0.88	0.90	0.95	1.00	.	.	.	.	.	.
2012	0.75	0.66	0.71	0.82	0.76	0.81	0.80	0.82	0.85	0.87	0.88	0.91	0.91	0.93	1.00	.	.	.	.	.
2013	0.80	0.70	0.72	0.79	0.75	0.81	0.82	0.87	0.84	0.86	0.90	0.90	0.93	0.95	0.94	1.00	.	.	.	.
2014	0.81	0.74	0.75	0.80	0.76	0.79	0.82	0.89	0.86	0.85	0.91	0.91	0.95	0.92	0.92	0.95	1.00	.	.	.
2015	0.72	0.75	0.76	0.82	0.76	0.77	0.80	0.83	0.82	0.84	0.88	0.87	0.90	0.92	0.88	0.89	0.93	1.00	.	.
2016	0.80	0.79	0.79	0.82	0.78	0.79	0.83	0.86	0.85	0.84	0.88	0.90	0.89	0.93	0.87	0.90	0.91	0.95	1.00	.
2017	0.75	0.76	0.73	0.82	0.75	0.75	0.81	0.83	0.83	0.78	0.83	0.87	0.89	0.92	0.86	0.88	0.88	0.90	0.96	1.00

Note: This table presents Spearman’s ρ (rank correlation coefficient) between pairs of 2 Year Impact Factors computed as of different dates between 1996–2017. Each coefficient is estimated using two sets of year-specific Impact Factors for 44 of the 51 journals listed in Tables 4 and O-A35 (see note below for explanation of why seven journals are excluded). The top row and first column of the table indicate the years used to estimate each correlation coefficient. Let \mathbf{IF}_x be the vector of Impact Factors for the 44 journals as of year- x , and \mathbf{IF}_y the vector of Impact Factors as of year- y . The cell in column x and row y presents $\rho(\mathbf{IF}_x, \mathbf{IF}_y)$, the Spearman rank correlation between 2 Year Impact Factors for years x and y .

Note on journal exclusion: A journal is excluded if citations and publications data for the journal is unavailable at any point during the period 1996–2017. We impose this inclusion restriction in order to ensure that the reported correlations in each cell are estimated using the same set of journals. The 7 excluded journals is composed of: the four American Economic Journals, *JEEA*, *World Development*, and *the Review of Economic Dynamics*.

6.3 Where Influential Economists Publish

Table O-A40: Journals that Account For Largest Share of **Field-Specific Publications** Between 1996-2017 By RePEc's Top 50 Authors Within Different Fields (Unadjusted For Publication Volume)

Rank.	dem	dev	ecmt	env	exp	fin	health
1.	AER	AER	JOE	EnvResEc	JEBO	JFE	JHE
2.	JPop	JDE	EctT	EcolEc	ExpEc	JOF	HE
3.	JHR	WD	ECMA	JEnvEcMgmt	AER	ReFin	AER
4.	EJ LabEc	QJE	JBES	EnPol	GAMES	JOE	JEP
5.		WBER	EctRev	AER	SthEcJ	JBanFin	EcHumBio
6.	JOLE	EDCC JEG	JAE	EnergyEc	EJ EER JPub	AER	JHR
7.	JHE		EctJ	REnvEcPol		JPortMgmt	Inquiry JPub
8.	JPub	JAfrEc	EL	ResEnerEc EnvDevEc ClmChgEc		JBES	
9.	QJE AEJae	JEEA	ReStat		EL	JFQA	QJE JPAM
10.		EJ	IntJFore		JEcPsy JECmeth	JInvMgmt	

Rank.	intFin	intTr	IO	labor	macro	micro	pubEcon
1.	JIMF	JIE	IJIO	AER	AER	JET	JPub
2.	JIE	AER	RAND	JOLE	JME	AER	NTJ
3.	AER	WrldEc	JInE	LabEc	JMCB	ECMA	AER
4.	IntJFinEc	RevIntEc	AER	EJ	BPEA	GAMES	ITPF
5.	JMCB	EER	EER	QJE	FedSTLRev	ReStud	FiscSt
6.	OpEcRev	WrldTrdRev	EL	ILR	IntJCentrBan	JEEA	FinanzArchiv
7.	JPolModel	AE QJE RevWrldEc	EJ	ReStat	JEDC	RAND	JEP
8.	IMF		RevIO	JHR	JEP	QJE	AEJep
9.	EcPol		JEMS	JPub	EER JPE JEEA	JPE	PubFinRev
10.	EER JME	EcBull JDE	JEEA	JEP		EER	EJ EER

Label Legend: AEJae–American Economic Journal; Applied Economics, ClmChgEc–Climate Change Economics, EcHumBio–Economics and Human Biology, EcolEc–Ecological Economics, EDCC–Economic Development and Cultural Change, EnvDevEc–Environment and Development Economics, EnvResEc–Environmental and Resource Economics, FedSTLRev–Federal Reserve Bank of St. Louis Review, IMF–IMF Economic Review, ITPF–International Tax and Public Finance, JAfrEc–Journal of African Economies, JBanFin–Journal of Banking and Finance, JDE–Journal of Development Economics, JEG–Journal of Economic Growth, JIE–Journal of International Economics, JIMF–Journal of International Money and Finance, JInvMgt–Journal of Investment Management, JPolModel–Journal of Policy Modelling, JPop–Journal of Population Economics, JPub–Journal of Public Economics, LabEc–Labour Economics, REnvEcPol–Review of Environmental Economics and Policy, ResEnerEc–Resource and Energy Economics, RevWrldEc–Review of World Economics, SthEcJ–Southern Economic Journal, WBER–World Bank Economic Review, WD–World Development, WrldEc–World Economy

Source: RePEc, EconLit.

Table O-A41: Journals that Account For Largest Share of **Overall Publications** Between 1996-2017 By RePEc's Top 50 Authors Within Different Fields (Adjusted For Publication Volume)

Rank.	dem	dev	ecmt	env	exp	fin	health
1.	JOLE	JEG	JOE	IntRevEnvR	ExpEc	JOE	JHE
2.	AER	WBRschObs	EctT	REnvEcPol	JRU	JFE	AER
3.	JEG	WBER	JBES	JEnvEcMgm	AER	ReFin	AmJHealEc
4.	QJE	QJE	ECMA	ResEnerEc	JEBO	WBRschObs	JHR
5.	JPop	AER	JAE	EnvDevEc	QJE	JFinInterm	HE
6.	AEJae	EDCC	EctJ	EnvEcPol	GAMES	JFinEcmt	JEP
7.	JHR	JDE	EctRev	EnvResEc	JEEA	WBER	JRU
8.	JPE	JPE	JFinEcmt	JEL	SthEcJ	RevFin	JOLE
9.	LabEc	JAFrEc	FrntEcChn	OxRevEcPol	JEcPsy	JBES	QJE
10.	CES	JEL	OxES	AER	EcInq	JOE	JEL

Rank.	intFin	intTr	IO	labor	macro	micro	pubEcon
1.	EcPol	JIE	RAND	BPEA	BPEA	QJE	NTJ
2.	BPEA	EcPol	IJIO	JOLE	AER	AER	ITPF
3.	IntFin	WrldEc	JInE	AER	JME	ReStud	AER
4.	JIMF	AER	JEEA	QJE	FrntEcChn	ECMA	EcPol
5.	JIntComEcF	IEJ	EcPol	JEP	JPE	RAND	QJE
6.	JIE	WrldTrdRev	JEMS	ILR	JMCB	JPE	FiscSt
7.	IntJFinEc	RevWrldEc	AER	JEL	AEJma	JEEA	BPEA
8.	OpEcRev	QJE	InfEcPol	LabEc	JEP	JEL	JEL
9.	JJapIntEc	RevIntEc	FiscSt	JHR	EcPol	JET	JPub
10.	IMFEcRev	JPE	ReStud	EJ	IMFEcRev	JEG	AEJep

Label Legend: AEJae–American Economic Journal: Applied Economics, AEJep–American Economic Journal: Economic Policy, AEJma–American Economic Journal: Macroeconomics, AER–American Economic Review, AmJHealEc–American Journal of Health Economics, BPEA–Brookings Papers on Economic Activity, CES–CESifo Economic Studies, ClmChgEc–Climate Change Economics, EctRev–Econometric Reviews, EctT–Econometric Theory, ECMA–Econometrica, EctJ–Econometrics Journal, EDCC–Economic Development and Cultural Change, EcInq–Economic Inquiry, EJ–Economic Journal, EcPol–Economic Policy, EcPol–Economic Policy: A European Forum, EnvDevEc–Environment and Development Economics, EnvResEc–Environmental and Resource Economics, EnvEcPol–Environmental Economics and Policy Studies, ExpEc–Experimental Economics, FedSTLRev–Federal Reserve Bank of St. Louis Review, FiscSt–Fiscal Studies, FrntEcChn–Frontiers of Economics in China, GAMES–Games and Economic Behavior, HE–Health Economics, IMFEcRev–IMF Economic Review, ILR–Industrial and Labor Relations Review, InfEcPol–Information Economics and Policy, IEJ–International Economic Journal, IntFin–International Finance, IntJFinEc–International Journal of Finance and Economics, IJIO–International Journal of Industrial Organization, IntRevEnvResEc–International Review of Environmental and Resource Economics, ITPF–International Tax and Public Finance, JAFrEc–Journal of African Economics, JAE–Journal of Applied Econometrics, JBES–Journal of Business and Economic Statistics, JDE–Journal of Development Economics, JOE–Journal of Econometrics, JEBO–Journal of Economic Behavior and Organization, JEG–Journal of Economic Growth, JEL–Journal of Economic Literature, JEP–Journal of Economic Perspectives, JEcPsy–Journal of Economic Psychology, JET–Journal of Economic Theory, JEMS–Journal of Economics and Management Strategy, JEnvEcMgmt–Journal of Environmental Economics and Management, JFinEcmt–Journal of Financial Econometrics, JHE–Journal of Health Economics, JHR–Journal of Human Resources, JInE–Journal of Industrial Economics, JIntComEcPol–Journal of International Commerce, Economics and Policy, JIE–Journal of International Economics, JIMF–Journal of International Money and Finance, JOLE–Journal of Labor Economics, JME–Journal of Monetary Economics, JMCB–Journal of Money, Credit, and Banking, JPE–Journal of Political Economy, JPop–Journal of Population Economics, JPub–Journal of Public Economics, JRU–Journal of Risk and Uncertainty, JEEA–Journal of the European Economic Association, JJapIntEc–Journal of the Japanese and International Economies, LabEc–Labour Economics, NTJ–National Tax Journal, NZEcPap–New Zealand Economic Papers, OpEcRev–Open Economies Review, OxRevEcPol–Oxford Review of Economic Policy, QJE–Quarterly Journal of Economics, RAND–RAND Journal of Economics, ResEnerEc–Resource and Energy Economics, ReStud–Review of Economic Studies, REnvEcPol–Review of Environmental Economics and Policy, RevIO–Review of Industrial Organization, RevIntEc–Review of International Economics, RevWrldEc–Review of World Economics/Weltwirtschaftliches Archiv, SthEcJ–Southern Economic Journal, WBER–World Bank Economic Review, WBRschObs–World Bank Research Observer, WrldEc–World Economy, WrldTrdRev–World Trade Review

Source: RePEc, EconLit.

Table O-A42: Journals that Account For Largest Share of **Overall Publications** Between 1996-2017 By RePEc's Top 50 Authors Within Different Fields (Unadjusted For Publication Volume)

Rank.	dem	dev	ecmt	env	exp	fin	health
1.	AER	AER	JOE	EnvResEc	JEBO	JFE	JHE
2.	EJ	JDE	EctT	JEnvEcMgmt	AER	JOE	AER
3.	JPub	QJE	ECMA	EcolEc	GAMES	JOE ReFin	HE
4.	QJE ReStat	WD	JBES	AER	ExpEc		JEP
5.		JEEA	JAE	EnergyEc	EL	AER	ReStat
6.	JOLE	WBER	EctRev	EnPol EnvDevEc	EJ	JBES	JPub
7.	JHE	JPE	EctJ		JPub	JBanFin	JHR
8.	JHR	EJ JEG	EL	ResEnerEc	EcInq	JME	QJE
9.	LabEc		ReStat	AJAC	QJE	JPortMgmt	JPAM
10.	JPop	JEP	AER	REnvEcPol	EER	JEP	JPE

Rank.	intFin	intTr	IO	labor	macro	micro	pubEcon
1.	JIMF	JIE	AER	AER	AER	AER	AER
2.	AER JIE	AER	IJIO	EJ	JME	JET	JPub
3.		WrldEc	RAND	JOLE	BPEA	GAMES	NTJ
4.	JMCB	AE RevIntEc	EER	QJE	JMCB	ECMA	ITPF
5.	JME		JET	JEP	FedSTLRev JEP	JEEA	QJE
6.	EcPol	EER	EJ EL JEEA	ReStat		QJE	JEP
7.	EER	EL		LabEc	JPE	ReStud	EJ
8.	OpEcRev IntJFinEc	JDE		JPub	JEDC JOE	RAND	JEEA
9.		CJE	JInE	ILR		EER	JPE
10.	JPolModel	QJE ReStat	GAMES	JHR	EJ	JPE	EER

Label Legend: AE–Applied Economics, AER–American Economic Review, AER–American Economic Review, AJAC–American Journal of Agricultural Economics, BPEA–Brookings Papers on Economic Activity, CJE–Canadian Journal of Economics, EcInq–Economic Inquiry, ECMA–Econometrica, EcolEc–Ecological Economics, EcPol–Economic Policy, EctJ–Econometrics Journal, EctRev–Econometric Reviews, EctT–Econometric Theory, EER–European Economic Review, EJ–Economic Journal, EL–Economics Letters, EnergyEc–Energy Economics, EnPol–Energy Policy, EnvDevEc–Environment and Development Economics, EnvResEc–Environmental and Resource Economics, ExpEc–Experimental Economics, FedSTLRev–Federal Reserve Bank of St. Louis Review, GAMES–Games and Economic Behavior, IJIO–International Journal of Industrial Organization, ILR–Industrial and Labor Relations Review, IntJFinEc–International Journal of Finance and Economics, ITPF–International Tax and Public Finance, JAE–Journal of Applied Econometrics, JBES–Journal of Business and Economic Statistics, JDE–Journal of Development Economics, JEBO–Journal of Economic Behavior and Organization, JEDC–Journal of Economic Dynamics and Control, JEEA–Journal of the European Economic Association, JEnvEcMgmt–Journal of Environmental Economics and Management, JEP–Journal of Economic Perspectives, JET–Journal of Economic Theory, JHE–Journal of Health Economics, JHR–Journal of Human Resources, JIE–Journal of International Economics, JIMF–Journal of International Money and Finance, JInE–Journal of Industrial Economics, JMCB–Journal of Money, Credit and Banking, JME–Journal of Monetary Economics, JOE–Journal of Econometrics, JOLE–Journal of Labor Economics, JPE–Journal of Political Economy, JPolModel–Journal of Policy Modeling, JPop–Journal of Population Economics, JPub–Journal of Public Economics, LabEc–Labour Economics, NTJ–National Tax Journal, OpEcRev–Open Economics Review, QJE–The Quarterly Journal of Economics, RAND–RAND Journal of Economics, REnvEcPol–Review of Environmental Economics and Policy, ResEnerEc–Resource and Energy Economics, ReStat–The Review of Economics and Statistics, ReStud–Review of Economic Studies, RevIntEc–Review of International Economics, WrldEc–World Economy

Source: RePEc, EconLit.

Table O-A43: RePEc's Top 50 Authors in Demography, Development, Econometrics, Environmental Economics, Experimental Economics, Health Economics, and International Finance

Rank.	dem	dev	ecmt	env	exp	fin	health
1.	Heckman, J	Rodrik, D	Phillips, P	Weitzman, M	List, J	Campbell, J	Deaton, A
2.	Bertrand, M	Barro, R	Newey, W	Pindyck, R	Gneezy, U	Thakor, A	Currie, J
3.	Blundell, R	Ravallion, M	Andrews, D	Greenstone, M	Smith, V	Levine, R	Cutler, D
4.	Lundberg, S	Deaton, A	Granger, C	Tol, R	Fehr, E	Engle, R	Gruber, J
5.	Currie, J	Acemoglu, D	White, H	Stavins, R	Charness, G	Bollerslev, T	Grossman, M
6.	Pollak, R	Duflo, E	Hausman, J	Brock, W	Plott, C	Diebold, F	Newhouse, J
7.	Blau, F	Behrman, J	Engle, R	van der Ploeg, F	Gaechter, S	Cochrane, J	Case, A
8.	Hamermesh, D	Easterly, W	Imbens, G	Mendelsohn, R	Andreoni, J	Hirshleifer, D	McFadden, D
9.	Olivetti, C	Galor, O	Perron, P	Kahn, M	Fischbacher, U	Goetzmann, W	Trivedi, P
10.	Grossman, M	Jones, C	Bai, J	Oates, W	Schotter, A	Stulz, R	Lichtenberg, F
11.	Del Boca, D	Rosenzweig, M	Pesaran, M	Barbier, E	Holt, C	Hodrick, R	Viscusi, W
12.	Greenwood, J	Johnson, S	Stock, J	Karp, L	Sutter, M	Harvey, C	van Doorslaer, E
13.	Kahn, L	Weil, D	Hendry, D	Nordhaus, W	Falk, A	Stein, J	Wagstaff, A
14.	Meghir, C	Aghion, P	Heckman, J	Holt, C	Roberts, J	Wu, L	Fuchs, V
15.	List, J	Levine, R	MacKinnon, J	Stern, D	Eckel, C	Bekaert, G	Finkelstein, A
16.	Zhang, J	Roodman, D	Watson, M	Fullerton, D	Palfrey, T	Lettau, M	Jones, A
17.	Black, S	Fafchamps, M	Bollerslev, T	Ozturk, I	Noussair, C	Rajan, R	Heckman, J
18.	Zilibotti, F	McKenzie, D	Shin, Y	Wei, Y	Cason, T	Brown, S	Norton, E
19.	Ruhm, C	Besley, T	West, K	Venables, A	Mullainathan, S	Auerbach, A	Weil, D
20.	Figlio, D	Sala-i-Martin, X	Pagan, A	Hanemann, M	Duflo, E	Lo, A	Skinner, J
21.	Doepke, M	Robinson, J	Linton, O	Jaffe, A	Harrison, G	Green, R	Keane, M
22.	Chetty, R	Turnovsky, S	Arellano, M	Taylor, A	Guth, W	Stambaugh, R	Bound, J
23.	Riphahn, R	Rajan, R	Ng, S	Parry, I	Cox, J	Beck, T	Paxson, C
24.	Dustmann, C	Howitt, P	Davidson, R	Levinson, A	Villeval, M	Weber, M	Ruhm, C
25.	Lavy, V	Kraay, A	Baltagi, B	Copeland, B	Putterman, L	Santa-Clara, P	Kenkel, D

Source: RePEc. Accessed: 06/02/2018.

Table O-A44: RePEc's Top 50 Authors in Demography, Development, Econometrics, Environmental Economics, Experimental Economics, Health Economics, and International Finance

Rank.	dem	dev	ecmt	env	exp	fin	health
26.	Bloom, D	Barrett, C	Geweke, J	Smith, K	Crawford, V	Demirguc-Kunt, A	Layard, R
27.	Savor, P	Attanasio, O	Johansen, S	Frankel, J	Shogren, J	Baker, M	Cawley, J
28.	Pestieau, P	Jovanovic, B	Dufour, J	Fischer, C	Levitt, S	Pesaran, M	Philipson, T
29.	Lleras-Muney, A	Dollar, D	Smith, R	Carraro, C	Grossman, P	Ghysels, E	Roth, A
30.	Miguel, E	Persson, T	Lewbel, A	Tisdell, C	Hey, J	Valkanov, R	Chaloupka, F
31.	Gertler, P	La Porta, R	Terasvirta, T	Schmalensee, R	Croson, R		Kaestner, R
32.	Aaronson, D	Schultz, T	Diebold, F	Hanley, N	Johannesson, M		Gerdtham, U
33.	Custodio, C	Loayza, N	Koopman, S	Hertel, T	Carpenter, J		Gaynor, M
34.	Bertocchi, G	Townsend, R	Nelson, C	Pizer, W	Sonnemans, J		Kremer, M
35.	Flinn, C	Knack, S	Shephard, N	Zilberman, D	Hart, O		Wise, D
36.	Canning, D	Dercon, S	Harvey, A	Xepapadeas, A	Kocher, M		Oswald, A
37.	Costa Dias, M	Demirguc-Kunt, A	Elliott, G	Heal, G	Sefton, M		Sloan, F
38.	Winter-Ebmer, R	Morduch, J	Abadie, A	Carson, R	Laury, S		Bloom, D
39.	Petrongolo, B	Shleifer, A	Hamilton, J	Polasky, S	Levin, D		Costa, D
40.	de la Croix, D	Svensson, J	Chernozhukov, V	Aghion, P	Schmidt, K		Evans, W
41.	Salvanes, K	Wacziarg, R	Hansen, L	Gerlagh, R	Weber, R		Miron, J
42.	Hunt, J	Bardhan, P	Taylor, R	Palmer, K	Sheremeta, R		Oster, E
43.	Peri, G	Mookherjee, D	Lutkepohl, H	Hoel, M	Huck, S		Costa-Font, J
44.	Sahn, D	Udry, C	Angrist, J	Managi, S	Niederle, M		Shields, M
45.	Guner, N	Feenstra, R	Hahn, J	Newell, R	Sugden, R		Duggan, M
46.	Pan, J	Beck, T	Reichlin, L	Withagen, C	Duffy, J		ODonnell, O
47.	Wiswall, M	Temple, J	Simar, L	Deschenes, O	McCabe, K		French, E
48.	Clark, A	Bourguignon, F	Saikkonen, P	Kolstad, C	Walker, J		Smith, J
49.	Albanesi, S	Levinsohn, J	Renault, E	Halkos, G	Bertrand, M		Dranove, D
50.	Dehejia, R	Brown, S	Ait-Sahalia, Y	Burtraw, D	Heckman, J		Canning, D

Source: RePEc. Accessed: 06/02/2018.

Table O-A45: RePEc's Top 50 Authors in International Trade, Industrial Organizaiton, Labor Economics, Macroeconomics, Microeconomics, and Public Economics

Rank.	intFin	intTr	IO	labor	macro	micro	pubEcon
1.	Obstfeld, M	Helpman, E	Shapiro, C	Krueger, A	Summers, L	Tirole, J	Auerbach, A
2.	Rogoff, K	Melitz, M	Berger, A	Heckman, J	Barro, R	Hart, O	Saez, E
3.	Eichenbaum, M	Feenstra, R	Thisse, J	Card, D	Gertler, M	Acemoglu, D	Poterba, J
4.	Reinhart, C	Eaton, J	Vickers, J	Freeman, R	Stiglitz, J	Shleifer, A	Feldstein, M
5.	Eichengreen, B	Grossman, G	Anderson, S	Hall, R	Blanchard, O	Benabou, R	Alesina, A
6.	Rebelo, S	Baldwin, R	Roberts, M	Lazear, E	Reinhart, C	McAfee, R	Slemrod, J
7.	Taylor, M	Anderson, J	Armstrong, M	Neumark, D	Woodford, M	Myerson, R	Diamond, P
8.	Engel, C	Staiger, R	Hall, B	Blundell, R	Gali, J	Fudenberg, D	Wildasin, D
9.	Edwards, S	Bernard, A	Levine, D	Katz, L	Svensson, L	Morris, S	Persson, T
10.	Frankel, J	Markusen, J	Gabszewicz, J	Lemieux, T	Taylor, J	Armstrong, M	Oates, W
11.	Clarida, R	Hanson, G	Aghion, P	Angrist, J	Sargent, T	Murphy, K	Stiglitz, J
12.	Lane, P	Antras, P	Klemperer, P	Borjas, G	Watson, M	Vickers, J	Alm, J
13.	Fratzscher, M	Ottaviano, G	Amir, R	Pissarides, C	Mishkin, F	Anderson, S	Boadway, R
14.	Mishkin, F	Mayer, T	Schmidt, K	Nickell, S	Hamilton, J	Vives, X	Keen, M
15.	Aizenman, J	Egger, P	Rey, P	Dustmann, C	Romer, D	Moulin, H	Coate, S
16.	Forbes, K	Neary, J	White, L	Autor, D	Hall, R	Postlewaite, A	Gordon, R
17.	Ito, T	Bahmani-Oskooee, M	Lambertini, L	Bertrand, M	Lucas, R	Mas-Colell, A	Schneider, F
18.	Chinn, M	Rodriguez-Clare, A	Economides, N	Hamermesh, D	Buiter, W	Stole, L	Atkinson, A
19.	Shin, H	Wei, S	Chen, Y	Diamond, P	Christiano, L	Bergemann, D	Hines, J
20.	Sarno, L	Jensen, J	Motta, M	Helpman, E	Rogoff, K	Klemperer, P	Gruber, J
21.	West, K	Redding, S	Verboven, F	Manning, A	Kehoe, P	Levine, D	Acemoglu, D
22.	Milesi-Ferretti, G	Costinot, A	Newbery, D	Blau, F	Obstfeld, M	Hellwig, M	Creedy, J
23.	Calvo, G	Wagner, J	Feinberg, R	Peri, G	Mankiw, N	Rochet, J	Lockwood, B
24.	Lyons, R	Hoekman, B	Holmes, T	Kahn, L	Calvo, G	Rubinstein, A	Blundell, R
25.	Devereux, M	Kortum, S	Cabral, L	Rogerson, R	Stock, J	Aghion, P	Sargent, T

Source: RePEc. Accessed: 06/02/2018.

Table O-A46: RePEc's Top 50 Authors in International Trade, Industrial Organizaiton, Labor Economics, Macroeconomics, Microeconomics, and Public Economics

Rank.	intFin	intTr	IO	labor	macro	micro	pubEcon
26.	van Wincoop, E	Fontagne, L	Fehr, E	Meghir, C	Kydland, F	Andreoni, J	Kotlikoff, L
27.	Caballero, R	Ethier, W	Lach, S	Haltiwanger, J	Cukierman, A	Epstein, L	Besley, T
28.	Goldberg, L	de Melo, J	Yurtoglu, B	Hanushek, E	King, R	Hart, S	Devereux, M
29.	Blanchard, O	Davidson, C	Gugler, K	Altonji, J	Uhlig, H	Gabaix, X	Laroque, G
30.	Burnside, C	Bagwell, K	Tadelis, S	Addison, J	Rudebusch, G	Reny, P	Samwick, A
31.	McKinnon, R	Rauch, J	Choi, J	Mortensen, D	Orphanides, A	Joskow, P	Tabellini, G
32.	Bollerslev, T	Schott, P	Sorgard, L	Saez, E	Blinder, A	Mailath, G	Lindbeck, A
33.	Rose, A	Francois, J	Inderst, R	Goldin, C	Sims, C	Horner, J	Blank, R
34.	Hutchison, M	Trefler, D	Mirman, L	van Ours, J	Caballero, R	Rey, P	Chetty, R
35.	Wei, S	Manova, K	Van Reenen, J	Cahuc, P	Rogerson, R	Fehr, E	Mintz, J
36.	Harvey, C	Head, K	Gaynor, M	Bound, J	Pesaran, M	Watson, J	Martinez-Vazquez, J
37.	Cheung, Y	Pavcnik, N	Waterson, M	Weiss, Y	Leeper, E	Schmeidler, D	Bovenberg, L
38.	Roubini, N	Yeaple, S	Nocke, V	Lang, K	Uribe, M	Weibull, J	Liebman, J
39.	Rey, H	Felbermayr, G	Griffith, R	Hanson, G	Frankel, J	Martimort, D	Fuest, C
40.	Feldstein, M	Whalley, J	Cockburn, I	Blanchflower, D	Reis, R	Malcomson, J	Kneller, R
41.	Evans, M	Levchenko, A	Bernard, A	Davis, S	Smets, F	Glaeser, E	Shleifer, A
42.	Gertler, M	Venables, A	Nicoletti, G	Alesina, A	Cochrane, J	DeMarzo, P	Egger, P
43.	Rogers, J	Maggi, G	Valletti, T	Sattinger, M	Chari, V	Sala-i-Martin, X	Heckman, J
44.	MacDonald, R	Goldberg, P	Morris, S	Gottschalk, P	Benhabib, J	Lambertini, L	Pestieau, P
45.	Ghosh, A	Larch, M	Shum, M	van den Berg, G	Diamond, D	Besley, T	Zodrow, G
46.	Bekaert, G	Rodrik, D		Chiswick, B	Mendoza, E	Chen, Y	Fullerton, D
47.	Blomstrom, M	Hummels, D		Deaton, A	Eichenbaum, M	Schmidt, K	Frey, B
48.	De Grauwe, P	Amiti, M		Woessmann, L	Cooper, R	Meyer, M	Epple, D
49.	Edison, H	Arkolakis, C		Holzer, H	Diamond, P	Jullien, B	Mulligan, C
50.	Bordo, M	Yotov, Y		Shimer, R	McCallum, B	Roberts, M	Hoxby, C

Source: RePEc. Accessed: 06/02/2018.

6.4 Journals That Are Most Cited By the Top Journals of Different Fields

This section presents publication volume-unadjusted rankings of journals that are most cited by top field journals in different fields of specialization (see Table 6 for the publication volume-adjusted analog). Online Appendix Table O-A47 presents publication volume-unadjusted rankings for journals that received the largest share of citations from articles published between 2010–2017 by the top 2 field journals within each field (the top 2 in each field are determined based on field-specific rankings provided by Combes and Linnemer (2010)). The rankings are constructed using proportions of outgoing references from the top 2 journals of each field to different journals. The publication volume-unadjusted proportion for referenced journal j in field f is computed in two steps. First, proportions of outgoing citations from each article a published in the 2 field journals is calculated for each journal j referenced by a :

$$p_{a,j} = \frac{1}{R_a} \sum_{r=1}^{R_a} \mathbb{1}(r \in j) \quad (4)$$

where R_a is the total number of journal articles referenced by article a during the period 1996–2017, and $\mathbb{1}(r \in j)$ is an indicator that equals one if reference r was published in journal j . Next, we use $p_{a,j}$ to compute proportions of outgoing citations from all articles published by field f 's top 2 journals in between 2010–2017 to each journal j referenced by these articles:

$$S_j^f = \frac{1}{N^f} \sum_{a=1}^{N_f} p_{a,j} \quad (5)$$

where N^f is the total number of articles published by the top 2 field- f journals during the period 1996–2017⁸.

S_j^f is interpreted as the average share of journal citations that j accounted for across all articles published by the top 2 field- f journals during the period 1996–2017. It weights each

⁸Note that $N^f = \sum_{j \in \mathcal{J}} \sum_{a=1}^{N_f} p_{a,j}$, where \mathcal{J} is the set of journals that were cited by field f 's top 2 journals during the period 1996–2017. This equality holds because $\sum_{j \in \mathcal{J}} p_{a,j} = 1$ by construction.

article a equally (the sum of $p_{a,j}$ over all cited journals j is equal to 1 for all articles a). This weighting scheme prevents individual articles a from skewing S_j^f in their favor⁹.

Table 6 presents a publication volume-adjusted analog to Online Appendix Table O-A47. The volume adjustment is made with respect to publication volumes of the cited journal, by multiplying the indicator $\mathbb{1}(r \in j)$ in Equation 4 with the inverse of $(v_{j,y}/V_y)$ ¹⁰. This weighting adjusts for the larger probability of a journal being cited associated with journals that publish more articles. The publication volume-adjusted proportion is given by:

$$\tilde{S}_j^f = \frac{1}{\tilde{N}^f} \sum_{a=1}^{N_f} \tilde{p}_{a,j} \quad (7)$$

where the tildes over the variables denote that the variables were constructed using the above-referenced volume-adjusted indicator¹¹.

⁹An unweighted measure is given by

$$\hat{S}_j^f = \frac{\sum_{a=1}^{N_f} \sum_{r=1}^{R_a} \mathbb{1}(r \in j)}{R^f} \quad (6)$$

where R^f is the total number of journal articles referenced by all publications in field f 's top 2 journals during the period 1996–2017. The other variables are defined as above. Note that article a 's contribution to the grand numerator (i.e., its influence on \hat{S}_j^f) increases with R_a , the number of articles referenced by a . \hat{S}_j^f will be unrepresentative of average citation behavior in field f if a handful of articles account for a large share of citations made by the top 2 journals in field f , and if the journals cited by these articles are unrepresentative of the journals cited by the overall population of articles in field f .

¹⁰ $(v_{j,y}/V_y)$ is journal j 's volume of publication during year y as a proportion of total publication volume during year y for the 50 journals that received the most unweighted citations from articles published in field f 's top 2 journals during the period 2010–2017.

¹¹Note that $\tilde{N}^f = \sum_{j \in \mathcal{J}} \sum_{a=1}^{N_f} \tilde{p}_{a,j}$ is a volume-adjusted count of references made by articles a .

Table O-A47: Journals That Received The Highest Number of Citations From Articles Published Between 2010–2017 In the Top 2 Journals Within Different Fields of Specialization (Rankings Uses Citations to Articles Published Between 1996-2017; Rankings are **Unadjusted For Publication Volume**)

ranking	T5	dev	ecmt	fin	health
1	AER	AER	JOE	JOF	JHE
2	ECMA	JDE	ECMA	JFE	HE
3	QJE	QJE	EctT	ReFin	AER
4	JPE	ReStat	JBES	AER	HlthAff
5	ReStud	JPE	JASA	QJE	QJE
6	JET	EJ	AnnStat	JPE	SocSciMed
7	JEP	ECMA	JAE	JFQA	JHR
8	ReStat	ReStud	JOF	JAccEc	JPub
9	JME	JIE	ReStat	ECMA	HtlhServRes
10	JOF	JEG	ReStud	JBus	NEJM

ranking	IO	labor	macro	micro	pubEcon
1	RAND	AER	AER	JET	JPub
2	AER	QJE	JME	GAMES	AER
3	IJIO	JOLE	JMCB	ECMA	QJE
4	ECMA	JHR	JPE	AER	JPE
5	JInE	ReStat	QJE	ReStud	ECMA
6	ReStud	JPE	JOF	EcT	ReStud
7	JPE	ECMA	ECMA	JPE	ReStat
8	QJE	JPub	ReStud	QJE	EJ
9	JET	ReStud	ReFin	IJGT	JEP
10	JEMS	AEJae	JFE	SocChWelf	JEL

Source: Scopus; Accessed 08/2018.

Note: This table presents a ranking of journals that received the highest citations from the top 2 field journals in nine different fields of specialization. The nine fields used in this table are the same ones used in our analysis of work-history data and categorized in Table O-A9. Construction of the ranking proceeds in three steps. First, the top 2 journals in a field is defined as being composed of the two journals that received the highest rank within the field in [Combes and Linnemer \(2010\)](#)'s field-specific rankings (the column titled "Tier A Field" in Table O-A9 presents the top 2 journals by field). Second, proportions of outgoing citations from the top 2 field journals are calculated for each journal that received citations from articles published by the top 2 field journals in 2017. The proportions only use citations to articles published between 1996-2017 due to data unavailability for the pre-1996 period. Third, journals are ranked within a field based on field-specific outgoing proportions constructed in step 2. This table uses field-specific proportions constructed in Steps 1–3 to present the 10 journals that received the largest proportion of citations from the top 2 journals of each field.

Label Legend: AEJae–American Economic Journal: Applied Economics; AER–American Economic Review; AnnStat–Annals of Statistics; ECMA–Econometrica; EJ–Economic Journal; EcT–Economic Theory; EctT–Econometric Theory; GAMES–Games and Economic Behavior; HE–Health Economics; HlthAff–Health Affairs; HtlhServRes–Health Services Research; IJGT–International Journal of Game Theory; IJIO–International Journal of Industrial Organization; JAE–Journal of Applied Econometrics; JASA–Journal of the American Statistical Association; JAccEc–Journal of Accounting and Economics; JBES–Journal of Business and Economic Statistics; JBus–Journal of Business; JDE–Journal of Development Economics; JEG–Journal of Economic Growth; JEL–Journal of Economic Literature; JEMS–Journal of Economics and Management Strategy; JEP–Journal of Economic Perspectives; JET–Journal of Economic Theory; JFE–Journal of Financial Economics; JFQA–Journal of Financial and Quantitative Analysis; JHE–Journal of Health Economics; JHR–Journal of Human Resources; JIE–Journal of International Economics; JInE–Journal of Industrial Economics; JMCB–Journal of Money, Credit and Banking; JME–Journal of Monetary Economics; JOE–Journal of Econometrics; JOF–Journal of Finance; JOLE–Journal of Labor Economics; JPE–Journal of Political Economy; JPub–Journal of Public Economics; NEJM–New England Journal of Medicine; QJE–Quarterly Journal of Economics; RAND–RAND Journal of Economics; ReFin–Review of Financial Studies; ReStat–Review of Economics and Statistics; ReStud–Review of Economic Studies; SocChWelf–Social Choice and Welfare; SocSciMed–Social Science and Medicine;

6.5 The Forgotten (by the Top 5) Classics

Table O-A47: 20 Most Cited Non-T5 Articles in RePEc's Ranking of Most Cited Articles, Cont'd

	Author	Article Name <i>Journal</i>	Pub Year	RePEc Rank	RePEc Cites
11.	Johansen, S Juselius, K	“Maximum Likelihood Estimation and inference on cointegration – With applications to the demand for money” <i>Oxford Bulletin of Economics and Statistics</i>	1990	29	2,434
12.	Kwiatkowski, D. Phillips, P. Schmidt, P. Shin, Y.	“Testing the null hypothesis of stationarity against the alternative of a unit root : How sure are we that economic time series have a unit root?” <i>Journal of Econometrics</i>	1992	36	2,157
13.	Myers, S. Majluf, N.	“Corporate financing and investment decisions when firms have information that investors do not have” <i>Journal of Financial Economics</i>	1984	39	2,020
14.	Diebold, F. Mariano, R.	“Comparing predictive accuracy” <i>Journal of Business & Economic Statistics</i>	2002	43	1,956
15.	Fama, E. French, K.	“The cross-section of expected stock returns” <i>Journal of Finance</i>	1992	48	1,894
16.	Levin, A. Lin, C. James Chu, C	“Unit root tests in panel data: asymptotic and finite-sample properties” <i>Journal of Econometrics</i>	2002	51	1,856
17.	Gertler, M. Gali, J. Clarida, R.	“The science of monetary policy: A new Keynesian Perspective” <i>Journal of Economic Literature</i>	1999	53	1,832
18.	Merton, R.	“On the pricing of corporate debt: The risk structure of interest rates” <i>Journal of Finance</i>	1974	55	1,826
19.	Carhart, M.	“On persistence in mutual fund performance” <i>Journal of Finance</i>	1997	56	1,820
20.	Aigner, D. Lovell, C. Schmidt, P.	“Formulation and estimation of stochastic frontier production function models” <i>Journal of Econometrics</i>	1977	57	1,817

Note: Ranking and Citation Source: RePEc. Accessed on: 05/19/2017

Table O-A48: Other Classic/Influential Papers Published Outside the T5

Author	Article Name <i>Journal</i>	Pub Year	Cites ¹
Coase, R	“The Problem of Social Cost” <i>Journal of Law & Economics</i>	1960	5093
Merton, R	“Theory of Rational Option Pricing” <i>The Bell Journal of Economics</i>	1973	2826
Becker, G	“A theory of the Allocation of Time” <i>The Economic Journal</i>	1965	2710
Holmstrom, B	“Moral Hazard and Observability” <i>The Bell Journal of Economics</i>	1979	2,193
Heckman, J	“Common Structure of Statistical-Models of Truncation, Sample Selection And Limited Dependent Variables And a Simple Estimator For Such Models” <i>Annals of Economic and Social Measurement</i>	1976	1797
Lucas, R.	“Expectations and the neutrality of money” <i>Journal of Economic Theory</i>	1972	1165
Milgrom, P	“Good-News and Bad News - Representation Theorems and Applications” <i>The Bell Journal of Economics</i>	1981	747
Myerson, R. B., Satterthwaite, M. A.	“Efficient mechanisms for bilateral trading” <i>Journal of Economic Theory</i>	1983	708
Roth, A. E., Erev, I.	“Learning in extensive-form games: Experimental data and simple dynamic models in the intermediate term.” <i>Games and Economic Behavior</i>	1995	602
Card, D	“The Impact of The Mariel Boatlift On The Miami Labor-Market” <i>Industrial & Labor Relations Review</i>	1990	346

¹Source of Citation Data: Web of Science Core Collection (Thomson Reuters, 2016)

Table O-A49: RePEc's 20 Most Cited Articles

Author	Article Name <i>Journal</i>	Pub Year	RePEc Rank	RePEc Cites
Arellano, M. Bond, S.	“Some Tests of Specification for Panel Data: Monte Carlo Evidence and an Application to Employment Equations” <i>Review of Economic Studies</i>	1991	1	5,491
Engle, R. Granger, C.	“Co-integration and Error Correction: Representation, Estimation, and Testing” <i>Econometrica</i>	1987	2	4,381
Kahneman, D. Tversky, A.	“Prospect Theory: An Analysis of Decision under Risk” <i>Econometrica</i>	1979	3	4,363
Heckman, J.	“Sample Selection Bias as a Specification Error” <i>Econometrica</i>	1979	4	4,355
Lucas, R. J.	“On the Mechanics of Economic Development” <i>Journal of Monetary Economics</i>	1988	5	4,249
Blundell, R., Bond, S.	“Initial conditions and moment restrictions in dynamic panel data models” <i>Journal of Econometrics</i>	1998	6	4,195
Jensen, M., Meckling, W.	“Theory of the firm: Managerial behavior, agency costs and ownership structure” <i>Journal of Financial Economics</i>	1976	7	4,145
Johansen, S.	“Statistical Analysis of Cointegration Vectors” <i>Journal of Economic Dynamics and Control</i>	1988	8	3,939
Bollerslev, T	“Generalized autoregressive conditional heteroskedasticity” <i>Journal of Econometrics</i>	1986	9	3,876
Romer, P.	“Increasing Returns and Long-run Growth” <i>Journal of Political Economy</i>	1986	10	3,660

Note: Ranking and Citation Source: RePEc. Accessed on: 05/19/2017

Table O-A49: RePEc's 20 Most Cited Articles, Cont'd

Author	Article Name <i>Journal</i>	Pub Year	RePEc Rank	RePEc Cites
White, H.	“A Heteroskedasticity-Consistent Covariance Matrix Estimator and a Direct Test for Heteroskedasticity” <i>Econometrica</i>	1980	11	3,649
Black, F. Scholes, M.	“The Pricing of Options and Corporate Liabilities” <i>Journal of Political Economy</i>	1973	12	3,499
Mankiw, G. Romer, D. Weil, D.	“A Contribution to the Empirics of Economic Growth” <i>Quarterly Journal of Economics</i>	1992	13	3,387
Romer, P.	“Endogenous Technological Change” <i>Journal of Political Economy</i>	1990	14	3,306
Arellano, M. Bover, O.	“Another look at the instrumental variable estimation of error-components models” <i>Journal of Econometrics</i>	1995	15	3,087
La Porta, R. Lopez-de-Silanes, F. Shleifer, A. Vishny, R.	“Law and Finance” <i>Journal of Political Economy</i>	1998	16	3,014
Newey, W. West, K.	“A Simple, Positive Semi-definite, Heteroskedasticity and Autocorrelation Consistent Covariance Matrix” <i>Econometrica</i>	1987	17	2,960
Engle, R.	“Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation” <i>Econometrica</i>	1982	18	2,808
Hansen, L.	“Large Sample Properties of Generalized Method of Moments Estimators” <i>Econometrica</i>	1982	19	2,760
Fama, E. French, K.	“Common risk factors in the returns on stocks and bonds” <i>Journal of Financial Economics</i>	1993	19	2,760

Note: Ranking and Citation Source: RePEc. Accessed on: 05/19/2017

Table O-A50: Examples of Influential Books

Authors	Name	Pub Year	Cites¹
Mas-Colell, A., Whinston, M.D., Green, J.R.	“Microeconomic theory”	1995	12,520
Becker, G	“Human capital: A theoretical and empirical analysis, with special reference to education”	1994	32,271
Acemoglu, D., Robinson, J.A.	“Why nations fail: the origins of power, prosperity, and poverty”	2013	6,566
Deaton, A., Muellbauer, J.	“Economics and consumer behavior”	1980	6,252
Fudenberg, D., Levine, D.	“The Theory of Learning in Games”	1998	3,347
Goldin, C., Katz, L.	“The Race between Education and Technology”	1994	2,017
Hansen, L., Sargent, T.	“Robustness”	2008	895

¹Source of Citation Data: Google Scholar

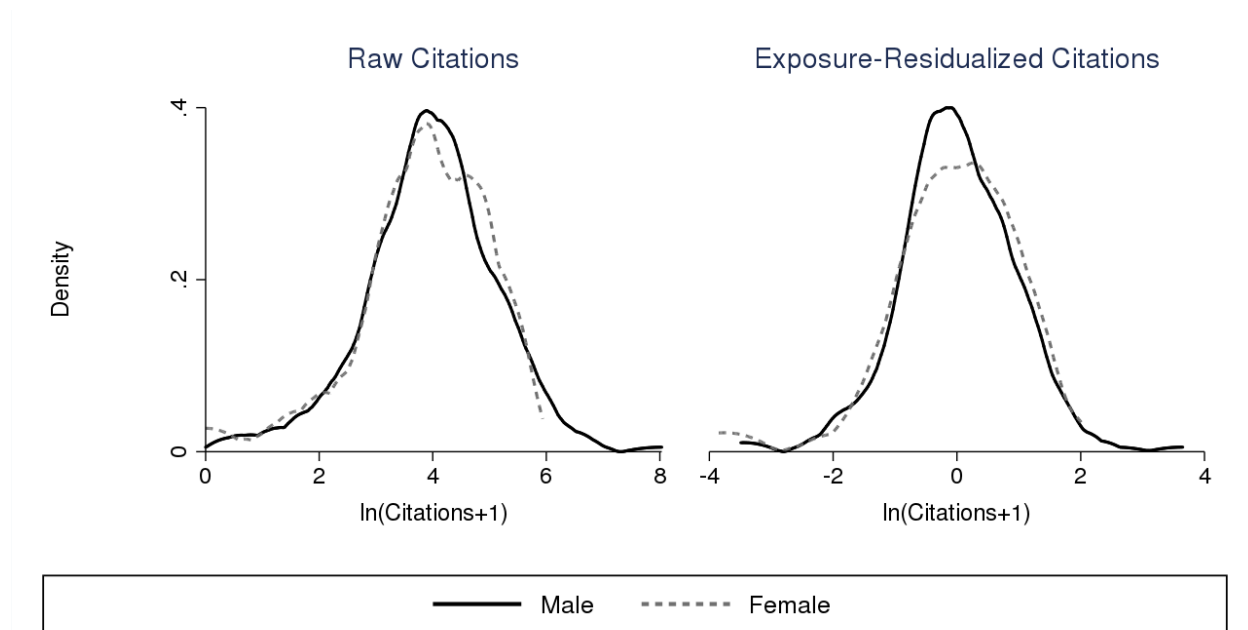
Table O-A51: 10 Most Cited Publications By Richard Thaler

	Author	Article Name <i>Journal</i>	Pub Year	Cites¹
1.	Thaler, R.H.	Towards a positive theory of consumer choice <i>Journal of Economic Behavior & Organization</i>	1980	1677
2.	DeBondt, W.F.M. Thaler, R.H.	Does the stock-market overreact <i>Journal of Finance</i>	1985	1431
3.	Kahneman, D. Knetsch, J.L. Thaler, R.H.	Anomalies: the endowment effect, loss aversion, and status-quo bias <i>Journal of Economic Perspectives</i>	1991	1343
4.	Kahneman, D. Knetsch, J.L. Thaler, R.H.	Experimental tests of the endowment effect and the Coase theorem <i>Journal of Political Economy</i> ★	1990	1336
5.	Kahneman, D. Knetsch, J.L. Thaler, R.H.	Fairness as a constraint on profit seeking: entitlements in the market <i>American Economic Review</i> ★	1986	1242
6.	Thaler, R.H. Johnson, E.J.	Gambling with the house money and trying to break even - the effects of prior outcomes on risky choice <i>Management Science</i>	1990	740
7.	Thaler, R.H.	Some empirical evidence on dynamic inconsistency <i>Economics Letters</i>	1981	712
8.	Thaler, R.H.	Mental accounting matters <i>Journal of Behavioral Decision Making</i>	1999	702
9.	Thaler, R.H. Shefrin, H.M.	Economic theory of self-control <i>Journal of Political Economy</i> ★	1981	702
10.	Jolls, C. Sunstein, C.R. Thaler, R.H.	Behavioral approach to law and economics <i>Stanford Law Review</i>	1998	697

¹ Citation Source: Web of Science, Thomson Reuters 2017. Accessed on: 10/18/2017

6.6 Differences in T5 Citations By Gender

Figure O-A27: Inter-Gender Comparison of Citation Distributions For Solo-Authored T5 Articles Published by Tenure-Track Faculty Hired by the T35 Departments Between 1996–2010 (Citations Measured Through 2018)



Source: Scopus; Accessed 09/2018.

Note: This figure compares citation distributions of T5 articles by gender of author. Both figures use citations data for solo-authored T5 articles published by tenure-track faculty hired by the T35 departments between 1996–2010. Citations accrue through 2018. The left figure plots gender-specific distributions for raw log citations received by the T5 articles. The right figure plots gender-specific distributions of exposure-adjusted log citations received by the T5 articles. The exposure-adjustment is obtained in two steps: (i) $\ln(\text{Citations}+1)$ is regressed on a third degree polynomial for years elapsed between year of publication and 2018 (citations were measured through 2018), and (ii) residuals are predicted from this model. The right figure plots these residuals.

This section investigates gender differences in the distribution of citations received by T5 articles. The analysis is conducted using data on citations accrued by T5 articles published by tenure-track faculty hired by the “Top 35” departments during the period 1996-2010. Citations are measured through 2018. The sample is restricted to only include solo-authored T5 articles. This restriction allows each article to be categorized into either a male-authored or female-authored category. Citation distributions are then compared across these gender-

based categories. In principle, this analysis can be extended to include co-authored articles if gender for all co-authors is observed. The present analysis excludes co-authored articles because the data does not allow us to observe co-author gender (the data only records characteristics of our sample of tenure-track faculty hired by the T35 departments; it does not record information on these authors' co-authors).

The sample includes 265 solo-authored T5 articles published between 1996–2018. Female-authored articles account for 24% of this sample (N=64).

Figure O-A27 plots citation distributions for T5 articles by gender. The figure on the left plots gender-specific distributions of raw log citations for all T5 articles published by the group of tenure-track faculty. The right figure plots gender-specific distributions of residualized log citations for the same T5 articles. The residuals are obtained from an OLS model that estimates $\ln(\text{Citations}+1)$ as a function of a third degree polynomial for years elapsed between year of publication and 2018 (citations were measured through 2018). The residualization adjusts citations for exposure effects. The citation distributions are similar across genders in both the exposure-adjusted and -unadjusted plots.

Table O-A52 presents formal tests for the equality of citation distributions across genders at three different quantiles. Unlike OLS estimates, estimates from quantile regressions are robust to the presence of outliers (citation distributions are skewed and exhibit thick right tails). Estimates for quantile- q is obtained by estimating a quantile regression that can be represented as:

$$Q^q(\text{Citations}_{a,i}) = \beta_0^q + \beta_g^q \mathbb{1}(\text{Gender}_i = \text{Male}) + \boldsymbol{\alpha}^q \mathbf{X} \quad (8)$$

where $\text{Citations}_{a,i}$ measures citations accrued by article a authored by individual i , $\mathbb{1}(\text{Gender}_i = \text{Male})$ is an indicator for i 's gender, and \mathbf{X} is a vector of article-level and author-level controls (see bottom-most panel of Table O-A52 for a list of variables included in \mathbf{X}).

The estimates reveal that gender is not statistically significantly associated with any

of the three T5 citation quantiles considered at the 10% level. This finding is robust to varying treatments of the vector of controls \mathbf{X} . This result suggests that citations do not accrue differently by gender of co-author. This is consistent with the findings of [Hamermesh \(2018\)](#). Analyzing citations to the 5 most-cited articles for each of 1043 tenure-track or tenured economics faculty members at the top thirty US economics departments, he finds that authors' gender is not statistically significantly associated with citations.

Table O-A52: Estimates of Gender Differences in the 25th, 50th, and 75th Percentiles of the Citation Distribution for Solo-Authored T5 Articles Published by Tenure-Track Faculty Hired by the T35 Departments Between 1996–2010 (Citations Measured Through 2018; Estimates Obtained From Quantile Regressions)

	Specification 1		Specification 2		Specification 3		Specification 4		Specification 5		Specification 6	
	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.	Est.	SE.
$Q_{25}(C | \text{Male}=1, \mathbf{X}) - Q_{25}(C | \text{Male}=0, \mathbf{X})$	-2.00	(5.12)	-1.10	(4.94)	-0.05	(5.00)	1.22	(5.25)	3.89	(6.17)	1.01	(6.07)
$Q_{50}(C | \text{Male}=1, \mathbf{X}) - Q_{50}(C | \text{Male}=0, \mathbf{X})$	5.00	(9.66)	0.00	(10.74)	1.54	(11.00)	-1.30	(11.29)	-1.96	(11.21)	1.40	(12.10)
$Q_{75}(C | \text{Male}=1, \mathbf{X}) - Q_{75}(C | \text{Male}=0, \mathbf{X})$	27.00	(29.12)	-4.00	(23.42)	-1.72	(23.39)	5.43	(22.53)	-12.85	(22.59)	-0.25	(22.18)
Control Variables \mathbf{X} Included in Specification												
Citation Exposure (2018 - Pub Year)	x		✓		✓		✓		✓		✓	
Author Experience (Pub Year - Year Grad)	x		x		✓		✓		✓		✓	
Almamater Quality F.E.	x		x		x		✓		✓		✓	
Journal F.E.	x		x		x		x		✓		✓	
Page Length	x		x		x		x		x		✓	

Source: Scopus; Accessed 09/2018.

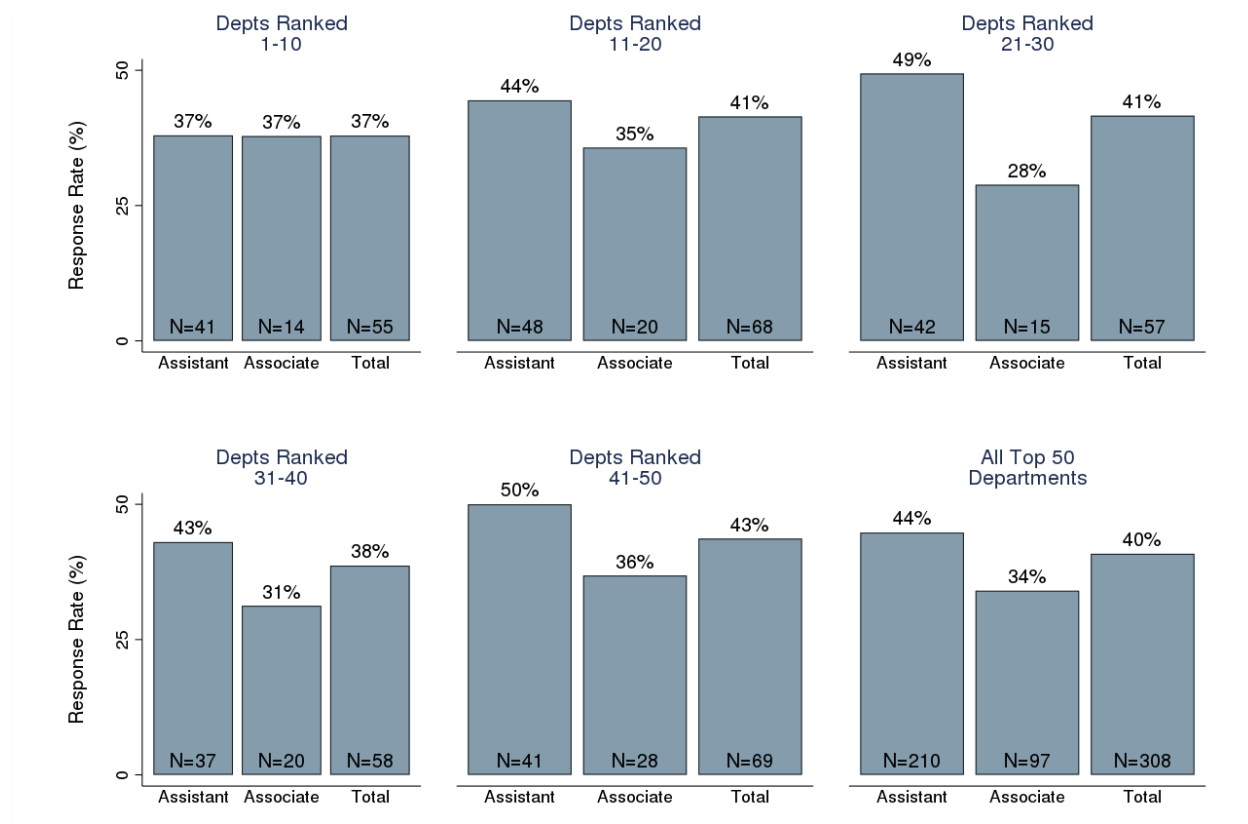
Note: This table presents coefficient estimates and standard errors obtained from quantile regressions of T5 citations on authors' gender and a vector of controls \mathbf{X} . The table's first column indicates the quantile regression used to generate the estimates. For instance, the row labelled $Q_{50}(C | \text{Male}=1, \mathbf{X}) - Q_{50}(C | \text{Male}=0, \mathbf{X})$ presents estimates of gender differences in median T5 citations obtained from a median quantile regression. Six sets of estimates are presented for each quantile regression, where each specification differs from the others based on the variables included in the vector of controls \mathbf{X} (the bottom panel of the table specifies the variables that are included in each specification). Estimates are bolded if statistically significant at the 10% level.

Definition of Control Variables \mathbf{X} : (i) Citation Exposure – Third degree polynomial for years elapsed between year of publication and 2018; (ii) Author Experience– Third degree polynomial for years elapsed between year of publication and year of graduation; (iii) Almamater Quality F.E. – Set of indicators for having graduated from a Top 10, 20, 30, or 40 economics department (graduates from non-Top 40 departments are the excluded category); (iv) Journal F.E. – indicators for each of the T5 journals (AER is the excluded category); (v) Page length – a count of page length

7 Survey

7.1 Response Rates

Figure O-A28: Response Rate By Department Rank and Position



7.2 Data Description

Given the “Top Five’s” influence on career progression, it is plausible that a negatively selected sample will yield responses that are biased against current tenure and promotion practices, particularly with respect to the “Top Five’s” role in tenure and promotion decisions. Responses would thus be unrepresentative of the overall population in the presence of such bias. We test for the presence of this form of selection by comparing the distribution of the number of Top Five articles published by the survey respondents against the distribution

of the number of Top Five articles published by the population of Assistant and Associate Professors¹². Table O-A53 presents summary statistics that compare Top Five publications between the two faculty groups, by department ranking. The mean number of Top Five publications are comparable between individuals in the overall population and individuals in the sample of respondents. We conduct separate Mann-Whitney tests for faculty in each department rank-based group to compare the distributions of Top Five publications between the overall population of junior faculty hired by the rank-based group and the corresponding sample of respondents. We fail to reject the null hypothesis of equality between the population and respondent distributions for all rank-based groups. These results suggest that respondents did not select into the survey based on their ability to publish Top Five articles, thereby, allaying concerns of non-reponse bias stemming from such selection.

Table O-A53: Comparison of Top Five Publications Between Survey Respondents and Overall Population of Assistant and Associate Professors in the T50 Departments

Departments	Population		Respondents		Mann-Whitney	
	Mean	SD.	Mean	SD.	z	p
1. Depts. 1–10	2.21	2.38	2.15	2.00	-0.32	0.75
2. Depts. 11–20	1.37	1.69	1.38	1.43	-0.66	0.51
3. Depts. 21–30	1.00	1.30	0.82	1.21	0.96	0.34
4. Depts. 31–40	0.50	0.86	0.40	0.68	0.27	0.79
5. Depts. 41–50	0.58	0.86	0.51	0.78	0.43	0.66

Source: Scopus.com; accessed 07/2018

Note: This table presents summary statistics for the number of Top Five articles published by the survey respondents and by the population of Assistant and Associate Professors at the T50 departments. The first two columns labelled “Population” presents means and standard deviations for the population of Assistant and Associate Professors. The set of columns labelled “Respondents” presents analogous statistics for our sample of respondents. The last two columns present z -scores and p -values obtained from Mann-Whitney tests conducted at the department rank group level.

Years of post-PhD work experience is comparable between the sample of Assistant Professor respondents and the overall population of Assistant Professors. On average, Assis-

¹²The distribution of Top Five publications for survey respondents is obtained from survey responses. The distribution for the overall population is collected from Scopus using a procedure similar to the one used in the analyses presented in previous sections

tant Professor respondents have been out of graduate school for 4.5 years (SD=2.4) compared to 4.7 years (SD=2.8) in the overall population. In contrast, Associate Professor respondents tend to be considerably younger than the overall population of Associate Professors. On average, Associate Professor respondents have been out of graduate school for 12.5 years (SD=5.1) compared to 15.8 years (SD=10.9) in the overall population. We do not expect this difference in years of experience to bias responses either against or in favor of the use of “Top Five” publications in the tenure and promotion process. It is, however, possible that younger Associate Professors have better awareness of current tenure practices since they are likely to have undergone tenure review more recently than their more experienced colleagues. Survey results should be interpreted in light of these differences in years of experience. The reader is referred to Online Appendix Table [O-A54](#) for department rank- and Professorial rank-specific summary statistics on years since graduation.

Female faculty account for 20.9% of the overall sample of respondents, 20.7% of Assistant Professor respondents, and 21.7% of Associate Professor respondents. According to the *AEA*'s 2018 issue of the Universal Academic Questionnaire ([Scott and Siegfried, 2018](#)), females accounted for 26.6% of Assistant Professor positions and 24.4% of Associate Professor positions in the 2017-2018 academic year across 103 PhD-granting institutions in the U.S. While female representation is lower in our sample of respondents, we cannot conclude that females were less likely to take the survey since the *UAQ* figures are based on data from a larger set of institutions.

We also summarize respondents' fields of specialization. Labor Economics is the most common field with 29.08% of respondents reporting it as one of their fields of specialization. Other fields that account for at least 10% of the sample include Macroeconomics (23.53%), Development Economics (16.01%), Economic Theory (16.01%), Public Economics (15.36%), Econometrics (15.03%), and Industrial Organization (12.75%). Online Appendix Table [O-A55](#) presents analogous percentages for 15 additional fields.

Table O-A54: Comparison of Years Since Graduation Between Survey Respondents and Overall Population of Assistant and Associate Professors in the T50 Departments

	Departments	Population		Respondents		Mean Diff.
		Mean	SD.	Mean	SD.	
<u>Assistant Professors</u>						
1.	Depts. 1–10	4.50	2.24	4.53	2.17	-0.03
2.	Depts. 11–20	4.74	2.44	4.83	2.38	-0.09
3.	Depts. 21–30	5.32	3.19	4.27	2.69	1.05
4.	Depts. 31–40	4.43	3.74	3.73	2.55	0.70
5.	Depts. 41–50	4.83	2.46	4.95	2.24	-0.12
<u>Associate Professors</u>						
6.	Depts. 1–10	10.41	3.18	9.79	1.81	0.62
7.	Depts. 11–20	15.82	16.43	10.75	2.84	5.07
8.	Depts. 21–30	15.76	8.83	13.67	6.08	2.10
9.	Depts. 31–40	18.44	10.33	14.70	6.16	3.74
10.	Depts. 41–50	16.00	9.19	12.86	5.22	3.14

Note: This table presents summary statistics for the number of years elapsed since PhD graduation for the survey respondents and for the population of Assistant and Associate Professors at the T50 departments. The first two columns labelled “Population” presents means and standard deviations for the population of Assistant and Associate Professors. The set of columns labelled “Respondents” presents analogous statistics for our sample of respondents. The last column presents the difference in means reported in the first two set of columns.

Table O-A55: % of Respondents Who Specialize in Different Fields

	Field	% of Respondents
1.	Labor Economics	29.08%
2.	Macroeconomics	23.53%
3.	Development Economics	16.01%
4.	Economic Theory	16.01%
5.	Public Economics	15.36%
6.	Econometrics	15.03%
7.	Industrial Organization	12.75%
8.	Economics Of Education	9.48%
9.	Health Economics	9.15%
10.	Behavioral Economics	7.52%
11.	Finance	6.86%
12.	Experimental Economics	6.21%
13.	International Trade	5.23%
14.	Economic History	3.92%
15.	Environmental Economics	3.92%
16.	Demographic Economics	2.94%
17.	Political Economy	1.63%
18.	Urban Economics	0.98%
19.	International Finance	0.65%
20.	Organization Economics	0.65%
21.	Economics Of Innovation	0.33%
22.	Personnel Economics	0.33%

Note: This table presents the % of respondents who report specializing in 22 different fields. The fields are not mutually exclusive; respondents are allowed to select multiple fields of specialization.

This table presents results from Wilcoxon signed rank tests conducted between pairs of performance areas using the influence rankings provided by the respondents for the performance areas. It provides a non-parametric test for whether the rankings provided by the respondents for two performance areas A and B come from the same distribution. This is meant to supplement the ranking summary presented in Figure 10. Each cell in Tables O-A56 and O-A57 presents z -statistics obtained from a signed-rank test of the ranking distributions

Table O-A56: Wilcoxon Tests of Significance For Rankings of Performance Areas Based on Their Perceived Influence on Tenure Decisions

	T5	nonT5	chapters	books	citations	teaching	letters	grants
T5	.	9.87	12.10	12.16	11.38	12.20	7.03	12.45
nonT5	.	.	12.31	12.28	6.72	12.21	-3.66	12.08
chapters	.	.	.	4.82	-11.47	-6.29	-11.55	-5.75
books	-11.71	-8.30	-11.53	-7.91
citations	10.24	-9.21	10.60
teaching	-11.54	0.86
letters	11.85
grants

Note: This table presents z -statistics obtained from pair-wise Wilcoxon signed-rank tests conducted between rankings for each of the eight performance areas. Cells are shaded gray if the Wilcoxon test fails to reject the null hypothesis of equality between the distributions for the two performance areas that are being compared. The cells are not shaded if the null is rejected at the 10% level.

for the corresponding performance areas. For instance, the cell in the first row-second column of Table O-A56 presents z -statistics for the test between the rankings for the T5 and non-T5 performance areas. A cell is left unshaded if the null hypothesis of equality of distributions is rejected at the 10% level. In this table, we reject the null hypothesis for all pairs except the grants-letters pair. All other pairs of rankings are statistically significantly different from one another. Importantly, the rankings provided for the T5 are significantly different than the rankings provided for all other performance areas. I now define the test statistic below.

Let r_i^A and r_i^B be the ranks provided by respondent i to performance areas A and B respectively. We construct the Wilcoxon signed-rank statistic in four steps:

1. For $i = 1, \dots, N$, calculate the absolute difference between r_i^A and r_i^B : $R_i^{A,B} = |r_i^A - r_i^B|$, and the sign of the difference $sgn(r_i^A - r_i^B)$.
2. Exclude tied pairs: $|r_i^A - r_i^B| = 0$. Let N_r be the number of untied pairs.
3. Order the pairs based on the absolute difference $R_i^{A,B}$, assigning 1 to the smallest difference

4. Construct the Wilcoxon statistic: $\sum_{i=1}^{N_r} [R_i^{A,B} \times \text{sgn}(r_i^A - r_i^B)].$

The tables report z-statistics for the Wilcoxon statistic.

Table O-A57: Wilcoxon Tests of Significance For Rankings of Performance Areas Based on Their Perceived Influence on Promotion To Assistant Professor

	T5	nonT5	chapters	books	citations	teaching	letters	grants
T5	.	8.42	9.74	9.72	9.30	10.04	6.03	10.29
nonT5	.	.	10.03	9.96	5.66	10.19	-2.58	10.09
chapters	.	.	.	4.33	-9.11	-3.87	-9.72	-3.57
books	-9.39	-6.03	-9.61	-5.92
citations	8.59	-7.11	8.58
teaching	-9.87	0.41
letters	10.16
grants

Note: This table presents z -statistics obtained from pair-wise Wilcoxon signed-rank tests conducted between rankings for each of the eight performance areas. Cells are shaded gray if the Wilcoxon test fails to reject the null hypothesis of equality between the distributions for the two performance areas that are being compared. The cells are not shaded if the null is rejected at the 10% level.

Table O-A58: Wilcoxon Tests of Significance For Rankings of Performance Areas Based on Their Perceived Influence on Promotion To Associate Professor

	T5	nonT5	chapters	books	citations	teaching	letters	grants
T5	.	4.71	7.02	7.08	5.28	6.99	2.99	7.22
nonT5	.	.	6.93	6.81	1.23	6.57	-1.11	6.26
chapters	.	.	.	1.16	-6.58	-4.12	-6.52	-4.46
books	-6.56	-4.28	-6.49	-4.41
citations	6.13	-2.54	6.30
teaching	-6.21	-1.38
letters	6.01
grants

Note: This table presents z -statistics obtained from pair-wise Wilcoxon signed-rank tests conducted between rankings for each of the eight performance areas. Cells are shaded gray if the Wilcoxon test fails to reject the null hypothesis of equality between the distributions for the two performance areas that are being compared. The cells are not shaded if the null is rejected at the 10% level.

7.3 Survey Instrument



THE UNIVERSITY OF
CHICAGO

DIVISION OF THE SOCIAL SCIENCES

Introduction

Preface

This questionnaire seeks to gather information on economists' perceptions about the relationship between "Top Five" publications and tenure and promotion decisions in academic Economics. For the purposes of this questionnaire, the "Top Five" consists of *The American Economic Review*, *Econometrica*, *The Journal of Political Economy*, *The Quarterly Journal of Economics*, and *The Review of Economic Studies*. The results of the questionnaire will be published as part of a study titled "The Curse of the Top Five: Publishing and Promotion in Economics". Some of the results from the questionnaire will be used to supplement findings from an empirical analysis of employment histories that explores the relationship between "Top Five" publications and tenure and promotion decisions of Economics departments within the U.S. Other questionnaire results will be used to inform a discussion about the consequences of this practice for the health and future of the discipline. The study will expand upon a number of issues that were raised in a roundtable discussion hosted during the 2017 Annual meeting of the American Economic Association. A webcast of the session is available here: <https://www.aeaweb.org/webcasts/2017/curse>. The results of the current study will be used in a future roundtable discussion that will continue and elaborate on the discussion from 2017. The future roundtable will be expanded to include discussion and commentary from a wider group of Economists.

IRB Approval

This study has received approval from the University of Chicago Social and Behavioral Sciences Institutional Review Board. The study adopts strong data security and data confidentiality protocols that are in accordance with the University of Chicago's IRB. If you wish to contact the University of Chicago's IRB, they can be reached by email at sbs-irb@uchicago.edu or by phone at 773-834-7835. Our study can be identified using our IRB identifier: 16-1373.

Confidentiality

Under no circumstance will we release personal identifying information provided by the respondent. The collected data will be stored on a secure network drive which is only accessible to researchers working with Professor Heckman at the Center for the Economics of Human Development. If you choose to provide us your name when completing the questionnaire, we will de-identify your submission by substituting your name with a unique alphanumeric identifier that corresponds with your submission. A key linking your name to the unique identifier will be stored securely and separately from the submissions data, and this key will only be accessible to key research personnel. Data collected from this survey will not be linked to data from any other source. To maintain respondent and institutional anonymity, we will ensure that the cell sizes corresponding to any reported result is large enough to prevent the result from being attributed to any individual respondent or individual institution.

Statement of Risk:

Risk from participation in this study primarily stems from the possibility that a respondent's identity could be revealed due to improper handling or reporting of the data. As outlined in the Confidentiality section above, the researchers have collaborated with the University of Chicago's IRB to implement data security, data storage, and data reporting protocols that are

designed to minimize this risk. The research team will follow these guidelines stringently, ensuring that the data is subjected to appropriate levels of security at all times.

Consent

Participation in this study is voluntary. Your decision to provide us with the requested information indicates consent to be included in the research study. Respondents will neither enjoy any direct benefits nor suffer from increased risk as a consequence of participation in this study. If you agree to participate in the study, please advance to the next screen.

Applicability Filter

The survey is intended for current Assistant and Associate Professors of Economics who are either on the tenure track or who were on the tenure track and have now received tenure.

To proceed with the survey, please select your current position within your department.

Important Note: The questions that you encounter in the rest of this survey are selected based on your response to this question.

- Assistant Professor (tenure track)
- Associate Professor (tenure track or tenured)
- Full Professor
- Postdoctoral Researcher
- Lecturer/Instructor
- Visiting Faculty
- Other Academic position
- Other non-Academic position

Basic Information

You indicated that you are currently employed as an $\{e://Field/Origin\}$ Professor. Please provide details for this current job. The next question will ask for details on previous employment.

	Employer Name (Ordered Alphabetically)	Department	Employment Start Year
Current Job	<input type="text"/>	<input type="text"/>	<input type="text"/>

Please provide details for jobs other than your current job (i.e., previous jobs) that you have held after your PhD. Make separate entries for different positions, even if they were held within the same institution e.g., you should make two entries if you were promoted from Assistant to Associate Professor within the same university. Include all non-current positions held after your PhD, including non-tenure-track academic assignments (e.g., lecturer or instructor) and assignments outside of academia (e.g., industry positions).

	Employer Name (Ordered Alphabetically)	Department	Position	Employment Start Year	Employment End Year
	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

	Employer Name (Ordered Alphabetically)	Department	Position	Employment Start Year	Employment End Year
Previous Job 1	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Previous Job 2	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Previous Job 3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Previous Job 4	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Previous Job 5	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Sex of respondent

University where you received your PhD

Year of Graduation from PhD program

Field(s) of Specialization

(Select all that apply)

- Behavioral Economics
- Development Economics
- Econometrics
- Economic Demography
- Economic History
- Economic Theory
- Economics of Education
- Environmental Economics
- Experimental Economics
- Finance
- Health Economics
- Industrial Organization
- International Trade
- Labor Economics
- Macroeconomics

Public Economics

 Other

Core

For purposes of this questionnaire, the “Top Five” consists of *The American Economic Review*, *Econometrica*, *The Journal of Political Economy*, *The Quarterly Journal of Economics*, and *The Review of Economic Studies*.

How many of your papers have been accepted for publication by the “Top Five”?

How many of your papers are currently in a “Revise and Resubmit” phase with a “Top Five” journal?

Do you think that **tenure decisions** in your current department are influenced by the number of papers a candidate publishes in the “Top Five” journals?

 Yes

 No

Do you think that **promotion decisions to $\{e://Field/Destination\}$ Professor** in your current department are influenced by the number of papers a candidate publishes in the “Top Five” journals?

 Yes

 No

Please rank the following factors in terms of their degree of influence on current tenure and promotion decisions within your department. Assign each factor a rank from 1 to 8, where 1 corresponds to most influential. If you believe some of the factors are equal in influence, assign them the same rank.

	Degree of influence on tenure decisions	Degree of influence on promotion from $\{e://Field/Origin\}$ to $\{e://Field/Destination\}$ Professor
Number of publications in the “Top Five”	<input type="text"/>	<input type="text"/>
Number of publications in non-“Top Five” journals	<input type="text"/>	<input type="text"/>
Number of publications of chapters in edited books	<input type="text"/>	<input type="text"/>

	Degree of influence on tenure decisions	Degree of influence on promotion from \$(e://Field/Origin) to \$(e://Field/Destination) Professor
Number of publications of books	<input type="text" value="▼"/>	<input type="text" value="▼"/>
Citation counts	<input type="text" value="▼"/>	<input type="text" value="▼"/>
Teaching performance	<input type="text" value="▼"/>	<input type="text" value="▼"/>
Quality of external letters	<input type="text" value="▼"/>	<input type="text" value="▼"/>
Success in securing grants and funding	<input type="text" value="▼"/>	<input type="text" value="▼"/>

You indicated that tenure decisions in your department are influenced by "Top Five" publications. Has your department officially notified you that you need to publish a certain number of "Top Five" articles to be competitive for **tenure**?

- Yes
 No

You indicated that you have not received official departmental notification regarding any requirement to publish in the "Top Five" for tenure. How did you learn about your department's expectations for "Top Five" publications for **tenure** decisions?

Based on your understanding of the tenure process in your department, what is the minimum number of "Top Five" publications required to be competitive for **tenure** in your department?

Minimum number of **solo-authored** "Top Fives" (assuming zero co-authored "Top Fives"):

Minimum number of **co-authored** "Top Fives" (assuming zero solo-authored "Top Fives"):

You indicated that promotion decisions in your department are influenced by "Top Five" publications. Has your department officially notified you that you need to publish a certain number of "Top Five" articles to be competitive for **promotion to** **\$(e://Field/Destination) Professor**?

- Yes
 No

You indicated that you have not received official departmental notification regarding any requirement to publish in the "Top Five" for promotion. How did you learn about your department's expectations for "Top Five" publications for **promotion to \${e://Field/Destination} Professor** ?

Based on your understanding of the promotion process in your department, what is the minimum number of "Top Five" publications required to be competitive for **promotion to \${e://Field/Destination} Professor** in your department?

Minimum number of **solo-authored** "Top Fives" (assuming zero co-authored "Top Fives") :

Minimum number of **co-authored** "Top Fives" (assuming zero solo-authored "Top Fives"):

The next two questions are based on a hypothetical scenario presented below. Please read the hypothetical scenario carefully before answering the questions.

Hypothetical Scenario:

Imagine a hypothetical scenario where your department's tenure or promotion committee is presented with two individuals who are equivalent in every respect except that one has published only in "Top Five" journals while the other has published the same number of articles in non-"Top Five" journals only. Both candidates' publications are equal in quality in this hypothetical scenario, however, this fact is initially unknown to the committee. As in reality, committee members have the option of determining the relative quality of the candidates' research by reading the papers, attending seminars, speaking to the candidates, etc.

If your department can only **tenure** one of the two candidates from the above hypothetical scenario, what is your estimate for the probability that your department **tenures** the candidate with the "Top Five" publications instead of the candidate with the non-"Top Five" publications?

Input a probability between 0 and 1.

If your department can only **promote** one of the two candidates **to \${e://Field/Destination} Professor**, what is your estimate for the probability that your department **promotes** the candidate with the "Top Five" publications instead of the candidate with the non-"Top Five" publications?

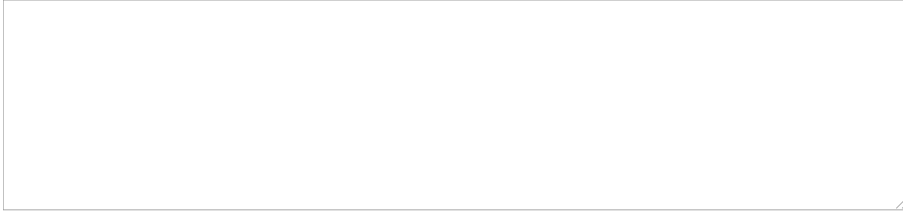
Input a probability between 0 and 1.

One concern about relying too strongly on the “Top Five” is that it might incentivize Economists to pursue research projects that are more likely to be published in the “Top Five”. Do you think that your department’s reliance on “Top Five” publications has influenced the types of questions and projects you have pursued so far?

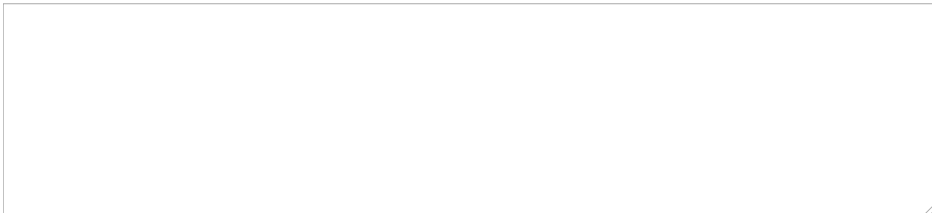
Yes

No

What types of research would you have pursued more of had tenure and/or promotion decisions in your department not depended on “Top Five” publications?

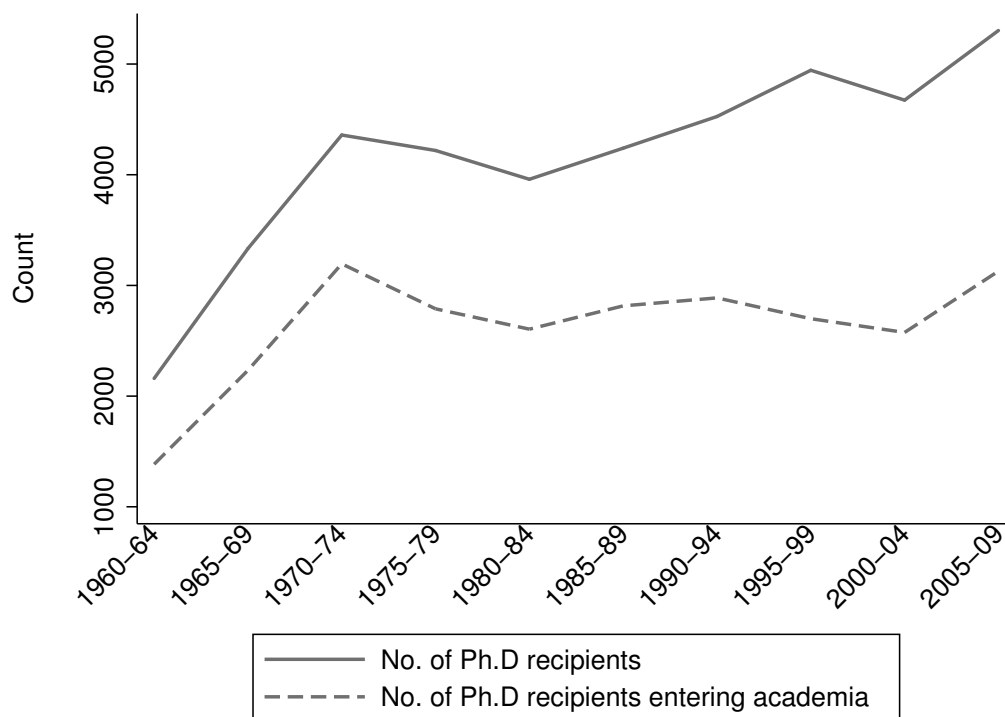
A large, empty rectangular text input area with a thin border and a small diagonal icon in the bottom right corner, intended for the respondent to describe the types of research they would have pursued.

Please use the space below to describe how the discipline’s focus on “Top Five” publications has affected your career as an Economist, or those of colleagues, students, and acquaintances. Personal stories are welcome.

A large, empty rectangular text input area with a thin border and a small diagonal icon in the bottom right corner, intended for the respondent to describe the impact of the discipline's focus on "Top Five" publications.

8 Growing Size of the Profession and Declining Acceptance Rates

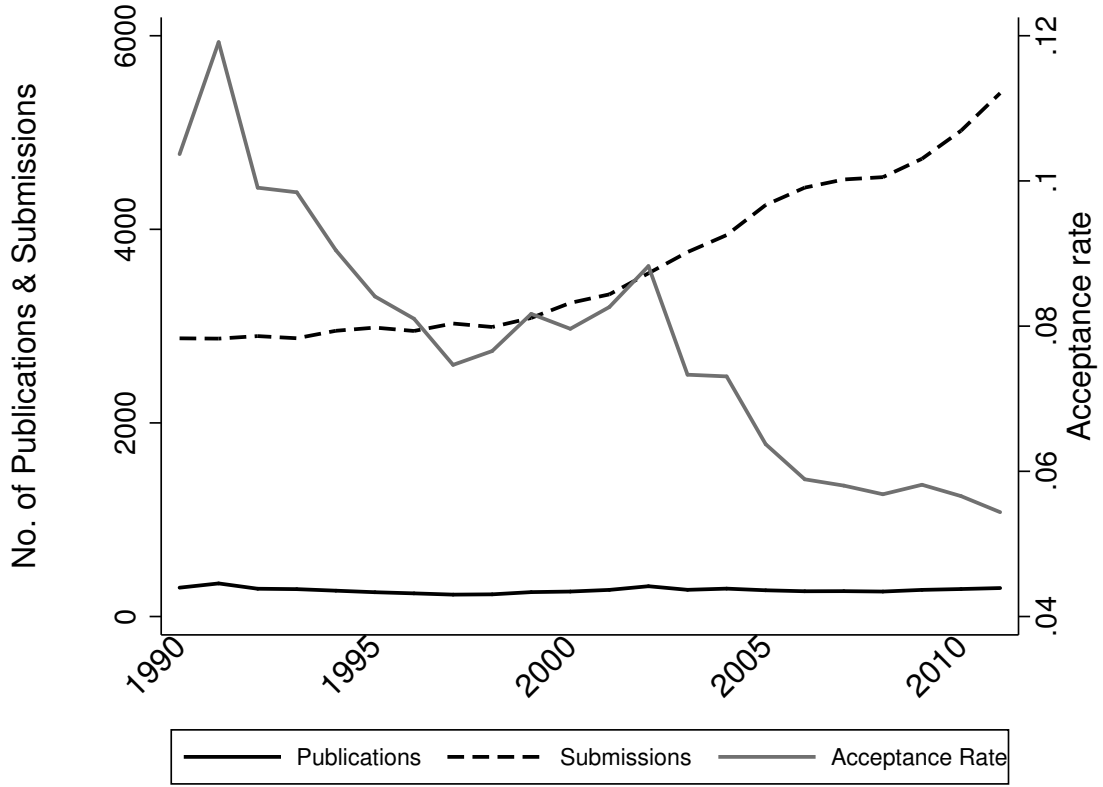
Figure O-A29: Growth of Profession Over Time



Source: Scott and Siegfried (2014)

Note: This plot presents counts for (i) the number of individuals who received Ph.Ds from Economic departments in the USA and (ii) the number of individuals who received their Ph.D and reported definite postgraduate plans of working in academia.

Figure O-A30: Numbers of Submissions, Publications, and Acceptance Rates in the “Top Five” Journals Over Time



Note: The plot uses data from Card and Dellavigna (2013) to calculate trends in the numbers of publications by and submissions to the top 5 journals.

Table O-A59: Affiliation of AER Editors and Co-Editors During the Period 1996–2016

Affiliation (Employing Department)	# of Unique Editors/Co-Editors (During 1996-2016)	% of Unique Editors /Co-Editors (During 1996-2016)
Princeton	7	23%
Stanford	4	13%
NYU	3	10%
UCSD	3	10%
Northwestern	2	6%
UCBerkeley	2	6%
Michigan	2	6%
Carnegie Mellon	1	3%
John Hopkins	1	3%
London School of Economics	1	3%
Chicago	1	3%
UPenn	1	3%
University of Texas	1	3%
Wisconsin	1	3%
Yale	1	3%

Source: Brogaard, Engelberg & Parsons (2014) for data until 2011. Data for subsequent years collected from journal front pages.

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