THE VISIBILITY PREMIUM: ARTICLE ORDER AND CITATIONS

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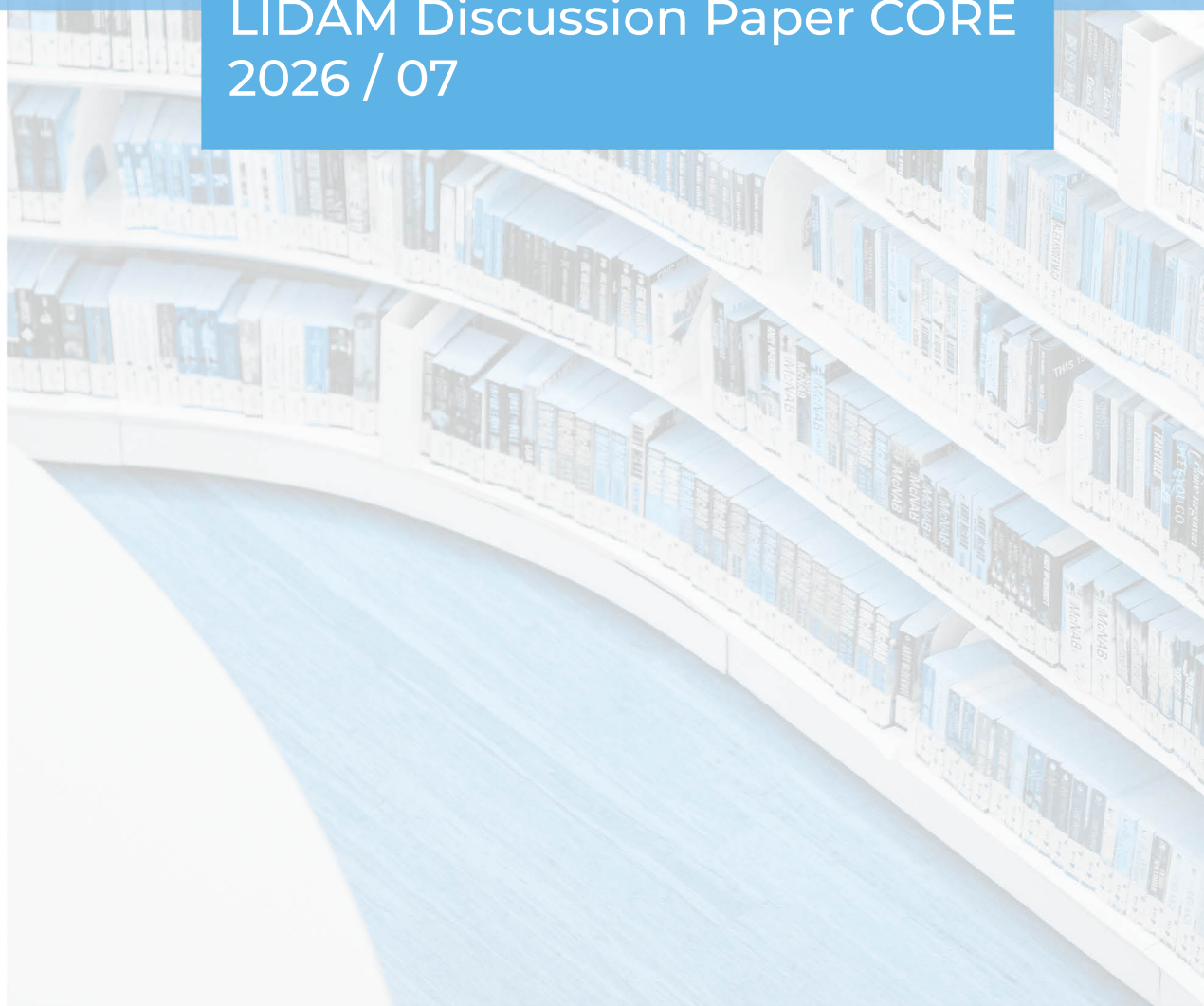

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The Visibility Premium: Article Order and Citations*

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Abstract

We exploit a natural experiment to identify the causal effect of the order in which articles appear within a journal issue on citations. Using data on 1,456 articles published in the *Economic Journal* between 2010 and 2024, we find that articles appearing earlier in an issue receive substantially more citations throughout the sample period. Articles ranked 7-9 receive 20% fewer two-year citations than those ranked 1-3, with effects growing to 28% over five years. Between December 2015 and February 2025, the journal switched from chronological to alphabetical ordering, allowing us to disentangle rank (visibility) effects from alphabetical (name) effects. Analysis of views and downloads confirms a visibility mechanism, with important implications for editorial practices.

Keywords: Article Ordering, Citations, Alphabetical Ordering, Rank Effects, Visibility, Natural Experiment, Order Bias, Attention Allocation

JEL codes: A14, D83, C21

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1 Introduction

Citations are central to academic evaluation, shaping hiring, promotion, funding decisions, and scholarly reputation. While citation outcomes are typically attributed to research quality and journal prestige, growing evidence suggests that seemingly arbitrary aspects of how research is presented may also influence impact.[1] One such feature is the order in which articles appear. Feenberg, Ganguli, Gaule and Gruber (2017) show that NBER working papers listed first in weekly email announcements receive 27% more citations than otherwise identical papers listed later, despite being ordered by working number, i.e. chronologically by the time they were submitted to the NBER. Their findings suggest that scholars exhibit "skimming" behavior, devoting disproportionate attention to items that appear first in a list.

Whether similar order effects operate in peer-reviewed journals remains unclear. Journals differ in how they order articles within issues – by acceptance date, alphabetically, or randomly – and these conventions may have distinct consequences. Alphabetical ordering may appear neutral, yet it can systematically advantage authors whose surnames fall early in the alphabet. Random ordering eliminates alphabetical bias but may still generate position-based visibility effects if readers disproportionately attend to early-listed articles (we will use "position", "order" and "rank" interchangeably).

This paper provides causal evidence on how within-issue article order affects citations in a leading peer-reviewed economics journal. We exploit an editorial policy change at the *Economic Journal* (EJ). Prior to December 2015, articles were ordered within issues chronologically, i.e., by acceptance date. From December 2015 until February 2025, the journal adopted strict alphabetical ordering by the first author's surname. This change generates exogenous variation in both article rank within issue and alphabetical position, allowing us to separately identify visibility (rank) effects and alphabetical effects within the same journal.

We assemble data on 1,456 EJ articles published between 2010 and 2024 and collect detailed citation records from Scopus. For articles published between 2021 and 2024, we additionally observe HTML views and PDF downloads from Oxford University Press, enabling us to examine potential mechanisms linking article position to subsequent citations. We find substantial rank effects. Articles in positions 7–9 receive 20% fewer citations over the first two years after publication than articles in the top three positions; the gap increases to 28% over five years. These effects persist after controlling for detailed article characteristics and issue fixed effects. Articles ranked tenth or later display similar short-run penalties. Consistent with a visibility mechanism, articles appearing later in the ordering receive significantly fewer views and downloads shortly after publication, suggesting that appearing earlier in the ordering increases exposure, which in turn translates into higher citation counts.

Our findings contribute to three strands of the literature. First, we extend evidence on order effects in academic dissemination. Feenberg et al. (2017) document substantial order bias in NBER working paper announcements, with the citation premium concentrated primarily on the first-listed paper in the weekly NBER email newsletter

[1] See AEA-EEA-ES-RES Committee (2024) for a recent discussion of the publication process in economics.

and much smaller or statistically imprecise effects for subsequent ranks. In contrast, we study peer-reviewed journal articles and document a smoother decay in citations across positions within an issue. Articles ranked 7–9 and 10 or later both experience meaningful citation penalties relative to the top positions. The persistence of order effects beyond the first rank in our setting suggests that visibility operates through a broader attention gradient rather than a winner-take-all effect.

Second, we relate to a large literature documenting correlations between alphabetical ordering and citation outcomes (see Weber (2018) for a review). Prior studies report that authors with surnames later in the alphabet are more likely to remain uncited or receive fewer citations (Arsenault and Larivière, 2015; Öz, 2024). However, because alphabetical position is not randomly assigned, identification is challenging. Our quasi-experimental setting allows us to disentangle rank effects from alphabetical effects and to provide clean causal estimates. In particular, the editorial reform at the EJ generates variation in article rank that is orthogonal to author characteristics, enabling us to separate visibility (rank) effects from alphabetical effects. Moreover, we implement a placebo test using the pre-reform period: articles whose first authors would have occupied early alphabetical positions under alphabetical ordering do not exhibit a citation premium during the period when the *actual* ordering was based on acceptance date. This finding suggests that alphabetical citation advantages might arise from ordering conventions rather than from intrinsic differences across authors.

Third, our results connect to theoretical work analyzing how ranking conventions shape incentives and the allocation of credit. While alphabetical ordering may appear neutral, theory shows that ranking conventions can distort incentives and the allocation of credit, e.g., Engers, Gans, Grant and King (1999) and Ray ⓡ Robson (2018). The magnitude of the effects we document—citation penalties of 20–30% for mid-ranked articles—is economically meaningful relative to journal impact factors and individual citation trajectories. These findings imply that editorial ordering conventions can have significant career consequences, even when unrelated to research quality. More broadly, our mechanism evidence sheds light on how researchers allocate attention in an environment characterized by information abundance. The fact that article position within an issue – information orthogonal to quality – substantially affects views, downloads, and citations suggests that scholars rely on heuristic processing when navigating new research. This has implications for the design of editorial practices and for understanding how information is curated and consumed in academic markets.

Going beyond our core result on rank order effects, another striking finding is that a larger number of equations, conditional on the set of JEL codes, and all other controls, is negatively associated with citations: articles with medium or high levels of mathematical notation receive significantly fewer citations than those with little or no mathematical content. This finding is consistent with rational reader skimming: mathematical notation raises the perceived cost of engagement, so readers facing time constraints allocate less attention to heavily mathematical papers.

The remainder of the paper proceeds as follows. Section 2 describes the data and empirical strategy. Section 3

presents the main results and explores the mechanism. Section 4 concludes.

2 Data and Empirical Specification

We construct a dataset of all articles published in the Economic Journal (EJ) between 2010 and 2024, drawing on bibliographic records from Scopus. The dataset comprises 1,481 articles spanning various publication types, including regular research articles, EJ Feature articles,[2] conference papers, short papers, special sessions, book reviews, anniversary issues, corrections and errata, the Hahn Lecture, and the Presidential Address. There are 36 papers that were not indexed by Scopus, leading to a final dataset of 1,456 articles.[3]

Our key explanatory variable is the rank of each article within its issue, constructed based on the article's order of appearance. To capture potential non-linear effects of rank position, we group articles into four bins: positions 1-3, 4-6, 7-9, and 10 or higher, with the first bin (Order 1-3) serving as the omitted category throughout.

For our main outcome, we collect citation data from Scopus and construct two citation measures: log (1 + citations) accumulated over years t+1 to t+2 and over years t + 1 to t + 5, where t denotes the year of publication. The two-year window uses articles published between 2010 and 2022, while the five-year window restricts the articles published between 2010 and 2019 to allow sufficient time for citations to accrue.

To investigate the mechanisms underlying any rank effects, we also obtain data on monthly article views (HTML page views) and downloads (PDF downloads) from Oxford University Press (OUP), covering the period from January 2021 through September 2024. Since the issue for publication month m is often published a few days before the start of month m, we consider view and downloads accumulated over the months m - 1 to m + 1 (short run) and m - 1 to m + 4 (short to medium run).

Using these data, we estimate ordinary least squares (OLS) regressions of the form:

$$log(1 + Y_{iv}) = \alpha + \beta\, OrderBin_{iv} + \gamma\, X_{iv} + \omega_v + \delta_p + \epsilon_{iv} \tag{1}$$

where i indexes articles and v indexes issues; Y is one of our outcome measures (citations, views, or downloads); $OrderBin$ is a set of indicator variables for rank position bins; X is a vector of article-level controls; and ω_v is a full set of issue fixed effects; and δ_p is a full set of paper type fixed effects. Since our identifying variation comes from differences in rank within an issue, the inclusion of issue fixed effects ensures that comparisons are made among articles published in the same issue, absorbing any unobserved issue-level heterogeneity. Paper type fixed effects account for systematic differences in citation patterns across publication types. In the full sample, the categories are regular research articles, EJ Features, conference papers, anniversary issue contributions, short papers, and errata.

[2] Feature articles were a collection of invited papers and symposia, often published in a dedicated issue. They were discontinued in July 2018.

[3] Figure A1 shows the distribution of articles by type across publication years.

Our controls include the number of printed pages, the number of authors, a dummy for open access articles, a dummy for Editor's Choice articles (selected by the editors for their timely and authoritative research, available from July 2020 to November 2024), a dummy for keynote lectures, the number of references, a categorical variable capturing formula intensity across quartiles (number of displayed equations $[0,3]$, $[3,7]$, $[8,20]$, or more than 20), the number of citations received by all co-authors in all their prior work in the years before the article's publication year (rescaled per 100) and a full set of dummies for one-digit JEL codes.

Table 1 reports summary statistics for the full sample, the research article sample, and the post-reform research article sample. Across all three samples, mean two-year log citations are similar, at approximately 1.6. Since our dependent variable is specified in logs, the log value of 1.6 yields a geometric mean of about 3.95 citations (exp(1.6) - 1) over the two-year window. For five year cumulative citations, the mean of 2.67 roughly corresponds to a geometric mean of roughly 13.43 citations (exp(2.67) - 1). Articles have on average 2.41 authors and roughly 28 printed pages. About 14 percent of articles are open access, and about 2 percent are designated as Editor's Choice, and about 1 percent are keynote lectures. The distribution of articles across rank bins is relatively even in the full and research samples, though in the post-reform sample, a somewhat larger share of articles (33 percent) fall into the Order 10+ category, reflecting larger issue sizes in more recent years.

An assumption of our identification strategy is that article ordering within an issue is not systematically related to article quality or characteristics. To assess whether this assumption holds, Table A1 reports, for each article characteristic, the coefficient from a bivariate OLS regression of that characteristic on a dummy for being ranked 4th or later, with positions 1-3 as the omitted category, controlling for issue and paper type fixed effects. The strongest pattern in the table concerns keynote lectures: across all three samples, the coefficient on the Keynote Lecture indicator is always negative, sizeable, and highly significant, reflecting the editorial convention that places keynote lectures in early positions. The remaining characteristics such as number of pages, open access status, Editor's Choice designation, number of references, formula intensity, and most JEL codes are largely uncorrelated with article order. In the post-reform sample, the number of authors is negatively correlated with later position, indicating the fact that articles with greater number of authors are more likely to have first authors being alphabetically early.

To assess balance jointly, the bottom row of Table A1 report the F-statistics from a single multivariate OLS regression of the Order 4+ indicator on a full set of article characteristics, again controlling for issue and paper type fixed effects. Because of the systematic placement of keynote lectures, the joint F-test rejects balance when the keynote lecture indicator is included among the tested coefficients ($F = 6.364$, $p < 0.001$ in the full sample, and similarly in the other samples). Once the keynote lecture indicator is removed, the joint F-test fails to reject the null that the remaining balance coefficients are jointly zero in the full and research-article sample ($F = 1.048$, $p = 0.396$; $F = 0.966$, $p = 0.517$), and only marginally rejects in the post-reform sample ($F = 1.363$, $p = 0.098$). We address the keynote-lecture pattern directly by including a keynote lecture indicator as a control and by absorbing

Table 1
Summary Statistics by Sample

	All Articles (N= 1,481)		Research Articles (N= 1,437)		Research Articles (Post Dec-2015) (N= 1,003)	
	Mean	(SD)	Mean	(SD)	Mean	(SD)
$\log(1 + \text{Citations}_{t+1,t+2})^{\dagger}$	1.60	(0.89)	1.62	(0.88)	1.62	(0.90)
$\log(1 + \text{Citations}_{t+1,t+5})^{\ddagger}$	2.67	(1.04)	2.69	(1.02)	2.63	(1.05)
Order 1–3	0.25	(0.43)	0.25	(0.43)	0.23	(0.42)
Order 4–6	0.25	(0.43)	0.25	(0.44)	0.23	(0.42)
Order 7–9	0.23	(0.42)	0.23	(0.42)	0.22	(0.41)
Order 10+	0.27	(0.44)	0.26	(0.44)	0.33	(0.47)
Number of Pages	28.18	(9.10)	28.65	(8.45)	29.70	(8.41)
Number of Authors	2.41	(1.06)	2.44	(1.03)	2.52	(1.06)
Open Access	0.14	(0.35)	0.13	(0.34)	0.17	(0.38)
Editor's Choice	0.02	(0.15)	0.03	(0.16)	0.04	(0.19)
Keynote Lecture	0.01	(0.12)	0.02	(0.12)	0.01	(0.11)
Number of References	48.80	(24.02)	49.65	(23.40)	54.07	(24.33)
Number of Equations (0–2)	0.26	(0.44)	0.24	(0.43)	0.22	(0.41)
Number of Equations (3–7)	0.26	(0.44)	0.27	(0.44)	0.28	(0.45)
Number of Equations (8–20)	0.24	(0.43)	0.25	(0.43)	0.27	(0.45)
Number of Equations (>20)	0.24	(0.43)	0.25	(0.43)	0.23	(0.42)
JEL: A (General Economics)	0.01	(0.12)	0.01	(0.12)	0.01	(0.12)
JEL: B (History of Thought)	0.01	(0.11)	0.00	(0.06)	0.00	(0.07)
JEL: C (Mathematical Methods)	0.10	(0.30)	0.10	(0.30)	0.12	(0.32)
JEL: D (Microeconomics)	0.49	(0.50)	0.50	(0.50)	0.53	(0.50)
JEL: E (Macroeconomics)	0.17	(0.37)	0.17	(0.38)	0.15	(0.36)
JEL: F (International Economics)	0.09	(0.28)	0.09	(0.29)	0.09	(0.28)
JEL: G (Financial Economics)	0.11	(0.32)	0.12	(0.32)	0.11	(0.31)
JEL: H (Public Economics)	0.14	(0.34)	0.14	(0.35)	0.15	(0.36)
JEL: I (Health, Education)	0.20	(0.40)	0.20	(0.40)	0.21	(0.41)
JEL: J (Labor Economics)	0.35	(0.48)	0.36	(0.48)	0.38	(0.49)
JEL: K (Law and Economics)	0.07	(0.25)	0.07	(0.25)	0.07	(0.25)
JEL: L (Industrial Organization)	0.18	(0.38)	0.19	(0.39)	0.18	(0.39)
JEL: M (Business)	0.04	(0.21)	0.05	(0.21)	0.04	(0.20)
JEL: N (Economic History)	0.08	(0.27)	0.08	(0.27)	0.10	(0.29)
JEL: O (Development)	0.21	(0.41)	0.21	(0.41)	0.24	(0.43)
JEL: P (Economic Systems)	0.04	(0.19)	0.04	(0.19)	0.04	(0.20)
JEL: Q (Agricultural/Environmental)	0.08	(0.28)	0.08	(0.28)	0.09	(0.29)
JEL: R (Urban Economics)	0.08	(0.26)	0.08	(0.27)	0.08	(0.28)
JEL: Y (Miscellaneous)	0.01	(0.12)	0.01	(0.11)	0.00	(0.04)
JEL: Z (Other Special Topics)	0.08	(0.27)	0.08	(0.28)	0.09	(0.28)
Post December 2015	0.68	(0.46)	0.70	(0.46)	1.00	(0.00)

Notes: Summary statistics for articles published in the *Economic Journal*. Standard deviations in parentheses. The full sample covers 2010–2024. † $\log(1 + \text{Citations}_{t+1,t+2})$ is restricted to the 2010–2022 subsample (requiring two years of post-publication citation data). The number of observations drops by approximately 15%. Refer to Table 2 for the exact number of observations. ‡ $\log(1 + \text{Citations}_{t+1,t+5})$ is restricted to the 2010–2019 subsample (requiring five years of post-publication citation data); the number of observations drops by approximately 37%. Refer to Table 3 for the exact number of observations. All other variables use the full 2010–2024 sample. Order refers to the position of the article within its journal issue. Research Articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Post December 2015 indicates articles published after the Economic Journal switched to alphabetical ordering within issues.

remaining heterogeneity through paper type fixed effects. We also show below that our estimates are robust to the large battery of observable controls.

3 Results

This section presents our main empirical findings about the impact of within-issue article placement on citation outcomes. First, we document the magnitude and persistence of rank effects on both two-year and five-year cumulative citations, highlighting a significant premium for articles appearing in the first three positions. Second, we investigate the underlying mechanisms by analyzing article views and downloads to determine if the citation patterns are driven by a visibility channel and reader "skimming" behavior. Finally, we briefly examine whether coauthor teams responded strategically to the policy change through naming manipulations, thereby ensuring that our results reflect genuine rank visibility rather than compositional shifts in article quality.

3.1 Main Results: Rank Effects on Citations

Table 2 presents estimates of the effect of within-issue article rank on two-year citations. The most striking finding is a sizeable negative effect of being ranked later in the issue across all samples. In the full sample with controls (column 2), articles ranked 7-9 receive significantly fewer citations (β = -0.131; p $<$ 0.10), as do those ranked 10 or higher (β = -0.133; p $<$ 0.10), while the coefficient on Order 4-6 is negative but not statistically significant. Restricting the sample to research articles (columns 3-4) yields very similar estimates, with the coefficient on Order 7-9 being more precisely estimated (β = -0.135, p $<$ 0.05).

The effects are larger and more precise in the post-reform sample, where article ordering was determined alphabetically. In our preferred specification, with controls (column 6), the rank gradient is evident across all bins: articles ranked 4–6, 7–9, and 10+ receive significantly fewer citations than those in positions 1–3 (β = -0.142, -0.173, and -0.162). Articles in positions 7–9 receive about 20 percent fewer two-year citations than articles in positions 1–3.[4] That the penalty is significant even for positions 4–6 suggests a sharp visibility advantage for the first three articles in an issue.

Table 3 reports the corresponding results for five-year citations. The rank effects are notably larger over the longer horizon. In the research article sample with controls (column 4), the coefficients on Order 7-9 and Order 10+ are -0.209 (p $<$ 0.05) and -0.246 (p $<$ 0.01). The penalty for Order 7-9 is about 28 percent. Figure 1 confirms visually that the gap between rank groups widens monotonically over the five years following publication: the rank premium is not a transitory phenomenon.

[4] Since our dependent variable is log(1 + Citations) rather than log(Citations), the standard semi-elasticity exp(β)-1 measures the proportional change in (1 + Citations). When citation counts are modest, the "+1" attenuates the implied effect on Citations itself. The percentage change is, therefore, exp(β)-1 $\times$ (1 + $\bar{Y}$)/$\bar{Y}$, where $\bar{Y}$ is the mean of citations. In the two-year sample, the mean is approximately 3.95, yielding an attenuation factor of 1.25. Applying this to the Order 7–9 coefficient in column (6), the percentage change is [exp(0.173)-1] $\times$ 1.25 = 0.20.

Table 2
Effects of Article Order on Citations Over a 2-Year Period

Sample:	Dependent Variable: log(1 + Citations$_{t+1,t+2}$)					
	All Articles		Research Articles		Research Articles (Post Dec-2015)	
	(1)	(2)	(3)	(4)	(5)	(6)
Order 4-6	-0.047	-0.054	-0.052	-0.055	-0.159*	-0.142*
	(0.067)	(0.063)	(0.067)	(0.063)	(0.087)	(0.083)
Order 7-9	-0.159**	-0.131*	-0.165**	-0.135**	-0.241***	-0.173**
	(0.072)	(0.067)	(0.073)	(0.068)	(0.089)	(0.085)
Order 10+	-0.200***	-0.133*	-0.230***	-0.160**	-0.254***	-0.162**
	(0.074)	(0.070)	(0.074)	(0.071)	(0.086)	(0.082)
Keynote Lecture		0.063		0.050		0.239
		(0.210)		(0.209)		(0.346)
Number of Printed Pages		0.009**		0.008**		0.007
		(0.004)		(0.004)		(0.005)
Number of Authors		0.070***		0.064**		0.050
		(0.026)		(0.027)		(0.031)
Open Access (=1)		0.193**		0.192**		0.169*
		(0.082)		(0.082)		(0.090)
Editor's Choice (=1)		0.476**		0.466**		0.457**
		(0.226)		(0.226)		(0.225)
Number of References		0.004***		0.004**		0.005***
		(0.002)		(0.002)		(0.002)
Number of Equations (3-7)		-0.103		-0.120*		-0.155*
		(0.068)		(0.069)		(0.088)
Number of Equations (8-20)		-0.206***		-0.234***		-0.288***
		(0.072)		(0.072)		(0.090)
Number of Equations (>20)		-0.426***		-0.454***		-0.479***
		(0.076)		(0.076)		(0.097)
Author Team Pre-Pub Citations (per 100)		0.004***		0.004***		0.004***
		(0.001)		(0.001)		(0.001)
Observations	1228	1228	1205	1205	779	779
Adjusted R^2	0.086	0.244	0.077	0.233	0.106	0.247
Mean (Dep. Var.)	1.603	1.603	1.616	1.616	1.620	1.620
SD (Dep. Var.)	0.889	0.889	0.881	0.881	0.897	0.897
Controls	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

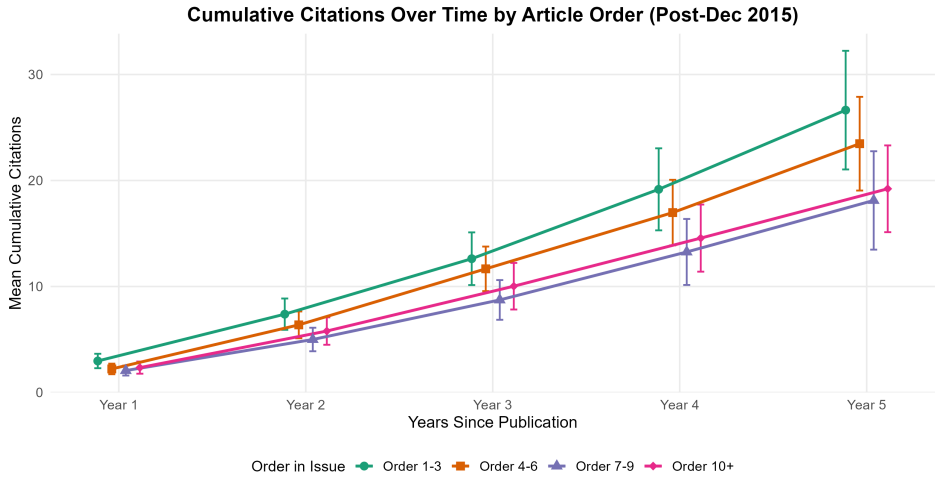
Notes: The unit of observation is an article published in the *Economic Journal* between 2010 and 2022. The dependent variable is the natural logarithm of one plus the total number of citations received in the first two years after publication (years $t+1$ and $t+2$). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (107 issues in columns (1)–(2), 106 in columns (3)–(4), and 60 in columns (5)–(6)) and paper type fixed effects (6 types in columns (1)–(2), 4 in columns (3)–(4), and 4 in columns (5)–(6)). Research articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Columns (3)–(4) restrict to research articles. Columns (5)–(6) restrict to research articles published in December 2015 or later (post-reform period). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table 3
Effects of Article Order on Citations Over a 5-Year Period

Sample:	Dependent Variable: log(1 + Citations$_{t+1,t+5}$)					
	All Articles		Research Articles		Research Articles (Post Dec-2015)	
	(1)	(2)	(3)	(4)	(5)	(6)
Order 4-6	0.007	-0.023	-0.005	-0.027	-0.048	-0.045
	(0.086)	(0.076)	(0.085)	(0.075)	(0.127)	(0.114)
Order 7-9	-0.200**	-0.201**	-0.214**	-0.209**	-0.381***	-0.304**
	(0.095)	(0.085)	(0.096)	(0.085)	(0.134)	(0.122)
Order 10+	-0.274***	-0.192**	-0.333***	-0.246***	-0.337**	-0.205*
	(0.105)	(0.095)	(0.103)	(0.094)	(0.131)	(0.123)
Keynote Lecture		0.109		0.089		0.187
		(0.278)		(0.280)		(0.600)
Number of Printed Pages		0.008		0.005		-0.003
		(0.005)		(0.005)		(0.007)
Number of Authors		0.139***		0.132***		0.141***
		(0.034)		(0.035)		(0.049)
Open Access (=1)		0.071		0.080		0.083
		(0.120)		(0.118)		(0.139)
Editor's Choice (=1)†		Not Identified		Not Identified		Not Identified
		(.)		(.)		(.)
Number of References		0.005***		0.005**		0.007***
		(0.002)		(0.002)		(0.003)
Number of Equations (3-7)		-0.014		-0.056		-0.154
		(0.086)		(0.087)		(0.123)
Number of Equations (8-20)		-0.245***		-0.302***		-0.385***
		(0.091)		(0.089)		(0.122)
Number of Equations (>20)		-0.531***		-0.587***		-0.715***
		(0.094)		(0.093)		(0.138)
Author Team Pre-Pub Citations (per 100)		0.006***		0.006***		0.005***
		(0.001)		(0.001)		(0.001)
Observations	907	907	887	887	461	461
Adjusted R^2	0.130	0.354	0.125	0.349	0.197	0.368
Mean (Dep. Var.)	2.672	2.672	2.693	2.693	2.632	2.632
SD (Dep. Var.)	1.038	1.038	1.016	1.016	1.050	1.050
Controls	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is an article published in the *Economic Journal* between 2010 and 2019. The dependent variable is the natural logarithm of one plus the total number of citations received in the first five years after publication (years $t+1$ to $t+5$). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (83 issues in columns (1)–(2), 82 in columns (3)–(4), and 36 in columns (5)–(6)) and paper type fixed effects (5 types in columns (1)–(2), 3 in columns (3)–(4), and 3 in columns (5)–(6)). Research articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Columns (3)–(4) restrict to research articles. Columns (5)–(6) restrict to research articles published in December 2015 or later (post-reform period). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). † Since Editor's Choice was only introduced in 2020, the coefficient on this variable is not identified in the 5-year citation window. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Figure 1



Notes: Sample includes all articles published in December 2015 or later. Articles are grouped by their position within each issue: Order 1-3 (first through third), Order 4-6, Order 7-9, and Order 10+. Cumulative citations are calculated from Scopus data for years t+1 through t+5 after publication. The vertical bars denote 95% confidence intervals for the mean cumulative citation count.

Control variables

Among the control variables, several patterns are worth noting. The number of authors is positively associated with citations across all specifications, and articles with more references also tend to receive more citations. Open access status is associated with higher two-year citations but not five-year citations. Editor's Choice articles receive substantially more two-year citations.[5] Perhaps most strikingly, a larger number of equations, conditional on the set of JEL codes, and all other controls, is negatively associated with citations: articles with medium or high levels of mathematical notation receive significantly fewer citations than those with little or no mathematical content. The astrophysicist Stephen Hawking famously said: "When I wrote a popular book recently, I was advised that each equation I included would halve the sales" (Hawking, 1989). Our coefficients suggest a milder penalty among the EJ's mostly academic readership than suggested by Hawking for the readers of his popular book.

Magnitude of the rank effects

To put the rank effects into perspective, in our preferred post-reform specification with controls (Table 2, Column 6), articles ranked 7-9 receive 0.173 log points fewer citations than articles ranked 1-3, corresponding to approximately 20 percent fewer citations (exp(-0.173)-1 $\times$ 1.25), as explained in footnote 4. Since the mean of log(1 + citations) is 1.62, implying a geometric mean of about 4 citations (exp(1.620)-1), the rank penalty for articles in positions 7-9 amounts to roughly 0.80 fewer citations (4 $\times$ 20%) relative to articles in positions 1-3. A relevant benchmark is the EJ's 2024 Clarivate Journal Impact Factor that measures mean citations per article over a two-year window, which is 3.6. The rank penalty thus represents about one-fifth of the journal's impact factor. These magnitudes are broadly comparable to those reported by Feenberg et al. (2017) for NBER working papers, who

[5]Since Editor's Choice was only introduced in 2020, the coefficient on this variable is not identified in the 5-year citation window.

find that being listed first in the NBER "New This Week" email increases citations by 27 percent. Our estimates are of a similar order of magnitude, despite several important differences in context: our setting involves a peer-reviewed journal rather than a working paper series, the ordering mechanism is alphabetical rather than based on chronological order, and the relevant audience interacts with articles through a journal's table of contents rather than through an email announcement. The consistency of these findings across settings reinforces the conclusion that order effects on citations are a robust and economically meaningful phenomenon in academic publishing.

3.2 Disentangling Visibility Effects from Alphabetical Effects

A natural concern with the post-reform estimates is that rank and first-author surname initial are mechanically linked under alphabetical ordering: being ranked 1-3 means the first author's surname falls early in the alphabet. It is conceivable that alphabetically early authors are intrinsically more citable - for instance, because they are better established, have benefited from cumulative alphabetical advantages over their careers, or have different coauthorship patterns. If this is true, our post-reform estimates could conflate a genuine visibility effect with a direct alphabetical channel.

We address this concern with a placebo test.[6] In the pre-reform period (before December 2015), articles were ordered chronologically, so alphabetical position was irrelevant to placement of articles within an issue. We construct a hypothetical alphabetical rank for each pre-reform article within its issue – the position it would have occupied had the issue been ordered alphabetically – and test whether this ABC rank predicts citations. If alphabetically early authors are intrinsically more citable, the hypothetical rank should matter even when it did not determine actual placement.

Table A3 reports the results. Across all specifications, the coefficient on hypothetical Order 4-6 and Order 7-9 are small, mixed in sign, and uniformly insignificant: there is no evidence that papers in the middle of the alphabetical distribution were either advantaged or disadvantaged in the pre-reform period. The coefficient on hypothetical Order 10+ are, if anything, positive and in some specifications marginally significant. This pattern is opposite of the negative gradient we estimate under genuine alphabetical ordering in the post-reform period, and it rules out the alternative explanation that late-alphabet first authors are intrinsically less citable. In some specifications, late-alphabet authors appear to write somewhat more citable pre-reform papers, which would suggest that the post-reform visibility penalty we estimate works against a slight underlying advantage of late-alphabet papers and is, if anything, a lower bound on the true rank effect. However, this pattern is not robust across all columns of Table A3 and should be interpreted with caution.

Taken together, the placebo evidence provides direct support for the interpretation of the effects in Table 2 and 3 as reflecting visibility driven by rank rather than unobserved differences across authors sorted by surname initial.

[6] We thank Joshua Gans and Patrick Gaulé for suggesting this test.

3.3 Mechanisms: Views and Downloads

To shed further light on the mechanisms at play, we examine whether rank effects on citations operate through differential visibility. Table 4 reports results for views and downloads using OUP data for articles published between January 2021 and September 2024. Because OUP makes articles available online shortly before the official issue date, we measure attention from the month before publication (m - 1) onward.

Table 4
Effects of Article Order on Views and Downloads

	Views				Downloads			
Outcome:	$\log(1+\text{Views}_{m-1,m+1})$		$\log(1+\text{Views}_{m-1,m+4})$		$\log(1+\text{Downloads}_{m-1,m+1})$		$\log(1+\text{Downloads}_{m-1,m+4})$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Order 4-6	-0.026	-0.120*	0.020	-0.047	-0.001	-0.083	0.043	-0.025
	(0.113)	(0.072)	(0.121)	(0.076)	(0.089)	(0.062)	(0.095)	(0.066)
Order 7-9	-0.135	-0.185**	-0.142	-0.158*	-0.100	-0.158**	-0.104	-0.132**
	(0.109)	(0.076)	(0.115)	(0.081)	(0.086)	(0.063)	(0.091)	(0.067)
Order 10+	-0.227**	-0.230***	-0.133	-0.151*	-0.193**	-0.216***	-0.106	-0.135*
	(0.107)	(0.082)	(0.117)	(0.089)	(0.085)	(0.068)	(0.093)	(0.075)
Keynote Lecture		0.312		0.671**		0.271		0.622***
		(0.266)		(0.304)		(0.199)		(0.215)
Number of Printed Pages		0.004		0.005		0.002		0.003
		(0.003)		(0.004)		(0.003)		(0.003)
Number of Authors		-0.012		-0.022		-0.029		-0.031
		(0.026)		(0.029)		(0.020)		(0.023)
Open Access (=1)		1.143***		1.216***		0.842***		0.879***
		(0.056)		(0.060)		(0.046)		(0.049)
Editor's Choice (=1)		1.051***		1.019***		0.708***		0.689***
		(0.121)		(0.122)		(0.101)		(0.102)
Number of References		0.002		0.002		0.002**		0.002
		(0.001)		(0.001)		(0.001)		(0.001)
Number of Equations (3-7)		-0.158*		-0.134		-0.119*		-0.117*
		(0.086)		(0.090)		(0.064)		(0.067)
Number of Equations (8-20)		-0.249***		-0.227**		-0.145**		-0.157**
		(0.089)		(0.097)		(0.066)		(0.073)
Number of Equations (>20)		-0.291***		-0.297***		-0.226***		-0.252***
		(0.094)		(0.100)		(0.069)		(0.074)
Author Team Pre-Pub Citations (per 100)		0.002***		0.002***		0.002***		0.002***
		(0.001)		(0.001)		(0.001)		(0.001)
Observations	418	418	388	388	418	418	388	388
Adjusted R^2	0.066	0.629	0.034	0.617	0.095	0.589	0.059	0.567
Mean (Dep. Var.)	5.180	5.180	5.596	5.596	4.512	4.512	4.925	4.925
SD (Dep. Var.)	0.801	0.801	0.815	0.815	0.633	0.633	0.639	0.639
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is a research article published in the *Economic Journal*. Views refer to HTML page views, and downloads refer to PDF downloads. The dependent variables are the natural logarithm of one plus the total views or downloads in the specified months relative to publication (month m is the publication month; $m-1$ is the month before publication). Columns (1)–(2) and (5)–(6) use articles published between January 2021 and September 2024 (allowing 1 month of post-publication metrics to accumulate). Columns (3)–(4) and (7)–(8) use articles published between January 2021 and June 2024 (allowing 4 months of post-publication metrics to accumulate). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (30 issues in columns (1)–(2) and (5)–(6); 28 in columns (3)–(4) and (7)–(8)) and paper type fixed effects (3 types in columns (1)–(2) and (5)–(6); 3 in columns (3)–(4) and (7)–(8)). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

The results are consistent with the citation findings. For views measured over m - 1 to m + 1 with controls (column 2), the coefficients on Order 4-6, 7-9, and 10+ are -0.120 ($p < 0.10$), -0.185 ($p < 0.05$), and -0.230 ($p < 0.01$), revealing a clear and monotonically widening visibility gradient. For views measured over m - 1 to m + 4 (column 4), the coefficients on Order 7-9 and Order 10+ are smaller in magnitude but remain marginally significant (β = -0.158 and -0.151, both $p < 0.10$). For downloads, the results follow a comparable pattern: short-window

downloads for articles ranked 7-9 and 10+ are significantly lower (β = -0.158 and -0.216; $p < 0.05$ and $p < 0.01$), and these effects persist over the four-month window (β = -0.132 and -0.135; $p < 0.05$ and $p < 0.10$).

These findings suggest that citation premium for earlier-ranked articles is at least partly mediated through a visibility channel: articles appearing in the first few positions within an issue are more likely to be viewed and downloaded, which in turn translates into a persistent citation advantage. The pattern is consistent with the skimming behavior proposed by Feenberg et al. (2017), whereby readers devote disproportionate attention to the first few items on a list due to time constraints or interruptions. Notably, open access status and Editor's Choice designation have very large positive effects on both views and downloads, confirming that visibility-enhancing factors more broadly play an important role in the dissemination of research.

3.4 Addressing Alternative Explanations: Strategic Author Responses

One potential concern with our interpretation is that the rank effects we document could reflect strategic behavior by authors rather than pure visibility. Specifically, after the December 2015 reform introduced alphabetical article ordering within issues, author teams might have responded by manipulating the order in which they list their names on papers, e.g. by ordering authors alphabetically in order to benefit from a visibility premium. If such strategic reordering were widespread, our estimates would conflate a genuine rank visibility effect with a selection effect from compositional changes in which types of papers or authors appear in early positions.

Table A2 provides direct evidence against this concern. We compare the share of multi-author papers with alphabetical versus non-alphabetical author ordering before and after the December 2015 reform. In Panel A, which includes all multi-author papers published between 2010 and 2022, the share with alphabetical author ordering is 89.4 percent pre-reform and 90.0 percent post-reform, a difference of merely 0.6 percentage points that is statistically indistinguishable from zero ($p = 0.759$). We see similar results when we restrict the sample to multi-author research articles in Panel B. This large share of alphabetically ordered papers is in line with the practice all across Economics (see Ray (2018)).

Despite the fact that alphabetical article ordering within issues created a premium for papers whose first-listed author has a surname early in the alphabet, it appears that coauthor teams did not adjust their naming conventions in response. There are several potential explanations for why coauthor teams failed to respond strategically. First, an individual author team cannot predict its rank within an issue with any certainty. Under alphabetical ordering, a paper's position within the issue depends on who else appears in the same issue, e.g., a paper by Adams et al. is not guaranteed first position if the same issue contains multiple papers by authors with earlier surnames. Second, and in our view more likely, coauthor teams may simply have been unaware of the change.[7] Third, even among those who might have noticed, given the prevalence of alphabetical ordering in author teams in Economics and the EJ, the scope for alphabetical re-ordering was limited. In all cases, the evidence supports our identification: the

[7]The switch to alphabetical article ordering within issues was an administrative decision that received no public announcement. To our knowledge, it was not even known among the journal's own editors.

rank effects we document reflect genuine visibility-driven differences in reader attention rather than endogenous sorting of papers or authors into favorable positions.

Robustness: Decile Specifications

One concern with the log-citation specification is that the results could be sensitive to the skewed distribution of citation counts and to the influence of a small number of highly cited articles. As a robustness check, we re-estimate equation (1) replacing log (1 + Citations) with the decile of citations within the relevant sample, which is bounded between 1 and 10 and is by construction insensitive to outliers in the upper tail. Tables A4 and A5 show the results for two-year and five-year citations and Table A6 shows the results for views and downloads. The consistency of the decile and log specifications confirms that our main estimates are not driven by outliers.

4 Discussion and Conclusion

This paper provides causal evidence that article positioning within journal issues significantly affects citation outcomes. We document that articles appearing in positions 7-9 receive 20% fewer two-year citations than those in positions 1-3, with penalties growing to 28% over five years. Exploiting the Economic Journal's use of alphabetical ordering between December 2015 and February 2025 as a natural experiment, we show that these effects are not driven by any kind of systematic ordering, such as alphabetical ordering, because the ordering effects appear both before and after this reform. Our analysis of views and downloads confirms that these effects operate through a visibility mechanism: articles ranked earlier receive disproportionate attention from readers browsing the table of contents. A secondary finding reinforces the attention-allocation interpretation: conditional on field and other controls, papers with more equations receive fewer citations and fewer views and downloads. Readers facing time constraints appear to discount mathematically intensive papers at first pass, suggesting that the returns to accessible writing are non-negligible.

Our findings have implications for editorial policy. The magnitude of rank effects – comparable to one-fifth of the journal's impact factor – suggests that ordering conventions are far from neutral. Alphabetical ordering, while appearing simple, systematically disadvantages authors with surnames later in the alphabet. Chronological ordering based on acceptance dates preserves rank effects but distributes them more equitably over an author's career as the same author might sometimes appear first, sometimes last. It is because of this evidence that in February 2025 the EJ returned to chronological ordering within issues — the convention in place before December 2015. Likewise, following the circulation of this paper, the Review of Economic Studies abandoned the (within issue) alphabetical convention and approved a change to chronological ordering.[8] Journals might also consider rotating article order across different platforms (print, online, email alerts) or prominently featuring articles in

[8]Source: private correspondence with Ruben Enikolopov, Chair of Restud's Editorial Board.

random order to mitigate these biases.

For researchers, particularly those early in their careers or with alphabetically disadvantaged surnames, these results highlight a subtle but persistent source of inequality in academic evaluation. The cumulative nature of citation advantages – small initial differences compound over time – means that even seemingly minor presentation effects can have lasting career consequences.

Future work might explore whether strategic behavior emerges in response to alphabetical ordering – for example, whether authors with late-alphabet surnames systematically seek co-authors with early-alphabet surnames, or whether alphabetical disadvantage affects the decision to pursue single-authored versus co-authored work. Additionally, examining whether readers' attention patterns differ between print and digital formats could inform platform-specific ordering strategies. Understanding these dynamics is essential for designing fairer systems of research dissemination and evaluation in an increasingly competitive academic environment.

References

AEA-EEA-ES-RES Committee, "Report on Improving the Publication Process in Economics," Committee Report, American Economic Association, European Economic Association, Econometric Society, and Royal Economic Society 2024.

Arsenault, Clément and Vincent Larivière, "Is Paper Uncitedness a Function of the Alphabet?," *Proceedings of the 15th International Conference of the International Society for Scientometrics and Informetrics*, 2015, pp. 286–287.

Engers, Maxim, Joshua S. Gans, Simon Grant, and Stephen P. King, "First-Author Conditions," *Journal of Political Economy*, 1999, *107* (4), 859–883.

Feenberg, Daniel R., Ina Ganguli, Patrick Gaule, and Jonathan Gruber, "It's Good to Be First: Order Bias in Reading and Citing NBER Working Papers," *The Review of Economics and Statistics*, 2017, *99* (1), 32–39.

Hawking, Stephen, "Speech (Prince of Asturias Award for Concord 1989)," 1989. https://www.fpa.es/en/princess-of-asturias-awards/laureates/1989-stephen-hawking/?texto=discurso (accessed 2026-02-26).

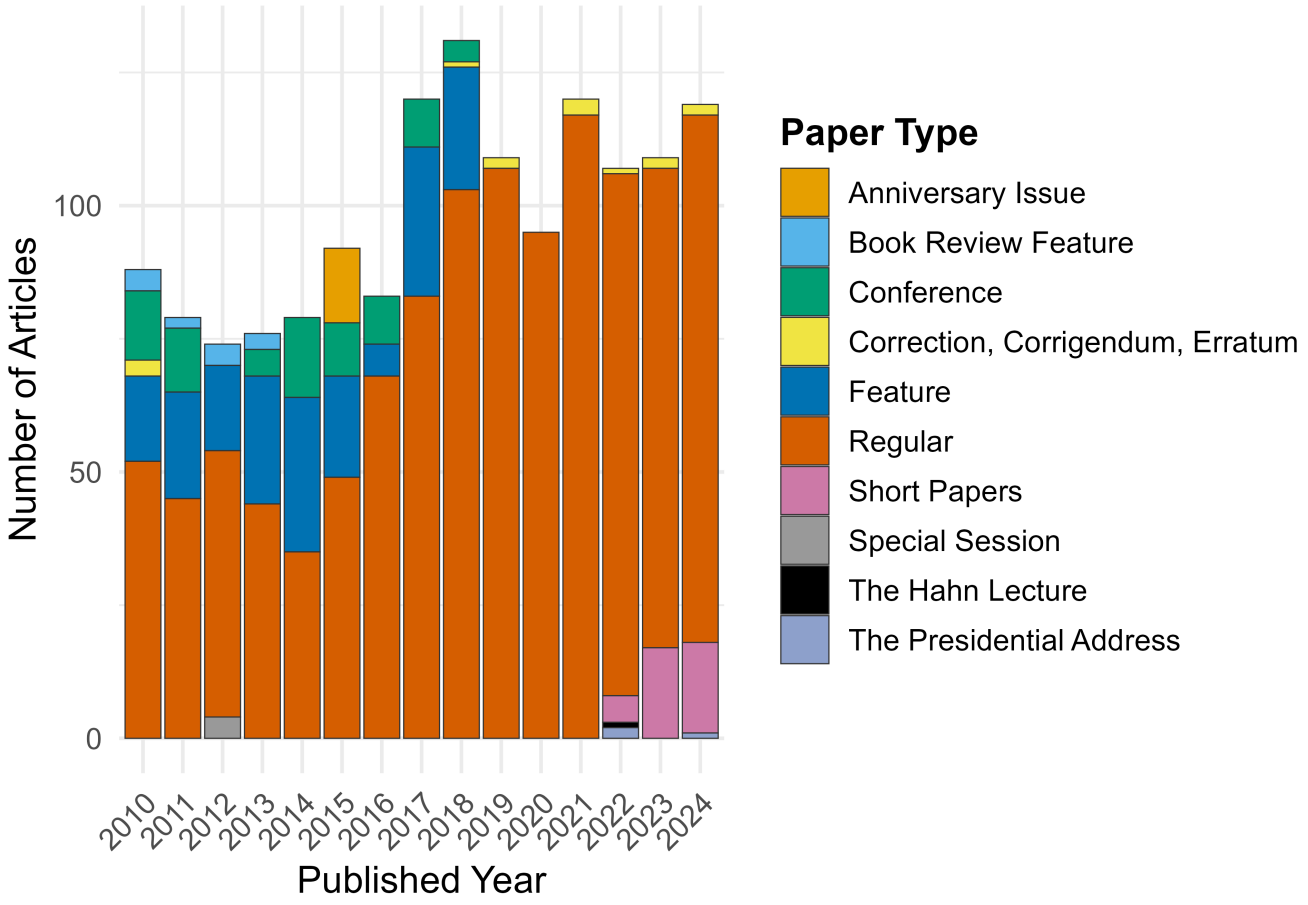
Öz, Ali Bariş, "Overcoming Alphabetical Disadvantage: Factors Influencing the Use of Surname Initial Techniques And Their Impact on Citation Rates in The Four Major Disciplines of Social Sciences," *Scientometrics*, 2024, *129* (8), 4885–4908.

Ray, Debraj ⓡ **Arthur Robson**, "Certified Random: A New Order for Coauthorship," *American Economic Review*, February 2018, *108* (2), 489–520.

Weber, Matthias, "The Effects of Listing Authors in Alphabetical Order: A Review of the Empirical Evidence," *Research Evaluation*, 2018, *27* (3), 238–245.

APPENDIX

Figure A1
Distribution of Articles by Type across Published Years



Notes: This figure reports the annual number of articles published between 2010 and 2024, disaggregated by paper type. Bars are stacked to show the total number of articles published in each year, with colored segments indicating the contribution of each category (Regular, EJ Features, Conference, Short Papers, Special Session, Book Review, Anniversary Issue, Correction/Corrigendum/Erratum, The Hahn Lecture, and The Presidential Address). The height of each bar reflects total publication volume in that year.

Table A1
Correlation Between Article Order and Article Characteristics

	All Articles (N=1,228)	Research Articles (N=1,205)	Research Articles (Post Dec-2015) (N=779)
Number of Pages	-0.126	-0.379	-0.567
	(0.532)	(0.522)	(0.669)
Number of Authors	-0.059	-0.046	-0.201**
	(0.071)	(0.067)	(0.088)
Open Access	0.004	0.004	0.021
	(0.019)	(0.019)	(0.029)
Editor's Choice	0.000	0.000	0.001
	(0.008)	(0.008)	(0.014)
Keynote Lecture	-0.051***	-0.051***	-0.024***
	(0.011)	(0.011)	(0.009)
Number of References	-0.978	-1.081	-1.219
	(1.398)	(1.389)	(1.982)
Number of Equations (3-7)	0.009	0.010	-0.030
	(0.030)	(0.031)	(0.041)
Number of Equations (8-20)	0.016	0.011	0.065*
	(0.029)	(0.029)	(0.039)
Number of Equations (>20)	-0.019	-0.023	-0.042
	(0.030)	(0.030)	(0.038)
Author Team Pre-Pub Citations	-345.018*	-353.045*	-425.582
	(182.041)	(183.417)	(288.080)
Issue fixed effects	Yes	Yes	Yes
Paper type fixed effects	Yes	Yes	Yes
JEL Code dummies	Yes	Yes	Yes
Joint F-statistic	6.364	6.403	2.076
Joint F-test p-value	0.000***	0.000***	0.001***
Joint F-statistic (Excluding keynote lecture dummy)	1.048	0.966	1.363
Joint F-test p-value (Excluding keynote lecture dummy)	0.396	0.517	0.098*

Notes: Each cell reports the coefficient from an OLS regression of an article characteristic on a dummy variable equal to one for articles in positions 4 or later (Order 4+), with positions 1–3 as the omitted category, controlling for issue and paper type fixed effects. Robust standard errors in parentheses. Author Team Pre-Publication Citations is the total number of new citations received by all co-authors' prior work in all years before the article's publication year, summed across co-authors. The joint F-statistic tests whether all balance variable coefficients are jointly zero (partial F-test, excluding fixed effects); the p-value tests this null. The row tests the same null but with keynote_lecture removed from the tested coefficients (the regression specification is unchanged). The three columns correspond to: (1) all articles published in the *Economic Journal* between 2010 and 2022; (2) research articles only; (3) research articles in issues published in December 2015 or later. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A2
Author Ordering Before and After the December 2015 Reform

	N	% Alphabetical	% Non-Alphabetical	Difference	p-value
Panel A: All Multi-Author Papers					
Pre Dec-2015	348	89.4	10.6		
Post Dec-2015	659	90.0	10.0		
Difference (Post – Pre)				-0.6	0.759
Panel B: Multi-Author Research Articles					
Pre Dec-2015	340	89.1	10.9		
Post Dec-2015	652	89.9	10.1		
Difference (Post – Pre)				-0.8	0.710

Notes: This table compares the share of multi-author papers with alphabetical versus non-alphabetical author ordering before and after the December 2015 *Economic Journal* reform (which introduced alphabetical article ordering within issues). The sample includes multi-author papers published between 2010 and 2022. Panel A includes all multi-author papers; Panel B restricts to multi-author research articles (excluding errata, book reviews, presidential addresses, and corrections). The p-value is from a two-sample test of proportions (pre vs. post). * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A3
Effects of ABC Order on Citations (Pre-Reform Period)

	$\log(1 + \text{Citations}_{t+1,t+2})$				$\log(1 + \text{Citations}_{t+1,t+5})$			
Sample:	All Articles		Research Articles		All Articles		Research Articles	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Order 4-6	0.067	0.114	0.117	0.144	-0.013	0.056	0.050	0.092
	(0.108)	(0.104)	(0.107)	(0.105)	(0.124)	(0.107)	(0.122)	(0.107)
Order 7-9	-0.085	0.015	-0.039	0.026	-0.137	-0.030	-0.072	-0.024
	(0.114)	(0.113)	(0.115)	(0.115)	(0.126)	(0.116)	(0.125)	(0.116)
Order 10+	0.016	0.209	0.032	0.268*	-0.006	0.269*	0.025	0.364**
	(0.151)	(0.143)	(0.154)	(0.147)	(0.170)	(0.148)	(0.170)	(0.145)
Keynote Lecture		0.069		0.052		0.166		0.139
		(0.277)		(0.277)		(0.273)		(0.268)
Number of Printed Pages		0.014**		0.012*		0.022***		0.018**
		(0.007)		(0.007)		(0.008)		(0.007)
Number of Authors		0.130**		0.121**		0.165***		0.147***
		(0.052)		(0.060)		(0.051)		(0.056)
Open Access (=1)		0.418*		0.439**		0.291		0.318
		(0.214)		(0.212)		(0.207)		(0.204)
Number of References		0.001		0.000		0.003		0.002
		(0.003)		(0.003)		(0.003)		(0.003)
Number of Equations (3-7)		-0.005		-0.045		0.125		0.058
		(0.117)		(0.121)		(0.123)		(0.123)
Number of Equations (8-20)		-0.043		-0.124		-0.097		-0.227*
		(0.128)		(0.129)		(0.139)		(0.137)
Number of Equations (>20)		-0.343***		-0.422***		-0.362***		-0.480***
		(0.123)		(0.123)		(0.133)		(0.127)
Author Team Pre-Pub Citations (per 100)		0.009**		0.007*		0.010**		0.009*
		(0.004)		(0.004)		(0.005)		(0.005)
Observations	443	443	426	426	443	443	426	426
Adjusted R^2	0.005	0.195	0.011	0.188	0.012	0.335	0.013	0.331
Mean (Dep. Var.)	1.595	1.595	1.609	1.609	2.730	2.730	2.759	2.759
SD (Dep. Var.)	0.861	0.861	0.852	0.852	1.006	1.006	0.975	0.975
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is an article published in the *Economic Journal*, restricted to the pre-reform period (before December 2015). Columns (1)–(4) use the natural logarithm of one plus citations in years $t+1$ and $t+2$ as the dependent variable (sample: 2010–2022). Columns (5)–(8) use citations in years $t+1$ through $t+5$ (sample: 2010–2019). The omitted category is Order 1–3 (articles positioned first through third in their issue). Order is determined by alphabetical ordering of author surnames. All specifications include issue fixed effects (47 issues in columns (1)–(2), 46 in columns (3)–(4), 47 in columns (5)–(6), and 46 in columns (7)–(8)) and paper type fixed effects (6 types in columns (1)–(2), 3 in columns (3)–(4), 6 in columns (5)–(6), and 3 in columns (7)–(8)). Research articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations (rescaled per 100), and JEL classification dummies (not shown for brevity). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A4
Effects of Article Order on Citation Decile Over a 2-Year Period

Sample:	Dependent Variable: Decile of Citations$_{t+1,t+2}$					
	All Articles		Research Articles		Research Articles (Post Dec-2015)	
	(1)	(2)	(3)	(4)	(5)	(6)
Order 4-6	-0.177	-0.219	-0.188	-0.217	-0.534*	-0.479
	(0.236)	(0.220)	(0.237)	(0.222)	(0.311)	(0.292)
Order 7-9	-0.640**	-0.584**	-0.646**	-0.582**	-0.937***	-0.709**
	(0.249)	(0.231)	(0.251)	(0.234)	(0.309)	(0.292)
Order 10+	-0.724***	-0.505**	-0.833***	-0.606**	-0.934***	-0.589**
	(0.258)	(0.243)	(0.258)	(0.243)	(0.303)	(0.288)
Keynote Lecture		-0.258		-0.300		0.185
		(0.780)		(0.779)		(1.310)
Number of Printed Pages		0.026**		0.024*		0.022
		(0.013)		(0.013)		(0.016)
Number of Authors		0.284***		0.259***		0.249**
		(0.088)		(0.092)		(0.108)
Open Access (=1)		0.601**		0.603**		0.525*
		(0.293)		(0.292)		(0.317)
Editor's Choice (=1)		1.393*		1.366*		1.399**
		(0.719)		(0.718)		(0.709)
Number of References		0.016***		0.015***		0.018***
		(0.005)		(0.005)		(0.006)
Number of Equations (3-7)		-0.430*		-0.486**		-0.670**
		(0.239)		(0.241)		(0.313)
Number of Equations (8-20)		-0.840***		-0.946***		-1.169***
		(0.256)		(0.255)		(0.321)
Number of Equations (>20)		-1.541***		-1.638***		-1.761***
		(0.268)		(0.269)		(0.350)
Author Team Pre-Pub Citations (per 100)		0.013***		0.013***		0.012***
		(0.003)		(0.003)		(0.003)
Observations	1228	1228	1205	1205	779	779
Adjusted R^2	0.076	0.230	0.074	0.227	0.097	0.236
Mean (Dep. Var.)	5.124	5.124	5.159	5.159	5.122	5.122
SD (Dep. Var.)	3.068	3.068	3.054	3.054	3.095	3.095
Controls	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is an article published in the *Economic Journal* between 2010 and 2022. The dependent variable is the decile (1–10) of total citations received in the first two years after publication (years $t+1$ and $t+2$). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (107 issues in columns (1)–(2), 106 in columns (3)–(4), and 60 in columns (5)–(6)) and paper type fixed effects (6 types in columns (1)–(2), 4 in columns (3)–(4), and 4 in columns (5)–(6)). Research articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Columns (3)–(4) restrict to research articles. Columns (5)–(6) restrict to research articles published in December 2015 or later (post-reform period). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A5
Effects of Article Order on Citation Decile Over a 5-Year Period

Sample:	Dependent Variable: Decile of Citations$_{t+1,t+5}$					
	All Articles		Research Articles		Research Articles (Post Dec-2015)	
	(1)	(2)	(3)	(4)	(5)	(6)
Order 4-6	0.034	-0.059	0.027	-0.045	-0.132	-0.153
	(0.254)	(0.227)	(0.255)	(0.227)	(0.376)	(0.339)
Order 7-9	-0.581**	-0.586**	-0.590**	-0.581**	-1.075***	-0.864**
	(0.273)	(0.246)	(0.276)	(0.249)	(0.381)	(0.346)
Order 10+	-0.717**	-0.467*	-0.880***	-0.619**	-0.930**	-0.535
	(0.295)	(0.271)	(0.295)	(0.271)	(0.377)	(0.356)
Keynote Lecture		-0.054		-0.102		-0.268
		(0.815)		(0.812)		(1.578)
Number of Printed Pages		0.016		0.010		-0.009
		(0.014)		(0.014)		(0.018)
Number of Authors		0.411***		0.380***		0.397***
		(0.096)		(0.102)		(0.138)
Open Access (=1)		0.130		0.159		0.205
		(0.357)		(0.356)		(0.425)
Editor's Choice (=1)†		Not Identified		Not Identified		Not Identified
		(.)		(.)		(.)
Number of References		0.014**		0.013**		0.018**
		(0.006)		(0.006)		(0.007)
Number of Equations (3-7)		-0.133		-0.222		-0.581
		(0.252)		(0.254)		(0.361)
Number of Equations (8-20)		-0.879***		-1.024***		-1.400***
		(0.270)		(0.266)		(0.360)
Number of Equations (>20)		-1.581***		-1.711***		-2.095***
		(0.276)		(0.275)		(0.401)
Author Team Pre-Pub Citations (per 100)		0.013***		0.012***		0.010**
		(0.004)		(0.004)		(0.004)
Observations	907	907	887	887	461	461
Adjusted R^2	0.107	0.313	0.109	0.315	0.168	0.339
Mean (Dep. Var.)	5.387	5.387	5.430	5.430	5.232	5.232
SD (Dep. Var.)	2.928	2.928	2.903	2.903	2.933	2.933
Controls	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is an article published in the *Economic Journal* between 2010 and 2019. The dependent variable is the decile (1–10) of total citations received in the first five years after publication (years $t+1$ to $t+5$). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (83 issues in columns (1)–(2), 82 in columns (3)–(4), and 36 in columns (5)–(6)) and paper type fixed effects (5 types in columns (1)–(2), 3 in columns (3)–(4), and 3 in columns (5)–(6)). Research articles exclude non-standard content such as errata, book reviews, presidential addresses, and corrections. Columns (3)–(4) restrict to research articles. Columns (5)–(6) restrict to research articles published in December 2015 or later (post-reform period). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). † Since Editor's Choice was only introduced in 2020, the coefficient on this variable is not identified in the 5-year citation window. Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

Table A6
Effects of Article Order on Views and Downloads Decile

Outcome:	Views				Downloads			
	Decile of Views$_{m-1,m+1}$		Decile of Views$_{m-1,m+4}$		Decile of Downloads$_{m-1,m+1}$		Decile of Downloads$_{m-1,m+4}$	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Order 4-6	-0.260	-0.636**	-0.011	-0.267	-0.088	-0.470	0.161	-0.122
	(0.396)	(0.267)	(0.425)	(0.291)	(0.394)	(0.287)	(0.408)	(0.293)
Order 7-9	-0.738*	-0.946***	-0.630	-0.693**	-0.466	-0.726**	-0.541	-0.680**
	(0.383)	(0.286)	(0.406)	(0.303)	(0.382)	(0.296)	(0.395)	(0.295)
Order 10+	-1.042***	-1.039***	-0.516	-0.573*	-0.835**	-0.931***	-0.426	-0.534*
	(0.384)	(0.289)	(0.408)	(0.303)	(0.381)	(0.300)	(0.397)	(0.308)
Keynote Lecture		-0.590		-0.057		-0.280		0.898
		(0.942)		(1.200)		(1.202)		(1.577)
Number of Printed Pages		0.017		0.024*		0.015		0.022
		(0.013)		(0.014)		(0.014)		(0.015)
Number of Authors		0.016		0.010		-0.080		-0.092
		(0.091)		(0.098)		(0.093)		(0.097)
Open Access (=1)		4.067***		4.245***		3.741***		3.839***
		(0.177)		(0.185)		(0.188)		(0.188)
Editor's Choice (=1)		3.516***		3.414***		3.008***		2.970***
		(0.385)		(0.386)		(0.372)		(0.373)
Number of References		0.008*		0.008*		0.010**		0.008
		(0.005)		(0.005)		(0.005)		(0.005)
Number of Equations (3-7)		-0.363		-0.299		-0.367		-0.362
		(0.251)		(0.275)		(0.268)		(0.273)
Number of Equations (8-20)		-0.486*		-0.419		-0.334		-0.428
		(0.273)		(0.300)		(0.284)		(0.297)
Number of Equations (>20)		-0.604**		-0.616*		-0.742**		-0.864***
		(0.293)		(0.319)		(0.306)		(0.318)
Author Team Pre-Pub Citations (per 100)		0.008***		0.008***		0.009***		0.010***
		(0.002)		(0.002)		(0.002)		(0.002)
Observations	418	418	388	388	418	418	388	388
Adjusted R^2	0.068	0.630	0.031	0.609	0.082	0.571	0.046	0.563
Mean (Dep. Var.)	5.694	5.694	5.709	5.709	5.883	5.883	5.853	5.853
SD (Dep. Var.)	2.791	2.791	2.817	2.817	2.752	2.752	2.733	2.733
Controls	No	Yes	No	Yes	No	Yes	No	Yes
Issue Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Paper Type Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Notes: The unit of observation is a research article published in the *Economic Journal*. Views refer to HTML page views, and downloads refer to PDF downloads. The dependent variable is the decile (1–10) of total views or downloads in the specified months relative to publication (month m is the publication month; $m-1$ is the month before publication). Columns (1)–(2) and (5)–(6) use articles published between January 2021 and September 2024 (allowing 1 month of post-publication metrics to accumulate). Columns (3)–(4) and (7)–(8) use articles published between January 2021 and June 2024 (allowing 4 months of post-publication metrics to accumulate). The omitted category is Order 1–3 (articles positioned first through third in their issue). All specifications include issue fixed effects (30 issues in columns (1)–(2) and (5)–(6); 28 in columns (3)–(4) and (7)–(8)) and paper type fixed effects (3 types in columns (1)–(2) and (5)–(6); 3 in columns (3)–(4) and (7)–(8)). Controls in even-numbered columns include: number of pages, number of authors, open access indicator, editor's choice indicator, keynote lecture indicator, number of references, equation bin indicators, author team pre-publication citations, and JEL classification dummies (not shown for brevity). Robust standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.