Internal Markets for Department Chairs:

Comparative Advantage, Life-Cycle, and Jury Duty*

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We examine the internal market for department chairs in U.S. universities and provide the first empirical evidence concerning the determinants of departmental chair service using data from the economics departments in eight large public universities. The results reveal the wage premium for chairs increases with length of service and continues for an extended period thereafter. The chair premium largely represents compensation for foregone research and the attendant atrophy of research skills. The empirical results also indicate that departments tend to choose productive scholars to serve as chair, but avoid putting their most productive scholars in that position unless they are past their peak productivity period in their life-cycle.

I. Introduction

Although a large number of academics serve as department chairs or in similar administrative posts during their careers, many do not. And for most of those who do, their terms as chair are typically temporary rather than a permanent step into academic administration. In light of these observations, questions arise: Which faculty members are willing to serve as chair and, from among those individuals, whom do departments choose? In particular, do departments minimize the opportunity cost of filling the chair position, or are there other forces at work? These questions lie at the heart of understanding the internal markets for department chairs.

In private firms an administrative appointment is generally the result of superior performance and is often only one of a series of promotions during the individual's career. If successful with the new duties, the individual will likely never return to his or her original position, but will instead rise in the firm's administrative ladder or elsewhere. In contrast, the department chair position plays a different role in the career of university faculty. Although the chair position may be a stepping-stone to other administrative posts for some individuals, for most it is not a promotion per se. Instead, it is a period during which the individual's duties shift from teaching and research to administrative functions. When the term is completed, though, even the most successful chair often returns to his or her role as a regular member of the department faculty. Given this difference, it is perhaps not surprising that the incentives and career ladder models used to explain promotion policies of private firms appear to provide little to explain the periods of service as department chair.

We examine the factors affecting whether or not an individual ultimately serves as department chair and offer the first empirical study of how the internal (to the department) market for chairs operates, using data from the economics departments in several large public universities.

The existing literature focuses on how serving as a chair affects salary or research productivity (Katz, 1978; Seigfried and White, 1973; Saks, 1977; Tuchman and Leahey, 1975; Hammermesh et al., 1984; Sauer, 1988; Goodman and Sauer, 1995; Ragan and Rehman, 1996). The empirical consensus is that serving as department chair reduces research productivity during the term of service as well as permanently thereafter. Serving as department chair also generates a salary differential for the duration of the term that lingers long after the individual has left the position. These results are consistent with the notion that the chair's salary increment is at least in part a compensating differential for foregone contemporaneous and future research productivity. However, this important conclusion does not provide a sufficiently complete model of the internal department chair market.

When considering how departments choose their chairs, it is tempting to focus on idiosyncratic features of specific individuals and universities. For example, a department in a university that has recently undergone a complete change in upper administration is likely to be buffeted by forces that are often temporary, subsiding once the new administration is firmly ensconced. In order to minimize the influence of such passing idiosyncratic factors that can obscure the fundamental economic forces at work in the internal market for department chairs, our data set covers a cross section of economics departments in eight large public universities. Furthermore, by focusing on economics

departments alone, we avoid the difficulties associated with measuring research productivity and opportunity costs across disciplines.

The economics departments in our sample emphasize research as an important component in their overall missions. Our hypothesis is that, although these departments may want an experienced researcher as chair, they will also try to staff the position at the lowest opportunity cost. We consider two components of cost minimizing behavior, comparative advantage and life-cycle effects. The former is the notion that departments prefer relatively less productive individuals as chairs. The latter is the notion that departments prefer to draw their chairs from faculty who are past their peak publishing phase in the typical life cycle.

Finally, we also consider "the luck of the draw" as an alternative explanation. This view simply maintains that being called on to serve as a department chair is much like being called on for jury duty - a more or less random event.

The discussion is organized as follows. Section II describes the model of the internal market for department chairs. Section III examines how serving as chair affects faculty salary, both during the term of duty and after. Section IV examines the factors that influence the choice of chair, and Section V concludes.

II. The Internal Market for Department Chair

Economists should carry their professional focus on resource allocation questions over into departmental policy decisions, so economics departments should consider opportunity costs in making decisions.[1] Still, personalities and the institutional decision process can affect observed outcomes; the empirical question is whether or not these factors significantly affect the faculty's ability to staff its chair at minimum cost. The

inability of a committee or group of individuals to behave as if they have well-defined preferences is well documented.[2] The problem is further complicated by the fact that choosing a chair typically involves more than garnering a simple majority of department faculty votes. The input of deans or other external agents in the decision can create agenda control or other structure-induced equilibrium effects.

Nonetheless, it is not clear that higher levels of university administration will necessarily drive the department's choice away from the lowest opportunity cost solution. The salary analysis in the next section shows that chair's pay is largely a compensating differential for the individual's foregone research. Thus, higher-level administration interested in filling departmental administrative posts at the lowest salary cost would in effect support the lowest opportunity cost choice.

Finally, we also note that the influence of interest groups in the group decision process also need not negate a tendency for departments to minimize costs. In general, we expect that individual faculty prefer chair candidates who support a specific agenda; the candidate with the greatest political support in the department is the one who best represents the dominant interest group. Within our model the pivotal interest group would also offer, from within its acceptable set of individuals, a candidate representing the lowest opportunity cost to the department.

III. Chair Service and Salary

This section examines the relative rewards to serving as department chair and how the structure of the rewards during and following the term of office affect research productivity. Previous studies have estimated the earnings premium associated with service as a chair and virtually all find a significant positive premium - somewhere

between 15 and 30 percent (Siegfried and White, 1973; Ferber, 1974; Tuckman and Leahey, 1975) - although Katz (1978) finds no significant premium. Saks (1977) and Ragan and Rehman (1996) provide evidence on the durability of this premium after an individual steps down. Though their data and approaches differ considerably from that herein, both conclude that the chair premium erodes slowly over time.

The Data and Variable Definitions. Our personal characteristics and productivity data are constructed using information drawn from the complete set of individual vitae of full-time, tenure-track faculty members in Ph.D. granting economics departments in the U.S.[3] Salary information is constructed from the university budgets, which were readily available for all of the public universities in the data set.

The vitae are complete through the 1992-1993 academic year. An individual's vita permits us to construct variables that measure cumulative career productivity as of 1993, and variables measuring productivity at particular points along the experience-productivity profile. Our sample consists of eighty-seven associate and full professors. There are 27 faculty members with former or current experience as chair. Assistant professors were excluded because none had served as chair.

The economics departments are similar in that they are all in public universities and all house Ph.D. programs. According to the rankings reported in Scott and Mitias (1996), the departments in our data set rank between thirtieth and seventy-fifth in the U.S.[4] We expect that these departments have broadly similar research, teaching, and service missions. Consistent with this expectation, a comparison of faculty at these departments reveals similar demographic characteristics and publication records.

Professional *Experience* measures the number of years of post-Ph.D. academic job experience. *Seniority* is the number of years employed at the current institution in a permanent tenure-track position. *Sex* is a dummy variable taking a value of one for males. *Foreign* is a dummy variable indicating whether the individual received his or her undergraduate degree from a non-English-speaking country. *Pedigree Ph.D.* is a dummy variable indicating whether the individual earned his or her Ph.D. at one of the top graduate programs in economics in the U.S. A number of economics graduate programs rankings exist, based on opinion surveys as well as departmental publications (Moore, 1972; Siegfried, 1972; Bell and Seater, 1978; Graves et al., 1982; Hogan, 1986; Scott and Mitias, 1996). We identify the top programs as only those that were highly ranked in virtually all of these studies: Chicago, Harvard, M.I.T., Michigan, Minnesota, Northwestern, Pennsylvania, Princeton, Stanford, Berkeley, UCLA, Wisconsin, and Yale.[5]

Our measures of individual research productivity attempt to control for both quality and quantity. We stratify each individual's publications across tiers of economics journals, representing a broadly defined but meaningful index of research quality. The top-tier journals comprise, in alphabetical order, the *American Economic Review, Econometrica, Economic Journal, Economica, International Economic Review, Journal of Economic Theory, Journal of Political Economy, Quarterly Journal of Economics, Review of Economic Studies,* and the *Review of Economics and Statistics.* There is no unanimous agreement in the economics profession concerning which journals represent the top-tier. Our list of top 10 journals includes the top 8 identified by Conroy et al. (1995) plus the *Economic Journal* and *Economica.* This list contains the most significant

journals for our sample. Although the reputations of several of the journals in our top-tier may have slipped in recent years, they are clearly relevant for the senior faculty in our sample who published in them before they lost prestige in the profession.

We also identify second-tier journals as widely recognized second-tier general interest journals and the best field journals. We used the adjusted citation rankings in Liebowitz and Palmer (1984) to guide our choice of journals. We also relied upon the recent department quality ranking by Scott and Mitias (1996) to help identify some newer field journals appropriate for this set. The Appendix lists the 45 second-tier journals.

The variable *Total Publications* is the broadest measure of research productivity. It is the sum of all books and journal articles listed on an individual's vita. *Citations* measures the total citations to an individual's published work as reported in the *Social Science Citation Index*. This measure includes all co-authored citations regardless of listed order of authors. *Teaching Award* is a dummy variable included in the salary equation as a proxy for teaching quality. The variable takes a value of one if the individual has ever won a teaching award.

Table 1 presents summary statistics for the faculty in our sample. The full professors in our sample have an average of almost 22 years experience since earning their Ph.D.s. With an average of 16 years seniority, they have spent about 75 percent of their careers at their current university. Six percent earned their undergraduate degrees in non-English-speaking countries, and 41 percent obtained their Ph.D.s from the top-tier programs.

The associate professors have about 14 years of experience on average, with 12 years at their current institution. Twelve percent earned their undergraduate degrees in

non-English-speaking countries - over twice the percentage of full professors - and 44 percent obtained their Ph.D.s from the top-tier programs.

All of the departments in our sample emphasize publications, so it is not surprising that many of the faculty publish regularly. Although the faculty in the sample publish in journals at all levels, they publish fewer papers in the top-tier journals than in lower level journals. On average, both full and associate professors tend to publish most heavily in journals outside the sets of journals identified as level-one and two herein and publish more articles in level-two journals than in level-one journals. Still, 76 percent of the individuals in the sample have published in the top-tier journals, and 92 percent have published in second-tier journals. The average number of career citations is 147, although two individuals have garnered over 1,000 citations each.

The Salary Model. Our salary equation modifies the usual reduced form hedonic framework in order to focus on how serving as chair affects faculty salaries. The dependent variable is the log of the 1992-1993 nine-month salary, excluding consulting or royalty income or other outside income. The explanatory variables include the individual characteristics and productivity measures typical of academic salary models (Moore et al., 1998).

The basic version of the salary equation is reported in Table 2. The signs and significance of the coefficients on the individual characteristics and productivity variables follow those found elsewhere. Of particular interest for this study, the coefficients for *Total Publications*, *Level I Articles*, and *Level II Articles* clearly reveal that the departments in our sample value published research and reward higher quality research (at least as indicated by higher ranked journals) more than lower quality research. These

departments value articles in level-one journals almost twice as much as articles in level-two journals.

The Chair Premium. We include *Years as Chair* in the salary equation to capture the earnings differential attributable to an individual's accumulated experience as chair. We define this variable as the number of years an individual has served as a department chair, either currently or in the past.

The earnings equation in Table 2 reveals a positive and significant return to experience as chairperson. Chairs in our sample receive somewhat less than two percent premium for each year of service. Under this specification, the payoff to a chairperson with the sample average of 5.63 years of chair experience is about 9.7 percent.

How Durable Is the Chair Premium? While our chair premium estimate is broadly consistent with previous studies, it is still not entirely clear what kinds of productivity effects are being rewarded. A chairperson might be rewarded for enhancing the teaching and research productivity of other faculty members by creating a conducive environment or by successfully obtaining additional resources for the department. Another possibility is that any positive rewards paid to chairpersons may also reflect purely compensating wage payments (combat pay) for performing a difficult or dissatisfying job. To the extent that the observed chair premium is due to one of these two hypotheses, it should not increase with each additional year of chair experience, and it should last only as long as the individual remains in that position.

On the other hand, Goodwin and Sauer (1995) show that an individual's research productivity falls precipitously during, and particularly after, a term as department chair. Therefore, an alternative possibility is that the chair premium is the payment necessary to

offset the high opportunity cost of forgone research time and the attendant atrophy of research skills while in office. If so, the chair premium should rise with the length of the term served and persist for a significant period of time after the individual leaves the position; without the persistent salary premium, productive scholars could not be attracted to serve as department chair.

These arguments suggest that the way in which both cumulative length of term and the pattern of lagged effects are reflected in the individual's salary can reveal the driving force behind the chair premium. A premium that does not increase with the length of term and rapidly diminishes after leaving office is consistent with the notion that the chair premium is a direct reward for administrative duties or is combat pay. Alternatively, a premium that increases with length of term as chair coupled with persistence after relinquishing the department chair is consistent with the notion that the premium is primarily compensation for the opportunity cost of foregone research and the atrophy of research skills.

To estimate the rate at which the chair premium dissipates after an individual leaves office, the model in Table 3 extends the base earnings equation to include *Years Since Leaving,* the number of years since an individual last served as chair: *Years Since Leaving* = (93 - Year last served). This variable equals zero for both current chairpersons and those who have never served as chair. The coefficient on this variable (and its square, in the quadratic specification) reflects the rate of decay in the chair premium once the individual relinquishes the position.

Table 3 reports the estimated coefficients for the base salary model in Table 2 plus the expanded set of chair experience variables. We include the square of *Years Since*

Leaving under the assumption that the dissipation profile for a former chairperson's premium may be nonlinear.

Based on these estimates, chairs receive a 2.7 percent premium for each year of service while in that position. Thus, the payoff for serving the sample average of 5.63 years is about 15.2 percent - an estimate that is substantially higher than found in Table 2, but within the range of estimates found in previous studies. More importantly, though, the estimates reveal that the accumulated premium associated with chair experience dissipates rather slowly after leaving office and at a decreasing rate over time. Overall, the observed pattern is for the salary differential associated with service as chair to rise with time in office and then to decay over time following resignation.[6] The decay profile is convex. An estimated ten years pass before the accumulated chair premium has been fully dissipated.

The pattern of returns found in our sample suggests that the chair premium represents compensation for lost research productivity rather than compensation for simply undertaking an onerous task. Whatever the driving force behind the premium, however, the full return to chair service includes not only the premium earned while in office, but also the lingering premium that continues after leaving office.

IV. The Choice of Department Chair

The estimated salary equations reveal that, as expected, the departments in our sample value published research and pay chairs a premium as compensation for lost research opportunities. Thus a budget-conscious university administration would tend to reinforce any faculty tendency to choose chairs with lower opportunity costs. This section uses a reduced form probit model to examine the empirical determinants of serving as

department chair and, in particular, the competing cost-minimization and jury-duty hypotheses.

The dependent variable in the empirical models is *Chair,* a binary variable that takes the value of one for faculty who have served (or are currently serving) as chair some time during their career. The explanatory variables include the individual characteristics and productivity measures introduced earlier as well as other variables to test the cost-minimization hypotheses, as explained below.

None of the female faculty in our sample served as department chair, so we do not include a gender dummy variable in the model. We have no expectations concerning how the dummy variables *Foreign* and *Pedigree PhD* affect the likelihood of chair service. They are nonetheless included in the model.

Other individual characteristics include *Experience* and *Seniority.* Our cost-minimization or jury-duty hypotheses predicts that there should be no significant relationship between the experience variable and chair service when controlling for relative productivity effects measured across individuals and within each individual's life-cycle. Under the jury-duty hypothesis, however, simply serving a greater number of years on the faculty of a single university increases the cumulative probability of chair service. Therefore the jury-duty hypothesis calls for a significantly positive coefficient on seniority when controlling for productivity effects.

The variable *Citations* is included as a research quality control. Testing the cost-minimization hypothesis, however, requires measuring relative research productivity while controlling for both quality and quantity of publications. To construct such

measures, we stratify each individual's publications across the tiers of economics journals identified in the previous section.

Recall that the cost-minimization hypothesis comprises two components. The first rests on comparative advantage. That is, departments tend to choose faculty who are relatively less productive in publishing than their colleagues. To test this hypothesis we construct quality-adjusted measures of individual faculty relative to their department colleagues. For individuals who are serving or have served as department chairs, the relative productivity variables *Relative Level I* and *Relative Level II* are defined as the individual's average number of publications in the top-tier or second-tier journals, respectively, *at the time of chair appointment*, relative to the department average for the full professors in the sample. For individuals who are not or have not been chairs, the two variables *Relative Level I* and *Relative Level II* measure the individual's productivity to date in top-tier and second-tier journals, respectively, relative to the department average. Negative coefficients imply that chairs are selected from among the relatively less productive department members - the cost-minimization hypothesis based on comparative advantage.

The second cost-minimization argument rests on life-cycle effects; departments tend to choose as chairs faculty who are beyond their peak research productivity years. To test this hypothesis, we construct quality-adjusted measures of an individual's life-cycle productivity. For an individual who has chair experience in our sample, we define *Life-Cycle I* as the level-one publication rate during the five years immediately preceding the term as chair, relative to the annual productivity rate over his career (up to the appointment to chair). For an individual who has never served as a department chair, we

define *Life-Cycle I* as the level-one publication rate during the most recent five years, relative to the annual productivity rate over his career to date. The variable *Life-Cycle II* is similarly defined for level-two publications. Given the typical life-cycle pattern of increasing then declining publication rates (Goodwin and Sauer, 1995), a negative coefficient implies that departments tend to choose their chairs from the faculty who are past the peak years of research productivity in their life-cycle.

Table 4 reports the probit estimates for the chair determinants model. The *Experience*, *Experience*^{2}*, Pedigree PhD,* and *Foreign* coefficients are not significant. The coefficient estimates for the variables of central interest, however, are significantly different from zero.

The *Relative Level I* coefficient is significantly negative while the *Relative Level II* coefficient is significantly positive. The former implies that those individuals who publish relatively more heavily in level-one journals are less likely to serve while the latter implies that those who are relatively more productive publishing in level-two journals are more likely to serve as chair. Together, this pattern reveals an interesting twist on our cost-minimization hypothesis. As indicated in the salary equations reported in Table 2, the departments in our sample value level-one journal articles highly, almost twice as much as level-two articles. These departments tend to avoid putting their most productive level-one researchers into the chair position.[7] At the same time, while level-two articles are valued, these departments are more willing to put their more productive level-two publishers into the chair position. This pattern of coefficients is consistent with the comparative-advantage version of the cost-minimization hypothesis, somewhat mediated by dominant interest group affects. Departments pick relatively more

productive scholars as chair, but not the most highly prized scholars. Since the departments in our sample all share a research focus, putting productive researchers into the chair position is consistent with what we would expect to be the dominant interest group; a productive scholar has revealed that he or she values research and is therefore likely to pursue policies that support the department's research mission. At the same time, though, these departments avoid having their most highly prized research scholars - those publishing relatively more level-one papers – serve as chair. While faculty value a chair who excels in research, they apparently attempt to avoid incurring too high of an opportunity cost; giving up level-two journal articles is costly, but not as costly as giving up the relatively more scarce level-one articles.

We see a similar pattern in the coefficients of *Life-Cycle I* and *Life-Cycle II.* The significantly negative *Life-Cycle I* coefficient implies that individuals are less likely to serve as department chair before reaching the diminishing portion of their level-one research productivity profile. The significantly positive *Life-Cycle II* coefficient, on the other hand, suggests that individuals who have not yet reached the diminishing portion of their level-two research productivity profile are more likely to serve as department chair. The *Life-Cycle I* estimate is clearly consistent with the life-cycle-cost-minimization hypothesis. At first glance, however, the *Life-Cycle II* coefficient estimate appears to be inconsistent with cost minimization. All other things equal, we expect that departments tend to select chairs from faculty who have reached the downside of their life-cycle productivity in terms of level-two journal articles. On the other hand, this pattern is consistent with a dominant interest group effect to the extent that research faculty prefer chairs who are actively engaged in research when appointed. But again, the level-one

coefficient indicates that they are unwilling to incur a higher opportunity cost than necessary to get a currently productive scholar to fill the chair position.

These coefficient patterns help explain the significantly positive effect of *Citations* on serving as chair. Consistent with the variables associated with publications in level-two journals, departments prefer individuals with a record of quality publications (as reflected in a greater number of citations). But again, the negative coefficients on the level-one journal publications variables indicate the avoidance of high opportunity cost.

Finally, if the relative and life cycle productivity variables had been insignificantly different from zero, the positive *Seniority* coefficient would be consistent with the jury-duty hypothesis; chair service is simply the luck of the draw. The significant productivity variables, however, rule out the jury-duty hypothesis. Coupled with those results, the positive seniority effect implies that the departments in our sample tend to recruit department chairs from faculty who have been in the department longer rather than selecting from the more recent arrivals. Simply put, these departments have not had a penchant for recruiting externally for their chairs. In our sample, we are aware of only one individual who was hired externally to serve as chair.

V. Conclusion

We examine the internal market for department chairs. Instead of serving as a stepping stone to higher administrative positions, many faculty regard service as chair as a temporary shift in their duties away from teaching and research to administrative functions. Taking over the chair duties, however, not only reduces research productivity during the term, but it also has deleterious effects on the individual's research profile thereafter. For research-oriented departments, then, the choice of a productive faculty

member for chair implies both an immediate and an enduring opportunity cost. Our hypothesis is that economics departments choose from among the set of likely candidates those with a lower opportunity cost.

We use data from eight Ph.D. economics departments in public universities to test this cost-minimization hypothesis. At these eight programs there are a total of 27 current and former chairpersons. For each of these observations we are able to construct detailed productivity measures for the periods prior to, during, and subsequent to their tenure as chair. We conclude that the departments in our sample tend to select chairs from among their relatively more productive faculty, but avoid choosing the most productive faculty. Furthermore, there is some evidence that when the most productive faculty do serve terms as chair, they tend to serve when they are entering the declining portion of their research life cycle. Overall, these economics departments apparently prefer currently productive scholars as chairs, but this preference is balanced by a desire to fill the position without incurring an unduly high opportunity cost in the form of foregone published research.

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Table 1

Characteristics of Faculty at Eight Ph.D. Programs in Economics, 1992-93 Means

Variable	Professors	Associate Professors
Salary ($)	$73,633 (20,019)	$52,343 (7,871)
Experience	21.85 (6.13)	14.41 (5.63)
Seniority	16.20 (7.62)	12.24 (6.42)
Total Publications	43.37 (35.73)	16.51 (8.83)
Level I Articles	3.86 (4.42)	2.15 (2.03)
Level II Articles	10.19 (8.51)	4.24 (3.15)
Career Citations	147.71 (198.69)	30.49 (34.36)
Teaching Award	.21	.12
Males	.98	.95
Foreign	.06	.12
Pedigree Ph.D.	.41	.44
Sample Size	87	41

Note: Standard deviation in parentheses.

Table 2
Determinants of Earnings for Tenured Faculty

Variable	Coefficient	$\lvert t \rvert$ - statistic
Experience	.0104	(0.93)
Experience^2	-.0002	(0.91)
Seniority	-.0004	(0.11)
Sex (male=1)	-.0015	(0.02)
Pedigree Ph.D.	.0123	(0.39)
Foreign	.0126	(0.23)
Teaching Award	.0848*	(2.19)
Total Publications	.0014*	(1.98)
Level I Articles	.0286*	(5.45)
Level II Articles	.0166*	(6.07)
Career Citations	.0008*	(3.90)
*Citations * Total Publications*	-.0001*	(5.48)
Years as Chair	.0173*	(3.12)
Intercept	10.8255	(81.77)
d.f.	105	
Adjusted R^2	.73	

Notes: Dependent variable is log of 9-month salary. Department dummy variables are included but not reported. * Significant at the .05 level.

Table 3

Effects on Relative Earnings of Leaving Chair Service

Variable	Coefficient	| *t* | - statistic
Years as Chair	.027*	4.07
Years Since Leaving	-.038*	2.94
(Years Since Leaving)^2	.002*	2.76
Adjusted R^2	.74	

Notes: Also included in the regression are the other variables listed in Table 2. * Significant at the .01 level.

Table 4
Probit Estimates for Department Chair Determinants

Variable	Coefficient (t ratios)
Relative Level I	-0.0872* (4.97)
Relative Level II	0.705* (3.54)
Life-Cycle I	-0.653* (3.71)
Life-Cycle II	0.472* (2.98)
Career Citations	0.006* (14.96)
Experience	-0.265 (1.22)
Experience^2	-0.001 (0.01)
Seniority	0.224* (16.65)
Foreign	-0.680 (0.25)
Pedigree Ph.D.	-0.550 (1.61)
Constant	-0.441 (0.05)
Log-Likelihood	-26.14
Number of Observations	125

Note: * Significant at the .01 level.

APPENDIX - Level II Journals

1. *American Economics Association Papers and Proceedings*
2. *American Journal of Agricultural Economics*
3. *Brookings Papers on Economic Activity*
4. *Canadian Journal of Economics*
5. *Econometric Theory*
6. *Economic History Review*
7. *Economic Development and Cultural Change*
8. *Economic Inquiry*
9. *History of Political Economy*
10. *Industrial and Labor Relations Review*
11. *Journal of Business*
12. *Journal of Business and Economic Statistics*
13. *Journal of Comparative Economics*
14. *Journal of Econometrics*
15. *Journal of Economics Dynamics and Control*
16. *Journal of Economic History*
17. *Journal of Economic Literature*
18. *Journal of Economics and Organization*
19. *Journal of Environmental Economics and Management*
20. *Journal of Finance*
21. *Journal of Financial Economics*
22. *Journal of Financial and Quantitative Analysis*
23. *Journal of Health Economics*
24. *Journal of Human Resources*
25. *Journal of Industrial Economics*
26. *Journal of Institutional and Theoretical Economics*
27. *Journal of International Money and Finance*
28. *Journal of International Economics*
29. *Journal of Labor Economics*
30. *Journal of Law and Economics*
31. *Journal of Legal Studies*
32. *Journal of Money Credit and Banking*
33. *Journal of Macroeconomics*
34. *Journal of Mathematical Economics*
35. *Journal of Monetary Economics*
36. *Journal of Public Economics*
37. *Journal of Regional Science*
38. *Journal of the American Statistical Association*
39. *Journal of Urban Economics*
40. *Kyklos*
41. *National Tax Journal*
42. *Oxford Economic Papers*
43. *Public Choice*
44. *Rand Journal of Economics*
45. *Southern Economic Journal*

NOTES

*We wish to thank James Bennett for his helpful comments and suggestions on an earlier version of this paper. We are responsible for any errors.

[1] And, similary, if economics departments do not behave as if they minimize costs when filling chair positions, it is reasonable to infer that other departments do not behave that way, too.

[2] For example, Plott (1967). Interestingly, though, the public choice literature reveals that even complex group decision environments may in practice generate outcomes that can be rationalized by a well behaved preference structure (Turnbull and Chang, 1998).

[3] Vitae were supplied by members of these departments in response to personal requests on the condition that the identity of the departments remain confidential. The data set includes only those departments for which complete vitae could be obtained for all faculty. Earlier work by Moore et al. (1998) uses nine public universities, which includes the eight in our data set herein. The ninth university could not be used because the vita of its single faculty member with department chair experience did not contain all of the information needed for this study.

[4] The range of schools running from thirtieth to seventy-fifth is not as wide a range as it may first appear. Scott and Mitias (1996) show that the difference in publication performance between the thirtieth and seventy-fifth ranked departments is extremely

small when compared with, for example, the difference between the tenth and thirtieth ranked departments.

[5] Our results were unaffected using a smaller set including only Chicago, Harvard, MIT, Yale, Pennsylvania, and Stanford.

[6] Although our empirical specification is different, these results are very similar to those reported by Saks (1977) for department chairs at Michigan State University. We also estimated the model using Saks' specification. Since the results are qualitatively similar, we opt for the more straight-forward quadratic specification.

[7] Alternatively, perhaps these individuals may be unwilling to serve because rewards to continuing level-one publications may outweigh chair returns.