What's in a Surname? The Effects of Surname Initials on Academic Success

Liran Einav and Leeat Yariv

Liran Einav is Assistant Professor of Economics, Stanford University, Stanford, California and Faculty Research Fellow, National Bureau of Economic Research, Cambridge, Massachusetts. Leeat Yariv is Associate Professor of Economics, California Institute of Technology, Pasadena, California. Their e-mail addresses are <leinav@stanford.edu> and <lyariv@hss.caltech.edu>, respectively.

Abstract

We present evidence that a variety of proxies for success in the U.S. economics labor market (tenure at highly ranked schools, fellowship in the Econometric Society, and to a lesser extent, Nobel Prize and Clark Medal winnings) are correlated with surname initials, favoring economists with surname initials earlier in the alphabet. These patterns persist even when controlling for country of origin, ethnicity, and religion. We suspect that these effects are related to the existing norm in economics prescribing alphabetical ordering of authors' credits. Indeed, there is no significant correlation between surname initials and tenure at departments of psychology, where authors are credited roughly according to their intellectual contribution. The economics market participants seem to react to this phenomenon. Analyzing publications in the top economics journals since 1980, we note two consistent patterns: authors with higher surname initials are significantly less likely to participate in projects with more than three authors and significantly more likely to write papers in which the order of credits is non-alphabetical.

Journal of Economic Literature classification numbers: A11, A13, J23, J70, Z13.
Keywords: Norms, Economics Job Market, Alphabetical Discrimination.

There is abundant research identifying external characteristics (race, gender, adolescent height) that affect labor market outcomes; for recent contributions, see Bertrand and Mullainathan (2004) and Persico et al. (2004). In this paper, we focus on the effects of surname initials on professional outcomes in the academic labor market for economists.

We begin our analysis with data on faculty in all top 35 U.S. economics departments. Faculty with earlier surname initials are significantly more likely to receive tenure at top ten economics departments, are significantly more likely to become fellows of the Econometric Society, and, to a lesser extent, are more likely to receive the Clark Medal and the Nobel Prize. These statistically significant differences remain the same even after we control for country of origin, ethnicity, religion, or departmental fixed effects. All these effects gradually fade as we increase the sample to include our entire set of top 35 departments.

We suspect the "alphabetical discrimination" reported in this paper is linked to the norm in the economics profession prescribing alphabetical ordering of credits on co-authored publications. As a test, we replicate our analysis for faculty in the top 35 U.S. psychology departments, for which co-authorships are not normatively ordered alphabetically. We find no relationship between alphabetical placement and tenure status in psychology.

We then discuss the extent to which the effects of alphabetical placement are internalized by potential authors in their choices of the number of co-authors as well as in their willingness to follow the alphabetical ordering norm. We find that the distribution of authors' surnames in single-authored, double-authored, and triple-authored papers does not differ significantly. Nonetheless, authors with surname initials that are placed later in the alphabet are significantly less likely to participate in four- and five-author projects. Furthermore, such authors are also more likely to deviate from the accepted norm, and to write papers in which credits do not follow the alphabetical ordering.

The Relationship between Surname Initials and Professional Success

We collected demographic data regarding faculty at the top 35 economics departments in the United States.[1] The vast majority of the faculty data was collected from departmental web sites and faculty home pages. For all faculty, we recorded their names, tenure status (untenured, tenured, and emeritus),[2] nationalities, whether they are fellows of the Econometric Society (from the society's web page, as of January 2004), and the year they obtained their Ph.D. (the year of Ph.D. completion is available for approximately 80 percent of the sample).

Our goal is to assess whether faculty's last names have any noticeable effect on their professional success. We concentrate on several such measures: whether faculty members are tenured, whether they are fellows of the Econometric Society, and whether they are recipients of the Nobel Prize or Clark Medal. We code surname initials into numbers between 1 and 26 lexicographically ('A' corresponding to 1, 'B' to 2, and so on), and use regression analysis, which allows us to account for potential confounding factors, such as nationality, race, and religion.[3]

Tenure Status

Overall, we find that tenured faculty at the top five economics departments have last names significantly closer to the start of the alphabet than do junior faculty at the same departments. This negative relationship remains significant for the top 10 economics departments, but gradually disappears as we look at the set of top 20 and top 35 departments.

---

[1] The top 35 economics departments, as ranked by Thursby (2000), are: 1) Harvard; 2) Stanford; 3) Chicago; 4) MIT; 5) Princeton; 6)Yale; 7) UC-Berkeley; 8) Pennsylvania; 9) Northwestern; 10) Minnesota; 11) UCLA; 12) Columbia; 13) Rochester; 14) Michigan; 15) Wisconsin; 16) UC-San Diego; 17) New York University; 18) Cornell; 19) Caltech; 20) Maryland; 21) Boston University; 22) Duke; 23) Brown; 24) Virginia; 25) North Carolina; 26) Washington; 27) Michigan State; 28) Illinois; 29) Washington University in St. Louis; 30) Iowa; 31) Texas; 32) Ohio State; 33) Johns Hopkins; 34) Pittsburgh; and 35) Texas A&M.
[2] Since not all departments are consistent in posting their emeriti faculty on their web pages, all the reported results are based on a sample that does not include emeriti faculty. Adding the available emeriti faculty does not change any of the results.
[3] For the sake of presentational clarity, we report results from linear probability regressions throughout the paper. Results from probit regressions for all reported regressions yield virtually identical estimates and are reported in the preliminary working paper, Einav and Yariv (2004).

The four panels of Figure 1 present the cumulative distributions of surname initials corresponding to tenured and untenured faculty at the top 5, top 10, top 20, and top 35 economics departments. Noticeable and statistically significant differences in surname distributions can be seen within top 5 and top 10 departments. These differences are mostly driven by faculty whose surname initials are at the lower half of the alphabet, and they diminish as the sample expands. It is worth noting that the alphabetical distribution of surnames for the top 35 economics departments is essentially indistinguishable from the surname initial distribution of the entire membership of the American Economic Association (as calculated from the AEA's online directory in May 2005).

Table 1 provides the corresponding statistical evidence. For each group of faculty – top 5, top 10, top 20, and top 35 – there are two ordinary least squares regressions. The first set of regressions uses initial of last name as an explanatory variable, while the dependent variable takes a value of 1 for someone who is tenured and zero otherwise. In the regression for top 5 departments, each letter closer to the front of the alphabet increases the probability of being tenured by about 1 percent.

Since our analysis relies on cross-sectional variation, the second set of regressions addresses a story that could be told about the connection between surname and tenure. Perhaps the fraction of non-Americans at the junior faculty rank is higher at higher ranked universities, and perhaps foreign names are more likely to have initials later in the alphabet. To account for such a pattern, we control for American nationality, as well as for the origin of the name. We used two undergraduate research assistants to independently and subjectively classify last names as Jewish, Indian, and other Asian. As the overlap between the two classifications produced by the research assistants was not perfect, we separately added each of them as a control, resulting in six dummy variables (referred to as origin controls in all the tables that follow). Table 1 illustrates that even after adding these controls, one letter closer to the start of the alphabet increases tenure probability by more than half of 1 percent in top 5 and top 10 departments, and that this effect remains statistically significant.

We experimented with several other control variables. The pattern, magnitude, and statistical significance of these effects do not change if we control for departmental

fixed effects. Controlling for the number of publications slightly reduces the reported relationship.[4]

As a further control for whether some name trend may be affecting younger faculty, we restricted the sample to include only economists who obtained their Ph.D. between 1991 and 2000, thereby reducing the age gap between a representative tenured faculty and a representative junior faculty and restricting attention to economists who are "just after" tenure and those who are "just before." The pattern of the effects reported in Table 1 does not change. In fact, the magnitude of the effects at top 5 and top 10 departments increases by about two-thirds. The statistical significance of these effects is, of course, lower, as sample sizes are about one-fourth as large.[5]

While our main finding in this section is the existence of an alphabetical effect, it is somewhat surprising that it is driven solely by the top ten departments.[6] One could only speculate that perhaps tenure decisions at top departments are based on slightly different credentials from those that are used by lower ranked department. For example, conceivably lower ranked departments put more weight on vitae and publication counts, while top departments care more about visibility and impact. Surname initials may be more important for the latter (through, for instance, citation counts, which are discussed later).

Other Proxies for Professional Success

We now turn our attention to the 252 Econometric Society fellows in our sample. Of that group, only two are non-tenured, so we restrict attention to tenured faculty only.

---

[4] We use publication counts at five top economics journals between 1980 and 2002 (as discussed further below). Out of three publication counts we tried – simple count, count of papers in which the author is the first author, and count normalized by the number of co-authors – only the latter had a meaningful effect. Using publication data as a control for ability has two important limitations. First, publications may be endogenous: more successful individuals may find it easier to publish in top academic journals. Second, there is not much variation in publication counts for junior faculty: only 11 junior faculty in our data have more than two publications in the publication data we collected.

[5] We cannot control for age. First, age information is not available for many faculty members. Second, any proxy for age (such as the year of the Ph.D., which we have) will mechanically explain a large portion of the variation in tenure status, leaving only little variation to be explained by other variables.

[6] A simple sorting story that can produce such a pattern, namely that individuals with surnames later in the alphabet are denied tenure at top departments and move to lower ranked departments, can be ruled out. By looking at Figure 1 more closely, it turns out that the distribution of surname initials of tenured faculty is quite similar among top 10 and top 35 economics departments. The effects described in Figure 1 and Table 1 are almost entirely driven by the fact that junior faculty at top 10 economics departments have surnames significantly later in the alphabet than junior faculty at top 35 departments.

This approach makes this set of results orthogonal to the results provided in Table 1, since it considers differences within a subset of professors who were all grouped together as tenured in the earlier analysis.

Figure 2 shows cumulative distributions by surname of this group, and again reveals a gap in favor of those with surnames that are earlier in the alphabet. For simplicity, we present here only the analysis for top 10 and top 35 departments, but the patterns are also parallel for top 5 and top 20 departments. Table 2 provides the corresponding regression results. The results are strikingly similar to those reported in Table 1. Tenured faculty in top 10 economics departments with surnames closer to the start of the alphabet are significantly (at the 10 percent confidence level) more likely to be fellows of the Econometric Society. The magnitude of this effect is, again, almost one percent per letter. As before, the effect gradually vanishes as we expand the set of faculty to include tenured faculty in top 35 departments.[7]

Figure 3 and Table 3 present similar results for the Nobel Prize and the Clark Medal. We again obtain a negative relationship between surname initials and the likelihood of winning these honors. However, these results are not statistically significant, primarily due to the small number of recipients in the data: the top 35 departments have a total of only 13 Nobel laureates (remember, our sample does not include emeritus faculty) and 14 Clark Medal recipients; the top 10 departments have only seven Nobel Laureates and 13 Clark Medal recipients.

In short, the alphabetical placement of surnames for economists affects an array of proxies for success, and this relationship holds for groups of economists at different stages in their careers.

---

[7] Here the difference between the results for top 10 departments and top 35 is equally driven by both fellows and non-fellows. Econometric Society fellows at top departments have surnames with earlier initials than those of fellows in top 35 departments, while faculty in top 10 departments who are not fellows of the Econometric Society have surnames with later initials than those of non-fellows at top 35 departments. Since fellowship in the Econometric Society is not related to departmental affiliation, the different pattern between surname initials and fellowship in the Econometric Society across departments is somewhat puzzling.

Alphabetical Author Ordering and Alphabetical Discrimination

Tenure and professional prestige are clearly influenced by publication record. In economics, the convention is that authors of a co-authored article are listed in alphabetical order. The expectation that co-authors will be listed alphabetically differs across disciplines. In the years 1980-2002, about half of the publications in five of the most prominent economics journals were multi-authored. In 88 percent of these articles the authors were listed alphabetically (see Table 5 in the next section). In contrast, in many of the widely read journals of neighboring disciplines – *American Journal of Sociology, American Psychologist, Angewandte Chemie, and New England Journal of Medicine* – the rate of co-authorship stands similar to economics, but only 40-50 percent of the corresponding co-authors are listed alphabetically (Engers et al., 1999, Tables 1 and 2).

Below we present two pieces of evidence that strongly suggest that the convention in economics regarding the alphabetical ordering of credits in co-authored papers may be one cause of the alphabetical discrimination we identified in the previous section.

The first piece of evidence repeats our earlier analysis for faculty at the top 35 psychology departments.[8] Psychology is one of the closest disciplines to economics, but it follows the convention of listing co-authors by contribution, rather than according to their alphabetical placement. (An exception to this rule is the head of the lab who sometimes appears last.) The four panels in Figure 4, parallel to those in Figure 1, present the surname distribution of psychology faculty in top 5, top 10, top 20, and top 35 departments. The gap between last names and tenure is smaller in psychology; in fact, in some cases the junior faculty have names that appear earlier in the alphabet. Table 4 presents the regression results for these groups. This analysis results in smaller, insignificant, and often reversed relationship between last names and seniority status.

---

[8] The top 35 psychology departments, as ranked by the National Research Council (1996), are: 1) Stanford; 2) Michigan; 3) Yale; 4) UCLA; 5) Illinois; 6) Harvard; 7) Minnesota; 8) Pennsylvania; 9) UC-Berkeley; 10) UC-San Diego; 11) Carnegie Mellon; 12) Washington; 13) Princeton; 14) Cornell; 15) Wisconsin; 16) Texas; 17) Columbia; 18) Chicago; 19) Virginia; 20) Indiana; 21) Ohio State; 22)Oregon; 23) Colorado; 24) Northwestern; 25) North Carolina; 26) UC-Irvine; 27) Massachusetts; 28) Rutgers; 29) Southern California; 30) Purdue; 31) Rochester; 32) Penn State; 33) Duke; 34) New York University; 35) Johns Hopkins.

This pattern suggests the importance of the conventions pertaining to the ordering of authorship, and in particular whether it is alphabetically based.[9]

The second piece of evidence repeats the analysis for earlier decades. The number of co-authored articles in economics has risen substantially in recent years. As Hudson (1996) noted in this journal, in the years 1966-1970, the average proportion of multi-authored papers in top economics journals stood around 23 percent, which monotonically increased since, surpassing the 50 percent level during the 1990s. Rosenblat and Mobius (2004) document a steep rise in co-authorships in the period after use of the Internet became more widespread in 1991.[10] Consequently, if the ordering of authors' names is the channel by which alphabetical discrimination operates, one would expect the effects to be much weaker for past periods, in which many of the senior faculty had created a career based on predominantly single-authored papers. With this implication in mind, we collected data on faculty at the top five economics departments for academic years 1979-1980 and 1989-1990. Repeating the same exercise for those groups, we find no significant relationship between last names and tenure status.

Do Economists Respond to Alphabetical Bias?

Alphabetical bias provides an incentive for strategic behavior in publications. To identify whether such behavior is present, we collected a data set of dates, authors, and

---

[9] In the hard sciences, Shevlin and Mark (1997) found a correlation between citation rates and authors' alphabetical placement, favoring authors with earlier initials. This correlation, however, disappears when controlling for the base rate distribution of names using the London phone book. Over and Smallman (1970) looked at the *Journal of Physiology*, in which alphabetical ordering was mandatory. They found less collaborative publication by scientists with surnames starting with letters later in the alphabet (P-Z) than in other journals in the field. Zuckerman (1968) conducted interviews with Nobel laureates in the hard sciences. Zuckerman notes that laureates often exercise their noblesse oblige by giving credit to less eminent co-authors increasingly as their own eminence grows, particularly after winning the prize. This noblesse oblige has its limits; laureates' contributions to prize-winning research are more visible than contributions to their other research. Economics and the hard sciences do differ in the dimensions in which intellectual collaboration takes place. Laband and Tollison (2000) find that while the incidence and extent of formal intellectual collaboration through co-authorships are greater in biology than in economics, the incidence and extent of informal intellectual collaboration (for example, through discussions at conferences) are greater in economics than in biology.

[10] See also Ellison (2002), who provides a review of the trends in publication in top economic journals and illustrates how that process has slowed down over the past three decades. A general overview of recent trends in the economics profession appears in Gans (2001).

paper length for all publications at the *American Economic Review (AER), Econometrica,* the *Journal of Political Economy (JPE)*, the *Quarterly Journal of Economics (QJE)*, and the *Review of Economic Studies (REStud)*, from 1980 until 2002. We excluded notes and comments, as well as unrefereed publications; in particular, publications in the May "Papers and Proceedings" issue of the *American Economic Review* were not included. Table 5 contains a summary of these data. About half of the papers over this time are multi-authored, and in 88 percent of the multi-authored papers the authors are ordered alphabetically. The share of multi-authored papers has steadily increased over time within our observation period, in all journals.

Table 5 also presents the main findings from these data. After converting initials to a numerical scale from 1 to 26, we report the *average* initials corresponding to co-authored papers in which credits are alphabetical and those in which credits are non-alphabetical. Co-authors with higher surname initials are, of course, more likely to be listed last in the credits list. By basing the analysis on the average initial, we do not have to worry about the relative position of each co-author within each particular paper.

The results indicate that there is no significant effect on co-authorship patterns among single-authored, two-author, and three-author papers. In particular, we cannot reject the null that the surname initial of authors participating in two- and three-author papers are independent draws from the distribution of surname initials of single-authored papers. In contrast, authors with initials earlier in the alphabet are more likely to select themselves into four- and five-author projects. The effect is quite big: the average initial of four- and five-author papers is about half a standard deviation (of the surname distribution of single-authored papers) lower than that of other papers. Conceivably, this is because authors with higher initials will tend to avoid papers with four or five co-authors, as they will find themselves consistently listed fourth or fifth in the group, and experience relatively low returns for their work.[11]

---

[11] Engers et al. (1999) analyze a theoretical model of bargaining between two authors over their placement in a paper's credits and show that alphabetical ordering of names arises as an equilibrium. However, they take the two authors' participation decisions in the joint project as given; given our empirical findings, it would be interesting to analyze their setting when participation decisions are endogenous. In Einav and Yariv (2004) we show that the qualitative empirical pattern can be rationalized by modeling participation decisions of authors in multi-authored projects in the presence of alphabetical discrimination.

Finally, we find significant evidence that co-authors with later surname initials are more likely to reverse the order in which co-authors are listed. Non-alphabetical ordering is more prevalent in papers authored by economists with higher-than-average initials. The results in Table 5 show that while this effect is most significant for three- and four-author papers, it is also present in two-author papers.[12] Unless co-authors with higher initials are more likely to be greater contributors, which seems unlikely, this effect can only be driven by the perceptions of authors that the order of authors is consequential. Thus, this finding suggests that such authors perceive alphabetical discrimination to exist – and in the light of our previous findings such a perception may indeed have some merit.

It should be noted that while the reported results pool all five journals, the results are qualitatively similar for the *JPE*, *QJE*, and *REStud* when the analysis is performed separately for each journal. The results for the *AER* are weaker, while *Econometrica* publications reveal no interesting pattern in the dimensions we analyze. All the reported results are fairly robust to the inclusion of a time trend.

Possible Channels

A surname with a first letter that is earlier in the alphabet is correlated with several proxies for professional success in the economics labor market. We suspect that the accepted norm in economics of alphabetical ordering of credits in collaborative work may play an important role in creating this "alphabetical discrimination." It is essentially the only institutional structure creating asymmetries between market participants with different surname initials. Furthermore, alphabetical placement seems to have no significant consequences on academic success in psychology, in which publications specify authors predominantly according to their intellectual contribution. Indeed, we also document a significant relationship between alphabetical placement and participation in multi-authored projects and willingness to deviate from the accepted norm and list authors non-alphabetically. These patterns suggest that market participants are aware of this "alphabetical discrimination" and respond.

---

[12] See also van Praag and van Praag (2004) for an analysis of authors' decisions to order names non-alphabetically.

There are several possible channels by which the alphabetical ordering norm can produce alphabetical discrimination.

First, when referring to a paper with more than two authors, it is common to mention only the first author, and then to use "et al." for the rest. Thus, the work of first authors, with surname initials earlier in the alphabet, may be easier to remember.

Second, the fact that first authors appear first on every mention of their collaborative work (even when all the co-authors are listed), as well as the fact that reference lists are normally ordered alphabetically, may draw attention to authors with lower average surnames. In fact, this sort of influence on attention appears to be heavily exploited in the realm of advertising. For example, the 2003-2004 Los Angeles Westside Yellow Pages reveal more than 450 listed businesses with names containing a seemingly redundant initial A, as in "A-Approved Chimney Services," "A Any Way Bail Bonds," "A Budget Moves," and the like.

Third, the Social Science Citation Index in book form lists works according to first authors only, creating potential biases in citation counts favoring authors with lower initials. While the online version of the citation index corrects for this by accounting for all authors of the referenced work, this is so only for published work in journals covered by the citation index. For other types of research, such as working papers or books, only first authors are accounted for (according to the online guidelines for "cited ref" search in ISI's Web of Science), so some bias may still exist.

Our findings regarding authors' choices of co-authorships are important in ruling out one potentially appealing explanation. Suppose authors with later initials in the alphabet were reluctant to co-author, at least early in their careers. To the extent that co-authorships allow an author to write more papers, this effect alone would make the resumes of higher-initial authors shorter, leading to apparent alphabetical discrimination. Given our findings that such a response is only present for four- and five-author papers, which account for less than 3 percent of all multi-authored papers, we do not think that this channel can explain the observed patterns.

We remain agnostic as to which of these (or other) mechanisms are at work. Nonetheless, we maintain that some policy implications may be drawn from the observed effects of alphabetical placements. For example, economics journals could require the

termination of the use of "et al." Citations can appear as footnotes (as in law reviews) instead of endnotes, or their order can be determined by their importance, their order of appearance in the text, or by a chronological order of publication. The order of co-authors could be randomized or ordered by contribution (as in most other academic disciplines). At the individual level, economists entering the labor market could simply change their names. Indeed, one of us is currently contemplating dropping the first letter of her surname.

References

Bertrand, Marianne, and Sendhil Mullainathan (2004), "Are Emily and Greg More Employable Than Lakisha and Jamal? A Field Experiment on Labor Market Discrimination," *American Economic Review*, 94(4), 991-1013.

Einav, Liran, and Leeat Yariv (2004), "What's in a Surname? The Effects of Surname Initials on Academic Success," UCLA Working Paper No. 835.

Ellison, Glen (2002), "The Slowdown of the Economic Publishing Process," *The Journal of Political Economy*, 110(5), 947-993.

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

Gans, Joshua S., editor (2001), *Publishing Economics: Analyses of the Academic Journal Market in Economics*, Edward Elgar Publishing.

Hudson, John (1996), "Trends in Multi-Authored Papers in Economics," *The Journal of Economic Perspectives*, 10(3), 153-158.

Laband, David N., and Robert D. Tollison (2000), "Intellectual Collaboration," *The Journal of Political Economy*, 108(3), 632-662.

National Research Council Report (1996), http://www.socialpsychology.org/ranking.htm

Over, Ray, and Susan Smallman (1970), "Citation Idiosyncrasies," *Nature*, 228, 1357.

Persico, Nicola, Andrew Postlewaite, and Dan Silverman (2004), "The Effect of Adolescent Experience on Labor Market Outcomes: The Case of Height," *The Journal of Political Economy*, 112(5), 1019-1053.

Rosenblat, Tanya S., and Markus M. Mobius (2004), "Getting Closer or Drifting Apart?," *Quarterly Journal of Economics*, 119(3), 971-1009.

Shevlin, Mark, and Mark N. O. Davies (1997), "Alphabetical Listing and Citation Rates," *Nature*, 388, 14.

Thursby, Jerry G. (2000), "What do We Say about Ourselves and What Does It Mean? Yet another Look at Economics Department Research," *Journal of Economic Literature*, 38(2), 383-404.

Van Praag, C. Mirjam, and Bernard, M. S. van Praag (2004), "The Benefits of Being Mr. A instead of Mr. Z. An Empirical Analysis," mimeo, University of Amsterdam.

Zuckerman, Harriet A. (1968), "Patterns of Name Ordering among Authors of Scientific Papers: A Study of Social Symbolism and Its ambiguity," *American Journal of Sociology*, 74(3), 276-291.

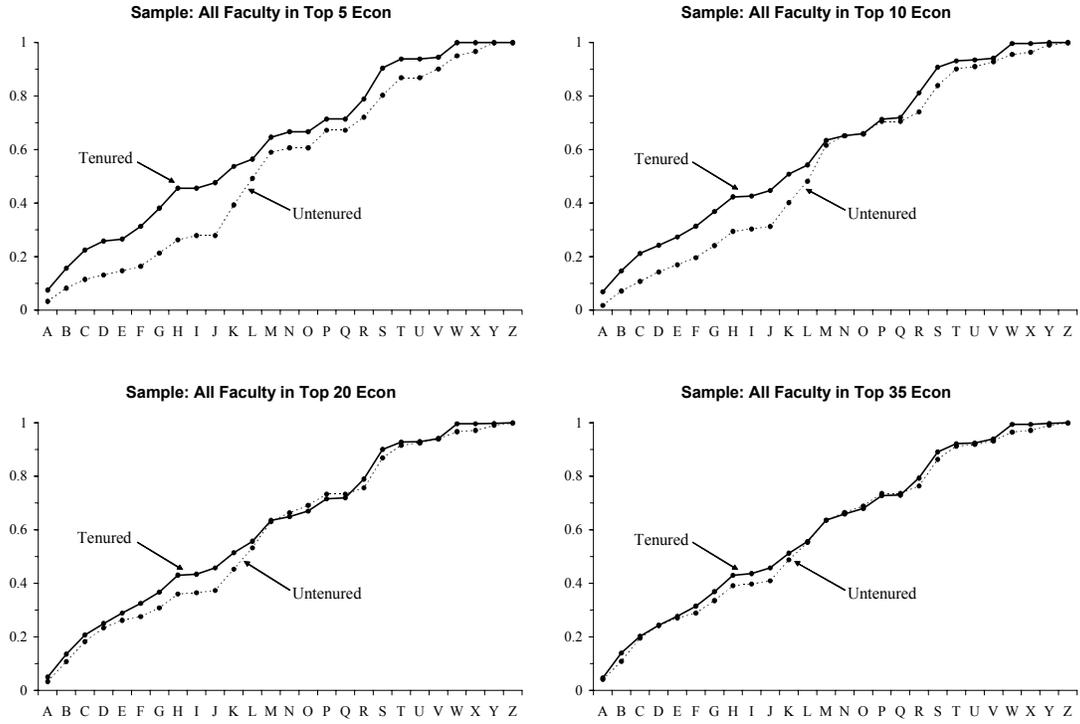Figure 1: Cumulative Distributions of Surname Initials in Economics by Tenure Status

Sample: All Faculty in Top 5 Econ

Sample: All Faculty in Top 10 Econ

Sample: All Faculty in Top 20 Econ

Sample: All Faculty in Top 35 Econ

Table 1: Linear Probability Regressions: Dependent Variable - 1 if Tenured (Economics)

Sample	Top 5 Econ		Top 10 Econ		Top 20 Econ		Top 35 Econ	
Last Name Initial	-0.0099**	-0.0086*	-0.0068**	-0.0063**	-0.0026	-0.0016	-0.0015	-0.0011
	(-2.18)	(-1.84)	(-2.08)	(-1.97)	(-1.12)	(-0.74)	(-0.84)	(-0.60)
American Nationality	-	0.2282**	-	0.2062**	-	0.1873**	-	0.1436**
		(3.61)		(4.63)		(5.78)		(5.53)
Six origin controls	no	yes	no	yes	no	yes	no	yes
R^2	0.0225	0.1209	0.0106	0.1115	0.0016	0.0947	0.0006	0.0716
Number of Obs.	208		405		799		1,233	
Number of Tenured (%)	147 (70.7%)		293 (72.3%)		585 (73.2%)		911 (73.9%)	

**, * Statistically significant at the 5% and 10% confidence level, respectively.

t-stats below coefficients.

Probit results are virtually identical (see tables 1 and 2 in Einav and Yariv (2004)).

Figure 2: Cumulative Distributions of Surname Initials in Economics by ES Fellowship Status
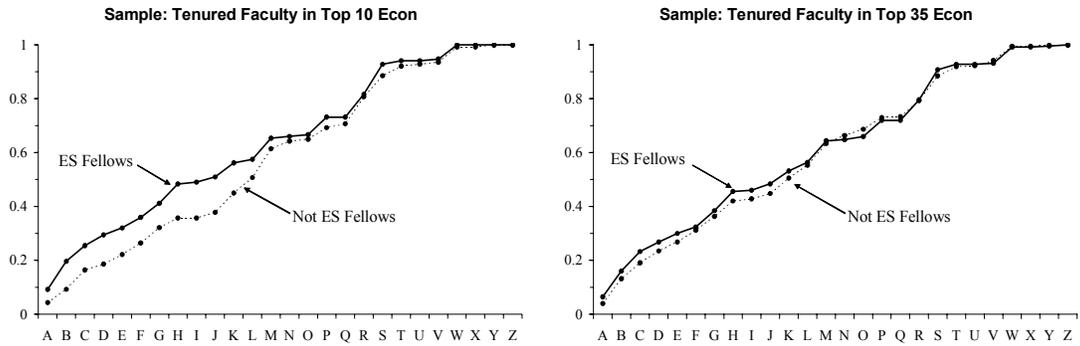
Table 2: Linear Probability Regressions: Dependent Variable - 1 if fellow of the Econometric Society

Sample	Tenured faculty at top 10 Econ		Tenured faculty at top 35 Econ	
Last Name Initial	-0.0077*	-0.0072	-0.0013	-0.0015
	(-1.82)	(-1.61)	(-0.58)	(-0.70)
American Nationality	-	0.0063	-	0.0561*
		(0.10)		(1.82)
Six origin controls	no	yes	no	yes
R^2	0.0113	0.0220	0.0004	0.0138
Number of Obs.	293		911	
Number of ES Fellows (%)	153 (52.2%)		250 (27.4%)	

* Statistically significant at the 10% confidence level.

t-stats below coefficients.

Probit results are virtually identical (see Table 3 in Einav and Yariv (2004)).

Figure 3: Cumulative Distributions of Surname Initials for Nobel Laureates and Clark Winners

Sample: Tenured Faculty in Top 10 Econ

Clark Winners

Nobel Laureates

All Tenured in Top 10

A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Sample: Tenured Faculty in Top 35 Econ

Nobel Laureates

Clark Winners

All Tenured in Top 35

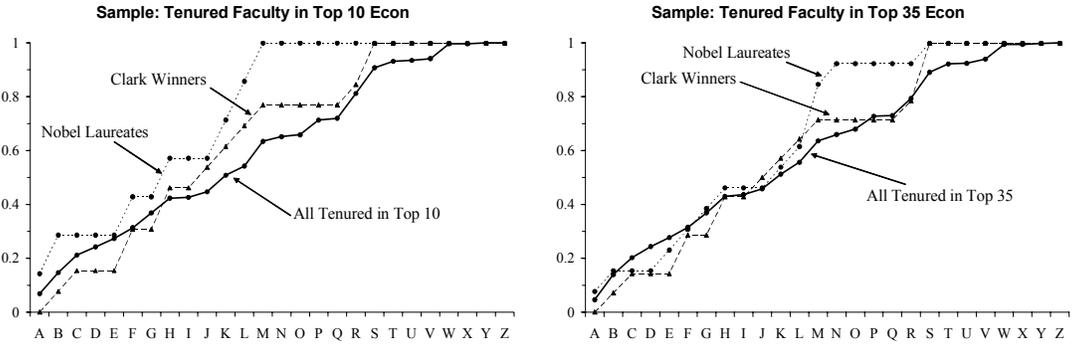A B C D E F G H I J K L M N O P Q R S T U V W X Y Z

Table 3: Linear Probability Regressions: Dep. Var. - 1 if Nobel Laureate or Clark Medal Recipient

Sample	Tenured faculty at top 10 Econ		Tenured faculty at top 35 Econ	
Measure	Nobel Prize	Clark Medal	Nobel Prize	Clark Medal
Last Name Initial[a]	-0.0018	-0.0007	-0.0005	-0.00004
	(-1.39)	(-0.40)	(-0.84)	(-0.07)
R^2	0.0066	0.0005	0.0008	0.0000
Number of Obs.	293	293	911	911
Number of winners (%)	7 (2.4%)	13 (4.4%)	13 (1.4%)	14 (1.5%)

t-stats below coefficients.

Probit results are virtually identical (see Table 4 in Einav and Yariv (2004)).

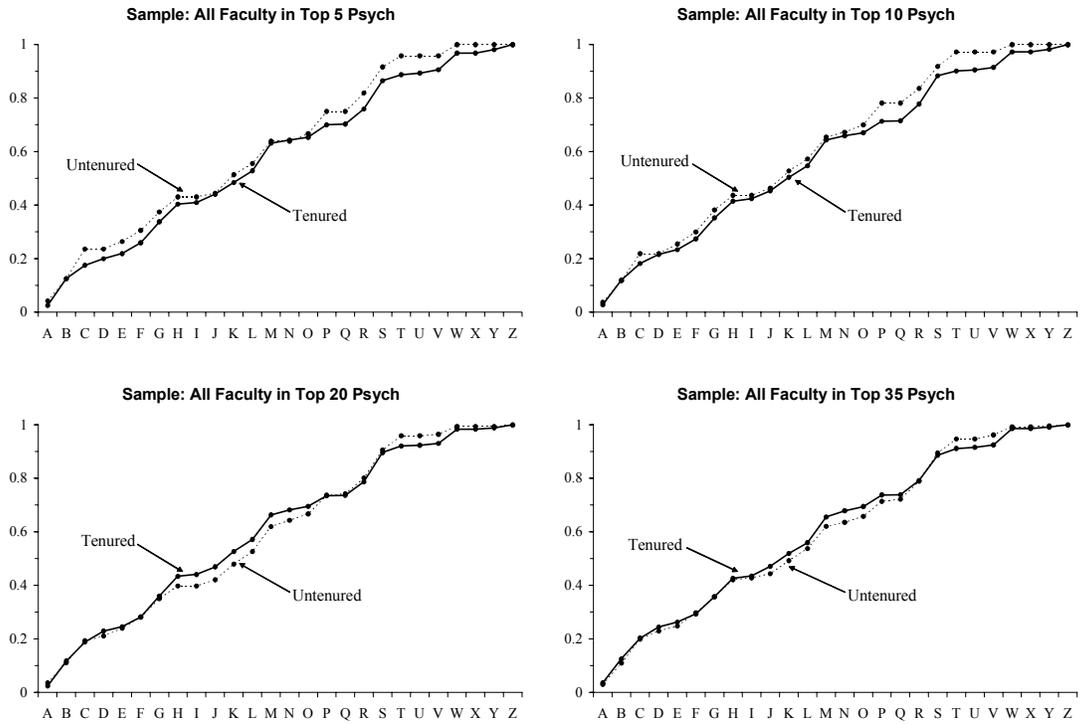Figure 4: Cumulative Distributions of Surname Initials in Psychology by Tenure Status

Sample: All Faculty in Top 5 Psych

Sample: All Faculty in Top 10 Psych

Sample: All Faculty in Top 20 Psych

Sample: All Faculty in Top 35 Psych

Table 4: Linear Probability Regressions: Dependent Variable - 1 if Tenured (Psychology)

Sample	Top 5 Psych		Top 10 Psych		Top 20 Psych		Top 35 Psych	
Last Name Initial	0.0026	0.0027	0.0026	0.0027	-0.0007	-0.0002	-0.0005	-0.0001
	(0.93)	(0.97)	(1.06)	(1.09)	(-0.34)	(-0.11)	(-0.36)	(-0.07)
Six origin controls	no	yes	no	yes	no	yes	no	yes
R^2	0.0022	0.0743	0.0020	0.0542	0.0001	0.0315	0.0001	0.0294
Number of Obs.	392		556		904		1,466	
Number of Tenured (%)	320 (81.6%)		446 (80.2%)		733 (81.1%)		1,200 (81.9%)	

t-stats below coefficients.

Probit results are virtually identical (see Table 5 in Einav and Yariv (2004)).

Table 5: Publication Statistics

Number of Authors[a]		Obs. (%)	Mean Initial	Std. Dev.
1		3,378 (49.8%)	11.38	6.95
2		2,691 (39.6%)	11.43	4.97
	Alphabetically	2,460 (91.4%)	11.39	4.98
	Non-Alphabetically	231 (8.6%)	11.91	4.83
3		628 (9.3%)	11.60	4.08
	Alphabetically	507 (80.7%)	11.44	4.07
	Non-Alphabetically	121 (19.3%)	12.28^^	4.07
4		84 (1.2%)	10.55**	3.38
	Alphabetically	26 (31.0%)	8.60	3.16
	Non-Alphabetically	58 (69.0%)	11.43^^	3.12
5		8 (0.1%)	7.18**	3.25
	Alphabetically	0	-	-
	Non-Alphabetically	8 (100%)	7.18	3.25
All Multi-Authored		3,411 (50.2%)	11.43	4.78
	Alphabetically	2,993 (87.7%)	11.37	4.83
	Non-Alphabetically	418 (12.3%)	11.86^^	4.43

Alphabetical order refers to alphabetical ordering of all authors.

[a] No paper in the data set has more than five authors.

** Significantly lower (at 5%) than single-authored papers; the test is based on Table 7 in Einav and Yariv (2004), which reports the results from a linear regression of the mean initial on a set of "number of authors" dummy variables interacted with an alphabetically-ordered dummy variable.

^^ Significantly higher (at 5%) than the corresponding alphabetically-ordered multi-authored papers; the test is based on Table 7 in Einav and Yariv (2004), which reports the results from a linear regression of the mean initial on a set of "number of authors" dummy variables interacted with an alphabetically-ordered dummy variable.