

# **Gender Differences in the Careers of Academic Scientists and Engineers**

Special Report

Division of Science Resources Statistics  
Directorate for Social, Behavioral, and Economic Sciences

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**National Science Foundation**



June 2004



# **Gender Differences in the Careers of Academic Scientists and Engineers**

Special Report

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# SECTION 1. INTRODUCTION

The typical postsecondary academic career follows a well-ordered path with several discrete milestones. The first of these is securing a tenure-track position at an academic institution, at which point the individual is usually assigned to a junior rank, such as assistant professor. Junior faculty members ordinarily are employed on probation and are given a specified number of years to earn tenure. The second milestone, the tenure decision, is perhaps the most critical point on the academic career path. Earning tenure usually means lifetime employment and arrival at another milestone, promotion to the rank of associate professor. Failing to earn tenure often results in termination of employment at the institution. Some doctorate holders, presumably those who establish distinguished records, reach a final milestone with promotion to the rank of full professor.<sup>1</sup>

This study uses data from a nationally representative sample of recipients of doctorates in science and engineering (S&E). With these data we examined gender differences for four critical outcomes that reflect successful movement along the postsecondary academic career path. These four critical outcomes are tenure-track placement, earning tenure, promotion to the rank of associate professor, and promotion to the rank of full professor.

## STUDY DESIGN

We conducted this study in two phases. Phase I examines whether a doctorate recipient's sex is related to the likelihood of successfully achieving outcomes at specific points in time along the academic career path. Phase II, which is longitudinal, examines whether their sex is related to the amount of time it takes doctorate recipients to achieve career milestones.

## DATA

Both phases of this study used data from the Survey of Doctorate Recipients (SDR).<sup>2</sup> The SDR surveys individuals who earned doctorates in S&E in the United

States. The survey is conducted every two years and provides information on individual doctorate recipients' academic field, career outcomes, and many personal characteristics (e.g., birth date, sex, and race/ethnicity).

The Phase I data include individuals who reported working full-time in academia and who appeared in the 1981 through 1997 waves of the SDR. The Phase II data include doctorate recipients reporting full-time academic employment in the 1997 SDR wave. Because the Phase II analysis tracked individuals from the time they earned their doctorates until the time of the 1997 survey, it also used some data from earlier SDR waves. These data include information required to construct work and family histories.

We emphasize that the SDR data include only those individuals who have earned doctorates in S&E<sup>3</sup> in the United States. As a result, our analyses do not consider career outcomes of individuals employed in academia who have not earned doctorates, individuals who have earned degrees in fields other than S&E, or individuals who earned doctorates outside the United States.

## MODELING APPROACH

In both phases of our study we used multivariate statistical techniques that allowed us to control for factors other than sex that might be related to career outcomes.<sup>4</sup> All of the models we estimated include measures of human capital,<sup>5</sup> variables distinguishing academic fields and personal and family characteristics, and controls for when the doctorate was earned. Some of the models we estimated also include a set of selection variables reflecting characteristics of the employer and the primary work activity. These models should be interpreted cautiously because the selection variables themselves are outcomes that could be determined by the same processes that cause gender differences in tenure-track placements, tenure, and promotions to senior academic ranks.

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<sup>1</sup> There are, of course, meritorious promotions beyond the full professor rank. Endowed chairs and promotions to high-level administrative positions are examples.

<sup>2</sup> The National Science Foundation (NSF) provides principal support for the SDR.

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<sup>3</sup> The sciences include both the natural and social sciences. Engineering fields include chemical engineering, electrical engineering, and other engineering fields. See table 2-2 for a detailed list of academic fields included in this study.

<sup>4</sup> We estimate multivariate logit models in Phase I and multivariate hazard models in Phase II.

<sup>5</sup> Human capital is the accumulated set of skills and ability that enable individuals to perform jobs.

We imposed restrictions on the samples we used to estimate some models. These restricted models exclude doctorate recipients who reported employment in non-tenure-track positions and/or those who reported employment in positions for which the outcomes of interest (tenure or academic rank) were not applicable.<sup>6</sup> We also urge caution in interpreting the results of these models. The individuals excluded from the samples are, in a sense, off the career path, and we must be concerned that their positions are influenced by their sex. For example, our analyses of tenure-track placements indicate that women are less likely than men to be employed in tenure-track positions.

Last, we estimated a set of models that include female-interaction variables as controls. These models, which allow for gender differences in the influence of family characteristics on career outcomes, enabled us to test hypotheses about whether being married or having children affects the careers of women and men differently. We have been careful to measure family characteristics at common points in individuals' postdoctoral careers, because we suspect that the timing of decisions about marital status and fertility are important. For example, we might expect that women who postpone childbirth until after the tenure decision might realize different career outcomes than women who are raising children at the same time they are being evaluated for tenure.

## STUDY LIMITATIONS

Section 2 of this report describes several limitations of this study. We urge readers to consider these when interpreting the study's findings. Perhaps the most serious of these limitations is the potential for selection bias.

Doctorate recipients included in our analyses were not randomly assigned to the samples we used. They selected science or engineering as a field of study and completed requirements for a doctorate. They also must have selected and obtained a full-time position in academia rather than employment in a nonacademic job or a part-time academic position. Moreover, because we excluded nonacademic positions, the samples we used suffer from

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<sup>6</sup> Relative to men, a higher proportion of women in our samples reported employment in nontenure-track positions. However, the percentages of women and men reporting employment in tenure and rank "not applicable" positions are about the same.

attrition in that they exclude doctorate holders who may have left academia, possibly because of failure to earn tenure or promotion.

One problem is that the selection process itself may be determined in part by differences in individual preferences or by discriminatory treatment that could be related to both a person's sex and chances for career success. Although we attempted to control for differences among individuals in our analyses, we were limited to characteristics that are measurable and available in the data we used. As is typically the case in empirical work, we could not control for remaining unobserved differences among individuals that could affect outcomes. These unobserved differences could be related to an individual's sex and the selection process, thus raising the possibility of selection bias.

Selection issues are present even within the sample of doctorates employed in academia. For example, doctorate recipients must select the kind of institution at which they seek employment and choose how to allocate their time among work activities. Given that promotion requirements vary across institutions, and chances for promotion depend on research and teaching credentials, these decisions are likely to affect chances for career success.

If assignment to the samples we used were truly random, our results might have been different; thus, we do not claim that our estimates of gender differences in career success rates reflect the effects of discriminatory treatment. The same caveat applies to cases where we find no statistical differences in success rates for women and men.

## SUMMARY OF FINDINGS

We find evidence that female scientists and engineers are less successful than their male counterparts in traveling along the academic career path. Some of this disparity appears to be related to differences between the sexes in the influence of family characteristics. Typically, married women and women with children are less successful than men who are married and have children. Our estimates of gender differences in success rates are relatively insensitive to characteristics of academic employers and to primary work activity. Below, we summarize our findings for each of the career outcomes examined in this study.

## TENURE-TRACK PLACEMENT

After accounting for controls, women with eight or nine years of postdoctoral experience who are employed full-time in academia are about 3.3 percentage points less likely than men to be employed in tenure-track positions. The comparable estimate for women with 14 or 15 years of experience is about 4.5 percentage points. If we allow for gender differences in the influence of family characteristics, gender differences in tenure-track placements are statistically insignificant. Our estimates suggest that being married or having children reduces women's chances to be employed in tenure-track positions relative to men who are married or have children.

## TENURE

In Phase I of the analysis we examined gender differences in tenure rates for individuals with specific levels of postdoctoral experience. The findings that follow are based on the results of this analysis.

After accounting for controls, women with eight or nine years of postdoctoral experience who are employed full time in academia are about 6.9 percentage points less likely than men to be tenured. The comparable estimate for women with 14 or 15 years of experience is about 8.5 percentage points. When we restrict our analysis to tenure-track positions only, women with eight or nine years of postdoctoral experience are about 5.9 percentage points less likely than men to be tenured. The comparable estimate for women with 14 or 15 years of experience is about 4.1 percentage points.

Our analysis suggests that women's chances for earning tenure are related to the influence of family characteristics. In most of the models we estimated, gender differences in tenure rates are statistically insignificant when we allow for gender differences in the influence of family characteristics. Having young children later in their careers is positively related to women's chances for earning tenure. We interpret this as indirect evidence suggesting that women who do not have children early in their careers increase their chances for earning tenure.

The Phase II tenure analysis estimated gender differences in the likelihood of doctorate recipients earning tenure at any given time in their careers. For the most part, the results of our Phase II tenure analysis are consistent with the findings reported above for Phase I. After accounting for controls, women are less likely than men to be tenured, and, if we allow for gender

differences in the influence of family characteristics, gender differences in the probability of being tenured are statistically insignificant.

## ACADEMIC RANK

Our Phase I analysis examined the likelihood that individuals will be employed in any one of three different academic ranks—junior ranks, rank of associate professor, and rank of full professor—at specific points in their postdoctoral careers.

We found that, after accounting for controls, women with 14 or 15 years of postdoctoral experience who are employed full-time in academia are about 8 percentage points more likely than men to be employed in junior ranks. The estimate for women with 20 or 21 years of postdoctoral experience is similar. After accounting for controls, women with 14 or 15 years of postdoctoral experience who are employed full-time in academia are almost 14 percentage points less likely than men to be employed at the rank of full professor. The comparable estimate for women with 20 or 21 years of postdoctoral experience is similar. Our analysis suggests some of the gender differences in academic rank are related to differential influences of family characteristics. For example, if we allow for gender differences in the influence of family variables, the relative difference in employment at the full-professor rank for full-time academicians with 20 or 21 years of postdoctoral experience falls to about 7 percentage points, but it remains statistically significant. Gender differences in academic rank decline if we exclude from our samples doctorate recipients who reported employment in nontenure-track positions. This finding is consistent with our Phase I tenure analysis, which shows that women are more likely than men to be employed in these positions.

The Phase II rank analysis estimated differences between women and men in the likelihood of doctorate recipients holding either the associate- or full-professor rank at any given time in their postdoctoral careers. Most of our Phase II findings are consistent with the results of our Phase I rank analysis. The Phase II rank analysis indicates that, after accounting for controls, women are less likely than men to be promoted to senior ranks. We also find that after allowing for gender differences in the influence of family characteristics, gender differences in promotions to the full-professor rank are statistically insignificant. We are concerned, however, that the data we used in our Phase II analysis overstate the relative

amount of time it takes men to earn promotions, causing us to understate gender differences in promotion rates in the Phase II analyses.<sup>7</sup>

## ORGANIZATION OF REPORT

Sections 2 through 4 of this report provide a description of the study design, our report and interpretation of the results of the tenure track and tenure analyses, and our analysis of gender differences in academic rank.

Additional information is provided in five appendices. Appendix A provides descriptions of the statistical models used in this study. Appendix B is an alphabetical glossary of all variable acronyms. Appendix C reports full-model estimates and associated statistics for the Phase I analyses, and Appendix D reports detailed statistics for the Phase II analyses. Appendix E describes the procedures we used to construct the databases used in the analyses and discusses several data issues that surfaced during this study.

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<sup>7</sup>We measured time to promotion by searching SDR waves for the first occurrence of an individual reporting employment at a senior rank. Missing information on academic rank in the SDR files, however, is a potential problem. If an individual fails to complete the section of the SDR questionnaire on academic rank after being promoted, we will overstate the time the individual took to achieve the senior ranks. In the sample we used, men are about 3.5 percent more likely than women to have failed to report academic rank before promotion to associate professor and are about 3.0 percent more likely to have failed to report this information before promotion to full professor. This issue holds for the Phase II tenure analysis as well. Men are about 3.5 percent more likely than women to have failed to report tenure status before earning tenure.

## SECTION 2. STUDY DESIGN

Phase I of this study examines whether the likelihood of successfully achieving outcomes at specific times along the academic career path is related to doctorate recipients' sex. Phase II is longitudinal and examines whether doctorate recipients' sex is related to the amount of time it takes to achieve career milestones. Both phases use data from nationally representative samples of people who earned doctorates in S&E and who are employed in academia. Both also use multivariate statistical methods that control for factors other than sex that might affect career success.

### DATA

Data for both phases of this study were taken from the SDR. The SDR data include only those individuals who have earned S&E doctorates in the United States. Consequently, our analyses do not consider career outcomes of those employed in academia who have not earned doctorates, those who earned degrees in fields other than S&E, or those who earned doctorates outside the United States.

### PHASE I DATA

The Phase I data include individuals who reported working full time in academia and who appeared in the 1981 through 1997 wave of the SDR. When this study was undertaken, SDR data were available for odd-numbered years 1973 through 1997; however, the surveys conducted during the 1970s do not provide sufficient detail on the ages and numbers of children (dependents), so we excluded them from our analyses. Some of our analyses required constraints on the samples we used. We describe these sample restrictions later in this section of the report.

### PHASE II DATA

The Phase II data include doctorate recipients who reported full-time employment in academia in the 1997 SDR wave. Because this part of the analysis tracks individuals from the time they earned their doctorates until the time of the 1997 survey, Phase II also uses some data from earlier SDR waves. These data include information required to construct work and family histories.<sup>1</sup>

<sup>1</sup>The SDR is longitudinal in the sense that individuals reappear in successive survey waves throughout their careers as long as they remain in the sample frame. The SDR data are not maintained in a longitudinal format, however, so constructing employment and family histories for individuals requires linking survey identification numbers across SDR waves.

As in Phase I, some of the Phase II analyses required that we exclude certain respondents from the samples we used. These exclusions are described later in this section of the report.

### PHASE I STUDY DESIGN

Below, we describe the Phase I models used to compare female scientists and engineers to their male counterparts. Specifically, we identify the career outcomes of interest, describe the statistical methods employed, list the control variables included in the analyses, and describe sample restrictions and model specifications.

### CAREER OUTCOMES

Phase I focuses on three career outcomes for doctorate recipients employed in academia. The first, tenure track, is whether the individual is employed in a tenure-track position. The second, tenure, is whether the individual has earned tenure. And the third, academic rank, is whether the individual is employed at the rank of full professor, associate professor, or a junior rank (assistant professor or other rank below associate or full professor).

### STATISTICAL MODELS

In Phase I, we used multivariate logit analysis as the primary statistical tool. Logit analysis allows estimation of the probability of success (e.g., the probability of earning tenure) after controlling for differences in individual characteristics among doctorate recipients included in the sample. Outcomes for the tenure and tenure-track analyses are discrete binomial occurrences in that only two outcomes are possible—tenure or not tenured, and on tenure track or not on tenure track. Outcomes for the analysis of academic rank, however, are multinomial in that several outcomes are possible—full professor, associate professor, or junior rank.

### CONTROL VARIABLES

Table 2-1 lists the control variables included in the Phase I analyses. These include human capital proxies, personal characteristics, family characteristics, female interactions, year of the survey wave, and selection variables related to employment. In addition to the listed controls, each of the Phase I analyses includes a dichotomous (dummy) variable distinguishing females from

males. The estimated coefficient on the “female” variable allows us to compute gender differences in the probability of a career success after accounting for the effects of controls.

### Human Capital

Other things being the same, individuals who have accumulated more human capital are more likely to have earned tenure and to have been promoted to higher academic ranks. Table 2-1 lists human capital variables used as controls in the Phase I analyses. We emphasize that these variables are not direct measures of human capital; rather, they should be interpreted as proxies.

We included “years since earning the doctorate” as a measure of postdoctoral experience. We also included a set of variables distinguishing between the kinds of financial support that doctoral candidates receive in graduate school. We interpret these variables as proxies for differences in experience and training and differences

TABLE 2-1. Phase I control variables by category

Human capital	
Years since earning the doctorate	
Kind of graduate support (fellowship, research assistantship, teaching assistantship, traineeship, other)	
Time-to-degree (years between bachelor’s degree and doctorate)	
Postdoctorate plans (planning postdoctorate appointment)	
Field switching (between degrees)	
Bachelor’s degree earned at foreign institution	
Doctorate earned at research institution	
Doctorate earned at public institution	
Academic field (usually 17 fields distinguished, but some fields combined for rank models)	
Personal characteristics	
Age when doctorate was earned	
Citizenship (naturalized, permanent resident, temporary resident, other)	
Race/ethnicity (American Indian/Alaskan Native, Asian/Pacific Islander, black, Hispanic, other)	
Family characteristics	
Marital status	
Number of dependents younger than 6	
Number of dependents age 6 to 18	
Female interactions	
Marital status at time of survey	
Number of dependents younger than 6	
Number of dependents age 6 to 18	
Survey wave, 1981–1997	
Employment selection	
Primary work activity (research, teaching, other)	
Carnegie classification of employer (doctoral, research, other)	
Employed at private institution	

in academic ability. For example, those who earned the doctorate while supported by research assistantships are likely to have experience and training different from that of doctoral candidates who were supported by teaching assistantships. And doctorate earners who were supported by fellowships are likely to be more academically able than those who received other kinds of support.

Some doctorate earners opt for additional training by taking postdoctoral appointments before they enter the full-time academic labor market. Our list of controls includes a variable reflecting whether individuals were planning postdoctoral appointments at the time they received their doctorates. The potential effect of this variable is an empirical issue. Postdoctoral appointments afford individuals opportunities for additional training that might improve chances for success in academia, but they delay entry into full-time faculty positions and thus can delay tenure and promotions to higher academic ranks.<sup>2</sup>

Field switching occurs when individuals earn undergraduate degrees, masters’ degrees, or doctorates in different academic fields. Expertise in two or more fields could enhance chances for success in academic careers. Alternatively, individuals who stay in a single field might realize benefits from specialization that also affect career outcomes.

We included three variables that distinguish characteristics of the institutions at which individuals earned degrees—earning a bachelor’s degree at a foreign institution, earning a doctorate at a research institution, and earning a doctorate at a public institution. Although these variables distinguish possible differences in accumulated human capital, we regard their effects on success in academic jobs as an empirical issue.

Chances for earning tenure and promotion are likely to vary considerably across different academic fields. We included a set of control variables that distinguish 17 different fields in which individuals earned their doctorates. These fields are identified in table 2-2.<sup>3</sup>

<sup>2</sup> Postdoctoral appointments could also reflect selection by ability. For example, the most able doctoral candidates might be more likely to receive faculty appointments immediately after earning their degrees.

<sup>3</sup> Identifying the parameters of the logit models required us to combine a few of the fields in table 2-2 for the academic rank analyses. See Appendices C and D.

## Personal Characteristics

Table 2-1 lists three sets of control variables reflecting the personal characteristics of doctorate recipients—age at the time the doctorate was earned, citizenship, and race/ethnicity. We included these variables as controls to capture variations in backgrounds, opportunities, and preferences that could affect chances for tenure and promotion.

## Family Characteristics

We included a set of three “family” variables as controls in the Phase I analyses. These are marital status (married or unmarried), the number of dependent children less than 6 years of age, and the number of children between the ages of 6 and 18.

Family characteristics can reasonably be expected to influence chances for tenure and promotion, but the direction of their effects is unclear. For example, being married might enhance a doctorate recipient’s career if the spouse provides support and motivation. Having children might also provide motivation. Alternatively, the burden of supporting a family might divert time and energy from job responsibilities, thus reducing chances for tenure and promotion.

The ages of a doctorate recipient’s dependent children convey information for estimating the effects of family composition on career success.<sup>4</sup> Three potentially important effects are (1) differences in child-rearing requirements, (2) cumulative care-giving effects, and (3) fertility timing. Children of different ages require different kinds and levels of care. Children of pre-school age, for example, require very different kinds of care than do children of high-school age. Also, older children have required a period of parental care longer than that required by younger children. For example, a two-year-old child has required care for only 20 percent of the time that a 10-year-old child has. Ages of children also convey information about the timing of fertility decisions. For example, an individual with 10 years of postdoctoral experience who is caring for a two-year-old child has likely postponed starting a family until after the time academic institutions typically make tenure decisions. An

<sup>4</sup> Over the period 1981–1997, the SDR survey instruments have solicited different information about dependents’ ages. The distinctions we make—children under age 6 and children between the ages of 6 and 18—reflect the most detail consistently available since the 1981 SDR wave.

TABLE 2-2. Doctoral fields included in tenure and rank analyses

Academic field	Specialty codes <sup>1</sup>
Agricultural science	0–99
Biological science	100–199
Health science	200–299
Chemical engineering	312
Electrical engineering	322–324
Other engineering	300–311, 313–321, 325–399
Computer and information sciences	400–410
Mathematics	420–499
Physics and astronomy	560–576, 500–505
Chemistry	520–539
Geosciences	510–519, 540–559, 585–595
Other physical sciences	580–599
Psychology	600–649
Economics	666–668
Political science	678
Sociology, anthropology, and demography	686, 662, 650
Other social sciences	652–658, 670–682, 690–699

<sup>1</sup> Codes match those used in Survey of Earned Doctorates.

individual with the same experience and a 10-year-old child has probably been faced with child-rearing responsibilities before receiving tenure. This discussion points to the importance of measuring family composition at comparable times in the careers of doctorate recipients. For example, a two-year-old in the family of an individual with six years of experience might have a quite different effect on career success than would a two-year-old under the care of an individual with 10 years of experience.

Family characteristics might also affect chances for career success indirectly by affecting job choices. Doctorate recipients with spouses and children face location constraints that unmarried doctorate recipients without children do not. These constraints might cause individuals to compromise job choices and, eventually, reduce their chances for tenure and promotion.

We close this discussion with an important caveat about the difficulty in assigning causal links between family composition and career success. It could be that both marital status and timing of fertility are influenced by doctorate recipients’ expectations of chances for tenure and promotion. Evidence from the literature suggests that women who perceive gender bias are more likely to marry and to have children earlier than they might otherwise (NSF 2003). To the extent that this occurs, observed relationships between family variables and career success will partly reflect selective decisions by individuals who believe their chances for tenure and promotion are relatively low.

## *Female Interactions*

Some of the models we estimated include three female-interaction variables. These are interactions between “female” and marital status, “female” and the number of children younger than 6, and “female” and the number of children between ages 6 and 18. We included these variables to measure possible gender differences in the effects of family composition on chances for tenure and promotion.

There are several reasons to think that family composition might affect the academic careers of women and men differently. Gender differences in household and child-rearing activities could give rise to differential effects. If women, as a group, tend to undertake more household and child-rearing responsibilities than men do, they will have less time and energy to devote to their careers.

The constraint that marriage imposes on job choices might also be expected to differ by sex. Because academic job openings are limited, households in which both spouses seek faculty jobs face especially difficult location decisions, which often require compromise. Men and women both face this compromise in families where both spouses hold doctorates. But because fewer women than men have doctoral degrees, men are less likely than women to have their job choices constrained owing to their spouse also holding a doctorate.<sup>5</sup>

## *Survey Wave*

Changes in labor market conditions and promotion requirements over the 1981–1997 time period spanned by our data are likely to affect success rates for academic careers. Accordingly, we controlled for the survey year in which individuals are observed in the data.

## *Employment Selection*

Variables for employment selection reflect either voluntary or involuntary selections made by doctorate recipients about the kinds of activities they undertake on

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<sup>5</sup> One might argue that dual-career families have financial resources that enable them to sacrifice current income for positions that offer better career opportunities. This possibility, however, poses difficult modeling issues. Even if data on spouses’ education and income were available, it would be unclear whether the selection of a position with lower pay but better opportunities for career advancement was permitted by the spouse’s income or whether it resulted from a location compromise.

the job and the characteristics of the institutions at which they are employed. Relationships between the selection variables and career success rates should be interpreted cautiously. Because the selection variables themselves are career outcomes, they could be determined by the same forces—gender bias and other gender-specific factors—that affect tenure and promotion decisions. For example, if women as a group tend to emphasize teaching as a primary work activity because there is gender bias against women in research, controlling for primary work activity in the tenure analysis might mask gender differences in tenure rates. Because of this potential problem, we adopted the convention of conducting each of the Phase I analyses twice—with and without the selection variables as controls.

## PHASE I SAMPLE RESTRICTIONS AND MODEL SPECIFICATIONS

This discussion provides a framework for interpreting the results of the Phase I analyses presented later in this report. It includes restrictions imposed on the samples used for estimating the tenure, tenure track, and academic rank models; specifications of the models we estimate; and guidance for interpreting results.

### SAMPLE RESTRICTIONS

Data for the Phase I analyses were from the 1981–1997 SDR waves. All Phase I analyses were restricted to those doctorate recipients who reported full-time employment in academia; however, the samples we used were further restricted. These sample-selection criteria were years since earning the doctorate, outcome not applicable, not on tenure track, and missing observations.

### *Years Since Earning the Doctorate*

Each of the Phase I analyses is based on a sample of doctorate recipients selected by postdoctoral experience (the number of years elapsed since earning the doctorate). Both the tenure track and tenure analyses were conducted using two different samples characterized by years of experience: one sample restricted to individuals with 8 or 9 years of postdoctoral experience, and a second sample restricted to individuals with 14 or 15 years of experience. The academic rank analysis was also conducted using two different samples: a first sample restricted to individuals with 14 or 15 years of experience, and a second sample restricted to individuals with 20 or 21 years of experience.



Each analysis includes a sample selected by an even-numbered year and an adjacent odd-numbered year. We used this selection procedure to exploit fully the sample sizes available in the SDR. Given that the SDR is conducted every other year, selecting by a single year (say, only even-numbered years) would yield only about one-half the available sample.

Our principal motive for selecting samples by years since the doctorate was earned was to ensure that the time-dependent control variables were observed at about the same point in each individual’s postdoctoral career. The most important of these are the family and female-interaction variables. Selecting samples by years of experience also ensured that the selection variables characterizing work activities and employers were also observed at about the same time in postdoctoral careers.<sup>6</sup>

Ensuring that individuals appear in a given sample only once was a second motive for selecting by years of experience.<sup>7</sup> This avoided problems associated with uneven weighting (doctorate recipients with more experience appear in more SDR waves than those with less experience) and correlated statistical errors across individual observations.

### *Outcome Not Applicable*

When asking individuals to report on tenure and rank status, the SDR survey instruments permit “not applicable” responses. Some of the analyses we conducted use samples that exclude individuals who made “not applicable” responses. This allowed us to determine the extent to which “not applicable” job assignments (which might be involuntary) explain differences in tenure and promotion rates.

### *Nontenure-Track Positions*

The SDR survey instruments also allow respondents to report that they are employed in “not on tenure track”

<sup>6</sup> Selecting samples based on years of postdoctoral experience does not resolve timing issues related to predoctoral careers. Before earning their doctorates, some individuals accumulate human capital and credentials that might enhance their postdoctoral academic careers. The data we used provides no information about individuals’ work histories before they earned doctorates; however, some of the effects of predoctoral careers are likely to be captured by controls for age and academic field. Older doctorate recipients are more likely to have accumulated predoctoral experience, and the extent to which predoctoral credentials affect academic careers is likely to vary by field. In our analyses, we controlled for both age and field.

<sup>7</sup> Once individuals are selected for the SDR, they are followed in subsequent waves as long as they remain in the sampling frame. As a result, the same individual can appear in several SDR waves.

positions. Again, we conducted some tenure and rank analyses excluding these individuals to determine the extent to which assignments to nontenure-track positions explain gender differences in career success rates.

### *Missing Observations*

Some SDR respondents do not complete the questionnaire. We excluded from our analyses doctorate recipients who did not report on tenure and rank status.<sup>8</sup>

## MODEL SPECIFICATIONS

We estimated six models for each of the Phase I tenure and academic rank analyses (table 2-3). Comparisons across these six models allowed us to determine whether selection variables (primary work activities and employer characteristics), assignments to job positions in which tenure or academic rank are not applicable, and assignments to nontenure-track positions affect estimates of gender differences in success rates.

TABLE 2-3. Phase I models and criteria included

Model	Outcome not applicable	Not on tenure track	Selection variables
1	Yes	Yes	No
2	Yes	Yes	Yes
3	No	Yes	No
4	No	Yes	Yes
5	No	No	No
6	No	No	Yes

Model 2, for example, differs from Model 1 in that it includes selection variables as controls.<sup>9</sup> Thus, by comparing estimates of gender differences across these two models we could determine whether work activities or employer characteristics explain some of the observed gender differences in career success rates. Models 3 and 4 and Models 5 and 6 are paired in the same respect.

Models 1 through 4 differ only in the treatment of “not applicable” responses. Thus, by comparing estimates of Models 1 and 2 with those of Models 3 and 4 we could determine if “not applicable” job assignments affect estimates of gender differences in outcomes.

Finally, Models 5 and 6 exclude individuals who reported being in nontenure-track positions. These two models allowed us to determine the extent to which as-

<sup>8</sup> We did not exclude individuals when the value of a control variable was missing. Instead, we constructed dichotomous (dummy) variables for missing control variables.

<sup>9</sup> All six models include the other controls listed in table 2-1.

signments to nontenure-track positions affect estimates of gender differences.<sup>10</sup>

We estimated each of the models listed in table 2-3 twice, with and without the female-interaction variables. By comparing the two sets of results we could determine how gender differences in the effects of family characteristics affect gender differences in tenure and promotion rates.

## PHASE II STUDY DESIGN

Several aspects of the Phase II analyses are distinctly different from the Phase I analyses. Below we describe the Phase II study design.

### CAREER OUTCOMES

The Phase II analyses examine tenure and academic rank for doctorate recipients who reported full-time academic employment. Unlike Phase I, Phase II does not include a formal analysis of tenure-track status. The Phase II analyses look at the time required for a clearly defined transition from one state to another in a career path (e.g., nontenured to tenured).

### STATISTICAL MODELS

We used multivariate hazard analysis as the principal statistical tool in the Phase II analyses.<sup>11</sup> Hazard analysis looks at the time required for a transitional event to occur (e.g., time elapsed between earning the doctorate and earning tenure). Estimates of hazard models provide information needed to compute the probability that an individual will be tenured or promoted to senior academic ranks at a given point in time.<sup>12</sup> Like Phase I, the Phase II analyses are multivariate in the sense that we compared career success across gender after controlling for other factors that might affect tenure and promotion.

Estimating the hazard models for the tenure analysis required the following information: the time elapsed between earning the doctorate and receiving tenure for those individuals who have been tenured (at or before the 1997 SDR wave); the time elapsed between earning

the doctorate and the 1997 SDR wave for those individuals who have not received tenure; and a censoring indicator distinguishing those individuals who have received tenure from those who have not.

Phase II analyses include doctorate recipients who were employed full time in academia as of the 1997 SDR wave. We constructed a variable measuring time elapsed between earning the doctorate and earning tenure by searching previous SDR records (i.e., SDR waves before 1997) for the first occurrence of reported tenure.<sup>13</sup> Then, we took the date of the first reported occurrence as the date of tenure and counted years elapsed since the year of the doctorate. If no SDR wave indicated tenure, we assumed that the individual had never been tenured and counted years elapsed between earning the doctorate and the 1997 survey wave.

The Phase II academic rank analysis required the same kind of information as the tenure analysis. Of course, the rank analysis required data on the time elapsed between earning the doctorate and promotion to either associate or full professor. We constructed these variables using the same method described above for the tenure analysis.

The method we used to create measures of time elapsed before tenure or promotion introduced a potential bias. Specifically, we overstate time required to achieve tenure or promotion if those outcomes are not reported in the survey that corresponds to the date of the outcome. For example, suppose that an individual was first tenured as of the date of the 1993 SDR but failed to complete the section of the 1993 questionnaire on tenure status. Suppose further that the same individual reported being tenured on the 1995 survey. Our method will overstate time required for tenure by two years for this individual.<sup>14</sup>

We have compared missing responses to survey items on tenure and rank status for men and women in our sample. We found that women are about 3.5 percent less likely than men to have missing observations for these outcomes before they become tenured or promoted to

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<sup>10</sup> Because Models 5 and 6 include only doctorate recipients in tenure-track positions, they could not be estimated for the analysis that examines gender differences in tenure-track placements.

<sup>11</sup> Hazard analysis is sometimes referred to in the literature as duration or survival analysis.

<sup>12</sup> See Appendix A for a more detailed discussion of hazard analysis.

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<sup>13</sup> Unfortunately, the SDR data report whether individuals are tenured as of each survey but do not report the date of tenure. The same is true for academic rank.

<sup>14</sup> The SDR questionnaire simply asks whether an individual is tenured as of the date of the questionnaire; it does not ask when tenure was received.

the rank of associate professor.<sup>15</sup> This raises the possibility that we overstate time required for tenure and promotion for men relative to women, or equivalently, that we understate relative differences in male to female success rates. Unfortunately, we cannot tell for certain whether the bias exists, and if it does, the extent to which it occurs.<sup>16</sup>

## CONTROL VARIABLES

Like Phase I, the Phase II analyses are multivariate in that we attempt to measure gender differences in career success rates after accounting for factors other than sex that might affect tenure and promotions. All of the Phase II analyses also include the dichotomous variable “female,” which distinguishes female from male doctorate recipients. The estimated coefficient of the female variable serves the same purpose in Phase II as it does in Phase I.

Table 2-4 lists the control variables used in the Phase II analyses. The human capital variables and personal characteristics are the same as those used in Phase I and are not discussed further here.

### *Family Characteristics*

The family variables used in Phase II—marital status, dependents younger than 6, and dependents between ages 6 and 18—are the same as those used in Phase I. When we measure them, however, is slightly different. For Phase II, we measured family variables three waves (about 6 years) and six waves (about 12 years) after the doctorate was earned for the tenure and the academic rank analyses, respectively. For the academic rank analysis, we measured family variables later in postdoctoral careers to coincide more closely with the time at which promotion to full professor might occur.

### *Female Interactions*

The Phase II analyses include the full set of female-interaction variables. Our reasons for including these as controls are the same as those described earlier for the Phase I analyses. We defined the female interactions so that they are observed at the same time in the postdoctoral career as the family variables.

<sup>15</sup> Gender differences in missing outcomes before promotion to the full professor rank are small and are statistically insignificant.

<sup>16</sup> The bias occurs only if the individual fails to respond to questions of tenure and rank status on the first survey wave after either tenure or promotion actually occurs.

TABLE 2-4. Phase II control variables by category

Human capital
Kind of graduate support (fellowship, research assistantship, teaching assistantship, traineeship, other)
Time-to-degree (years between bachelor's degree and doctorate)
Postdoctorate plans (planning postdoctorate appointment)
Field switching (between degrees)
Bachelor's degree earned at foreign institution
Doctorate earned at research institution
Doctorate earned at public institution
Academic field (usually 17 fields distinguished, but some fields combined for rank models)
Personal characteristics
Age when doctorate was earned
Citizenship (naturalized, permanent resident, temporary resident, other)
Race/ethnicity (American Indian/Alaskan Native, Asian/Pacific Islander, black, Hispanic, other)
Family characteristics
Marital status
Number of dependents younger than 6
Number of dependents age 6 to 18
Female interactions
Marital status at time of survey
Number of dependents younger than 6
Number of dependents age 6 to 18
Decade of doctorate, 1970s–1990s
Selection <sup>1</sup>
Outcome status not applicable
Employment status
Not working full time in academia
Working at research institution
Working at doctoral institution
Primary work activity research
Primary work activity teaching

<sup>1</sup> Percentage of survey waves with listed response before tenure or promotion achieved.

### *Decade of the Doctorate*

The Phase II analyses include a set of dichotomous variables that identify the decade (1970s, 1980s, 1990s) in which individuals earned their doctorates. We included these variables to control for changes over time in labor market conditions and tenure and promotion requirements.<sup>17</sup>

### *Selection Variables*

The Phase II analyses include two kinds of selection controls—an outcome-status variable and several work-history variables. We refer to these as selection variables because, as outcomes themselves, they are determined by either voluntary self-selection or involuntary assignment.

<sup>17</sup> Because the Phase I analyses control for year of the survey wave and time since earning the doctorate, controlling for the year of the doctorate as well would be redundant.

Although several of the Phase II selection variables listed in table 2-4 are similar to those used in Phase I, their construction is quite different. The Phase I selection variables are a snapshot of the individual's status at the time of the survey wave. The Phase II selection variables are more informative because they reflect work histories that track the individual's status between when the doctorate was earned and either tenure or promotion (or time elapsed up to the 1997 SDR wave if the individual has not been tenured or promoted).

We constructed the Phase II selection variables using a method similar to the procedure for computing time elapsed between earning the doctorate and achieving either tenure or promotion. Specifically, we traced each individual appearing in the 1997 SDR wave through earlier waves, counted the number of times before tenure or promotion that the individual reported being in a given status, and calculated the percentage of survey waves for which that status was reported. For example, if an individual reported employment status in four waves before being tenured and in one case reported employment outside academia, the variable reflecting "not working in academia full time" takes on a value of 25 percent for the Phase II tenure analysis.

The variable "outcome status not applicable" measures the percentage of survey waves before tenure or promotion that an individual reports employment in a position in which either tenure or academic rank is not applicable. Other factors being the same, we would expect this variable to be positively correlated with time elapsed before tenure or promotion (or negatively related to the probability of being tenured or promoted at a given point in time).

The set of work-history variables includes a measure of the percentage of survey waves before either tenure or promotion that an individual reports not being employed full time in academia. In most cases, we would also expect this variable to be positively correlated with time elapsed before tenure or promotion.<sup>18</sup>

The remaining four work-history variables reflect the characteristics of employers and primary work activities. These variables coincide with selection variables

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<sup>18</sup> Some individuals might acquire skills or experience in employment outside of academia that enhance their chances for success in academia, but we expect in most cases a history of full-time academic employment would allow individuals to acquire job-specific human capital that would confer greater advantages in the academic labor market.

used in Phase I, except that they reflect employment histories rather than current employment status.

## PHASE II SAMPLE RESTRICTIONS AND MODEL SPECIFICATIONS

### SAMPLE RESTRICTIONS

The Phase II analyses used a selected sample of the doctorate recipients who reported full-time academic employment in the 1997 SDR wave. The analyses for tenure and promotion to associate-professor rank include only individuals with 6 or more years of postdoctoral experience; the analysis of promotion to full professor includes only individuals with 12 or more years of postdoctoral experience. Doctorate recipients whose years of postdoctoral experience fall below these limits were excluded from the analyses.

These exclusions principally were made to allow us to measure the variables for family and for female interactions for each individual at a comparable time, close to when tenure and promotions occur in a typical academic career. Family variables are undefined (not yet observed) for these less-experienced doctorate recipients because they have not yet reached the later career points being measured.<sup>19</sup>

Secondarily, the sample exclusions are motivated by censoring effects. Observations for less-experienced doctorate recipients are heavily censored in that very few individuals receive tenure in less than 6 years or are promoted to full professor in less than 12 years. Although hazard analysis is designed to deal with censoring effects, including the less-experienced doctorate recipients in our samples would provide little information about career success rates.

### MODEL SPECIFICATIONS

Table 2-5 lists the Phase II model specifications. These models allowed us to determine whether the selection variables reflecting work histories affected estimates of gender differences in career success rates. For example, Models 1 and 2 differ in that the latter includes variables for work history. Comparing estimates of these two models allowed us to determine whether

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<sup>19</sup> For example, we do not observe family characteristics six years after earning the doctorate for individuals reporting only two years of postdoctoral experience in the 1997 survey.

TABLE 2-5. Phase II models and criteria included

Model	Outcome not applicable	Employment-related variables
1	No	No
2	No	Yes
3	Yes	No
4	Yes	Yes

estimates of gender differences in success rates are sensitive to employment-related histories. Similarly, Models 3 and 4 differ from Models 1 and 2 in that the latter include the variables reflecting time spent in outcome-not-applicable job positions.

## CONTRIBUTIONS TO THE LITERATURE

We have reviewed several statistical studies of gender differences in academic careers (NSF 2003). Some of these studies are similar to ours in that they used multivariate analyses, used data from nationally representative samples, and included broad coverage of academic fields. Our study design, however, offers three important contributions to the literature. These are our treatment of family characteristics, systematic control for selection variables, and the longitudinal nature of our Phase II analyses.

### FAMILY CHARACTERISTICS

Relatively few studies provide evidence on the effects of family characteristics on women’s academic careers. Farber (1977), McDowell and Smith (1992), and Kahn (1993) provided suggestive evidence that family responsibilities hinder women’s careers in that women appear to be disadvantaged at points in their careers when they are likely to have young children.

Two studies, Long (2001) and Olson (1999), included direct controls for family characteristics in their analyses of tenure and promotions. Both, however, estimated separate models for men and women, and neither conducted formal hypothesis testing of differential gender effects. Moreover, both Long and Olson measured family characteristics at different points in the careers of doctorate recipients included in the data. As we have argued, it is reasonable to expect that the timing of both marital and fertility decisions are important.

We have attempted to resolve both issues with our study design. First, our specification of the female-interaction variables permits straightforward hypothesis tests for gender differences in the influence of family characteristics on academic careers. Second, we have

been careful to measure family characteristics at common points in postdoctoral careers in both our Phase I and Phase II analyses.

## SELECTION CONTROLS

Some of the studies we have reviewed include variables reflecting the characteristics of the employing institution as controls (NSF 2003). This kind of model specification is understandable, given that requirements for tenure and promotion are likely to vary across different kinds of institutions. For example, it is reasonable to expect that tenure and promotion requirements are usually more stringent at research universities than at most four-year liberal arts colleges. Nonetheless, we have concerns about interpreting estimates of gender differences in career success rates from models that control for employer characteristics. The problem is that the characteristics of the employer are themselves outcomes resulting from a selection process that may be affected by factors related to career success, including individual preferences, human capital, opportunities, and real or perceived gender bias.

These same comments apply to primary work activities. Decisions to engage in research or teaching, which are likely to affect career success, result from a selection process reflecting preferences, skills, and opportunities. If women are disadvantaged with respect to tenure and promotion, they may also be limited in their choices of work activities.

Our study design does not completely resolve the problems associated with using selection variables as controls. However, the sequence of models we estimated includes specifications both with and without employer characteristics and primary work activities. As we noted earlier, this feature of our study design allowed us to determine whether estimates of gender differences in career success rates are sensitive to model specifications that include selection variables as controls.

## LONGITUDINAL CONTROLS

Many of the studies we have reviewed use multivariate analyses in that they attempt to estimate gender differences in career success rates after accounting for controls. However, because these studies measure controls for each individual at only a single point in time, they cannot account for the potential effects of career histories on outcomes. We have attempted to resolve this problem in our Phase II analyses. Some of the models we estimated include work-history variables as controls.

These include variables measuring the percentage of time before tenure and promotions that individuals spent working outside of academia, working for employers with various characteristics, and engaging in different work activities.<sup>20</sup>

## STUDY LIMITATIONS

Several important limitations of our study design should be considered when interpreting the results of our analyses, which are presented in later sections of this report. In particular, our results do not prove the presence or absence of gender bias in academia; rather, the study's findings should be interpreted within the broader context of the empirical literature on gender differences in academic careers.

## POTENTIAL SELECTION BIAS

The potential for selection bias is perhaps the most serious limitation of this study. Doctorate recipients included in our analyses were not randomly assigned to the samples we used. Individuals included in the sample were those who selected science or engineering as a field of study and who completed requirements for a doctorate. They also selected and obtained a full-time position in academia rather than a part-time academic position or employment in a nonacademic job. The selection process itself, however, may be determined in part by differences in individual preferences or by discriminatory treatment that could be related both to sex and to chances for career success. Although we attempted to control for differences among individuals in our analyses, we were limited to characteristics that are measurable and available in the data we used. As is typically the case in empirical work, we could not control for remaining unobserved differences among individuals that could affect outcomes. These unobserved differences could be related to sex and the selection process, thus raising the possibility of selection bias.

There are also selection issues related to the samples we have chosen to use, which exclude doctorate recipients employed part time in academia. A selection issue arises if, other factors being the same, women are more likely than men to work part time. Also, because we limited our samples to doctorate recipients employed in

academia, we did not account for attrition from the academic workforce. The selection issue here is whether women are more likely than men to remain in academia if they fail to land tenure-track positions, receive tenure, or earn promotions.

Statistical methods for adjusting for selection bias have been developed.<sup>21</sup> The data required to adjust for some of the potential sources of bias described above, however, are unavailable in the samples we used. For example, adjusting for selection into science and engineering fields requires information on individuals who have selected fields other than science and engineering. Similarly, adjusting for selection into the sample of doctorate recipients requires data on individuals who have not earned doctorates. This information is not available in the data we used.

In theory, the data required to adjust for selection into full-time academic positions are available, given that the SDR data include some doctorate recipients who hold nonacademic jobs and some who are employed part time. However, estimating models that adjust for selection bias requires a priori identification restrictions on factors affecting job choices and tenure and promotions. Given the choices of variables available in the data we used, appropriate identification restrictions were not obvious to us.<sup>22</sup>

## LIMITED CONTROLS

Although the multivariate analyses we conducted account for a relatively large set of factors other than gender that might affect career success, the controls we could use were necessarily limited by the data available to us. For example, the variables for human capital we included in our models are proxies, not direct measures of skills and abilities that might enhance doctorates' chances for tenure and promotion. Also, our analyses did not control for variations in measures of productivity, which include scholarly output, quality of teaching, and service to the academic community.<sup>23</sup> Finally, we had limited information about individuals' predoctoral careers.

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<sup>21</sup> See, for example, Heckman (1974, 1976).

<sup>22</sup> The identification restrictions require that different sets of factors influence job choices and tenure or promotion outcomes.

<sup>23</sup> The 1995 SDR is the only wave that provides information on scholarly output (the number of articles published and papers presented). However, the sample size for the 1995 wave alone is too small to estimate the models we specify. None of the SDR waves provides data on teaching quality or service to the academic community (e.g., committee assignments).

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<sup>20</sup> Note that the work-history variables can be viewed as selection variables in the sense that they result from a selection process that could be affected by the same factors that influence tenure and promotion.

Some information about predoctoral education was available, but we had no information about predoctoral work experience.

## POTENTIAL REPORTING BIAS

We may systematically overstate the relative time required for male tenure and promotions in our Phase II analyses because of missing responses in the SDR data (see “Phase II Control Variables,” above). We have evidence that women are more consistent than men in completing the SDR questionnaires. Women are about 3.5 percent less likely than men to have omitted information on their rank before they achieved tenure and promotion to associate professor, and they are about 3.0 percent less likely to have omitted this information before they achieved promotion to full professor.<sup>24</sup> This raises the possibility that the Phase II analysis overstates the relative time required for men to achieve promotions. To the extent that this occurs, our estimates of female disadvantages in the Phase II analyses will be understated.

## FUTURE RESEARCH

This study focuses on gender differences for a limited set of career outcomes, but the available data are suited to address several other important questions about the academic careers of female scientists and engineers. These include such questions as whether among scientists and engineers women are more or less likely than men to take academic jobs, take part-time employment in academia, or remain in academia, especially after failing to receive tenure and promotions, and whether women

face greater mobility constraints than men when selecting jobs, especially when they must find new employment after failing to receive tenure.

Several of our recommendations for future research address some of the previously noted limitations of this study. For example, we noted that gender differences in preferences for academic versus nonacademic jobs raises the potential for selection bias. A study of gender differences in job choices—especially the first job after earning the doctorate—would help us assess the potential for selection bias. Studies of gender differences in full-time versus part-time employment and in attrition rates would also address selection issues.

A job-mobility study might shed light on whether immobility compromises the academic careers of female scientists and engineers. We are particularly interested in whether gender differences in mobility exist among doctorate recipients who fail to receive tenure in their first academic job. Many doctorate recipients who take first jobs at prestigious research institutions fail to earn tenure. Their ability to earn tenure at a subsequent position is likely to depend on the freedom they have to choose jobs that are well suited to their experience and skills.

This study provides evidence that gender differences in the influence of family variables—marital status and family size—are related to women’s chances for career success. Accordingly, we recommend that future studies be designed to control for potential gender differences in the influence of family characteristics.

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<sup>24</sup> The gender difference in response rates for the associate-professor analysis is statistically significant. Even though the difference for the full-professor analysis is not statistically significant, there is still potential for bias in the measure of time to promotion.





## SECTION 3. TENURE ANALYSIS

We find evidence that among scientists and engineers working in academia, women are less likely to be employed in tenure-track positions than men who are similarly situated. If, however, we allow for gender differences in the effects of family characteristics, we find that gender differences in tenure-track placements are statistically insignificant. It appears that women who are married and have children are less likely to be employed in tenure-track positions than men who are married and have children.

We also find evidence that women are less likely to earn tenure than their male counterparts, partly because women are less likely to be employed in tenure-track positions. Family characteristics also appear to differentially influence tenure rates of men and women, both directly and indirectly through their relation to tenure-track placements. Some of our analyses suggest that women who have children later in their postdoctoral careers are more likely to earn tenure.

We have also looked at whether the characteristics of the employer and the primary work activities affect estimates of gender differences in tenure-track placements and tenure rates. Although these factors are related to tenure outcomes, we do not find consistent evidence that they account for gender differences in outcomes.

### PHASE I TENURE-TRACK ANALYSIS

Our Phase I analyses examine differences between the sexes in achieving career outcomes at specific points in postdoctoral career paths. Below we present and interpret the results of the Phase I analysis of the tenure-track rate. The tenure-track rate is the proportion of doctorate recipients who report that they either are on tenure track or have earned tenure at academic institutions. We report data on tenure-track rates by sex and then describe the results of our multivariate analyses of

how female scientists and engineers fare relative to men in obtaining academic tenure-track positions.

### PHASE I TENURE-TRACK RATES BY SEX

Table 3-1 reports estimates of tenure-track rates from the samples we used in the Phase I analysis. We estimate that among doctorate recipients with 8 or 9 years of postdoctoral experience employed full time in academia, about 87 percent (0.874) worked in tenure-track positions. Estimated tenure-track rates for men and women with comparable experience are 0.886 and 0.836, respectively. Tenure-track rates appear to be somewhat higher for Ph.D.s with 14 or 15 years of experience.

The estimates in table 3-1 are presented mainly to provide a context for interpreting the results of the multivariate analyses, below. We urge caution in interpreting the gender differences in tenure-track rates. These are simply sample-weighted population estimates and do not account for gender differences in control variables that might explain some of the variation in these rates.

### PHASE I MULTIVARIATE ANALYSES OF TENURE-TRACK RATES

The major findings of our Phase I multivariate tenure-track analysis include the following:

- After accounting for controls, women with 8 or 9 years of postdoctoral experience are 3.2 to 3.3 percentage points less likely than men to be employed in tenure-track positions. The comparable estimates for women with 14 or 15 years of postdoctoral experience range from about 4.1 to 4.9 percentage points.
- If we allow for gender differences in the influence of family characteristics, gender differences in tenure-track placement rates are statistically insignificant.

TABLE 3-1. Phase I tenure-track rates by sex

Years since doctorate	Total		Male		Female	
	Sample size	Tenure-track rate	Sample size	Tenure-track rate	Sample size	Tenure-track rate
8 or 9	9870	0.874	6242	0.886	3628	0.836
14 or 15	8606	0.926	5805	0.935	2801	0.876

NOTE: Tenure-track rates are sample-weighted estimates of the proportion of Ph.D.s who reported being on tenure track or who have earned tenure at academic institutions.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

- Our analyses suggest that being married and having children reduces women’s chances for employment in tenure-track positions relative to similarly situated men.
- Estimates of gender differences in tenure-track placements are relatively insensitive to the characteristics of the employer or to the primary work activity.

Table 3-2 reports the results of our multivariate analysis of tenure-track rates for doctorate recipients with 8 or 9 years of postdoctoral experience.<sup>1</sup> Specifically, we present results for each of the four variants of the tenure-track model described in Section 2 of this report. Each of the four models includes, as controls, variables for human capital, personal characteristics, and family characteristics, and variables that distinguish survey waves. Models 2 and 4 also include as controls selection variables reflecting primary work activity and the characteristics of the employer. Finally, the samples we used to estimate Models 3 and 4 exclude observations for doctorate recipients who report that tenure is not applicable for their positions.

TABLE 3-2. Marginal relations of female variables for Phase I tenure-track models: 8 or 9 years since doctorate

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	-0.033*	-	-	-
2	-0.032*	-	-	-
3	-0.037*	-	-	-
4	-0.036*	-	-	-
I-1	0.011	-0.036*	-0.020*	-0.029*
I-2	0.003	-0.026	-0.019*	-0.025*
I-3	0.013	-0.040*	-0.024*	-0.034*
I-4	0.003	-0.029	-0.022*	-0.029*

\*Statistically significant at 95 percent confidence.

NOTES: Models 1 and 3 exclude selection variables; Models 3 and 4 exclude Ph.D.s who reported tenure was not applicable. Models I-1 through I-4 include female-interaction variables. See Appendix C, tables C-1–8, for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

We also report results for each of the four models estimated with the female-interaction variables included as controls. These variables allow us to determine the extent to which a differential influence of family characteristics explains gender differences in tenure-track rates.<sup>2</sup> The models in table 3-2 labeled with a prefix “I” include the female-interaction variables.

The estimates reported in table 3-2 give the marginal relations between the female and female-interaction variables and the probability of a doctorate recipient being employed in a tenure-track position.<sup>3</sup> For example, the estimated marginal relation for the female variable for Model 1 is -0.033. This means that, after accounting for controls, female doctorate recipients are 3.3 percentage points less likely than their male counterparts to be employed in a tenure-track position.<sup>4</sup>

Table 3-3 reports the results of the multivariate tenure-track analysis for doctorate recipients with 14 or 15 years of postdoctoral experience. These estimates can be interpreted similarly to those in table 3-2. For example, the estimated marginal relation for the female variable for Model 1 is -0.045. This estimate indicates that, after accounting for controls, women with 14 or 15 years of postdoctoral experience are about 4.5 percentage points less likely to be employed in tenure-track positions than their male counterparts.

### Results for Female-Interaction Variables

The last four rows of tables 3-2 and 3-3 show estimated marginal relations for models that include the female-interaction variables as controls. These four models allow for gender differences in the marginal relations between family characteristics and the likelihood of employment in tenure-track positions. One way to interpret the influence of the female-interaction variables is by pair-wise comparisons of models with and without the interactions. In table 3-2, for example, the estimated

<sup>2</sup> Note that all of the models include family characteristics as controls. The female-interaction variables allow us to measure how gender differences in family effects influence estimates of gender differences in tenure-track rates.

<sup>3</sup> See Appendix A for a more detailed, technical interpretation of the marginal relations.

<sup>4</sup> The estimated marginal relations can be placed in context by comparing them to the tenure-track rates reported in table 3-1. For example, the overall tenure-track rate for doctorate recipients with 8 or 9 years of experience is 0.874. Thus, a marginal gender difference of -0.033 is about 3.8 percent of the overall tenure-track rate (i.e., 100 x 0.033/0.874).

<sup>1</sup> The tables in this section of the report present results for the female variables of interest. Estimates for the complete models, including the coefficients of the control variables, are reported in Appendices C and D.

TABLE 3-3. Marginal relations of female variables for Phase I tenure-track models: 14 or 15 years since doctorate

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	-0.045*	-	-	-
2	-0.041*	-	-	-
3	-0.049*	-	-	-
4	-0.043*	-	-	-
I-1	-0.007	-0.037*	0.007	-0.017*
I-2	-0.008	-0.030*	0.006	-0.016*
I-3	-0.008	-0.038*	0.007	-0.021*
I-4	-0.010	-0.029*	0.004	-0.018*

\* Statistically significant at 95 percent confidence.

NOTES: Models 1 and 3 exclude selection variables; Models 3 and 4 exclude Ph.D.s who reported tenure was not applicable. Models I-1 through I-4 include female-interaction variables. See Appendix C, tables C-9–16, for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

marginal relation for the female variable for Model 1 is  $-0.033$  and is statistically significant. Model I-1 is specified the same as Model 1, except the former includes the female-interaction variables. The estimated coefficient of the female variable is small ( $0.011$ ) and is statistically insignificant. In other words, if we allow for gender differences in the influences of family characteristics, we cannot reject the hypothesis that women and men are equally likely to be employed in tenure-track positions. This conclusion holds for all four variants of the interaction models presented in tables 3-2 and 3-3.

The marginal relations of the female-interaction variables can be interpreted similarly. In table 3-2, for example, the estimated marginal relation for the “married” variable for Model I-1 is  $-0.036$ . This indicates that married women are 3.6 percentage points less likely than married men with the same characteristics to be employed in tenure-track positions. Estimated marginal relations for the “dependents” variables of Model 1 indicate that compared with their male counterparts, each dependent under the age of 6 and each dependent between the ages of 6 and 18 decrease tenure-track placement chances for women by 2.0 and 2.9 percentage points, respectively.

Each of the estimated marginal relations reported in table 3-2 for the two dependents variables is negative and statistically significant, suggesting that women with 8 or 9 years of postdoctoral experience and with children under their care are less likely to be employed in tenure-track positions than are similarly situated men. Each estimate for the married variable is also negative,

but only those for Models I-1 and I-3 are statistically significant.

Table 3-3 reports the estimated marginal relations for the female-interaction variables for doctorate recipients with 14 or 15 years of postdoctoral experience. The coefficients for the variables “married” and “dependents (ages 6 to 18)” are all negative and statistically significant, suggesting that, relative to men, these family characteristics reduce women’s chances for tenure-track positions. The estimated marginal relations for the variable “dependents (age <6)” are all small and statistically insignificant. We suspect that this result occurs because of fertility timing. Many women with 14 or 15 years of postdoctoral experience and young children under their care are likely to have had fewer children earlier in their careers. The results in table 3-2 for less-experienced doctorate recipients suggest that women who postpone having children earlier in their careers are more likely to be employed in tenure-track positions.

We urge caution in interpreting causal relations between the female-interaction variables and chances for employment in tenure-track positions. The possibility of self-selection is of particular concern. If women, as a group, tend to be more pessimistic than men about their chances for earning tenure, they might choose employment in nontenure-track positions and have children early in their postdoctoral careers. If this occurs, the female-interaction variables will reflect, at least partially, the consequences of adverse selection rather than gender differences in the influence of family responsibilities on chances for career success.

### *Results for Selection Variables*

Two of the four tenure-track models we have estimated include selection variables as controls. These sets of variables distinguish kinds of primary work activities and characteristics of the employing institution (whether the employer is a research, doctoral, or other kind of institution, and whether the institution is private or public). Our estimates of gender differences in tenure-track rates do not appear to be sensitive to the selection variables. For example, although the selection variables are included as controls in Models 2 and 4 of table 3-2 and excluded from Models 1 and 3, pair-wise comparisons of the estimated coefficients for the variable “female” indicate that these alternative model specifications yield nearly the same marginal relations. Differences between model specifications in the estimated marginal relations for the female variable reported in table 3-3 are also small and are certainly within the range of statistical error in the

estimates. Statistically, we find about the same gender differences in tenure-track rates whether or not we control for work activity and characteristics of the employer.

Our finding that the selection variables do not seem to affect our estimates of gender differences does not imply that the selection variables have no relation to tenure-track rates. Indeed, we find that doctorate recipients who report teaching as a primary work activity rather than other work and those who report being employed at doctoral rather than nondoctoral institutions are more likely to be placed in tenure-track positions. Those who report being employed at private rather than public institutions are less likely to be placed in tenure-track positions.<sup>5</sup> However, based on the results reported in tables 3-2 and 3-3, we do not find evidence that the selection variables affect estimates of gender differences in tenure-track rates.<sup>6</sup>

### Results for Tenure Not Applicable

Our estimates of gender differences in tenure-track rates also appear to be relatively insensitive to whether we include observations for doctorate recipients who report that tenure is not applicable for their positions. The samples we used to estimate Models 1 and 2 include the observations for the tenure-not-applicable positions; they are excluded from the samples used to estimate Models 3 and 4. Differences in our estimates of the marginal relations for the female variable are relatively close for these alternative models and are certainly within the range of statistical error. The same conclusion holds for our estimates of the female-interaction variables.

## PHASE I TENURE ANALYSIS

Below, we present data on tenure rates by sex and then describe the results of our multivariate analyses of gender differences in tenure success rates.

<sup>5</sup> See Appendix C, tables C-2, C-4, C-6, C-8, C-10, C-12, C-14, and C-16.

<sup>6</sup> Comparing results for Models I-1 and I-3 with Models I-2 and I-4 in tables 3-2 and 3-3 suggests that estimates of the coefficients of the female-interaction variables are also relatively insensitive to selection variables.

## PHASE I TENURE RATES BY SEX

Table 3-4 reports population estimates of tenure rates from the samples we used in the Phase I analyses. For example, we estimated an overall tenure rate of 0.476 (47.6 percent) for doctorate recipients with 8 or 9 years of postdoctoral experience. The comparable rates for men and women with the same experience are 0.503 and 0.385, respectively. Tenure rates for more experienced doctorate recipients are higher, 0.772 overall for those with 14 or 15 years of postdoctoral experience. The results reported in table 3-4 do not account for other factors that might affect tenure rates, and gender differences in the estimated tenure rates should be interpreted accordingly.

## PHASE I MULTIVARIATE ANALYSES OF TENURE RATES

The study design we used for our multivariate analysis of tenure rates is similar to the design described above for the tenure-track analysis. Specifically, we show results for variants of the tenure model with and without the selection variables, observations on “tenure not applicable,” and female-interaction variables. We also estimated tenure models with and without observations on doctorate recipients who reported employment in non-tenure-track positions.

The major findings of our Phase I multivariate tenure analysis include the following:

- After accounting for controls, women are less likely than men to be tenured. Gender differences in tenure rates decline if we exclude from our samples doctorate recipients employed in nontenure-track positions.
- Our analysis suggests that women’s chances for earning tenure are influenced by family characteristics, both directly and indirectly through the relation of family characteristics to the likelihood of being employed in tenure-track positions.
- Having young children later in their careers is positively related to women’s chances for earning tenure.

TABLE 3-4. Phase I tenure rates by sex

Years since doctorate	Total		Male		Female	
	Sample size	Tenure rate	Sample size	Tenure rate	Sample size	Tenure rate
8 or 9	9870	0.476	6242	0.503	3628	0.385
14 or 15	8606	0.772	5805	0.794	2801	0.662

NOTE: Tenure rates are sample-weighted estimates of the proportion of Ph.D.s who reported being tenured.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

- Estimates of gender differences in tenure rates are relatively insensitive to the characteristics of the employer or to the primary work activity.

Table 3-5 reports Phase I estimates of the marginal relations between the female and female-interaction variables and the probability of receiving tenure for doctorate recipients with 8 or 9 years of postdoctoral experience. For example, the estimated marginal relation for Model 1 is  $-0.069$ , meaning that, after accounting for controls, these women are about 6.9 percentage points less likely to be tenured than similarly situated men.<sup>7</sup> In the six models that exclude the female-interaction variables, estimates of the marginal relations range from  $-0.054$  to  $-0.074$  (table 3-5).

Phase I estimates of the marginal relations between the female variables and tenure for doctorate recipients with 14 or 15 years of postdoctoral experience are reported in table 3-6. Estimates of the marginal relations between the female variables and the probability of being tenured range from  $-0.034$  and  $-0.088$  for Models 1 through 6.

### Results for Female-Interaction Variables

A comparison of the results for Models 1 through 4 and I-1 through I-4 of the Phase I tenure analysis suggests a link between lower tenure rates for women and family characteristics. When we exclude the female-interaction variables (Models 1 through 4), women with 8 or 9 years of postdoctoral experience are about 7 percent less likely to be tenured than their male counterparts (table 3-5). If, however, we allow for gender differences in the influence of family characteristics (Models I-1 through I-4), the estimated marginal relations for the female variable fall to about 3 or 4 percent, and none is statistically insignificant. The results for women with 14 or 15 years of postdoctoral experience (table 3-6) are even more striking. Without the female-interaction variables, we estimate that women are about 8 or 9 percentage points less likely to be tenured than men. However, when we allow for gender differences in the influence of family characteristics, estimates of the coefficients of the female variable fall to about 1.5 percent and are statistically insignificant. All the estimates of the marginal

<sup>7</sup> The estimated marginal relations can be placed in context by comparing them to the tenure rates reported in table 3-4. For example, the overall tenure-track rate for doctorate recipients with 8 or 9 years of experience is 0.476. Thus, a marginal gender difference of  $-0.069$  is about 14.5 percent of the overall tenure rate (i.e.,  $100 \times 0.069/0.476$ ).

relations for the variable “dependents (age <6)” of Models I-1 through I-4 are negative and statistically significant (table 3-5).

For women with 8 or 9 years of postdoctoral experience, the estimates of the marginal relations for the female-interaction variables are all negative and are statistically significant for dependents under the age of six (table 3-5). Results for this variable are different, however, among women with 14 or 15 years of postdoctoral experience (table 3-6). Although the estimated coefficients for the variables reflecting marital status and the number of dependents between ages 6 and 18 are negative, the marginal relations for dependents under the age of six are positive. Taken at face value, this suggests that women with 14 or 15 years of doctoral experience increase their chances for tenure by having young children, but we caution against assigning causality from this result. More likely, the positive marginal relations reported in table 3-6 reflect the effects of fertility timing. If women who were without children earlier in their careers were more successful in getting tenure, then started families, we would expect to observe a positive relation between tenure rates and having children later in their careers. This interpretation is consistent with the results reported in table 3-5 for less-experienced doctorate recipients, which show that women with young children have lower

TABLE 3-5. Marginal relations of female variables for Phase I tenure models: 8 or 9 years since doctorate

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	$-0.069^*$	-	-	-
2	$-0.069^*$	-	-	-
3	$-0.074^*$	-	-	-
4	$-0.072^*$	-	-	-
5	$-0.059^*$	-	-	-
6	$-0.054^*$	-	-	-
I-1	$-0.035$	$-0.013$	$-0.039^*$	$-0.031$
I-2	$-0.041$	$-0.008$	$-0.038^*$	$-0.027$
I-3	$-0.036$	$-0.018$	$-0.041^*$	$-0.030$
I-4	$-0.039$	$-0.012$	$-0.041^*$	$-0.027$
I-5	$-0.055^*$	0.005	$-0.023$	$-0.001$
I-6	$-0.054^*$	0.010	$-0.022$	$-0.001$

\*Statistically significant at 95 percent confidence.

NOTES: Models 1 and 3 exclude selection variables; Models 3 and 4 exclude Ph.D.s who reported tenure “not applicable”; Models 5 and 6 exclude Ph.D.s who reported nontenure-track positions. Models I-1 through I-6 include female-interaction variables. See Appendix C, tables C-17–28 for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

TABLE 3-6. Marginal relations of female variables for Phase I tenure models: 14 or 15 years since doctorate

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	-0.085*	-	-	-
2	-0.084*	-	-	-
3	-0.088*	-	-	-
4	-0.083*	-	-	-
5	-0.041*	-	-	-
6	-0.034*	-	-	-
I-1	-0.012	-0.076*	0.057*	-0.044*
I-2	-0.013	-0.069*	0.049*	-0.047*
I-3	-0.015	-0.078*	0.057*	-0.039*
I-4	-0.015	-0.071*	0.051*	-0.038*
I-5	-0.008	-0.042*	0.054*	-0.018*
I-6	-0.006	-0.035*	0.047*	-0.016*

\*Statistically significant at 95 percent confidence.

NOTES: Models 1 and 3 exclude selection variables; Models 3 and 4 exclude Ph.D.s who reported tenure was not applicable; Models 5 and 6 exclude Ph.D.s who reported nontenure-track positions. Models I-1 through I-6 include female-interaction variables. See Appendix C, tables C-29–40, for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

chances for tenure early in their careers. It is also consistent with the results reported in table 3-6 for dependents between ages 6 and 18. The estimated marginal relations for older dependents are negative, suggesting that women who had children early in their careers have lower chances for tenure later in their careers (i.e., 14 or 15 years after earning their doctorates).

There are also differences between tables 3-5 and 3-6 in the estimated marginal relations for the variable “married.” The estimates are relatively small and are statistically insignificant for less-experienced doctorate recipients (table 3-5) but are negative and statistically significant for more experienced doctorate recipients (table 3-6). It could be that the immobility associated with being married is more of a constraint later in women’s careers, after their spouses have established careers of their own.

### Results for Nontenure-Track Positions

Estimates of gender differences in tenure rates decline if nontenure-track positions are excluded, as shown in the results for Models 5 and 6 of the tenure analysis. In table 3-6, for example, the estimated marginal relations for the female variable fall from 8 or 9 percent for Models 1 through 4, which include observations

for nontenure-track positions, to 3 or 4 percent for Models 5 and 6, which exclude observations for nontenure-track positions. These results are consistent with our early finding that women are less likely than men to be employed in tenure-track positions. This, of course, lowers women’s chances of earning tenure.

Above, we reported evidence suggesting that having children is negatively related to women’s chances for employment in tenure-track positions. The results of our tenure analysis are consistent with this finding. We did not observe substantial declines in the estimated marginal relations for the female variable in Models I-5 and I-6 compared with Models I-1 through I-4. This might reflect the indirect, differential influence exerted by family characteristics on the tenure rates of men and women through the effects of family characteristics on tenure-track rates. The coefficients of the female-interaction variables in Models I-1 through I-4 capture the indirect influence of the family variables on tenure rates through their relations with tenure-track rates. As a result, removing observations on nontenure-track positions from the samples used to estimate Models I-5 and I-6 does not result in substantial changes in estimates of gender difference in tenure rates. The behavior of the estimates of the marginal relations of the female-interaction variables is consistent with this interpretation. For Models I-5 and I-6, the estimates are statistically insignificant in table 3-5, and the influences of the marital-status and older-dependents variables decline noticeably in table 3-6. We would expect the influence of the female-interaction variables to decline when we eliminate the effects of gender differences in tenure-track rates by removing nontenure-track positions from the sample.

### Results for Selection Variables

The even-numbered tenure models reported in tables 3-5 and 3-6 include selection variables as controls. These variables distinguish kinds of primary work activities and characteristics of the employing institution. The estimates of gender differences in tenure rates do not appear to be sensitive to the selection variables. Pair-wise comparisons of the estimated coefficients for the female variable indicate that the alternative model specifications, which include (Models 2, 4, 6) or exclude (Models 1, 3, 5) selection variables as controls, yield similar estimates of marginal relations for the female variables. For women with 14 or 15 years of postdoctoral experience, differences in the estimated marginal relations across model specifications are also small for the female variable and

are within the range of statistical error in the estimates (table 3-6).<sup>8</sup> In summary, we find statistically about the same gender differences in tenure rates when we control for work activity and characteristics of the employer.

Our finding that the selection variables do not appear to affect our estimates of gender differences does not imply that the selection variables have no relation to tenure rates. Doctorate recipients who report that the primary work activity is teaching rather than other work and those who report being employed at doctoral rather than nondoctoral institutions are more likely to have earned tenure. Those who report being employed at private rather than public institutions are less likely to have earned tenure.<sup>9</sup> However, based on the results reported in tables 3-5 and 3-6, we do not find evidence that work activity or employer characteristics affect estimates of gender differences in tenure rates.

### *Results for Tenure Not Applicable*

Our estimates of gender differences in tenure rates also appear to be relatively insensitive to whether we include observations for doctorate recipients who report that tenure is not applicable for their positions. The samples we used to estimate Models 1 and 2 include the observations for the tenure-not-applicable positions; they are excluded from the samples used to estimate Models 3 and 4. Differences in our estimates of the marginal relations for the female variable are relatively close for these alternative models and are certainly within the range of statistical error. The same conclusion holds for our estimates of the female-interaction variables.

<sup>8</sup> Estimates of the marginal relations for the female-interaction variables reported in tables 3-5 and 3-6 are also relatively insensitive to whether the selection variables are included as controls.

<sup>9</sup> See Appendix C, tables C-18, C-20, C-22, C-24, C-26, C-28, C-30, C-32, C-34, C-36, C-38, C-40.

## PHASE II TENURE ANALYSIS

In the discussion that follows, we present and interpret the results of the Phase II tenure analysis, which uses a sample of doctorate recipients who reported full-time academic employment in the 1997 SDR wave and includes work-history variables as controls.<sup>10</sup>

### PHASE II TENURE RATES BY SEX

Our objective in the Phase II tenure analysis was to estimate gender differences in the likelihood of doctorate recipients earning tenure at any given time in their careers. The statistical method we used—multivariate hazard analysis—takes into account whether an individual had received tenure as of the date of the 1997 SDR wave and the amount of time it took to earn tenure.<sup>11</sup>

Table 3-7 reports sample-weighted estimates of the relevant statistics. Based on the 1997 SDR data, we estimate that 53.4 percent of science and engineering doctorate recipients employed full-time in academia were tenured as of the date of the 1997 SDR wave.

Table 3-7 also shows sample-weighted estimates of the amount of time it took to earn tenure, measured from the year that the doctorate was earned, for those individuals who reported that they had received tenure either before or as of the date of the 1997 SDR wave. We estimate that it took doctorate recipients overall an average of 8.61 years to earn tenure.

<sup>10</sup> We also used a different statistical model, multivariate hazard analysis, in the Phase II analysis. In the Phase I analysis we used multivariate logit analysis. See Appendix A for technical details.

<sup>11</sup> The hazard model also considers the amount of time elapsed since earning the doctorate for those individuals in the sample who had not yet earned tenure as of the date of the 1997 SDR wave.

TABLE 3-7. Phase II tenure rates and years to tenure by sex

Outcome	Total		Male		Female	
	Sample size	Tenure outcome	Sample size	Tenure outcome	Sample size	Tenure outcome
Tenure rate	5305	0.534	3548	0.574	1757	0.439
Years to tenure	2732	8.61	1950	8.66	782	8.46

NOTES: Tenure rates and years to tenure (years since earning doctorate) are sample-weighted estimates. Years-to-tenure estimates exclude censored observations.

SOURCES: Sample drawn from Survey of Doctorate Recipients, 1997; work-history data drawn from Survey of Doctorate Recipients, 1981–1997.

We offer the usual caveat about interpreting gender differences in the statistics reported in table 3-7. These are simply weighted estimates from the sample we used and do not account for other factors that might affect the likelihood of tenure. Moreover, the estimates of time taken to earn tenure exclude censored observations. An observation is censored if, as of the date of the 1997 SDR wave, the individual has never reported being tenured.<sup>12</sup>

## PHASE II MULTIVARIATE ANALYSES OF TENURE RATES

For the most part, the results of our Phase II tenure analysis are consistent with the findings reported above for the Phase I analysis. After accounting for controls, women are less likely than men to be tenured; however, if we allow for gender differences in the effects of family characteristics, gender differences in the probability of being tenured are statistically insignificant.

Table 3-8 reports the results of the Phase II multivariate tenure analysis for four alternative model specifications. All four models include as controls variables for human capital, personal and family characteristics, and when the doctorate was earned.<sup>13</sup> In addition, Model 2 includes an outcome-status variable that measures the percentage of time before tenure (or the percentage of time before the 1997 SDR wave for untenured doctorate recipients) that the individual reported employment in positions in which tenure was not applicable. Model 3 includes a set of work-history variables that reflect the percentage of time before earning tenure that the individual reported either not working in academia full time, working at a research institution, working at a doctoral institution, research as a primary work activity, or teaching as a primary work activity. Model 3 does not include the outcome-status variable as a control. Model 4 includes variables for both outcome status and work history.

The estimated marginal relations in table 3-8 are interpreted differently from those for the Phase I tenure analyses because they show the relations between the variables of interest and the ratio of women's tenure success rates to men's. For example, the estimated marginal

<sup>12</sup> The hazard model we employed does, however, use information on the amount of time elapsed since earning the doctorate for censored observations. Thus, the sample sizes used in the Phase II multivariate tenure analysis are those reported in table 3-7 for tenure rates and not the smaller sample sizes reported for estimates of years to tenure.

<sup>13</sup> See Section 2, table 2-4 for a detailed list of control variables.

TABLE 3-8. Marginal relations of female variables for Phase II tenure models

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	0.846*	-	-	-
2	0.880*	-	-	-
3	0.898*	-	-	-
4	0.931	-	-	-
I-1	0.931	1.023	0.880	0.824*
I-2	0.970	0.952	0.895	0.911
I-3	0.957	1.037	0.905	0.856*
I-4	0.993	0.959	0.937	0.949

\*Statistically significant at 95 percent confidence.

NOTES: Model 1 excludes selection variables for outcome status and employment status; Model 2 excludes outcome status but includes employment status; Model 3 includes outcome status but excludes employment status; Model 4 includes both outcome status and employment status. Models I-1 through I-4 include female-interaction variables. See Appendix D, tables D-1-8, for detailed estimates of complete models.

SOURCES: Sample drawn from Survey of Doctorate Recipients, 1997; work-history data drawn from Survey of Doctorate Recipients, 1981-1997.

relation of 0.846 for the female variable for Model 1 means that, after accounting for controls, the chance of a woman earning tenure is about 84.6 percent of the chance of a man earning tenure. An estimated marginal relation less than 1.0 means that the variable of interest is negatively related to women's chances for tenure relative to similarly situated men. An estimated marginal relation greater than 1.0 indicates the variable of interest is positively related to women's relative chances of earning tenure.

### Results for Female-Interaction Variables

The last four rows in table 3-8 report results for models that include the female-interaction variables as controls.<sup>14</sup> None of the estimated marginal relations for the female variable is statistically significant, consistent with our findings from the Phase I analysis. After controlling for gender differences in the effects of family variables, we cannot reject statistically the hypothesis that tenure rates for men and women are the same.

Table 3-8 also reports estimates of the marginal relations for the female-interaction variables. The estimated marginal relations for the dependents variables are

<sup>14</sup> The Phase II tenure analysis measures all family variables—including the female-interaction variables—three survey waves, or about six years, from the date that the doctorate was earned.



less than 1.0 for all four alternative specifications of the female-interactions variables but are statistically significant in only two of eight cases. None of the coefficients of the marital-status variable is significant.

### *Results for Outcome-Status and Work-History Variables*

The estimated marginal relation for the female variable in Model 1, which excludes both the outcome-status and work-history variables, is 0.846. For Models 2 and 3, which alternately include the outcome-status and work-history variables, the comparable estimates are 0.880 and 0.898, respectively. These last two estimates are closer to 1.0, which might imply smaller gender differences in promotion rates; however, the differences in the marginal relations between Models 1, 2, and 3 are within the range of statistical error. Model 4, which includes both the outcome-status and work-history variables, yields the highest marginal relation for the female variable (0.931). The difference between the estimates for Models 1 and 4 is about two standard deviations away from the standard errors of the estimated coefficients.<sup>15</sup> This suggests that some of the gender differences in tenure rates might

be explained by variations in outcome status and work histories. But we reiterate our earlier caution about interpreting the results models using these variables as controls. Both outcome status and work history are selection variables in that they reflect career outcomes. As a result, the same forces that influence gender differences in tenure rates, including discriminatory treatment of women, could determine these variables.<sup>16</sup>

We do note, however, that the estimated coefficients of the outcome status and most of the work-history variables are statistically significant. As might be expected, spending time in nontenure positions reduces the likelihood of an individual earning tenure at any given point in the career path. Also, spending time employed at research and doctoral institutions lowers an individual's chance for tenure relative to employment at other kinds of academic institutions. This result is not surprising, given that research and doctoral institutions are likely to have the most stringent requirements for tenure. Finally, those who report spending time engaged in teaching as a primary work activity have higher chances of earning tenure than those involved in other activities.<sup>17</sup>

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<sup>15</sup> Specifically, the differences in the estimates of the coefficients of the hazard function are about two standard deviations apart. See Appendix D, tables D-1 and D-4.

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<sup>16</sup> See Section 2 for a detailed discussion of the interpretation of selection variables.

<sup>17</sup> See Appendix D, tables D-2, D-3, D-4, D-6, D-7, and D-8.



## SECTION 4. ANALYSIS OF ACADEMIC RANK

Our analyses provide evidence that among scientists and engineers in academia, women are more likely to be employed in junior ranks and are less likely to hold the rank of full professor than are men. Differences in placement across academic ranks may be related to the differential influence of family characteristics on men and women. Married women who have older children under their care are more likely to be employed in junior ranks and are less likely to hold the rank of full professor than are similarly situated men.

Gender differences in academic ranks decline if we exclude nontenure-track positions from our analysis. This result is consistent with our earlier finding that after accounting for controls, women are less likely than men to be employed in tenure-track positions.

We have also looked at whether characteristics of the employer or the kind of work done affect estimates of gender differences in academic rank. Although these factors are both related to promotions to higher academic ranks, we do not find consistent evidence that they explain gender differences in career success.

### PHASE I RANK ANALYSIS

Like our tenure analysis, the Phase I analysis of academic rank examines gender differences in career outcomes at specific points in individuals' postdoctoral career paths. Data on academic rank by sex and our

interpretation of the results of our multivariate Phase I analysis of academic rank are presented below.

### PHASE I PLACEMENT IN ACADEMIC RANKS BY SEX

Table 4-1 reports estimates of the proportion of doctorate recipients having either 14–15 or 20–21 years of postdoctoral experience who are employed full time in academia at the rank of assistant, associate, or full professor. Estimates were made from samples used in our Phase I analysis. We estimate, for example, that about 16.1 percent of doctorate recipients with 14 or 15 years of postdoctoral experience hold the rank of assistant professor or other junior rank. The comparable estimates by sex show about 14 percent of men and about 26 percent of women hold that rank. Once doctorate recipients attain 20 or 21 years of experience, we estimate that only about 9.8 percent remain at the assistant-professor rank. When sex is taken into account, however, we found that about 19.3 percent of women hold positions at junior ranks, more than double the percentage for men.

The estimates in table 4-1 show considerable differences by sex in relative composition of academic ranks. We emphasize that the figures in this table are simple sample-weighted population estimates and do not account for other factors that might affect academic rank. We show these estimates to provide a context for interpreting the results of the multivariate rank analyses, which follow.

TABLE 4-1. Phase I academic rank by years since doctorate and by sex

Years since doctorate	Total		Male		Female	
	Sample size	Fraction in rank	Sample size	Fraction in rank	Sample size	Fraction in rank
14 or 15	8823		5951		2872	
Assistant professor/other		0.161		0.141		0.257
Associate professor		0.389		0.377		0.452
Full professor		0.450		0.481		0.291
20 or 21	6533		4905		1628	
Assistant professor/other		0.098		0.087		0.193
Associate professor		0.200		0.192		0.266
Full professor		0.702		0.722		0.542

NOTE: Fractions are sample-weighted estimates of the proportion of doctorate recipients reporting full-time employment in each academic rank.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

## PHASE I MULTIVARIATE ANALYSIS OF ACADEMIC RANK

Our Phase I multivariate rank analysis considered the likelihood that individual doctorate recipients have attained the rank of full professor, associate professor, or a junior rank. Although most individuals classified as holding a junior rank reported employment as assistant professor, some reported employment in other junior ranks, such as instructor or lecturer. In general, the junior-rank category includes doctorate recipients who did not report having attained the rank of either associate or full professor.

As noted in Section 2 of this report, we estimated multinomial logit models in our Phase I rank analysis. This technique allowed us to estimate the marginal relations between the female and control variables and the probability that individuals have attained any one of the three academic ranks defined above.<sup>1</sup>

The general specifications of the Phase I academic-rank models are similar to those of the Phase I tenure models. We estimated six different variants of the basic model. Each of the six models includes variables for human capital, personal characteristics, and family characteristics, and variables distinguishing survey waves as controls. Models 2, 4, and 6 also include as controls selection variables reflecting the primary work activity and characteristics of the employer. The samples we used to estimate Models 3 through 6 exclude doctorate recipients who reported that rank is not applicable for their positions.<sup>2</sup> The samples we used to estimate Models 5 and 6 exclude doctorate recipients who reported employment in nontenure-track positions. Finally, we estimated each of the six models twice, once without and once with the female-interaction variables.

The major findings of our Phase I multivariate analysis of gender differences in academic rank include the following:

- After accounting for controls, women employed full time in academia who have 14 or 15 years of postdoctoral experience are about 8 percentage

<sup>1</sup> See Appendix A for a more detailed, technical description of the logit models.

<sup>2</sup> Models 1 and 2 include doctorate recipients who reported that rank is not applicable in their positions. These individuals are classified as holding junior ranks in these models.

points more likely than men to be employed in junior ranks. The estimate for women with 20 or 21 years of postdoctoral experience is similar.

- After accounting for controls, women employed full time in academia who have 14 or 15 years of postdoctoral experience are almost 14 percentage points less likely than men to be employed at the rank of full professor. The comparable estimate for women with 20 or 21 years of postdoctoral experience is similar.
- Our analysis suggests some of the gender differences in academic rank are related to differential influences of family characteristics.
- Gender differences in academic rank decline if doctorate recipients who reported employment in nontenure-track positions are excluded from the sample. This finding is consistent with our Phase I tenure analysis, which showed that women are more likely than men to be employed in nontenure-track positions.
- Estimates of gender differences in placements across academic ranks are relatively insensitive to the characteristics of the employer or to the primary work activity.

Table 4-2 reports estimates of the marginal relations between the female variables of interest and the probability of placement in different academic ranks for individuals with 14 or 15 years of postdoctoral experience. For example, the estimated marginal relation between the female variable and junior ranks for Model 1 is 0.085, meaning that after accounting for controls, women are 8.5 percentage points more likely than men to be employed in these ranks. The negative value of the comparable estimate for the full-professor rank means that after accounting for controls, women are 13.9 percentage points less likely than men to be employed as a full professor. About 45 percent of doctorate recipients with 14 or 15 years of experience are employed at the full-professor rank (table 4-1); thus, the gender difference of 13.9 percentage points is about 31 percent of the overall full-professor placement rate (i.e.,  $100 \times 13.9/45.0$ ).

The estimates in table 4-2 show a pattern in which women are more likely to be employed in ranks below the full professor. Excluding models I-I through I-6, which include the female-interaction variables, our estimates indicate that after accounting for controls, women are 4.8–8.5 percentage points more likely than men to be

TABLE 4-2. Marginal relations of female variables for Phase I rank models: 14 or 15 years since doctorate

Rank and model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
<b>Junior ranks</b>				
1	0.085*	-	-	-
2	0.084*	-	-	-
3	0.085*	-	-	-
4	0.083*	-	-	-
5	0.049*	-	-	-
6	0.048*	-	-	-
I-1	0.021	0.062*	-0.027	0.036*
I-2	0.024	0.052*	-0.019	0.039*
I-3	0.026	0.051*	-0.021	0.035*
I-4	0.029	0.044*	-0.016	0.035*
I-5	0.022	0.024	-0.024	0.020*
I-6	0.021	0.021	-0.017	0.020*
<b>Associate professor</b>				
1	0.055*	-	-	-
2	0.051*	-	-	-
3	0.058*	-	-	-
4	0.055*	-	-	-
5	0.078*	-	-	-
6	0.073*	-	-	-
I-1	0.053*	0.010	0.010	-0.005
I-2	0.046*	0.015	0.011	-0.006
I-3	0.052*	0.016	0.006	-0.004
I-4	0.045	0.020	0.008	-0.004
I-5	0.054*	0.029	0.004	0.007
I-6	0.048	0.031	0.005	0.008
<b>Full professor</b>				
1	-0.139*	-	-	-
2	-0.135*	-	-	-
3	-0.143*	-	-	-
4	-0.137*	-	-	-
5	-0.127*	-	-	-
6	-0.121*	-	-	-
I-1	-0.073*	-0.071*	0.017	-0.031*
I-2	-0.070*	-0.067*	0.008	-0.032*
I-3	-0.079*	-0.067*	0.015	-0.031*
I-4	-0.074*	-0.064*	0.008	-0.032*
I-5	-0.076*	-0.054	0.020	-0.027
I-6	-0.069*	-0.052	0.012	-0.028

\*Statistically significant at 95 percent confidence.

NOTES: Models 1, 3, and 5 exclude selection variables; Models 3 through 6 exclude Ph.D.s who reported rank was not applicable; Models 5 and 6 exclude Ph.D.s who reported nontenure-track positions. Models I-1 through I-6 include female-interaction variables. See Appendix C, tables C-41–52, for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

employed in junior ranks. In contrast, women are 12.1–13.9 percentage points less likely than their male counterparts to be employed at the full-professor rank.<sup>3</sup>

Table 4-3 reports estimates of the marginal relations of interest for individuals with 20 or 21 years of postdoctoral experience. These estimates can be interpreted similarly to those reported in table 4-2.

The estimated marginal relations in table 4-3 show that like women with less experience, women with 20 or 21 years of postdoctoral experience are also more likely to be employed in junior and associate ranks and less likely to hold the rank of full professor. Ignoring the models that include the female-interaction variables, these women are 4.2–8.9 percentage points more likely to be employed in junior ranks and 9.4–14.1 percentage points less likely to be employed at the full-professor rank than similarly situated men.

### Results for Female-Interaction Variables

Models in tables 4-2 and 4-3 that include the female-interaction variables as controls are labeled with the prefix “I.” These are the same interaction variables used earlier in our tenure analysis and include three variables reflecting family characteristics—marital status, the number of dependents under 6 years of age, and the number of dependents between ages 6 and 18. We included these variables to see if gender differences in the marginal relations of family characteristics affected estimates of gender differences in promotions to higher academic ranks.

The results in table 4-2 suggest links between women’s chances for promotion to higher ranks and gender differences in the influence of family characteristics. In Model 1 for junior ranks, the estimated marginal relation for the female variable is 0.085 and is statistically significant. In comparison, the value for this variable in Model I-1 is 0.021 and is statistically insignificant. The value for the marital-status variable in Model I-1 is 0.062, meaning that after accounting for controls, a married woman is 6.2 percentage points more likely to be employed in junior ranks than a similarly situated married man. The estimated marginal relation for the “Dependents (age 6 to 18)” interaction variable is also

<sup>3</sup> The marginal relations for a given variable must sum to zero across all three ranks. Thus, if the female variable is positively related to chances for employment in both the junior and associate ranks, it must necessarily be negatively related to the likelihood of employment at the full-professor rank.

TABLE 4-3. Marginal relations of female variables for Phase I rank models 20 or 21 years since doctorate

Rank and model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
<b>Junior ranks</b>				
1	0.089*	-	-	-
2	0.081*	-	-	-
3	0.076*	-	-	-
4	0.072*	-	-	-
5	0.044*	-	-	-
6	0.042*	-	-	-
I-1	0.047*	0.048*	0.002	0.010
I-2	0.049*	0.038*	0.004	0.008
I-3	0.045*	0.034*	0.004	0.008
I-4	0.046*	0.030*	0.003	0.006
I-5	0.027*	0.018	-0.023	0.008
I-6	0.027*	0.015	-0.021	0.007
<b>Associate professor</b>				
1	0.052*	-	-	-
2	0.051*	-	-	-
3	0.056*	-	-	-
4	0.054*	-	-	-
5	0.057*	-	-	-
6	0.053*	-	-	-
I-1	0.023	0.030	0.099	0.013
I-2	0.020	0.033	0.098	0.013
I-3	0.023	0.036	0.107	0.014
I-4	0.020	0.036	0.102	0.014
I-5	0.026	0.034	0.112	0.009
I-6	0.022	0.034	0.112	0.010
<b>Full professor</b>				
1	-0.141*	-	-	-
2	-0.132*	-	-	-
3	-0.131*	-	-	-
4	-0.126*	-	-	-
5	-0.101*	-	-	-
6	-0.094*	-	-	-
I-1	-0.070*	-0.078*	-0.101	-0.023
I-2	-0.069*	-0.070*	-0.093	-0.021
I-3	-0.068*	-0.069*	-0.111	-0.022
I-4	-0.066*	-0.066*	-0.106	-0.021
I-5	-0.053*	-0.052	-0.097	-0.017
I-6	-0.049*	-0.049	-0.092	-0.017

\*Statistically significant at 95 percent confidence.

NOTES: Models 1, 3, and 5 exclude selection variables; Models 3 through 6 exclude Ph.D.s who reported rank was not applicable; Models 5 and 6 exclude Ph.D.s who reported nontenure-track positions. Models I-1 through I-6 include female-interaction variables. See Appendix C, tables C-53–64, for detailed estimates of complete models.

SOURCE: Survey of Doctorate Recipients, 1981–1997.

positive and significant, suggesting that women with older children are more likely than men with older children to be employed in junior ranks.<sup>4</sup>

The marginal relations for the full-professor rank in table 4-2 provide further evidence for gender differences in the influence of family characteristics on placements in academic ranks. The marginal relation for the female variable in Model 1 is  $-0.139$ , indicating that after accounting for controls, women are 13.9 percentage points less likely than men to be employed at the full-professor rank. The comparable estimate for Model I-1 is  $-0.073$ ; thus, allowing for gender differences in the influence of family characteristics reduces the negative relation between the female variable and the full-professor rank by about 47 percent. The marginal relations for both the marital status and the older-dependent interaction variables are negative, suggesting that gender differences in the influence of these family characteristics reduce women's chances for promotion to full professor relative to similarly situated men.

Comparing the results for Models 2 through 4 with Models I-2 through I-4 in table 4-2 shows that differences in the influence of family characteristics on the careers of men and women appear to account for some of the gender differences in placements across academic ranks.<sup>5</sup> The estimated marginal relation between the female variable and the full-professor rank, however, is both negative and statistically significant even when the female-interaction variables are included as controls.

Table 4-3 provides evidence on the influence of gender differences in family characteristics on the careers of women with 20 or 21 years of postdoctoral experience. Estimated marginal relations between the female variable and the likelihood of employment in junior ranks are statistically significant in Models 1 through 4; however, allowing for gender differences in the influence of family characteristics reduces the marginal relations for the female variable by 36 to 47 percent. The influence of family characteristics also appears to be related to

<sup>4</sup> The marginal relation for dependents younger than age six in Model I-1 is negative and statistically insignificant. This finding is consistent with our earlier result for the Phase I tenure analysis. As we noted earlier, women with 14 or 15 years of postdoctoral experience who have young children are likely to have had children after tenure and promotion decisions occurred.

<sup>5</sup> The results for Models 5, 6, I-5, and I-6 are somewhat different. These models exclude doctorate recipients who reported employment in nontenure-track positions. See "Results for Nontenure-Track Positions," below.

women's chances for employment in the full-professor rank. For example, the marginal relation between the female variable and the full-professor rank is  $-0.141$  for Model 1. The comparable estimate for Model I-1 is  $-0.070$ , about 50 percent of the Model 1 estimate. Results are similar for Models 2 through 4 and I-2 through I-4.

In table 4-3, for Models I-2 through I-4 the marginal relations between the female-interaction variables and the junior and associate ranks are all positive, and for the full-professor rank, they are all negative. This suggests that gender differences in the influence of family characteristics increase women's chances for employment in junior ranks and reduce their chances for employment at the full-professor rank. Only the marginal relations between the variable for marital status and the junior and full-professor ranks, however, are statistically significant. The lack of statistical significance for the dependents variables may be due to the fact that relatively few women have dependents (especially younger children) at home at this stage in their careers.<sup>6</sup> It is possible that the variable "married" in table 4-3 captures some of the cumulative effects of raising children on women's careers. This could occur if married women with 20 or 21 years of experience were more likely to have raised children earlier in their careers than were unmarried women with the same level of postdoctoral experience.

### *Results for Nontenure-Track Positions*

Models 5 and 6 exclude observations on individuals who reported employment in nontenure-track positions. Excluding these positions tends to reduce women's relative representation in junior ranks. This phenomenon is shown in tables 4-2 and 4-3, where the estimates for the female variable for Models 5 and 6 are on average more than 40 percent less than those for the first four models.<sup>7</sup> These results are consistent with the results reported in Section 3 for our tenure analysis, where we found that women are more likely to be employed in nontenure-track positions.

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<sup>6</sup> Family characteristics in table 4-3 are observed 20 or 21 years after earning the doctorate.

<sup>7</sup> Because the marginal relations for the female variable must sum to zero across all three ranks, the sum of the marginal relations for the associate and full-professor ranks must increase when the marginal relations for the junior ranks fall. Note that the marginal relations for both the associate and full-professor ranks increase in table 4-2 when nontenure-track positions are excluded. When we excluded nontenure-track positions for doctorate recipients with more experience (table 4-3), the marginal relations for the associate rank were virtually unchanged, but the marginal relation for the full-professor rank increased (became less negative).

Removing nontenure-track positions from the sample does not eliminate the statistically significant gender differences we found for the female variable reported in tables 4-2 and 4-3. The results for Models 5 and 6 show a pattern in which women are significantly more likely than men to be employed in the junior and associate ranks and less likely to hold the full-professor rank.

Excluding nontenure-track positions tends to reduce the statistical significance of the female-interaction variables. This result might be expected. If women are less likely to be employed in tenure-track positions because of the gender differences in the influence of family characteristics, limiting the sample to tenure-track positions is likely to reduce the influence of these variables on academic rank.<sup>8</sup>

### *Results for Selection Variables*

The even-numbered rank models reported in tables 4-2 and 4-3 include selection variables as controls. Selection variables include variables distinguishing the primary work activity (teaching, research, other) and characteristics of the employing institution (private versus public; research, doctoral, other). The results reported in tables 4-2 and 4-3 indicate that our estimates of gender differences in placements across academic ranks are not sensitive to the primary work activity or to characteristics of the employing institutions. Differences in the estimated marginal relations for the female variables between odd and even numbered models are relatively small and are certainly within the range of statistical error.

This result does not mean that we find no relation between the selection variables and the likelihood of employment in different ranks. For example, we find that after accounting for other controls, doctorate recipients who report teaching as a primary work activity are less likely to be employed in junior ranks and more likely to be employed at the associate professor rank than are doctorate recipients who report engaging in other primary work activities. Also, doctorate recipients employed at private institutions are more likely to hold junior ranks and less likely to be employed at the full-professor rank than are doctorate recipients who work at public institutions.<sup>9</sup> That the estimates of the marginal relations for

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<sup>8</sup> This interpretation warrants some caution. We have adopted a 95 percent confidence level for reporting statistical significance in this report; however, several of the female-interaction variables in Models I-5 and I-6 are statistically significant at a 90 percent confidence level.

<sup>9</sup> See Appendix C, tables C-42, C-44, C-46, C-48, C-50, C-52, C-54, C-56, C-58, C-60, C-62, and C-64 for estimates of the marginal relations for the selection variables.

the female variables are relatively insensitive to selection variables suggests that work activities and employer characteristics do not appear to affect measures of gender differences in academic ranks.

### Results for Rank Not Applicable

Our estimates of gender differences in placements across academic ranks also appear to be relatively insensitive to whether we exclude observations on doctorate recipients who reported employment in positions for which academic rank was not applicable. For example, although Models 3 and 4 in tables 4-2 and 4-3 exclude observations for these positions, estimates of the marginal relations for the female variables are relatively close to those of Models 1 and 2, which include them. The differences between Models 1 and 2 and Models 3 and 4 are within the range of statistical error. The same conclusion holds for comparisons across models that include the female-interaction variables (i.e., comparing results for Models I-1 and I-2 with Models I-3 and I-4).

## PHASE II RANK ANALYSIS

The Phase II analysis uses a sample of doctorate recipients who reported full-time academic employment in the 1997 SDR wave and includes work-history variables as controls.

### PHASE II PLACEMENTS IN ACADEMIC RANKS BY GENDER

Our objective in Phase II of the rank analysis, in which we used multivariate hazard analysis, was to estimate gender differences in the likelihood of doctorate recipients receiving promotion to senior ranks at any given

point in their careers. The hazard model allowed us to take into account whether an individual had received promotion to a senior rank (associate or full professor) as of the date of the 1997 SDR wave as well as the amount of time it took to receive the promotion (measured from the date that the doctorate was earned).<sup>10</sup>

Table 4-4 reports sample-weighted estimates of promotion rates to senior academic rank and years to promotion by sex, based on the samples used in our Phase II rank analysis. For example, we estimate that 57.9 percent of the population of doctorate recipients represented by the sample had been promoted to associate professor as of the date of the 1997 SDR wave. Comparable estimates by sex show that 61.6 percent of men and 49.1 percent of women in the sample had been promoted to that rank. Of those who earned the rank of associate professor, the average time to promotion was about 8.32 years, measured from the date of the doctorate.<sup>11</sup> Estimated times to promotion for men and women were 8.31 and 8.39 years, respectively. Estimates of promotion rates and time to promotion for the full-professor rank can be interpreted similarly.<sup>12</sup>

<sup>10</sup> The hazard model also considers the amount of time elapsed since earning the doctorate for those individuals who have not yet received promotions to senior ranks.

<sup>11</sup> The samples used to compute average times to promotion in table 4-4 include only individuals who reported receiving promotions in the SDR.

<sup>12</sup> The sample size for the full-professor rank is smaller because we excluded individuals with fewer than 12 years of postdoctoral experience from this analysis. The sample used for the associate-professor analysis excluded individuals with fewer than 6 years of postdoctoral experience.

TABLE 4-4. Phase II promotion rates and years to rank by sex

Rank and outcome	Total		Male		Female	
	Sample size	Rank outcome	Sample size	Rank outcome	Sample size	Rank outcome
Associate professor						
Fraction in rank	5305	0.579	3548	0.616	1757	0.491
Years to promotion	3015	8.32	2138	8.31	877	8.39
Full professor						
Fraction in rank	2495	0.344	1745	0.380	750	0.241
Years to promotion	783	12.65	597	12.64	186	12.67

NOTE: Fractions in rank and years to promotion (years since earning the doctorate) are sample-weighted estimates. Years-to-tenure estimates exclude censored observations.

SOURCES: Sample drawn from Survey of Doctorate Recipients, 1997; work-history data drawn from Survey of Doctorate Recipients, 1981–1997.



Gender differences in promotion rates and time to promotion reported in table 4-4 should be interpreted cautiously. These are simply sample-weighted estimates from the samples used for the Phase II rank analysis and do not account for other factors that affect promotions to senior ranks. Also, the estimates of time to promotion exclude censored observations. An observation was censored if the individual had never reported being promoted as of the date of the 1997 SDR wave.<sup>13</sup>

## PHASE II MULTIVARIATE ANALYSIS OF ACADEMIC RANK

Most of our findings from the Phase II rank analysis are consistent with the results of our Phase I rank analysis and our tenure analysis. The results of our Phase II rank analysis indicate that after accounting for controls, women are less likely than men to be promoted to senior ranks. We also found that allowing for gender differences in the influence of family characteristics reduces gender differences in promotions to the full-professor rank. Having children is negatively related to women's success rates. Finally, we note that women are less likely than men to have missing observations for the rank outcomes before they are promoted to associate professor. This might have caused us to understate gender differences in success rates.

Table 4-5 reports the results of our Phase II analysis of promotions to the associate-professor rank for four alternative model specifications. All four models include as controls variables for human capital and for personal and family characteristics and include a set of variables distinguishing when the doctorate was earned.<sup>14</sup> In addition, Model 2 includes a variable for outcome status. This measures, as a percentage of time before promotion, how long an individual was employed in a position for which academic rank was not applicable. Model 3 includes a set of work-history variables as controls but does not include the variable for outcome status. Model 4 includes variables for both outcome status and work history.

The estimated marginal relations in table 4-5 are interpreted differently from those for the Phase I rank analyses. Specifically, the estimates in table 4-5 show

<sup>13</sup> The hazard model used information on the amount of time elapsed since earning the doctorate for censored observations. As a result, the sample sizes used in the Phase II multivariate analysis are those reported in table 4-4 for promotion rates, not the smaller samples used to compute average time to promotion.

<sup>14</sup> See Section 2, table 2-4, for a detailed list of control variables.

TABLE 4-5. Marginal relations of female variables for Phase II rank models: Associate professor

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	0.829*	-	-	-
2	0.848*	-	-	-
3	0.826*	-	-	-
4	0.882*	-	-	-
I-1	0.903	1.068	0.865*	0.789*
I-2	0.931	1.016	0.859*	0.852*
I-3	0.908	1.030	0.896	0.777*
I-4	0.982	0.989	0.877	0.832*

\* Statistically significant at 95 percent confidence.

NOTES: Model 1 excludes selection variables for outcome status and employment; Model 2 excludes outcome status but includes work history; Model 3 includes outcome status, but excludes work history; Model 4 includes both outcome status and work history. Models I-1 through I-4 include female-interaction variables. See Appendix D, tables D-9–16, for detailed estimates of complete model.

SOURCES: Sample drawn from Survey of Doctorate Recipients, 1997; variables constructed from Survey of Doctorate Recipients, 1981–1997.

the relations between the variables of interest and women's promotion success rates relative to men's. A marginal relation less than 1.0 means that the variable of interest is negatively related to women's chances for promotion relative to similarly situated men. Similarly, a marginal relation greater than 1.0 indicates the variable of interest is positively related to women's relative chances for promotion. For example, the estimated marginal relation for the female variable for Model 1 is 0.829; thus, after accounting for controls, the chance of a woman being promoted to the associate professor rank is about 82.9 percent of man's chance of being promoted.

The estimated marginal relations for Models 1 through 4 are all less than 1.0 and are statistically significant, indicating that after accounting for controls, women are less likely than men to be promoted to the associate-professor rank. The estimates range from 0.829 to 0.882, suggesting that women's chances for promotion are about 83 to 88 percent of the chances of their male counterparts.

Table 4-6 reports the results of our Phase II analysis of promotion to the full-professor rank for the same four alternative model specifications described above. These estimates can be interpreted similarly to those in table 4-5. Each of the estimated marginal relations for the female variables in Model 1 through 4 is less than 1.0 and is statistically significant.

TABLE 4-6. Marginal relations of female variables for Phase II rank models: Full professor

Model	Female	Female interactions		
		Married	Dependents (age <6)	Dependents (age 6 to 18)
1	0.747*	-	-	-
2	0.730*	-	-	-
3	0.748*	-	-	-
4	0.763*	-	-	-
I-1	1.046	0.938	0.835	0.642*
I-2	0.872	1.064	0.876	0.704*
I-3	1.058	0.908	0.838	0.651*
I-4	0.992	1.009	0.890	0.723*

\* Statistically significant at 95 percent confidence.

NOTES: Model 1 excludes selection variables for outcome status and employment variables; Model 2 excludes outcome status but includes work history; Model 3 includes outcome status but excludes work history; Model 4 includes both outcome status and work history. Models I-1 through I-4 include female-interaction variables. See Appendix D, tables D-17–24, for detailed estimates of complete models.

SOURCES: Sample drawn from Survey of Doctorate Recipients, 1997; variables constructed from Survey of Doctorate Recipients, 1981–1997.

### Results for Female-Interaction Variables

The last four rows of tables 4-5 and 4-6 report results for Models I-1 through I-4, which include female-interaction variables.<sup>15</sup> The estimated marginal relations for the female-interaction variables can be interpreted similarly to the estimates for the female variables. For example, the marginal relation in table 4-5 for the variable “dependents (age 6 to 18)” in Model 1 is 0.789. This means that after accounting for other controls, the last child between the ages of 6 and 18 reduces a woman’s chances for promotion to the associate-professor rank to 78.9 percent of the chances for a similarly situated man.

The results for the female-interaction models in tables 4-5 and 4-6 show that allowing for gender differences in the influence of family characteristics tends to lower estimates of gender differences in promotion rates. The estimates of the marginal relations for the variables for interaction between “female” and “dependents” are consistently less than 1.0 and are statistically significant for older dependents. Moreover, the estimated marginal relations for the female variable are statistically insignificant, both for the associate- and full-professor analyses.

<sup>15</sup> The Phase II analysis of promotion to the associate-professor rank measures all family characteristics—including the female-interaction variables—3 survey waves, or about 6 years, from the date that the doctorate was earned. The Phase II analysis of promotion to the full-professor rank measures family characteristics 6 survey waves, or about 12 years, from the date of the doctorate.

Accordingly, after allowing for gender differences in the influence of family variables, we cannot reject the hypothesis that men and women have the same chances for promotion to senior ranks after allowing for gender differences in the influence of family variables.

This finding differs from our conclusions from the Phase I analysis, and thus warrants further comment. In the Phase I analysis, we observed statistically significant gender differences in the likelihood of promotion to the full-professor rank, even after we allowed for gender differences in the influence of family characteristics. In the Phase II analysis, however, the estimated marginal relations for the female variable in Models I-1, I-3, and I-4 are very close to 1.0 and are statistically insignificant, suggesting no gender differences in promotion rates (table 4-6). The marginal relation for Model I-2 is less than 1.0 but is not statistically significant.

The different results for the Phase I and Phase II interaction models have several possible explanations. One possibility is that we systematically overstate the relative time required for male promotions in Phase II because of missing responses in the SDR data. Time to promotion was measured by searching SDR waves for the first occurrence of an individual reporting employment at a senior rank. If an individual fails to complete the section of the SDR questionnaire on academic rank after being promoted, we will overstate the time the individual required to achieve the full-professor rank.<sup>16</sup> Women, however, are about 3.5 percent less likely than men to omit information on their rank before promotion to associate professor, and they are about 3.0 percent less likely to omit information on their rank before promotion to full professor.<sup>17</sup> This raises the possibility that the Phase II analysis overstates the relative time it takes men to be promoted. To the extent that this occurs, our estimates of gender differences in promotion rates will be understated.

Second, we used different samples for the Phase I and Phase II analyses. The Phase I analysis looked at doctorate recipients at specific points in their careers and used a sample of doctorate recipients who reported full-time academic employment anytime in the 1981–1997 SDR waves. In contrast, the Phase II analysis used a

<sup>16</sup> The same bias is possible in our measure of time to promotion to the rank of associate professor.

<sup>17</sup> The gender difference in response rates for the associate-professor analysis is statistically significant. Although the difference for the full-professor analysis is not statistically significant, there is still potential for bias in the measure of time to promotion.

sample of individuals who reported full-time employment in the 1997 SDR wave. Individuals included in the Phase II sample on average earned the doctorate more recently than those in the Phase I sample. Also, because of the recent trend of increased female representation in academia, the Phase II sample has a higher proportion of women than the sample we used for the Phase I analyses. Differences in the Phase I and II results could be due to differences in these samples.

Finally, the statistical methods we used in Phases I and II are different. As noted earlier, we used multinomial logit analysis in Phase I and multivariate hazard analysis in Phase II. Differences in underlying assumptions implicit in these modeling techniques could contribute to differences in Phase I and Phase II results.<sup>18</sup>

### *Results for Outcome-Status and Work-History Variables*

Several of the alternative model specifications included in tables 4-5 and 4-6 are designed to determine whether variables for outcome status and work history affect estimates of gender differences in promotion rates. The outcome-status variable measures the percentage of time that doctorate recipients were employed in positions where rank was not applicable before they received promotions. The work-history variables include measures of the percentage of time

before promotion that individuals report not being employed full time in academia or report employment at a research institution, employment at a doctoral institution, teaching as the primary work activity, or research as the primary work activity.

Although there is some variation in the estimated marginal relations for the female variable across alternative model specifications in tables 4-5 and 4-6, the differences are within the range of statistical error.<sup>19</sup> Accordingly, we do not find statistical evidence that including outcome-status and work-history variables as controls affects our estimates of gender differences in promotion rates.

In most cases, however, the outcome-status and work-history variables are statistically significant determinants of promotion rates. As might be expected, spending time in positions where rank is not applicable is negatively related to chances for promotion to senior ranks. The same is true for spending time in jobs that are not full-time academic positions. Being employed in either a research or a doctoral institution reduces a doctorate recipient's chances for promotion, perhaps because promotion requirements at these kinds of institutions are more stringent than at other institutions. Finally, spending time in positions for which teaching is a primary work activity is negatively related to chances for promotion to the full-professor rank.<sup>20</sup>

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<sup>18</sup> The logit analysis looked at the likelihood that an individual with a given level of postdoctoral experience will receive a promotion, whereas the hazard analysis considered how long it took an individual to receive a promotion. The two modeling techniques also adopted different assumptions about underlying statistical error. See Appendix A for more technical descriptions of the logit and hazard models.

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<sup>19</sup> Differences in the estimated female coefficients of the hazard function are all within two standard deviations across alternative model specifications. See Appendix D, tables D-9–24.

<sup>20</sup> See Appendix D, tables D-10–12, 14–16, 18–20, and 22–24.



## REFERENCES

- Farber, S. 1977. The earnings and promotion of women faculty: Comment. *The American Economic Review* 67(2):199–200.
- Greene, Wm. H. 1995. LIMDEP Version 7.0 User's Manual. Bellport, New York: Econometric Software, Inc.
- Heckman, J. 1974. Shadow prices, market wages, and labor supply. *Econometrica* 42(4):679–694.
- Heckman, J. 1976. Sample selection bias as a specification error. *Econometrica* 47(1):153–161.
- Kahn, S. 1993. Gender differences in academic career paths of economists. *AER Papers and Proceedings* May: 52–56.
- Long, J. S. 2001. *From Scarcity to Visibility: Gender Differences in the Careers of Doctoral Scientists and Engineers*. Washington, DC: National Academy Press.
- McDowell J. M., and J. K. Smith. 1992. The effect of gender sorting on propensity to coauthor: Implications for academic promotion. *Economic Inquiry* 30(1):68–82.
- National Science Foundation (NSF). 2003. *Gender Differences in the Careers of Academic Scientists and Engineers: A Literature Review*, NSF 03-322, Project Officer, Alan I. Rapoport. Arlington, VA.
- Olson, K. 1999. Who has tenure? Gender differences in science and engineering academia. [Unpublished report; copy in the possession of Alan I. Rapoport, Science and Engineering Indicators Program, Division of Science Resources Statistics, National Science Foundation, Arlington, VA.]



# APPENDIX A. STATISTICAL MODELS

This appendix describes the statistical models used in this study. These include the multivariate logit analyses used in Phase I and the multivariate hazard analyses used in Phase II.

We adopted a 95 percent confidence level for rejecting the null hypothesis throughout this report. A 95 percent confidence level means that there is a 5 percent chance of incorrectly rejecting the null hypothesis and concluding that the differences observed in the sample are significant.

We followed the statistical convention of testing the null hypothesis. In this case, the null hypothesis states that, after controlling for other factors, the probability that an outcome occurs for female doctorate recipients is not different from the probability that the same outcome will be observed for male doctorate recipients. Rejecting the null hypothesis allows us to accept the alternative hypothesis that the probabilities are different. If we can accept the alternative hypothesis, we might infer an association between sex and the outcome (i.e., employment in a tenure-track position, earning tenure, or employment in different academic ranks).

## LOGIT ANALYSIS

The logit analyses allow us to determine whether sex is related to the likelihood that a given outcome will occur after accounting for the contributions of other controlling variables. We do this by comparing the likelihood that a given outcome will occur for female doctorates with the likelihood that the outcome will occur for male doctorate recipients, holding constant other factors that might be related to outcomes.

The general structure of the logit model is

$$\text{Prob}(Y_j) = e^{F_i\alpha_j + X_i\beta_j} / \sum_j e^{F_i\alpha_j + X_i\beta_j}$$

where

$\text{Prob}(Y_j)$  = the probability of observing an outcome;

$F$  = a vector of female variables (i.e., FEMALE and the female interaction variables);

$\alpha$  = a vector of coefficients on  $F$ ;

$X$  = a vector of controlling variables;

$\beta$  = a vector of coefficients on  $X$ ;

$i$  references individuals; and

$j$  references outcomes.

The Phase I estimates presented in Sections 3 and 4 of this report are the marginal relations between the female variables and the likelihood of an outcome occurring and are not the estimates of the  $\alpha$  and  $\beta$ . These marginal relations, typically referred to as “marginal effects,” are given by the partial derivative of the probability of the outcome occurring with respect to the female variables. For example, the marginal effect of the  $k^{\text{th}}$  female variable is given by

$$\text{Marginal effect}_k = \partial \text{Prob}(Y_j) / \partial F_k$$

computed at the sample means of  $X$  and  $F$ . We computed the marginal effects of the controlling variables analogously.<sup>1</sup> We provide complete estimates of the logit models in Appendix C. Note that the estimates reported there are the marginal effects and are not estimates of the  $\alpha$  and  $\beta$ . We provide an alphabetical list of variable acronyms in Appendix B.

Note that the logit models for the tenure track and tenure analyses are binomial in that only two outcomes are possible (e.g., the individual is either tenured or not tenured). However, the logit models for the academic rank analyses are multinomial in that several (three) outcomes are possible (i.e., junior ranks, associate professor rank, or full professor rank).

We generally included cases when observations were missing for independent variables and included missing dummy variables as controls. However, we excluded cases in which information required to define the dependent variable, (i.e., career outcomes) was missing.<sup>2</sup>

<sup>1</sup>The logit models were estimated using LIMDEP ver. 7.0. See Greene, 1995.

<sup>2</sup>We followed this convention in all the multivariate analyses conducted for this study.

## HAZARD ANALYSIS

Hazard analysis allows us to estimate the likelihood that an outcome will be observed for an individual at any given time, conditional on the fact that the outcome has not occurred previously for that individual. We employed the Cox proportional hazard model in our Phase II analyses. The structure of the model is

$$h(t, F, X) = h(t, 0, 0)e^{\alpha F + \beta'X}$$

where

$t$  = time (years since doctorate);

$h(t, F, X)$  = the hazard rate at time  $t$ , conditional on  $F$  and  $X$ ;

$h(t, 0, 0)$  = the baseline hazard rate; and

all else is as previously defined.

The probability of an outcome occurring for an individual at time  $T^*$  can be written

$$\text{Prob}(i, j | T^*) = e^{\alpha F_i + \beta'X_i} / \sum_{i \in R_k} e^{\alpha F_i + \beta'X_i}$$

where  $R_k$  is the set of individuals with durations greater than or equal to  $T^*$ , and all else is as previously defined.

In Sections 3 and 4 of this report, we present Phase II estimates of the marginal relations between the female variables and the likelihood of outcomes occurring. These marginal relations, typically referred to as “relative risks” (e.g., the risk of moving from the untenured state to being tenured), give the ratio of the probability of an outcome for a surviving (e.g., untenured) female doctorate recipient to the probability for a similarly situated male doctorate recipient. For example, for the FEMALE<sup>3</sup> variable, the relative risk is given by

$$\text{Relative risk}_F = \text{Prob}(j | F = 1) / \text{Prob}(j | F = 0) = e^{\alpha F}$$

Although we report relative risks in the tables presented in Sections 3 and 4 of this report, the tables in Appendix D report the estimated coefficients of the hazard function (i.e., the  $\alpha$  and  $\beta$ ). These can be converted to estimates of relative risks by exponentiation of the estimated coefficients.

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<sup>3</sup>FEMALE = 1 if individual is female; FEMALE = 0 if not.



## APPENDIX B. GLOSSARY OF VARIABLE ACRONYMS

The following glossary is an alphabetical listing of acronyms for all variables used in the analyses reported in Appendices C and D.

AGEPHD	Age at the date of the doctorate; 0 if age is missing.
ASIAN	1 if race is Asian; 0 otherwise.
BAINT	1 if bachelor's degree earned outside the United States; 0 otherwise.
BIO	1 if doctoral field is biology; 0 otherwise.
BLACK	1 if race is black; 0 otherwise.
CHEM	1 if doctoral field is chemistry; 0 otherwise.
CHEMENG	1 if doctoral field is chemical engineering; 0 otherwise.
COMP	1 if doctoral field is computer science; 0 otherwise.
DEP6	Number of dependents under age 6 living at home; 0 if missing.
DEP63	Number of dependents under age 6 living at home, three survey waves since doctorate; 0 if missing.
DEP66	Number of dependents under age 6 living at home, six survey waves since doctorate; 0 if missing.
DEP183	Number of dependents between ages 6 and 18 living at home, three survey waves since doctorate; 0 if missing.
DEP186	Number of dependents between ages 6 and 18 living at home, six survey waves since doctorate; 0 if missing.
DEP618	Number of dependents between ages 6 and 18 living at home; 0 if missing.
EAOSCI	1 if doctoral field is earth, atmospheric, or oceanic science; 0 otherwise.
ECON	1 if doctoral field is economics; 0 otherwise.
ELECENG	1 if doctoral field is electrical engineering; 0 otherwise.
EMPDOC	1 if employed at doctoral institution; 0 otherwise.
EMPPRI	1 if employed at private institution; 0 otherwise.
EMPRES	1 if employed at research institution; 0 otherwise.
ENG	1 if doctoral field is engineering; 0 otherwise.

FDEP6	FEMALE times number of dependents under age 6 living at home.
FDEP63	FEMALE times number of dependents under age 6 living at home, three survey waves since doctorate.
FDEP66	FEMALE times number of dependents under age 6 living at home, six survey waves since doctorate.
FDEP183	FEMALE times number of dependents between ages 6 and 18 living at home, three survey waves since doctorate.
FDEP186	FEMALE times number of dependents between ages 6 and 18 living at home, six survey waves since doctorate.
FDEP618	FEMALE times number of dependents between ages 6 and 18 living at home.
FELLOW	1 if primary support is fellowship; 0 otherwise.
FEMALE	1 if sex is female; 0 otherwise.
FMAR3	1 if female and married, three survey waves since doctorate; 0 otherwise.
FMAR6	1 if married and married, six survey waves since doctorate; 0 otherwise.
FMARRIED	1 if female and married; 0 otherwise.
FSWI	1 if switched fields between bachelor's, master's or doctoral degree; 0 otherwise.
HCAPPHD	1 if individual reported being handicapped at time of earning doctorate; 0 otherwise.
HEALTH	1 if doctoral field is health; 0 otherwise.
HISPAN	1 if ethnicity is Hispanic; 0 otherwise.
MAGEPHD	1 if age at the date of the doctorate is missing; 0 otherwise.
MAR3	1 if married, three survey waves since doctorate; 0 otherwise.
MAR6	1 if married, six survey waves since doctorate; 0 otherwise.
MARRIED	1 if married; 0 otherwise.
MATH	1 if doctoral field is mathematics; 0 otherwise.
MATHCOMP	1 if doctoral field is mathematics or computer science; 0 otherwise.
MBAINTE	1 if bachelor's degree earned outside the United States is missing; 0 otherwise.
MCITPHD	1 if citizenship status at time of doctorate is missing; 0 otherwise.
MDEP	1 if number of children living at home is missing; 0 otherwise.
MDEP3	1 if number of children living at home is missing, three survey waves since doctorate; 0 otherwise.

MDEP6	1 if number of children living at home is missing, six survey waves since doctorate; 0 otherwise.
MEMPCARN	1 if Carnegie classification of employing institution is missing; 0 otherwise.
MEMPPRI	1 if employed at private institution is missing; 0 otherwise.
MFSWI	1 if switched fields between bachelor's, master's or doctoral degree is missing; 0 otherwise.
MHCAPPHD	1 if handicap status at time of earning doctorate is missing; 0 otherwise.
MMAR3	1 if marital status is missing, three survey waves since doctorate; 0 otherwise.
MMARRIED	1 if marital status is missing; 0 otherwise.
MPDOCP	1 if planning a postdoctoral appointment at time of doctorate is missing; 0 otherwise.
MPSOURC	1 if primary support is missing; 0 otherwise.
MRACE	1 if race/ethnicity is missing; 0 otherwise.
MTTD1	1 if years elapsed between graduate school entry and doctorate is missing; 0 otherwise.
NATAMER	1 if Native American; 0 otherwise.
NATUPHD	1 if naturalized citizen at time of doctorate; 0 otherwise.
OPSCI	1 if doctoral field is other physical science; 0 otherwise.
OSSCI	1 if doctoral field is other social science; 0 otherwise.
OTHENG	1 if doctoral field is other engineering; 0 otherwise.
PDOCP	1 if planning a postdoctoral appointment at time of doctorate; 0 otherwise.
PEMPDOA	Percent of time employed at doctoral institution before promotion to associate professor, if promoted; otherwise percent of time employed at doctoral institution before 1997 SDR survey wave.
PEMPDOF	Percent of time employed at doctoral institution before promotion to full professor, if promoted; otherwise percent of time employed at doctoral institution before 1997 SDR survey wave.
PEMPDOL	Percent of time employed at doctoral institution before tenure, if tenured; otherwise percent of time employed at doctoral institution before 1997 SDR survey wave.
PEMPRSA	Percent of time employed at research institution before promotion to associate professor, if promoted; otherwise percent of time employed at research institution before 1997 SDR survey wave.
PEMPRSF	Percent of time employed at research institution before promotion to full professor, if promoted; otherwise percent of time employed at research institution before 1997 SDR survey wave.
PEMPRSL	Percent of time employed at research institution before tenure, if tenured; otherwise percent of time employed at research institution before 1997 SDR survey wave.

PERMPHD	1 if permanent resident at time of doctorate; 0 otherwise.
PHD70S	1 if doctorate earned during the 1970s; 0 otherwise.
PHD80S	1 if doctorate earned during the 1980s; 0 otherwise.
PHYSICS	1 if doctoral field is physics; 0 otherwise.
PHYSOTH	1 if doctoral field is physics or other physical science; 0 otherwise.
PMASO	Percent of time rank is missing before promotion to associate professor, if promoted; otherwise percent of time rank is missing before 1997 SDR survey wave.
PMCRGA	Percent of time Carnegie classification of employing institution is missing before promotion to associate professor, if promoted; otherwise percent of time Carnegie classification of employing institution is missing before 1997 SDR survey wave.
PMCRGF	Percent of time Carnegie classification of employing institution is missing before promotion to full professor, if promoted; otherwise percent of time Carnegie classification of employing institution is missing before 1997 SDR survey wave.
PMCRGL	Percent of time Carnegie classification of employing institution is missing before tenure, if tenured; otherwise percent of time Carnegie classification of employing institution is missing before 1997 SDR survey wave.
PMFULL	Percent of time rank is missing before promotion to full professor, if promoted; otherwise percent of time rank is missing before 1997 SDR survey wave.
PMTENL	Percent of time tenure status is missing before tenure, if tenured; otherwise percent of time tenure status is missing before 1997 SDR survey wave.
PMWAA	Percent of time primary work activity is missing before promotion to associate professor, if promoted; otherwise percent of time primary work activity is missing before 1997 SDR survey wave.
PMWACF	Percent of time primary work activity is missing before promotion to full professor, if promoted; otherwise percent of time primary work activity is missing before 1997 SDR survey wave.
PMWAL	Percent of time primary work activity is missing before tenure, if tenured; otherwise percent of time primary work activity is missing before 1997 SDR survey wave.
PNACAFA	Percent of time not employed full time in academia before promotion to associate professor, if promoted; otherwise percent of time not employed full time in academia before 1997 SDR survey wave.
PNACAFF	Percent of time not employed full time in academia before promotion to full professor, if promoted; otherwise percent of time not employed full time in academia before 1997 SDR survey wave.
PNACAFT	Percent of time not employed full time in academia before tenure, if tenured; otherwise percent of time not employed full time in academia before 1997 SDR survey wave.
PNTRAC	Percent of time not on tenure track before tenure, if tenured; otherwise percent of time not on tenure track before 1997 SDR survey wave.

POLYSCI	1 if doctoral field is political science; 0 otherwise.
PRANKNA	Percent of time rank is not applicable before promotion to full professor, if promoted; otherwise percent of time rank is not applicable before 1997 SDR survey wave.
PRESCHA	Percent of time primary work activity is research before promotion to associate professor, if promoted; otherwise percent of time primary work activity is research before 1997 SDR survey wave.
PRESCHF	Percent of time primary work activity is research before promotion to full professor, if promoted; otherwise percent of time primary work activity is research before 1997 SDR survey wave.
PRESCHL	Percent of time primary work activity is research before tenure, if tenured; otherwise percent of time primary work activity is research before 1997 SDR survey wave.
PRNKANA	Percent of time rank is not applicable before promotion to associate professor, if promoted; otherwise percent of time rank is not applicable before 1997 SDR survey wave.
PSYCH	1 if doctoral field is psychology; 0 otherwise.
PTEACHA	Percent of time primary work activity is teaching before promotion to associate professor, if promoted; otherwise percent of time primary work activity is teaching before 1997 SDR survey wave.
PTEACHF	Percent of time primary work activity is teaching before promotion to full professor, if promoted; otherwise percent of time primary work activity is teaching before 1997 SDR survey wave.
PTEACHL	Percent of time primary work activity is teaching before tenure, if tenured; otherwise percent of time primary work activity is teaching before 1997 SDR survey wave.
RA	1 if primary support is research assistantship; 0 otherwise.
RANK1	2 rank is full; 1 if rank is associate; 0 otherwise.
SAD	1 if doctoral field is sociology, anthropology, or demography; 0 otherwise.
TA	1 if primary support is teaching assistantship; 0 otherwise.
TEMPPHD	1 if temporary resident at time of doctorate; 0 otherwise.
TENURED	1 if tenured; 0 otherwise.
TRAC	1 if on tenure track; 0 otherwise.
TRAIN	1 if primary support is traineeship; 0 otherwise.
TTD1	Years elapsed between graduate school entry and doctorate; 0 if missing.
WAOTH	1 if primary work activity is not teaching or research; 0 otherwise.
WATEACH	1 if primary work activity is teaching; 0 otherwise.
WAVE83	1 if SDR survey wave is 1983; 0 otherwise.

WAVE85	1 if SDR survey wave is 1985; 0 otherwise.
WAVE87	1 if SDR survey wave is 1987; 0 otherwise.
WAVE89	1 if SDR survey wave is 1989; 0 otherwise.
WAVE91	1 if SDR survey wave is 1991; 0 otherwise.
WAVE93	1 if SDR survey wave is 1993; 0 otherwise.
WAVE95	1 if SDR survey wave is 1995; 0 otherwise.
WAVE97	1 if SDR survey wave is 1997; 0 otherwise.
YRPHD15	1 if years since doctorate is 15; 0 otherwise.
YRPHD21	1 if years since doctorate is 21; 0 otherwise.
YRPHD9	1 if years since doctorate is 9; 0 otherwise.
YRSASO	Years elapsed between doctorate and promotion to associate professor, if promoted; otherwise, years elapsed between doctorate and 1997 survey wave.
YRSFULL	Years elapsed between doctorate and promotion to full professor, if promoted; otherwise, years elapsed between doctorate and 1997 survey wave.
YRSTEN	Years elapsed between doctorate and tenure, if tenured; otherwise, years elapsed between doctorate and 1997 survey wave.

# APPENDIX C. PHASE I MULTIVARIATE LOGIT ANALYSES

This appendix reports the detailed statistical results of our Phase I analyses. These include the following:

- Tenure track (tables C-1 through C-16).
- Tenure (tables C-17 through C-40).
- Academic rank (tables C-41 through C-64).

All reported coefficients and corresponding statistics are marginal relations (i.e., partial derivatives of outcome variables with respect to the corresponding independent variable).<sup>1</sup> Refer to Appendix A for detailed descriptions of the statistical models and to Appendix B for a list of variable acronyms and definitions. Descriptions of models are provided in Section 2 of this report and are summarized in table 2-3.<sup>2</sup>

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<sup>1</sup> All models were estimated using LIMDEP ver. 7.0. See Greene, 1995.

<sup>2</sup> Models labeled with the prefix "I" include the female-interaction variables.

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TABLE C-1. Maximum likelihood estimates for tenure track, logit model 1: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.75664E-01	3.98480E-02	6.918	0.0000		DEP6	3.18676E-03	5.93380E-03	0.537	0.5912	4.01300E-01
FEMALE	-3.27920E-02	6.85990E-03	-4.780	0.0000	3.67600E-01	DEP618	4.92288E-03	5.02280E-03	0.980	0.3270	4.61600E-01
YRPHD9	1.14633E-02	6.45630E-03	1.776	0.0758	5.06600E-01	MDEP	5.01488E-03	1.19410E-02	0.420	0.6745	3.68200E-01
TA	1.84405E-02	1.28640E-02	1.433	0.1517	1.16900E-01	BIO	-5.25260E-02	1.68170E-02	-3.123	0.0018	2.99200E-01
RA	2.63628E-02	1.18570E-02	2.223	0.0262	1.65000E-01	HEALTH	-7.25272E-03	1.96790E-02	-0.369	0.7125	7.82200E-02
FELLOW	3.67753E-02	2.25410E-02	1.631	0.1028	2.57300E-02	CHEMENG	1.47198E-01	7.72160E-02	1.906	0.0566	1.02300E-02
TRAIN	2.90009E-02	1.28420E-02	2.258	0.0239	1.03300E-01	ELECENG	7.31144E-02	3.95970E-02	1.846	0.0648	2.13800E-02
MPSOURC	3.34861E-02	1.32660E-02	2.524	0.0116	4.16000E-01	OTHENG	1.73437E-02	2.19030E-02	0.792	0.4285	7.37600E-02
TTD1	-8.62991E-04	1.44560E-03	-0.597	0.5505	8.60300E+00	COMP	3.97511E-02	4.02400E-02	0.988	0.3232	1.39800E-02
MTTD1	5.21297E-03	3.86010E-02	0.135	0.8926	2.50300E-02	MATH	3.66182E-02	2.10200E-02	1.742	0.0815	8.54100E-02
PDOCP	-6.38832E-02	8.10900E-03	-7.878	0.0000	3.80900E-01	PHYSICS	-7.56298E-02	1.95130E-02	-3.876	0.0001	5.25800E-02
MPDOCP	-5.86760E-02	1.85020E-02	-3.171	0.0015	5.07600E-02	CHEM	-3.22348E-02	2.00320E-02	-1.609	0.1076	6.18000E-02
FSWI	-8.80716E-03	7.13620E-03	-1.234	0.2172	3.68300E-01	EAOSCI	-5.35899E-02	2.04710E-02	-2.618	0.0089	4.40700E-02
MFSWI	-1.48414E-02	7.43850E-03	-1.995	0.0460	3.44900E-01	OPSCI	-4.65162E-02	5.12460E-02	-0.908	0.3640	3.34300E-03
BAINT	9.31167E-03	1.68910E-02	0.551	0.5814	8.11600E-02	PSYCH	-5.04768E-02	1.85260E-02	-2.725	0.0064	8.65200E-02
MBAINT	1.73017E-03	4.45540E-02	0.039	0.9690	1.29700E-02	ECON	4.79742E-02	3.25690E-02	1.473	0.1408	2.50300E-02
AGEPHD	-2.06290E-03	1.28150E-03	-1.610	0.1075	3.13800E+01	POLYSCI	6.15347E-02	3.55800E-02	1.729	0.0837	2.02600E-02
MAGEPHD	-7.43102E-02	8.24660E-02	-0.901	0.3675	3.54600E-03	SAD	2.61941E-02	2.31710E-02	1.130	0.2583	5.12700E-02
NATUPHD	-2.24693E-02	1.59000E-02	-1.413	0.1576	4.14400E-02	OSSCI	1.98522E-02	3.29900E-02	0.602	0.5473	1.80300E-02
PERMPHD	-3.53226E-02	1.84410E-02	-1.915	0.0554	4.26500E-02	WAVE97	8.21540E-02	1.88550E-02	4.357	0.0000	9.33100E-02
TEMPPHD	8.90013E-03	1.73970E-02	0.512	0.6089	8.41900E-02	WAVE95	8.26573E-02	1.82130E-02	4.538	0.0000	1.18100E-01
MCITPHD	5.45735E-02	3.00710E-02	1.815	0.0696	2.58400E-02	WAVE93	7.04092E-02	1.76870E-02	3.981	0.0001	1.20700E-01
HISPAN	3.23766E-02	1.67820E-02	1.929	0.0537	5.02500E-02	WAVE91	6.15010E-02	1.87060E-02	3.288	0.0010	7.89300E-02
BLACK	5.63661E-02	1.70500E-02	3.306	0.0010	5.90700E-02	WAVE89	2.89852E-02	1.67240E-02	1.733	0.0831	9.62500E-02
ASIAN	-2.33662E-02	1.16910E-02	-1.999	0.0456	1.12700E-01	WAVE87	1.92538E-02	1.64680E-02	1.169	0.2423	9.20000E-02
NATAMER	3.59394E-02	6.56640E-02	0.547	0.5842	3.64700E-03	WAVE85	-1.57592E-02	1.29610E-02	-1.216	0.2240	1.17000E-01
MARRIED	-3.30438E-03	8.26200E-03	-0.400	0.6892	7.29400E-01	WAVE83	1.14057E-02	1.28180E-02	0.890	0.3736	1.47600E-01
MMARRIED	2.26703E-02	1.92780E-02	1.176	0.2396	3.51600E-02						

NOTES: Dependent variable:TRAC; marginal effects: tenure track; 9870 observations; 7 iterations; log likelihood function = -3751.911.

TABLE C-2. Maximum likelihood estimates for tenure track, logit model 2: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.33909E-01	3.65790E-02	6.395	0.0000		WATEACH	1.31375E-01	7.37130E-03	17.822	0.0000	4.49500E-01
FEMALE	-3.18798E-02	6.19640E-03	-5.145	0.0000	3.67600E-01	WAOH	-1.05294E-02	8.25390E-03	-1.276	0.2021	1.27200E-01
YRPHD9	8.67043E-03	5.81360E-03	1.491	0.1359	5.06600E-01	EMPPRI	-2.63217E-02	6.49900E-03	-4.050	0.0001	2.74900E-01
TA	2.82160E-03	1.16410E-02	0.242	0.8085	1.16900E-01	MEMPPRI	-3.16163E-02	2.38620E-02	-1.325	0.1852	1.39200E-01
RA	2.60346E-02	1.06760E-02	2.438	0.0148	1.65000E-01	EMPRES	-5.12210E-03	7.26750E-03	-0.705	0.4809	3.06600E-01
FELLOW	3.22678E-02	2.02240E-02	1.596	0.1106	2.57300E-02	EMPDOC	4.99897E-02	1.36220E-02	3.670	0.0002	8.01400E-02
TRAIN	2.97740E-02	1.15470E-02	2.578	0.0099	1.03300E-01	MEMPCARN	1.23791E-02	2.34760E-02	0.527	0.5980	2.66600E-01
MPSOURC	3.31025E-02	1.20100E-02	2.756	0.0059	4.16000E-01	BIO	-4.59801E-02	1.52550E-02	-3.014	0.0026	2.99200E-01
TTD1	-5.53470E-04	1.30110E-03	-0.425	0.6706	8.60300E+00	HEALTH	-8.77188E-03	1.77470E-02	-0.494	0.6211	7.82200E-02
MTTD1	1.19471E-02	3.43300E-02	0.348	0.7278	2.50300E-02	CHEMENG	1.18883E-01	6.81100E-02	1.745	0.0809	1.02300E-02
PDOCP	-3.53691E-02	7.56450E-03	-4.676	0.0000	3.80900E-01	ELECENG	4.54459E-02	3.52310E-02	1.290	0.1971	2.13800E-02
MPDOCP	-4.39774E-02	1.70520E-02	-2.579	0.0099	5.07600E-02	OTHENG	-2.44361E-03	1.96570E-02	-0.124	0.9011	7.37600E-02
FSWI	-2.61453E-03	6.44200E-03	-0.406	0.6849	3.68300E-01	COMP	2.33321E-02	3.58660E-02	0.651	0.5153	1.39800E-02
MFSWI	-3.69200E-03	6.69690E-03	-0.551	0.5814	3.44900E-01	MATH	4.23002E-03	1.89800E-02	0.223	0.8236	8.54100E-02
BAINT	1.10676E-02	1.52500E-02	0.726	0.4680	8.11600E-02	PHYSICS	-7.25753E-02	1.76850E-02	-4.104	0.0000	5.25800E-02
MBAINT	2.87140E-03	4.01110E-02	0.072	0.9429	1.29700E-02	CHEM	-5.09472E-02	1.81680E-02	-2.804	0.0050	6.18000E-02
AGEPHD	-3.04931E-03	1.16060E-03	-2.627	0.0086	3.13800E+01	EAOSCI	-7.36905E-02	1.84870E-02	-3.986	0.0001	4.40700E-02
MAGEPHD	-1.14138E-01	7.39940E-02	-1.543	0.1230	3.54600E-03	OPSCI	-5.92570E-02	4.64340E-02	-1.276	0.2019	3.34300E-03
NATUPHD	-2.08903E-02	1.44180E-02	-1.449	0.1474	4.14400E-02	PSYCH	-5.52451E-02	1.68430E-02	-3.280	0.0010	8.65200E-02
PERMPHD	-2.69604E-02	1.66700E-02	-1.617	0.1058	4.26500E-02	ECON	1.38730E-02	2.90840E-02	0.477	0.6334	2.50300E-02
TEMPPHD	7.53793E-03	1.56150E-02	0.483	0.6293	8.41900E-02	POLYSCI	2.25385E-02	3.18280E-02	0.708	0.4789	2.02600E-02
MCITPHD	4.78741E-02	2.70380E-02	1.771	0.0766	2.58400E-02	SAD	2.15346E-03	2.09590E-02	0.103	0.9182	5.12700E-02
HISPAN	2.49333E-02	1.50950E-02	1.652	0.0986	5.02500E-02	OSSCI	2.90418E-03	2.95740E-02	0.098	0.9218	1.80300E-02
BLACK	4.34558E-02	1.53740E-02	2.827	0.0047	5.90700E-02	WAVE97	9.69513E-02	2.10950E-02	4.596	0.0000	9.33100E-02
ASIAN	-2.13019E-02	1.04720E-02	-2.034	0.0419	1.12700E-01	WAVE95	9.18002E-02	1.67020E-02	5.496	0.0000	1.18100E-01
NATAMER	3.30891E-02	5.86750E-02	0.564	0.5728	3.64700E-03	WAVE93	7.10378E-02	2.68580E-02	2.645	0.0082	1.20700E-01
MARRIED	-2.28622E-03	7.45260E-03	-0.307	0.7590	7.29400E-01	WAVE91	6.50386E-02	1.69880E-02	3.828	0.0001	7.89300E-02
MMARRIED	1.37270E-02	1.73770E-02	0.790	0.4296	3.51600E-02	WAVE89	4.04721E-02	1.51330E-02	2.675	0.0075	9.62500E-02
DEP6	1.40044E-03	5.35040E-03	0.262	0.7935	4.01300E-01	WAVE87	2.98502E-02	1.49150E-02	2.001	0.0454	9.20000E-02
DEP618	2.11665E-03	4.54350E-03	0.466	0.6413	4.61600E-01	WAVE85	-1.11386E-02	1.17810E-02	-0.945	0.3444	1.17000E-01
MDEP	5.33512E-03	1.08060E-02	0.494	0.6215	3.68200E-01	WAVE83	5.51456E-03	1.16500E-02	0.473	0.6360	1.47600E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 9870 observations; 7 iterations; log likelihood function = -3532.526.

TABLE C-3. Maximum likelihood estimates for tenure track, logit model 3: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	3.02471E-01	4.38390E-02	6.900	0.0000		DEP6	5.07396E-03	6.55290E-03	0.774	0.4388	3.92400E-01
FEMALE	-3.72055E-02	7.57160E-03	-4.914	0.0000	3.67600E-01	DEP618	5.36220E-03	5.53070E-03	0.970	0.3323	4.56700E-01
YRPHD9	1.29054E-02	7.11820E-03	1.813	0.0698	5.07500E-01	MDEP	7.65367E-03	1.31430E-02	0.582	0.5603	3.94700E-01
TA	2.09856E-02	1.42770E-02	1.470	0.1416	1.12600E-01	BIO	-5.84951E-02	1.84520E-02	-3.170	0.0015	2.93700E-01
RA	2.44105E-02	1.31820E-02	1.852	0.0641	1.51400E-01	HEALTH	-2.95637E-03	2.16120E-02	-0.137	0.8912	7.89500E-02
FELLOW	5.26754E-02	2.47680E-02	2.127	0.0334	2.65400E-02	CHEMENG	1.69760E-01	8.43510E-02	2.013	0.0442	9.81300E-03
TRAIN	3.68551E-02	1.42280E-02	2.590	0.0096	1.00500E-01	ELECENG	8.75344E-02	4.33330E-02	2.020	0.0434	2.07400E-02
MPSOURC	3.63469E-02	1.46620E-02	2.479	0.0132	4.45600E-01	OTHENG	2.72736E-02	2.40140E-02	1.136	0.2561	7.25900E-02
TTD1	-1.31954E-03	1.58620E-03	-0.832	0.4055	8.55300E+00	COMP	6.53087E-02	4.39760E-02	1.485	0.1375	1.46100E-02
MTTD1	-6.41499E-04	4.31240E-02	-0.015	0.9881	2.36400E-02	MATH	4.48535E-02	2.30170E-02	1.949	0.0513	9.16600E-02
PDOCP	-7.06914E-02	8.92070E-03	-7.924	0.0000	3.70200E-01	PHYSICS	-8.91525E-02	2.15310E-02	-4.141	0.0000	4.98400E-02
MPDOCP	-6.23114E-02	2.03880E-02	-3.056	0.0022	5.04000E-02	CHEM	-3.52198E-02	2.19860E-02	-1.602	0.1092	6.17800E-02
FSWI	-9.35799E-03	7.86230E-03	-1.190	0.2340	3.69100E-01	EAOSCI	-5.83383E-02	2.24820E-02	-2.595	0.0095	4.46000E-02
MFSWI	-2.05590E-02	8.19020E-03	-2.510	0.0121	3.38800E-01	OPSCI	-5.40148E-02	5.67180E-02	-0.952	0.3409	3.23400E-03
BAINT	3.84758E-03	1.85930E-02	0.207	0.8361	8.19600E-02	PSYCH	-5.80364E-02	2.03490E-02	-2.852	0.0043	8.48600E-02
MBAINT	1.45925E-03	4.94110E-02	0.030	0.9764	1.29300E-02	ECON	6.42643E-02	3.55540E-02	1.807	0.0707	2.65400E-02
AGEPHD	-2.19855E-03	1.40800E-03	-1.561	0.1184	3.13200E+01	POLYSCI	7.70782E-02	3.87980E-02	1.987	0.0470	2.16300E-02
MAGEPHD	-8.37943E-02	9.15760E-02	-0.915	0.3602	3.12200E-03	SAD	3.10824E-02	2.53890E-02	1.224	0.2209	5.24100E-02
NATUPHD	-2.73455E-02	1.75870E-02	-1.555	0.1200	4.04800E-02	OSSCI	2.41593E-02	3.61390E-02	0.669	0.5038	1.79500E-02
PERMPHD	-3.66707E-02	2.04660E-02	-1.792	0.0732	4.27100E-02	WAVE97	5.77651E-02	2.08410E-02	2.772	0.0056	8.38500E-02
TEMPPHD	1.21457E-02	1.92040E-02	0.632	0.5271	8.21800E-02	WAVE95	5.20325E-02	2.01410E-02	2.583	0.0098	1.02500E-01
MCITPHD	5.97261E-02	3.31860E-02	1.800	0.0719	2.46400E-02	WAVE93	4.12159E-02	1.95480E-02	2.108	0.0350	1.07500E-01
HISPAN	3.45858E-02	1.84770E-02	1.872	0.0612	4.91700E-02	WAVE91	4.88322E-02	2.05730E-02	2.374	0.0176	7.76100E-02
BLACK	5.99388E-02	1.87080E-02	3.204	0.0014	5.93200E-02	WAVE89	1.53892E-02	1.84470E-02	0.834	0.4041	9.62300E-02
ASIAN	-2.85204E-02	1.29250E-02	-2.207	0.0273	1.08900E-01	WAVE87	4.18961E-03	1.81520E-02	0.231	0.8175	9.13200E-02
NATAMER	4.04021E-02	7.20530E-02	0.561	0.5750	3.56800E-03	WAVE85	-1.77067E-02	1.41730E-02	-1.249	0.2115	1.28800E-01
MARRIED	-1.64114E-03	9.11160E-03	-0.180	0.8571	7.30500E-01	WAVE83	1.20840E-02	1.40160E-02	0.862	0.3886	1.62500E-01
MMARRIED	2.60082E-02	2.11590E-02	1.229	0.2190	3.73600E-02						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8968 observations; 6 iterations; log likelihood function = -3606.144.

TABLE C-4. Maximum likelihood estimates for tenure track, logit model 4: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.63602E-01	3.98270E-02	6.619	0.0000		WATEACH	1.47687E-01	7.82530E-03	18.873	0.0000	4.80500E-01
FEMALE	-3.59051E-02	6.73970E-03	-5.327	0.0000	3.67600E-01	WAOth	-3.26066E-02	9.23040E-03	-3.533	0.0004	1.07900E-01
YRPHD9	9.44962E-03	6.31470E-03	1.496	0.1345	5.07500E-01	EMPPRI	-3.35691E-02	7.07870E-03	-4.742	0.0000	2.73900E-01
TA	-2.54895E-04	1.27760E-02	-0.020	0.9841	1.12600E-01	MEMPPRI	-2.89130E-02	3.43940E-02	-0.841	0.4006	1.26200E-01
RA	2.25179E-02	1.17120E-02	1.923	0.0545	1.51400E-01	EMPRES	-8.18283E-03	7.85480E-03	-1.042	0.2975	3.12000E-01
FELLOW	4.52614E-02	2.17960E-02	2.077	0.0378	2.65400E-02	EMPDOC	5.11131E-02	1.46320E-02	3.493	0.0005	8.36300E-02
TRAIN	3.84195E-02	1.25870E-02	3.052	0.0023	1.00500E-01	MEMPCARN	-1.25523E-02	3.37570E-02	-0.372	0.7100	2.37300E-01
MPSOURC	3.66096E-02	1.30940E-02	2.796	0.0052	4.45600E-01	BIO	-5.17229E-02	1.64280E-02	-3.148	0.0016	2.93700E-01
TTD1	-8.85789E-04	1.41590E-03	-0.626	0.5316	8.55300E+00	HEALTH	-3.23086E-03	1.91610E-02	-0.169	0.8661	7.89500E-02
MTTD1	9.40107E-03	3.79260E-02	0.248	0.8042	2.36400E-02	CHEMENG	1.31055E-01	7.28380E-02	1.799	0.0720	9.81300E-03
PDOCP	-3.84187E-02	8.22520E-03	-4.671	0.0000	3.70200E-01	ELECENG	5.25026E-02	3.78300E-02	1.388	0.1652	2.07400E-02
MPDOCP	-4.53239E-02	1.85460E-02	-2.444	0.0145	5.04000E-02	OTHENG	2.56320E-03	2.11380E-02	0.121	0.9035	7.25900E-02
FSWI	-1.89469E-03	6.98520E-03	-0.271	0.7862	3.69100E-01	COMP	4.54930E-02	3.84380E-02	1.184	0.2366	1.46100E-02
MFSWI	-7.47827E-03	7.25720E-03	-1.030	0.3028	3.38800E-01	MATH	7.35202E-03	2.04010E-02	0.360	0.7186	9.16600E-02
BAINT	7.61594E-03	1.64920E-02	0.462	0.6442	8.19600E-02	PHYSICS	-8.89774E-02	1.92090E-02	-4.632	0.0000	4.98400E-02
MBAINT	3.56409E-04	4.40450E-02	0.008	0.9935	1.29300E-02	CHEM	-6.19285E-02	1.96290E-02	-3.155	0.0016	6.17800E-02
AGEPHD	-3.37748E-03	1.26500E-03	-2.670	0.0076	3.13200E+01	EAOSCI	-8.61160E-02	2.00020E-02	-4.305	0.0000	4.46000E-02
MAGEPHD	-1.36535E-01	8.14280E-02	-1.677	0.0936	3.12200E-03	OPSCI	-7.64342E-02	5.10420E-02	-1.497	0.1343	3.23400E-03
NATUPHD	-2.70660E-02	1.57690E-02	-1.716	0.0861	4.04800E-02	PSYCH	-6.47338E-02	1.82310E-02	-3.551	0.0004	8.48600E-02
PERMPHD	-2.94018E-02	1.82050E-02	-1.615	0.1063	4.27100E-02	ECON	2.41884E-02	3.11310E-02	0.777	0.4372	2.65400E-02
TEMPPHD	1.24328E-02	1.69550E-02	0.733	0.4634	8.21800E-02	POLYSCI	3.42665E-02	3.41310E-02	1.004	0.3154	2.16300E-02
MCITPHD	5.19620E-02	2.93700E-02	1.769	0.0769	2.46400E-02	SAD	3.77599E-03	2.25930E-02	0.167	0.8673	5.24100E-02
HISPAN	2.87633E-02	1.64140E-02	1.752	0.0797	4.91700E-02	OSSCI	2.54296E-03	3.19140E-02	0.080	0.9365	1.79500E-02
BLACK	4.54114E-02	1.66270E-02	2.731	0.0063	5.93200E-02	WAVE97	8.56575E-02	2.30310E-02	3.719	0.0002	8.38500E-02
ASIAN	-2.58223E-02	1.14010E-02	-2.265	0.0235	1.08900E-01	WAVE95	5.61443E-02	1.80760E-02	3.106	0.0019	1.02500E-01
NATAMER	4.47602E-02	6.29370E-02	0.711	0.4770	3.56800E-03	WAVE93	5.88398E-02	3.68080E-02	1.599	0.1099	1.07500E-01
MARRIED	-9.83646E-04	8.10880E-03	-0.121	0.9035	7.30500E-01	WAVE91	4.88320E-02	1.83790E-02	2.657	0.0079	7.76100E-02
MMARRIED	1.18667E-02	1.87530E-02	0.633	0.5269	3.73600E-02	WAVE89	2.78956E-02	1.64580E-02	1.695	0.0901	9.62300E-02
DEP6	3.19182E-03	5.80910E-03	0.549	0.5827	3.92400E-01	WAVE87	1.28675E-02	1.61960E-02	0.794	0.4269	9.13200E-02
DEP618	1.73303E-03	4.93280E-03	0.351	0.7253	4.56700E-01	WAVE85	-1.20979E-02	1.26770E-02	-0.954	0.3399	1.28800E-01
MDEP	8.36176E-03	1.17170E-02	0.714	0.4754	3.94700E-01	WAVE83	5.62016E-03	1.25480E-02	0.448	0.6542	1.62500E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track: 8968 observations; 7 iterations; log likelihood function = -3334.886.

TABLE C-5. Maximum likelihood estimates for tenure track, logit model I-1: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.60162E-01	3.97020E-02	6.553	0.0000		MARRIED	1.68682E-02	1.12680E-02	1.497	0.1344	7.29400E-01
FEMALE	1.09936E-02	1.22630E-02	0.897	0.3700	3.67600E-01	MMARRIED	2.96785E-02	1.91970E-02	1.546	0.1221	3.51600E-02
FMARRIED	-3.59041E-02	1.53870E-02	-2.333	0.0196	2.27300E-01	DEP6	9.35340E-03	6.96780E-03	1.342	0.1795	4.01300E-01
FDEP6	-2.02000E-02	9.92290E-03	-2.036	0.0418	1.08700E-01	DEP618	1.37522E-02	5.94510E-03	2.313	0.0207	4.61600E-01
FDEP618	-2.90694E-02	8.60020E-03	-3.380	0.0007	1.08100E-01	MDEP	2.60614E-03	1.17130E-02	0.223	0.8239	3.68200E-01
YRPHD9	1.14747E-02	6.41550E-03	1.789	0.0737	5.06600E-01	BIO	-5.11570E-02	1.67280E-02	-3.058	0.0022	2.99200E-01
TA	1.77113E-02	1.27970E-02	1.384	0.1664	1.16900E-01	HEALTH	-6.01578E-03	1.95830E-02	-0.307	0.7587	7.82200E-02
RA	2.73350E-02	1.17930E-02	2.318	0.0205	1.65000E-01	CHEMENG	1.49355E-01	7.66280E-02	1.949	0.0513	1.02300E-02
FELLOW	3.59087E-02	2.23950E-02	1.603	0.1088	2.57300E-02	ELECENG	7.48928E-02	3.93520E-02	1.903	0.0570	2.13800E-02
TRAIN	2.89492E-02	1.27730E-02	2.266	0.0234	1.03300E-01	OTHENG	1.57324E-02	2.17770E-02	0.722	0.4700	7.37600E-02
MPSOURC	3.37287E-02	1.32010E-02	2.555	0.0106	4.16000E-01	COMP	4.29865E-02	4.00150E-02	1.074	0.2827	1.39800E-02
TTD1	-6.59697E-04	1.43650E-03	-0.459	0.6461	8.60300E+00	MATH	3.87303E-02	2.09050E-02	1.853	0.0639	8.54100E-02
MTTD1	4.79857E-03	3.83990E-02	0.125	0.9006	2.50300E-02	PHYSICS	-7.32915E-02	1.94040E-02	-3.777	0.0002	5.25800E-02
PDOCP	-6.35873E-02	8.06340E-03	-7.886	0.0000	3.80900E-01	CHEM	-2.98238E-02	1.99410E-02	-1.496	0.1348	6.18000E-02
MPDOCP	-5.72921E-02	1.83890E-02	-3.116	0.0018	5.07600E-02	EAOSCI	-5.23125E-02	2.03560E-02	-2.570	0.0102	4.40700E-02
FSWI	-9.15427E-03	7.08900E-03	-1.291	0.1966	3.68300E-01	OPSCI	-4.90032E-02	5.08500E-02	-0.964	0.3352	3.34300E-03
MFSWI	-1.53459E-02	7.39190E-03	-2.076	0.0379	3.44900E-01	PSYCH	-4.83225E-02	1.84290E-02	-2.622	0.0087	8.65200E-02
BAINT	9.21731E-03	1.67820E-02	0.549	0.5828	8.11600E-02	ECON	4.94634E-02	3.23410E-02	1.529	0.1262	2.50300E-02
MBAINT	4.97347E-03	4.42910E-02	0.112	0.9106	1.29700E-02	POLYSCI	6.13643E-02	3.53240E-02	1.737	0.0824	2.02600E-02
AGEPHD	-2.49072E-03	1.27310E-03	-1.956	0.0504	3.13800E+01	SAD	2.87110E-02	2.30500E-02	1.246	0.2129	5.12700E-02
MAGEPHD	-8.53719E-02	8.20610E-02	-1.040	0.2982	3.54600E-03	OSSCI	2.18916E-02	3.27910E-02	0.668	0.5044	1.80300E-02
NATUPHD	-2.04669E-02	1.57660E-02	-1.298	0.1942	4.14400E-02	WAVE97	8.46460E-02	1.87450E-02	4.516	0.0000	9.33100E-02
PERMPHD	-3.39377E-02	1.83420E-02	-1.850	0.0643	4.26500E-02	WAVE95	8.43735E-02	1.81180E-02	4.657	0.0000	1.18100E-01
TEMPPHD	9.03003E-03	1.72630E-02	0.523	0.6009	8.41900E-02	WAVE93	7.19237E-02	1.75930E-02	4.088	0.0000	1.20700E-01
MCITPHD	5.14857E-02	2.98580E-02	1.724	0.0847	2.58400E-02	WAVE91	6.46875E-02	1.85940E-02	3.479	0.0005	7.89300E-02
HISPAN	3.31834E-02	1.66640E-02	1.991	0.0465	5.02500E-02	WAVE89	3.10161E-02	1.66430E-02	1.864	0.0624	9.62500E-02
BLACK	5.71680E-02	1.69350E-02	3.376	0.0007	5.90700E-02	WAVE87	2.22644E-02	1.63890E-02	1.359	0.1743	9.20000E-02
ASIAN	-2.36130E-02	1.15830E-02	-2.039	0.0415	1.12700E-01	WAVE85	-1.38581E-02	1.29000E-02	-1.074	0.2827	1.17000E-01
NATAMER	3.47594E-02	6.51100E-02	0.534	0.5934	3.64700E-03	WAVE83	1.33611E-02	1.27540E-02	1.048	0.2948	1.47600E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 9870 observations; 7 iterations; log likelihood function = -3736.716.

TABLE C-6. Maximum likelihood estimates for tenure track, logit model I-2: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.23492E-01	3.64020E-02	6.139	0.0000		MDEP	2.85612E-03	1.05860E-02	0.270	0.7873	3.68200E-01
FEMALE	3.21815E-03	1.10760E-02	0.291	0.7714	3.67600E-01	WATEACH	1.29969E-01	7.34130E-03	17.704	0.0000	4.49500E-01
FMARRIED	-2.64377E-02	1.39320E-02	-1.898	0.0577	2.27300E-01	WAOth	-1.12511E-02	8.20860E-03	-1.371	0.1705	1.27200E-01
FDEP6	-1.86144E-02	8.96240E-03	-2.077	0.0378	1.08700E-01	EMPPRI	-2.59198E-02	6.46580E-03	-4.009	0.0001	2.74900E-01
FDEP618	-2.51949E-02	7.78500E-03	-3.236	0.0012	1.08100E-01	MEMPPRI	-3.07549E-02	2.36420E-02	-1.301	0.1933	1.39200E-01
YRPHD9	8.76735E-03	5.77890E-03	1.517	0.1292	5.06600E-01	EMPRES	-4.73015E-03	7.22730E-03	-0.654	0.5128	3.06600E-01
TA	2.88081E-03	1.15850E-02	0.249	0.8036	1.16900E-01	EMPDOc	4.85046E-02	1.35290E-02	3.585	0.0003	8.01400E-02
RA	2.71163E-02	1.06190E-02	2.554	0.0107	1.65000E-01	MEMPCARN	1.31102E-02	2.32580E-02	0.564	0.5730	2.66600E-01
FELLOW	3.15796E-02	2.00990E-02	1.571	0.1161	2.57300E-02	BIO	-4.49393E-02	1.51840E-02	-2.960	0.0031	2.99200E-01
TRAIN	2.98628E-02	1.14870E-02	2.600	0.0093	1.03300E-01	HEALTH	-7.70638E-03	1.76630E-02	-0.436	0.6626	7.82200E-02
MPSOURC	3.31507E-02	1.19540E-02	2.773	0.0056	4.16000E-01	CHEMENG	1.21644E-01	6.76430E-02	1.798	0.0721	1.02300E-02
TTD1	-3.91629E-04	1.29230E-03	-0.303	0.7619	8.60300E+00	ELECENG	4.71793E-02	3.50460E-02	1.346	0.1782	2.13800E-02
MTTD1	1.14984E-02	3.41620E-02	0.337	0.7364	2.50300E-02	OTHENG	-4.10676E-03	1.95610E-02	-0.210	0.8337	7.37600E-02
PDOCP	-3.56938E-02	7.52410E-03	-4.744	0.0000	3.80900E-01	COMP	2.55391E-02	3.56650E-02	0.716	0.4739	1.39800E-02
MPDOCP	-4.28711E-02	1.69800E-02	-2.525	0.0116	5.07600E-02	MATH	6.00778E-03	1.88840E-02	0.318	0.7504	8.54100E-02
FSWI	-2.85831E-03	6.40390E-03	-0.446	0.6554	3.68300E-01	PHYSICS	-7.06327E-02	1.75960E-02	-4.014	0.0001	5.25800E-02
MFSWI	-4.18450E-03	6.65830E-03	-0.628	0.5297	3.44900E-01	CHEM	-4.87998E-02	1.80890E-02	-2.698	0.0070	6.18000E-02
BAINT	1.03194E-02	1.51630E-02	0.681	0.4961	8.11600E-02	EAOSCI	-7.24759E-02	1.83970E-02	-3.940	0.0001	4.40700E-02
MBAINT	5.28979E-03	3.98960E-02	0.133	0.8945	1.29700E-02	OPSCI	-6.17289E-02	4.60700E-02	-1.340	0.1803	3.34300E-03
AGEPHD	-3.40633E-03	1.15280E-03	-2.955	0.0031	3.13800E+01	PSYCH	-5.34120E-02	1.67660E-02	-3.186	0.0014	8.65200E-02
MAGEPHD	-1.23999E-01	7.35630E-02	-1.686	0.0919	3.54600E-03	ECON	1.41403E-02	2.88720E-02	0.490	0.6243	2.50300E-02
NATUPHD	-1.91060E-02	1.43050E-02	-1.336	0.1817	4.14400E-02	POLYSCI	2.28490E-02	3.16460E-02	0.722	0.4703	2.02600E-02
PERMPHD	-2.55413E-02	1.65810E-02	-1.540	0.1235	4.26500E-02	SAD	4.67211E-03	2.08750E-02	0.224	0.8229	5.12700E-02
TEMPPHD	8.09973E-03	1.55100E-02	0.522	0.6015	8.41900E-02	OSSCI	4.66897E-03	2.94010E-02	0.159	0.8738	1.80300E-02
MCITPHD	4.49600E-02	2.68600E-02	1.674	0.0942	2.58400E-02	WAVE97	9.70193E-02	2.09620E-02	4.628	0.0000	9.33100E-02
HISPAN	2.61298E-02	1.50010E-02	1.742	0.0815	5.02500E-02	WAVE95	9.18698E-02	1.66160E-02	5.529	0.0000	1.18100E-01
BLACK	4.36497E-02	1.52620E-02	2.860	0.0042	5.90700E-02	WAVE93	7.10202E-02	2.66460E-02	2.665	0.0077	1.20700E-01
ASIAN	-2.15484E-02	1.03890E-02	-2.074	0.0381	1.12700E-01	WAVE91	6.66230E-02	1.68820E-02	3.946	0.0001	7.89300E-02
NATAMER	3.19475E-02	5.81620E-02	0.549	0.5828	3.64700E-03	WAVE89	4.15508E-02	1.50660E-02	2.758	0.0058	9.62500E-02
MARRIED	1.26042E-02	1.01580E-02	1.241	0.2147	7.29400E-01	WAVE87	3.14494E-02	1.48450E-02	2.118	0.0341	9.20000E-02
MMARRIED	1.95274E-02	1.73230E-02	1.127	0.2596	3.51600E-02	WAVE85	-9.92259E-03	1.17290E-02	-0.846	0.3976	1.17000E-01
DEP6	6.93302E-03	6.23260E-03	1.112	0.2660	4.01300E-01	WAVE83	7.16862E-03	1.16020E-02	0.618	0.5366	1.47600E-01
DEP618	9.64011E-03	5.32580E-03	1.810	0.0703	4.61600E-01						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 9870 observations; 7 iterations; log likelihood function = -3519.499.



TABLE C-7. Maximum likelihood estimates for tenure track, logit model I-3: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.85494E-01	4.36900E-02	6.535	0.0000		MARRIED	2.05385E-02	1.24520E-02	1.649	0.0991	7.30500E-01
FEMALE	1.25055E-02	1.35400E-02	0.924	0.3557	3.67600E-01	MMARRIED	3.40723E-02	2.10650E-02	1.617	0.1058	3.73600E-02
FMARRIED	-3.97851E-02	1.69600E-02	-2.346	0.0190	2.27300E-01	DEP6	1.26745E-02	7.70020E-03	1.646	0.0998	3.92400E-01
FDEP6	-2.43266E-02	1.09460E-02	-2.222	0.0263	1.05400E-01	DEP618	1.56924E-02	6.55190E-03	2.395	0.0166	4.56700E-01
FDEP618	-3.39767E-02	9.49220E-03	-3.579	0.0003	1.04600E-01	MDEP	4.96832E-03	1.29000E-02	0.385	0.7001	3.94700E-01
YRPHD9	1.28646E-02	7.07620E-03	1.818	0.0691	5.07500E-01	BIO	-5.65551E-02	1.83600E-02	-3.080	0.0021	2.93700E-01
TA	1.99722E-02	1.42060E-02	1.406	0.1598	1.12600E-01	HEALTH	-1.00215E-03	2.15230E-02	-0.047	0.9629	7.89500E-02
RA	2.55993E-02	1.31190E-02	1.951	0.0510	1.51400E-01	CHEMENG	1.72055E-01	8.37120E-02	2.055	0.0399	9.81300E-03
FELLOW	5.17014E-02	2.46130E-02	2.101	0.0357	2.65400E-02	ELECENG	9.05620E-02	4.30880E-02	2.102	0.0356	2.07400E-02
TRAIN	3.71396E-02	1.41580E-02	2.623	0.0087	1.00500E-01	OTHENG	2.60883E-02	2.38820E-02	1.092	0.2747	7.25900E-02
MPSOURC	3.69154E-02	1.45950E-02	2.529	0.0114	4.45600E-01	COMP	6.94291E-02	4.37510E-02	1.587	0.1125	1.46100E-02
TTD1	-1.02292E-03	1.57570E-03	-0.649	0.5162	8.55300E+00	MATH	4.78634E-02	2.28930E-02	2.091	0.0366	9.16600E-02
MTTD1	1.43058E-03	4.29020E-02	0.033	0.9734	2.36400E-02	PHYSICS	-8.57976E-02	2.14200E-02	-4.005	0.0001	4.98400E-02
PDOCP	-7.06036E-02	8.87430E-03	-7.956	0.0000	3.70200E-01	CHEM	-3.15987E-02	2.19010E-02	-1.443	0.1491	6.17800E-02
MPDOCP	-6.16594E-02	2.02590E-02	-3.044	0.0023	5.04000E-02	EAOSCI	-5.64378E-02	2.23590E-02	-2.524	0.0116	4.46000E-02
FSWI	-9.74233E-03	7.81380E-03	-1.247	0.2125	3.69100E-01	OPSCI	-5.70492E-02	5.62200E-02	-1.015	0.3102	3.23400E-03
MFSWI	-2.12629E-02	8.14200E-03	-2.612	0.0090	3.38800E-01	PSYCH	-5.47776E-02	2.02540E-02	-2.705	0.0068	8.48600E-02
BAINT	3.52224E-03	1.84700E-02	0.191	0.8488	8.19600E-02	ECON	6.68499E-02	3.53140E-02	1.893	0.0584	2.65400E-02
MBAINT	4.75427E-03	4.91450E-02	0.097	0.9229	1.29300E-02	POLYSCI	7.76761E-02	3.85220E-02	2.016	0.0438	2.16300E-02
AGEPHD	-2.73319E-03	1.39820E-03	-1.955	0.0506	3.13200E+01	SAD	3.39168E-02	2.52550E-02	1.343	0.1793	5.24100E-02
MAGEPHD	-9.63443E-02	9.12460E-02	-1.056	0.2910	3.12200E-03	OSSCI	2.71991E-02	3.59370E-02	0.757	0.4491	1.79500E-02
NATUPHD	-2.50164E-02	1.74540E-02	-1.433	0.1518	4.04800E-02	WAVE97	6.06350E-02	2.07370E-02	2.924	0.0035	8.38500E-02
PERMPHD	-3.53034E-02	2.03570E-02	-1.734	0.0829	4.27100E-02	WAVE95	5.44273E-02	2.00420E-02	2.716	0.0066	1.02500E-01
TEMPPHD	1.16428E-02	1.90560E-02	0.611	0.5412	8.21800E-02	WAVE93	4.30210E-02	1.94520E-02	2.212	0.0270	1.07500E-01
MCITPHD	5.66526E-02	3.29590E-02	1.719	0.0856	2.46400E-02	WAVE91	5.32815E-02	2.04720E-02	2.603	0.0093	7.76100E-02
HISPAN	3.46083E-02	1.83510E-02	1.886	0.0593	4.91700E-02	WAVE89	1.80521E-02	1.83630E-02	0.983	0.3256	9.62300E-02
BLACK	6.02840E-02	1.85840E-02	3.244	0.0012	5.93200E-02	WAVE87	7.90984E-03	1.80740E-02	0.438	0.6617	9.13200E-02
ASIAN	-2.86676E-02	1.28110E-02	-2.238	0.0252	1.08900E-01	WAVE85	-1.53265E-02	1.41130E-02	-1.086	0.2775	1.28800E-01
NATAMER	4.00333E-02	7.14890E-02	0.560	0.5755	3.56800E-03	WAVE83	1.43939E-02	1.39490E-02	1.032	0.3021	1.62500E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8968 observations; 6 iterations; log likelihood function = -3589.457.

TABLE C-8. Maximum likelihood estimates for tenure track, logit model I-4: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.51958E-01	3.95990E-02	6.363	0.0000		MDEP	5.58354E-03	1.14670E-02	0.487	0.6263	3.94700E-01
FEMALE	3.41976E-03	1.20550E-02	0.284	0.7767	3.67600E-01	WATEACH	1.46067E-01	7.79250E-03	18.745	0.0000	4.80500E-01
FMARRIED	-2.87188E-02	1.51340E-02	-1.898	0.0577	2.27300E-01	WAOth	-3.33855E-02	9.17870E-03	-3.637	0.0003	1.07900E-01
FDEP6	-2.26325E-02	9.70380E-03	-2.332	0.0197	1.05400E-01	EMPPRI	-3.31161E-02	7.04170E-03	-4.703	0.0000	2.73900E-01
FDEP618	-2.85561E-02	8.45690E-03	-3.377	0.0007	1.04600E-01	MEMPPRI	-2.78928E-02	3.40100E-02	-0.820	0.4121	1.26200E-01
YRPHD9	9.59155E-03	6.27590E-03	1.528	0.1264	5.07500E-01	EMPRES	-7.66601E-03	7.80910E-03	-0.982	0.3263	3.12000E-01
TA	-3.67385E-04	1.27070E-02	-0.029	0.9769	1.12600E-01	EMPDOc	4.95843E-02	1.45240E-02	3.414	0.0006	8.36300E-02
RA	2.38903E-02	1.16480E-02	2.051	0.0403	1.51400E-01	MEMPCARN	-1.15697E-02	3.33940E-02	-0.346	0.7290	2.37300E-01
FELLOW	4.43198E-02	2.16480E-02	2.047	0.0406	2.65400E-02	BIO	-5.00473E-02	1.63500E-02	-3.061	0.0022	2.93700E-01
TRAIN	3.89136E-02	1.25210E-02	3.108	0.0019	1.00500E-01	HEALTH	-1.52139E-03	1.90770E-02	-0.080	0.9364	7.89500E-02
MPSOURC	3.67898E-02	1.30290E-02	2.824	0.0048	4.45600E-01	CHEMENG	1.34322E-01	7.23110E-02	1.858	0.0632	9.81300E-03
TTD1	-6.44874E-04	1.40450E-03	-0.459	0.6461	8.55300E+00	ELECENG	5.57753E-02	3.76580E-02	1.481	0.1386	2.07400E-02
MTTD1	1.10000E-02	3.77520E-02	0.291	0.7708	2.36400E-02	OTHENG	1.49387E-03	2.10320E-02	0.071	0.9434	7.25900E-02
PDOCP	-3.89272E-02	8.17840E-03	-4.760	0.0000	3.70200E-01	COMP	4.84667E-02	3.82420E-02	1.267	0.2050	1.46100E-02
MPDOCP	-4.50996E-02	1.84340E-02	-2.447	0.0144	5.04000E-02	MATH	1.00020E-02	2.02880E-02	0.493	0.6220	9.16600E-02
FSWI	-2.14900E-03	6.94390E-03	-0.309	0.7570	3.69100E-01	PHYSICS	-8.60235E-02	1.91100E-02	-4.501	0.0000	4.98400E-02
MFSWI	-8.11657E-03	7.21380E-03	-1.125	0.2605	3.38800E-01	CHEM	-5.83888E-02	1.95450E-02	-2.987	0.0028	6.17800E-02
BAINT	6.46218E-03	1.63870E-02	0.394	0.6933	8.19600E-02	EAOSCI	-8.41048E-02	1.98980E-02	-4.227	0.0000	4.46000E-02
MBAINT	3.12125E-03	4.38540E-02	0.071	0.9433	1.29300E-02	OPSCI	-7.90951E-02	5.04850E-02	-1.567	0.1172	3.23400E-03
AGEPHD	-3.81064E-03	1.25470E-03	-3.037	0.0024	3.13200E+01	PSYCH	-6.17012E-02	1.81470E-02	-3.400	0.0007	8.48600E-02
MAGEPHD	-1.45653E-01	8.11190E-02	-1.796	0.0726	3.12200E-03	ECON	2.53379E-02	3.09010E-02	0.820	0.4122	2.65400E-02
NATUPHD	-2.49795E-02	1.56460E-02	-1.597	0.1104	4.04800E-02	POLYSCI	3.54718E-02	3.39450E-02	1.045	0.2960	2.16300E-02
PERMPHD	-2.79367E-02	1.80980E-02	-1.544	0.1227	4.27100E-02	SAD	7.23473E-03	2.24950E-02	0.322	0.7478	5.24100E-02
TEMPPHD	1.24551E-02	1.68420E-02	0.740	0.4596	8.21800E-02	OSSCI	5.36320E-03	3.17340E-02	0.169	0.8658	1.79500E-02
MCITPHD	4.91513E-02	2.91480E-02	1.686	0.0918	2.46400E-02	WAVE97	8.55665E-02	2.28750E-02	3.741	0.0002	8.38500E-02
HISPAN	2.95126E-02	1.63090E-02	1.810	0.0704	4.91700E-02	WAVE95	5.63763E-02	1.79720E-02	3.137	0.0017	1.02500E-01
BLACK	4.52210E-02	1.65000E-02	2.741	0.0061	5.93200E-02	WAVE93	5.87127E-02	3.64450E-02	1.611	0.1072	1.07500E-01
ASIAN	-2.59426E-02	1.13100E-02	-2.294	0.0218	1.08900E-01	WAVE91	5.12277E-02	1.82700E-02	2.804	0.0051	7.76100E-02
NATAMER	4.32950E-02	6.24180E-02	0.694	0.4879	3.56800E-03	WAVE89	2.92762E-02	1.63800E-02	1.787	0.0739	9.62300E-02
MARRIED	1.49870E-02	1.10500E-02	1.356	0.1750	7.30500E-01	WAVE87	1.47379E-02	1.61210E-02	0.914	0.3606	9.13200E-02
MMARRIED	1.85686E-02	1.86890E-02	0.994	0.3205	3.73600E-02	WAVE85	-1.06323E-02	1.26210E-02	-0.842	0.3995	1.28800E-01
DEP6	1.01277E-02	6.76560E-03	1.497	0.1344	3.92400E-01	WAVE83	7.55427E-03	1.24890E-02	0.605	0.5453	1.62500E-01
DEP618	1.02659E-02	5.77670E-03	1.777	0.0756	4.56700E-01						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8968 observations; 7 iterations; log likelihood function = -3320.468.

TABLE C-9. Maximum likelihood estimates for tenure track, logit model 1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.61190E-01	3.58020E-02	7.295	0.0000		MMARRIED	1.81627E-02	1.71260E-02	1.061	0.2889	4.11300E-02
FEMALE	-4.54237E-02	5.62920E-03	-8.069	0.0000	3.25500E-01	DEP6	-2.54045E-03	5.68630E-03	-0.447	0.6551	1.94200E-01
YRPHD15	8.92847E-03	5.17800E-03	1.724	0.0847	4.92900E-01	DEP618	2.87275E-03	3.70380E-03	0.776	0.4380	7.61900E-01
TA	5.00748E-03	1.41210E-02	0.355	0.7229	6.00700E-02	MDEP	5.24177E-03	9.62150E-03	0.545	0.5859	3.72500E-01
RA	1.49540E-02	1.34400E-02	1.113	0.2659	7.72700E-02	BIO	-4.93537E-02	1.41100E-02	-3.498	0.0005	3.10700E-01
FELLOW	3.93080E-02	2.77720E-02	1.415	0.1570	1.45200E-02	HEALTH	2.29817E-04	1.74170E-02	0.013	0.9895	6.28600E-02
TRAIN	2.91522E-02	1.42880E-02	2.040	0.0413	5.94900E-02	CHEMENG	-1.94288E-04	5.00430E-02	-0.004	0.9969	4.53200E-03
MPSOURC	1.75695E-02	1.57440E-02	1.116	0.2644	7.11500E-01	ELECENG	2.51869E-02	4.10220E-02	0.614	0.5392	9.99300E-03
TTD1	-5.75949E-04	1.17820E-03	-0.489	0.6250	8.17400E+00	OTHENG	3.18906E-02	2.42590E-02	1.315	0.1887	3.80000E-02
MTTD1	-5.99910E-03	3.25620E-02	-0.184	0.8538	1.76600E-02	COMP	-1.17649E-02	5.05660E-02	-0.233	0.8160	3.48600E-03
PDOCP	-3.28972E-02	6.34310E-03	-5.186	0.0000	3.23500E-01	MATH	4.62174E-02	1.85810E-02	2.487	0.0129	1.07400E-01
MPDOCP	-2.10251E-02	1.53130E-02	-1.373	0.1698	4.31100E-02	PHYSICS	-5.43677E-02	1.61510E-02	-3.366	0.0008	5.68200E-02
FSWI	-7.80966E-03	5.62800E-03	-1.388	0.1652	3.69000E-01	CHEM	-4.09372E-02	1.63400E-02	-2.505	0.0122	6.41400E-02
MFSWI	6.51453E-04	5.92240E-03	0.110	0.9124	3.43400E-01	EAOSCI	-1.20939E-02	1.89100E-02	-0.640	0.5225	4.35700E-02
BAINT	-1.14685E-02	1.45640E-02	-0.787	0.4310	7.80900E-02	OPSCI	2.28189E-02	6.88710E-02	0.331	0.7404	2.55600E-03
MBAINT	-9.59039E-04	3.94130E-02	-0.024	0.9806	9.99300E-03	PSYCH	-2.89557E-02	1.54770E-02	-1.871	0.0614	9.94700E-02
AGEPHD	-1.90120E-03	1.06090E-03	-1.792	0.0731	3.08700E+01	ECON	-1.74746E-02	2.01430E-02	-0.868	0.3856	3.21900E-02
MAGEPHD	-8.28506E-02	8.08220E-02	-1.025	0.3053	1.51100E-03	POLYSCI	3.81315E-02	2.54660E-02	1.497	0.1343	2.85800E-02
NATUPHD	-1.11712E-02	1.41790E-02	-0.788	0.4308	3.11400E-02	SAD	2.83513E-02	1.95670E-02	1.449	0.1474	5.83300E-02
PERMPHD	6.38944E-03	1.62820E-02	0.392	0.6947	4.32300E-02	OSSCI	4.86880E-02	3.05270E-02	1.595	0.1107	2.01000E-02
TEMPPHD	-5.94428E-03	1.59160E-02	-0.373	0.7088	5.78700E-02	WAVE97	8.39690E-03	1.85500E-02	0.453	0.6508	8.13400E-02
MCITPHD	1.56380E-02	2.59700E-02	0.602	0.5471	1.70800E-02	WAVE95	4.75688E-03	1.82080E-02	0.261	0.7939	8.83100E-02
HISPAN	1.94713E-02	1.88800E-02	1.031	0.3024	2.85800E-02	WAVE93	3.71752E-03	1.82570E-02	0.204	0.8387	1.01400E-01
BLACK	4.01870E-02	1.69570E-02	2.370	0.0178	4.43900E-02	WAVE91	4.85148E-03	1.58670E-02	0.306	0.7598	7.77400E-02
ASIAN	-1.46028E-02	1.06290E-02	-1.374	0.1695	7.93600E-02	WAVE89	-3.20912E-03	1.11640E-02	-0.287	0.7738	1.44600E-01
MRACE	-3.72230E-02	5.16340E-02	-0.721	0.4710	1.97500E-03	WAVE87	1.00526E-03	1.11850E-02	0.090	0.9284	1.42500E-01
NATAMER	6.14939E-02	6.81730E-02	0.902	0.3670	3.48600E-03	WAVE85	-3.15922E-02	1.07160E-02	-2.948	0.0032	1.30300E-01
MARRIED	-7.08837E-03	6.85380E-03	-1.034	0.3010	7.54100E-01	WAVE83	-1.59348E-02	1.20830E-02	-1.319	0.1873	1.26800E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8906 observations; 6 iterations; log likelihood function = -2385.866.

TABLE C-10. Maximum likelihood estimates for tenure track, logit model 2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.21813E-01	3.19480E-02	6.943	0.0000		WATEACH	6.84284E-02	5.77670E-03	11.846	0.0000	4.91400E-01
FEMALE	-4.06645E-02	5.02360E-03	-8.095	0.0000	3.25500E-01	WAOTH	-4.86331E-03	5.94700E-03	-0.818	0.4135	1.65200E-01
YRPHD15	6.11674E-03	4.53710E-03	1.348	0.1776	4.92900E-01	EMPPRI	-2.47112E-02	5.10300E-03	-4.842	0.0000	2.58400E-01
TA	-9.25663E-04	1.23680E-02	-0.075	0.9403	6.00700E-02	MEMPPRI	-1.64883E-02	1.86270E-02	-0.885	0.3761	1.31900E-01
RA	1.16496E-02	1.17350E-02	0.993	0.3208	7.72700E-02	EMPRES	-2.10505E-02	5.65880E-03	-3.720	0.0002	2.94600E-01
FELLOW	3.47887E-02	2.40540E-02	1.446	0.1481	1.45200E-02	EMPDOC	2.30366E-02	1.07390E-02	2.145	0.0320	9.31900E-02
TRAIN	2.85092E-02	1.24490E-02	2.290	0.0220	5.94900E-02	MEMPCARN	-5.75684E-03	1.88100E-02	-0.306	0.7596	2.35200E-01
MPSOURC	1.82773E-02	1.38320E-02	1.321	0.1864	7.11500E-01	BIO	-5.06849E-02	1.24810E-02	-4.061	0.0001	3.10700E-01
TTD1	-6.01697E-04	1.03440E-03	-0.582	0.5608	8.17400E+00	HEALTH	-5.25447E-03	1.52600E-02	-0.344	0.7306	6.28600E-02
MTTD1	7.59457E-04	2.84870E-02	0.027	0.9787	1.76600E-02	CHEMENG	-1.37726E-02	4.31720E-02	-0.319	0.7497	4.53200E-03
PDOCP	-1.60728E-02	5.69300E-03	-2.823	0.0048	3.23500E-01	ELECENG	1.08014E-02	3.56500E-02	0.303	0.7619	9.99300E-03
MPDOCP	-1.93587E-02	1.33990E-02	-1.445	0.1485	4.31100E-02	OTHENG	1.52536E-02	2.11010E-02	0.723	0.4697	3.80000E-02
FSWI	-3.49664E-03	4.93070E-03	-0.709	0.4782	3.69000E-01	COMP	-2.04063E-02	4.39410E-02	-0.464	0.6424	3.48600E-03
MFSWI	5.94732E-03	5.19890E-03	1.144	0.2527	3.43400E-01	MATH	2.12459E-02	1.62910E-02	1.304	0.1922	1.07400E-01
BAINT	-1.10006E-02	1.25520E-02	-0.876	0.3808	7.80900E-02	PHYSICS	-5.49634E-02	1.41970E-02	-3.871	0.0001	5.68200E-02
MBAINT	-7.98063E-03	3.43820E-02	-0.232	0.8165	9.99300E-03	CHEM	-5.30221E-02	1.44460E-02	-3.670	0.0002	6.41400E-02
AGEPHD	-2.05312E-03	9.34760E-04	-2.196	0.0281	3.08700E+01	EAOSCI	-2.62662E-02	1.65190E-02	-1.590	0.1118	4.35700E-02
MAGEPHD	-8.96433E-02	7.13790E-02	-1.256	0.2092	1.51100E-03	OPSCI	8.57616E-03	5.99960E-02	0.143	0.8863	2.55600E-03
NATUPHD	-9.48440E-03	1.24790E-02	-0.760	0.4472	3.11400E-02	PSYCH	-3.64196E-02	1.36600E-02	-2.666	0.0077	9.94700E-02
PERMPHD	4.63218E-03	1.41180E-02	0.328	0.7428	4.32300E-02	ECON	-3.33625E-02	1.76940E-02	-1.886	0.0594	3.21900E-02
TEMPPHD	-3.47392E-03	1.38540E-02	-0.251	0.8020	5.78700E-02	POLYSCI	1.26573E-02	2.22620E-02	0.569	0.5697	2.85800E-02
MCITPHD	1.93274E-02	2.25980E-02	0.855	0.3924	1.70800E-02	SAD	6.96213E-03	1.71780E-02	0.405	0.6853	5.83300E-02
HISPAN	1.57155E-02	1.64740E-02	0.954	0.3401	2.85800E-02	OSSCI	1.64960E-02	2.66470E-02	0.619	0.5359	2.01000E-02
BLACK	3.08644E-02	1.47320E-02	2.095	0.0362	4.43900E-02	WAVE97	2.73631E-02	1.88680E-02	1.450	0.1470	8.13400E-02
ASIAN	-1.55630E-02	9.26360E-03	-1.680	0.0930	7.93600E-02	WAVE95	2.07869E-02	1.60140E-02	1.298	0.1943	8.83100E-02
MRACE	-1.57741E-02	4.62460E-02	-0.341	0.7330	1.97500E-03	WAVE93	1.66256E-02	2.34160E-02	0.710	0.4777	1.01400E-01
NATAMER	5.86944E-02	6.07940E-02	0.965	0.3343	3.48600E-03	WAVE91	1.60875E-02	1.38910E-02	1.158	0.2468	7.77400E-02
MARRIED	-1.49114E-03	6.01670E-03	-0.248	0.8043	7.54100E-01	WAVE89	4.73374E-03	9.81410E-03	0.482	0.6296	1.44600E-01
MMARRIED	1.87258E-02	1.49810E-02	1.250	0.2113	4.11300E-02	WAVE87	8.97792E-03	9.83330E-03	0.913	0.3612	1.42500E-01
DEP6	-5.91140E-04	4.96100E-03	-0.119	0.9052	1.94200E-01	WAVE85	-2.53897E-02	9.44170E-03	-2.689	0.0072	1.30300E-01
DEP618	1.99572E-03	3.25360E-03	0.613	0.5396	7.61900E-01	WAVE83	-1.34404E-02	1.06290E-02	-1.265	0.2060	1.26800E-01
MDEP	4.97253E-03	8.45220E-03	0.588	0.5563	3.72500E-01						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8906 observations; 7 iterations; log likelihood function = -2260.540.

TABLE C-11. Maximum likelihood estimates for tenure track, logit model 3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.89041E-01	3.86040E-02	7.487	0.0000		MMARRIED	2.05583E-02	1.83150E-02	1.122	0.2617	4.31200E-02
FEMALE	-4.91128E-02	6.06310E-03	-8.100	0.0000	3.24900E-01	DEP6	-1.84863E-03	6.11860E-03	-0.302	0.7626	1.91400E-01
YRPHD15	1.02442E-02	5.56510E-03	1.841	0.0657	4.94000E-01	DEP618	3.06423E-03	3.98640E-03	0.769	0.4421	7.56900E-01
TA	1.00079E-02	1.52970E-02	0.654	0.5130	5.62400E-02	MDEP	7.51022E-03	1.03370E-02	0.727	0.4675	3.91500E-01
RA	2.07780E-02	1.45310E-02	1.430	0.1528	7.12400E-02	BIO	-5.39061E-02	1.51070E-02	-3.568	0.0004	3.09500E-01
FELLOW	4.77681E-02	2.99180E-02	1.597	0.1104	1.34900E-02	HEALTH	2.79472E-03	1.86890E-02	0.150	0.8811	6.27900E-02
TRAIN	3.39994E-02	1.54710E-02	2.198	0.0280	5.34600E-02	CHEMENG	1.30521E-03	5.34880E-02	0.024	0.9805	4.79100E-03
MPSOURC	1.97709E-02	1.70200E-02	1.162	0.2454	7.36500E-01	ELECENG	2.75642E-02	4.38660E-02	0.628	0.5298	9.96100E-03
TTD1	-6.49922E-04	1.26160E-03	-0.515	0.6065	8.11600E+00	OTHENG	3.49332E-02	2.59450E-02	1.346	0.1782	3.84600E-02
MTTD1	-5.00307E-03	3.48540E-02	-0.144	0.8859	1.80300E-02	COMP	-8.27750E-03	5.42390E-02	-0.153	0.8787	3.40400E-03
PDOCP	-3.71279E-02	6.82170E-03	-5.443	0.0000	3.15600E-01	MATH	4.88766E-02	1.98760E-02	2.459	0.0139	1.11300E-01
MPDOCP	-2.45182E-02	1.64890E-02	-1.487	0.1370	4.22400E-02	PHYSICS	-6.52910E-02	1.73460E-02	-3.764	0.0002	5.30800E-02
FSWI	-8.32348E-03	6.04010E-03	-1.378	0.1682	3.71300E-01	CHEM	-4.71718E-02	1.75310E-02	-2.691	0.0071	6.33000E-02
MFSWI	3.20416E-04	6.37260E-03	0.050	0.9599	3.40900E-01	EAOSCI	-1.72403E-02	2.02510E-02	-0.851	0.3946	4.24900E-02
BAINT	-1.80039E-02	1.55890E-02	-1.155	0.2481	7.89300E-02	OPSCI	2.82557E-02	7.36290E-02	0.384	0.7012	2.64800E-03
MBAINT	-3.17406E-03	4.22250E-02	-0.075	0.9401	1.04700E-02	PSYCH	-3.49938E-02	1.65640E-02	-2.113	0.0346	9.64600E-02
AGEPHD	-2.36693E-03	1.13930E-03	-2.077	0.0378	3.08100E+01	ECON	-1.68411E-02	2.15490E-02	-0.782	0.4345	3.34100E-02
MAGEPHD	-9.53122E-02	8.69950E-02	-1.096	0.2733	1.38700E-03	POLYSCI	4.18549E-02	2.72370E-02	1.537	0.1244	2.92500E-02
NATUPHD	-9.67629E-03	1.52750E-02	-0.633	0.5264	3.07700E-02	SAD	3.31273E-02	2.09340E-02	1.582	0.1136	5.95100E-02
PERMPHD	1.17836E-02	1.74360E-02	0.676	0.4992	4.30000E-02	OSSCI	5.61911E-02	3.26480E-02	1.721	0.0852	2.08000E-02
TEMPPHD	2.77334E-04	1.70080E-02	0.016	0.9870	5.85000E-02	WAVE97	-9.06487E-03	2.00980E-02	-0.451	0.6520	7.33800E-02
MCITPHD	2.15538E-02	2.79700E-02	0.771	0.4410	1.67700E-02	WAVE95	-1.40212E-02	1.97070E-02	-0.711	0.4768	7.91800E-02
HISPAN	2.30013E-02	2.02580E-02	1.135	0.2562	2.82400E-02	WAVE93	-1.70608E-02	1.95910E-02	-0.871	0.3838	9.04000E-02
BLACK	4.53846E-02	1.82430E-02	2.488	0.0129	4.30000E-02	WAVE91	-4.79286E-03	1.70240E-02	-0.282	0.7783	7.71700E-02
ASIAN	-1.92129E-02	1.14240E-02	-1.682	0.0926	7.66600E-02	WAVE89	-1.25016E-02	1.19550E-02	-1.046	0.2957	1.42500E-01
MRACE	-3.96121E-02	5.52520E-02	-0.717	0.4734	2.14300E-03	WAVE87	-7.04549E-03	1.19800E-02	-0.588	0.5565	1.42200E-01
NATAMER	4.44365E-02	7.22650E-02	0.615	0.5386	3.02600E-03	WAVE85	-3.41421E-02	1.14440E-02	-2.983	0.0029	1.41300E-01
MARRIED	-5.45231E-03	7.36590E-03	-0.740	0.4592	7.55000E-01	WAVE83	-1.78841E-02	1.29100E-02	-1.385	0.1660	1.37600E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 7931 observations; 6 iterations; log likelihood function = -2309.642.

TABLE C-12. Maximum likelihood estimates for tenure track, logit model 4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.41214E-01	3.36400E-02	7.170	0.0000		WATEACH	7.55976E-02	5.98280E-03	12.636	0.0000	5.18900E-01
FEMALE	-4.30168E-02	5.26860E-03	-8.165	0.0000	3.24900E-01	WAOTH	-1.52481E-02	6.31040E-03	-2.416	0.0157	1.46300E-01
YRPHD15	7.11887E-03	4.72090E-03	1.508	0.1316	4.94000E-01	EMPPRI	-2.97907E-02	5.33620E-03	-5.583	0.0000	2.53400E-01
TA	5.42067E-03	1.30020E-02	0.417	0.6767	5.62400E-02	MEMPPRI	-3.20544E-02	2.47510E-02	-1.295	0.1953	1.19700E-01
RA	1.91227E-02	1.22910E-02	1.556	0.1198	7.12400E-02	EMPRES	-2.42223E-02	5.89490E-03	-4.109	0.0000	2.97400E-01
FELLOW	4.69887E-02	2.50540E-02	1.876	0.0607	1.34900E-02	EMPDOC	2.51725E-02	1.10890E-02	2.270	0.0232	9.87300E-02
TRAIN	3.66803E-02	1.30210E-02	2.817	0.0049	5.34600E-02	MEMPCARN	-5.32712E-03	2.49020E-02	-0.214	0.8306	2.11800E-01
MPSOURC	2.21216E-02	1.44710E-02	1.529	0.1263	7.36500E-01	BIO	-5.43979E-02	1.29300E-02	-4.207	0.0000	3.09500E-01
TTD1	-6.92060E-04	1.07990E-03	-0.641	0.5216	8.11600E+00	HEALTH	-8.77589E-04	1.58510E-02	-0.055	0.9559	6.27900E-02
MTTD1	1.78609E-03	2.94770E-02	0.061	0.9517	1.80300E-02	CHEMENG	-1.13531E-02	4.44380E-02	-0.255	0.7984	4.79100E-03
PDOCP	-1.77095E-02	5.95330E-03	-2.975	0.0029	3.15600E-01	ELECENG	1.06228E-02	3.68200E-02	0.289	0.7730	9.96100E-03
MPDOCP	-2.05607E-02	1.40170E-02	-1.467	0.1424	4.22400E-02	OTHENG	1.47610E-02	2.17670E-02	0.678	0.4977	3.84600E-02
FSWI	-3.08021E-03	5.12300E-03	-0.601	0.5477	3.71300E-01	COMP	-1.48587E-02	4.56210E-02	-0.326	0.7447	3.40400E-03
MFSWI	6.21258E-03	5.42240E-03	1.146	0.2519	3.40900E-01	MATH	1.87438E-02	1.68230E-02	1.114	0.2652	1.11300E-01
BAINT	-1.78698E-02	1.29350E-02	-1.382	0.1671	7.89300E-02	PHYSICS	-6.73601E-02	1.47780E-02	-4.558	0.0000	5.30800E-02
MBAINT	-7.57882E-03	3.56090E-02	-0.213	0.8315	1.04700E-02	CHEM	-6.15275E-02	1.50420E-02	-4.090	0.0000	6.33000E-02
AGEPHD	-2.51142E-03	9.79410E-04	-2.564	0.0103	3.08100E+01	EAOSCI	-3.64406E-02	1.70880E-02	-2.133	0.0330	4.24900E-02
MAGEPHD	-1.08760E-01	7.53070E-02	-1.444	0.1487	1.38700E-03	OPSCI	1.37493E-02	6.19610E-02	0.222	0.8244	2.64800E-03
NATUPHD	-7.84990E-03	1.30580E-02	-0.601	0.5477	3.07700E-02	PSYCH	-4.32375E-02	1.41410E-02	-3.058	0.0022	9.64600E-02
PERMPHD	9.16403E-03	1.45630E-02	0.629	0.5292	4.30000E-02	ECON	-3.32632E-02	1.83050E-02	-1.817	0.0692	3.34100E-02
TEMPPHD	6.43925E-03	1.43150E-02	0.450	0.6528	5.85000E-02	POLYSCI	1.34009E-02	2.30080E-02	0.582	0.5603	2.92500E-02
MCITPHD	2.43514E-02	2.35870E-02	1.032	0.3019	1.67700E-02	SAD	9.95787E-03	1.77550E-02	0.561	0.5749	5.95100E-02
HISPAN	1.74903E-02	1.70970E-02	1.023	0.3063	2.82400E-02	OSSCI	1.80967E-02	2.75220E-02	0.658	0.5108	2.08000E-02
BLACK	3.43197E-02	1.53250E-02	2.239	0.0251	4.30000E-02	WAVE97	2.03067E-02	1.97320E-02	1.029	0.3034	7.33800E-02
ASIAN	-2.08421E-02	9.62700E-03	-2.165	0.0304	7.66600E-02	WAVE95	-3.90305E-05	1.67100E-02	-0.002	0.9981	7.91800E-02
MRACE	-1.24988E-02	4.79760E-02	-0.261	0.7945	2.14300E-03	WAVE93	-7.33099E-03	2.85940E-02	-0.256	0.7977	9.04000E-02
NATAMER	2.02394E-02	6.07260E-02	0.333	0.7389	3.02600E-03	WAVE91	3.65714E-03	1.44170E-02	0.254	0.7998	7.71700E-02
MARRIED	2.09506E-03	6.26450E-03	0.334	0.7381	7.55000E-01	WAVE89	-5.90149E-03	1.01640E-02	-0.581	0.5615	1.42500E-01
MMARRIED	2.07957E-02	1.54750E-02	1.344	0.1790	4.31200E-02	WAVE87	-1.66603E-04	1.02020E-02	-0.016	0.9870	1.42200E-01
DEP6	8.15390E-04	5.17530E-03	0.158	0.8748	1.91400E-01	WAVE85	-2.66259E-02	9.76340E-03	-2.727	0.0064	1.41300E-01
DEP618	2.39120E-03	3.40030E-03	0.703	0.4819	7.56900E-01	WAVE83	-1.45413E-02	1.09930E-02	-1.323	0.1859	1.37600E-01
MDEP	8.13207E-03	8.81060E-03	0.923	0.3560	3.91500E-01						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 7931 observations; 7 iterations; log likelihood function = -2150.902.

TABLE C-13. Maximum likelihood estimates for tenure track, logit model I-1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.45090E-01	3.56890E-02	6.867	0.0000		MARRIED	1.66613E-02	9.75910E-03	1.707	0.0878	7.54100E-01
FEMALE	-6.92392E-03	1.06590E-02	-0.650	0.5160	3.25500E-01	MMARRIED	2.69248E-02	1.70410E-02	1.580	0.1141	4.11300E-02
FMARRIED	-3.69847E-02	1.28470E-02	-2.879	0.0040	1.93800E-01	DEP6	-6.11995E-03	6.41200E-03	-0.954	0.3399	1.94200E-01
FDEP6	7.27258E-03	1.13580E-02	0.640	0.5220	4.33400E-02	DEP618	7.07512E-03	4.19790E-03	1.685	0.0919	7.61900E-01
FDEP618	-1.74805E-02	5.85940E-03	-2.983	0.0029	1.61900E-01	MDEP	1.64914E-03	9.60700E-03	0.172	0.8637	3.72500E-01
YRPHD15	8.86347E-03	5.12690E-03	1.729	0.0838	4.92900E-01	BIO	-4.82480E-02	1.39680E-02	-3.454	0.0006	3.10700E-01
TA	6.46395E-03	1.40010E-02	0.462	0.6443	6.00700E-02	HEALTH	2.17168E-04	1.72300E-02	0.013	0.9899	6.28600E-02
RA	1.58876E-02	1.33130E-02	1.193	0.2327	7.72700E-02	CHEMENG	4.79044E-03	4.95800E-02	0.097	0.9230	4.53200E-03
FELLOW	4.02389E-02	2.75170E-02	1.462	0.1437	1.45200E-02	ELECENG	2.46955E-02	4.05940E-02	0.608	0.5430	9.99300E-03
TRAIN	3.02658E-02	1.41620E-02	2.137	0.0326	5.94900E-02	OTHENG	3.13160E-02	2.39970E-02	1.305	0.1919	3.80000E-02
MPSOURC	1.86902E-02	1.56030E-02	1.198	0.2310	7.11500E-01	COMP	-1.03834E-02	5.01750E-02	-0.207	0.8361	3.48600E-03
TTD1	-4.63913E-04	1.16450E-03	-0.398	0.6904	8.17400E+00	MATH	4.62049E-02	1.83780E-02	2.514	0.0119	1.07400E-01
MTTD1	-6.97184E-03	3.23240E-02	-0.216	0.8292	1.76600E-02	PHYSICS	-5.41600E-02	1.59790E-02	-3.389	0.0007	5.68200E-02
PDOCP	-3.33240E-02	6.28520E-03	-5.302	0.0000	3.23500E-01	CHEM	-4.02795E-02	1.61720E-02	-2.491	0.0128	6.41400E-02
MPDOCP	-1.90250E-02	1.51730E-02	-1.254	0.2099	4.31100E-02	EAOSCI	-1.07524E-02	1.87210E-02	-0.574	0.5657	4.35700E-02
FSWI	-7.76941E-03	5.57140E-03	-1.395	0.1632	3.69000E-01	OPSCI	1.97480E-02	6.80940E-02	0.290	0.7718	2.55600E-03
MFSWI	4.92000E-04	5.85870E-03	0.084	0.9331	3.43400E-01	PSYCH	-2.76492E-02	1.53120E-02	-1.806	0.0710	9.94700E-02
BAINT	-1.29894E-02	1.43800E-02	-0.903	0.3664	7.80900E-02	ECON	-1.53921E-02	1.99540E-02	-0.771	0.4405	3.21900E-02
MBAINT	1.84505E-03	3.89930E-02	0.047	0.9623	9.99300E-03	POLYSCI	3.89528E-02	2.51970E-02	1.546	0.1221	2.85800E-02
AGEPHD	-2.26039E-03	1.04970E-03	-2.153	0.0313	3.08700E+01	SAD	3.00403E-02	1.93560E-02	1.552	0.1207	5.83300E-02
MAGEPHD	-9.60877E-02	8.00420E-02	-1.200	0.2300	1.51100E-03	OSSCI	4.84316E-02	3.01620E-02	1.606	0.1083	2.01000E-02
NATUPHD	-1.03177E-02	1.40520E-02	-0.734	0.4628	3.11400E-02	WAVE97	1.03409E-02	1.84130E-02	0.562	0.5744	8.13400E-02
PERMPHD	1.14006E-02	1.61320E-02	0.707	0.4797	4.32300E-02	WAVE95	5.28307E-03	1.80440E-02	0.293	0.7697	8.83100E-02
TEMPPHD	-4.60400E-03	1.56910E-02	-0.293	0.7692	5.78700E-02	WAVE93	5.15498E-03	1.81010E-02	0.285	0.7758	1.01400E-01
MCITPHD	1.51627E-02	2.57450E-02	0.589	0.5559	1.70800E-02	WAVE91	5.38454E-03	1.57310E-02	0.342	0.7321	7.77400E-02
HISPAN	1.98330E-02	1.87050E-02	1.060	0.2890	2.85800E-02	WAVE89	-2.28572E-03	1.10640E-02	-0.207	0.8363	1.44600E-01
BLACK	4.06880E-02	1.67660E-02	2.427	0.0152	4.43900E-02	WAVE87	1.86941E-03	1.10740E-02	0.169	0.8659	1.42500E-01
ASIAN	-1.48455E-02	1.05290E-02	-1.410	0.1586	7.93600E-02	WAVE85	-3.05823E-02	1.06270E-02	-2.878	0.0040	1.30300E-01
MRACE	-3.39525E-02	5.09950E-02	-0.666	0.5055	1.97500E-03	WAVE83	-1.43198E-02	1.19670E-02	-1.197	0.2315	1.26800E-01
NATAMER	6.41192E-02	6.73980E-02	0.951	0.3414	3.48600E-03						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8606 observations; 6 iterations; log likelihood function = -2374.220.

TABLE C-14. Maximum likelihood estimates for tenure track, logit model I-2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.09986E-01	3.18430E-02	6.594	0.0000		DEP618	5.76526E-03	3.69220E-03	1.561	0.1184	7.61900E-01
FEMALE	-8.89880E-03	9.34920E-03	-0.952	0.3412	3.25500E-01	MDEP	1.79039E-03	8.45260E-03	0.212	0.8323	3.72500E-01
FMARRIED	-2.95481E-02	1.12770E-02	-2.620	0.0088	1.93800E-01	WATEACH	6.76623E-02	5.73220E-03	11.804	0.0000	4.91400E-01
FDEP6	5.93157E-03	9.93260E-03	0.597	0.5504	4.33400E-02	WAOth	-5.01257E-03	5.90250E-03	-0.849	0.3958	1.65200E-01
FDEP618	-1.57410E-02	5.17110E-03	-3.044	0.0023	1.61900E-01	EMPPRI	-2.41858E-02	5.06240E-03	-4.778	0.0000	2.58400E-01
YRPHD15	5.95720E-03	4.49890E-03	1.324	0.1855	4.92900E-01	MEMPPRI	-1.59793E-02	1.84050E-02	-0.868	0.3853	1.31900E-01
TA	7.96624E-04	1.22920E-02	0.065	0.9483	6.00700E-02	EMPRES	-2.06576E-02	5.60640E-03	-3.685	0.0002	2.94600E-01
RA	1.24278E-02	1.16400E-02	1.068	0.2857	7.72700E-02	EMPDOc	2.26500E-02	1.06470E-02	2.127	0.0334	9.31900E-02
FELLOW	3.49556E-02	2.38420E-02	1.466	0.1426	1.45200E-02	MEMPCARN	-5.47652E-03	1.85940E-02	-0.295	0.7684	2.35200E-01
TRAIN	2.93691E-02	1.23610E-02	2.376	0.0175	5.94900E-02	BIO	-4.93875E-02	1.23720E-02	-3.992	0.0001	3.10700E-01
MPSOURC	1.89142E-02	1.37230E-02	1.378	0.1681	7.11500E-01	HEALTH	-4.62839E-03	1.51220E-02	-0.306	0.7596	6.28600E-02
TTD1	-4.82044E-04	1.02370E-03	-0.471	0.6377	8.17400E+00	CHEMENG	-9.74485E-03	4.28000E-02	-0.228	0.8199	4.53200E-03
MTTD1	-3.63308E-04	2.82720E-02	-0.013	0.9898	1.76600E-02	ELECENG	1.01340E-02	3.52770E-02	0.287	0.7739	9.99300E-03
PDOCP	-1.65746E-02	5.64880E-03	-2.934	0.0033	3.23500E-01	OTHENG	1.45507E-02	2.09140E-02	0.696	0.4866	3.80000E-02
MPDOCP	-1.72355E-02	1.33330E-02	-1.293	0.1961	4.31100E-02	COMP	-1.94342E-02	4.36910E-02	-0.445	0.6565	3.48600E-03
FSWI	-3.71540E-03	4.88820E-03	-0.760	0.4472	3.69000E-01	MATH	2.13069E-02	1.61300E-02	1.321	0.1865	1.07400E-01
MFSWI	5.77857E-03	5.15230E-03	1.122	0.2621	3.43400E-01	PHYSICS	-5.48646E-02	1.40590E-02	-3.902	0.0001	5.68200E-02
BAINT	-1.24478E-02	1.24080E-02	-1.003	0.3158	7.80900E-02	CHEM	-5.19026E-02	1.43340E-02	-3.621	0.0003	6.41400E-02
MBAINT	-5.42439E-03	3.40920E-02	-0.159	0.8736	9.99300E-03	EAOSCI	-2.52211E-02	1.63810E-02	-1.540	0.1237	4.35700E-02
AGEPHD	-2.36964E-03	9.26420E-04	-2.558	0.0105	3.08700E+01	OPSCI	7.63472E-03	5.94660E-02	0.128	0.8978	2.55600E-03
MAGEPHD	-9.92348E-02	7.06060E-02	-1.405	0.1599	1.51100E-03	PSYCH	-3.55177E-02	1.35280E-02	-2.626	0.0087	9.94700E-02
NATUPHD	-9.38483E-03	1.23630E-02	-0.759	0.4478	3.11400E-02	ECON	-3.12302E-02	1.75630E-02	-1.778	0.0754	3.21900E-02
PERMPHD	9.31367E-03	1.40250E-02	0.664	0.5066	4.32300E-02	POLYSCI	1.33002E-02	2.20570E-02	0.603	0.5465	2.85800E-02
TEMPPHD	-2.26015E-03	1.36810E-02	-0.165	0.8688	5.78700E-02	SAD	9.07489E-03	1.70270E-02	0.533	0.5941	5.83300E-02
MCITPHD	1.86379E-02	2.24280E-02	0.831	0.4060	1.70800E-02	OSSCI	1.68467E-02	2.63790E-02	0.639	0.5231	2.01000E-02
HISPAN	1.66589E-02	1.63710E-02	1.018	0.3089	2.85800E-02	WAVE97	2.76370E-02	1.87010E-02	1.478	0.1395	8.13400E-02
BLACK	3.17056E-02	1.45900E-02	2.173	0.0298	4.43900E-02	WAVE95	2.07654E-02	1.59020E-02	1.306	0.1916	8.83100E-02
ASIAN	-1.58255E-02	9.18750E-03	-1.723	0.0850	7.93600E-02	WAVE93	1.71749E-02	2.31800E-02	0.741	0.4587	1.01400E-01
MRACE	-1.48541E-02	4.54900E-02	-0.327	0.7440	1.97500E-03	WAVE91	1.61072E-02	1.37900E-02	1.168	0.2428	7.77400E-02
NATAMER	6.08732E-02	6.00820E-02	1.013	0.3110	3.48600E-03	WAVE89	5.34905E-03	9.74420E-03	0.549	0.5830	1.44600E-01
MARRIED	1.70985E-02	8.55270E-03	1.999	0.0456	7.54100E-01	WAVE87	9.68208E-03	9.75420E-03	0.993	0.3209	1.42500E-01
MMARRIED	2.50338E-02	1.48780E-02	1.683	0.0925	4.11300E-02	WAVE85	-2.46129E-02	9.38620E-03	-2.622	0.0087	1.30300E-01
DEP6	-3.62266E-03	5.60650E-03	-0.646	0.5182	1.94200E-01	WAVE83	-1.20425E-02	1.05560E-02	-1.141	0.2539	1.26800E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 8606 observations; 7 iterations; log likelihood function = -2249.571.



TABLE C-15. Maximum likelihood estimates for tenure track, logit model I-3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.72265E-01	3.84900E-02	7.074	0.0000		MARRIED	1.92523E-02	1.04680E-02	1.839	0.0659	7.55000E-01
FEMALE	-7.52178E-03	1.14610E-02	-0.656	0.5116	3.24900E-01	MMARRIED	2.97546E-02	1.82070E-02	1.634	0.1022	4.31200E-02
FMARRIED	-3.84191E-02	1.37990E-02	-2.784	0.0054	1.93500E-01	DEP6	-5.42048E-03	6.89570E-03	-0.786	0.4318	1.91400E-01
FDEP6	7.01878E-03	1.22520E-02	0.573	0.5667	4.26200E-02	DEP618	8.03804E-03	4.50420E-03	1.785	0.0743	7.56900E-01
FDEP618	-2.06142E-02	6.30290E-03	-3.271	0.0011	1.58700E-01	MDEP	3.23208E-03	1.03300E-02	0.313	0.7544	3.91500E-01
YRPHD15	1.02844E-02	5.51080E-03	1.866	0.0620	4.94000E-01	BIO	-5.29494E-02	1.49530E-02	-3.541	0.0004	3.09500E-01
TA	1.18848E-02	1.51700E-02	0.783	0.4334	5.62400E-02	HEALTH	2.17136E-03	1.84880E-02	0.117	0.9065	6.27900E-02
RA	2.21485E-02	1.43970E-02	1.538	0.1240	7.12400E-02	CHEMENG	6.33729E-03	5.29840E-02	0.120	0.9048	4.79100E-03
FELLOW	4.88978E-02	2.96590E-02	1.649	0.0992	1.34900E-02	ELECENG	2.76645E-02	4.34200E-02	0.637	0.5240	9.96100E-03
TRAIN	3.55184E-02	1.53390E-02	2.316	0.0206	5.34600E-02	OTHENG	3.42353E-02	2.56630E-02	1.334	0.1822	3.84600E-02
MPSOURC	2.16270E-02	1.68680E-02	1.282	0.1998	7.36500E-01	COMP	-8.49047E-03	5.38250E-02	-0.158	0.8747	3.40400E-03
TTD1	-4.97819E-04	1.24730E-03	-0.399	0.6898	8.11600E+00	MATH	4.85227E-02	1.96570E-02	2.469	0.0136	1.11300E-01
MTTD1	-5.06602E-03	3.45960E-02	-0.146	0.8836	1.80300E-02	PHYSICS	-6.48529E-02	1.71640E-02	-3.778	0.0002	5.30800E-02
PDOCP	-3.76280E-02	6.76190E-03	-5.565	0.0000	3.15600E-01	CHEM	-4.69904E-02	1.73510E-02	-2.708	0.0068	6.33000E-02
MPDOCP	-2.19982E-02	1.63520E-02	-1.345	0.1785	4.22400E-02	EAOSCI	-1.63470E-02	2.00360E-02	-0.816	0.4146	4.24900E-02
FSWI	-8.30249E-03	5.97920E-03	-1.389	0.1650	3.71300E-01	OPSCI	2.52028E-02	7.27930E-02	0.346	0.7292	2.64800E-03
MFSWI	2.13726E-04	6.30340E-03	0.034	0.9730	3.40900E-01	PSYCH	-3.36779E-02	1.63860E-02	-2.055	0.0399	9.64600E-02
BAINT	-1.97098E-02	1.54100E-02	-1.279	0.2009	7.89300E-02	ECON	-1.49467E-02	2.13530E-02	-0.700	0.4839	3.34100E-02
MBAINT	-8.69819E-04	4.17670E-02	-0.021	0.9834	1.04700E-01	POLYSCI	4.22807E-02	2.69430E-02	1.569	0.1166	2.92500E-02
AGEPHD	-2.78220E-03	1.12800E-03	-2.467	0.0136	3.08100E+01	SAD	3.47974E-02	2.07030E-02	1.681	0.0928	5.95100E-02
MAGEPHD	-1.11559E-01	8.62370E-02	-1.294	0.1958	1.38700E-03	OSSCI	5.52851E-02	3.22500E-02	1.714	0.0865	2.08000E-02
NATUPHD	-8.69216E-03	1.51460E-02	-0.574	0.5660	3.07700E-02	WAVE97	-6.64445E-03	1.99590E-02	-0.333	0.7392	7.33800E-02
PERMPHD	1.77169E-02	1.72930E-02	1.025	0.3056	4.30000E-02	WAVE95	-1.35409E-02	1.95180E-02	-0.694	0.4878	7.91800E-02
TEMPPHD	1.65318E-03	1.67740E-02	0.099	0.9215	5.85000E-02	WAVE93	-1.53609E-02	1.94420E-02	-0.790	0.4295	9.04000E-02
MCITPHD	2.01856E-02	2.77510E-02	0.727	0.4670	1.67700E-02	WAVE91	-4.03994E-03	1.68870E-02	-0.239	0.8109	7.71700E-02
HISPAN	2.30773E-02	2.00630E-02	1.150	0.2500	2.82400E-02	WAVE89	-1.11717E-02	1.18500E-02	-0.943	0.3458	1.42500E-01
BLACK	4.61473E-02	1.80340E-02	2.559	0.0105	4.30000E-02	WAVE87	-5.85054E-03	1.18590E-02	-0.493	0.6218	1.42200E-01
ASIAN	-1.93826E-02	1.13200E-02	-1.712	0.0869	7.66600E-02	WAVE85	-3.29771E-02	1.13490E-02	-2.906	0.0037	1.41300E-01
MRACE	-3.63153E-02	5.45370E-02	-0.666	0.5055	2.14300E-03	WAVE83	-1.59067E-02	1.27840E-02	-1.244	0.2134	1.37600E-01
NATAMER	4.73363E-02	7.14550E-02	0.662	0.5077	3.02600E-03						

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 7931 observations; 6 iterations; log likelihood function = -2297.290.

TABLE C-16. Maximum likelihood estimates for tenure track, logit model I-4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	2.29949E-01	3.35110E-02	6.862	0.0000		DEP618	6.80737E-03	3.84060E-03	1.772	0.0763	7.56900E-01
FEMALE	-9.70851E-03	9.73820E-03	-0.997	0.3188	3.24900E-01	MDEP	4.28972E-03	8.81550E-03	0.487	0.6265	3.91500E-01
FMARRIED	-2.88870E-02	1.17350E-02	-2.462	0.0138	1.93500E-01	WATEACH	7.46583E-02	5.93710E-03	12.575	0.0000	5.18900E-01
FDEP6	3.98920E-03	1.03720E-02	0.385	0.7005	4.26200E-02	WAOth	-1.57313E-02	6.26190E-03	-2.512	0.0120	1.46300E-01
FDEP618	-1.84948E-02	5.40600E-03	-3.421	0.0006	1.58700E-01	EMPPRI	-2.90661E-02	5.29320E-03	-5.491	0.0000	2.53400E-01
YRPHD15	7.05958E-03	4.67990E-03	1.508	0.1314	4.94000E-01	MEMPPRI	-3.07650E-02	2.43220E-02	-1.265	0.2059	1.19700E-01
TA	7.66296E-03	1.29210E-02	0.593	0.5532	5.62400E-02	EMPRES	-2.38812E-02	5.84040E-03	-4.089	0.0000	2.97400E-01
RA	2.02566E-02	1.21920E-02	1.661	0.0966	7.12400E-02	EMPDOC	2.45591E-02	1.09950E-02	2.234	0.0255	9.87300E-02
FELLOW	4.72257E-02	2.48200E-02	1.903	0.0571	1.34900E-02	MEMPCARN	-5.39838E-03	2.44690E-02	-0.221	0.8254	2.11800E-01
TRAIN	3.79512E-02	1.29300E-02	2.935	0.0033	5.34600E-02	BIO	-5.33414E-02	1.28140E-02	-4.163	0.0000	3.09500E-01
MPSOURC	2.34122E-02	1.43580E-02	1.631	0.1030	7.36500E-01	HEALTH	-7.27492E-04	1.57070E-02	-0.046	0.9631	6.27900E-02
TTD1	-5.35695E-04	1.06820E-03	-0.501	0.6160	8.11600E+00	CHEMENG	-7.54904E-03	4.40470E-02	-0.171	0.8639	4.79100E-03
MTTD1	1.34893E-03	2.92290E-02	0.046	0.9632	1.80300E-02	ELECENG	1.04175E-02	3.64340E-02	0.286	0.7749	9.96100E-03
PDOCP	-1.82621E-02	5.90810E-03	-3.091	0.0020	3.15600E-01	OTHENG	1.39539E-02	2.15720E-02	0.647	0.5177	3.84600E-02
MPDOCP	-1.80740E-02	1.39680E-02	-1.294	0.1957	4.22400E-02	COMP	-1.55800E-02	4.52840E-02	-0.344	0.7308	3.40400E-03
FSWI	-3.46293E-03	5.07590E-03	-0.682	0.4951	3.71300E-01	MATH	1.81165E-02	1.66470E-02	1.088	0.2765	1.11300E-01
MFSWI	6.10435E-03	5.37220E-03	1.136	0.2558	3.40900E-01	PHYSICS	-6.71283E-02	1.46360E-02	-4.587	0.0000	5.30800E-02
BAINT	-1.95457E-02	1.27930E-02	-1.528	0.1266	7.89300E-02	CHEM	-6.12134E-02	1.49250E-02	-4.101	0.0000	6.33000E-02
MBAINT	-5.74715E-03	3.52770E-02	-0.163	0.8706	1.04700E-02	EAOSCI	-3.60394E-02	1.69210E-02	-2.130	0.0332	4.24900E-02
AGEPHD	-2.87355E-03	9.70730E-04	-2.960	0.0031	3.08100E+01	OPSCI	1.32040E-02	6.13080E-02	0.215	0.8295	2.64800E-03
MAGEPHD	-1.21093E-01	7.42940E-02	-1.630	0.1031	1.38700E-03	PSYCH	-4.24898E-02	1.39990E-02	-3.035	0.0024	9.64600E-02
NATUPHD	-8.06777E-03	1.29160E-02	-0.625	0.5322	3.07700E-02	ECON	-3.14806E-02	1.81690E-02	-1.733	0.0832	3.34100E-02
PERMPHD	1.48570E-02	1.44960E-02	1.025	0.3054	4.30000E-02	POLYSCI	1.31914E-02	2.27710E-02	0.579	0.5624	2.92500E-02
TEMPPHD	7.52331E-03	1.41310E-02	0.532	0.5944	5.85000E-02	SAD	1.21655E-02	1.75960E-02	0.691	0.4893	5.95100E-02
MCITPHD	2.30355E-02	2.34470E-02	0.982	0.3259	1.67700E-02	OSSCI	1.80087E-02	2.72280E-02	0.661	0.5084	2.08000E-02
HISPAN	1.84551E-02	1.69940E-02	1.086	0.2775	2.82400E-02	WAVE97	2.04131E-02	1.95680E-02	1.043	0.2969	7.33800E-02
BLACK	3.53932E-02	1.51720E-02	2.333	0.0197	4.30000E-02	WAVE95	-1.11674E-04	1.65900E-02	-0.007	0.9946	7.91800E-02
ASIAN	-2.11373E-02	9.54660E-03	-2.214	0.0268	7.66600E-02	WAVE93	-6.38852E-03	2.81760E-02	-0.227	0.8206	9.04000E-02
MRACE	-1.21754E-02	4.70090E-02	-0.259	0.7956	2.14300E-03	WAVE91	3.65711E-03	1.43150E-02	0.255	0.7984	7.71700E-02
NATAMER	2.37868E-02	6.01170E-02	0.396	0.6924	3.02600E-03	WAVE89	-4.95366E-03	1.00880E-02	-0.491	0.6234	1.42500E-01
MARRIED	2.02885E-02	8.88590E-03	2.283	0.0224	7.55000E-01	WAVE87	9.99334E-04	1.01150E-02	0.099	0.9213	1.42200E-01
MMARRIED	2.70705E-02	1.53400E-02	1.765	0.0776	4.31200E-02	WAVE85	-2.57214E-02	9.70350E-03	-2.651	0.0080	1.41300E-01
DEP6	-1.68920E-03	5.85200E-03	-0.289	0.7729	1.91400E-01	WAVE83	-1.27833E-02	1.09130E-02	-1.171	0.2414	1.37600E-01

NOTES: Dependent variable: TRAC; marginal effects: tenure track; 7931 observations; 7 iterations; log likelihood function = -2139.038.

TABLE C-17. Maximum likelihood estimates for tenure, logit model 1: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	7.66684E-02	6.76740E-02	1.133	0.2573		MMARRIED	7.20612E-02	3.32420E-02	2.168	0.0302	3.51600E-02
FEMALE	-6.90980E-02	1.25060E-02	-5.525	0.0000	3.67600E-01	DEP6	1.04907E-02	9.88450E-03	1.061	0.2885	4.01300E-01
YRPHD9	1.21689E-01	1.12640E-02	10.803	0.0000	5.06600E-01	DEP618	2.48756E-02	7.97240E-03	3.120	0.0018	4.61600E-01
TA	2.66883E-02	2.15840E-02	1.236	0.2163	1.16900E-01	MDEP	-3.26270E-02	2.12170E-02	-1.538	0.1241	3.68200E-01
RA	-1.01230E-02	2.04980E-02	-0.494	0.6214	1.65000E-01	BIO	-2.27125E-01	2.68320E-02	-8.465	0.0000	2.99200E-01
FELLOW	1.09974E-01	3.84300E-02	2.862	0.0042	2.57300E-02	HEALTH	-5.80661E-02	3.05970E-02	-1.898	0.0577	7.82200E-02
TRAIN	-1.63415E-02	2.38880E-02	-0.684	0.4939	1.03300E-01	CHEMENG	1.36721E-01	5.95570E-02	2.296	0.0217	1.02300E-02
MPSOURC	4.35578E-02	2.27790E-02	1.912	0.0559	4.16000E-01	ELECENG	5.32276E-02	4.35790E-02	1.221	0.2219	2.13800E-02
TTD1	-3.10362E-03	2.52030E-03	-1.231	0.2182	8.60300E+00	OTHENG	3.31984E-03	3.10750E-02	0.107	0.9149	7.37600E-02
MTTD1	9.36791E-02	5.80490E-02	1.614	0.1066	2.50300E-02	COMP	1.09403E-01	5.14720E-02	2.125	0.0336	1.39800E-02
PDOCP	-2.73494E-01	-1.42270E-02	19.224	0.0000	3.80900E-01	MATH	5.24533E-02	3.06670E-02	1.710	0.0872	8.54100E-02
MPDOCP	-1.17854E-01	3.25290E-02	-3.623	0.0003	5.07600E-02	PHYSICS	-1.94573E-01	3.45520E-02	-5.631	0.0000	5.25800E-02
FSWI	5.40625E-04	1.27470E-02	0.042	0.9662	3.68300E-01	CHEM	-7.23279E-02	3.29980E-02	-2.192	0.0284	6.18000E-02
MFSWI	-6.57096E-02	1.37620E-02	-4.775	0.0000	3.44900E-01	EAOSCI	-5.38586E-02	3.43410E-02	-1.568	0.1168	4.40700E-02
BAINT	-1.79622E-02	2.87470E-02	-0.625	0.5321	8.11600E-02	OPSCI	-6.45989E-02	9.51110E-02	-0.679	0.4970	3.34300E-03
MBAINT	-1.34410E-01	6.91370E-02	-1.944	0.0519	1.29700E-02	PSYCH	-1.17394E-01	2.96910E-02	-3.954	0.0001	8.65200E-02
AGEPHD	3.96007E-03	2.22150E-03	1.783	0.0747	3.13800E+01	ECON	4.68351E-02	4.17010E-02	1.123	0.2614	2.50300E-02
MAGEPHD	-1.37423E-02	1.29070E-01	-0.106	0.9152	3.54600E-03	POLYSCI	7.47495E-03	4.41380E-02	0.169	0.8655	2.02600E-02
NATUPHD	-6.37864E-02	3.01980E-02	-2.112	0.0347	4.14400E-02	SAD	-2.65226E-02	3.32550E-02	-0.798	0.4251	5.12700E-02
PERMPHD	-4.47906E-02	3.29480E-02	-1.359	0.1740	4.26500E-02	OSSCI	-3.08127E-02	4.56700E-02	-0.675	0.4999	1.80300E-02
TEMPPHD	6.92665E-02	2.79900E-02	2.475	0.0133	8.41900E-02	WAVE97	-1.59257E-01	3.17580E-02	-5.015	0.0000	9.33100E-02
MCITPHD	3.14914E-02	4.71130E-02	0.668	0.5039	2.58400E-02	WAVE95	-2.09692E-01	3.09250E-02	-6.781	0.0000	1.18100E-01
HISPAN	7.93177E-02	2.59310E-02	3.059	0.0022	5.02500E-02	WAVE93	-1.66009E-01	3.02790E-02	-5.483	0.0000	1.20700E-01
BLACK	2.41386E-03	2.36190E-02	0.102	0.9186	5.90700E-02	WAVE91	-8.28609E-02	3.19210E-02	-2.596	0.0094	7.89300E-02
ASIAN	-8.96375E-03	2.13970E-02	-0.419	0.6753	1.12700E-01	WAVE89	-8.64705E-02	2.99730E-02	-2.885	0.0039	9.62500E-02
MRACE	1.38478E-01	1.56880E-01	0.883	0.3774	1.31700E-03	WAVE87	-6.39979E-02	2.95300E-02	-2.167	0.0302	9.20000E-02
NATAMER	-5.27274E-02	8.94800E-02	-0.589	0.5557	3.64700E-03	WAVE85	-5.94072E-02	2.39200E-02	-2.484	0.0130	1.17000E-01
MARRIED	-3.31604E-03	1.46650E-02	-0.226	0.8211	7.29400E-01	WAVE83	5.05212E-02	2.33080E-02	2.168	0.0302	1.47600E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 9870 observations; 5 iterations; log likelihood function = -5770.553.

TABLE C-18. Maximum likelihood estimates for tenure, logit model 2: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	4.55390E-02	7.02260E-02	0.648	0.5167		WATEACH	1.68797E-01	1.34430E-02	12.557	0.0000	4.49500E-01
FEMALE	-6.94884E-02	1.27720E-02	-5.440	0.0000	3.67600E-01	WAOTH	-7.10048E-02	1.91840E-02	-3.701	0.0002	1.27200E-01
YRPHD9	1.26713E-01	1.15130E-02	11.006	0.0000	5.06600E-01	EMPPRI	-1.35618E-01	1.35940E-02	-9.976	0.0000	2.74900E-01
TA	9.96432E-03	2.20340E-02	0.452	0.6511	1.16900E-01	MEMPPRI	5.68966E-02	4.98030E-02	1.142	0.2533	1.39200E-01
RA	-7.74103E-03	2.08940E-02	-0.370	0.7110	1.65000E-01	EMPRES	2.56406E-02	1.50950E-02	1.699	0.0894	3.06600E-01
FELLOW	1.07531E-01	3.93410E-02	2.733	0.0063	2.57300E-02	EMPDOG	9.00041E-02	2.22030E-02	4.054	0.0001	8.01400E-02
TRAIN	-7.20138E-03	2.44190E-02	-0.295	0.7681	1.03300E-01	MEMPCARN	-1.28228E-01	4.81420E-02	-2.664	0.0077	2.66600E-01
MPSOURC	4.97453E-02	2.32950E-02	2.135	0.0327	4.16000E-01	BIO	-2.09681E-01	2.75110E-02	-7.622	0.0000	2.99200E-01
TTD1	-1.98663E-03	2.56520E-03	-0.774	0.4387	8.60300E+00	HEALTH	-4.63340E-02	3.13650E-02	-1.477	0.1396	7.82200E-02
MTTD1	1.11966E-01	5.92820E-02	1.889	0.0589	2.50300E-02	CHEMENG	1.45620E-01	6.08350E-02	2.394	0.0167	1.02300E-02
PDOCP	-2.52043E-01	-1.46960E-02	17.150	0.0000	3.80900E-01	ELECENG	4.16406E-02	4.45600E-02	0.934	0.3501	2.13800E-02
MPDOCP	-1.02865E-01	3.33550E-02	-3.084	0.0020	5.07600E-02	OTHENG	-7.00540E-03	3.18020E-02	-0.220	0.8257	7.37600E-02
FSWI	6.49585E-03	1.30210E-02	0.499	0.6179	3.68300E-01	COMP	1.13513E-01	5.24460E-02	2.164	0.0304	1.39800E-02
MFSWI	-4.94564E-02	1.40940E-02	-3.509	0.0005	3.44900E-01	MATH	3.49428E-02	3.15070E-02	1.109	0.2674	8.54100E-02
BAINT	-1.31756E-02	2.96040E-02	-0.445	0.6563	8.11600E-02	PHYSICS	-1.84006E-01	3.52760E-02	-5.216	0.0000	5.25800E-02
MBAINT	-1.44891E-01	7.09600E-02	-2.042	0.0412	1.29700E-02	CHEM	-7.98009E-02	3.38460E-02	-2.358	0.0184	6.18000E-02
AGEPHD	2.45614E-03	2.27050E-03	1.082	0.2794	3.13800E+01	EAOSCI	-8.59428E-02	3.51410E-02	-2.446	0.0145	4.40700E-02
MAGEPHD	-7.79840E-02	1.32520E-01	-0.588	0.5562	3.54600E-03	OPSCI	-9.65434E-02	9.94360E-02	-0.971	0.3316	3.34300E-03
NATUPHD	-6.96484E-02	3.09020E-02	-2.254	0.0242	4.14400E-02	PSYCH	-1.03360E-01	3.05820E-02	-3.380	0.0007	8.65200E-02
PERMPHD	-3.78949E-02	3.37390E-02	-1.123	0.2614	4.26500E-02	ECON	3.65181E-02	4.26510E-02	0.856	0.3919	2.50300E-02
TEMPPHD	6.75516E-02	2.86800E-02	2.355	0.0185	8.41900E-02	POLYSCI	-1.08899E-02	4.53560E-02	-0.240	0.8103	2.02600E-02
MCITPHD	2.15062E-02	4.84150E-02	0.444	0.6569	2.58400E-02	SAD	-3.77514E-02	3.40820E-02	-1.108	0.2680	5.12700E-02
HISPAN	7.33150E-02	2.63760E-02	2.780	0.0054	5.02500E-02	OSSCI	-4.04075E-02	4.68950E-02	-0.862	0.3889	1.80300E-02
BLACK	-3.59561E-03	2.40190E-02	-0.150	0.8810	5.90700E-02	WAVE97	-1.03543E-01	4.19920E-02	-2.466	0.0137	9.33100E-02
ASIAN	-1.26763E-02	2.19320E-02	-0.578	0.5633	1.12700E-01	WAVE95	-1.88414E-01	3.19470E-02	-5.898	0.0000	1.18100E-01
MRACE	2.25271E-01	1.57160E-01	1.433	0.1517	1.31700E-03	WAVE93	-8.84079E-03	5.48290E-02	-0.161	0.8719	1.20700E-01
NATAMER	-5.84590E-02	9.12610E-02	-0.641	0.5218	3.64700E-03	WAVE91	-7.77342E-02	3.27210E-02	-2.376	0.0175	7.89300E-02
MARRIED	-5.06607E-03	1.49990E-02	-0.338	0.7355	7.29400E-01	WAVE89	-7.69218E-02	3.07270E-02	-2.503	0.0123	9.62500E-02
MMARRIED	6.12730E-02	3.39830E-02	1.803	0.0714	3.51600E-02	WAVE87	-5.22641E-02	3.02920E-02	-1.725	0.0845	9.20000E-02
DEP6	1.19531E-02	1.00740E-02	1.187	0.2354	4.01300E-01	WAVE85	-5.89658E-02	2.45750E-02	-2.399	0.0164	1.17000E-01
DEP618	2.28796E-02	8.13850E-03	2.811	0.0049	4.61600E-01	WAVE83	4.44333E-02	2.39360E-02	1.856	0.0634	1.47600E-01
MDEP	-3.34291E-02	2.16990E-02	-1.541	0.1234	3.68200E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured: 9870 observations; 5 iterations; log likelihood function = -5575.411.

TABLE C-19. Maximum likelihood estimates for tenure, logit model 3: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	7.50781E-02	7.28270E-02	1.031	0.3026		MMARRIED	7.20816E-02	3.46730E-02	2.079	0.0376	3.73600E-02
FEMALE	-7.35375E-02	1.32200E-02	-5.562	0.0000	3.67600E-01	DEP6	1.31060E-02	1.07070E-02	1.224	0.2209	3.92400E-01
YRPHD9	1.39222E-01	1.20270E-02	11.575	0.0000	5.07500E-01	DEP618	2.86600E-02	8.77450E-03	3.266	0.0011	4.56700E-01
TA	3.09712E-02	2.35430E-02	1.316	0.1883	1.12600E-01	MDEP	-3.27034E-02	2.25300E-02	-1.452	0.1466	3.94700E-01
RA	-9.94479E-03	2.23760E-02	-0.444	0.6567	1.51400E-01	BIO	-2.47283E-01	2.89430E-02	-8.544	0.0000	2.93700E-01
FELLOW	7.30599E-02	4.06190E-02	1.799	0.0721	2.65400E-02	HEALTH	-8.47801E-02	3.31010E-02	-2.561	0.0104	7.89500E-02
TRAIN	-3.80299E-02	2.55140E-02	-1.491	0.1361	1.00500E-01	CHEMENG	1.68518E-01	6.99600E-02	2.409	0.0160	9.81300E-03
MPSOURC	3.27525E-02	2.45810E-02	1.332	0.1827	4.45600E-01	ELECENG	4.68136E-02	4.89460E-02	0.956	0.3389	2.07400E-02
TTD1	-2.45663E-03	2.70900E-03	-0.907	0.3645	8.55300E+00	OTHENG	-1.82135E-02	3.40510E-02	-0.535	0.5927	7.25900E-02
MTTD1	1.45223E-01	6.60820E-02	2.198	0.0280	2.36400E-02	COMP	4.37493E-02	5.53260E-02	0.791	0.4291	1.46100E-02
PDOCP	-2.96198E-01	-1.50680E-02	19.657	0.0000	3.70200E-01	MATH	2.14945E-02	3.28410E-02	0.654	0.5128	9.16600E-02
MPDOCP	-1.25059E-01	3.43480E-02	-3.641	0.0003	5.04000E-02	PHYSICS	-1.99606E-01	3.70560E-02	-5.387	0.0000	4.98400E-02
FSWI	3.42085E-03	1.35200E-02	0.253	0.8003	3.69100E-01	CHEM	-7.91696E-02	3.53490E-02	-2.240	0.0251	6.17800E-02
MFSWI	-6.36598E-02	1.44860E-02	-4.395	0.0000	3.38800E-01	EAOSCI	-6.86951E-02	3.68970E-02	-1.862	0.0626	4.46000E-02
BAINT	2.65142E-05	3.08580E-02	0.001	0.9993	8.19600E-02	OPSCI	-7.61101E-02	1.04030E-01	-0.732	0.4644	3.23400E-03
MBAINT	-1.65190E-01	7.64470E-02	-2.161	0.0307	1.29300E-02	PSYCH	-1.15105E-01	3.22100E-02	-3.574	0.0004	8.48600E-02
AGEPHD	4.64745E-03	2.38670E-03	1.947	0.0515	3.13200E+01	ECON	-6.31080E-03	4.44030E-02	-0.142	0.8870	2.65400E-02
MAGEPHD	-3.63376E-03	1.39880E-01	-0.026	0.9793	3.12200E-03	POLYSCI	-4.14418E-02	4.66450E-02	-0.888	0.3743	2.16300E-02
NATUPHD	-6.50776E-02	3.22450E-02	-2.018	0.0436	4.04800E-02	SAD	-4.72266E-02	3.59570E-02	-1.313	0.1890	5.24100E-02
PERMPHD	-5.99149E-02	3.52820E-02	-1.698	0.0895	4.27100E-02	OSSCI	-4.81839E-02	4.98430E-02	-0.967	0.3337	1.79500E-02
TEMPPHD	6.31790E-02	3.04430E-02	2.075	0.0380	8.21800E-02	WAVE97	-7.06886E-02	3.40640E-02	-2.075	0.0380	8.38500E-02
MCITPHD	3.57600E-02	5.05970E-02	0.707	0.4797	2.46400E-02	WAVE95	-1.09996E-01	3.32340E-02	-3.310	0.0009	1.02500E-01
HISPAN	9.22374E-02	2.82000E-02	3.271	0.0011	4.91700E-02	WAVE93	-8.10464E-02	3.23950E-02	-2.502	0.0124	1.07500E-01
BLACK	4.84211E-03	2.52100E-02	0.192	0.8477	5.93200E-02	WAVE91	-3.18410E-02	3.39220E-02	-0.939	0.3479	7.76100E-02
ASIAN	-1.60766E-04	2.29620E-02	-0.007	0.9944	1.08900E-01	WAVE89	-3.94589E-02	3.17100E-02	-1.244	0.2134	9.62300E-02
MRACE	1.17704E-01	1.59750E-01	0.737	0.4612	1.45000E-03	WAVE87	-7.46721E-03	3.13700E-02	-0.238	0.8119	9.13200E-02
NATAMER	-4.88855E-02	9.73450E-02	-0.502	0.6155	3.56800E-03	WAVE85	-6.25995E-02	2.46390E-02	-2.541	0.0111	1.28800E-01
MARRIED	-1.03703E-02	1.55840E-02	-0.665	0.5058	7.30500E-01	WAVE83	5.44869E-02	2.39420E-02	2.276	0.0229	1.62500E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured: 8968 observations; 5 iterations; log likelihood function = -5282.163.

TABLE C-20. Maximum likelihood estimates for tenure, logit model 4: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	-4.36216E-02	7.50100E-02	0.582	0.5609		WATEACH	-1.42221E-01	1.41830E-02	10.027	0.0000	4.80500E-01
FEMALE	-7.19385E-02	1.34230E-02	-5.359	0.0000	3.67600E-01	WAOTH	-2.11921E-02	2.11230E-02	-1.003	0.3157	1.07900E-01
YRPHD9	-1.41563E-01	1.22040E-02	11.600	0.0000	5.07500E-01	EMPPRI	-1.27643E-01	1.42520E-02	-8.956	0.0000	2.73900E-01
TA	-1.98738E-02	2.38990E-02	0.832	0.4057	1.12600E-01	MEMPPRI	-8.92185E-02	7.11880E-02	1.253	0.2101	1.26200E-01
RA	-7.70447E-03	2.26470E-02	-0.340	0.7337	1.51400E-01	EMPRES	-2.47951E-02	1.57210E-02	1.577	0.1148	3.12000E-01
FELLOW	-7.67916E-02	4.13500E-02	1.857	0.0633	2.65400E-02	EMPDOC	-9.40198E-02	2.32630E-02	4.042	0.0001	8.36300E-02
TRAIN	-2.56092E-02	2.59260E-02	-0.988	0.3233	1.00500E-01	MEMPCARN	-8.04200E-02	6.88100E-02	-1.169	0.2425	2.37300E-01
MPSOURC	-3.95022E-02	2.49440E-02	1.584	0.1133	4.45600E-01	BIO	-2.27037E-01	2.95100E-02	-7.693	0.0000	2.93700E-01
TTD1	-1.58128E-03	2.73400E-03	-0.578	0.5630	8.55300E+00	HEALTH	-7.51041E-02	3.36650E-02	-2.231	0.0257	7.89500E-02
MTTD1	-1.56767E-01	6.69280E-02	2.342	0.0192	2.36400E-02	CHEMENG	-1.79179E-01	7.11580E-02	2.518	0.0118	9.81300E-03
PDOCP	-2.75024E-01	-1.55090E-02	17.733	0.0000	3.70200E-01	ELECENG	-3.80516E-02	4.96050E-02	0.767	0.4430	2.07400E-02
MPDOCP	-1.10114E-01	3.50410E-02	-3.142	0.0017	5.04000E-02	OTHENG	-2.28051E-02	3.46300E-02	-0.659	0.5102	7.25900E-02
FSWI	-8.09436E-03	1.37320E-02	0.589	0.5556	3.69100E-01	COMP	-5.44602E-02	5.60920E-02	0.971	0.3316	1.46100E-02
MFSWI	-4.99676E-02	1.47500E-02	-3.388	0.0007	3.38800E-01	MATH	-1.48781E-02	3.35690E-02	0.443	0.6576	9.16600E-02
BAINT	-2.87330E-03	3.15210E-02	-0.091	0.9274	8.19600E-02	PHYSICS	-1.91658E-01	3.76530E-02	-5.090	0.0000	4.98400E-02
MBAINT	-1.77549E-01	7.76710E-02	-2.286	0.0223	1.29300E-02	CHEM	-8.27129E-02	3.61600E-02	-2.287	0.0222	6.17800E-02
AGEPHD	-3.19014E-03	2.41920E-03	1.319	0.1873	3.13200E+01	EAOSCI	-9.05807E-02	3.75240E-02	-2.414	0.0158	4.46000E-02
MAGEPHD	-5.96806E-02	1.42510E-01	-0.419	0.6754	3.12200E-03	OPSCI	-1.08760E-01	1.07010E-01	-1.016	0.3095	3.23400E-03
NATUPHD	-6.85749E-02	3.27060E-02	-2.097	0.0360	4.04800E-02	PSYCH	-1.05862E-01	3.29480E-02	-3.213	0.0013	8.48600E-02
PERMPHD	-4.92704E-02	3.58530E-02	-1.374	0.1694	4.27100E-02	ECON	-3.89843E-03	4.51850E-02	-0.086	0.9313	2.65400E-02
TEMPPHD	-6.03875E-02	3.10150E-02	1.947	0.0515	8.21800E-02	POLYSCI	-5.06751E-02	4.75450E-02	-1.066	0.2865	2.16300E-02
MCITPHD	-2.42278E-02	5.15690E-02	0.470	0.6385	2.46400E-02	SAD	-5.14218E-02	3.66590E-02	-1.403	0.1607	5.24100E-02
HISPAN	-8.45773E-02	2.85090E-02	2.967	0.0030	4.91700E-02	OSSCI	-5.73536E-02	5.07070E-02	-1.131	0.2580	1.79500E-02
BLACK	-1.41229E-03	2.54860E-02	-0.055	0.9558	5.93200E-02	WAVE97	-9.70389E-02	4.51870E-02	-2.148	0.0318	8.38500E-02
ASIAN	-5.69923E-03	2.33600E-02	-0.244	0.8073	1.08900E-01	WAVE95	-1.05018E-01	3.39430E-02	-3.094	0.0020	1.02500E-01
MRACE	-2.01702E-01	1.60620E-01	1.256	0.2092	1.45000E-03	WAVE93	-2.16252E-02	7.44490E-02	0.290	0.7715	1.07500E-01
NATAMER	-5.71797E-02	9.83690E-02	-0.581	0.5611	3.56800E-03	WAVE91	-3.20468E-02	3.45370E-02	-0.928	0.3535	7.76100E-02
MARRIED	-1.09378E-02	1.58260E-02	-0.691	0.4895	7.30500E-01	WAVE89	-3.43532E-02	3.22960E-02	-1.064	0.2875	9.62300E-02
MMARRIED	-6.22331E-02	3.51710E-02	1.769	0.0768	3.73600E-02	WAVE87	-3.09666E-03	3.19480E-02	-0.097	0.9228	9.13200E-02
DEP6	-1.45339E-02	1.08250E-02	1.343	0.1794	3.92400E-01	WAVE85	-6.29629E-02	2.51340E-02	-2.505	0.0122	1.28800E-01
DEP618	-2.58730E-02	8.88640E-03	2.912	0.0036	4.56700E-01	WAVE83	-4.44630E-02	2.44240E-02	1.820	0.0687	1.62500E-01
MDEP	-3.33333E-02	2.28830E-02	-1.457	0.1452	3.94700E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured: 8968 observations; 5 iterations; log likelihood function = -5165.232.

TABLE C-21. Maximum likelihood estimates for tenure, logit model 5: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	1.01227E-01	8.01590E-02	1.263	0.2067		MMARRIED	5.90673E-02	3.74410E-02	1.578	0.1147	3.82600E-02
FEMALE	-5.94379E-02	1.42030E-02	-4.185	0.0000	3.54700E-01	DEP6	1.07101E-02	1.12570E-02	0.951	0.3414	3.94500E-01
YRPHD9	1.52652E-01	1.27980E-02	11.928	0.0000	5.11700E-01	DEP618	2.90521E-02	9.46220E-03	3.070	0.0021	4.67500E-01
TA	1.25906E-02	2.49700E-02	0.504	0.6141	1.14500E-01	MDEP	-4.03672E-02	2.41790E-02	-1.670	0.0950	3.88400E-01
RA	-3.16422E-02	2.35920E-02	-1.341	0.1799	1.51600E-01	BIO	-2.50115E-01	3.16980E-02	-7.891	0.0000	2.70400E-01
FELLOW	5.11888E-02	4.19410E-02	1.221	0.2223	2.71800E-02	HEALTH	-1.05277E-01	3.63680E-02	-2.895	0.0038	8.06100E-02
TRAIN	-6.28000E-02	2.64710E-02	-2.372	0.0177	9.84200E-02	CHEMENG	1.15668E-01	7.11770E-02	1.625	0.1041	1.13500E-02
MPSOURC	1.07185E-02	2.61840E-02	0.409	0.6823	4.46300E-01	ELECENG	9.31758E-03	5.12050E-02	0.182	0.8556	2.33500E-02
TTD1	-1.52405E-03	3.02360E-03	-0.504	0.6142	8.53300E+00	OTHENG	-3.95723E-02	3.68640E-02	-1.073	0.2831	7.87600E-02
MTTD1	1.74043E-01	7.12970E-02	2.441	0.0146	2.42700E-02	COMP	1.28131E-02	5.84400E-02	0.219	0.8265	1.60900E-02
PDOCP	-2.84068E-01	-1.59900E-02	17.765	0.0000	3.38800E-01	MATH	-5.46251E-03	3.60000E-02	-0.152	0.8794	1.00100E-01
MPDOCP	-1.06414E-01	3.74690E-02	-2.840	0.0045	5.06600E-02	PHYSICS	-1.58389E-01	4.03830E-02	-3.922	0.0001	4.42000E-02
FSWI	1.28086E-02	1.43960E-02	0.890	0.3736	3.69700E-01	CHEM	-6.95466E-02	3.84750E-02	-1.808	0.0707	6.00300E-02
MFSWI	-4.87272E-02	1.54010E-02	-3.164	0.0016	3.24500E-01	EAOSCI	-4.28797E-02	4.14280E-02	-1.035	0.3007	4.27400E-02
BAINT	8.00880E-03	3.30370E-02	0.242	0.8085	8.06100E-02	OPSCI	-6.54928E-02	1.20290E-01	-0.544	0.5861	3.03400E-03
MBAINT	-1.96281E-01	8.14030E-02	-2.411	0.0159	1.31900E-02	PSYCH	-9.33983E-02	3.57170E-02	-2.615	0.0089	8.24500E-02
AGEPHD	7.29123E-03	2.66640E-03	2.734	0.0063	3.13100E+01	ECON	-4.77058E-02	4.73400E-02	-1.008	0.3136	2.94200E-02
MAGEPHD	8.12500E-02	1.45760E-01	0.557	0.5772	3.29800E-03	POLYSCI	-1.02436E-01	4.90070E-02	-2.090	0.0366	2.40100E-02
NATUPHD	-6.02490E-02	3.45590E-02	-1.743	0.0813	3.85200E-02	SAD	-8.27406E-02	3.90920E-02	-2.117	0.0343	5.63300E-02
PERMPHD	-4.44960E-02	3.79460E-02	-1.173	0.2410	4.03700E-02	OSSCI	-8.27587E-02	5.34930E-02	-1.547	0.1218	1.92600E-02
TEMPPHD	5.00884E-02	3.20630E-02	1.562	0.1182	8.43000E-02	WAVE97	-1.29029E-01	3.60930E-02	-3.575	0.0004	8.69400E-02
MCITPHD	-2.52943E-03	5.32460E-02	-0.048	0.9621	2.59900E-02	WAVE95	-1.63495E-01	3.51210E-02	-4.655	0.0000	1.06100E-01
HISPAN	8.15222E-02	2.98770E-02	2.729	0.0064	5.15800E-02	WAVE93	-1.28224E-01	3.44210E-02	-3.725	0.0002	1.09500E-01
BLACK	-3.21696E-02	2.61630E-02	-1.230	0.2189	6.39800E-02	WAVE91	-6.75337E-02	3.61460E-02	-1.868	0.0617	7.96800E-02
ASIAN	1.40468E-02	2.44580E-02	0.574	0.5658	1.04200E-01	WAVE89	-6.97703E-02	3.38800E-02	-2.059	0.0395	9.43300E-02
MRACE	1.65044E-02	1.55390E-01	0.106	0.9154	1.71500E-03	WAVE87	-1.28266E-02	3.36490E-02	-0.381	0.7031	8.86500E-02
NATAMER	-9.32621E-02	9.83940E-02	-0.948	0.3432	3.82600E-03	WAVE85	-5.78710E-02	2.69430E-02	-2.148	0.0317	1.21900E-01
MARRIED	-7.71657E-03	1.65470E-02	-0.466	0.6410	7.32500E-01	WAVE83	4.52649E-02	2.61190E-02	1.733	0.0831	1.63500E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7580 observations; 5 iterations; log likelihood function = -4344.955.

TABLE C-22. Maximum likelihood estimates for tenure, logit model 6: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	5.35310E-02	8.17900E-02	0.654	0.5128		WATEACH	5.54147E-02	1.51390E-02	3.660	0.0003	5.35100E-01
FEMALE	-5.44268E-02	1.43100E-02	-3.803	0.0001	3.54700E-01	WAOTH	3.86627E-02	2.43570E-02	1.587	0.1124	9.26100E-02
YRPHD9	1.54399E-01	1.28790E-02	11.989	0.0000	5.11700E-01	EMPPRI	-1.13678E-01	1.49760E-02	-7.591	0.0000	2.63200E-01
TA	1.55350E-02	2.51410E-02	0.618	0.5366	1.14500E-01	MEMPPRI	1.17611E-01	7.84270E-02	1.500	0.1337	1.26300E-01
RA	-2.90523E-02	2.36870E-02	-1.226	0.2200	1.51600E-01	EMPRES	4.96273E-02	1.68450E-02	2.946	0.0032	3.01200E-01
FELLOW	5.54792E-02	4.23500E-02	1.310	0.1902	2.71800E-02	EMPDOC	7.71865E-02	2.41340E-02	3.198	0.0014	9.06300E-02
TRAIN	-5.03996E-02	2.66870E-02	-1.889	0.0590	9.84200E-02	MEMPCARN	-4.26958E-02	7.50300E-02	-0.569	0.5693	2.39300E-01
MPSOURC	1.86476E-02	2.63370E-02	0.708	0.4789	4.46300E-01	BIO	-2.17924E-01	3.21450E-02	-6.779	0.0000	2.70400E-01
TTD1	-8.65115E-04	3.02240E-03	-0.286	0.7747	8.53300E+00	HEALTH	-8.96771E-02	3.67120E-02	-2.443	0.0146	8.06100E-02
MTTD1	1.76732E-01	7.15560E-02	2.470	0.0135	2.42700E-02	CHEMENG	1.44937E-01	7.21330E-02	2.009	0.0445	1.13500E-02
PDOCP	-2.77269E-01	-1.63590E-02	16.949	0.0000	3.38800E-01	ELECENG	2.44843E-02	5.15060E-02	0.475	0.6345	2.33500E-02
MPDOCP	-9.98071E-02	3.78320E-02	-2.638	0.0083	5.06600E-02	OTHENG	-2.13549E-02	3.72880E-02	-0.573	0.5668	7.87600E-02
FSWI	1.20968E-02	1.45070E-02	0.834	0.4044	3.69700E-01	COMP	4.47928E-02	5.89020E-02	0.760	0.4470	1.60900E-02
MFSWI	-4.19191E-02	1.55810E-02	-2.690	0.0071	3.24500E-01	MATH	1.79719E-02	3.65680E-02	0.491	0.6231	1.00100E-01
BAINT	-2.71532E-03	3.35010E-02	-0.081	0.9354	8.06100E-02	PHYSICS	-1.36049E-01	4.07690E-02	-3.337	0.0009	4.42000E-02
MBAINT	-2.12942E-01	8.17940E-02	-2.603	0.0092	1.31900E-02	CHEM	-3.86819E-02	3.92040E-02	-0.987	0.3238	6.00300E-02
AGEPHD	6.67853E-03	2.67310E-03	2.498	0.0125	3.13100E+01	EAOSCI	-3.33514E-02	4.18790E-02	-0.796	0.4258	4.27400E-02
MAGEPHD	7.31525E-02	1.46400E-01	0.500	0.6173	3.29800E-03	OPSCI	-7.05777E-02	1.21760E-01	-0.580	0.5622	3.03400E-03
NATUPHD	-5.96460E-02	3.46790E-02	-1.720	0.0854	3.85200E-02	PSYCH	-6.70240E-02	3.62720E-02	-1.848	0.0646	8.24500E-02
PERMPHD	-3.34231E-02	3.82410E-02	-0.874	0.3821	4.03700E-02	ECON	-1.28419E-02	4.79300E-02	-0.268	0.7888	2.94200E-02
TEMPPHD	4.61591E-02	3.24730E-02	1.421	0.1552	8.43000E-02	POLYSCI	-7.80612E-02	4.96720E-02	-1.572	0.1161	2.40100E-02
MCITPHD	-1.04819E-02	5.35430E-02	-0.196	0.8448	2.59900E-02	SAD	-6.10572E-02	3.95990E-02	-1.542	0.1231	5.63300E-02
HISPAN	7.21497E-02	2.99840E-02	2.406	0.0161	5.15800E-02	OSSCI	-7.58237E-02	5.38150E-02	-1.409	0.1588	1.92600E-02
BLACK	-3.58183E-02	2.62990E-02	-1.362	0.1732	6.39800E-02	WAVE97	-2.06718E-01	4.95990E-02	-4.168	0.0000	8.69400E-02
ASIAN	8.24444E-03	2.46630E-02	0.334	0.7382	1.04200E-01	WAVE95	-1.62983E-01	3.56130E-02	-4.577	0.0000	1.06100E-01
MRACE	7.08074E-02	1.55740E-01	0.455	0.6494	1.71500E-03	WAVE93	-5.64969E-02	8.10030E-02	-0.697	0.4855	1.09500E-01
NATAMER	-1.14174E-01	9.91250E-02	-1.152	0.2494	3.82600E-03	WAVE91	-6.82296E-02	3.64880E-02	-1.870	0.0615	7.96800E-02
MARRIED	-9.35508E-03	1.66640E-02	-0.561	0.5745	7.32500E-01	WAVE89	-7.12260E-02	3.41580E-02	-2.085	0.0371	9.43300E-02
MMARRIED	5.47982E-02	3.76650E-02	1.455	0.1457	3.82600E-02	WAVE87	-9.28805E-03	3.39690E-02	-0.273	0.7845	8.86500E-02
DEP6	1.36874E-02	1.12880E-02	1.213	0.2253	3.94500E-01	WAVE85	-5.97001E-02	2.72300E-02	-2.192	0.0284	1.21900E-01
DEP618	2.82622E-02	9.51150E-03	2.971	0.0030	4.67500E-01	WAVE83	3.89170E-02	2.64140E-02	1.473	0.1407	1.63500E-01
MDEP	-4.26357E-02	2.43350E-02	-1.752	0.0798	3.88400E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7580 observations; 5 iterations; log likelihood function = -4298.989.



TABLE C-23. Maximum likelihood estimates for tenure, logit model I-1: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	7.53821E-02	6.80310E-02	1.108	0.2678		MARRIED	4.78571E-03	1.99400E-02	0.240	0.8103	7.29400E-01
FEMALE	-3.53614E-02	2.20660E-02	-1.603	0.1090	3.67600E-01	MMARRIED	7.77518E-02	3.33740E-02	2.330	0.0198	3.51600E-02
FMARRIED	-1.25069E-02	2.77980E-02	-0.450	0.6528	2.27300E-01	DEP6	2.03577E-02	1.11990E-02	1.818	0.0691	4.01300E-01
FDEP6	-3.86517E-02	1.88360E-02	-2.052	0.0402	1.08700E-01	DEP618	3.19205E-02	8.94990E-03	3.567	0.0004	4.61600E-01
FDEP618	-3.09780E-02	1.58780E-02	-1.951	0.0511	1.08100E-01	MDEP	-3.88518E-02	2.13070E-02	-1.823	0.0682	3.68200E-01
YRPHD9	1.21490E-01	1.12700E-02	10.780	0.0000	5.06600E-01	BIO	-2.26504E-01	2.68480E-02	-8.437	0.0000	2.99200E-01
TA	2.56501E-02	2.16100E-02	1.187	0.2352	1.16900E-01	HEALTH	-5.69180E-02	3.06410E-02	-1.858	0.0632	7.82200E-02
RA	-9.30292E-03	2.05230E-02	-0.453	0.6503	1.65000E-01	CHEMENG	1.38794E-01	5.95980E-02	2.329	0.0199	1.02300E-02
FELLOW	1.09498E-01	3.84580E-02	2.847	0.0044	2.57300E-02	ELECENG	5.34018E-02	4.36330E-02	1.224	0.2210	2.13800E-02
TRAIN	-1.63994E-02	2.39040E-02	-0.686	0.4927	1.03300E-01	OTHENG	2.13664E-03	3.10940E-02	0.069	0.9452	7.37600E-02
MPSOURC	4.34114E-02	2.27880E-02	1.905	0.0568	4.16000E-01	COMP	1.11313E-01	5.15620E-02	2.159	0.0309	1.39800E-02
TTD1	-2.86414E-03	2.52030E-03	-1.136	0.2558	8.60300E+00	MATH	5.39418E-02	3.07060E-02	1.757	0.0790	8.54100E-02
MTTD1	9.49787E-02	5.79930E-02	1.638	0.1015	2.50300E-02	PHYSICS	-1.92426E-01	3.45750E-02	-5.565	0.0000	5.25800E-02
PDOCP	-2.74377E-01	-1.42530E-02	19.251	0.0000	3.80900E-01	CHEM	-7.15334E-02	3.30310E-02	-2.166	0.0303	6.18000E-02
MPDOCP	-1.18401E-01	3.25510E-02	-3.637	0.0003	5.07600E-02	EAOSCI	-5.29683E-02	3.43600E-02	-1.542	0.1232	4.40700E-02
FSWI	2.06781E-04	1.27550E-02	0.016	0.9871	3.68300E-01	OPSCI	-6.56438E-02	9.48880E-02	-0.692	0.4891	3.34300E-03
MFSWI	-6.55458E-02	1.37730E-02	-4.759	0.0000	3.44900E-01	PSYCH	-1.16551E-01	2.97180E-02	-3.922	0.0001	8.65200E-02
BAINT	-1.77656E-02	2.87580E-02	-0.618	0.5367	8.11600E-02	ECON	4.79751E-02	4.17330E-02	1.150	0.2503	2.50300E-02
MBAINT	-1.32824E-01	6.91040E-02	-1.922	0.0546	1.29700E-02	POLYSCI	7.57159E-03	4.41620E-02	0.171	0.8639	2.02600E-02
AGEPHD	3.47449E-03	2.22510E-03	1.562	0.1184	3.13800E+01	SAD	-2.50670E-02	3.32960E-02	-0.753	0.4515	5.12700E-02
MAGEPHD	-2.73311E-02	1.29280E-01	-0.211	0.8326	3.54600E-03	OSSCI	-2.92776E-02	4.57190E-02	-0.640	0.5219	1.80300E-02
NATUPHD	-6.20883E-02	3.02410E-02	-2.053	0.0401	4.14400E-02	WAVE97	-1.59584E-01	3.17890E-02	-5.020	0.0000	9.33100E-02
PERMPHD	-4.35290E-02	3.29540E-02	-1.321	0.1865	4.26500E-02	WAVE95	-2.10700E-01	3.09470E-02	-6.808	0.0000	1.18100E-01
TEMPPHD	7.02120E-02	2.80150E-02	2.506	0.0122	8.41900E-02	WAVE93	-1.67159E-01	3.03090E-02	-5.515	0.0000	1.20700E-01
MCITPHD	2.97817E-02	4.70900E-02	0.632	0.5271	2.58400E-02	WAVE91	-8.17728E-02	3.19380E-02	-2.560	0.0105	7.89300E-02
HISPAN	8.02204E-02	2.59610E-02	3.090	0.0020	5.02500E-02	WAVE89	-8.44548E-02	2.99980E-02	-2.815	0.0049	9.62500E-02
BLACK	3.81053E-03	2.36240E-02	0.161	0.8719	5.90700E-02	WAVE87	-6.20873E-02	2.95530E-02	-2.101	0.0357	9.20000E-02
ASIAN	-9.38513E-03	2.14160E-02	-0.438	0.6612	1.12700E-01	WAVE85	-5.76848E-02	2.39420E-02	-2.409	0.0160	1.17000E-01
MRACE	1.39930E-01	1.56470E-01	0.894	0.3712	1.31700E-03	WAVE83	5.41228E-02	2.33530E-02	2.318	0.0205	1.47600E-01
NATAMER	-5.25131E-02	8.94770E-02	-0.587	0.5573	3.64700E-03						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 9870 observations; 5 iterations; log likelihood function = -5765.246.

TABLE C-24. Maximum likelihood estimates for tenure, logit model I-2: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	4.48596E-02	7.05580E-02	0.636	0.5249		DEP618	2.91518E-02	9.14160E-03	3.189	0.0014	4.61600E-01
FEMALE	-4.07310E-02	2.25750E-02	-1.804	0.0712	3.67600E-01	MDEP	-3.88249E-02	2.17690E-02	-1.784	0.0745	3.68200E-01
FMARRIED	-7.99630E-03	2.83930E-02	-0.282	0.7782	2.27300E-01	WATEACH	1.68262E-01	1.34560E-02	12.505	0.0000	4.49500E-01
FDEP6	-3.75433E-02	1.91310E-02	-1.962	0.0497	1.08700E-01	WAOTH	-7.15395E-02	1.91980E-02	-3.726	0.0002	1.27200E-01
FDEP618	-2.66837E-02	1.61450E-02	-1.653	0.0984	1.08100E-01	EMPPRI	-1.35307E-01	1.35990E-02	-9.950	0.0000	2.74900E-01
YRPHD9	1.26620E-01	1.15180E-02	10.993	0.0000	5.06600E-01	MEMPPRI	5.89132E-02	4.98570E-02	1.182	0.2374	1.39200E-01
TA	9.10693E-03	2.20570E-02	0.413	0.6797	1.16900E-01	EMPRES	2.56179E-02	1.51000E-02	1.696	0.0898	3.06600E-01
RA	-7.05028E-03	2.09170E-02	-0.337	0.7361	1.65000E-01	EMPDOC	8.88940E-02	2.22170E-02	4.001	0.0001	8.01400E-02
FELLOW	1.06927E-01	3.93660E-02	2.716	0.0066	2.57300E-02	MEMPCARN	-1.28522E-01	4.82000E-02	-2.666	0.0077	2.66600E-01
TRAIN	-7.32677E-03	2.44280E-02	-0.300	0.7642	1.03300E-01	BIO	-2.09175E-01	2.75270E-02	-7.599	0.0000	2.99200E-01
MPSOURC	4.95394E-02	2.32970E-02	2.126	0.0335	4.16000E-01	HEALTH	-4.56216E-02	3.14100E-02	-1.452	0.1464	7.82200E-02
TTD1	-1.78675E-03	2.56520E-03	-0.697	0.4861	8.60300E+00	CHEMENG	1.47885E-01	6.08900E-02	2.429	0.0152	1.02300E-02
MTTD1	1.13309E-01	5.92340E-02	1.913	0.0558	2.50300E-02	ELECENG	4.16309E-02	4.46170E-02	0.933	0.3508	2.13800E-02
PDOCP	-2.53066E-01	-1.47210E-02	17.191	0.0000	3.80900E-01	OTHENG	-7.97606E-03	3.18170E-02	-0.251	0.8021	7.37600E-02
MPDOCP	-1.03687E-01	3.33920E-02	-3.105	0.0019	5.07600E-02	COMP	1.14969E-01	5.25250E-02	2.189	0.0286	1.39800E-02
FSWI	6.27098E-03	1.30270E-02	0.481	0.6303	3.68300E-01	MATH	3.61977E-02	3.15500E-02	1.147	0.2513	8.54100E-02
MFSWI	-4.92990E-02	1.41040E-02	-3.495	0.0005	3.44900E-01	PHYSICS	-1.82368E-01	3.52980E-02	-5.167	0.0000	5.25800E-02
BAINT	-1.31508E-02	2.96100E-02	-0.444	0.6569	8.11600E-02	CHEM	-7.91935E-02	3.38900E-02	-2.337	0.0195	6.18000E-02
MBAINT	-1.43672E-01	7.09430E-02	-2.025	0.0429	1.29700E-02	EAOSCI	-8.50042E-02	3.51600E-02	-2.418	0.0156	4.40700E-02
AGEPHD	2.03852E-03	2.27390E-03	0.896	0.3700	3.13800E+01	OPSCI	-9.72968E-02	9.91530E-02	-0.981	0.3265	3.34300E-03
MAGEPHD	-8.83756E-02	1.32620E-01	-0.666	0.5052	3.54600E-03	PSYCH	-1.02661E-01	3.06090E-02	-3.354	0.0008	8.65200E-02
NATUPHD	-6.80350E-02	3.09410E-02	-2.199	0.0279	4.14400E-02	ECON	3.70972E-02	4.26830E-02	0.869	0.3848	2.50300E-02
PERMPHD	-3.68158E-02	3.37380E-02	-1.091	0.2752	4.26500E-02	POLYSCI	-1.07632E-02	4.53790E-02	-0.237	0.8125	2.02600E-02
TEMPPHD	6.81763E-02	2.87070E-02	2.375	0.0176	8.41900E-02	SAD	-3.64779E-02	3.41340E-02	-1.069	0.2852	5.12700E-02
MCITPHD	1.98934E-02	4.84040E-02	0.411	0.6811	2.58400E-02	OSSCI	-3.89686E-02	4.69470E-02	-0.830	0.4065	1.80300E-02
HISPAN	7.43488E-02	2.64070E-02	2.816	0.0049	5.02500E-02	WAVE97	-1.05442E-01	4.20080E-02	-2.510	0.0121	9.33100E-02
BLACK	-2.17806E-03	2.40240E-02	-0.091	0.9278	5.90700E-02	WAVE95	-1.89113E-01	3.19570E-02	-5.918	0.0000	1.18100E-01
ASIAN	-1.30056E-02	2.19470E-02	-0.593	0.5535	1.12700E-01	WAVE93	-9.72308E-03	5.48770E-02	-0.177	0.8594	1.20700E-01
MRACE	2.26593E-01	1.56930E-01	1.444	0.1488	1.31700E-03	WAVE91	-7.64467E-02	3.27260E-02	-2.336	0.0195	7.89300E-02
NATAMER	-5.79675E-02	9.11520E-02	-0.636	0.5248	3.64700E-03	WAVE89	-7.49924E-02	3.07450E-02	-2.439	0.0147	9.62500E-02
MARRIED	7.74973E-04	2.03630E-02	0.038	0.9696	7.29400E-01	WAVE87	-5.04554E-02	3.03110E-02	-1.665	0.0960	9.20000E-02
MMARRIED	6.60911E-02	3.41060E-02	1.938	0.0527	3.51600E-02	WAVE85	-5.74118E-02	2.45920E-02	-2.335	0.0196	1.17000E-01
DEP6	2.18333E-02	1.14270E-02	1.911	0.0560	4.01300E-01	WAVE83	4.79130E-02	2.39770E-02	1.998	0.0457	1.47600E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured: 9870 observations; 5 iterations; log likelihood function = -5571.234.

TABLE C-25. Maximum likelihood estimates for tenure, logit model I-3: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	7.22261E-02	7.31640E-02	0.987	0.3236		MARRIED	5.57157E-04	2.12760E-02	0.026	0.9791	7.30500E-01
FEMALE	-3.59505E-02	2.34240E-02	-1.535	0.1248	3.67600E-01	MMARRIED	7.86505E-02	3.48330E-02	2.258	0.0240	3.73600E-02
FMARRIED	-1.81652E-02	2.94120E-02	-0.618	0.5368	2.27300E-01	DEP6	2.34543E-02	1.20970E-02	1.939	0.0525	3.92400E-01
FDEP6	-4.05293E-02	1.98170E-02	-2.045	0.0408	1.05400E-01	DEP618	3.54670E-02	9.83950E-03	3.605	0.0003	4.56700E-01
FDEP618	-3.03819E-02	1.69330E-02	-1.794	0.0728	1.04600E-01	MDEP	-3.88272E-02	2.25290E-02	-1.723	0.0848	3.94700E-01
YRPHD9	1.39084E-01	1.20340E-02	11.557	0.0000	5.07500E-01	BIO	-2.46606E-01	2.89690E-02	-8.513	0.0000	2.93700E-01
TA	2.98090E-02	2.35700E-02	1.265	0.2060	1.12600E-01	HEALTH	-8.37061E-02	3.31550E-02	-2.525	0.0116	7.89500E-02
RA	-9.05698E-03	2.24020E-02	-0.404	0.6860	1.51400E-01	CHEMENG	1.70813E-01	7.00240E-02	2.439	0.0147	9.81300E-03
FELLOW	7.24743E-02	4.06500E-02	1.783	0.0746	2.65400E-02	ELECENG	4.78234E-02	4.90400E-02	0.975	0.3295	2.07400E-02
TRAIN	-3.80866E-02	2.55340E-02	-1.492	0.1358	1.00500E-01	OTHENG	-1.91300E-02	3.40780E-02	-0.561	0.5746	7.25900E-02
MPSOURC	3.28435E-02	2.45940E-02	1.335	0.1817	4.45600E-01	COMP	4.57935E-02	5.54210E-02	0.826	0.4086	1.46100E-02
TTD1	-2.19343E-03	2.70970E-03	-0.809	0.4183	8.55300E+00	MATH	2.34237E-02	3.28960E-02	0.712	0.4764	9.16600E-02
MTTD1	1.47600E-01	6.60780E-02	2.234	0.0255	2.36400E-02	PHYSICS	-1.97408E-01	3.70900E-02	-5.322	0.0000	4.98400E-02
PDOCP	-2.97272E-01	-1.50970E-02	19.690	0.0000	3.70200E-01	CHEM	-7.78692E-02	3.53990E-02	-2.200	0.0278	6.17800E-02
MPDOCP	-1.26192E-01	3.43690E-02	-3.672	0.0002	5.04000E-02	EAOSCI	-6.74770E-02	3.69200E-02	-1.828	0.0676	4.46000E-02
FSWI	3.10773E-03	1.35290E-02	0.230	0.8183	3.69100E-01	OPSCI	-7.78678E-02	1.03660E-01	-0.751	0.4526	3.23400E-03
MFSWI	-6.36726E-02	1.44980E-02	-4.392	0.0000	3.38800E-01	PSYCH	-1.13587E-01	3.22500E-02	-3.522	0.0004	8.48600E-02
BAINT	1.67819E-04	3.08760E-02	0.005	0.9957	8.19600E-02	ECON	-4.69988E-03	4.44470E-02	-0.106	0.9158	2.65400E-02
MBAINT	-1.63207E-01	7.64570E-02	-2.135	0.0328	1.29300E-02	POLYSCI	-4.11510E-02	4.66680E-02	-0.882	0.3779	2.16300E-02
AGEPHD	4.12186E-03	2.39090E-03	1.724	0.0847	3.13200E+01	SAD	-4.55410E-02	3.60080E-02	-1.265	0.2060	5.24100E-02
MAGEPHD	-1.71061E-02	1.40140E-01	-0.122	0.9029	3.12200E-03	OSSCI	-4.63368E-02	4.99000E-02	-0.929	0.3531	1.79500E-02
NATUPHD	-6.28739E-02	3.22790E-02	-1.948	0.0514	4.04800E-02	WAVE97	-7.05383E-02	3.40990E-02	-2.069	0.0386	8.38500E-02
PERMPHD	-5.85026E-02	3.52950E-02	-1.658	0.0974	4.27100E-02	WAVE95	-1.10378E-01	3.32590E-02	-3.319	0.0009	1.02500E-01
TEMPPHD	6.36172E-02	3.04720E-02	2.088	0.0368	8.21800E-02	WAVE93	-8.20633E-02	3.24300E-02	-2.530	0.0114	1.07500E-01
MCITPHD	3.37234E-02	5.05760E-02	0.667	0.5049	2.46400E-02	WAVE91	-3.00576E-02	3.39320E-02	-0.886	0.3757	7.76100E-02
HISPAN	9.24788E-02	2.82210E-02	3.277	0.0011	4.91700E-02	WAVE89	-3.71566E-02	3.17440E-02	-1.171	0.2418	9.62300E-02
BLACK	5.99012E-03	2.52120E-02	0.238	0.8122	5.93200E-02	WAVE87	-5.22541E-03	3.14050E-02	-0.166	0.8679	9.13200E-02
ASIAN	-4.99691E-04	2.29750E-02	-0.022	0.9827	1.08900E-01	WAVE85	-6.06905E-02	2.46670E-02	-2.460	0.0139	1.28800E-01
MRACE	1.19352E-01	1.59370E-01	0.749	0.4539	1.45000E-03	WAVE83	5.79439E-02	2.39960E-02	2.415	0.0158	1.62500E-01
NATAMER	-4.80067E-02	9.73270E-02	-0.493	0.6218	3.56800E-03						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8968 observations; 5 iterations; log likelihood function = -5277.009.

TABLE C-26. Maximum likelihood estimates for tenure, logit model I-4: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	4.19854E-02	7.53410E-02	0.557	0.5773		DEP618	3.22402E-02	9.97810E-03	3.231	0.0012	4.56700E-01
FEMALE	-3.94816E-02	2.38090E-02	-1.658	0.0973	3.67600E-01	MDEP	-3.88986E-02	2.28880E-02	-1.699	0.0892	3.94700E-01
FMARRIED	-1.18470E-02	2.98490E-02	-0.397	0.6914	2.27300E-01	WATEACH	1.41632E-01	1.42000E-02	9.974	0.0000	4.80500E-01
FDEP6	-4.13845E-02	2.00690E-02	-2.062	0.0392	1.05400E-01	WAOATH	-2.20007E-02	2.11370E-02	-1.041	0.2980	1.07900E-01
FDEP618	-2.72796E-02	1.71510E-02	-1.591	0.1117	1.04600E-01	EMPPRI	-1.27499E-01	1.42600E-02	-8.941	0.0000	2.73900E-01
YRPHD9	1.41497E-01	1.22100E-02	11.588	0.0000	5.07500E-01	MEMPPRI	9.10539E-02	7.13610E-02	1.276	0.2020	1.26200E-01
TA	1.89842E-02	2.39240E-02	0.794	0.4275	1.12600E-01	EMPRES	2.48061E-02	1.57290E-02	1.577	0.1148	3.12000E-01
RA	-6.76631E-03	2.26730E-02	-0.298	0.7654	1.51400E-01	EMPDOC	9.28537E-02	2.32820E-02	3.988	0.0001	8.36300E-02
FELLOW	7.61598E-02	4.13800E-02	1.841	0.0657	2.65400E-02	MEMPCARN	-8.05087E-02	6.89960E-02	-1.167	0.2433	2.37300E-01
TRAIN	-2.56846E-02	2.59410E-02	-0.990	0.3221	1.00500E-01	BIO	-2.26494E-01	2.95320E-02	-7.669	0.0000	2.93700E-01
MPSOURC	3.95480E-02	2.49510E-02	1.585	0.1130	4.45600E-01	HEALTH	-7.43673E-02	3.37150E-02	-2.206	0.0274	7.89500E-02
TTD1	-1.35325E-03	2.73490E-03	-0.495	0.6207	8.55300E+00	CHEMENG	1.81395E-01	7.12150E-02	2.547	0.0109	9.81300E-03
MTTD1	1.59048E-01	6.69090E-02	2.377	0.0175	2.36400E-02	ELECENG	3.87537E-02	4.96990E-02	0.780	0.4355	2.07400E-02
PDOCP	-2.76329E-01	-1.55370E-02	17.785	0.0000	3.70200E-01	OTHENG	-2.36428E-02	3.46480E-02	-0.682	0.4950	7.25900E-02
MPDOCP	-1.11428E-01	3.50660E-02	-3.178	0.0015	5.04000E-02	COMP	5.60943E-02	5.61810E-02	0.998	0.3181	1.46100E-02
FSWI	7.82828E-03	1.37400E-02	0.570	0.5689	3.69100E-01	MATH	1.65287E-02	3.36210E-02	0.492	0.6230	9.16600E-02
MFSWI	-5.00025E-02	1.47610E-02	-3.387	0.0007	3.38800E-01	PHYSICS	-1.89951E-01	3.76820E-02	-5.041	0.0000	4.98400E-02
BAINT	-2.93753E-03	3.15350E-02	-0.093	0.9258	8.19600E-02	CHEM	-8.16054E-02	3.62190E-02	-2.253	0.0243	6.17800E-02
MBAINT	-1.75809E-01	7.76870E-02	-2.263	0.0236	1.29300E-02	EAOSCI	-8.93028E-02	3.75450E-02	-2.379	0.0174	4.46000E-02
AGEPHD	2.72593E-03	2.42350E-03	1.125	0.2607	3.13200E+01	OPSCI	-1.10401E-01	1.06570E-01	-1.036	0.3002	3.23400E-03
MAGEPHD	-7.07808E-02	1.42720E-01	-0.496	0.6199	3.12200E-03	PSYCH	-1.04476E-01	3.29890E-02	-3.167	0.0015	8.48600E-02
NATUPHD	-6.65532E-02	3.27380E-02	-2.033	0.0421	4.04800E-02	ECON	-2.78267E-03	4.52350E-02	-0.062	0.9510	2.65400E-02
PERMPHD	-4.80525E-02	3.58570E-02	-1.340	0.1802	4.27100E-02	POLYSCI	-5.03237E-02	4.75650E-02	-1.058	0.2901	2.16300E-02
TEMPPHD	6.06580E-02	3.10510E-02	1.954	0.0508	8.21800E-02	SAD	-4.98633E-02	3.67190E-02	-1.358	0.1745	5.24100E-02
MCITPHD	2.22461E-02	5.15500E-02	0.432	0.6661	2.46400E-02	OSSCI	-5.54774E-02	5.07600E-02	-1.093	0.2744	1.79500E-02
HISPAN	8.50077E-02	2.85310E-02	2.979	0.0029	4.91700E-02	WAVE97	-9.85831E-02	4.52000E-02	-2.181	0.0292	8.38500E-02
BLACK	-1.79567E-04	2.54870E-02	-0.007	0.9944	5.93200E-01	WAVE95	-1.05309E-01	3.39590E-02	-3.101	0.0019	1.02500E-01
ASIAN	-5.90757E-03	2.33700E-02	-0.253	0.8004	1.08900E-01	WAVE93	2.06658E-02	7.46140E-02	0.277	0.7818	1.07500E-01
MRACE	2.03360E-01	1.60360E-01	1.268	0.2047	1.45000E-03	WAVE91	-3.01731E-02	3.45410E-02	-0.874	0.3824	7.76100E-02
NATAMER	-5.62257E-02	9.82530E-02	-0.572	0.5672	3.56800E-03	WAVE89	-3.21095E-02	3.23210E-02	-0.993	0.3205	9.62300E-02
MARRIED	-3.16801E-03	2.15850E-02	-0.147	0.8833	7.30500E-01	WAVE87	-9.66416E-04	3.19770E-02	-0.030	0.9759	9.13200E-02
MMARRIED	6.78739E-02	3.53290E-02	1.921	0.0547	3.73600E-02	WAVE85	-6.11406E-02	2.51570E-02	-2.430	0.0151	1.28800E-01
DEP6	2.55114E-02	1.22640E-02	2.080	0.0375	3.92400E-01	WAVE83	4.80611E-02	2.44740E-02	1.964	0.0496	1.62500E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8968 observations; 5 iterations; log likelihood function = -5160.807.

TABLE C-27. Maximum likelihood estimates for tenure, logit model I-5: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	1.04103E-01	8.05500E-02	1.292	0.1962		MARRIED	-9.26455E-03	2.25270E-02	-0.411	0.6809	7.32500E-01
FEMALE	-5.46892E-02	2.49370E-02	-2.193	0.0283	3.54700E-01	MMARRIED	5.99359E-02	3.76310E-02	1.593	0.1112	3.82600E-02
FMARRIED	5.05226E-03	3.13860E-02	0.161	0.8721	2.15400E-01	DEP6	1.65368E-02	1.26040E-02	1.312	0.1895	3.94500E-01
FDEP6	-2.28462E-02	2.12570E-02	-1.075	0.2825	9.74900E-02	DEP618	2.92405E-02	1.04260E-02	2.805	0.0050	4.67500E-01
FDEP618	-9.41509E-04	1.92240E-02	-0.049	0.9609	9.61700E-02	MDEP	-4.23654E-02	2.42320E-02	-1.748	0.0804	3.88400E-01
YRPHD9	1.52585E-01	1.28000E-02	11.921	0.0000	5.11700E-01	BIO	-2.50235E-01	3.17100E-02	-7.891	0.0000	2.70400E-01
TA	1.21032E-02	2.49890E-02	0.484	0.6282	1.14500E-01	HEALTH	-1.06056E-01	3.64140E-02	-2.912	0.0036	8.06100E-02
RA	-3.15535E-02	2.35980E-02	-1.337	0.1812	1.51600E-01	CHEMENG	1.15696E-01	7.12070E-02	1.625	0.1042	1.13500E-02
FELLOW	5.07165E-02	4.19620E-02	1.209	0.2268	2.71800E-02	ELECENG	8.56302E-03	5.12530E-02	0.167	0.8673	2.33500E-02
TRAIN	-6.28767E-02	2.64780E-02	-2.375	0.0176	9.84200E-02	OTHENG	-3.98521E-02	3.68650E-02	-1.081	0.2797	7.87600E-02
MPSOURC	1.08074E-02	2.61790E-02	0.413	0.6797	4.46300E-01	COMP	1.22583E-02	5.84910E-02	0.210	0.8340	1.60900E-02
TTD1	-1.52617E-03	3.02760E-03	-0.504	0.6142	8.53300E+00	MATH	-5.57280E-03	3.60390E-02	-0.155	0.8771	1.00100E-01
MTTD1	1.74234E-01	7.13110E-02	2.443	0.0146	2.42700E-02	PHYSICS	-1.58300E-01	4.03880E-02	-3.920	0.0001	4.42000E-02
PDOCP	-2.84748E-01	-1.60110E-02	17.785	0.0000	3.38800E-01	CHEM	-7.02814E-02	3.85240E-02	-1.824	0.0681	6.00300E-02
MPDOCP	-1.07398E-01	3.74720E-02	-2.866	0.0042	5.06600E-02	EAOSCI	-4.26319E-02	4.14350E-02	-1.029	0.3035	4.27400E-02
FSWI	1.27373E-02	1.43990E-02	0.885	0.3764	3.69700E-01	OPSCI	-6.46060E-02	1.20170E-01	-0.538	0.5908	3.03400E-03
MFSWI	-4.85780E-02	1.54070E-02	-3.153	0.0016	3.24500E-01	PSYCH	-9.33986E-02	3.57400E-02	-2.613	0.0090	8.24500E-02
BAINT	7.93341E-03	3.30560E-02	0.240	0.8103	8.06100E-02	ECON	-4.84315E-02	4.73710E-02	-1.022	0.3066	2.94200E-02
MBAINT	-1.95942E-01	8.14250E-02	-2.406	0.0161	1.31900E-02	POLYSCI	-1.02515E-01	4.90180E-02	-2.091	0.0365	2.40100E-02
AGEPHD	7.17169E-03	2.67400E-03	2.682	0.0073	3.13100E+01	SAD	-8.25587E-02	3.91320E-02	-2.110	0.0349	5.63300E-02
MAGEPHD	7.87524E-02	1.45930E-01	0.540	0.5894	3.29800E-03	OSSCI	-8.24778E-02	5.35110E-02	-1.541	0.1232	1.92600E-02
NATUPHD	-5.95636E-02	3.45960E-02	-1.722	0.0851	3.85200E-02	WAVE97	-1.28986E-01	3.60880E-02	-3.574	0.0004	8.69400E-02
PERMPHD	-4.42800E-02	3.79520E-02	-1.167	0.2433	4.03700E-02	WAVE95	-1.63924E-01	3.51220E-02	-4.667	0.0000	1.06100E-01
TEMPPHD	5.05364E-02	3.20890E-02	1.575	0.1153	8.43000E-02	WAVE93	-1.29094E-01	3.44310E-02	-3.749	0.0002	1.09500E-01
MCITPHD	-2.90836E-03	5.32400E-02	-0.055	0.9564	2.59900E-02	WAVE91	-6.71477E-02	3.61370E-02	-1.858	0.0632	7.96800E-02
HISPAN	8.16714E-02	2.98860E-02	2.733	0.0063	5.15800E-02	WAVE89	-6.86730E-02	3.39030E-02	-2.026	0.0428	9.43300E-02
BLACK	-3.18673E-02	2.61640E-02	-1.218	0.2232	6.39800E-02	WAVE87	-1.22997E-02	3.36640E-02	-0.365	0.7148	8.86500E-02
ASIAN	1.42448E-02	2.44670E-02	0.582	0.5604	1.04200E-01	WAVE85	-5.73258E-02	2.69510E-02	-2.127	0.0334	1.21900E-01
MRACE	1.63306E-02	1.55410E-01	0.105	0.9163	1.71500E-03	WAVE83	4.63366E-02	2.61630E-02	1.771	0.0766	1.63500E-01
NATAMER	-9.37194E-02	9.83520E-02	-0.953	0.3406	3.82600E-03						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7580 observations; 5 iterations; log likelihood function = -4344.366.

TABLE C-28. Maximum likelihood estimates for tenure, logit model I-6: 8 or 9 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	5.75543E-02	8.21690E-02	0.700	0.4837		DEP618	2.85451E-02	1.05080E-02	2.717	0.0066	4.67500E-01
FEMALE	-5.36597E-02	2.51000E-02	-2.138	0.0325	3.54700E-01	MDEP	-4.41790E-02	2.43830E-02	-1.812	0.0700	3.88400E-01
FMARRIED	9.85968E-03	3.15470E-02	0.313	0.7546	2.15400E-01	WATEACH	5.55109E-02	1.51470E-02	3.665	0.0003	5.35100E-01
FDEP6	-2.16156E-02	2.13250E-02	-1.014	0.3108	9.74900E-02	WAOTH	3.84939E-02	2.43630E-02	1.580	0.1141	9.26100E-02
FDEP618	-3.37713E-04	1.92490E-02	-0.018	0.9860	9.61700E-02	EMPPRI	-1.13653E-01	1.49800E-02	-7.587	0.0000	2.63200E-01
YRPHD9	1.54331E-01	1.28810E-02	11.982	0.0000	5.11700E-01	MEMPPRI	1.16700E-01	7.84480E-02	1.488	0.1369	1.26300E-01
TA	1.52179E-02	2.51580E-02	0.605	0.5453	1.14500E-01	EMPRES	4.94326E-02	1.68490E-02	2.934	0.0034	3.01200E-01
RA	-2.89080E-02	2.36930E-02	-1.220	0.2224	1.51600E-01	EMPDOC	7.67996E-02	2.41440E-02	3.181	0.0015	9.06300E-02
FELLOW	5.50883E-02	4.23720E-02	1.300	0.1936	2.71800E-02	MEMPCARN	-4.11436E-02	7.50780E-02	-0.548	0.5837	2.39300E-01
TRAIN	-5.03820E-02	2.66950E-02	-1.887	0.0591	9.84200E-02	BIO	-2.18269E-01	3.21570E-02	-6.788	0.0000	2.70400E-01
MPSOURC	1.87328E-02	2.63310E-02	0.711	0.4768	4.46300E-01	HEALTH	-9.06452E-02	3.67600E-02	-2.466	0.0137	8.06100E-02
TTD1	-8.88371E-04	3.02630E-03	-0.294	0.7691	8.53300E+00	CHEMENG	1.44454E-01	7.21520E-02	2.002	0.0453	1.13500E-02
MTTD1	1.76824E-01	7.15670E-02	2.471	0.0135	2.42700E-02	ELECENG	2.33765E-02	5.15570E-02	0.453	0.6503	2.33500E-02
PDOCP	-2.77940E-01	-1.63780E-02	16.971	0.0000	3.38800E-01	OTHENG	-2.17968E-02	3.72890E-02	-0.585	0.5589	7.87600E-02
MPDOCP	-1.00766E-01	3.78360E-02	-2.663	0.0077	5.06600E-02	COMP	4.39205E-02	5.89610E-02	0.745	0.4563	1.60900E-02
FSWI	1.20509E-02	1.45100E-02	0.831	0.4062	3.69700E-01	MATH	1.74912E-02	3.66060E-02	0.478	0.6328	1.00100E-01
MFSWI	-4.17357E-02	1.55860E-02	-2.678	0.0074	3.24500E-01	PHYSICS	-1.36257E-01	4.07760E-02	-3.342	0.0008	4.42000E-02
BAINT	-2.86019E-03	3.35180E-02	-0.085	0.9320	8.06100E-02	CHEM	-3.97692E-02	3.92560E-02	-1.013	0.3110	6.00300E-02
MBAINT	-2.12660E-01	8.18240E-02	-2.599	0.0094	1.31900E-02	EAOSCI	-3.33620E-02	4.18890E-02	-0.796	0.4258	4.27400E-02
AGEPHD	6.59620E-03	2.68050E-03	2.461	0.0139	3.13100E+01	OPSCI	-6.96892E-02	1.21690E-01	-0.573	0.5669	3.03400E-03
MAGEPHD	7.14815E-02	1.46540E-01	0.488	0.6257	3.29800E-03	PSYCH	-6.73121E-02	3.62960E-02	-1.855	0.0637	8.24500E-02
NATUPHD	-5.92619E-02	3.47100E-02	-1.707	0.0878	3.85200E-02	ECON	-1.39068E-02	4.79640E-02	-0.290	0.7719	2.94200E-02
PERMPHD	-3.33070E-02	3.82450E-02	-0.871	0.3838	4.03700E-02	POLYSCI	-7.85059E-02	4.96790E-02	-1.580	0.1141	2.40100E-02
TEMPPHD	4.65344E-02	3.25000E-02	1.432	0.1522	8.43000E-02	SAD	-6.12352E-02	3.96400E-02	-1.545	0.1224	5.63300E-02
MCITPHD	-1.07092E-02	5.35410E-02	-0.200	0.8415	2.59900E-02	OSSCI	-7.57516E-02	5.38370E-02	-1.407	0.1594	1.92600E-02
HISPAN	7.22042E-02	2.99900E-02	2.408	0.0161	5.15800E-02	WAVE97	-2.07363E-01	4.95870E-02	-4.182	0.0000	8.69400E-02
BLACK	-3.56371E-02	2.63010E-02	-1.355	0.1754	6.39800E-02	WAVE95	-1.63418E-01	3.56130E-02	-4.589	0.0000	1.06100E-01
ASIAN	8.51094E-03	2.46720E-02	0.345	0.7301	1.04200E-01	WAVE93	-5.89724E-02	8.10550E-02	-0.728	0.4669	1.09500E-01
MRACE	7.06827E-02	1.55820E-01	0.454	0.6501	1.71500E-03	WAVE91	-6.78658E-02	3.64810E-02	-1.860	0.0628	7.96800E-02
NATAMER	-1.14502E-01	9.90850E-02	-1.156	0.2479	3.82600E-03	WAVE89	-7.02023E-02	3.41800E-02	-2.054	0.0400	9.43300E-02
MARRIED	-1.34000E-02	2.26900E-02	-0.591	0.5548	7.32500E-01	WAVE87	-8.93230E-03	3.39810E-02	-0.263	0.7927	8.86500E-02
MMARRIED	5.49505E-02	3.78600E-02	1.451	0.1467	3.82600E-02	WAVE85	-5.91773E-02	2.72390E-02	-2.173	0.0298	1.21900E-01
DEP6	1.94661E-02	1.26720E-02	1.536	0.1245	3.94500E-01	WAVE83	3.99857E-02	2.64590E-02	1.511	0.1307	1.63500E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8968 observations; 5 iterations; log likelihood function = -5160.807.

TABLE C-29. Maximum likelihood estimates for tenure, logit model 1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	5.96794E-01	6.43770E-02	9.270	0.0000		MMARRIED	1.95760E-02	2.95130E-02	0.663	0.5071	4.11300E-02
FEMALE	-8.54580E-02	1.06460E-02	-8.027	0.0000	3.25500E-01	DEP6	2.77144E-03	1.00020E-02	0.277	0.7817	1.94200E-01
YRPHD15	3.02131E-02	9.42390E-03	3.206	0.0014	4.92900E-01	DEP618	5.85489E-03	6.25430E-03	0.936	0.3492	7.61900E-01
TA	8.39008E-03	2.37470E-02	0.353	0.7239	6.00700E-02	MDEP	2.71933E-02	1.75630E-02	1.548	0.1215	3.72500E-01
RA	2.90792E-02	2.25380E-02	1.290	0.1970	7.72700E-02	BIO	-1.24591E-01	2.47800E-02	-5.028	0.0000	3.10700E-01
FELLOW	7.32544E-02	4.09550E-02	1.789	0.0737	1.45200E-02	HEALTH	-4.23627E-02	2.96570E-02	-1.428	0.1532	6.28600E-02
TRAIN	1.03285E-02	2.35550E-02	0.438	0.6610	5.94900E-02	CHEMENG	2.75236E-02	8.55580E-02	0.322	0.7477	4.53200E-03
MPSOURC	-1.19290E-02	2.57030E-02	-0.464	0.6426	7.11500E-01	ELECENG	3.24231E-02	5.98530E-02	0.542	0.5880	9.99300E-03
TTD1	-2.93335E-05	2.27290E-03	-0.013	0.9897	8.17400E+00	OTHENG	3.37711E-04	3.54920E-02	0.010	0.9924	3.80000E-02
MTTD1	-9.88447E-03	5.62070E-02	-0.176	0.8604	1.76600E-02	COMP	-9.17436E-03	7.94610E-02	-0.115	0.9081	3.48600E-03
PDOCP	-7.49864E-02	1.17410E-02	-6.387	0.0000	3.23500E-01	MATH	2.40502E-02	2.90110E-02	0.829	0.4071	1.07400E-01
MPDOCP	-4.82446E-02	2.79180E-02	-1.728	0.0840	4.31100E-02	PHYSICS	-1.84734E-01	2.88920E-02	-6.394	0.0000	5.68200E-02
FSWI	-1.75396E-02	1.04880E-02	-1.672	0.0945	3.69000E-01	CHEM	-1.27077E-01	2.92600E-02	-4.343	0.0000	6.41400E-02
MFSWI	-1.85147E-02	1.09440E-02	-1.692	0.0907	3.43400E-01	EAOSCI	-6.22809E-02	3.22450E-02	-1.931	0.0534	4.35700E-02
BAINT	-3.61298E-03	2.70420E-02	-0.134	0.8937	7.80900E-02	OPSCI	-1.16342E-01	8.70900E-02	-1.336	0.1816	2.55600E-03
MBAINT	6.41544E-02	7.14590E-02	0.898	0.3693	9.99300E-03	PSYCH	-1.07607E-01	2.70560E-02	-3.977	0.0001	9.94700E-02
AGEPHD	-4.88573E-03	2.01910E-03	-2.420	0.0155	3.08700E+01	ECON	-8.93480E-03	3.68220E-02	-0.243	0.8083	3.21900E-02
MAGEPHD	-1.18264E-01	1.44630E-01	-0.818	0.4135	1.51100E-03	POLYSCI	4.02332E-02	4.01710E-02	1.002	0.3166	2.85800E-02
NATUPHD	5.15132E-03	2.73770E-02	0.188	0.8508	3.11400E-02	SAD	3.50789E-02	3.18810E-02	1.100	0.2712	5.83300E-02
PERMPHD	-5.19754E-03	2.90700E-02	-0.179	0.8581	4.32300E-02	OSSCI	9.67593E-02	4.80710E-02	2.013	0.0441	2.01000E-02
TEMPPHD	1.83194E-02	2.85760E-02	0.641	0.5215	5.78700E-02	WAVE97	-2.14519E-01	3.18990E-02	-6.725	0.0000	8.13400E-02
MCITPHD	5.45567E-03	4.40200E-02	0.124	0.9014	1.70800E-02	WAVE95	-2.35307E-01	3.12270E-02	-7.535	0.0000	8.83100E-02
HISPAN	4.30506E-02	2.98920E-02	1.440	0.1498	2.85800E-02	WAVE93	-2.55673E-01	3.10720E-02	-8.228	0.0000	1.01400E-01
BLACK	3.78250E-02	2.38440E-02	1.586	0.1127	4.43900E-02	WAVE91	-1.46892E-01	2.78790E-02	-5.269	0.0000	7.77400E-02
ASIAN	-6.96908E-02	2.00110E-02	-3.483	0.0005	7.93600E-02	WAVE89	-1.21979E-01	2.16870E-02	-5.625	0.0000	1.44600E-01
MRACE	-1.46278E-01	1.00890E-01	-1.450	0.1471	1.97500E-03	WAVE87	-1.21793E-01	2.13700E-02	-5.699	0.0000	1.42500E-01
NATAMER	-7.13715E-02	7.21940E-02	-0.989	0.3229	3.48600E-03	WAVE85	-8.72094E-02	2.23920E-02	-3.895	0.0001	1.30300E-01
MARRIED	4.17540E-03	1.26590E-02	0.330	0.7415	7.54100E-01	WAVE83	-5.44132E-02	2.49060E-02	-2.185	0.0289	1.26800E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8606 observations; 5 iterations; log likelihood function = -4528.253.

TABLE C-30. Maximum likelihood estimates for tenure, logit model 2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	5.66393E-01	6.38220E-02	8.875	0.0000		WATEACH	1.51846E-01	1.13830E-02	13.339	0.0000	4.91400E-01
FEMALE	-8.43838E-02	1.04870E-02	-8.046	0.0000	3.25500E-01	WAOH	-9.14828E-02	1.29320E-02	-7.074	0.0000	1.65200E-01
YRPHD15	2.42658E-02	9.22890E-03	2.629	0.0086	4.92900E-01	EMPPRI	-1.49784E-01	-1.04750E-02	14.300	0.0000	2.58400E-01
TA	-3.70817E-03	2.33130E-02	-0.159	0.8736	6.00700E-02	MEMPPRI	-1.15396E-01	3.54480E-02	-3.255	0.0011	1.31900E-01
RA	2.36111E-02	2.20930E-02	1.069	0.2852	7.72700E-02	EMPRES	5.04651E-03	1.21350E-02	0.416	0.6775	2.94600E-01
FELLOW	7.31576E-02	4.00440E-02	1.827	0.0677	1.45200E-02	EMPDOC	9.98944E-02	2.02400E-02	4.936	0.0000	9.31900E-02
TRAIN	2.12985E-02	2.30190E-02	0.925	0.3548	5.94900E-02	MEMPCARN	-4.46141E-02	3.53200E-02	-1.263	0.2065	2.35200E-01
MPSOURC	-5.73443E-03	2.52820E-02	-0.227	0.8206	7.11500E-01	BIO	-1.07650E-01	2.42650E-02	-4.436	0.0000	3.10700E-01
TTD1	3.12080E-04	2.23860E-03	0.139	0.8891	8.17400E+00	HEALTH	-1.42044E-02	2.90710E-02	-0.489	0.6251	6.28600E-02
MTTD1	-2.41163E-03	5.45660E-02	-0.044	0.9648	1.76600E-02	CHEMENG	4.07327E-02	8.27840E-02	0.492	0.6227	4.53200E-03
PDOCP	-4.93745E-02	1.17870E-02	-4.189	0.0000	3.23500E-01	ELECENG	2.10221E-02	5.81430E-02	0.362	0.7177	9.99300E-03
MPDOCP	-3.84741E-02	2.74790E-02	-1.400	0.1615	4.31100E-02	OTHENG	-1.22160E-03	3.47260E-02	-0.035	0.9719	3.80000E-02
FSWI	-1.21340E-02	1.02670E-02	-1.182	0.2373	3.69000E-01	COMP	-7.66804E-03	7.78670E-02	-0.098	0.9216	3.48600E-03
MFSWI	-7.85272E-03	1.07350E-02	-0.732	0.4645	3.43400E-01	MATH	9.01799E-03	2.82520E-02	0.319	0.7496	1.07400E-01
BAINT	5.08540E-03	2.63710E-02	0.193	0.8471	7.80900E-02	PHYSICS	-1.71970E-01	2.82290E-02	-6.092	0.0000	5.68200E-02
MBAINT	6.03901E-02	6.98850E-02	0.864	0.3875	9.99300E-03	CHEM	-1.32010E-01	2.87900E-02	-4.585	0.0000	6.41400E-02
AGEPHD	-5.77165E-03	1.99470E-03	-2.894	0.0038	3.08700E+01	EAOSCI	-8.58098E-02	3.15160E-02	-2.723	0.0065	4.35700E-02
MAGEPHD	-1.47613E-01	1.42750E-01	-1.034	0.3011	1.51100E-03	OPSCI	-1.61139E-01	8.63800E-02	-1.865	0.0621	2.55600E-03
NATUPHD	-4.52016E-04	2.69580E-02	-0.017	0.9866	3.11400E-02	PSYCH	-9.35833E-02	2.65480E-02	-3.525	0.0004	9.94700E-02
PERMPHD	-9.42737E-03	2.82200E-02	-0.334	0.7383	4.32300E-02	ECON	-2.38815E-02	3.58900E-02	-0.665	0.5058	3.21900E-02
TEMPPHD	3.92504E-02	2.79960E-02	1.402	0.1609	5.78700E-02	POLYSCI	2.92270E-02	3.92290E-02	0.745	0.4563	2.85800E-02
MCITPHD	4.80692E-03	4.31980E-02	0.111	0.9114	1.70800E-02	SAD	2.30814E-02	3.12240E-02	0.739	0.4598	5.83300E-02
HISPAN	3.10730E-02	2.91990E-02	1.064	0.2873	2.85800E-02	OSSCI	5.29187E-02	4.67270E-02	1.132	0.2574	2.01000E-02
BLACK	3.95800E-02	2.31880E-02	1.707	0.0878	4.43900E-02	WAVE97	-7.34870E-02	3.66460E-02	-2.005	0.0449	8.13400E-02
ASIAN	-8.58824E-02	1.95990E-02	-4.382	0.0000	7.93600E-02	WAVE95	-2.16064E-01	3.08640E-02	-7.001	0.0000	8.83100E-02
MRACE	-1.17736E-01	9.86810E-02	-1.193	0.2328	1.97500E-03	WAVE93	-1.70452E-01	4.46670E-02	-3.816	0.0001	1.01400E-01
NATAMER	-1.05022E-01	7.27290E-02	-1.444	0.1487	3.48600E-03	WAVE91	-1.34652E-01	2.74280E-02	-4.909	0.0000	7.77400E-02
MARRIED	1.48154E-02	1.24460E-02	1.190	0.2339	7.54100E-01	WAVE89	-1.11452E-01	2.11980E-02	-5.258	0.0000	1.44600E-01
MMARRIED	1.77066E-02	2.88000E-02	0.615	0.5387	4.11300E-02	WAVE87	-1.09614E-01	2.09460E-02	-5.233	0.0000	1.42500E-01
DEP6	7.95272E-03	9.79150E-03	0.812	0.4167	1.94200E-01	WAVE85	-8.48100E-02	2.18920E-02	-3.874	0.0001	1.30300E-01
DEP618	6.10693E-03	6.13540E-03	0.995	0.3196	7.61900E-01	WAVE83	-5.13022E-02	2.43420E-02	-2.108	0.0351	1.26800E-01
MDEP	2.84638E-02	1.72250E-02	1.652	0.0985	3.72500E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8606 observations; 5 iterations; log likelihood function = -4205.317.



TABLE C-31. Maximum likelihood estimates for tenure, logit model 3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	4.49509E-01	5.98850E-02	7.506	0.0000		MMARRIED	7.17342E-03	2.57800E-02	0.278	0.7808	4.31200E-02
FEMALE	-8.81608E-02	9.50570E-03	-9.275	0.0000	3.24900E-01	DEP6	-3.44819E-03	9.18990E-03	-0.375	0.7075	1.91400E-01
YRPHD15	2.80356E-02	8.56430E-03	3.274	0.0011	4.94000E-01	DEP618	4.44497E-03	5.89850E-03	0.754	0.4511	7.56900E-01
TA	-1.88333E-02	2.34240E-02	-0.804	0.4214	5.62400E-02	MDEP	1.70288E-02	1.59540E-02	1.067	0.2858	3.91500E-01
RA	6.68417E-03	2.24490E-02	0.298	0.7659	7.12400E-02	BIO	-1.13351E-01	2.30920E-02	-4.909	0.0000	3.09500E-01
FELLOW	6.11684E-02	4.21130E-02	1.452	0.1464	1.34900E-02	HEALTH	-4.71500E-02	2.75790E-02	-1.710	0.0873	6.27900E-02
TRAIN	4.73335E-04	2.31780E-02	0.020	0.9837	5.34600E-02	CHEMENG	-2.16855E-02	7.40420E-02	-0.293	0.7696	4.79100E-03
MPSOURC	-1.02211E-02	2.53420E-02	-0.403	0.6867	7.36500E-01	ELECENG	6.54496E-02	6.54120E-02	1.001	0.3170	9.96100E-03
TTD1	-6.33804E-04	2.07570E-03	-0.305	0.7601	8.11600E+00	OTHENG	7.93825E-03	3.41620E-02	0.232	0.8163	3.84600E-02
MTTD1	-3.32381E-02	5.03810E-02	-0.660	0.5094	1.80300E-02	COMP	-3.51350E-02	7.60820E-02	-0.462	0.6442	3.40400E-03
PDOCP	-6.88868E-02	1.05760E-02	-6.513	0.0000	3.15600E-01	MATH	2.60619E-02	2.73430E-02	0.953	0.3405	1.11300E-01
MPDOCP	-3.23317E-02	2.60180E-02	-1.243	0.2140	4.22400E-02	PHYSICS	-1.31500E-01	2.70690E-02	-4.858	0.0000	5.30800E-02
FSWI	-1.89295E-02	9.43610E-03	-2.006	0.0449	3.71300E-01	CHEM	-9.38311E-02	2.71540E-02	-3.456	0.0006	6.33000E-02
MFSWI	-1.33655E-02	9.87780E-03	-1.353	0.1760	3.40900E-01	EAOSCI	-2.06027E-02	3.16150E-02	-0.652	0.5146	4.24900E-02
BAINT	1.94755E-02	2.45780E-02	0.792	0.4281	7.89300E-02	OPSCI	-1.43477E-01	7.41560E-02	-1.935	0.0530	2.64800E-03
MBAINT	5.23832E-02	6.34190E-02	0.826	0.4088	1.04700E-02	PSYCH	-6.98497E-02	2.54920E-02	-2.740	0.0061	9.64600E-02
AGEPHD	-2.15683E-03	1.85670E-03	-1.162	0.2454	3.08100E+01	ECON	-2.46817E-02	3.35400E-02	-0.736	0.4618	3.34100E-02
MAGEPHD	3.85034E-02	1.68110E-01	0.229	0.8188	1.38700E-03	POLYSCI	5.16514E-02	3.86490E-02	1.336	0.1814	2.92500E-02
NATUPHD	-8.67332E-03	2.48290E-02	-0.349	0.7269	3.07700E-02	SAD	2.04515E-02	2.99950E-02	0.682	0.4954	5.95100E-02
PERMPHD	-1.93886E-02	2.64930E-02	-0.732	0.4643	4.30000E-02	OSSCI	8.15410E-02	4.61960E-02	1.765	0.0775	2.08000E-02
TEMPPHD	-1.71562E-02	2.59450E-02	-0.661	0.5084	5.85000E-02	WAVE97	-6.03107E-02	2.98660E-02	-2.019	0.0435	7.33800E-02
MCITPHD	-1.11055E-02	4.05390E-02	-0.274	0.7841	1.67700E-02	WAVE95	-8.14790E-02	2.90380E-02	-2.806	0.0050	7.91800E-02
HISPAN	3.87272E-02	2.91330E-02	1.329	0.1837	2.82400E-02	WAVE93	-9.89955E-02	2.85890E-02	-3.463	0.0005	9.04000E-02
BLACK	4.24405E-02	2.38750E-02	1.778	0.0755	4.30000E-02	WAVE91	-5.52049E-02	2.49480E-02	-2.213	0.0269	7.71700E-02
ASIAN	-5.00231E-02	1.82310E-02	-2.744	0.0061	7.66600E-02	WAVE89	-2.96995E-02	1.86660E-02	-1.591	0.1116	1.42500E-01
MRACE	-1.27358E-01	8.14480E-02	-1.564	0.1179	2.14300E-03	WAVE87	-3.69273E-02	1.82620E-02	-2.022	0.0432	1.42200E-01
NATAMER	-3.84136E-02	7.46790E-02	-0.514	0.6070	3.02600E-03	WAVE85	-6.81711E-02	1.80800E-02	-3.771	0.0002	1.41300E-01
MARRIED	-5.66290E-03	1.15130E-02	-0.492	0.6228	7.55000E-01	WAVE83	-4.16157E-02	2.03540E-02	-2.045	0.0409	1.37600E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7931 observations; 5 iterations; log likelihood function = -3649.882.

TABLE C-32. Maximum likelihood estimates for tenure, logit model 4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	4.09555E-01	5.83090E-02	7.024	0.0000		WATEACH	9.73385E-02	1.01150E-02	9.624	0.0000	5.18900E-01
FEMALE	-8.28418E-02	9.24880E-03	-8.957	0.0000	3.24900E-01	WAOH	-4.22867E-02	1.21130E-02	-3.491	0.0005	1.46300E-01
YRPHD15	2.46609E-02	8.27610E-03	2.980	0.0029	4.94000E-01	EMPPRI	-1.09820E-01	-9.15690E-03	11.993	0.0000	2.53400E-01
TA	-1.78504E-02	2.26180E-02	-0.789	0.4300	5.62400E-02	MEMPPRI	-9.60899E-02	4.39850E-02	-2.185	0.0289	1.19700E-01
RA	7.43547E-03	2.15920E-02	0.344	0.7306	7.12400E-02	EMPRES	8.84425E-03	1.05900E-02	0.835	0.4036	2.97400E-01
FELLOW	6.59432E-02	4.04790E-02	1.629	0.1033	1.34900E-02	EMPDOC	7.08224E-02	1.73300E-02	4.087	0.0000	9.87300E-02
TRAIN	1.39436E-02	2.22620E-02	0.626	0.5311	5.34600E-02	MEMPCARN	3.53278E-02	4.42040E-02	0.799	0.4242	2.11800E-01
MPSOURC	-9.52590E-04	2.45030E-02	-0.039	0.9690	7.36500E-01	BIO	-9.33252E-02	2.24500E-02	-4.157	0.0000	3.09500E-01
TTD1	-3.66684E-04	2.00300E-03	-0.183	0.8548	8.11600E+00	HEALTH	-2.75948E-02	2.67020E-02	-1.033	0.3014	6.27900E-02
MTTD1	-2.60494E-02	4.83320E-02	-0.539	0.5899	1.80300E-02	CHEMENG	-1.26247E-02	7.07560E-02	-0.178	0.8584	4.79100E-03
PDOCP	-5.13729E-02	1.04990E-02	-4.893	0.0000	3.15600E-01	ELECENG	6.08041E-02	6.24780E-02	0.973	0.3305	9.96100E-03
MPDOCP	-2.48569E-02	2.52500E-02	-0.984	0.3249	4.22400E-02	OTHENG	6.69165E-03	3.29450E-02	0.203	0.8391	3.84600E-02
FSWI	-1.47658E-02	9.12630E-03	-1.618	0.1057	3.71300E-01	COMP	-2.94224E-02	7.35210E-02	-0.400	0.6890	3.40400E-03
MFSWI	-4.92615E-03	9.59090E-03	-0.514	0.6075	3.40900E-01	MATH	1.93467E-02	2.64050E-02	0.733	0.4637	1.11300E-01
BAINT	1.59047E-02	2.35980E-02	0.674	0.5003	7.89300E-02	PHYSICS	-1.22419E-01	2.61370E-02	-4.684	0.0000	5.30800E-02
MBAINT	4.44496E-02	6.13070E-02	0.725	0.4684	1.04700E-02	CHEM	-8.98472E-02	2.64890E-02	-3.392	0.0007	6.33000E-02
AGEPHD	-2.77251E-03	1.79530E-03	-1.544	0.1225	3.08100E+01	EAOSCI	-3.47862E-02	3.04300E-02	-1.143	0.2530	4.24900E-02
MAGEPHD	9.84483E-03	1.62430E-01	0.061	0.9517	1.38700E-03	OPSCI	-1.65874E-01	7.22530E-02	-2.296	0.0217	2.64800E-03
NATUPHD	-8.68850E-03	2.40980E-02	-0.361	0.7184	3.07700E-02	PSYCH	-6.07718E-02	2.47230E-02	-2.458	0.0140	9.64600E-02
PERMPHD	-1.86335E-02	2.54100E-02	-0.733	0.4634	4.30000E-02	ECON	-2.64506E-02	3.24170E-02	-0.816	0.4145	3.34100E-02
TEMPPHD	-2.64450E-03	2.51650E-02	-0.105	0.9163	5.85000E-02	POLYSCI	4.13370E-02	3.72160E-02	1.111	0.2667	2.92500E-02
MCITPHD	-1.10643E-02	3.93790E-02	-0.281	0.7787	1.67700E-02	SAD	1.55521E-02	2.90010E-02	0.536	0.5918	5.95100E-02
HISPAN	2.84449E-02	2.79840E-02	1.016	0.3094	2.82400E-02	OSSCI	5.52206E-02	4.43950E-02	1.244	0.2136	2.08000E-02
BLACK	4.20034E-02	2.29530E-02	1.830	0.0673	4.30000E-02	WAVE97	-1.76231E-02	3.42720E-02	-0.514	0.6071	7.33800E-02
ASIAN	-5.98026E-02	1.76210E-02	-3.394	0.0007	7.66600E-02	WAVE95	-7.92177E-02	2.82120E-02	-2.808	0.0050	7.91800E-02
MRACE	-1.08567E-01	7.95550E-02	-1.365	0.1724	2.14300E-03	WAVE93	-1.09161E-01	5.01620E-02	-2.176	0.0295	9.04000E-02
NATAMER	-6.69219E-02	7.25820E-02	-0.922	0.3565	3.02600E-03	WAVE91	-5.42793E-02	2.42290E-02	-2.240	0.0251	7.71700E-02
MARRIED	2.15302E-03	1.11600E-02	0.193	0.8470	7.55000E-01	WAVE89	-2.86706E-02	1.80550E-02	-1.588	0.1123	1.42500E-01
MMARRIED	5.49562E-03	2.48510E-02	0.221	0.8250	4.31200E-02	WAVE87	-3.35595E-02	1.76990E-02	-1.896	0.0579	1.42200E-01
DEP6	1.87092E-04	8.91050E-03	0.021	0.9833	1.91400E-01	WAVE85	-6.60138E-02	1.75200E-02	-3.768	0.0002	1.41300E-01
DEP618	4.40667E-03	5.72010E-03	0.770	0.4411	7.56900E-01	WAVE83	-4.11048E-02	1.96880E-02	-2.088	0.0368	1.37600E-01
MDEP	1.70650E-02	1.54540E-02	1.104	0.2695	3.91500E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7931 observations; 6 iterations; log likelihood function = -3489.259.

TABLE C-33. Maximum likelihood estimates for tenure, logit model 5: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.3106157	4.69220E-02	6.620	0.0000		DEP6	-1.60813E-03	7.06720E-03	-0.228	0.8200	1.90900E-01
FEMALE	-4.11530E-02	7.66010E-03	-5.372	0.0000	3.10400E-01	DEP618	1.37444E-03	4.55230E-03	0.302	0.7627	7.65400E-01
YRPHD15	1.78630E-02	6.83230E-03	2.614	0.0089	4.98000E-01	MDEP	1.18978E-02	1.28120E-02	0.929	0.3531	3.90500E-01
TA	-2.72218E-02	1.84060E-02	-1.479	0.1391	5.60600E-02	BIO	-6.38580E-02	1.92080E-02	-3.325	0.0009	2.93300E-01
RA	-1.36999E-02	1.78880E-02	-0.766	0.4438	7.12600E-02	HEALTH	-5.16995E-02	2.21410E-02	-2.335	0.0195	6.38700E-02
FELLOW	1.68933E-02	3.17040E-02	0.533	0.5941	1.39500E-02	CHEMENG	-2.19022E-02	5.68980E-02	-0.385	0.7003	5.02000E-03
TRAIN	-2.74885E-02	1.79070E-02	-1.535	0.1248	5.31300E-02	ELECENG	4.47381E-02	5.49190E-02	0.815	0.4153	1.06000E-02
MPSOURC	-2.68167E-02	1.97890E-02	-1.355	0.1754	7.38000E-01	OTHENG	-1.96951E-02	2.62880E-02	-0.749	0.4537	4.10000E-02
TTD1	8.30104E-04	1.64740E-03	0.504	0.6143	8.06500E+00	COMP	-2.29906E-02	5.78610E-02	-0.397	0.6911	3.48600E-03
MTTD1	-1.12102E-02	3.69130E-02	-0.304	0.7614	1.81300E-02	MATH	-1.25936E-02	2.16760E-02	-0.581	0.5613	1.19500E-01
PDOCP	-3.40065E-02	8.53980E-03	-3.982	0.0001	2.97600E-01	PHYSICS	-6.82361E-02	2.24990E-02	-3.033	0.0024	5.00600E-02
MPDOCP	-7.96448E-03	2.16160E-02	-0.368	0.7125	4.21100E-02	CHEM	-5.03662E-02	2.25170E-02	-2.237	0.0253	6.09400E-02
FSWI	-1.01439E-02	7.58560E-03	-1.337	0.1811	3.69800E-01	EAOSCI	-9.21706E-04	2.71740E-02	-0.034	0.9729	4.33700E-02
MFSWI	-1.36451E-02	7.87010E-03	-1.734	0.0830	3.35700E-01	OPSCI	-1.38908E-01	4.94560E-02	-2.809	0.0050	2.78900E-03
BAINT	4.22779E-02	2.01320E-02	2.100	0.0357	7.64200E-02	PSYCH	-3.61785E-02	2.12950E-02	-1.699	0.0893	9.51100E-02
MBAINT	5.50367E-02	5.03610E-02	1.093	0.2745	1.06000E-02	ECON	-7.16122E-03	2.86530E-02	-0.250	0.8026	3.40300E-02
AGEPHD	-2.87798E-04	1.40990E-03	-0.204	0.8383	3.07500E+01	POLYSCI	1.15923E-02	3.06720E-02	0.378	0.7055	3.09600E-02
NATUPHD	7.54922E-03	2.10630E-02	0.358	0.7200	2.98400E-02	SAD	-1.04665E-02	2.39330E-02	-0.437	0.6619	6.26100E-02
PERMPHD	-2.85137E-02	2.04320E-02	-1.396	0.1629	4.22500E-02	OSSCI	2.82469E-02	3.68190E-02	0.767	0.4430	2.21700E-02
TEMPPHD	-1.71521E-02	2.04110E-02	-0.840	0.4007	5.73100E-02	WAVE97	-4.91662E-02	2.33350E-02	-2.107	0.0351	7.27900E-02
MCITPHD	-2.86800E-02	3.14660E-02	-0.911	0.3621	1.70100E-02	WAVE95	-6.78616E-02	2.25100E-02	-3.015	0.0026	7.85100E-02
HISPAN	1.58982E-02	2.25310E-02	0.706	0.4804	2.92800E-02	WAVE93	-7.97307E-02	2.19550E-02	-3.632	0.0003	9.00900E-02
BLACK	3.34852E-03	1.74620E-02	0.192	0.8479	4.51800E-02	WAVE91	-5.08790E-02	1.93870E-02	-2.624	0.0087	7.80900E-02
ASIAN	-3.28567E-02	1.46890E-02	-2.237	0.0253	7.29300E-02	WAVE89	-1.91718E-02	1.54990E-02	-1.237	0.2161	1.42500E-01
MRACE	-8.02148E-02	5.86150E-02	-1.369	0.1712	2.09200E-03	WAVE87	-3.30137E-02	1.48280E-02	-2.226	0.0260	1.43900E-01
NATAMER	-5.58122E-02	4.94120E-02	-1.130	0.2587	3.20700E-03	WAVE85	-3.58207E-02	1.51510E-02	-2.364	0.0181	1.37600E-01
MARRIED	-2.20535E-04	9.31400E-03	-0.024	0.9811	7.55800E-01	WAVE83	-2.81214E-02	1.70660E-02	-1.648	0.0994	1.37400E-01
MMARRIED	-1.30007E-02	1.96360E-02	-0.662	0.5079	4.49000E-02						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7171 observations; 6 iterations; log likelihood function = -2356.740.

TABLE C-34. Maximum likelihood estimates for tenure, logit model 6: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.2625844	4.45290E-02	5.897	0.0000		WATEACH	1.70978E-02	7.95200E-03	2.150	0.0315	5.50000E-01
FEMALE	-3.43582E-02	7.19730E-03	-4.774	0.0000	3.10400E-01	WAOHT	-2.58409E-02	1.00610E-02	-2.568	0.0102	1.35500E-01
YRPHD15	1.59555E-02	6.40050E-03	2.493	0.0127	4.98000E-01	EMPPRI	-7.52342E-02	-6.82530E-03	11.023	0.0000	2.45600E-01
TA	-2.13062E-02	1.72290E-02	-1.237	0.2162	5.60600E-02	MEMPPRI	-7.89953E-02	3.65320E-02	-2.162	0.0306	1.17800E-01
RA	-1.32868E-02	1.67210E-02	-0.795	0.4268	7.12600E-02	EMPRES	4.25829E-02	8.66430E-03	4.915	0.0000	2.88900E-01
FELLOW	1.39643E-02	2.95550E-02	0.472	0.6366	1.39500E-02	EMPDOC	4.44077E-02	1.26640E-02	3.507	0.0005	1.04300E-01
TRAIN	-2.16655E-02	1.67550E-02	-1.293	0.1960	5.31300E-02	MEMPCARN	5.77678E-02	3.72050E-02	1.553	0.1205	2.09900E-01
MPSOURC	-2.05136E-02	1.85640E-02	-1.105	0.2692	7.38000E-01	BIO	-3.31356E-02	1.82150E-02	-1.819	0.0689	2.93300E-01
TTD1	1.08138E-03	1.54930E-03	0.698	0.4852	8.06500E+00	HEALTH	-2.75115E-02	2.08300E-02	-1.321	0.1866	6.38700E-02
MTTD1	-9.16327E-03	3.45720E-02	-0.265	0.7910	1.81300E-02	CHEMENG	-3.65739E-04	5.31190E-02	-0.007	0.9945	5.02000E-03
PDOCP	-3.34748E-02	8.22650E-03	-4.069	0.0001	2.97600E-01	ELECENG	5.67092E-02	5.08810E-02	1.115	0.2650	1.06000E-02
MPDOCP	-3.36163E-03	2.03140E-02	-0.165	0.8686	4.21100E-02	OTHENG	-1.72482E-03	2.46890E-02	-0.070	0.9443	4.10000E-02
FSWI	-1.12939E-02	7.11070E-03	-1.588	0.1122	3.69800E-01	COMP	-4.65865E-03	5.40620E-02	-0.086	0.9313	3.48600E-03
MFSWI	-1.08349E-02	7.43730E-03	-1.457	0.1452	3.35700E-01	MATH	7.27534E-03	2.03870E-02	0.357	0.7212	1.19500E-01
BAINT	3.99073E-02	1.89270E-02	2.108	0.0350	7.64200E-02	PHYSICS	-4.22669E-02	2.11640E-02	-1.997	0.0458	5.00600E-02
MBAINT	4.92469E-02	4.76410E-02	1.034	0.3013	1.06000E-02	CHEM	-1.80889E-02	2.14580E-02	-0.843	0.3992	6.09400E-02
AGEPHD	-1.78446E-04	1.32310E-03	-0.135	0.8927	3.07500E+01	EAOSCI	1.01877E-02	2.54290E-02	0.401	0.6887	4.33700E-02
NATUPHD	9.19911E-03	1.97910E-02	0.465	0.6421	2.98400E-02	OPSCI	-1.39907E-01	4.63500E-02	-3.018	0.0025	2.78900E-03
PERMPHD	-2.76254E-02	1.91480E-02	-1.443	0.1491	4.22500E-02	PSYCH	-1.22060E-02	2.00450E-02	-0.609	0.5426	9.51100E-02
TEMPPHD	-1.07776E-02	1.93270E-02	-0.558	0.5771	5.73100E-02	ECON	1.37164E-02	2.68450E-02	0.511	0.6094	3.40300E-02
MCITPHD	-2.99458E-02	2.98320E-02	-1.004	0.3155	1.70100E-02	POLYSCI	2.81389E-02	2.86960E-02	0.981	0.3268	3.09600E-02
HISPAN	7.38662E-03	2.09240E-02	0.353	0.7241	2.92800E-02	SAD	9.73713E-03	2.25390E-02	0.432	0.6657	6.26100E-02
BLACK	6.99627E-03	1.62830E-02	0.430	0.6674	4.51800E-02	OSSCI	3.19558E-02	3.42060E-02	0.934	0.3502	2.21700E-02
ASIAN	-3.77022E-02	1.38320E-02	-2.726	0.0064	7.29300E-02	WAVE97	-3.36747E-02	2.65660E-02	-1.268	0.2050	7.27900E-02
MRACE	-7.88491E-02	5.54560E-02	-1.422	0.1551	2.09200E-03	WAVE95	-7.43660E-02	2.12490E-02	-3.500	0.0005	7.85100E-02
NATAMER	-6.10192E-02	4.63170E-02	-1.317	0.1877	3.20700E-03	WAVE93	-1.09473E-01	4.12110E-02	-2.656	0.0079	9.00900E-02
MARRIED	1.01557E-03	8.75400E-03	0.116	0.9076	7.55800E-01	WAVE91	-5.48444E-02	1.82540E-02	-3.005	0.0027	7.80900E-02
MMARRIED	-1.63611E-02	1.83420E-02	-0.892	0.3724	4.49000E-02	WAVE89	-2.12401E-02	1.44870E-02	-1.466	0.1426	1.42500E-01
DEP6	-1.01145E-03	6.62550E-03	-0.153	0.8787	1.90900E-01	WAVE87	-3.33089E-02	1.38730E-02	-2.401	0.0164	1.43900E-01
DEP618	2.27832E-03	4.28890E-03	0.531	0.5953	7.65400E-01	WAVE85	-3.46468E-02	1.41880E-02	-2.442	0.0146	1.37600E-01
MDEP	1.02743E-02	1.20180E-02	0.855	0.3926	3.90500E-01	WAVE83	-2.65656E-02	1.59730E-02	-1.663	0.0963	1.37400E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7171 observations; 6 iterations; log likelihood function = -2270.638.

TABLE C-35. Maximum likelihood estimates for tenure, logit model I-1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.5796756	6.47240E-02	8.956	0.0000		MARRIED	4.58402E-02	1.73350E-02	2.644	0.0082	7.54100E-01
FEMALE	-1.16630E-02	1.94810E-02	-0.599	0.5494	3.25500E-01	MMARRIED	3.39813E-02	2.95610E-02	1.150	0.2503	4.11300E-02
FMARRIED	-7.63748E-02	2.39810E-02	-3.185	0.0015	1.93800E-01	DEP6	-1.25562E-02	1.09670E-02	-1.145	0.2522	1.94200E-01
FDEP6	5.72530E-02	2.25470E-02	2.539	0.0111	4.33400E-02	DEP618	1.36205E-02	6.86960E-03	1.983	0.0474	7.61900E-01
FDEP618	-4.40510E-02	1.14620E-02	-3.843	0.0001	1.61900E-01	MDEP	1.88869E-02	1.77860E-02	1.062	0.2883	3.72500E-01
YRPHD15	3.01710E-02	9.42620E-03	3.201	0.0014	4.92900E-01	BIO	-1.23454E-01	2.47620E-02	-4.986	0.0000	3.10700E-01
TA	1.01425E-02	2.37920E-02	0.426	0.6699	6.00700E-02	HEALTH	-4.13921E-02	2.96580E-02	-1.396	0.1628	6.28600E-02
RA	3.17205E-02	2.25670E-02	1.406	0.1598	7.72700E-02	CHEMENG	3.60099E-02	8.55530E-02	0.421	0.6738	4.53200E-03
FELLOW	7.24488E-02	4.09680E-02	1.768	0.0770	1.45200E-02	ELECENG	3.12752E-02	5.99150E-02	0.522	0.6017	9.99300E-03
TRAIN	1.23195E-02	2.35880E-02	0.522	0.6015	5.94900E-02	OTHENG	-4.04111E-04	3.54530E-02	-0.011	0.9909	3.80000E-02
MPSOURC	-1.04756E-02	2.57130E-02	-0.407	0.6837	7.11500E-01	COMP	-1.65995E-02	7.94270E-02	-0.209	0.8345	3.48600E-03
TTD1	2.74779E-04	2.26830E-03	0.121	0.9036	8.17400E+00	MATH	2.52397E-02	2.89880E-02	0.871	0.3839	1.07400E-01
MTTD1	-8.14957E-03	5.63480E-02	-0.145	0.8850	1.76600E-02	PHYSICS	-1.85332E-01	2.88750E-02	-6.418	0.0000	5.68200E-02
PDOCP	-7.63254E-02	1.17530E-02	-6.494	0.0000	3.23500E-01	CHEM	-1.26232E-01	2.92520E-02	-4.315	0.0000	6.41400E-02
MPDOCP	-4.40452E-02	2.79100E-02	-1.578	0.1145	4.31100E-02	EAOSCI	-6.02695E-02	3.22330E-02	-1.870	0.0615	4.35700E-02
FSWI	-1.73748E-02	1.04910E-02	-1.656	0.0977	3.69000E-01	OPSCI	-1.20979E-01	8.70110E-02	-1.390	0.1644	2.55600E-03
MFSWI	-1.93034E-02	1.09420E-02	-1.764	0.0777	3.43400E-01	PSYCH	-1.05632E-01	2.70400E-02	-3.906	0.0001	9.94700E-02
BAINT	-5.31375E-03	2.70290E-02	-0.197	0.8442	7.80900E-02	ECON	-5.19945E-03	3.68570E-02	-0.141	0.8878	3.21900E-02
MBAINT	6.80832E-02	7.14760E-02	0.953	0.3408	9.99300E-03	POLYSCI	4.30887E-02	4.01390E-02	1.073	0.2831	2.85800E-02
AGEPHD	-5.69232E-03	2.01860E-03	-2.820	0.0048	3.08700E+01	SAD	3.93676E-02	3.18570E-02	1.236	0.2166	5.83300E-02
MAGEPHD	-1.45109E-01	1.44680E-01	-1.003	0.3159	1.51100E-03	OSSCI	9.73779E-02	4.80120E-02	2.028	0.0425	2.01000E-02
NATUPHD	7.48375E-03	2.74140E-02	0.273	0.7849	3.11400E-02	WAVE97	-2.13504E-01	3.19460E-02	-6.683	0.0000	8.13400E-02
PERMPHD	4.38801E-03	2.91390E-02	0.151	0.8803	4.32300E-02	WAVE95	-2.36221E-01	3.12610E-02	-7.556	0.0000	8.83100E-02
TEMPPHD	2.10732E-02	2.85400E-02	0.738	0.4603	5.78700E-02	WAVE93	-2.55015E-01	3.11210E-02	-8.194	0.0000	1.01400E-01
MCITPHD	5.05861E-03	4.40960E-02	0.115	0.9087	1.70800E-02	WAVE91	-1.46332E-01	2.79080E-02	-5.243	0.0000	7.77400E-02
HISPAN	4.40235E-02	2.99300E-02	1.471	0.1413	2.85800E-02	WAVE89	-1.21601E-01	2.16850E-02	-5.608	0.0000	1.44600E-01
BLACK	3.86749E-02	2.38160E-02	1.624	0.1044	4.43900E-02	WAVE87	-1.21086E-01	2.13490E-02	-5.672	0.0000	1.42500E-01
ASIAN	-7.19869E-02	2.00230E-02	-3.595	0.0003	7.93600E-02	WAVE85	-8.57344E-02	2.23930E-02	-3.829	0.0001	1.30300E-01
MRACE	-1.37467E-01	1.00690E-01	-1.365	0.1722	1.97500E-03	WAVE83	-5.22146E-02	2.48960E-02	-2.097	0.0360	1.26800E-01
NATAMER	-6.80033E-02	7.23760E-02	-0.940	0.3474	3.48600E-03						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8606 observations; 5 iterations; log likelihood function = -4508.984.

TABLE C-36. Maximum likelihood estimates for tenure, logit model I-2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.5528930	6.41420E-02	8.62	0.0000		DEP618	1.43610E-02	6.74510E-03	2.129	0.0333	7.61900E-01
FEMALE	-1.34257E-02	1.90780E-02	-0.704	0.4816	3.25500E-01	MDEP	1.94487E-02	1.74380E-02	1.115	0.2647	3.72500E-01
FMARRIED	-6.86054E-02	2.35270E-02	-2.916	0.0036	1.93800E-01	WATEACH	1.52055E-01	1.13860E-02	13.354	0.0000	4.91400E-01
FDEP6	4.89777E-02	2.21850E-02	2.208	0.0273	4.33400E-02	WAOTH	-9.22410E-02	1.29430E-02	-7.127	0.0000	1.65200E-01
FDEP618	-4.65085E-02	1.12900E-02	-4.120	0.0000	1.61900E-01	EMPPRI	-1.48946E-01	-1.04770E-02	14.217	0.0000	2.58400E-01
YRPHD15	2.41415E-02	9.23000E-03	2.616	0.0089	4.92900E-01	MEMPPRI	-1.12578E-01	3.54930E-02	-3.172	0.0015	1.31900E-01
TA	-2.19301E-03	2.33680E-02	-0.094	0.9252	6.00700E-02	EMPRES	5.38654E-03	1.21290E-02	0.444	0.6570	2.94600E-01
RA	2.59557E-02	2.21140E-02	1.174	0.2405	7.72700E-02	EMPDOC	9.99812E-02	2.02610E-02	4.935	0.0000	9.31900E-02
FELLOW	7.21838E-02	4.00140E-02	1.804	0.0712	1.45200E-02	MEMPCARN	-4.65782E-02	3.53550E-02	-1.317	0.1877	2.35200E-01
TRAIN	2.31143E-02	2.30390E-02	1.003	0.3157	5.94900E-02	BIO	-1.06364E-01	2.42420E-02	-4.388	0.0000	3.10700E-01
MPSOURC	-4.64951E-03	2.52870E-02	-0.184	0.8541	7.11500E-01	HEALTH	-1.25093E-02	2.90890E-02	-0.430	0.6672	6.28600E-02
TTD1	6.59651E-04	2.23220E-03	0.296	0.7676	8.17400E+00	CHEMENG	4.93971E-02	8.29640E-02	0.595	0.5516	4.53200E-03
MTTD1	-4.30464E-04	5.46260E-02	-0.008	0.9937	1.76600E-02	ELECENG	1.92548E-02	5.81040E-02	0.331	0.7404	9.99300E-03
PDOCP	-5.04281E-02	1.17970E-02	-4.275	0.0000	3.23500E-01	OTHENG	-2.66484E-03	3.46780E-02	-0.077	0.9388	3.80000E-02
MPDOCP	-3.43093E-02	2.75060E-02	-1.247	0.2123	4.31100E-02	COMP	-1.47293E-02	7.77460E-02	-0.189	0.8497	3.48600E-03
FSWI	-1.24199E-02	1.02680E-02	-1.210	0.2265	3.69000E-01	MATH	9.40177E-03	2.82050E-02	0.333	0.7389	1.07400E-01
MFSWI	-8.36293E-03	1.07320E-02	-0.779	0.4358	3.43400E-01	PHYSICS	-1.72995E-01	2.81940E-02	-6.136	0.0000	5.68200E-02
BAINT	2.97495E-03	2.63420E-02	0.113	0.9101	7.80900E-02	CHEM	-1.31643E-01	2.87890E-02	-4.573	0.0000	6.41400E-02
MBAINT	6.38178E-02	6.98180E-02	0.914	0.3607	9.99300E-03	EAOSCI	-8.44745E-02	3.14820E-02	-2.683	0.0073	4.35700E-02
AGEPHD	-6.61558E-03	1.99260E-03	-3.320	0.0009	3.08700E+01	OPSCI	-1.63536E-01	8.63840E-02	-1.893	0.0583	2.55600E-03
MAGEPHD	-1.71849E-01	1.42910E-01	-1.203	0.2292	1.51100E-03	PSYCH	-9.15301E-02	2.65130E-02	-3.452	0.0006	9.94700E-02
NATUPHD	1.02746E-03	2.69350E-02	0.038	0.9696	3.11400E-02	ECON	-2.00538E-02	3.59440E-02	-0.558	0.5769	3.21900E-02
PERMPHD	6.85597E-04	2.82950E-02	0.024	0.9807	4.32300E-02	POLYSCI	3.10913E-02	3.91620E-02	0.794	0.4273	2.85800E-02
TEMPPHD	4.20448E-02	2.79350E-02	1.505	0.1323	5.78700E-02	SAD	2.77614E-02	3.12060E-02	0.890	0.3737	5.83300E-02
MCITPHD	4.49327E-03	4.32740E-02	0.104	0.9173	1.70800E-02	OSSCI	5.37062E-02	4.66890E-02	1.150	0.2500	2.01000E-02
HISPAN	3.28814E-02	2.92570E-02	1.124	0.2611	2.85800E-02	WAVE97	-7.36880E-02	3.66490E-02	-2.011	0.0444	8.13400E-02
BLACK	4.07974E-02	2.31620E-02	1.761	0.0782	4.43900E-02	WAVE95	-2.17564E-01	3.08990E-02	-7.041	0.0000	8.83100E-02
ASIAN	-8.82352E-02	1.96050E-02	-4.501	0.0000	7.93600E-02	WAVE93	-1.68574E-01	4.46910E-02	-3.772	0.0002	1.01400E-01
MRACE	-1.10425E-01	9.79610E-02	-1.127	0.2596	1.97500E-03	WAVE91	-1.34570E-01	2.74480E-02	-4.903	0.0000	7.77400E-02
NATAMER	-1.01274E-01	7.29290E-02	-1.389	0.1649	3.48600E-03	WAVE89	-1.10903E-01	2.12000E-02	-5.231	0.0000	1.44600E-01
MARRIED	5.24758E-02	1.70130E-02	3.084	0.0020	7.54100E-01	WAVE87	-1.09109E-01	2.09400E-02	-5.211	0.0000	1.42500E-01
MMARRIED	3.12526E-02	2.87890E-02	1.086	0.2777	4.11300E-02	WAVE85	-8.33591E-02	2.19050E-02	-3.805	0.0001	1.30300E-01
DEP6	-5.26904E-03	1.07550E-02	-0.490	0.6242	1.94200E-01	WAVE83	-4.85634E-02	2.43390E-02	-1.995	0.0460	1.26800E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 8606 observations; 5 iterations; log likelihood function = -4186.312.

TABLE C-37. Maximum likelihood estimates for tenure, logit model I-3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.4276159	5.99740E-02	7.130	0.0000		MARRIED	3.87346E-02	1.59110E-02	2.435	0.0149	7.55000E-01
FEMALE	-1.50375E-02	1.76510E-02	-0.852	0.3943	3.24900E-01	MMARRIED	2.23145E-02	2.57730E-02	0.866	0.3866	4.31200E-02
FMARRIED	-7.81160E-02	2.15040E-02	-3.633	0.0003	1.93500E-01	DEP6	-1.92302E-02	1.00030E-02	-1.922	0.0546	1.91400E-01
FDEP6	5.67736E-02	2.02810E-02	2.799	0.0051	4.26200E-02	DEP618	1.22922E-02	6.51560E-03	1.887	0.0592	7.56900E-01
FDEP618	-3.92107E-02	1.00590E-02	-3.898	0.0001	1.58700E-01	MDEP	1.05249E-02	1.60970E-02	0.654	0.5132	3.91500E-01
YRPHD15	2.81580E-02	8.53990E-03	3.297	0.0010	4.94000E-01	BIO	-1.12467E-01	2.30070E-02	-4.888	0.0000	3.09500E-01
TA	-1.59811E-02	2.34050E-02	-0.683	0.4947	5.62400E-02	HEALTH	-4.71004E-02	2.74940E-02	-1.713	0.0867	6.27900E-02
RA	9.99652E-03	2.24000E-02	0.446	0.6554	7.12400E-02	CHEMENG	-1.24031E-02	7.39590E-02	-0.168	0.8668	4.79100E-03
FELLOW	6.06465E-02	4.19750E-02	1.445	0.1485	1.34900E-02	ELECENG	6.53740E-02	6.52440E-02	1.002	0.3164	9.96100E-03
TRAIN	3.08754E-03	2.31380E-02	0.133	0.8939	5.34600E-02	OTHENG	7.26678E-03	3.40380E-02	0.213	0.8309	3.84600E-02
MPSOURC	-7.38838E-03	2.52830E-02	-0.292	0.7701	7.36500E-01	COMP	-4.82549E-02	7.56660E-02	-0.638	0.5237	3.40400E-03
TTD1	-2.59285E-04	2.06320E-03	-0.126	0.9000	8.11600E+00	MATH	2.65463E-02	2.72300E-02	0.975	0.3296	1.11300E-01
MTTD1	-3.11263E-02	5.03390E-02	-0.618	0.5364	1.80300E-02	PHYSICS	-1.31623E-01	2.69640E-02	-4.881	0.0000	5.30800E-02
PDOCP	-7.02132E-02	1.05550E-02	-6.652	0.0000	3.15600E-01	CHEM	-9.36984E-02	2.70530E-02	-3.463	0.0005	6.33000E-02
MPDOCP	-2.80187E-02	2.59820E-02	-1.078	0.2809	4.22400E-02	EAOSCI	-1.92019E-02	3.14900E-02	-0.610	0.5420	4.24900E-02
FSWI	-1.86829E-02	9.40790E-03	-1.986	0.0471	3.71300E-01	OPSCI	-1.48204E-01	7.38850E-02	-2.006	0.0449	2.64800E-03
MFSWI	-1.37684E-02	9.84090E-03	-1.399	0.1618	3.40900E-01	PSYCH	-6.76214E-02	2.54000E-02	-2.662	0.0078	9.64600E-02
BAINT	1.66660E-02	2.44700E-02	0.681	0.4958	7.89300E-02	ECON	-2.25317E-02	3.34610E-02	-0.673	0.5007	3.34100E-02
MBAINT	5.64421E-02	6.32330E-02	0.893	0.3721	1.04700E-02	POLYSCI	5.43704E-02	3.85290E-02	1.411	0.1582	2.92500E-02
AGEPHD	-2.99002E-03	1.84840E-03	-1.618	0.1057	3.08100E+01	SAD	2.46890E-02	2.98830E-02	0.826	0.4087	5.95100E-02
MAGEPHD	8.45649E-03	1.67430E-01	0.051	0.9597	1.38700E-03	OSSCI	7.96340E-02	4.59380E-02	1.734	0.0830	2.08000E-02
NATUPHD	-6.84857E-03	2.47570E-02	-0.277	0.7821	3.07700E-02	WAVE97	-5.74003E-02	2.98430E-02	-1.923	0.0544	7.33800E-02
PERMPHD	-8.23525E-03	2.64980E-02	-0.311	0.7560	4.30000E-02	WAVE95	-8.11848E-02	2.89670E-02	-2.803	0.0051	7.91800E-02
TEMPPHD	-1.38724E-02	2.57960E-02	-0.538	0.5907	5.85000E-02	WAVE93	-9.66987E-02	2.85750E-02	-3.384	0.0007	9.04000E-02
MCITPHD	-1.25582E-02	4.05130E-02	-0.310	0.7566	1.67700E-02	WAVE91	-5.36570E-02	2.49370E-02	-2.152	0.0314	7.71700E-02
HISPAN	3.94563E-02	2.90350E-02	1.359	0.1742	2.82400E-02	WAVE89	-2.89165E-02	1.86150E-02	-1.553	0.1203	1.42500E-01
BLACK	4.39026E-02	2.37640E-02	1.847	0.0647	4.30000E-02	WAVE87	-3.58141E-02	1.81890E-02	-1.969	0.0490	1.42200E-01
ASIAN	-5.15478E-02	1.81870E-02	-2.834	0.0046	7.66600E-02	WAVE85	-6.67822E-02	1.80400E-02	-3.702	0.0002	1.41300E-01
MRACE	-1.18068E-01	8.09530E-02	-1.458	0.1447	2.14300E-03	WAVE83	-3.98688E-02	2.02870E-02	-1.965	0.0494	1.37600E-01
NATAMER	-3.41776E-02	7.45060E-02	-0.459	0.6464	3.02600E-03						

NOTES: Dependent variable: TENURED; Marginal effects: tenured; 7931 observations; 5 iterations; log likelihood function = -3628.246.

TABLE C-38. Maximum likelihood estimates for tenure, logit model I-4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.3908669	5.84270E-02	6.690	0.0000		DEP618	1.19233E-02	6.32530E-03	1.885	0.0594	7.56900E-01
FEMALE	-1.46470E-02	1.70780E-02	-0.858	0.3911	3.24900E-01	MDEP	1.05988E-02	1.56000E-02	0.679	0.4969	3.91500E-01
FMARRIED	-7.13836E-02	2.08270E-02	-3.427	0.0006	1.93500E-01	WATEACH	9.69270E-02	1.00900E-02	9.607	0.0000	5.18900E-01
FDEP6	5.10803E-02	1.97250E-02	2.590	0.0096	4.26200E-02	WAOTH	-4.29306E-02	1.20900E-02	-3.551	0.0004	1.46300E-01
FDEP618	-3.79856E-02	9.79080E-03	-3.880	0.0001	1.58700E-01	EMPPRI	-1.08361E-01	-9.13780E-03	11.859	0.0000	2.53400E-01
YRPHD15	2.48463E-02	8.25450E-03	3.010	0.0026	4.94000E-01	MEMPPRI	-9.33877E-02	4.37520E-02	-2.135	0.0328	1.19700E-01
TA	-1.49413E-02	2.26160E-02	-0.661	0.5088	5.62400E-02	EMPRES	9.00165E-03	1.05550E-02	0.853	0.3938	2.97400E-01
RA	1.05453E-02	2.15500E-02	0.489	0.6246	7.12400E-02	EMPDOC	7.02342E-02	1.72960E-02	4.061	0.0001	9.87300E-02
FELLOW	6.47421E-02	4.03400E-02	1.605	0.1085	1.34900E-02	MEMPCARN	3.47496E-02	4.39280E-02	0.791	0.4289	2.11800E-01
TRAIN	1.61899E-02	2.22270E-02	0.728	0.4664	5.34600E-02	BIO	-9.25508E-02	2.23680E-02	-4.138	0.0000	3.09500E-01
MPSOURC	1.41739E-03	2.44450E-02	0.058	0.9538	7.36500E-01	HEALTH	-2.69348E-02	2.66430E-02	-1.011	0.3121	6.27900E-02
TTD1	8.96953E-06	1.99010E-03	0.005	0.9964	8.11600E+00	CHEMENG	-4.17291E-03	7.08120E-02	-0.059	0.9530	4.79100E-03
MTTD1	-2.46046E-02	4.82980E-02	-0.509	0.6105	1.80300E-02	ELECENG	6.02995E-02	6.22810E-02	0.968	0.3330	9.96100E-03
PDOCP	-5.25662E-02	1.04770E-02	-5.017	0.0000	3.15600E-01	OTHENG	4.95282E-03	3.28310E-02	0.151	0.8801	3.84600E-02
MPDOCP	-2.08596E-02	2.52620E-02	-0.826	0.4090	4.22400E-02	COMP	-4.35200E-02	7.29010E-02	-0.597	0.5505	3.40400E-03
FSWI	-1.48594E-02	9.10000E-03	-1.633	0.1025	3.71300E-01	MATH	1.90382E-02	2.62870E-02	0.724	0.4689	1.11300E-01
MFSWI	-5.10585E-03	9.55980E-03	-0.534	0.5933	3.40900E-01	PHYSICS	-1.22880E-01	2.60380E-02	-4.719	0.0000	5.30800E-02
BAINT	1.28359E-02	2.34910E-02	0.546	0.5848	7.89300E-02	CHEM	-9.01872E-02	2.63950E-02	-3.417	0.0006	6.33000E-02
MBAINT	4.91611E-02	6.11570E-02	0.804	0.4215	1.04700E-02	EAOSCI	-3.37543E-02	3.03120E-02	-1.114	0.2655	4.24900E-02
AGEPHD	-3.58629E-03	1.78720E-03	-2.007	0.0448	3.08100E+01	OPSCI	-1.68676E-01	7.21150E-02	-2.339	0.0193	2.64800E-03
MAGEPHD	-1.75434E-02	1.61460E-01	-0.109	0.9135	1.38700E-03	PSYCH	-5.89130E-02	2.46310E-02	-2.392	0.0168	9.64600E-02
NATUPHD	-7.46525E-03	2.39750E-02	-0.311	0.7555	3.07700E-02	ECON	-2.42433E-02	3.23930E-02	-0.748	0.4542	3.34100E-02
PERMPHD	-7.39926E-03	2.54360E-02	-0.291	0.7711	4.30000E-02	POLYSCI	4.30342E-02	3.71010E-02	1.160	0.2461	2.92500E-02
TEMPPHD	4.83859E-04	2.50160E-02	0.019	0.9846	5.85000E-02	SAD	2.02653E-02	2.89210E-02	0.701	0.4835	5.95100E-02
MCITPHD	-1.22586E-02	3.94110E-02	-0.311	0.7558	1.67700E-02	OSSCI	5.34165E-02	4.41990E-02	1.209	0.2268	2.08000E-02
HISPAN	3.00278E-02	2.79300E-02	1.075	0.2823	2.82400E-02	WAVE97	-1.72209E-02	3.41940E-02	-0.504	0.6145	7.33800E-02
BLACK	4.36959E-02	2.28650E-02	1.911	0.0560	4.30000E-02	WAVE95	-7.91354E-02	2.81650E-02	-2.810	0.0050	7.91800E-02
ASIAN	-6.14625E-02	1.75740E-02	-3.497	0.0005	7.66600E-02	WAVE93	-1.06871E-01	4.98900E-02	-2.142	0.0322	9.04000E-02
MRACE	-1.00722E-01	7.87380E-02	-1.279	0.2008	2.14300E-03	WAVE91	-5.30977E-02	2.42160E-02	-2.193	0.0283	7.71700E-02
NATAMER	-6.20915E-02	7.24390E-02	-0.857	0.3914	3.02600E-03	WAVE89	-2.77410E-02	1.80080E-02	-1.540	0.1235	1.42500E-01
MARRIED	4.25226E-02	1.54250E-02	2.757	0.0058	7.55000E-01	WAVE87	-3.23395E-02	1.76490E-02	-1.832	0.0669	1.42200E-01
MMARRIED	1.93592E-02	2.48170E-02	0.780	0.4354	4.31200E-02	WAVE85	-6.46143E-02	1.74910E-02	-3.694	0.0002	1.41300E-01
DEP6	-1.40423E-02	9.71780E-03	-1.445	0.1485	1.91400E-01	WAVE83	-3.92569E-02	1.96330E-02	-2.000	0.0456	1.37600E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7931 observations; 6 iterations; log likelihood function = -3469.034.



TABLE C-39. Maximum likelihood estimates for tenure, logit model I-5: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.2973643	4.68570E-02	6.346	0.0000		MARRIED	2.11793E-02	1.24780E-02	1.697	0.0896	7.55800E-01
FEMALE	-7.70508E-03	1.39970E-02	-0.550	0.5820	3.10400E-01	MMARRIED	-6.38680E-03	1.96520E-02	-0.325	0.7452	4.49000E-02
FMARRIED	-4.17919E-02	1.72060E-02	-2.429	0.0152	1.81100E-01	DEP6	-1.31525E-02	7.43930E-03	-1.768	0.0771	1.90900E-01
FDEP6	5.40333E-02	1.74000E-02	3.105	0.0019	4.01600E-02	DEP618	4.98632E-03	4.98060E-03	1.001	0.3168	7.65400E-01
FDEP618	-1.83021E-02	7.99290E-03	-2.290	0.0220	1.46600E-01	MDEP	9.77258E-03	1.28850E-02	0.758	0.4482	3.90500E-01
YRPHD15	1.74757E-02	6.78430E-03	2.576	0.0100	4.98000E-01	BIO	-6.28580E-02	1.90530E-02	-3.299	0.0010	2.93300E-01
TA	-2.57360E-02	1.82960E-02	-1.407	0.1595	5.60600E-02	HEALTH	-5.06823E-02	2.19850E-02	-2.305	0.0212	6.38700E-02
RA	-1.18855E-02	1.77530E-02	-0.669	0.5032	7.12600E-02	CHEMENG	-1.68273E-02	5.65940E-02	-0.297	0.7662	5.02000E-03
FELLOW	1.57539E-02	3.14700E-02	0.501	0.6167	1.39500E-02	ELECENG	4.47360E-02	5.45210E-02	0.821	0.4119	1.06000E-02
TRAIN	-2.65881E-02	1.77890E-02	-1.495	0.1350	5.31300E-02	OTHENG	-1.93881E-02	2.60740E-02	-0.744	0.4571	4.10000E-02
MPSOURC	-2.56752E-02	1.96470E-02	-1.307	0.1913	7.38000E-01	COMP	-3.61346E-02	5.73210E-02	-0.630	0.5284	3.48600E-03
TTD1	9.84264E-04	1.63700E-03	0.601	0.5477	8.06500E+00	MATH	-1.19050E-02	2.14890E-02	-0.554	0.5796	1.19500E-01
MTTD1	-9.57792E-03	3.68070E-02	-0.260	0.7947	1.81300E-02	PHYSICS	-6.76067E-02	2.23170E-02	-3.029	0.0025	5.00600E-02
PDOCP	-3.43196E-02	8.48950E-03	-4.043	0.0001	2.97600E-01	CHEM	-4.91914E-02	2.23330E-02	-2.203	0.0276	6.09400E-02
MPDOCP	-6.97394E-03	2.14670E-02	-0.325	0.7453	4.21100E-02	EAOSCI	7.41195E-04	2.69620E-02	0.027	0.9781	4.33700E-02
FSWI	-9.52282E-03	7.53080E-03	-1.265	0.2060	3.69800E-01	OPSCI	-1.40126E-01	4.91700E-02	-2.850	0.0044	2.78900E-03
MFSWI	-1.41301E-02	7.80310E-03	-1.811	0.0702	3.35700E-01	PSYCH	-3.46713E-02	2.11250E-02	-1.641	0.1007	9.51100E-02
BAINT	4.10310E-02	1.99600E-02	2.056	0.0398	7.64200E-02	ECON	-7.16058E-03	2.84170E-02	-0.252	0.8011	3.40300E-02
MBAINT	5.38642E-02	5.00410E-02	1.076	0.2818	1.06000E-02	POLYSCI	1.35009E-02	3.04470E-02	0.443	0.6575	3.09600E-02
AGEPHD	-6.14054E-04	1.40570E-03	-0.437	0.6622	3.07500E+01	SAD	-7.88835E-03	2.37450E-02	-0.332	0.7397	6.26100E-02
NATUPHD	8.69627E-03	2.09260E-02	0.416	0.6777	2.98400E-02	OSSCI	2.67224E-02	3.64920E-02	0.732	0.4640	2.21700E-02
PERMPHD	-2.38259E-02	2.03320E-02	-1.172	0.2413	4.22500E-02	WAVE97	-4.78430E-02	2.32010E-02	-2.062	0.0392	7.27900E-02
TEMPPHD	-1.58045E-02	2.01990E-02	-0.782	0.4340	5.73100E-02	WAVE95	-6.78191E-02	2.23380E-02	-3.036	0.0024	7.85100E-02
MCITPHD	-2.66431E-02	3.13000E-02	-0.851	0.3946	1.70100E-02	WAVE93	-7.81611E-02	2.18410E-02	-3.579	0.0004	9.00900E-02
HISPAN	1.66110E-02	2.23450E-02	0.743	0.4573	2.92800E-02	WAVE91	-5.00369E-02	1.93080E-02	-2.591	0.0096	7.80900E-02
BLACK	3.97946E-03	1.73340E-02	0.230	0.8184	4.51800E-02	WAVE89	-1.92153E-02	1.53940E-02	-1.248	0.2119	1.42500E-01
ASIAN	-3.32467E-02	1.45900E-02	-2.279	0.0227	7.29300E-02	WAVE87	-3.25800E-02	1.47140E-02	-2.214	0.0268	1.43900E-01
MRACE	-7.35887E-02	5.82790E-02	-1.263	0.2067	2.09200E-03	WAVE85	-3.49162E-02	1.50540E-02	-2.319	0.0204	1.37600E-01
NATAMER	-5.45500E-02	4.91170E-02	-1.111	0.2667	3.20700E-03	WAVE83	-2.74812E-02	1.69790E-02	-1.619	0.1056	1.37400E-01

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7171 observations; 6 iterations; log likelihood function = -2345.119.

TABLE C-40. Maximum likelihood estimates for tenure, logit model I-6: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Constant	0.2523693	4.45380E-02	5.666	0.0000		MDEP	8.45339E-03	1.21130E-02	0.698	0.4853	3.90500E-01
FEMALE	-5.93006E-03	1.31480E-02	-0.451	0.6520	3.10400E-01	WATEACH	1.65805E-02	7.91280E-03	2.095	0.0361	5.50000E-01
FMARRIED	-3.53556E-02	1.62100E-02	-2.181	0.0292	1.81100E-01	WAOth	-2.58380E-02	1.00160E-02	-2.580	0.0099	1.35500E-01
FDEP6	4.70125E-02	1.64540E-02	2.857	0.0043	4.01600E-02	EMPPRI	-7.38630E-02	-6.79900E-03	10.864	0.0000	2.45600E-01
FDEP618	-1.58975E-02	7.54640E-03	-2.107	0.0352	1.46600E-01	MEMPPRI	-7.66356E-02	3.60570E-02	-2.125	0.0336	1.17800E-01
YRPHD15	1.58162E-02	6.36470E-03	2.485	0.0130	4.98000E-01	EMPRES	4.18208E-02	8.61380E-03	4.855	0.0000	2.88900E-01
TA	-2.01281E-02	1.71490E-02	-1.174	0.2405	5.60600E-02	EMPDOc	4.44483E-02	1.26090E-02	3.525	0.0004	1.04300E-01
RA	-1.18663E-02	1.66210E-02	-0.714	0.4753	7.12600E-02	MEMPCARN	5.69400E-02	3.66940E-02	1.552	0.1207	2.09900E-01
FELLOW	1.24553E-02	2.93520E-02	0.424	0.6713	1.39500E-02	BIO	-3.28837E-02	1.80860E-02	-1.818	0.0690	2.93300E-01
TRAIN	-2.12710E-02	1.66680E-02	-1.276	0.2019	5.31300E-02	HEALTH	-2.67148E-02	2.07260E-02	-1.289	0.1974	6.38700E-02
MPSOURC	-1.96763E-02	1.84580E-02	-1.066	0.2864	7.38000E-01	CHEMENG	3.33285E-03	5.28880E-02	0.063	0.9498	5.02000E-03
TTD1	1.18927E-03	1.54180E-03	0.771	0.4405	8.06500E+00	ELECENG	5.60013E-02	5.05640E-02	1.108	0.2681	1.06000E-02
MTTD1	-8.28270E-03	3.44850E-02	-0.240	0.8102	1.81300E-02	OTHENG	-2.10140E-03	2.45270E-02	-0.086	0.9317	4.10000E-02
PDOCP	-3.38348E-02	8.18470E-03	-4.134	0.0000	2.97600E-01	COMP	-1.62244E-02	5.37450E-02	-0.302	0.7628	3.48600E-03
MPDOCP	-2.65854E-03	2.02100E-02	-0.132	0.8954	4.21100E-02	MATH	7.05592E-03	2.02360E-02	0.349	0.7273	1.19500E-01
FSWI	-1.08449E-02	7.06970E-03	-1.534	0.1250	3.69800E-01	PHYSICS	-4.21511E-02	2.10340E-02	-2.004	0.0451	5.00600E-02
MFSWI	-1.12508E-02	7.38580E-03	-1.523	0.1277	3.35700E-01	CHEM	-1.81187E-02	2.12880E-02	-0.851	0.3947	6.09400E-02
BAINT	3.87517E-02	1.87900E-02	2.062	0.0392	7.64200E-02	EAOSCI	1.12354E-02	2.52630E-02	0.445	0.6565	4.33700E-02
MBAINT	4.94794E-02	4.74460E-02	1.043	0.2970	1.06000E-02	OPSCI	-1.40360E-01	4.61020E-02	-3.045	0.0023	2.78900E-03
AGEPHD	-4.57566E-04	1.32200E-03	-0.346	0.7293	3.07500E+01	PSYCH	-1.14311E-02	1.99130E-02	-0.574	0.5659	9.51100E-02
NATUPHD	1.04059E-02	1.96960E-02	0.528	0.5973	2.98400E-02	ECON	1.36765E-02	2.66920E-02	0.512	0.6084	3.40300E-02
PERMPHD	-2.37315E-02	1.90610E-02	-1.245	0.2131	4.22500E-02	POLYSCI	2.89094E-02	2.85200E-02	1.014	0.3108	3.09600E-02
TEMPPHD	-9.74360E-03	1.91680E-02	-0.508	0.6112	5.73100E-02	SAD	1.17407E-02	2.23980E-02	0.524	0.6002	6.26100E-02
MCITPHD	-2.80182E-02	2.97450E-02	-0.942	0.3462	1.70100E-02	OSSCI	2.98506E-02	3.39410E-02	0.879	0.3791	2.21700E-02
HISPAN	8.41455E-03	2.07940E-02	0.405	0.6857	2.92800E-02	WAVE97	-3.40301E-02	2.64160E-02	-1.288	0.1977	7.27900E-02
BLACK	7.56347E-03	1.61850E-02	0.467	0.6403	4.51800E-02	WAVE95	-7.39437E-02	2.11340E-02	-3.499	0.0005	7.85100E-02
ASIAN	-3.80692E-02	1.37660E-02	-2.766	0.0057	7.29300E-02	WAVE93	-1.07725E-01	4.07090E-02	-2.646	0.0081	9.00900E-02
MRACE	-7.26925E-02	5.53830E-02	-1.313	0.1893	2.09200E-03	WAVE91	-5.40749E-02	1.82050E-02	-2.970	0.0030	7.80900E-02
NATAMER	-5.97738E-02	4.60200E-02	-1.299	0.1940	3.20700E-03	WAVE89	-2.13215E-02	1.44090E-02	-1.480	0.1389	1.42500E-01
MARRIED	1.89786E-02	1.17790E-02	1.611	0.1071	7.55800E-01	WAVE87	-3.31555E-02	1.37930E-02	-2.404	0.0162	1.43900E-01
MMARRIED	-1.07559E-02	1.83840E-02	-0.585	0.5585	4.49000E-02	WAVE85	-3.38259E-02	1.41160E-02	-2.396	0.0166	1.37600E-01
DEP6	-1.07773E-02	6.99110E-03	-1.542	0.1232	1.90900E-01	WAVE83	-2.60617E-02	1.59140E-02	-1.638	0.1015	1.37400E-01
DEP618	5.44305E-03	4.70560E-03	1.157	0.2474	7.65400E-01						

NOTES: Dependent variable: TENURED; marginal effects: tenured; 7171 observations; 6 iterations; log likelihood function = -2260.878.



TABLE C-41. Maximum likelihood estimates for rank, logit model 1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						MARRIED	3.17461E-02	1.53020E-02	2.075	0.0380	7.54052E-01
Constant	2.63774E-01	7.59068E-02	3.475	0.0005		MMARRIED	1.95180E-02	3.10558E-02	0.628	0.5297	4.05758E-02
FEMALE	-1.39376E-01	1.31178E-02	-10.625	0.0000	3.25513E-01	DEP6	-1.09997E-02	1.22564E-02	-0.897	0.3695	1.94945E-01
YRPHD15	6.72208E-02	1.10930E-02	6.060	0.0000	4.90989E-01	DEP618	8.97844E-03	7.57327E-03	1.186	0.2358	7.64819E-01
TA	-1.26823E-02	3.23139E-02	-0.392	0.6947	5.83702E-02	MDEP	3.72768E-02	2.05517E-02	1.814	0.0697	3.75496E-01
RA	3.49369E-02	3.01415E-02	1.159	0.2464	7.52578E-02	BIO	-1.34684E-01	2.58721E-02	-5.206	0.0000	3.11232E-01
FELLOW	4.94858E-02	5.36357E-02	0.923	0.3562	1.41675E-02	HEALTH	6.27623E-03	3.17805E-02	0.197	0.8434	6.24504E-02
TRAIN	1.80684E-03	3.35520E-02	0.054	0.9571	5.80301E-02	ENG	3.64793E-02	3.27726E-02	1.113	0.2657	5.24765E-02
MPSOURC	9.74303E-03	3.38014E-02	0.288	0.7732	7.19030E-01	MATHCOM	-6.71886E-02	2.80891E-02	-2.392	0.0168	1.11187E-01
TTD1	4.08276E-03	2.69517E-03	1.515	0.1298	8.19925E+00	PHYSOTH	-1.50283E-01	3.26606E-02	-4.601	0.0000	6.06370E-02
MTTD1	1.15678E-01	7.02351E-02	1.647	0.0996	1.60943E-02	CHEM	-5.34104E-02	3.23679E-02	-1.650	0.0989	6.49439E-02
PDOCP	-1.23855E-01	1.45324E-02	-8.523	0.0000	3.24039E-01	EAOSCI	-5.17697E-02	3.41260E-02	-1.517	0.1293	4.34093E-02
MPDOCP	-6.15517E-02	3.32952E-02	-1.849	0.0645	4.32959E-02	PSYCH	-1.13956E-01	2.89520E-02	-3.936	0.0001	9.95126E-02
FSWI	-1.02944E-02	1.21571E-02	-0.847	0.3971	3.69829E-01	ECON	2.02889E-02	3.77880E-02	0.537	0.5913	3.15086E-02
MFSWI	-2.96022E-02	1.32307E-02	-2.237	0.0253	3.42627E-01	POLYSCI	-2.95497E-02	3.98311E-02	-0.742	0.4582	2.83350E-02
BAINT	-2.01972E-02	3.28832E-02	-0.614	0.5391	7.97915E-02	SAD	-3.67865E-02	3.24717E-02	-1.133	0.2573	5.73501E-02
MBAINT	8.68201E-03	8.55695E-02	0.101	0.9192	8.84053E-03	OSSCI	-1.86690E-03	4.44215E-02	-0.042	0.9665	2.02879E-02
AGEPHD	-9.74237E-04	2.38554E-03	-0.408	0.6830	3.09349E+01	WAVE97	-2.36389E-01	3.93262E-02	-6.011	0.0000	7.79780E-02
NATUPHD	-3.27761E-02	3.27118E-02	-1.002	0.3164	3.23019E-02	WAVE95	-2.42949E-01	3.84540E-02	-6.318	0.0000	8.61385E-02
PERMPHD	-1.72377E-02	3.60295E-02	-0.478	0.6323	4.31826E-02	WAVE93	-2.41717E-01	3.81502E-02	-6.336	0.0000	9.89459E-02
TEMPPHD	1.01201E-01	3.46445E-02	2.921	0.0035	5.90502E-02	WAVE91	-1.29930E-01	3.16313E-02	-4.108	0.0000	7.62779E-02
MCITPHD	-6.70860E-02	5.42593E-02	-1.236	0.2163	1.70010E-02	WAVE89	-1.19859E-01	2.23960E-02	-5.352	0.0000	1.49722E-01
HISPAN	5.37060E-02	3.31534E-02	1.620	0.1052	2.89017E-02	WAVE87	-1.36237E-01	2.18377E-02	-6.239	0.0000	1.49836E-01
BLACK	-2.01102E-02	2.71983E-02	-0.739	0.4597	4.51094E-02	WAVE85	-1.07515E-01	2.27220E-02	-4.732	0.0000	1.30454E-01
ASIAN	6.52840E-03	2.53427E-02	0.258	0.7967	7.96781E-02	WAVE83	-3.84754E-02	2.51730E-02	-1.528	0.1264	1.25581E-01
NATAMER	-1.49892E-01	1.02479E-01	-1.463	0.1436	3.40020E-03						

NOTES: Dependent variable: RANK1; 8823 observations; 6 iterations; log likelihood function = -8636.229; restricted log likelihood = -9190.100; Chi-squared = 1107.742; d.f. = 98; significance = .0000000.



TABLE C-42. Maximum likelihood estimates for rank, logit model 2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE89	6.65014E-02	2.34274E-02	2.839	0.0045	1.49722E-01	MMARRIED	1.81481E-02	3.14022E-02	0.578	0.5633	4.05758E-02
WAVE87	9.04289E-02	2.27913E-02	3.968	0.0001	1.49836E-01	DEP6	-9.71506E-03	1.24163E-02	-0.782	0.4340	1.94945E-01
WAVE85	4.82652E-02	2.38442E-02	2.024	0.0430	1.30454E-01	DEP618	1.13888E-02	7.67960E-03	1.483	0.1381	7.64819E-01
WAVE83	3.14098E-02	2.65485E-02	1.183	0.2368	1.25581E-01	MDEP	3.95962E-02	2.08198E-02	1.902	0.0572	3.75496E-01
Marginal effects: full-professor rank											
Constant	2.92879E-01	7.78455E-02	3.762	0.0002		WATEACH	-2.21695E-02	1.40240E-02	-1.581	0.1139	4.89516E-01
FEMALE	-1.35092E-01	1.33138E-02	-10.147	0.0000	3.25513E-01	WAOTH	-4.37233E-02	1.82898E-02	-2.391	0.0168	1.65930E-01
YRPHD15	6.55926E-02	1.12354E-02	5.838	0.0000	4.90989E-01	EMPPRI	-7.25135E-02	1.33837E-02	-5.418	0.0000	2.59096E-01
TA	-1.31958E-02	3.27971E-02	-0.402	0.6874	5.83702E-02	MEMPPRI	-4.80807E-02	5.47135E-02	-0.879	0.3795	1.30568E-01
RA	3.09703E-02	3.05632E-02	1.013	0.3109	7.52578E-02	EMPRES	-1.69270E-02	1.42976E-02	-1.184	0.2364	2.94118E-01
FELLOW	4.67843E-02	5.44233E-02	0.860	0.3900	1.41675E-02	EMPDOC	-3.59919E-02	2.06015E-02	-1.747	0.0806	9.23722E-02
TRAIN	1.68586E-03	3.39811E-02	0.050	0.9604	5.80301E-02	MEMPCARN	-7.78285E-02	5.44420E-02	-1.430	0.1528	2.31327E-01
MPSOURC	1.28392E-02	3.42177E-02	0.375	0.7075	7.19030E-01	BIO	-1.27913E-01	2.65703E-02	-4.814	0.0000	3.11232E-01
TTD1	4.16090E-03	2.73616E-03	1.521	0.1283	8.19925E+00	HEALTH	1.94578E-02	3.23367E-02	0.602	0.5474	6.24504E-02
MTTD1	1.13825E-01	7.12752E-02	1.597	0.1103	1.60943E-02	ENG	5.37426E-02	3.32992E-02	1.614	0.1065	5.24765E-02
PDOCP	-1.31146E-01	1.50619E-02	-8.707	0.0000	3.24039E-01	MATHCOM	-5.33385E-02	2.87614E-02	-1.855	0.0637	1.11187E-01
MPDOCP	-5.66157E-02	3.38381E-02	-1.673	0.0943	4.32959E-02	PHYSOTH	-1.30740E-01	3.33523E-02	-3.920	0.0001	6.06370E-02
FSWI	-1.26219E-02	1.23366E-02	-1.023	0.3062	3.69829E-01	CHEM	-3.52107E-02	3.33978E-02	-1.054	0.2918	6.49439E-02
MFSWI	-3.02110E-02	1.34638E-02	-2.244	0.0248	3.42627E-01	EAOSCI	-4.47363E-02	3.47877E-02	-1.286	0.1985	4.34093E-02
BAINT	-9.24125E-03	3.34844E-02	-0.276	0.7826	7.97915E-02	PSYCH	-9.24785E-02	2.97084E-02	-3.113	0.0019	9.95126E-02
MBAINT	2.21087E-02	8.71232E-02	0.254	0.7997	8.84053E-03	ECON	3.88555E-02	3.85118E-02	1.009	0.3130	3.15086E-02
AGEPHD	-5.19062E-04	2.42177E-03	-0.214	0.8303	3.09349E+01	POLYSCI	-5.26812E-03	4.06119E-02	-0.130	0.8968	2.83350E-02
NATUPHD	-3.50376E-02	3.32341E-02	-1.054	0.2918	3.23019E-02	SAD	-2.16869E-02	3.31031E-02	-0.655	0.5124	5.73501E-02
PERMPHD	-2.03436E-02	3.65419E-02	-0.557	0.5777	4.31826E-02	OSSCI	1.79856E-03	4.50445E-02	0.040	0.9682	2.02879E-02
TEMPPHD	1.17667E-01	3.53347E-02	3.330	0.0009	5.90502E-02	WAVE97	-1.48296E-01	4.74013E-02	-3.129	0.0018	7.79780E-02
MCITPHD	-8.01771E-02	5.50392E-02	-1.457	0.1452	1.70010E-02	WAVE95	-2.40541E-01	3.91832E-02	-6.139	0.0000	8.61385E-02
HISPAN	4.90069E-02	3.35607E-02	1.460	0.1442	2.89017E-02	WAVE93	-1.74616E-01	6.42607E-02	-2.717	0.0066	9.89459E-02
BLACK	-2.21747E-02	2.75853E-02	-0.804	0.4215	4.51094E-02	WAVE91	-1.27074E-01	3.21128E-02	-3.957	0.0001	7.62779E-02
ASIAN	-2.70525E-03	2.58201E-02	-0.105	0.9166	7.96781E-02	WAVE89	-1.21387E-01	2.26913E-02	-5.350	0.0000	1.49722E-01
NATAMER	-1.57987E-01	1.04015E-01	-1.519	0.1288	3.40020E-03	WAVE87	-1.36488E-01	2.20996E-02	-6.176	0.0000	1.49836E-01
MARRIED	3.43369E-02	1.55175E-02	2.213	0.0269	7.54052E-01	WAVE85	-1.08446E-01	2.30025E-02	-4.715	0.0000	1.30454E-01
						WAVE83	-3.54699E-02	2.54642E-02	-1.393	0.1636	1.25581E-01

NOTES: Dependent variable: RANK1; 8823 observations; 6 iterations; log likelihood function = -8357.985; restricted log likelihood = -9190.100; Chi-squared =1664.232; d.f. = 112; significance = .0000000.



TABLE C-43. Maximum likelihood estimates for rank, logit model 3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						MARRIED	2.87749E-02	1.56943E-02	1.833	0.0667	7.54434E-01
Constant	2.44245E-01	7.79641E-02	3.133	0.0017		MMARRIED	1.53959E-02	3.15750E-02	0.488	0.6258	4.20903E-02
FEMALE	-1.42763E-01	1.34264E-02	-10.633	0.0000	3.26555E-01	DEP6	-1.13759E-02	1.25888E-02	-0.904	0.3662	1.92362E-01
YRPHD15	6.77276E-02	1.13711E-02	5.956	0.0000	4.92433E-01	DEP618	8.90173E-03	7.81898E-03	1.138	0.2549	3.88153E-01
TA	-2.19167E-02	3.36139E-02	-0.652	0.5144	5.45046E-02	MDEP	3.66469E-02	2.10994E-02	1.737	0.0824	3.88153E-01
RA	3.09467E-02	3.14426E-02	0.984	0.3250	6.95200E-02	BIO	-1.31341E-01	2.64235E-02	-4.971	0.0000	3.12012E-01
FELLOW	4.26321E-02	5.60122E-02	0.761	0.4466	1.32419E-02	HEALTH	8.36256E-04	3.23938E-02	0.026	0.9794	6.39631E-02
TRAIN	-8.43973E-03	3.47186E-02	-0.243	0.8079	5.45046E-02	ENG	5.02710E-02	3.39713E-02	1.480	0.1389	5.27311E-02
MPSOURC	2.01261E-03	3.49498E-02	0.058	0.9541	7.38591E-01	MATHCOM	-6.42520E-02	2.86621E-02	-2.242	0.0250	1.13502E-01
TTD1	4.34361E-03	2.76348E-03	1.572	0.1160	8.18231E+00	PHYSOTH	-1.26960E-01	3.36126E-02	-3.777	0.0002	5.63963E-02
MTTD1	1.25173E-01	7.21511E-02	1.735	0.0828	1.63159E-02	CHEM	-3.37613E-02	3.32536E-02	-1.015	0.3100	6.37266E-02
PDOCP	-1.24855E-01	1.48973E-02	-8.381	0.0000	3.18279E-01	EAOSCI	-3.56449E-02	3.51660E-02	-1.014	0.3108	4.26815E-02
MPDOCP	-6.27833E-02	3.42955E-02	-1.831	0.0672	4.33909E-02	PSYCH	-1.02829E-01	2.96261E-02	-3.471	0.0005	9.82502E-02
FSWI	-1.18369E-02	1.24403E-02	-0.951	0.3414	3.73020E-01	ECON	3.11075E-02	3.89003E-02	0.800	0.4239	3.16860E-02
MFSWI	-2.97524E-02	1.35638E-02	-2.194	0.0283	3.40979E-01	POLYSCI	-1.74811E-02	4.08793E-02	-0.428	0.6689	2.84937E-02
BAINT	-1.44960E-02	3.38328E-02	-0.428	0.6683	8.12249E-02	SAD	-3.48526E-02	3.32222E-02	-1.049	0.2941	5.76969E-02
MBAINT	6.24563E-03	8.78901E-02	0.071	0.9433	9.10381E-03	OSSCI	-8.07858E-03	4.51197E-02	-0.179	0.8579	2.08087E-02
AGEPHD	-6.24780E-04	2.44637E-03	-0.255	0.7984	3.09205E+01	WAVE97	-2.02234E-01	4.04382E-02	-5.001	0.0000	7.30669E-02
NATUPHD	-3.03786E-02	3.36807E-02	-0.902	0.3671	3.13313E-02	WAVE95	-2.06327E-01	3.96231E-02	-5.207	0.0000	7.98061E-02
PERMPHD	-2.68655E-02	3.71122E-02	-0.724	0.4691	4.36273E-02	WAVE93	-1.96396E-01	3.92075E-02	-5.009	0.0000	8.96193E-02
TEMPPHD	9.19611E-02	3.58065E-02	2.568	0.0102	5.99432E-02	WAVE91	-1.12641E-01	3.24884E-02	-3.467	0.0005	7.60227E-02
MCITPHD	-6.78027E-02	5.60495E-02	-1.210	0.2264	1.69071E-02	WAVE89	-1.07240E-01	2.28046E-02	-4.703	0.0000	1.51572E-01
HISPAN	5.12033E-02	3.41094E-02	1.501	0.1333	2.88484E-02	WAVE87	-1.27283E-01	2.21817E-02	-5.738	0.0000	1.53228E-01
BLACK	-2.22015E-02	2.80150E-02	-0.792	0.4281	4.44550E-02	WAVE85	-1.04806E-01	2.30509E-02	-4.547	0.0000	1.36084E-01
ASIAN	1.26589E-02	2.62387E-02	0.482	0.6295	7.85056E-02	WAVE83	-3.82197E-02	2.55202E-02	-1.498	0.1342	1.31000E-01
NATAMER	-1.55127E-01	1.05183E-01	-1.475	0.1403	3.31048E-03						

NOTES: Dependent variable: RANK1; 8458 observations; 6 iterations; log likelihood function = -8057.296; restricted log likelihood = -8531.418; Chi-squared = 948.2443; d.f. = 98; significance = .0000000.





TABLE C-44. Maximum likelihood estimates for rank, logit model 4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE89	8.10300E-02	2.34926E-02	3.449	0.0006	1.51572E-01	MMARRIED	1.35732E-02	3.18203E-02	0.427	0.6697	4.20903E-02
WAVE87	1.02861E-01	2.28181E-02	4.508	0.0000	1.53228E-01	DEP6	-1.06593E-02	1.26825E-02	-0.840	0.4006	1.92362E-01
WAVE85	5.56231E-02	2.38218E-02	2.335	0.0195	1.36084E-01	DEP618	1.14592E-02	7.88781E-03	1.453	0.1463	7.63301E-01
WAVE83	3.14362E-02	2.64965E-02	1.186	0.2355	1.31000E-01	MDEP	3.87577E-02	2.12700E-02	1.822	0.0684	3.88153E-01
Marginal effects: full-professor rank											
Constant	2.73517E-01	7.94388E-02	3.443	0.0006		WATEACH	-4.37211E-02	1.43319E-02	-3.051	0.0023	5.08040E-01
FEMALE	-1.37262E-01	1.35582E-02	-10.124	0.0000	3.26555E-01	WAO TH	-3.24197E-02	1.88473E-02	-1.720	0.0854	1.52873E-01
YRPHD15	6.65743E-02	1.14574E-02	5.811	0.0000	4.92433E-01	EMPPRI	-6.89071E-02	1.36404E-02	-5.052	0.0000	2.59754E-01
TA	-1.88442E-02	3.38933E-02	-0.556	0.5782	5.45046E-02	MEMPPRI	-8.98402E-03	6.56953E-02	-0.137	0.8912	1.23315E-01
RA	2.76389E-02	3.16547E-02	0.873	0.3826	6.95200E-02	EMPRES	-1.19671E-02	1.45465E-02	-0.823	0.4107	2.95342E-01
FELLOW	3.92158E-02	5.64409E-02	0.695	0.4872	1.32419E-02	EMPDO C	-4.10774E-02	2.07754E-02	-1.977	0.0480	9.51762E-02
TRAIN	-9.94275E-03	3.49448E-02	-0.285	0.7760	5.45046E-02	MEMPCARN	-9.65434E-02	6.50544E-02	-1.484	0.1378	2.15181E-01
MPSOURC	4.91332E-03	3.51836E-02	0.140	0.8889	7.38591E-01	BIO	-1.21660E-01	2.70543E-02	-4.497	0.0000	3.12012E-01
TTD1	4.44728E-03	2.78885E-03	1.595	0.1108	8.18231E+00	HEALTH	1.43962E-02	3.28606E-02	0.438	0.6613	6.39631E-02
MTTD1	1.22165E-01	7.28000E-02	1.678	0.0933	1.63159E-02	ENG	7.10579E-02	3.43882E-02	2.066	0.0388	5.27311E-02
PDOCP	-1.35054E-01	1.53783E-02	-8.782	0.0000	3.18279E-01	MATHCOM	-4.33141E-02	2.92789E-02	-1.479	0.1390	1.13502E-01
MPDOCP	-6.01589E-02	3.46811E-02	-1.735	0.0828	4.33909E-02	PHYSOTH	-1.06347E-01	3.41522E-02	-3.114	0.0018	5.63963E-02
FSWI	-1.52364E-02	1.25629E-02	-1.213	0.2252	3.73020E-01	CHEM	-9.69519E-03	3.41808E-02	-0.284	0.7767	6.37266E-02
MFSWI	-3.10203E-02	1.37321E-02	-2.259	0.0239	3.40979E-01	EAOSCI	-2.37158E-02	3.56654E-02	-0.665	0.5061	4.26815E-02
BAINT	-6.43433E-03	3.42320E-02	-0.188	0.8509	8.12249E-02	PSYCH	-7.85912E-02	3.02861E-02	-2.595	0.0095	9.82502E-02
MBAINT	1.74765E-02	8.89662E-02	0.196	0.8443	9.10381E-03	ECON	5.63117E-02	3.94886E-02	1.426	0.1539	3.16860E-02
AGEPHD	-7.05384E-05	2.46870E-03	-0.029	0.9772	3.09205E+01	POLYSCI	1.15745E-02	4.15324E-02	0.279	0.7805	2.84937E-02
NATUPHD	-3.10995E-02	3.39857E-02	-0.915	0.3602	3.13313E-02	SAD	-1.41863E-02	3.37563E-02	-0.420	0.6743	5.76969E-02
PERMPHD	-2.66330E-02	3.74012E-02	-0.712	0.4764	4.36273E-02	OSSCI	4.93414E-03	4.56397E-02	0.108	0.9139	2.08087E-02
TEMPPHD	1.08408E-01	3.63342E-02	2.984	0.0028	5.99432E-02	WAVE97	-1.36418E-01	4.84063E-02	-2.818	0.0048	7.30669E-02
MCITPHD	-7.80673E-02	5.65342E-02	-1.381	0.1673	1.69071E-02	WAVE95	-2.08246E-01	4.00757E-02	-5.196	0.0000	7.98061E-02
HISPAN	4.71174E-02	3.43736E-02	1.371	0.1705	2.88484E-02	WAVE93	-1.15123E-01	7.39586E-02	-1.557	0.1196	8.96193E-02
BLACK	-2.50742E-02	2.82724E-02	-0.887	0.3751	4.44550E-02	WAVE91	-1.12953E-01	3.28026E-02	-3.443	0.0006	7.60227E-02
ASIAN	3.12076E-03	2.65314E-02	0.118	0.9064	7.85056E-02	WAVE89	-1.12734E-01	2.30156E-02	-4.898	0.0000	1.51572E-01
NATAMER	-1.54724E-01	1.05900E-01	-1.461	0.1440	3.31048E-03	WAVE87	-1.30243E-01	2.23666E-02	-5.823	0.0000	1.53228E-01
MARRIED	2.99776E-02	1.58336E-02	1.893	0.0583	7.54434E-01	WAVE85	-1.07206E-01	2.32556E-02	-4.610	0.0000	1.36084E-01
						WAVE83	-3.68917E-02	2.57313E-02	-1.434	0.1516	1.31000E-01

NOTES: Dependent variable: RANK1; 8458 observations; 6 iterations; log likelihood function = -7901.148; restricted log likelihood = -8531.418; Chi-squared = 1260.541; d.f. = 112; significance = .000000.



TABLE C-45. Maximum likelihood estimates for rank, logit model 5: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
MTTD1	1.53826E-01	7.61777E-02	2.019	0.0435	1.62623E-02	BIO	-1.19575E-01	2.77411E-02	-4.310	0.0000	2.98012E-01
PDOCP	-1.16910E-01	1.57746E-02	-7.411	0.0000	3.03046E-01	HEALTH	-2.49563E-03	3.39372E-02	-0.074	0.9414	6.47909E-02
MPDOCP	-5.09299E-02	3.60403E-02	-1.413	0.1576	4.33660E-02	ENG	4.31950E-02	3.53378E-02	1.222	0.2216	5.54982E-02
FSWI	-8.51114E-03	1.30722E-02	-0.651	0.5150	3.71193E-01	MATHCOM	-7.97764E-02	2.97838E-02	-2.679	0.0074	1.20547E-01
MFSWI	-3.00557E-02	1.42781E-02	-2.105	0.0353	3.36345E-01	PHYSOTH	-1.18536E-01	3.55270E-02	-3.336	0.0008	5.40785E-02
BAINT	-1.56050E-02	3.58985E-02	-0.435	0.6638	7.93753E-02	CHEM	-1.92483E-02	3.49470E-02	-0.551	0.5818	6.14352E-02
MBAINT	-3.56943E-03	9.34564E-02	-0.038	0.9695	9.03459E-03	EAOSCI	-3.54481E-02	3.68406E-02	-0.962	0.3359	4.34951E-02
AGEPHD	-1.24866E-03	2.61051E-03	-0.478	0.6324	3.08841E+01	PSYCH	-9.41342E-02	3.10693E-02	-3.030	0.0024	9.69282E-02
NATUPHD	-2.57418E-02	3.56351E-02	-0.722	0.4701	3.05885E-02	ECON	3.81088E-02	4.10579E-02	0.928	0.3533	3.23955E-02
PERMPHD	-3.09481E-02	3.90321E-02	-0.793	0.4278	4.31079E-02	POLYSCI	-2.93579E-02	4.23729E-02	-0.693	0.4884	2.99432E-02
TEMPPHD	1.05594E-01	3.79697E-02	2.781	0.0054	5.89830E-02	SAD	-4.88645E-02	3.44460E-02	-1.419	0.1560	6.06608E-02
MCITPHD	-9.20378E-02	5.85070E-02	-1.573	0.1157	1.72948E-02	OSSCI	-2.75343E-02	4.65927E-02	-0.591	0.5545	2.19411E-02
HISPAN	4.72899E-02	3.54000E-02	1.336	0.1816	2.98141E-02	WAVE97	-2.08848E-01	4.22952E-02	-4.938	0.0000	7.36964E-02
BLACK	-3.56651E-02	2.88762E-02	-1.235	0.2168	4.65927E-02	WAVE95	-2.16018E-01	4.15333E-02	-5.201	0.0000	8.01497E-02
ASIAN	2.29298E-02	2.77797E-02	0.825	0.4091	7.56324E-02	WAVE93	-1.99796E-01	4.10043E-02	-4.873	0.0000	9.04750E-02
NATAMER	-1.69561E-01	1.07342E-01	-1.580	0.1142	3.48477E-03	WAVE91	-1.13704E-01	3.39429E-02	-3.350	0.0008	7.69231E-02
MARRIED	4.22844E-02	1.65565E-02	2.554	0.0107	7.55421E-01	WAVE89	-1.07844E-01	2.40680E-02	-4.481	0.0000	1.51910E-01
MMARRIED	2.37604E-02	3.29992E-02	0.720	0.4715	4.33660E-02	WAVE87	-1.28927E-01	2.33405E-02	-5.524	0.0000	1.55008E-01
DEP6	-1.57112E-02	1.31077E-02	-1.199	0.2307	1.92695E-01	WAVE85	-9.21449E-02	2.44736E-02	-3.765	0.0002	1.31389E-01
DEP618	4.78674E-03	8.17284E-03	0.586	0.5581	7.72457E-01	WAVE83	-3.36069E-02	2.71358E-02	-1.238	0.2155	1.29582E-01
MDEP	3.24299E-02	2.21348E-02	1.465	0.1429	3.84874E-01						

NOTES: Dependent variable: RANK1; 7748 observations; 6 iterations; log likelihood function = -7020.747; restricted log likelihood = -7384.218; Chi-squared = 726.9426; d.f. = 98; significance = .0000000.



TABLE C-46. Maximum likelihood estimates for rank, logit model 6: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE89	8.16802E-02	2.44798E-02	3.337	0.0008	1.51910E-01	MMARRIED	1.87182E-02	3.32541E-02	0.563	0.5735	4.33660E-02
WAVE87	9.96872E-02	2.37091E-02	4.205	0.0000	1.55008E-01	DEP6	-1.58856E-02	1.31929E-02	-1.204	0.2286	1.92695E-01
WAVE85	6.07151E-02	2.49404E-02	2.434	0.0149	1.31389E-01	DEP618	7.90771E-03	8.25044E-03	0.958	0.3378	7.72457E-01
WAVE83	3.70325E-02	2.77320E-02	1.335	0.1818	1.29582E-01	MDEP	3.39894E-02	2.23052E-02	1.524	0.1276	3.84874E-01
Marginal effects: full-professor rank											
Constant	2.87883E-01	8.43085E-02	3.415	0.0006		WATEACH	-7.99513E-02	1.52168E-02	-5.254	0.0000	5.33299E-01
FEMALE	-1.20611E-01	1.43335E-02	-8.415	0.0000	3.13758E-01	WAOATH	-3.26497E-02	2.02039E-02	-1.616	0.1061	1.45070E-01
YRPHD15	6.88474E-02	1.20338E-02	5.721	0.0000	4.95870E-01	EMPPRI	-6.46594E-02	1.43819E-02	-4.496	0.0000	2.52839E-01
TA	-3.14893E-02	3.52004E-02	-0.895	0.3710	5.49819E-02	MEMPPRI	1.39951E-03	7.42405E-02	0.019	0.9850	1.23258E-01
RA	7.75713E-03	3.30093E-02	0.235	0.8142	7.02117E-02	EMPRES	2.03274E-03	1.53876E-02	0.132	0.8949	2.87171E-01
FELLOW	1.63266E-02	5.79925E-02	0.282	0.7783	1.38100E-02	EMPDOC	-5.16272E-02	2.14146E-02	-2.411	0.0159	9.96386E-02
TRAIN	-3.63867E-02	3.62283E-02	-1.004	0.3152	5.48529E-02	MEMPCARN	-1.13977E-01	7.34060E-02	-1.553	0.1205	2.16185E-01
MPSOURC	-1.34330E-02	3.67121E-02	-0.366	0.7144	7.37093E-01	BIO	-1.01894E-01	2.84251E-02	-3.585	0.0003	2.98012E-01
TTD1	5.93971E-03	2.97207E-03	1.999	0.0457	8.14985E+00	HEALTH	1.74610E-02	3.44297E-02	0.507	0.6120	6.47909E-02
MTTD1	1.49983E-01	7.68617E-02	1.951	0.0510	1.62623E-02	ENG	7.51303E-02	3.58480E-02	2.096	0.0361	5.54982E-02
PDOCP	-1.34857E-01	1.63005E-02	-8.273	0.0000	3.03046E-01	MATHCOM	-4.41276E-02	3.04608E-02	-1.449	0.1474	1.20547E-01
MPDOCP	-4.90030E-02	3.64332E-02	-1.345	0.1786	4.33660E-02	PHYSOTH	-8.64995E-02	3.61233E-02	-2.395	0.0166	5.40785E-02
FSWI	-1.39627E-02	1.31860E-02	-1.059	0.2896	3.71193E-01	CHEM	2.09133E-02	3.59943E-02	0.581	0.5612	6.14352E-02
MFSWI	-3.39489E-02	1.44565E-02	-2.348	0.0189	3.36345E-01	EAOSCI	-1.05684E-02	3.73979E-02	-0.283	0.7775	4.34951E-02
BAINT	-2.74819E-03	3.63928E-02	-0.076	0.9398	7.93753E-02	PSYCH	-5.78036E-02	3.17766E-02	-1.819	0.0689	9.69282E-02
MBAINT	5.84907E-03	9.47029E-02	0.062	0.9508	9.03459E-03	ECON	7.57379E-02	4.16368E-02	1.819	0.0689	3.23955E-02
AGEPHD	-3.44786E-04	2.63276E-03	-0.131	0.8958	3.08841E+01	POLYSCI	1.41449E-02	4.30679E-02	0.328	0.7426	2.99432E-02
NATUPHD	-2.59006E-02	3.59262E-02	-0.721	0.4709	3.05885E-02	SAD	-1.40546E-02	3.50436E-02	-0.401	0.6884	6.06608E-02
PERMPHD	-3.09472E-02	3.93251E-02	-0.787	0.4313	4.31079E-02	OSSCI	-1.39165E-04	4.71481E-02	-0.003	0.9976	2.19411E-02
TEMPPHD	1.22601E-01	3.85584E-02	3.180	0.0015	5.89830E-02	WAVE97	-1.37998E-01	5.08695E-02	-2.713	0.0067	7.36964E-02
MCITPHD	-1.02909E-01	5.90118E-02	-1.744	0.0812	1.72948E-02	WAVE95	-2.27023E-01	4.20339E-02	-5.401	0.0000	8.01497E-02
HISPAN	4.29794E-02	3.57172E-02	1.203	0.2288	2.98141E-02	WAVE93	-1.03780E-01	8.22262E-02	-1.262	0.2069	9.04750E-02
BLACK	-3.76090E-02	2.91545E-02	-1.290	0.1971	4.65927E-02	WAVE91	-1.18895E-01	3.42394E-02	-3.472	0.0005	7.69231E-02
ASIAN	1.68186E-02	2.80524E-02	0.600	0.5488	7.56324E-02	WAVE89	-1.17373E-01	2.42830E-02	-4.834	0.0000	1.51910E-01
NATAMER	-1.65556E-01	1.07849E-01	-1.535	0.1248	3.48477E-03	WAVE87	-1.35690E-01	2.35241E-02	-5.768	0.0000	1.55008E-01
MARRIED	4.06281E-02	1.66910E-02	2.434	0.0149	7.55421E-01	WAVE85	-9.61160E-02	2.46615E-02	-3.897	0.0001	1.31389E-01
						WAVE83	-3.19299E-02	2.73257E-02	-1.168	0.2426	1.29582E-01

NOTES: Dependent variable: RANK1; 7748 observations; 7 iterations; log likelihood function = -6903.793; restricted log likelihood = -7384.218; Chi-squared = 960.8496; d.f. = 112; significance = .0000000.



TABLE C-47. Maximum likelihood estimates for rank, logit model I-1: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						ASIAN	6.07951E-03	2.53696E-02	0.240	0.8106	7.96781E-02
Constant	2.48959E-01	7.65196E-02	3.254	0.0011		NATAMER	-1.47995E-01	1.02759E-01	-1.440	0.1498	3.40020E-03
FEMALE	-7.30992E-02	2.32604E-02	-3.143	0.0017	3.25513E-01	MARRIED	6.84300E-02	2.03849E-02	3.357	0.0008	7.54052E-01
FMARRIED	-7.11011E-02	2.90263E-02	-2.450	0.0143	1.93812E-01	MMARRIED	3.24821E-02	3.11618E-02	1.042	0.2972	4.05758E-02
FDEP6	1.65209E-02	2.96787E-02	0.557	0.5778	4.37493E-02	DEP6	-1.71347E-02	1.32530E-02	-1.293	0.1960	1.94945E-01
FDEP618	-3.05102E-02	1.49003E-02	-2.048	0.0406	1.62416E-01	DEP618	1.21346E-02	7.93606E-03	1.529	0.1263	7.64819E-01
YRPHD15	6.71044E-02	1.11030E-02	6.044	0.0000	4.90989E-01	MDEP	2.99032E-02	2.08794E-02	1.432	0.1521	3.75496E-01
TA	-1.22666E-02	3.23575E-02	-0.379	0.7046	5.83702E-02	BIO	-1.34572E-01	2.58891E-02	-5.198	0.0000	3.11232E-01
RA	3.60389E-02	3.02039E-02	1.193	0.2328	7.52578E-02	HEALTH	5.69306E-03	3.18108E-02	0.179	0.8580	6.24504E-02
FELLOW	4.92320E-02	5.37143E-02	0.917	0.3594	1.41675E-02	ENG	3.65689E-02	3.27950E-02	1.115	0.2648	5.24765E-02
TRAIN	3.42125E-03	3.36139E-02	0.102	0.9189	5.80301E-02	MATHCOM	-6.68300E-02	2.81134E-02	-2.377	0.0174	1.11187E-01
MPSOURC	1.10434E-02	3.38329E-02	0.326	0.7441	7.19030E-01	PHYSOTH	-1.50810E-01	3.26937E-02	-4.613	0.0000	6.06370E-02
TTD1	4.19536E-03	2.69500E-03	1.557	0.1195	8.19925E+00	CHEM	-5.35331E-02	3.24047E-02	-1.652	0.0985	6.49439E-02
MTTD1	1.15333E-01	7.03123E-02	1.640	0.1009	1.60943E-02	EAOSCI	-5.08238E-02	3.41502E-02	-1.488	0.1367	4.34093E-02
PDOCP	-1.25048E-01	1.45462E-02	-8.597	0.0000	3.24039E-01	PSYCH	-1.12711E-01	2.89831E-02	-3.889	0.0001	9.95126E-02
MPDOCP	-5.97641E-02	3.33823E-02	-1.790	0.0734	4.32959E-02	ECON	2.29080E-02	3.78740E-02	0.605	0.5453	3.15086E-02
FSWI	-1.00745E-02	1.21711E-02	-0.828	0.4078	3.69829E-01	POLYSCI	-2.80903E-02	3.98502E-02	-0.705	0.4809	2.83350E-02
MFSWI	-2.98116E-02	1.32460E-02	-2.251	0.0244	3.42627E-01	SAD	-3.41363E-02	3.25006E-02	-1.050	0.2936	5.73501E-02
BAINT	-2.19551E-02	3.29538E-02	-0.666	0.5053	7.97915E-02	OSSCI	-1.67386E-03	4.44154E-02	-0.038	0.9699	2.02879E-02
MBAINT	1.33585E-02	8.55969E-02	0.156	0.8760	8.84053E-03	WAVE97	-2.36423E-01	3.93970E-02	-6.001	0.0000	7.79780E-02
AGEPHD	-1.56710E-03	2.39090E-03	-0.655	0.5122	3.09349E+01	WAVE95	-2.44230E-01	3.85401E-02	-6.337	0.0000	8.61385E-02
NATUPHD	-3.09363E-02	3.27541E-02	-0.944	0.3449	3.23019E-02	WAVE93	-2.42329E-01	3.82276E-02	-6.339	0.0000	9.89459E-02
PERMPHD	-9.44253E-03	3.61726E-02	-0.261	0.7941	4.31826E-02	WAVE91	-1.30245E-01	3.16955E-02	-4.109	0.0000	7.62779E-02
TEMPPHD	1.03170E-01	3.47070E-02	2.973	0.0030	5.90502E-02	WAVE89	-1.19758E-01	2.24231E-02	-5.341	0.0000	1.49722E-01
MCITPHD	-6.73679E-02	5.43443E-02	-1.240	0.2151	1.70010E-02	WAVE87	-1.35368E-01	2.18535E-02	-6.194	0.0000	1.49836E-01
HISPAN	5.39898E-02	3.31789E-02	1.627	0.1037	2.89017E-02	WAVE85	-1.07570E-01	2.27516E-02	-4.728	0.0000	1.30454E-01
BLACK	-1.80484E-02	2.72062E-02	-0.663	0.5071	4.51094E-02	WAVE83	-3.78153E-02	2.51994E-02	-1.501	0.1334	1.25581E-01

NOTES: Dependent variable: RANK1; 8823 observations; 6 iterations; log likelihood function = -8618.001; restricted log likelihood = -9190.100; Chi-squared = 1144.198; d.f. = 104; significance = .0000000.





TABLE C-48. Maximum likelihood estimates for rank, logit model I-2: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
SAD	6.79547E-02	3.42676E-02	1.983	0.0474	5.73501E-02	BLACK	-1.98031E-02	2.75902E-02	-0.718	0.4729	4.51094E-02
OSSCI	3.63892E-02	4.66620E-02	0.780	0.4355	2.02879E-02	ASIAN	-3.52019E-03	2.58489E-02	-0.136	0.8917	7.96781E-02
WAVE97	1.67484E-01	4.68006E-02	3.579	0.0003	7.79780E-02	NATAMER	-1.55940E-01	1.04331E-01	-1.495	0.1350	3.40020E-03
WAVE95	1.39637E-01	3.84715E-02	3.630	0.0003	8.61385E-02	MARRIED	6.91106E-02	2.06633E-02	3.345	0.0008	7.54052E-01
WAVE93	1.59562E-01	6.26210E-02	2.548	0.0108	9.89459E-02	MMARRIED	3.07227E-02	3.15149E-02	0.975	0.3296	4.05758E-02
WAVE91	7.60541E-02	3.24199E-02	2.346	0.0190	7.62779E-02	DEP6	-1.41920E-02	1.34302E-02	-1.057	0.2906	1.94945E-01
WAVE89	6.66679E-02	2.34444E-02	2.844	0.0045	1.49722E-01	DEP618	1.47750E-02	8.04664E-03	1.836	0.0663	7.64819E-01
WAVE87	9.06651E-02	2.28093E-02	3.975	0.0001	1.49836E-01	MDEP	3.15585E-02	2.11438E-02	1.493	0.1356	3.75496E-01
WAVE85	4.92481E-02	2.38602E-02	2.064	0.0390	1.30454E-01	WATEACH	-2.24543E-02	1.40410E-02	-1.599	0.1098	4.89516E-01
WAVE83	3.31494E-02	2.66178E-02	1.245	0.2130	1.25581E-01	WAOOTH	-4.46756E-02	1.83165E-02	-2.439	0.0147	1.65930E-01
Marginal effects: full-professor rank						EMPPRI	-7.20996E-02	1.33975E-02	-5.382	0.0000	2.59096E-01
Constant	2.80033E-01	7.84746E-02	3.568	0.0004		MEMPPRI	-4.76600E-02	5.48299E-02	-0.869	0.3847	1.30568E-01
FEMALE	-6.97699E-02	2.35605E-02	-2.961	0.0031	3.25513E-01	EMPRES	-1.68197E-02	1.43125E-02	-1.175	0.2399	2.94118E-01
FMARRIED	-6.69868E-02	2.94147E-02	-2.277	0.0228	1.93812E-01	EMPDOC	-3.67554E-02	2.06141E-02	-1.783	0.0746	9.23722E-02
FDEP6	8.00733E-03	3.00932E-02	0.266	0.7902	4.37493E-02	MEMPCARN	-7.95058E-02	5.45491E-02	-1.458	0.1450	2.31327E-01
FDEP618	-3.21843E-02	1.51278E-02	-2.127	0.0334	1.62416E-01	BIO	-1.27770E-01	2.65901E-02	-4.805	0.0000	3.11232E-01
YRPHD15	6.53317E-02	1.12449E-02	5.810	0.0000	4.90989E-01	HEALTH	1.91418E-02	3.23670E-02	0.591	0.5543	6.24504E-02
TA	-1.27434E-02	3.28440E-02	-0.388	0.6980	5.83702E-02	ENG	5.37179E-02	3.33222E-02	1.612	0.1069	5.24765E-02
RA	3.19955E-02	3.06286E-02	1.045	0.2962	7.52578E-02	MATHCOM	-5.30915E-02	2.87854E-02	-1.844	0.0651	1.11187E-01
FELLOW	4.65987E-02	5.45160E-02	0.855	0.3927	1.41675E-02	PHYSOTH	-1.31414E-01	3.33840E-02	-3.936	0.0001	6.06370E-02
TRAIN	3.37597E-03	3.40442E-02	0.099	0.9210	5.80301E-02	CHEM	-3.56041E-02	3.34514E-02	-1.064	0.2872	6.49439E-02
MPSOURC	1.41251E-02	3.42516E-02	0.412	0.6801	7.19030E-01	EAOSCI	-4.41267E-02	3.48102E-02	-1.268	0.2049	4.34093E-02
TTD1	4.29409E-03	2.73474E-03	1.570	0.1164	8.19925E+00	PSYCH	-9.13232E-02	2.97390E-02	-3.071	0.0021	9.95126E-02
MTTD1	1.13392E-01	7.13308E-02	1.590	0.1119	1.60943E-02	ECON	4.13175E-02	3.85988E-02	1.070	0.2844	3.15086E-02
PDOCP	-1.32364E-01	1.50779E-02	-8.779	0.0000	3.24039E-01	POLYSCI	-4.19003E-03	4.06149E-02	-0.103	0.9178	2.83350E-02
MPDOCP	-5.46374E-02	3.39328E-02	-1.610	0.1074	4.32959E-02	SAD	-1.89301E-02	3.31332E-02	-0.571	0.5678	5.73501E-02
FSWI	-1.26854E-02	1.23509E-02	-1.027	0.3044	3.69829E-01	OSSCI	2.07081E-03	4.50461E-02	0.046	0.9633	2.02879E-02
MFSWI	-3.04132E-02	1.34783E-02	-2.256	0.0240	3.42627E-01	WAVE97	-1.47518E-01	4.74991E-02	-3.106	0.0019	7.79780E-02
BAINT	-1.12683E-02	3.35471E-02	-0.336	0.7369	7.97915E-02	WAVE95	-2.42218E-01	3.92687E-02	-6.168	0.0000	8.61385E-02
MBAIN	2.65517E-02	8.71183E-02	0.305	0.7605	8.84053E-03	WAVE93	-1.74181E-01	6.43874E-02	-2.705	0.0068	9.89459E-02
AGEPHD	-1.11977E-03	2.42603E-03	-0.462	0.6444	3.09349E+01	WAVE91	-1.27868E-01	3.21766E-02	-3.974	0.0001	7.62779E-02
NATUPHD	-3.37901E-02	3.32637E-02	-1.016	0.3097	3.23019E-02	WAVE89	-1.21158E-01	2.27211E-02	-5.332	0.0000	1.49722E-01
PERMPHD	-1.18709E-02	3.66940E-02	-0.324	0.7463	4.31826E-02	WAVE87	-1.35558E-01	2.21220E-02	-6.128	0.0000	1.49836E-01
TEMPPHD	1.20010E-01	3.53940E-02	3.391	0.0007	5.90502E-02	WAVE85	-1.08575E-01	2.30366E-02	-4.713	0.0000	1.30454E-01
MCITPHD	-8.06759E-02	5.51291E-02	-1.463	0.1434	1.70010E-02	WAVE83	-3.44315E-02	2.54929E-02	-1.351	0.1768	1.25581E-01
HISPAN	4.97910E-02	3.35857E-02	1.483	0.1382	2.89017E-02						

NOTES: Dependent variable: RANK1; 8823 observations; 6 iterations; log likelihood function = -8338.851; restricted log likelihood = -9190.100; Chi-squared = 1702.499; d.f. = 118; significance = .0000000.



TABLE C-49. Maximum likelihood estimates for rank, logit model I-3: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						ASIAN	1.26224E-02	2.62660E-02	0.481	0.6308	7.85056E-02
Constant	2.28431E-01	7.86106E-02	2.906	0.0037		NATAMER	-1.53343E-01	1.05440E-01	-1.454	0.1459	3.31048E-03
FEMALE	-7.85214E-02	2.38264E-02	-3.296	0.0010	3.26555E-01	MARRIED	6.47609E-02	2.09514E-02	3.091	0.0020	7.54434E-01
FMARRIED	-6.70561E-02	2.97128E-02	-2.257	0.0240	1.94136E-01	MMARRIED	2.89529E-02	3.17102E-02	0.913	0.3612	4.20903E-02
FDEP6	1.47422E-02	3.03391E-02	0.486	0.6270	4.36273E-02	DEP6	-1.72057E-02	1.36343E-02	-1.262	0.2070	1.92362E-01
FDEP618	-3.09993E-02	1.52412E-02	-2.034	0.0420	1.61859E-01	DEP618	1.27654E-02	8.20396E-03	1.556	0.1197	7.63301E-01
YRPHD15	6.76317E-02	1.13818E-02	5.942	0.0000	4.92433E-01	MDEP	2.99876E-02	2.14199E-02	1.400	0.1615	3.88153E-01
TA	-2.07960E-02	3.36620E-02	-0.618	0.5367	5.45046E-02	BIO	-1.31127E-01	2.64392E-02	-4.960	0.0000	3.12012E-01
RA	3.23003E-02	3.15016E-02	1.025	0.3052	6.95200E-02	HEALTH	5.81740E-04	3.24237E-02	0.018	0.9857	6.39631E-02
FELLOW	4.27498E-02	5.60846E-02	0.762	0.4459	1.32419E-02	ENG	5.09778E-02	3.39926E-02	1.500	0.1337	5.27311E-02
TRAIN	-6.51420E-03	3.47790E-02	-0.187	0.8514	5.45046E-02	MATHCOM	-6.37708E-02	2.86865E-02	-2.223	0.0262	1.13502E-01
MPSOURC	3.55096E-03	3.49798E-02	0.102	0.9191	7.38591E-01	PHYSOTH	-1.27206E-01	3.36445E-02	-3.781	0.0002	5.63963E-02
TTD1	4.46783E-03	2.76290E-03	1.617	0.1059	8.18231E+00	CHEM	-3.38917E-02	3.32921E-02	-1.018	0.3087	6.37266E-02
MTTD1	1.25415E-01	7.22377E-02	1.736	0.0825	1.63159E-02	EAOSCI	-3.48033E-02	3.51826E-02	-0.989	0.3226	4.26815E-02
PDOCP	-1.26196E-01	1.49126E-02	-8.462	0.0000	3.18279E-01	PSYCH	-1.01304E-01	2.96591E-02	-3.416	0.0006	9.82502E-02
MPDOCP	-6.08426E-02	3.43899E-02	-1.769	0.0769	4.33909E-02	ECON	3.33872E-02	3.89763E-02	0.857	0.3917	3.16860E-02
FSWI	-1.14911E-02	1.24552E-02	-0.923	0.3562	3.73020E-01	POLYSCI	-1.63571E-02	4.09085E-02	-0.400	0.6893	2.84937E-02
MFSWI	-2.97581E-02	1.35810E-02	-2.191	0.0284	3.40979E-01	SAD	-3.17794E-02	3.32538E-02	-0.956	0.3392	5.76969E-02
BAINT	-1.63964E-02	3.38982E-02	-0.484	0.6286	8.12249E-02	OSSCI	-7.88747E-03	4.51093E-02	-0.175	0.8612	2.08087E-02
MBAINT	1.03809E-02	8.79323E-02	0.118	0.9060	9.10381E-03	WAVE97	-2.01746E-01	4.05155E-02	-4.979	0.0000	7.30669E-02
AGEPHD	-1.22054E-03	2.45164E-03	-0.498	0.6186	3.09205E+01	WAVE95	-2.07613E-01	3.97109E-02	-5.228	0.0000	7.98061E-02
NATUPHD	-2.88053E-02	3.37128E-02	-0.854	0.3929	3.13313E-02	WAVE93	-1.96773E-01	3.92869E-02	-5.009	0.0000	8.96193E-02
PERMPHD	-1.93679E-02	3.72442E-02	-0.520	0.6030	4.36273E-02	WAVE91	-1.13165E-01	3.25554E-02	-3.476	0.0005	7.60227E-02
TEMPPHD	9.37488E-02	3.58602E-02	2.614	0.0089	5.99432E-02	WAVE89	-1.07089E-01	2.28381E-02	-4.689	0.0000	1.51572E-01
MCITPHD	-6.80537E-02	5.61401E-02	-1.212	0.2254	1.69071E-02	WAVE87	-1.26534E-01	2.22015E-02	-5.699	0.0000	1.53228E-01
HISPAN	5.16424E-02	3.41252E-02	1.513	0.1302	2.88484E-02	WAVE85	-1.04954E-01	2.30852E-02	-4.546	0.0000	1.36084E-01
BLACK	-1.97537E-02	2.80291E-02	-0.705	0.4810	4.44550E-02	WAVE83	-3.74632E-02	2.55548E-02	-1.466	0.1427	1.31000E-01

NOTES: Dependent variable: RANK1; 8458 observations; 6 iterations; log likelihood function = -8039.130; restricted log likelihood = -8531.418; Chi-squared = 984.5755; d.f. = 104; significance = .0000000.



TABLE C-50. Maximum likelihood estimates for rank, logit model I-4: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
SAD	7.79040E-02	3.47407E-02	2.242	0.0249	5.76969E-02	BLACK	-2.23999E-02	2.82824E-02	-0.792	0.4284	4.44550E-02
OSSCI	3.95953E-02	4.70006E-02	0.842	0.3995	2.08087E-02	ASIAN	2.84750E-03	2.65595E-02	0.107	0.9146	7.85056E-02
WAVE97	1.70358E-01	4.76337E-02	3.576	0.0003	7.30669E-02	NATAMER	-1.52581E-01	1.06172E-01	-1.437	0.1507	3.31048E-03
WAVE95	1.73935E-01	3.92607E-02	4.430	0.0000	7.98061E-02	MARRIED	6.42472E-02	2.11208E-02	3.042	0.0024	7.54434E-01
WAVE93	1.94879E-01	7.24060E-02	2.691	0.0071	8.96193E-02	MMARRIED	2.66245E-02	3.19628E-02	0.833	0.4049	4.20903E-02
WAVE91	9.29587E-02	3.28797E-02	2.827	0.0047	7.60227E-02	DEP6	-1.50470E-02	1.37394E-02	-1.095	0.2734	1.92362E-01
WAVE89	8.12936E-02	2.35092E-02	3.458	0.0005	1.51572E-01	DEP618	1.53731E-02	8.27594E-03	1.858	0.0632	7.63301E-01
WAVE87	1.02914E-01	2.28341E-02	4.507	0.0000	1.53228E-01	MDEP	3.17488E-02	2.15853E-02	1.471	0.1413	3.88153E-01
WAVE85	5.65309E-02	2.38369E-02	2.372	0.0177	1.36084E-01	WATEACH	-4.41500E-02	1.43501E-02	-3.077	0.0021	5.08040E-01
WAVE83	3.30387E-02	2.65670E-02	1.244	0.2136	1.31000E-01	WAOOTH	-3.34075E-02	1.88772E-02	-1.770	0.0768	1.52873E-01
Marginal effects: full-professor rank						EMPPRI	-6.84066E-02	1.36558E-02	-5.009	0.0000	2.59754E-01
Constant	2.59542E-01	8.00990E-02	3.240	0.0012		MEMPPRI	-8.04320E-03	6.58782E-02	-0.122	0.9028	1.23315E-01
FEMALE	-7.42851E-02	2.40117E-02	-3.094	0.0020	3.26555E-01	EMPRES	-1.19696E-02	1.45625E-02	-0.822	0.4111	2.95342E-01
FMARRIED	-6.38037E-02	2.99503E-02	-2.130	0.0331	1.94136E-01	EMPDOC	-4.22061E-02	2.07877E-02	-2.030	0.0423	9.51762E-02
FDEP6	7.64277E-03	3.05878E-02	0.250	0.8027	4.36273E-02	MEMPCARN	-9.84455E-02	6.52365E-02	-1.509	0.1313	2.15181E-01
FDEP618	-3.15218E-02	1.53839E-02	-2.049	0.0405	1.61859E-01	BIO	-1.21434E-01	2.70713E-02	-4.486	0.0000	3.12012E-01
YRPHD15	6.63794E-02	1.14674E-02	5.789	0.0000	4.92433E-01	HEALTH	1.44168E-02	3.28881E-02	0.438	0.6611	6.39631E-02
TA	-1.76570E-02	3.39444E-02	-0.520	0.6029	5.45046E-02	ENG	7.17011E-02	3.44109E-02	2.084	0.0372	5.27311E-02
RA	2.87783E-02	3.17153E-02	0.907	0.3642	6.95200E-02	MATHCOM	-4.28890E-02	2.93021E-02	-1.464	0.1433	1.13502E-01
FELLOW	3.92257E-02	5.65360E-02	0.694	0.4878	1.32419E-02	PHYSOTH	-1.06769E-01	3.41803E-02	-3.124	0.0018	5.63963E-02
TRAIN	-8.13747E-03	3.50062E-02	-0.232	0.8162	5.45046E-02	CHEM	-9.97242E-03	3.42312E-02	-0.291	0.7708	6.37266E-02
MPSOURC	6.32427E-03	3.52133E-02	0.180	0.8575	7.38591E-01	EAOSCI	-2.31366E-02	3.56787E-02	-0.648	0.5167	4.26815E-02
TTD1	4.57659E-03	2.78732E-03	1.642	0.1006	8.18231E+00	PSYCH	-7.71659E-02	3.03179E-02	-2.545	0.0109	9.82502E-02
MTTD1	1.22080E-01	7.28673E-02	1.675	0.0939	1.63159E-02	ECON	5.86715E-02	3.95674E-02	1.483	0.1381	3.16860E-02
PDOCP	-1.36455E-01	1.53955E-02	-8.863	0.0000	3.18279E-01	POLYSCI	1.22208E-02	4.15472E-02	0.294	0.7686	2.84937E-02
MPDOCP	-5.81663E-02	3.47804E-02	-1.672	0.0944	4.33909E-02	SAD	-1.08859E-02	3.37876E-02	-0.322	0.7473	5.76969E-02
FSWI	-1.51558E-02	1.25777E-02	-1.205	0.2282	3.73020E-01	OSSCI	5.27152E-03	4.56379E-02	0.116	0.9080	2.08087E-02
MFSWI	-3.10330E-02	1.37484E-02	-2.257	0.0240	3.40979E-01	WAVE97	-1.35402E-01	4.85108E-02	-2.791	0.0053	7.30669E-02
BAINT	-8.54819E-03	3.42869E-02	-0.249	0.8031	8.12249E-02	WAVE95	-2.09836E-01	4.01612E-02	-5.225	0.0000	7.98061E-02
MBAINT	2.16726E-02	8.89842E-02	0.244	0.8076	9.10381E-03	WAVE93	-1.14211E-01	7.41604E-02	-1.540	0.1235	8.96193E-02
AGEPHD	-6.61063E-04	2.47308E-03	-0.267	0.7892	3.09205E+01	WAVE91	-1.13819E-01	3.28657E-02	-3.463	0.0005	7.60227E-02
NATUPHD	-2.99550E-02	3.40078E-02	-0.881	0.3784	3.13313E-02	WAVE89	-1.12493E-01	2.30498E-02	-4.880	0.0000	1.51572E-01
PERMPHD	-1.86599E-02	3.75342E-02	-0.497	0.6191	4.36273E-02	WAVE87	-1.29493E-01	2.23907E-02	-5.783	0.0000	1.53228E-01
TEMPPHD	1.10428E-01	3.63828E-02	3.035	0.0024	5.99432E-02	WAVE85	-1.07422E-01	2.32922E-02	-4.612	0.0000	1.36084E-01
MCITPHD	-7.84171E-02	5.66324E-02	-1.385	0.1662	1.69071E-02	WAVE83	-3.59109E-02	2.57668E-02	-1.394	0.1634	1.31000E-01
HISPAN	4.79645E-02	3.43904E-02	1.395	0.1631	2.88484E-02						

NOTES: Dependent variable: RANK1; 8458 observations; 6 iterations; log likelihood function = -7883.123; restricted log likelihood = -8531.418; Chi-squared = 1296.591; d.f. = 118; significance = .0000000.



TABLE C-51. Maximum likelihood estimates for rank, logit model I-5: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						ASIAN	2.28485E-02	2.77976E-02	0.822	0.4111	7.56324E-02
Constant	2.44148E-01	8.32981E-02	2.931	0.0034		NATAMER	-1.68984E-01	1.07546E-01	-1.571	0.1161	3.48477E-03
FEMALE	-7.57276E-02	2.50514E-02	-3.023	0.0025	3.13758E-01	MARRIED	7.02302E-02	2.19845E-02	3.195	0.0014	7.55421E-01
FMARRIED	-5.37951E-02	3.13352E-02	-1.717	0.0860	1.83402E-01	MMARRIED	3.45156E-02	3.31923E-02	1.040	0.2984	4.33660E-02
FDEP6	1.95195E-02	3.18141E-02	0.614	0.5395	4.14300E-02	DEP6	-2.16407E-02	1.41693E-02	-1.527	0.1267	1.92695E-01
FDEP618	-2.73661E-02	1.61096E-02	-1.699	0.0894	1.52039E-01	DEP618	7.68658E-03	8.55686E-03	0.898	0.3690	7.72457E-01
YRPHD15	6.96558E-02	1.19576E-02	5.825	0.0000	4.95870E-01	MDEP	2.65267E-02	2.24691E-02	1.181	0.2378	3.84874E-01
TA	-3.42888E-02	3.49860E-02	-0.980	0.3271	5.49819E-02	BIO	-1.19469E-01	2.77540E-02	-4.305	0.0000	2.98012E-01
RA	1.41884E-02	3.28488E-02	0.432	0.6658	7.02117E-02	HEALTH	-2.76758E-03	3.39637E-02	-0.081	0.9351	6.47909E-02
FELLOW	2.21420E-02	5.75116E-02	0.385	0.7002	1.38100E-02	ENG	4.37672E-02	3.53570E-02	1.238	0.2158	5.54982E-02
TRAIN	-2.78860E-02	3.60653E-02	-0.773	0.4394	5.48529E-02	MATHCOM	-7.95905E-02	2.98034E-02	-2.671	0.0076	1.20547E-01
MPSOURC	-1.11866E-02	3.65187E-02	-0.306	0.7594	7.37093E-01	PHYSOTH	-1.18840E-01	3.55554E-02	-3.342	0.0008	5.40785E-02
TTD1	5.95316E-03	2.94815E-03	2.019	0.0435	8.14985E+00	CHEM	-1.92572E-02	3.49712E-02	-0.551	0.5819	6.14352E-02
MTTD1	1.54626E-01	7.62799E-02	2.027	0.0427	1.62623E-02	EAOSCI	-3.43296E-02	3.68522E-02	-0.932	0.3516	4.34951E-02
PDOCP	-1.17942E-01	1.57848E-02	-7.472	0.0000	3.03046E-01	PSYCH	-9.29315E-02	3.10981E-02	-2.988	0.0028	9.69282E-02
MPDOCP	-5.03648E-02	3.60933E-02	-1.395	0.1629	4.33660E-02	ECON	3.88851E-02	4.11003E-02	0.946	0.3441	3.23955E-02
FSWI	-8.11831E-03	1.30831E-02	-0.621	0.5349	3.71193E-01	POLYSCI	-2.81965E-02	4.23926E-02	-0.665	0.5060	2.99432E-02
MFSWI	-3.02027E-02	1.42900E-02	-2.114	0.0346	3.36345E-01	SAD	-4.61788E-02	3.44751E-02	-1.339	0.1804	6.06608E-02
BAINT	-1.69189E-02	3.59509E-02	-0.471	0.6379	7.93753E-02	OSSCI	-2.76840E-02	4.65839E-02	-0.594	0.5523	2.19411E-02
MBAINT	-1.97650E-03	9.34916E-02	-0.021	0.9831	9.03459E-03	WAVE97	-2.08564E-01	4.23580E-02	-4.924	0.0000	7.36964E-02
AGEPHD	-1.75809E-03	2.61724E-03	-0.672	0.5018	3.08841E+01	WAVE95	-2.17391E-01	4.16041E-02	-5.225	0.0000	8.01497E-02
NATUPHD	-2.41283E-02	3.56705E-02	-0.676	0.4988	3.05885E-02	WAVE93	-2.00051E-01	4.10607E-02	-4.872	0.0000	9.04750E-02
PERMPHD	-2.46999E-02	3.91564E-02	-0.631	0.5282	4.31079E-02	WAVE91	-1.14485E-01	3.39874E-02	-3.368	0.0008	7.69231E-02
TEMPPHD	1.06949E-01	3.80139E-02	2.813	0.0049	5.89830E-02	WAVE89	-1.07887E-01	2.40920E-02	-4.478	0.0000	1.51910E-01
MCITPHD	-9.05547E-02	5.85700E-02	-1.546	0.1221	1.72948E-02	WAVE87	-1.28310E-01	2.33540E-02	-5.494	0.0000	1.55008E-01
HISPAN	4.79953E-02	3.54372E-02	1.354	0.1756	2.98141E-02	WAVE85	-9.22274E-02	2.44976E-02	-3.765	0.0002	1.31389E-01
BLACK	-3.36409E-02	2.88925E-02	-1.164	0.2443	4.65927E-02	WAVE83	-3.23930E-02	2.71874E-02	-1.191	0.2335	1.29582E-01

NOTES: Dependent variable: RANK1; 7748 observations; 6 iterations; log likelihood function = -7012.121; restricted log likelihood = -7384.218; Chi-squared = 744.1943; d.f. = 104; significance = .0000000.



TABLE C-52. Maximum likelihood estimates for rank, logit model I-6: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-2.52084E-01	4.33915E-02	-5.810	0.0000		WAVE91	2.83118E-02	1.87310E-02	1.511	0.1307	7.69231E-02
FEMALE	2.13605E-02	1.29070E-02	1.655	0.0979	3.13758E-01	WAVE89	3.56800E-02	1.37102E-02	2.602	0.0093	1.51910E-01
FMARRIED	2.08002E-02	1.58746E-02	1.310	0.1901	1.83402E-01	WAVE87	3.56269E-02	1.34084E-02	2.657	0.0079	1.55008E-01
FDEP6	-1.74219E-02	1.52271E-02	-1.144	0.2526	4.14300E-02	WAVE85	3.50654E-02	1.40801E-02	2.490	0.0128	1.31389E-01
FDEP618	2.03808E-02	7.36781E-03	2.766	0.0057	1.52039E-01	WAVE83	-6.94635E-03	1.65109E-02	-0.421	0.6740	1.29582E-01
YRPHD15	-1.31022E-02	6.27908E-03	-2.087	0.0369	4.95870E-01	Constant	-2.73083E-02	8.43117E-02	-0.324	0.7460	
TA	2.58098E-02	1.73770E-02	1.485	0.1375	5.49819E-02	FEMALE	4.77047E-02	2.47063E-02	1.931	0.0535	3.13758E-01
RA	2.49042E-03	1.71047E-02	0.146	0.8842	7.02117E-02	FMARRIED	3.11908E-02	3.09630E-02	1.007	0.3138	1.83402E-01
FELLOW	1.20861E-02	2.78709E-02	0.434	0.6645	1.38100E-02	FDEP6	5.29824E-03	3.04380E-02	0.174	0.8618	4.14300E-02
TRAIN	1.55687E-02	1.70345E-02	0.914	0.3607	5.48529E-02	FDEP618	7.95023E-03	1.57273E-02	0.506	0.6132	1.52039E-01
MPSOURC	2.36174E-02	1.84768E-02	1.278	0.2012	7.37093E-01	YRPHD15	-5.54402E-02	1.18816E-02	-4.666	0.0000	4.95870E-01
TTD1	-7.73875E-04	1.49069E-03	-0.519	0.6037	8.14985E+00	TA	4.79260E-03	3.39006E-02	0.141	0.8876	5.49819E-02
MTTD1	-1.47922E-02	3.73136E-02	-0.396	0.6918	1.62623E-02	RA	-1.08695E-02	3.21096E-02	-0.339	0.7350	7.02117E-02
PDOCP	2.71457E-02	8.13619E-03	3.336	0.0008	3.03046E-01	FELLOW	-2.80470E-02	5.55573E-02	-0.505	0.6137	1.38100E-02
MPDOCP	7.58935E-03	1.81084E-02	0.419	0.6751	4.33660E-02	TRAIN	1.96895E-02	3.46404E-02	0.568	0.5698	5.48529E-02
FSWI	9.52452E-03	6.81626E-03	1.397	0.1623	3.71193E-01	MPSOURC	-1.11268E-02	3.57678E-02	-0.311	0.7557	7.37093E-01
MFSWI	1.56044E-02	7.26055E-03	2.149	0.0316	3.36345E-01	TTD1	-5.26726E-03	2.97213E-03	-1.772	0.0764	8.14985E+00
BAINT	-1.53362E-02	1.81449E-02	-0.845	0.3980	7.93753E-02	MTTD1	-1.35535E-01	7.74814E-02	-1.749	0.0802	1.62623E-02
MBAINT	1.49974E-02	4.53663E-02	0.331	0.7410	9.03459E-03	PDOCP	1.08808E-01	1.59891E-02	6.805	0.0000	3.03046E-01
AGEPHD	2.23994E-03	1.32536E-03	1.690	0.0910	3.08841E+01	MPDOCP	4.06627E-02	3.61348E-02	1.125	0.2605	4.33660E-02
NATUPHD	-1.95938E-02	2.04749E-02	-0.957	0.3386	3.05885E-02	FSWI	4.24201E-03	1.30299E-02	0.326	0.7448	3.71193E-01
PERMPHD	2.10707E-02	1.88972E-02	1.115	0.2648	4.31079E-02	MFSWI	1.85429E-02	1.41872E-02	1.307	0.1912	3.36345E-01
TEMPPHD	9.33258E-03	1.91651E-02	0.487	0.6263	5.89830E-02	BAINT	1.94328E-02	3.62938E-02	0.535	0.5924	7.93753E-02
MCITPHD	2.47168E-02	2.68908E-02	0.919	0.3580	1.72948E-02	MBAINT	-2.29284E-02	9.64441E-02	-0.238	0.8121	9.03459E-03
HISPAN	-5.57035E-03	1.94753E-02	-0.286	0.7749	2.98141E-02	AGEPHD	-1.37961E-03	2.63131E-03	-0.524	0.6001	3.08841E+01
BLACK	1.73058E-03	1.48255E-02	0.117	0.9071	4.65927E-02	NATUPHD	4.40464E-02	3.50950E-02	1.255	0.2095	3.05885E-02
ASIAN	1.39999E-02	1.35569E-02	1.033	0.3018	7.56324E-02	PERMPHD	3.27814E-03	3.87534E-02	0.085	0.9326	4.31079E-02
NATAMER	4.63946E-02	4.63249E-02	1.002	0.3166	3.48477E-03	TEMPPHD	-1.33602E-01	3.86714E-02	-3.455	0.0006	5.89830E-02
MARRIED	-1.33356E-02	1.19350E-02	-1.117	0.2638	7.55421E-01	MCITPHD	7.69660E-02	5.73118E-02	1.343	0.1793	1.72948E-02
MMARRIED	-1.48460E-03	1.83259E-02	-0.081	0.9354	4.33660E-02	HISPAN	-3.82575E-02	3.57691E-02	-1.070	0.2848	2.98141E-02
DEP6	-4.67898E-03	7.61860E-03	-0.614	0.5391	1.92695E-01	BLACK	3.36777E-02	2.86774E-02	1.174	0.2402	4.65927E-02
DEP618	-8.01913E-03	4.80654E-03	-1.668	0.0952	7.72457E-01	ASIAN	-3.05817E-02	2.78442E-02	-1.098	0.2721	7.56324E-02
MDEP	-1.11293E-02	1.15828E-02	-0.961	0.3366	3.84874E-01	NATAMER	1.18201E-01	1.01742E-01	1.162	0.2453	3.48477E-03
WATEACH	-1.42475E-02	7.97995E-03	-1.785	0.0742	5.33299E-01	MARRIED	-5.46047E-02	2.18216E-02	-2.502	0.0123	7.55421E-01
WAOETH	5.92038E-02	9.06888E-03	6.528	0.0000	1.45070E-01	MMARRIED	-2.80479E-02	3.35382E-02	-0.836	0.4030	4.33660E-02
EMPPRI	3.45006E-02	7.19555E-03	4.795	0.0000	2.52839E-01	DEP6	2.51466E-02	1.39335E-02	1.805	0.0711	1.92695E-01
MEMPPRI	-1.75322E-02	2.90707E-02	-0.603	0.5464	1.23258E-01	DEP618	-2.87577E-03	8.52813E-03	-0.337	0.7360	7.72457E-01
EMPRES	2.60203E-03	8.24280E-03	0.316	0.7523	2.87171E-01	MDEP	-1.63725E-02	2.22910E-02	-0.734	0.4627	3.84874E-01
EMPDOC	-4.44483E-02	1.42641E-02	-3.116	0.0018	9.96386E-02	WATEACH	9.47377E-02	1.49758E-02	6.326	0.0000	5.33299E-01
MEMPCARN	1.08109E-01	2.79581E-02	3.867	0.0001	2.16185E-01	WAOETH	-2.57077E-02	2.01531E-02	-1.276	0.2021	1.45070E-01
BIO	1.33234E-02	1.55157E-02	0.859	0.3905	2.98012E-01	EMPPRI	2.95802E-02	1.41220E-02	2.095	0.0362	2.52839E-01
HEALTH	-3.81548E-02	1.93503E-02	-1.972	0.0486	6.47909E-02	MEMPPRI	1.57050E-02	7.23711E-02	0.217	0.8282	1.23258E-01
ENG	-6.84327E-02	2.40352E-02	-2.847	0.0044	5.54982E-02	EMPRES	-4.02196E-03	1.53322E-02	-0.262	0.7931	2.87171E-01
MATHCOM	-1.76051E-02	1.75091E-02	-1.005	0.3147	1.20547E-01	EMPDOC	9.69875E-02	2.10147E-02	4.615	0.0000	9.96386E-02
PHYSOTH	3.05724E-02	1.83382E-02	1.667	0.0955	5.40785E-02	MEMPCARN	7.89964E-03	7.14509E-02	0.111	0.9120	2.16185E-01
CHEM	5.20205E-03	1.89947E-02	0.274	0.7842	6.14352E-02	BIO	8.86963E-02	2.89768E-02	3.061	0.0022	2.98012E-01
EAOSCI	-9.30470E-03	2.15767E-02	-0.431	0.6663	4.34951E-02	HEALTH	2.10199E-02	3.50687E-02	0.599	0.5489	6.47909E-02
PSYCH	8.34885E-03	1.70009E-02	0.491	0.6234	9.69282E-02	ENG	-7.21819E-03	3.69890E-02	-0.195	0.8453	5.54982E-02
ECON	-5.01909E-02	2.65754E-02	-1.889	0.0589	3.23955E-02	MATHCOM	6.17548E-02	3.10655E-02	1.988	0.0468	1.20547E-01
POLYSCI	-3.82156E-02	2.50520E-02	-1.525	0.1271	2.99432E-02	PHYSOTH	5.66545E-02	3.63451E-02	1.559	0.1190	5.40785E-02
SAD	-4.91329E-02	2.08308E-02	-2.359	0.0183	6.06608E-02	CHEM	-2.58124E-02	3.65509E-02	-0.706	0.4801	6.14352E-02
OSSCI	-2.69252E-02	2.83516E-02	-0.950	0.3423	2.19411E-02	EAOSCI	1.89735E-02	3.80762E-02	0.498	0.6183	4.34951E-02
WAVE97	-1.99699E-02	2.42468E-02	-0.824	0.4102	7.36964E-02	PSYCH	4.83988E-02	3.22484E-02	1.501	0.1334	9.69282E-02
WAVE95	4.95237E-02	2.15652E-02	2.296	0.0216	8.01497E-02	ECON	-2.63450E-02	4.28370E-02	-0.615	0.5386	3.23955E-02
WAVE93	-4.83547E-02	3.42016E-02	-1.414	0.1574	9.04750E-02	POLYSCI	2.32715E-02	4.35529E-02	0.534	0.5931	2.99432E-02

TABLE C-52. Maximum likelihood estimates for rank, logit model I-6: 14 or 15 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
SAD	6.04993E-02	3.54460E-02	1.707	0.0879	6.06608E-02	BLACK	-3.54083E-02	2.91674E-02	-1.214	0.2248	4.65927E-02
OSSCI	2.72151E-02	4.77233E-02	0.570	0.5685	2.19411E-02	ASIAN	1.65818E-02	2.80723E-02	0.591	0.5547	7.56324E-02
WAVE97	1.56757E-01	5.00110E-02	3.134	0.0017	7.36964E-02	NATAMER	-1.64596E-01	1.08056E-01	-1.523	0.1277	3.48477E-03
WAVE95	1.79269E-01	4.11604E-02	4.355	0.0000	8.01497E-02	MARRIED	6.79403E-02	2.21546E-02	3.067	0.0022	7.55421E-01
WAVE93	1.51299E-01	8.02468E-02	1.885	0.0594	9.04750E-02	MMARRIED	2.95325E-02	3.34555E-02	0.883	0.3774	4.33660E-02
WAVE91	9.17947E-02	3.41267E-02	2.690	0.0071	7.69231E-02	DEP6	-2.04676E-02	1.42718E-02	-1.434	0.1515	1.92695E-01
WAVE89	8.17230E-02	2.44941E-02	3.336	0.0008	1.51910E-01	DEP618	1.08949E-02	8.64016E-03	1.261	0.2073	7.72457E-01
WAVE87	9.95182E-02	2.37198E-02	4.196	0.0000	1.55008E-01	MDEP	2.75017E-02	2.26358E-02	1.215	0.2244	3.84874E-01
WAVE85	6.13276E-02	2.49525E-02	2.458	0.0140	1.31389E-01	WATEACH	-8.04902E-02	1.52306E-02	-5.285	0.0000	5.33299E-01
WAVE83	3.74434E-02	2.78081E-02	1.346	0.1781	1.29582E-01	WAOOTH	-3.34961E-02	2.02277E-02	-1.656	0.0977	1.45070E-01
	Marginal effects: full-professor rank										
Constant	2.79393E-01	8.48825E-02	3.292	0.0010		EMP PRI	-6.40808E-02	1.43952E-02	-4.452	0.0000	2.52839E-01
FEMALE	-6.90652E-02	2.52433E-02	-2.736	0.0062	3.13758E-01	MEM P PRI	1.82726E-03	7.43485E-02	0.025	0.9804	1.23258E-01
FMARRIED	-5.19909E-02	3.15612E-02	-1.647	0.0995	1.83402E-01	EMPRES	1.41993E-03	1.53989E-02	0.092	0.9265	2.87171E-01
FDEP6	1.21236E-02	3.20098E-02	0.379	0.7049	4.14300E-02	EMPDOC	-5.25392E-02	2.14274E-02	-2.452	0.0142	9.96386E-02
FDEP618	-2.83311E-02	1.62422E-02	-1.744	0.0811	1.52039E-01	MEMPCARN	-1.16009E-01	7.35110E-02	-1.578	0.1145	2.16185E-01
YRPHD15	6.85424E-02	1.20412E-02	5.692	0.0000	4.95870E-01	BIO	-1.02020E-01	2.84397E-02	-3.587	0.0003	2.98012E-01
TA	-3.06024E-02	3.52356E-02	-0.869	0.3851	5.49819E-02	HEALTH	1.71349E-02	3.44551E-02	0.497	0.6190	6.47909E-02
RA	8.37904E-03	3.30584E-02	0.253	0.7999	7.02117E-02	ENG	7.56508E-02	3.58699E-02	2.109	0.0349	5.54982E-02
FELLOW	1.59609E-02	5.80763E-02	0.275	0.7834	1.38100E-02	MATHCOM	-4.41496E-02	3.04812E-02	-1.448	0.1475	1.20547E-01
TRAIN	-3.52582E-02	3.62813E-02	-0.972	0.3311	5.48529E-02	PHYSOTH	-8.72270E-02	3.61496E-02	-2.413	0.0158	5.40785E-02
MPSOURC	-1.24906E-02	3.67410E-02	-0.340	0.7339	7.37093E-01	CHEM	2.06103E-02	3.60204E-02	0.572	0.5672	6.14352E-02
TTD1	6.04114E-03	2.97141E-03	2.033	0.0420	8.14985E+00	EAOSCI	-9.66880E-03	3.74075E-02	-0.258	0.7960	4.34951E-02
MTT D1	1.50327E-01	7.69577E-02	1.953	0.0508	1.62623E-02	PSYCH	-5.67477E-02	3.18070E-02	-1.784	0.0744	9.69282E-02
PD OCP	-1.35954E-01	1.63116E-02	-8.335	0.0000	3.03046E-01	ECON	7.65359E-02	4.16826E-02	1.836	0.0663	3.23955E-02
MPDOCP	-4.82521E-02	3.64847E-02	-1.323	0.1860	4.33660E-02	POLYSCI	1.49442E-02	4.30801E-02	0.347	0.7287	2.99432E-02
FSWI	-1.37665E-02	1.31974E-02	-1.043	0.2969	3.71193E-01	SAD	-1.13664E-02	3.50714E-02	-0.324	0.7459	6.06608E-02
MFSWI	-3.41473E-02	1.44675E-02	-2.360	0.0183	3.36345E-01	OSSCI	-2.89969E-04	4.71385E-02	-0.006	0.9951	2.19411E-02
BAINT	-4.09659E-03	3.64372E-02	-0.112	0.9105	7.93753E-02	WAVE97	-1.36787E-01	5.09592E-02	-2.684	0.0073	7.36964E-02
MB AINT	7.93101E-03	9.47247E-02	0.084	0.9333	9.03459E-03	WAVE95	-2.28793E-01	4.21036E-02	-5.434	0.0000	8.01497E-02
AGEPHD	-8.60327E-04	2.63881E-03	-0.326	0.7444	3.08841E+01	WAVE93	-1.02944E-01	8.23499E-02	-1.250	0.2113	9.04750E-02
NATUPHD	-2.44526E-02	3.59596E-02	-0.680	0.4965	3.05885E-02	WAVE91	-1.20107E-01	3.42823E-02	-3.503	0.0005	7.69231E-02
PERMPHD	-2.43489E-02	3.94472E-02	-0.617	0.5371	4.31079E-02	WAVE89	-1.17403E-01	2.43076E-02	-4.830	0.0000	1.51910E-01
TEM P PHD	1.24270E-01	3.85952E-02	3.220	0.0013	5.89830E-02	WAVE87	-1.35145E-01	2.35402E-02	-5.741	0.0000	1.55008E-01
MCITPHD	-1.01683E-01	5.90797E-02	-1.721	0.0852	1.72948E-02	WAVE85	-9.63930E-02	2.46869E-02	-3.905	0.0001	1.31389E-01
HISPAN	4.38279E-02	3.57557E-02	1.226	0.2203	2.98141E-02	WAVE83	-3.04971E-02	2.73778E-02	-1.114	0.2653	1.29582E-01

NOTES: Dependent variable: RANK1; 7748 observations; 7 iterations; log likelihood function = -6895.245; restricted log likelihood = -7384.218; Chi-squared = 977.9465; d.f. = 118; significance = .0000000.

TABLE C-53. Maximum likelihood estimates for rank, logit model 1: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks											
Constant	-1.89797E-01	5.56025E-02	-3.413	0.0006		RA	3.59021E-03	6.35110E-02	0.057	0.9549	1.02556E-02
FEMALE	8.92416E-02	7.96510E-03	11.204	0.0000	2.49196E-01	FELLOW	-3.74775E-02	1.25456E-01	-0.299	0.7651	1.83683E-03
YRPHD21	-8.23999E-03	7.21619E-03	-1.142	0.2535	4.93342E-01	TRAIN	6.66021E-02	6.24815E-02	1.066	0.2864	9.49028E-03
TA	1.93907E-02	3.76535E-02	0.515	0.6066	1.05618E-02	MPSOURC	-4.33795E-02	4.93541E-02	-0.879	0.3794	9.55916E-01
RA	-5.55551E-02	4.29207E-02	-1.294	0.1955	1.02556E-02	TTD1	-1.50506E-03	2.61359E-03	-0.576	0.5647	7.90295E+00
FELLOW	2.45875E-02	6.60695E-02	0.372	0.7098	1.83683E-03	MTTD1	-6.32003E-02	7.45722E-02	-0.848	0.3967	1.45416E-02
TRAIN	-8.85379E-02	4.90336E-02	-1.806	0.0710	9.49028E-03	PDOCP	-1.06574E-02	1.36727E-02	-0.779	0.4357	2.63738E-01
MPSOURC	-2.78332E-02	3.08947E-02	-0.901	0.3676	9.55916E-01	MPDOCP	-1.01749E-02	3.13487E-02	-0.325	0.7455	4.07164E-02
TTD1	1.22952E-03	1.77345E-03	0.693	0.4881	7.90295E+00	FSWI	-3.11082E-03	1.14803E-02	-0.271	0.7864	3.75478E-01
MTTD1	4.83246E-02	4.19617E-02	1.152	0.2495	1.45416E-02	MFSWI	-1.31313E-03	1.22654E-02	-0.107	0.9147	3.19302E-01
PDOCP	2.42625E-02	8.76357E-03	2.769	0.0056	2.63738E-01	BAINT	-8.37284E-02	3.13643E-02	-2.670	0.0076	6.96464E-02
MPDOCP	2.16732E-02	1.92839E-02	1.124	0.2611	4.07164E-02	MBAINT	7.06302E-03	9.34274E-02	0.076	0.9397	8.26573E-03
FSWI	5.08119E-03	7.80135E-03	0.651	0.5148	3.75478E-01	AGEPHD	1.67787E-03	2.31282E-03	0.725	0.4682	3.06345E+01
MFSWI	-1.82169E-03	8.27798E-03	-0.220	0.8258	3.19302E-01	NATUPHD	3.65722E-02	3.47045E-02	1.054	0.2920	2.11235E-02
BAINT	-8.81515E-03	2.06061E-02	-0.428	0.6688	6.96464E-02	PERMPHD	7.73298E-02	3.11591E-02	2.482	0.0131	4.36247E-02
MBAINT	3.75413E-02	4.97444E-02	0.755	0.4504	8.26573E-03	TEMPPHD	6.46213E-02	3.37741E-02	1.913	0.0557	5.69417E-02
AGEPHD	5.62970E-04	1.59442E-03	0.353	0.7240	3.06345E+01	MCITPHD	4.25209E-02	5.07775E-02	0.837	0.4024	1.54600E-02
NATUPHD	-1.36378E-02	2.41639E-02	-0.564	0.5725	2.11235E-02	HISPAN	-3.38415E-02	3.77456E-02	-0.897	0.3699	2.09705E-02
PERMPHD	-2.18819E-02	2.25291E-02	-0.971	0.3314	4.36247E-02	BLACK	8.24550E-03	2.64197E-02	0.312	0.7550	3.75019E-02
TEMPPHD	1.83814E-02	2.12802E-02	0.864	0.3877	5.69417E-02	ASIAN	-2.14079E-02	2.65482E-02	-0.806	0.4200	7.08710E-02
MCITPHD	1.78047E-02	2.94956E-02	0.604	0.5461	1.54600E-02	NATAMER	2.77901E-02	6.66230E-02	0.417	0.6766	5.81662E-03
HISPAN	-2.24514E-02	2.60351E-02	-0.862	0.3885	2.09705E-02	MARRIED	-6.34869E-02	1.37935E-02	-4.603	0.0000	7.85550E-01
BLACK	-2.86090E-02	1.94442E-02	-1.471	0.1412	3.75019E-02	MMARRIED	-2.45732E-03	3.33278E-02	-0.074	0.9412	2.96954E-02
ASIAN	1.27079E-03	1.69239E-02	0.075	0.9401	7.08710E-02	DEP6	-1.61548E-02	1.91676E-02	-0.843	0.3993	5.80132E-02
NATAMER	5.01069E-02	3.76386E-02	1.331	0.1831	5.81662E-03	DEP618	-1.15999E-02	7.81066E-03	-1.485	0.1375	5.96663E-01
MARRIED	2.69548E-03	9.45410E-03	0.285	0.7756	7.85550E-01	MDEP	-3.23295E-02	2.00608E-02	-1.612	0.1071	3.60478E-01
MMARRIED	-1.91762E-02	2.73621E-02	-0.701	0.4834	2.96954E-02	BIO	6.49282E-02	2.63916E-02	2.460	0.0139	3.07210E-01
DEP6	9.95443E-03	1.20127E-02	0.829	0.4073	5.80132E-02	HEALTH	-2.27207E-02	3.67489E-02	-0.618	0.5364	4.13286E-02
DEP618	-2.96036E-04	5.02628E-03	-0.059	0.9530	5.96663E-01	ENG	-2.75547E-02	3.34386E-02	-0.824	0.4099	6.49013E-02
MDEP	3.00820E-05	1.37939E-02	-0.002	0.9983	3.60478E-01	MATHCOM	4.99048E-02	2.85858E-02	1.746	0.0808	1.10975E-01
BIO	-5.15604E-04	1.84065E-02	-0.028	0.9777	3.07210E-01	PHYSOTH	2.17982E-02	3.24954E-02	0.671	0.5023	6.24522E-02
HEALTH	-9.96321E-03	2.45275E-02	-0.406	0.6846	4.13286E-02	CHEM	3.00544E-02	3.19787E-02	0.940	0.3473	7.02587E-02
ENG	-1.22506E-02	2.28397E-02	-0.536	0.5917	6.49013E-02	EAOSCI	9.93979E-03	3.75096E-02	0.265	0.7910	3.68896E-02
MATHCOM	-8.53256E-03	2.04681E-02	-0.417	0.6768	1.10975E-01	PSYCH	2.21012E-02	2.92759E-02	0.755	0.4503	1.03322E-01
PHYSOTH	5.99946E-02	2.03772E-02	2.944	0.0032	6.24522E-02	ECON	-1.13010E-02	3.75714E-02	-0.301	0.7636	3.78081E-02
CHEM	4.67819E-02	2.04502E-02	2.288	0.0222	7.02587E-02	POLYSCI	2.23128E-02	3.91283E-02	0.570	0.5685	3.01546E-02
EAOSCI	2.32466E-02	2.48997E-02	0.934	0.3505	3.68896E-02	SAD	5.77990E-03	3.25679E-02	0.177	0.8591	5.87785E-02
PSYCH	-1.30103E-03	2.00462E-02	-0.065	0.9483	1.03322E-01	OSSCI	1.85868E-02	4.27555E-02	0.435	0.6638	2.12766E-02
ECON	-7.29297E-02	3.07105E-02	-2.375	0.0176	3.78081E-02	WAVE97	8.37629E-02	3.35169E-02	2.499	0.0125	9.21476E-02
POLYSCI	-4.08656E-02	2.89516E-02	-1.412	0.1581	3.01546E-02	WAVE95	6.10004E-02	2.82778E-02	2.157	0.0310	1.21690E-01
SAD	-5.81786E-02	2.39994E-02	-2.424	0.0153	5.87785E-02	WAVE93	6.26653E-02	2.76967E-02	2.263	0.0237	1.40364E-01
OSSCI	-2.66195E-02	3.08018E-02	-0.864	0.3875	2.12766E-02	WAVE91	6.95635E-02	2.83451E-02	2.454	0.0141	1.04699E-01
WAVE97	5.54304E-02	2.20003E-02	2.520	0.0118	9.21476E-02	WAVE89	7.81818E-02	2.52114E-02	3.101	0.0019	1.34701E-01
WAVE95	6.38683E-02	1.85742E-02	3.439	0.0006	1.21690E-01	WAVE87	4.10664E-02	2.55128E-02	1.610	0.1075	1.20465E-01
WAVE93	5.62892E-02	1.84238E-02	3.055	0.0022	1.40364E-01	WAVE85	1.34786E-02	2.68126E-02	0.503	0.6152	1.16026E-01
WAVE91	1.94133E-02	1.98366E-02	0.979	0.3277	1.04699E-01	WAVE83	1.79504E-02	2.91216E-02	0.616	0.5376	9.42905E-02
WAVE89	-4.66736E-04	1.76023E-02	-0.027	0.9788	1.34701E-01	Marginal effects: full-professor rank					
WAVE87	-1.02249E-02	1.79219E-02	-0.571	0.5683	1.20465E-01	Constant	3.54351E-01	9.49938E-02	3.730	0.0002	
WAVE85	1.87592E-02	1.75532E-02	1.069	0.2852	1.16026E-01	FEMALE	-1.40854E-01	1.45142E-02	-9.705	0.0000	2.49196E-01
WAVE83	-5.30107E-02	2.18252E-02	-2.429	0.0151	9.42905E-02	YRPHD21	2.49686E-02	1.20024E-02	2.080	0.0375	4.93342E-01
Marginal effects: associate-professor rank											
Constant	-1.64555E-01	8.33297E-02	-1.975	0.0483		TA	-4.96074E-03	7.37947E-02	-0.067	0.9464	1.05618E-02
FEMALE	5.16129E-02	1.28448E-02	4.018	0.0001	2.49196E-01	RA	5.19649E-02	7.44191E-02	0.698	0.4850	1.02556E-02
YRPHD21	-1.67286E-02	1.06406E-02	-1.572	0.1159	4.93342E-01	FELLOW	1.28900E-02	1.41190E-01	0.091	0.9273	1.83683E-03
TA	-1.44300E-02	6.41721E-02	-0.225	0.8221	1.05618E-02	TRAIN	2.19358E-02	7.66927E-02	0.286	0.7749	9.49028E-03
						MPSOURC	7.12127E-02	5.69781E-02	1.250	0.2114	9.55916E-01
						TTD1	2.75539E-04	2.97759E-03	0.093	0.9263	7.90295E+00

TABLE C-53. Maximum likelihood estimates for rank, logit model 1: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
MTTD1	1.48757E-02	8.10168E-02	0.184	0.8543	1.45416E-02	BIO	-6.44126E-02	2.94316E-02	-2.189	0.0286	3.07210E-01
PDOCP	-1.36051E-02	1.53010E-02	-0.889	0.3739	2.63738E-01	HEALTH	3.26839E-02	4.05709E-02	0.806	0.4205	4.13286E-02
MPDOCP	-1.14983E-02	3.49429E-02	-0.329	0.7421	4.07164E-02	ENG	3.98053E-02	3.67543E-02	1.083	0.2788	6.49013E-02
FSWI	-1.97037E-03	1.29701E-02	-0.152	0.8793	3.75478E-01	MATHCOM	-4.13722E-02	3.20941E-02	-1.289	0.1974	1.10975E-01
MFSWI	3.13482E-03	1.38592E-02	0.226	0.8211	3.19302E-01	PHYSOTH	-8.17928E-02	3.55726E-02	-2.299	0.0215	6.24522E-02
BAINT	9.25435E-02	3.51347E-02	2.634	0.0084	6.96464E-02	CHEM	-7.68363E-02	3.52479E-02	-2.180	0.0293	7.02587E-02
MBAINT	-4.46043E-02	9.97627E-02	-0.447	0.6548	8.26573E-03	EAOSCI	-3.31864E-02	4.12348E-02	-0.805	0.4209	3.68896E-02
AGEPHD	-2.24085E-03	2.64415E-03	-0.847	0.3967	3.06345E+01	PSYCH	-2.08002E-02	3.25958E-02	-0.638	0.5234	1.03322E-01
NATUPHD	-2.29344E-02	4.02504E-02	-0.570	0.5688	2.11235E-02	ECON	8.42307E-02	4.33319E-02	1.944	0.0519	3.78081E-02
PERMPHD	-5.54479E-02	3.61239E-02	-1.535	0.1248	4.36247E-02	POLYSCI	1.85527E-02	4.45755E-02	0.416	0.6773	3.01546E-02
TEMPPHD	-8.30027E-02	3.78758E-02	-2.191	0.0284	5.69417E-02	SAD	5.23987E-02	3.69741E-02	1.417	0.1564	5.87785E-02
MCITPHD	-6.03256E-02	5.63792E-02	-1.070	0.2846	1.54600E-02	OSSCI	8.03278E-03	4.85834E-02	0.165	0.8687	2.12766E-02
HISPAN	5.62928E-02	4.21810E-02	1.335	0.1820	2.09705E-02	WAVE97	-1.39193E-01	3.74186E-02	-3.720	0.0002	9.21476E-02
BLACK	2.03635E-02	3.09091E-02	0.659	0.5100	3.75019E-02	WAVE95	-1.24869E-01	3.12659E-02	-3.994	0.0001	1.21690E-01
ASIAN	2.01371E-02	2.95813E-02	0.681	0.4960	7.08710E-02	WAVE93	-1.18954E-01	3.06958E-02	-3.875	0.0001	1.40364E-01
NATAMER	-7.78971E-02	7.43336E-02	-1.048	0.2947	5.81662E-03	WAVE91	-8.89767E-02	3.17267E-02	-2.804	0.0050	1.04699E-01
MARRIED	6.07915E-02	1.59246E-02	3.817	0.0001	7.85550E-01	WAVE89	-7.77150E-02	2.81963E-02	-2.756	0.0058	1.34701E-01
MMARRIED	2.16335E-02	3.92520E-02	0.551	0.5815	2.96954E-02	WAVE87	-3.08415E-02	2.84613E-02	-1.084	0.2785	1.20465E-01
DEP6	6.20035E-03	2.10210E-02	0.295	0.7680	5.80132E-02	WAVE85	-3.22379E-02	2.93625E-02	-1.098	0.2722	1.16026E-01
DEP618	1.18959E-02	8.70522E-03	1.367	0.1718	5.96663E-01	WAVE83	3.50602E-02	3.27848E-02	1.069	0.2849	9.42905E-02
MDEP	3.23596E-02	2.25615E-02	1.434	0.1515	3.60478E-01						

NOTES: Dependent variable: RANK1; 6533 observations; 6 iterations; log likelihood function = -5239.458; restricted log likelihood = -5491.449; Chi-squared = 503.9816; d.f. = 98; significance = .0000000.

TABLE C-54. Maximum likelihood estimates for rank, logit model 2: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						WAVE85	2.14405E-02	1.56863E-02	1.367	0.1717	1.16026E-01
Constant	-1.81489E-01	4.97984E-02	-3.644	0.0003		WAVE83	-4.92530E-02	1.95094E-02	-2.525	0.0116	9.42905E-02
FEMALE	8.15747E-02	7.27148E-03	11.218	0.0000	2.49196E-01	Marginal effects: associate-professor rank					
YRPHD21	-5.81066E-03	6.44231E-03	-0.902	0.3671	4.93342E-01	Constant	-1.88058E-01	8.52170E-02	-2.207	0.0273	
TA	2.59951E-02	3.32728E-02	0.781	0.4346	1.05618E-02	FEMALE	5.07404E-02	1.29744E-02	3.911	0.0001	2.49196E-01
RA	-4.95714E-02	3.77865E-02	-1.312	0.1896	1.02556E-02	YRPHD21	-1.98695E-02	1.07134E-02	-1.855	0.0636	4.93342E-01
FELLOW	-3.23148E-03	5.85444E-02	-0.055	0.9560	1.83683E-03	TA	-2.67264E-02	6.49370E-02	-0.412	0.6807	1.05618E-02
TRAIN	-7.24690E-02	4.29666E-02	-1.687	0.0917	9.49028E-03	RA	4.16744E-03	6.40239E-02	0.065	0.9481	1.02556E-02
MPSOURC	-2.60122E-02	2.70892E-02	-0.960	0.3369	9.55916E-01	FELLOW	-2.42687E-02	1.25833E-01	-0.193	0.8471	1.83683E-03
TTD1	1.75274E-03	1.58401E-03	1.107	0.2685	7.90295E+00	TRAIN	5.93496E-02	6.29579E-02	0.943	0.3458	9.49028E-03
MTTD1	4.12605E-02	3.72691E-02	1.107	0.2683	1.45416E-02	MPSOURC	-4.46441E-02	4.98942E-02	-0.895	0.3709	9.55916E-01
PDOCP	1.30800E-02	8.05650E-03	1.624	0.1045	2.63738E-01	TTD1	-1.79988E-03	2.63478E-03	-0.683	0.4945	7.90295E+00
MPDOCP	1.21577E-02	1.74418E-02	0.697	0.4858	4.07164E-02	MTTD1	-6.24961E-02	7.50550E-02	-0.833	0.4050	1.45416E-02
FSWI	1.55214E-03	6.93586E-03	0.224	0.8229	3.75478E-01	PDOCP	4.97193E-03	1.40156E-02	0.355	0.7228	2.63738E-01
MFSWI	-4.52624E-03	7.40426E-03	-0.611	0.5410	3.19302E-01	MPDOCP	-1.82545E-03	3.13886E-02	-0.058	0.9536	4.07164E-02
BAINT	-2.59849E-02	1.87264E-02	-1.388	0.1653	6.96464E-02	FSWI	2.80161E-03	1.15902E-02	0.242	0.8090	3.75478E-01
MBAINT	3.20447E-02	4.45225E-02	0.720	0.4717	8.26573E-03	MFSWI	3.50244E-03	1.23626E-02	0.283	0.7769	3.19302E-01
AGEPHD	9.71938E-04	1.42212E-03	0.683	0.4943	3.06345E+01	BAINT	-8.96348E-02	3.18277E-02	-2.816	0.0049	6.96464E-02
NATUPHD	-5.62831E-03	2.14911E-02	-0.262	0.7934	2.11235E-02	MBAINT	1.54596E-02	9.42582E-02	0.164	0.8697	8.26573E-03
PERMPHD	-2.61802E-02	2.02225E-02	-1.295	0.1955	4.36247E-02	AGEPHD	6.34211E-04	2.33697E-03	0.271	0.7861	3.06345E+01
TEMPPHD	1.30562E-02	1.92595E-02	0.678	0.4978	5.69417E-02	NATUPHD	3.40566E-02	3.49981E-02	0.973	0.3305	2.11235E-02
MCITPHD	1.19300E-02	2.64401E-02	0.451	0.6518	1.54600E-02	PERMPHD	8.17661E-02	3.12170E-02	2.619	0.0088	4.36247E-02
HISPAN	-2.39431E-02	2.29224E-02	-1.045	0.2962	2.09705E-02	TEMPPHD	6.16922E-02	3.41023E-02	1.809	0.0704	5.69417E-02
BLACK	-3.22738E-02	1.73437E-02	-1.861	0.0628	3.75019E-02	MCITPHD	5.10650E-02	5.07950E-02	1.005	0.3147	1.54600E-02
ASIAN	1.01297E-02	1.50877E-02	0.671	0.5020	7.08710E-02	HISPAN	-3.10589E-02	3.80328E-02	-0.817	0.4141	2.09705E-02
NATAMER	5.88131E-02	3.44726E-02	1.706	0.0880	5.81662E-03	BLACK	1.15001E-02	2.66592E-02	0.431	0.6662	3.75019E-02
MARRIED	-2.42977E-03	8.38666E-03	-0.290	0.7720	7.85550E-01	ASIAN	-2.00133E-02	2.67390E-02	-0.748	0.4542	7.08710E-02
MMARRIED	-1.21092E-02	2.44231E-02	-0.496	0.6200	2.96954E-02	NATAMER	1.77622E-02	6.68559E-02	0.266	0.7905	5.81662E-03
DEP6	4.18882E-03	1.05200E-02	0.398	0.6905	5.80132E-02	MARRIED	-6.02872E-02	1.39306E-02	-4.328	0.0000	7.85550E-01
DEP618	-1.09115E-03	4.47806E-03	-0.244	0.8075	5.96663E-01	MMARRIED	-8.75725E-03	3.35166E-02	-0.261	0.7939	2.96954E-02
MDEP	-3.62148E-03	1.22420E-02	-0.296	0.7674	3.60478E-01	DEP6	-1.18419E-02	1.93813E-02	-0.611	0.5412	5.80132E-02
WATEACH	-6.69931E-02	8.10720E-03	-8.263	0.0000	5.11557E-01	DEP618	-1.16456E-02	7.85666E-03	-1.482	0.1383	5.96663E-01
WAOOTH	4.31394E-02	7.97186E-03	5.411	0.0000	1.99908E-01	MDEP	-2.73776E-02	2.01995E-02	-1.355	0.1753	3.60478E-01
EMP PRI	2.09297E-02	7.47136E-03	2.801	0.0051	2.49503E-01	WATEACH	9.48774E-02	1.35497E-02	7.002	0.0000	5.11557E-01
MEM PRI	-2.36440E-03	1.98544E-02	-0.119	0.9052	1.36691E-01	WAOOTH	-7.01963E-03	1.72835E-02	-0.406	0.6846	1.99908E-01
EMPRES	1.12668E-02	8.81840E-03	1.278	0.2014	2.93739E-01	EMP PRI	-5.48070E-03	1.26698E-02	-0.433	0.6653	2.49503E-01
EMPDOC	-1.68853E-02	1.41479E-02	-1.193	0.2327	9.79642E-02	MEM PRI	4.08908E-02	4.78647E-02	0.854	0.3929	1.36691E-01
MEMPCARN	9.73465E-02	1.89022E-02	5.150	0.0000	2.81953E-01	EMPRES	3.12112E-04	1.42921E-02	0.022	0.9826	2.93739E-01
BIO	3.10537E-03	1.64509E-02	0.189	0.8503	3.07210E-01	EMPDOC	4.35921E-02	1.85437E-02	2.351	0.0187	9.79642E-02
HEALTH	-1.29541E-02	2.18138E-02	-0.594	0.5526	4.13286E-02	MEMPCARN	1.76679E-03	4.79152E-02	0.037	0.9706	2.81953E-01
ENG	-5.07077E-03	2.02659E-02	-0.250	0.8024	6.49013E-02	BIO	6.10987E-02	2.67178E-02	2.287	0.0222	3.07210E-01
MATHCOM	9.44470E-03	1.82388E-02	0.518	0.6046	1.10975E-01	HEALTH	-2.72663E-02	3.70917E-02	-0.735	0.4623	4.13286E-02
PHYSOTH	5.67172E-02	1.82487E-02	3.108	0.0019	6.24522E-02	ENG	-4.42299E-02	3.37148E-02	-1.312	0.1896	6.49013E-02
CHEM	5.91222E-02	1.83961E-02	3.214	0.0013	7.02587E-02	MATHCOM	2.47806E-02	2.90217E-02	0.854	0.3932	1.10975E-01
EAOSCI	3.57338E-02	2.20865E-02	1.618	0.1057	3.68896E-02	PHYSOTH	7.89808E-03	3.28478E-02	0.240	0.8100	6.24522E-02
PSYCH	6.80609E-03	1.78773E-02	0.381	0.7034	1.03322E-01	CHEM	5.83981E-03	3.25985E-02	0.179	0.8578	7.02587E-02
ECON	-4.42106E-02	2.72069E-02	-1.625	0.1042	3.78081E-02	EAOSCI	-1.01713E-02	3.77845E-02	-0.269	0.7878	3.68896E-02
POLYSCI	-2.51236E-02	2.59042E-02	-0.970	0.3321	3.01546E-02	PSYCH	6.84882E-03	2.96886E-02	0.231	0.8176	1.03322E-01
SAD	-4.21521E-02	2.13031E-02	-1.979	0.0479	5.87785E-02	ECON	-3.83599E-02	3.78881E-02	-1.012	0.3113	3.78081E-02
OSSCI	-1.20312E-02	2.75595E-02	-0.437	0.6624	2.12766E-02	POLYSCI	-5.02805E-03	3.95518E-02	-0.127	0.8988	3.01546E-02
WAVE97	-3.54224E-02	2.28651E-02	-1.549	0.1213	9.21476E-02	SAD	-1.22621E-02	3.28646E-02	-0.373	0.7091	5.87785E-02
WAVE95	4.51280E-02	1.69895E-02	2.656	0.0079	1.21690E-01	OSSCI	-4.35027E-03	4.31260E-02	-0.101	0.9197	2.12766E-02
WAVE93	-4.30224E-02	2.37196E-02	-1.814	0.0697	1.40364E-01	WAVE97	5.83086E-02	4.26867E-02	1.366	0.1719	9.21476E-02
WAVE91	2.16317E-02	1.76833E-02	1.223	0.2212	1.04699E-01	WAVE95	7.11402E-02	2.85234E-02	2.494	0.0126	1.21690E-01
WAVE89	-9.82373E-04	1.57156E-02	-0.063	0.9502	1.34701E-01	WAVE93	7.30780E-02	5.32481E-02	1.372	0.1699	1.40364E-01
WAVE87	-9.87437E-03	1.60181E-02	-0.616	0.5376	1.20465E-01	WAVE91	6.78245E-02	2.84490E-02	2.384	0.0171	1.04699E-01

TABLE C-54. Maximum likelihood estimates for rank, logit model 2: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE89	7.87437E-02	2.53245E-02	3.109	0.0019	1.34701E-01	MMARRIED	2.08664E-02	3.82081E-02	0.546	0.5850	2.96954E-02
WAVE87	4.11023E-02	2.56025E-02	1.605	0.1084	1.20465E-01	DEP6	7.65305E-03	2.07175E-02	0.369	0.7118	5.80132E-02
WAVE85	8.85978E-03	2.69208E-02	0.329	0.7421	1.16026E-01	DEP618	1.27367E-02	8.55445E-03	1.489	0.1365	5.96663E-01
WAVE83	8.83369E-03	2.92577E-02	0.302	0.7627	9.42905E-02	MDEP	3.09991E-02	2.21195E-02	1.401	0.1611	3.60478E-01
Marginal effects: full-professor rank											
Constant	3.69547E-01	9.42460E-02	3.921	0.0001		WATEACH	-2.78842E-02	1.48675E-02	-1.876	0.0607	5.11557E-01
FEMALE	-1.32315E-01	1.43332E-02	-9.231	0.0000	2.49196E-01	WAOth	-3.61198E-02	1.81974E-02	-1.985	0.0472	1.99908E-01
YRPHD21	2.56801E-02	1.17754E-02	2.181	0.0292	4.93342E-01	EMPPRI	-1.54490E-02	1.38808E-02	-1.113	0.2657	2.49503E-01
TA	7.31246E-04	7.24607E-02	0.010	0.9919	1.05618E-02	MEMPPRI	-3.85264E-02	5.05018E-02	-0.763	0.4455	1.36691E-01
RA	4.54040E-02	7.26221E-02	0.625	0.5318	1.02556E-02	EMPRES	-1.15789E-02	1.56731E-02	-0.739	0.4600	2.93739E-01
FELLOW	2.75001E-02	1.38663E-01	0.198	0.8428	1.83683E-03	EMPDOc	-2.67068E-02	2.14172E-02	-1.247	0.2124	9.79642E-02
TRAIN	1.31193E-02	7.43990E-02	0.176	0.8600	9.49028E-03	MEMPCARN	-9.91132E-02	5.01445E-02	-1.977	0.0481	2.81953E-01
MPSOURC	7.06563E-02	5.57768E-02	1.267	0.2052	9.55916E-01	BIO	-6.42041E-02	2.90610E-02	-2.209	0.0272	3.07210E-01
TTD1	4.71451E-05	2.91786E-03	0.016	0.9871	7.90295E+00	HEALTH	4.02204E-02	3.99372E-02	1.007	0.3139	4.13286E-02
MTTD1	2.12356E-02	8.00463E-02	0.265	0.7908	1.45416E-02	ENG	4.93006E-02	3.61761E-02	1.363	0.1729	6.49013E-02
PDOCP	-1.80520E-02	1.53375E-02	-1.177	0.2392	2.63738E-01	MATHCOM	-3.42253E-02	3.16963E-02	-1.080	0.2802	1.10975E-01
MPDOCP	-1.03322E-02	3.42575E-02	-0.302	0.7630	4.07164E-02	PHYSOTH	-6.46153E-02	3.51897E-02	-1.836	0.0663	6.24522E-02
FSWI	-4.35375E-03	1.27436E-02	-0.342	0.7326	3.75478E-01	CHEM	-6.49620E-02	3.51064E-02	-1.850	0.0643	7.02587E-02
MFSWI	1.02380E-03	1.36197E-02	0.075	0.9401	3.19302E-01	EAOSCI	-2.55625E-02	4.05431E-02	-0.631	0.5284	3.68896E-02
BAINT	1.15620E-01	3.48991E-02	3.313	0.0009	6.96464E-02	PSYCH	-1.36549E-02	3.22128E-02	-0.424	0.6716	1.03322E-01
MBAINT	-4.75042E-02	9.90363E-02	-0.480	0.6315	8.26573E-03	ECON	8.25705E-02	4.23177E-02	1.951	0.0510	3.78081E-02
AGEPHD	-1.60615E-03	2.59316E-03	-0.619	0.5357	3.06345E+01	POLYSCI	3.01516E-02	4.37694E-02	0.689	0.4909	3.01546E-02
NATUPHD	-2.84283E-02	3.94069E-02	-0.721	0.4707	2.11235E-02	SAD	5.44142E-02	3.62422E-02	1.501	0.1333	5.87785E-02
PERMPHD	-5.55859E-02	3.52610E-02	-1.576	0.1149	4.36247E-02	OSSCI	1.63814E-02	4.76215E-02	0.344	0.7309	2.12766E-02
TEMPPHD	-7.47484E-02	3.73883E-02	-1.999	0.0456	5.69417E-02	WAVE97	-2.28862E-02	4.60977E-02	-0.496	0.6196	9.21476E-02
MCITPHD	-6.29950E-02	5.53507E-02	-1.138	0.2551	1.54600E-02	WAVE95	-1.16268E-01	3.09475E-02	-3.757	0.0002	1.21690E-01
HISPAN	5.50020E-02	4.13695E-02	1.330	0.1837	2.09705E-02	WAVE93	-3.00556E-02	5.61622E-02	-0.535	0.5925	1.40364E-01
BLACK	2.07737E-02	3.01398E-02	0.689	0.4907	3.75019E-02	WAVE91	-8.94562E-02	3.10764E-02	-2.879	0.0040	1.04699E-01
ASIAN	9.88357E-03	2.91739E-02	0.339	0.7348	7.08710E-02	WAVE89	-7.77613E-02	2.76310E-02	-2.814	0.0049	1.34701E-01
NATAMER	-7.65752E-02	7.30768E-02	-1.048	0.2947	5.81662E-03	WAVE87	-3.12280E-02	2.78935E-02	-1.120	0.2629	1.20465E-01
MARRIED	6.27170E-02	1.55960E-02	4.021	0.0001	7.85550E-01	WAVE85	-3.03002E-02	2.88604E-02	-1.050	0.2938	1.16026E-01
						WAVE83	4.04193E-02	3.21133E-02	1.259	0.2082	9.42905E-02

NOTES: Dependent variable: RANK1; 6533 observations; 6 iterations; log likelihood function = -5067.764; restricted log likelihood = -5491.449; Chi-squared = 847.3701; d.f. = 112; significance = .000000.

TABLE C-55. Maximum likelihood estimates for rank, logit model 3: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks											
Constant	-1.41554E-01	5.06911E-02	-2.792	0.0052		RA	1.96864E-04	6.62311E-02	0.003	0.9976	9.69177E-03
FEMALE	7.55485E-02	6.42151E-03	11.765	0.0000	2.48808E-01	FELLOW	-4.12702E-02	1.30238E-01	-0.317	0.7513	1.58881E-03
YRPHD21	-7.13284E-03	5.96316E-03	-1.196	0.2316	4.92850E-01	TRAIN	5.11164E-02	6.46897E-02	0.790	0.4294	9.53289E-03
TA	5.47583E-02	3.85514E-02	1.420	0.1555	1.00095E-02	MPSOURC	-5.32704E-02	5.12640E-02	-1.039	0.2987	9.58214E-01
RA	-4.89726E-02	5.35562E-02	-0.914	0.3605	9.69177E-03	TTD1	-1.56667E-03	2.67566E-03	-0.586	0.5582	7.90785E+00
FELLOW	1.61481E-02	7.19425E-02	0.224	0.8224	1.58881E-03	MTTD1	-6.97276E-02	7.67030E-02	-0.909	0.3633	1.47760E-02
TRAIN	-1.90714E-02	4.77348E-02	-0.400	0.6895	9.53289E-03	PDOCP	-6.85351E-03	1.40560E-02	-0.488	0.6258	2.58659E-01
MPSOURC	2.96014E-03	3.46993E-02	0.085	0.9320	9.58214E-01	MPDOCP	-8.54009E-03	3.21626E-02	-0.266	0.7906	3.97204E-02
TTD1	1.05754E-03	1.41218E-03	0.749	0.4539	7.90785E+00	FSWI	-3.21155E-03	1.17890E-02	-0.272	0.7853	3.76708E-01
MTTD1	6.11367E-02	3.35629E-02	1.822	0.0685	1.47760E-02	MFSWI	-3.41140E-03	1.26007E-02	-0.271	0.7866	3.18716E-01
PDOCP	1.23385E-02	7.34466E-03	1.680	0.0930	2.58659E-01	BAINT	-9.33684E-02	3.22316E-02	-2.897	0.0038	7.19733E-02
MPDOCP	1.15535E-02	1.64969E-02	0.700	0.4837	3.97204E-02	MBAINT	1.26735E-02	9.59103E-02	0.132	0.8949	8.57960E-03
FSWI	4.52842E-03	6.46753E-03	0.700	0.4838	3.76708E-01	AGEPHD	1.91823E-03	2.37034E-03	0.809	0.4184	3.06465E+01
MFSWI	5.11559E-03	6.86830E-03	0.745	0.4564	3.18716E-01	NATUPHD	4.09356E-02	3.58642E-02	1.141	0.2537	2.04957E-02
BAINT	1.26090E-02	1.69333E-02	0.745	0.4565	7.19733E-02	PERMPHD	8.14237E-02	3.20015E-02	2.544	0.0109	4.38513E-02
MBAINT	1.14387E-02	3.76620E-02	0.304	0.7613	8.57960E-03	TEMPPHD	7.19113E-02	3.48385E-02	2.064	0.0390	5.73562E-02
AGEPHD	1.22192E-04	1.27488E-03	0.096	0.9236	3.06465E+01	MCITPHD	5.20464E-02	5.21690E-02	0.998	0.3184	1.49349E-02
NATUPHD	-2.80968E-02	2.41455E-02	-1.164	0.2446	2.04957E-02	HISPAN	-3.74387E-02	3.88018E-02	-0.965	0.3346	2.08135E-02
PERMPHD	-2.73031E-02	1.96119E-02	-1.392	0.1639	4.38513E-02	BLACK	8.26580E-03	2.72200E-02	0.304	0.7614	3.68605E-02
TEMPPHD	9.79241E-03	1.85275E-02	0.529	0.5971	5.73562E-02	ASIAN	-2.25206E-02	2.73002E-02	-0.825	0.4094	7.08611E-02
MCITPHD	-1.10591E-03	2.53808E-02	-0.044	0.9652	1.49349E-02	NATAMER	3.12820E-02	6.86438E-02	0.456	0.6486	5.56085E-03
HISPAN	-1.72432E-02	2.40713E-02	-0.716	0.4738	2.08135E-02	MARRIED	-6.58963E-02	1.42237E-02	-4.633	0.0000	7.84557E-01
BLACK	-2.17901E-02	1.85967E-02	-1.172	0.2413	3.68605E-02	MMARRIED	-4.61981E-03	3.40229E-02	-0.136	0.8920	3.06641E-02
ASIAN	2.24187E-03	1.38814E-02	0.162	0.8717	7.08611E-02	DEP6	-1.59999E-02	1.96759E-02	-0.813	0.4161	5.68796E-02
NATAMER	4.15354E-02	3.31207E-02	1.254	0.2098	5.56085E-03	DEP618	-1.22053E-02	8.05183E-03	-1.516	0.1296	5.92151E-01
MARRIED	4.34941E-03	7.74188E-03	0.562	0.5743	7.84557E-01	MDEP	-3.40386E-02	2.05619E-02	-1.655	0.0978	3.71942E-01
MMARRIED	-1.06907E-02	1.99690E-02	-0.535	0.5924	3.06641E-02	BIO	7.00910E-02	2.70235E-02	2.594	0.0095	3.07595E-01
DEP6	5.61956E-03	1.07865E-02	0.521	0.6024	5.68796E-02	HEALTH	-2.36708E-02	3.76453E-02	-0.629	0.5295	4.17858E-02
DEP618	-7.75847E-04	4.57226E-03	-0.170	0.8653	5.92151E-01	ENG	-1.96944E-02	3.42974E-02	-0.574	0.5658	6.40292E-02
MDEP	-2.87979E-04	1.10113E-02	-0.026	0.9791	3.71942E-01	MATHCOM	5.46264E-02	2.92637E-02	1.867	0.0619	1.12647E-01
BIO	-1.12706E-02	1.42978E-02	-0.788	0.4305	3.07595E-01	PHYSSOTH	3.22590E-02	3.33578E-02	0.967	0.3335	5.97394E-02
HEALTH	-1.05558E-02	1.91679E-02	-0.551	0.5818	4.17858E-02	CHEM	4.07869E-02	3.27597E-02	1.245	0.2131	6.86368E-02
ENG	-4.06601E-02	2.04431E-02	-1.989	0.0467	6.40292E-02	EAOSCI	1.77437E-02	3.84661E-02	0.461	0.6446	3.65427E-02
MATHCOM	-2.07821E-02	1.59539E-02	-1.303	0.1927	1.12647E-01	PSYCH	2.81306E-02	3.00195E-02	0.937	0.3487	1.02796E-01
PHYSSOTH	1.85328E-02	1.65033E-02	1.123	0.2614	5.97394E-02	ECON	-1.52100E-02	3.83397E-02	-0.397	0.6916	3.89260E-02
CHEM	1.12711E-02	1.61389E-02	0.698	0.4849	6.86368E-02	POLYSCI	2.20792E-02	4.00796E-02	0.551	0.5817	3.06641E-02
EAOSCI	-9.16283E-03	2.10278E-02	-0.436	0.6630	3.65427E-02	SAD	3.78827E-03	3.33697E-02	0.114	0.9096	5.94217E-02
PSYCH	-2.14436E-02	1.58703E-02	-1.351	0.1766	1.02796E-01	OSSCI	2.17833E-02	4.38236E-02	0.497	0.6191	2.14490E-02
ECON	-5.90856E-02	2.34456E-02	-2.520	0.0117	3.89260E-02	WAVE97	1.01596E-01	3.43912E-02	2.954	0.0031	8.77026E-02
POLYSCI	-4.06557E-02	2.29265E-02	-1.773	0.0762	3.06641E-02	WAVE95	7.77877E-02	2.89409E-02	2.688	0.0072	1.14395E-01
SAD	-5.12506E-02	1.92938E-02	-2.656	0.0079	5.94217E-02	WAVE93	7.71715E-02	2.83202E-02	2.725	0.0064	1.34890E-01
OSSCI	-3.18682E-02	2.48389E-02	-1.283	0.1995	2.14490E-02	WAVE91	7.86519E-02	2.89386E-02	2.718	0.0066	1.05497E-01
WAVE97	-1.04865E-02	1.89826E-02	-0.552	0.5807	8.77026E-02	WAVE89	8.29558E-02	2.57413E-02	3.223	0.0013	1.37750E-01
WAVE95	-9.78454E-03	1.51514E-02	-0.646	0.5184	1.14395E-01	WAVE87	4.43489E-02	2.60451E-02	1.703	0.0886	1.22974E-01
WAVE93	-1.08139E-03	1.44789E-02	-0.075	0.9405	1.34890E-01	WAVE85	1.53837E-02	2.73724E-02	0.562	0.5741	1.20432E-01
WAVE91	-7.86679E-03	1.51211E-02	-0.520	0.6029	1.05497E-01	WAVE83	1.43219E-02	2.96770E-02	0.483	0.6294	9.78710E-02
WAVE89	-1.10774E-02	1.26725E-02	-0.874	0.3820	1.37750E-01	Marginal effects: full-professor rank					
WAVE87	-2.00463E-02	1.30285E-02	-1.539	0.1239	1.22974E-01	Constant	3.23887E-01	9.51797E-02	3.403	0.0007	
WAVE85	1.34431E-02	1.23001E-02	1.093	0.2744	1.20432E-01	FEMALE	-1.31546E-01	1.43078E-02	-9.194	0.0000	2.48808E-01
WAVE83	-3.74520E-02	1.53278E-02	-2.443	0.0145	9.78710E-02	YRPHD21	2.49183E-02	1.18469E-02	2.103	0.0354	4.92850E-01
Marginal effects: associate-professor rank						TA	-2.88878E-02	7.52716E-02	-0.384	0.7011	1.00095E-02
Constant	-1.82333E-01	8.59266E-02	-2.122	0.0338		RA	4.87758E-02	7.94849E-02	0.614	0.5394	9.69177E-03
FEMALE	5.59980E-02	1.32384E-02	4.230	0.0000	2.48808E-01	FELLOW	2.51222E-02	1.45651E-01	0.172	0.8631	1.58881E-03
YRPHD21	-1.77855E-02	1.09262E-02	-1.628	0.1036	4.92850E-01	TRAIN	-3.20449E-02	7.70071E-02	-0.416	0.6773	9.53289E-03
TA	-2.58705E-02	6.65431E-02	-0.389	0.6974	1.00095E-02	MPSOURC	5.03103E-02	5.92341E-02	0.849	0.3957	9.58214E-01
						TTD1	5.09127E-04	2.90470E-03	0.175	0.8609	7.90785E+00

TABLE C-55. Maximum likelihood estimates for rank, logit model 3: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
MTTD1	8.59088E-03	8.06869E-02	0.106	0.9152	1.47760E-02	BIO	-5.88205E-02	2.87548E-02	-2.046	0.0408	3.07595E-01
PDOCP	-5.48504E-03	1.51823E-02	-0.361	0.7179	2.58659E-01	HEALTH	3.42266E-02	3.98465E-02	0.859	0.3904	4.17858E-02
MPDOCP	-3.01338E-03	3.47349E-02	-0.087	0.9309	3.97204E-02	ENG	6.03546E-02	3.68728E-02	1.637	0.1017	6.40292E-02
FSWI	-1.31687E-03	1.28028E-02	-0.103	0.9181	3.76708E-01	MATHCOM	-3.38443E-02	3.13071E-02	-1.081	0.2797	1.12647E-01
MFSWI	-1.70419E-03	1.36845E-02	-0.125	0.9009	3.18716E-01	PHYSOTH	-5.07918E-02	3.52695E-02	-1.440	0.1498	5.97394E-02
BAINT	8.07595E-02	3.46839E-02	2.328	0.0199	7.19733E-02	CHEM	-5.20580E-02	3.47222E-02	-1.499	0.1338	6.86368E-02
MBAINT	-2.41122E-02	9.93468E-02	-0.243	0.8082	8.57960E-03	EAOSCI	-8.58087E-03	4.10124E-02	-0.209	0.8343	3.65427E-02
AGEPHD	-2.04043E-03	2.57845E-03	-0.791	0.4287	3.06465E+01	PSYCH	-6.68694E-03	3.20162E-02	-0.209	0.8346	1.02796E-01
NATUPHD	-1.28388E-02	4.08768E-02	-0.314	0.7535	2.04957E-02	ECON	7.42956E-02	4.16220E-02	1.785	0.0743	3.89260E-02
PERMPHD	-5.41206E-02	3.55857E-02	-1.521	0.1283	4.38513E-02	POLYSCI	1.85765E-02	4.34392E-02	0.428	0.6689	3.06641E-02
TEMPPHD	-8.17037E-02	3.77446E-02	-2.165	0.0304	5.73562E-02	SAD	4.74623E-02	3.61478E-02	1.313	0.1892	5.94217E-02
MCITPHD	-5.09405E-02	5.60785E-02	-0.908	0.3637	1.49349E-02	OSSCI	1.00850E-02	4.75374E-02	0.212	0.8320	2.14490E-02
HISPAN	5.46819E-02	4.25136E-02	1.286	0.1984	2.08135E-02	WAVE97	-9.11099E-02	3.73382E-02	-2.440	0.0147	8.77026E-02
BLACK	1.35243E-02	3.10963E-02	0.435	0.6636	3.68605E-02	WAVE95	-6.80031E-02	3.09746E-02	-2.195	0.0281	1.14395E-01
ASIAN	2.02787E-02	2.92562E-02	0.693	0.4882	7.08611E-02	WAVE93	-7.60901E-02	3.02126E-02	-2.518	0.0118	1.34890E-01
NATAMER	-7.28173E-02	7.45290E-02	-0.977	0.3286	5.56085E-03	WAVE91	-7.07851E-02	3.09482E-02	-2.287	0.0222	1.05497E-01
MARRIED	6.15469E-02	1.56338E-02	3.937	0.0001	7.84557E-01	WAVE89	-7.18784E-02	2.73321E-02	-2.630	0.0085	1.37750E-01
MMARRIED	1.53106E-02	3.73589E-02	0.410	0.6819	3.06641E-02	WAVE87	-2.43026E-02	2.76326E-02	-0.879	0.3791	1.22974E-01
DEP6	1.03803E-02	2.11379E-02	0.491	0.6234	5.68796E-02	WAVE85	-2.88268E-02	2.86056E-02	-1.008	0.3136	1.20432E-01
DEP618	1.29812E-02	8.76989E-03	1.480	0.1388	5.92151E-01	WAVE83	2.31301E-02	3.14766E-02	0.735	0.4624	9.78710E-02
MDEP	3.43266E-02	2.21841E-02	1.547	0.1218	3.71942E-01						

NOTES: Dependent variable: RANK1; 6294 observations; 7 iterations; log likelihood function = -4704.791; restricted log likelihood = -4923.011; Chi-squared = 436.4411; d.f. = 98; significance = .0000000.



TABLE C-56. Maximum likelihood estimates for rank, logit model 4: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.44263E-01	4.80627E-02	-3.002	0.0027		WAVE85	1.48600E-02	1.16709E-02	1.273	0.2029	1.20432E-01
FEMALE	7.21906E-02	6.19201E-03	11.659	0.0000	2.48808E-01	WAVE83	-3.54338E-02	1.45433E-02	-2.436	0.0148	9.78710E-02
YRPHD21	-5.81461E-03	5.63285E-03	-1.032	0.3019	4.92850E-01	Constant	-1.99496E-01	8.72431E-02	-2.287	0.0222	
TA	5.56049E-02	3.62598E-02	1.534	0.1251	1.00095E-02	FEMALE	5.39493E-02	1.32696E-02	4.066	0.0000	2.48808E-01
RA	-4.32552E-02	5.01292E-02	-0.863	0.3882	9.69177E-03	YRPHD21	-2.06399E-02	1.09319E-02	-1.888	0.0590	4.92850E-01
FELLOW	2.23121E-03	6.77218E-02	0.033	0.9737	1.58881E-03	TA	-3.67902E-02	6.67646E-02	-0.551	0.5816	1.00095E-02
TRAIN	-1.58142E-02	4.47221E-02	-0.354	0.7236	9.53289E-03	RA	-6.88611E-04	6.62459E-02	-0.010	0.9917	9.69177E-03
MPSOURC	1.52245E-03	3.25224E-02	0.047	0.9627	9.58214E-01	FELLOW	-3.56791E-02	1.29405E-01	-0.276	0.7828	1.58881E-03
TTD1	1.19173E-03	1.33399E-03	0.893	0.3717	7.90785E+00	TRAIN	4.57095E-02	6.47489E-02	0.706	0.4802	9.53289E-03
MTTD1	5.42028E-02	3.18438E-02	1.702	0.0887	1.47760E-02	MPSOURC	-5.33073E-02	5.14368E-02	-1.036	0.3000	9.58214E-01
PDOCP	8.64476E-03	7.09422E-03	1.219	0.2230	2.58659E-01	TTD1	-1.73389E-03	2.68139E-03	-0.647	0.5179	7.90785E+00
MPDOCP	8.40860E-03	1.57633E-02	0.533	0.5937	3.97204E-02	MTTD1	-6.71431E-02	7.66815E-02	-0.876	0.3812	1.47760E-02
FSWI	2.82677E-03	6.10821E-03	0.463	0.6435	3.76708E-01	PDOCP	7.05081E-03	1.43212E-02	0.492	0.6225	2.58659E-01
MFSWI	3.48041E-03	6.49639E-03	0.536	0.5921	3.18716E-01	MPDOCP	-1.10895E-03	3.20162E-02	-0.035	0.9724	3.97204E-02
BAINT	4.24911E-03	1.62315E-02	0.262	0.7935	7.19733E-02	FSWI	2.37970E-03	1.18248E-02	0.201	0.8405	3.76708E-01
MBAINT	1.04972E-02	3.58720E-02	0.293	0.7698	8.57960E-03	MFSWI	1.38862E-03	1.26249E-02	0.110	0.9124	3.18716E-01
AGEPHD	4.50648E-04	1.20351E-03	0.374	0.7081	3.06465E+01	BAINT	-9.93263E-02	3.25244E-02	-3.054	0.0023	7.19733E-02
NATUPHD	-2.40012E-02	2.26677E-02	-1.059	0.2897	2.04957E-02	MBAINT	1.95287E-02	9.61670E-02	0.203	0.8391	8.57960E-03
PERMPHD	-2.98309E-02	1.85667E-02	-1.607	0.1081	4.38513E-02	AGEPHD	8.37081E-04	2.38114E-03	0.352	0.7252	3.06465E+01
TEMPPHD	5.83199E-03	1.76947E-02	0.330	0.7417	5.73562E-02	NATUPHD	3.74584E-02	3.58983E-02	1.043	0.2967	2.04957E-02
MCITPHD	-6.23723E-03	2.42062E-02	-0.258	0.7967	1.49349E-02	PERMPHD	8.39300E-02	3.19037E-02	2.631	0.0085	4.38513E-02
HISPAN	-1.76747E-02	2.25804E-02	-0.783	0.4338	2.08135E-02	TEMPPHD	6.65614E-02	3.50129E-02	1.901	0.0573	5.73562E-02
BLACK	-2.48116E-02	1.75796E-02	-1.411	0.1581	3.68605E-02	MCITPHD	5.69256E-02	5.19275E-02	1.096	0.2730	1.49349E-02
ASIAN	8.06966E-03	1.30193E-02	0.620	0.5354	7.08611E-02	HISPAN	-3.46191E-02	3.88446E-02	-0.891	0.3728	2.08135E-02
NATAMER	4.65461E-02	3.16580E-02	1.470	0.1415	5.56085E-03	BLACK	1.29860E-02	2.72549E-02	0.476	0.6337	3.68605E-02
MARRIED	2.91844E-03	7.28871E-03	0.400	0.6889	7.84557E-01	ASIAN	-2.01252E-02	2.73038E-02	-0.737	0.4611	7.08611E-02
MMARRIED	-5.74727E-03	1.89132E-02	-0.304	0.7612	3.06641E-02	NATAMER	1.88033E-02	6.83743E-02	0.275	0.7833	5.56085E-03
DEP6	2.45476E-03	1.00704E-02	0.244	0.8074	5.68796E-02	MARRIED	-6.30304E-02	1.42509E-02	-4.423	0.0000	7.84557E-01
DEP618	-1.00343E-03	4.30303E-03	-0.233	0.8156	5.92151E-01	MMARRIED	-1.07593E-02	3.40454E-02	-0.316	0.7520	3.06641E-02
MDEP	-2.08128E-03	1.03660E-02	-0.201	0.8409	3.71942E-01	DEP6	-1.21435E-02	1.97405E-02	-0.615	0.5385	5.68796E-02
WATEACH	-2.96579E-02	7.08410E-03	-4.187	0.0000	5.28440E-01	DEP618	-1.22222E-02	8.03947E-03	-1.520	0.1284	5.92151E-01
WAOOTH	2.65275E-02	7.44421E-03	3.564	0.0004	1.88751E-01	DEP-	2.89555E-02	2.05765E-02	-1.407	0.1594	3.71942E-01
EMPPRI	1.01900E-02	6.49880E-03	1.568	0.1169	2.49126E-01	WATEACH	8.71102E-02	1.38662E-02	6.282	0.0000	5.28440E-01
MEMPPRI	5.27984E-02	2.54931E-02	2.071	0.0384	1.31077E-01	WAOOTH	-3.23972E-03	1.77081E-02	-0.183	0.8548	1.88751E-01
EMPRES	7.27865E-03	7.26608E-03	1.002	0.3165	2.96791E-01	EMPPRI	-3.76855E-03	1.29283E-02	-0.291	0.7707	2.49126E-01
EMPDOC	-1.20988E-02	1.13787E-02	-1.063	0.2877	1.00731E-01	MEMPPRI	4.27700E-02	5.79529E-02	0.738	0.4605	1.31077E-01
MEMPCARN	-9.00796E-03	2.63347E-02	-0.342	0.7323	2.67398E-01	EMPRES	1.40364E-03	1.45590E-02	0.096	0.9232	2.96791E-01
BIO	-8.99362E-03	1.36534E-02	-0.659	0.5101	3.07595E-01	EMPDOC	4.38178E-02	1.88430E-02	2.325	0.0201	1.00731E-01
HEALTH	-1.30523E-02	1.81645E-02	-0.719	0.4724	4.17858E-02	MEMPCARN	1.17357E-02	5.79127E-02	0.203	0.8394	2.67398E-01
ENG	-3.36986E-02	1.92756E-02	-1.748	0.0804	6.40292E-02	BIO	6.50625E-02	2.72165E-02	2.391	0.0168	3.07595E-01
MATHCOM	-1.05099E-02	1.51919E-02	-0.692	0.4891	1.12647E-01	HEALTH	-2.89045E-02	3.77828E-02	-0.765	0.4443	4.17858E-02
PHYSOTH	2.20070E-02	1.56604E-02	1.405	0.1599	5.97394E-02	ENG	-3.81019E-02	3.44218E-02	-1.107	0.2683	6.40292E-02
CHEM	2.04665E-02	1.54872E-02	1.322	0.1863	6.86368E-02	MATHCOM	2.93686E-02	2.95594E-02	0.994	0.3204	1.12647E-01
EAOSCI	-8.46487E-04	1.98335E-02	-0.043	0.9660	3.65427E-02	PHYSOTH	1.49704E-02	3.35140E-02	0.447	0.6551	5.97394E-02
PSYCH	-1.55092E-02	1.51000E-02	-1.027	0.3044	1.02796E-01	CHEM	1.52780E-02	3.32326E-02	0.460	0.6457	6.86368E-02
ECON	-4.56854E-02	2.21929E-02	-2.059	0.0395	3.89260E-02	EAOSCI	-3.04957E-03	3.85241E-02	-0.079	0.9369	3.65427E-02
POLYSCI	-3.43836E-02	2.18538E-02	-1.573	0.1156	3.06641E-02	PSYCH	1.15124E-02	3.02778E-02	0.380	0.7038	1.02796E-01
SAD	-4.32380E-02	1.82511E-02	-2.369	0.0178	5.94217E-02	ECON	-3.94708E-02	3.84955E-02	-1.025	0.3052	3.89260E-02
OSSCI	-2.37336E-02	2.35393E-02	-1.008	0.3133	2.14490E-02	POLYSCI	-4.36949E-03	4.02886E-02	-0.108	0.9136	3.06641E-02
WAVE97	-4.83599E-02	2.06741E-02	-2.339	0.0193	8.77026E-02	SAD	-1.36633E-02	3.34888E-02	-0.408	0.6833	5.94217E-02
WAVE95	-7.67582E-03	1.44030E-02	-0.533	0.5941	1.14395E-01	OSSCI	-1.23443E-03	4.39396E-02	-0.028	0.9776	2.14490E-02
WAVE93	8.59115E-03	2.81578E-02	0.305	0.7603	1.34890E-01	WAVE97	6.27852E-02	4.33273E-02	1.449	0.1473	8.77026E-02
WAVE91	-4.27655E-03	1.42945E-02	-0.299	0.7648	1.05497E-01	WAVE95	8.28535E-02	2.89675E-02	2.860	0.0042	1.14395E-01
WAVE89	-1.01393E-02	1.20074E-02	-0.844	0.3984	1.37750E-01	WAVE93	7.51705E-02	6.25577E-02	1.202	0.2295	1.34890E-01
WAVE87	-1.85981E-02	1.23470E-02	-1.506	0.1320	1.22974E-01	WAVE91	7.51905E-02	2.88936E-02	2.602	0.0093	1.05497E-01

TABLE C-56. Maximum likelihood estimates for rank, logit model 4: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE89	8.20149E-02	2.57171E-02	3.189	0.0014	1.37750E-01	MMARRIED	1.65066E-02	3.69883E-02	0.446	0.6554	3.06641E-02
WAVE87	4.33935E-02	2.60001E-02	1.669	0.0951	1.22974E-01	DEP6	9.68872E-03	2.09736E-02	0.462	0.6441	5.68796E-02
WAVE85	1.10277E-02	2.73338E-02	0.403	0.6866	1.20432E-01	DEP618	1.32256E-02	8.67516E-03	1.525	0.1274	5.92151E-01
WAVE83	5.26778E-03	2.96797E-02	0.177	0.8591	9.78710E-02	MDEP	3.10368E-02	2.19875E-02	1.412	0.1581	3.71942E-01
Marginal effects: full-professor rank											
Constant	3.43760E-01	9.53527E-02	3.605	0.0003		WATEACH	-5.74522E-02	1.48533E-02	-3.868	0.0001	5.28440E-01
FEMALE	-1.26140E-01	1.42467E-02	-8.854	0.0000	2.48808E-01	WAO TH	-2.32878E-02	1.84704E-02	-1.261	0.2074	1.88751E-01
YRPHD21	2.64545E-02	1.17418E-02	2.253	0.0243	4.92850E-01	EMPPRI	-6.42148E-03	1.38501E-02	-0.464	0.6429	2.49126E-01
TA	-1.88147E-02	7.45577E-02	-0.252	0.8008	1.00095E-02	MEMPPRI	-9.55683E-02	6.20045E-02	-1.541	0.1232	1.31077E-01
RA	4.39438E-02	7.80434E-02	0.563	0.5734	9.69177E-03	EMPRES	-8.68229E-03	1.55026E-02	-0.560	0.5754	2.96791E-01
FELLOW	3.34479E-02	1.43497E-01	0.233	0.8157	1.58881E-03	EMPDO C	-3.17190E-02	2.07700E-02	-1.527	0.1267	1.00731E-01
TRAIN	-2.98953E-02	7.58299E-02	-0.394	0.6934	9.53289E-03	MEMPCARN	-2.72776E-03	6.19578E-02	-0.044	0.9649	2.67398E-01
MPSOURC	5.17848E-02	5.85054E-02	0.885	0.3761	9.58214E-01	BIO	-5.60688E-02	2.87696E-02	-1.949	0.0513	3.07595E-01
TTD1	5.42167E-04	2.88010E-03	0.188	0.8507	7.90785E+00	HEALTH	4.19569E-02	3.96795E-02	1.057	0.2903	4.17858E-02
MTTD1	1.29403E-02	8.02279E-02	0.161	0.8719	1.47760E-02	ENG	7.18005E-02	3.66597E-02	1.959	0.0502	6.40292E-02
PDOCP	-1.56956E-02	1.53397E-02	-1.023	0.3062	2.58659E-01	MATHCOM	-1.88587E-02	3.13704E-02	-0.601	0.5477	1.12647E-01
MPDOCP	-7.29965E-03	3.43657E-02	-0.212	0.8318	3.97204E-02	PHYSOTH	-3.69774E-02	3.51843E-02	-1.051	0.2933	5.97394E-02
FSWI	-5.20647E-03	1.27138E-02	-0.410	0.6822	3.76708E-01	CHEM	-3.57445E-02	3.49776E-02	-1.022	0.3068	6.86368E-02
MFSWI	-4.86903E-03	1.35867E-02	-0.358	0.7201	3.18716E-01	EAOSCI	3.89606E-03	4.07242E-02	0.096	0.9238	3.65427E-02
BAINT	9.50772E-02	3.47475E-02	2.736	0.0062	7.19733E-02	PSYCH	3.99681E-03	3.20367E-02	0.125	0.9007	1.02796E-01
MBAINT	-3.00259E-02	9.90899E-02	-0.303	0.7619	8.57960E-03	ECON	8.51562E-02	4.13941E-02	2.057	0.0397	3.89260E-02
AGEPHD	-1.28773E-03	2.56041E-03	-0.503	0.6150	3.06465E+01	POLYSCI	3.87531E-02	4.32662E-02	0.896	0.3704	3.06641E-02
NATUPHD	-1.34572E-02	4.03096E-02	-0.334	0.7385	2.04957E-02	SAD	5.69013E-02	3.59411E-02	1.583	0.1134	5.94217E-02
PERMPHD	-5.40991E-02	3.51456E-02	-1.539	0.1237	4.38513E-02	OSSCI	2.49681E-02	4.71861E-02	0.529	0.5967	2.14490E-02
TEMPPHD	-7.23934E-02	3.76064E-02	-1.925	0.0542	5.73562E-02	WAVE97	-1.44253E-02	4.61775E-02	-0.312	0.7547	8.77026E-02
MCITPHD	-5.06884E-02	5.55166E-02	-0.913	0.3612	1.49349E-02	WAVE95	-7.51777E-02	3.07670E-02	-2.443	0.0145	1.14395E-01
HISPAN	5.22938E-02	4.20963E-02	1.242	0.2141	2.08135E-02	WAVE93	-8.37617E-02	6.67086E-02	-1.256	0.2092	1.34890E-01
BLACK	1.18257E-02	3.06788E-02	0.385	0.6999	3.68605E-02	WAVE91	-7.09140E-02	3.06569E-02	-2.313	0.0207	1.05497E-01
ASIAN	1.20555E-02	2.90491E-02	0.415	0.6781	7.08611E-02	WAVE89	-7.18756E-02	2.71006E-02	-2.652	0.0080	1.37750E-01
NATAMER	-6.53494E-02	7.36291E-02	-0.888	0.3748	5.56085E-03	WAVE87	-2.47954E-02	2.73854E-02	-0.905	0.3652	1.22974E-01
MARRIED	6.01119E-02	1.54885E-02	3.881	0.0001	7.84557E-01	WAVE85	-2.58876E-02	2.83921E-02	-0.912	0.3619	1.20432E-01
						WAVE83	3.01660E-02	3.12510E-02	0.965	0.3344	9.78710E-02

NOTES: Dependent variable: RANK1; 6294 observations; 7 iterations; log likelihood function = -4631.578; restricted log likelihood = -4923.011; Chi-squared = 582.8656; d.f. = 112; significance = .0000000.

TABLE C-57. Maximum likelihood estimates for rank, logit model 5: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						TTD1	-9.43682E-04	2.71858E-03	-0.347	0.7285	7.90814E+00
Constant	-1.45978E-01	4.21105E-02	-3.467	0.0005		MTTD1	-6.09839E-02	7.95671E-02	-0.766	0.4434	1.46096E-02
FEMALE	4.43075E-02	5.66838E-03	7.817	0.0000	2.38791E-01	PDOCP	-9.92391E-03	1.44489E-02	-0.687	0.4922	2.52057E-01
YRPHD21	-5.37029E-03	5.18909E-03	-1.035	0.3007	4.94878E-01	MPDOCP	-3.50136E-02	3.38676E-02	-1.034	0.3012	3.87909E-02
FELTRA	-1.21355E-03	3.57203E-02	-0.034	0.9729	1.07473E-02	FSWI	-7.04466E-03	1.19892E-02	-0.588	0.5568	3.76826E-01
TARA	6.34710E-03	3.02698E-02	0.210	0.8339	1.98153E-02	MFSWI	2.40694E-03	1.28304E-02	0.188	0.8512	3.15701E-01
MPSOURC	4.82134E-03	2.78219E-02	0.173	0.8624	9.58690E-01	BAINT	-1.02498E-01	3.29489E-02	-3.111	0.0019	7.12007E-02
TTD1	1.73073E-04	1.17669E-03	0.147	0.8831	7.90814E+00	MBAINT	1.96522E-02	9.76807E-02	0.201	0.8406	8.56423E-03
MTTD1	4.39386E-02	2.69062E-02	1.633	0.1025	1.46096E-02	AGEPHD	1.70846E-03	2.41013E-03	0.709	0.4784	3.06581E+01
PDOCP	4.66206E-03	6.62019E-03	0.704	0.4813	2.52057E-01	NATUPHD	5.29053E-02	3.59944E-02	1.470	0.1416	2.06549E-02
MPDOCP	1.90480E-02	1.31231E-02	1.451	0.1466	3.87909E-02	PERMPHD	8.21609E-02	3.25928E-02	2.521	0.0117	4.38287E-02
FSWI	4.04114E-03	5.56243E-03	0.727	0.4675	3.76826E-01	TEMPPHD	7.39016E-02	3.53629E-02	2.090	0.0366	5.67590E-02
MFSWI	-1.28866E-03	6.13060E-03	-0.210	0.8335	3.15701E-01	MCITPHD	7.16495E-02	5.35140E-02	1.339	0.1806	1.44416E-02
BAINT	-2.50789E-03	1.41410E-02	-0.177	0.8592	7.12007E-02	HISPAN	-4.00153E-02	3.95130E-02	-1.013	0.3112	2.09908E-02
MBAINT	1.01180E-02	2.95392E-02	0.343	0.7320	8.56423E-03	BLACK	4.29344E-03	2.75047E-02	0.156	0.8760	3.76154E-02
AGEPHD	6.63802E-04	1.05585E-03	0.629	0.5296	3.06581E+01	ASIAN	-2.68350E-02	2.78918E-02	-0.962	0.3360	7.03610E-02
NATUPHD	-2.57687E-02	2.20009E-02	-1.171	0.2415	2.06549E-02	NATAMER	3.60714E-02	6.80088E-02	0.530	0.5958	5.70949E-03
PERMPHD	-7.09683E-03	1.58670E-02	-0.447	0.6547	4.38287E-02	MARRIED	-7.04990E-02	1.44215E-02	-4.888	0.0000	7.85558E-01
TEMPPHD	1.31853E-02	1.54118E-02	0.856	0.3923	5.67590E-02	MMARRIED	-6.87723E-03	3.37263E-02	-0.204	0.8384	3.15701E-02
MCITPHD	-1.45059E-03	2.09285E-02	-0.069	0.9447	1.44416E-02	DEP6	-1.69410E-02	2.00859E-02	-0.843	0.3990	5.67590E-02
HISPAN	-9.95897E-03	1.98763E-02	-0.501	0.6163	2.09908E-02	DEP618	-1.28495E-02	8.25715E-03	-1.556	0.1197	5.90428E-01
BLACK	-1.21949E-02	1.50524E-02	-0.810	0.4178	3.76154E-02	MDEP	-2.94865E-02	2.09452E-02	-1.408	0.1592	3.73300E-01
ASIAN	9.02870E-03	1.15577E-02	0.781	0.4347	7.03610E-02	BIO	5.86112E-02	2.71447E-02	2.159	0.0308	3.02603E-01
NATAMER	3.68739E-02	2.60526E-02	1.415	0.1570	5.70949E-03	HEALTH	-2.70761E-02	3.79431E-02	-0.714	0.4755	4.19815E-02
MARRIED	1.26263E-03	6.76228E-03	0.187	0.8519	7.85558E-01	ENG	-2.77377E-02	3.44349E-02	-0.806	0.4205	6.61629E-02
MMARRIED	-6.16443E-03	1.69875E-02	-0.363	0.7167	3.15701E-02	MATHCOM	5.14650E-02	2.92297E-02	1.761	0.0783	1.15197E-01
DEP6	3.57205E-03	9.20340E-03	0.388	0.6979	5.67590E-02	PHYSOTH	2.59481E-02	3.37800E-02	0.768	0.4424	5.81024E-02
DEP618	3.31800E-04	3.95369E-03	0.084	0.9331	5.90428E-01	CHEM	3.14300E-02	3.31390E-02	0.948	0.3429	6.59950E-02
MDEP	4.59067E-03	9.63781E-03	0.476	0.6338	3.73300E-01	EAOSCI	2.17118E-02	3.84233E-02	0.565	0.5720	3.66079E-02
BIO	-9.56980E-03	1.19852E-02	-0.798	0.4246	3.02603E-01	PSYCH	2.05450E-02	3.02172E-02	0.680	0.4966	1.02267E-01
HEALTH	-3.17094E-03	1.55557E-02	-0.204	0.8385	4.19815E-02	ECON	-1.69024E-02	3.80214E-02	-0.445	0.6566	4.03023E-02
ENG	-2.11791E-02	1.61122E-02	-1.314	0.1887	6.61629E-02	POLYSKI	1.95070E-02	4.00412E-02	0.487	0.6261	3.12343E-02
MATHCOM	-1.11919E-02	1.32046E-02	-0.848	0.3967	1.15197E-01	SAD	-2.19894E-03	3.33271E-02	-0.066	0.9474	6.09572E-02
PHYSOTH	3.68047E-03	1.43435E-02	0.257	0.7975	5.81024E-02	OSSCI	2.83638E-02	4.35380E-02	0.651	0.5147	2.16625E-02
CHEM	3.88679E-03	1.39354E-02	0.279	0.7803	6.59950E-02	WAVE97	9.11021E-02	3.51779E-02	2.590	0.0096	8.73216E-02
EAOSCI	-1.40422E-02	1.85733E-02	-0.756	0.4496	3.66079E-02	WAVE95	7.21357E-02	2.95421E-02	2.442	0.0146	1.13518E-01
PSYCH	-1.44706E-02	1.33604E-02	-1.083	0.2788	1.02267E-01	WAVE93	7.25085E-02	2.87886E-02	2.519	0.0118	1.36356E-01
ECON	-4.51193E-02	2.04388E-02	-2.208	0.0273	4.03023E-02	WAVE91	7.01649E-02	2.95430E-02	2.375	0.0175	1.05793E-01
POLYSKI	-2.66294E-02	1.92896E-02	-1.381	0.1674	3.12343E-02	WAVE89	7.35408E-02	2.62139E-02	2.805	0.0050	1.37531E-01
SAD	-2.74813E-02	1.55139E-02	-1.771	0.0765	6.09572E-02	WAVE87	4.25334E-02	2.63345E-02	1.615	0.1063	1.25273E-01
OSSCI	-1.48977E-02	1.98295E-02	-0.751	0.4525	2.16625E-02	WAVE85	1.47151E-02	2.78239E-02	0.529	0.5969	1.17212E-01
WAVE97	2.05530E-02	1.65739E-02	1.240	0.2149	8.73216E-02	WAVE83	1.11928E-02	2.99101E-02	0.374	0.7082	9.99160E-02
WAVE95	3.26023E-03	1.46905E-02	0.222	0.8244	1.13518E-01	Marginal effects: full-professor rank					
WAVE93	1.96032E-02	1.36001E-02	1.441	0.1495	1.36356E-01	Constant	3.20661E-01	9.43153E-02	3.400	0.0007	
WAVE91	1.94405E-02	1.39518E-02	1.393	0.1635	1.05793E-01	FEMALE	-1.00831E-01	1.43590E-02	-7.022	0.0000	2.38791E-01
WAVE89	9.79856E-03	1.22087E-02	0.803	0.4222	1.37531E-01	YRPHD21	2.21408E-02	1.18127E-02	1.874	0.0609	4.94878E-01
WAVE87	1.04422E-02	1.21664E-02	0.858	0.3907	1.25273E-01	FELTRA	-2.87116E-02	7.22090E-02	-0.398	0.6909	1.07473E-02
WAVE85	1.74794E-02	1.22150E-02	1.431	0.1524	1.17212E-01	TARA	1.53702E-03	6.37381E-02	0.024	0.9808	1.98153E-02
WAVE83	-1.46199E-02	1.45832E-02	-1.003	0.3161	9.99160E-02	MPSOURC	5.25986E-02	5.80323E-02	0.906	0.3647	9.58690E-01
Marginal effects: associate-professor rank						TTD1	7.70608E-04	2.88846E-03	0.267	0.7896	7.90814E+00
Constant	-1.74683E-01	8.76841E-02	-1.992	0.0464		MTTD1	1.70453E-02	8.20761E-02	0.208	0.8355	1.46096E-02
FEMALE	5.65235E-02	1.35342E-02	4.176	0.0000	2.38791E-01	PDOCP	5.26185E-03	1.53536E-02	0.343	0.7318	2.52057E-01
YRPHD21	-1.67705E-02	1.11011E-02	-1.511	0.1309	4.94878E-01	MPDOCP	1.59656E-02	3.53868E-02	0.451	0.6519	3.87909E-02
FELTRA	2.99251E-02	6.46876E-02	0.463	0.6436	1.07473E-02	FSWI	3.00351E-03	1.27515E-02	0.236	0.8138	3.76826E-01
TARA	-7.88412E-03	5.76771E-02	-0.137	0.8913	1.98153E-02	MFSWI	-1.11828E-03	1.37021E-02	-0.082	0.9350	3.15701E-01
MPSOURC	-5.74200E-02	5.26560E-02	-1.090	0.2755	9.58690E-01	BAINT	1.05006E-01	3.47231E-02	3.024	0.0025	7.12007E-02

TABLE C-57. Maximum likelihood estimates for rank, logit model 5: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
MBAINT	-2.97702E-02	9.99152E-02	-0.298	0.7657	8.56423E-03	MATHCOM	-4.02731E-02	3.07574E-02	-1.309	0.1904	1.15197E-01
AGEPHD	-2.37226E-03	2.56302E-03	-0.926	0.3547	3.06581E+01	PHYSOTH	-2.96286E-02	3.53192E-02	-0.839	0.4015	5.81024E-02
NATUPHD	-2.71365E-02	4.02506E-02	-0.674	0.5002	2.06549E-02	CHEM	-3.53168E-02	3.46897E-02	-1.018	0.3086	6.59950E-02
PERMPHD	-7.50641E-02	3.51031E-02	-2.138	0.0325	4.38287E-02	EAOSCI	-7.66961E-03	4.06363E-02	-0.189	0.8503	3.66079E-02
TEMPPHD	-8.70868E-02	3.74374E-02	-2.326	0.0200	5.67590E-02	PSYCH	-6.07440E-03	3.17381E-02	-0.191	0.8482	1.02267E-01
MCITPHD	-7.01989E-02	5.61683E-02	-1.250	0.2114	1.44416E-02	ECON	6.20217E-02	4.07755E-02	1.521	0.1282	4.03023E-02
HISPAN	4.99742E-02	4.21204E-02	1.186	0.2354	2.09908E-02	POLYSCI	7.12243E-03	4.26008E-02	0.167	0.8672	3.12343E-02
BLACK	7.90146E-03	3.01769E-02	0.262	0.7934	3.76154E-02	SAD	2.96802E-02	3.52754E-02	0.841	0.4001	6.09572E-02
ASIAN	1.78063E-02	2.92650E-02	0.608	0.5429	7.03610E-02	OSSCI	-1.34662E-02	4.61947E-02	-0.292	0.7707	2.16625E-02
NATAMER	-7.29453E-02	7.20162E-02	-1.013	0.3111	5.70949E-03	WAVE97	-1.11655E-01	3.74336E-02	-2.983	0.0029	8.73216E-02
MARRIED	6.92363E-02	1.55147E-02	4.463	0.0000	7.85558E-01	WAVE95	-7.53959E-02	3.14772E-02	-2.395	0.0166	1.13518E-01
MMARRIED	1.30417E-02	3.63523E-02	0.359	0.7198	3.15701E-02	WAVE93	-9.21117E-02	3.04989E-02	-3.020	0.0025	1.36356E-01
DEP6	1.33690E-02	2.11447E-02	0.632	0.5272	5.67590E-02	WAVE91	-8.96054E-02	3.12787E-02	-2.865	0.0042	1.05793E-01
DEP618	1.25177E-02	8.79474E-03	1.423	0.1546	5.90428E-01	WAVE89	-8.33394E-02	2.77215E-02	-3.006	0.0026	1.37531E-01
MDEP	2.48958E-02	2.21989E-02	1.121	0.2621	3.73300E-01	WAVE87	-5.29756E-02	2.77895E-02	-1.906	0.0566	1.25273E-01
BIO	-4.90414E-02	2.84635E-02	-1.723	0.0849	3.02603E-01	WAVE85	-3.21944E-02	2.91279E-02	-1.105	0.2690	1.17212E-01
HEALTH	3.02470E-02	3.94886E-02	0.766	0.4437	4.19815E-02	WAVE83	3.42718E-03	3.16534E-02	0.108	0.9138	9.99160E-02
ENG	4.89167E-02	3.61313E-02	1.354	0.1758	6.61629E-02						

NOTES: Dependent variable: RANK1; 5955 observations; 7 iterations; log likelihood function = -4117.918; restricted log likelihood = -4266.621; Chi-squared = 297.4056; d.f. = 94; significance = .0000000.

TABLE C-58. Maximum likelihood estimates for rank, logit model 6: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.43089E-01	3.96439E-02	-3.609	0.0003		Constant	-2.00223E-01	8.89107E-02	-2.252	0.0243	
FEMALE	4.15497E-02	5.41296E-03	7.676	0.0000	2.38791E-01	FEMALE	5.26748E-02	1.35383E-02	3.891	0.0001	2.38791E-01
YRPHD21	-4.31707E-03	4.87184E-03	-0.886	0.3755	4.94878E-01	YRPHD21	-1.94060E-02	1.10778E-02	-1.752	0.0798	4.94878E-01
FELTRA	-2.61451E-03	3.33218E-02	-0.078	0.9375	1.07473E-02	FELTRA	2.88634E-02	6.46719E-02	0.446	0.6554	1.07473E-02
TARA	7.00355E-03	2.81391E-02	0.249	0.8034	1.98153E-02	TARA	-1.19764E-02	5.77867E-02	-0.207	0.8358	1.98153E-02
MPSOURC	1.84306E-03	2.58567E-02	0.071	0.9432	9.58690E-01	MPSOURC	-5.51361E-02	5.27953E-02	-1.044	0.2963	9.58690E-01
TTD1	2.39395E-04	1.10606E-03	0.216	0.8286	7.90814E+00	TTD1	-8.98868E-04	2.71879E-03	-0.331	0.7409	7.90814E+00
MTTD1	3.78071E-02	2.55511E-02	1.480	0.1390	1.46096E-02	MTTD1	-6.04974E-02	7.95530E-02	-0.760	0.4470	1.46096E-02
PDOCP	5.54319E-03	6.34163E-03	0.874	0.3821	2.52057E-01	PDOCP	5.99326E-03	1.46791E-02	0.408	0.6831	2.52057E-01
MPDOCP	1.64873E-02	1.24910E-02	1.320	0.1869	3.87909E-02	MPDOCP	-2.82632E-02	3.35592E-02	-0.842	0.3997	3.87909E-02
FSWI	4.04668E-03	5.22961E-03	0.774	0.4390	3.76826E-01	FSWI	-7.04637E-04	1.19994E-02	-0.059	0.9532	3.76826E-01
MFSWI	-1.21834E-03	5.77544E-03	-0.211	0.8329	3.15701E-01	MFSWI	7.89199E-03	1.28316E-02	0.615	0.5385	3.15701E-01
BAINT	-1.12550E-02	1.35654E-02	-0.830	0.4067	7.12007E-02	BAINT	-1.12068E-01	3.32538E-02	-3.370	0.0008	7.12007E-02
MBAINT	1.36564E-02	2.81884E-02	0.484	0.6281	8.56423E-03	MBAINT	3.22190E-02	9.78807E-02	0.329	0.7420	8.56423E-03
AGEPHD	7.45942E-04	9.91183E-04	0.753	0.4517	3.06581E+01	AGEPHD	3.32763E-04	2.41832E-03	0.138	0.8906	3.06581E+01
NATUPHD	-2.24367E-02	2.05769E-02	-1.090	0.2755	2.06549E-02	NATUPHD	5.04783E-02	3.59361E-02	1.405	0.1601	2.06549E-02
PERMPHD	-7.47947E-03	1.49201E-02	-0.501	0.6162	4.38287E-02	PERMPHD	8.62120E-02	3.24083E-02	2.660	0.0078	4.38287E-02
TEMPPHD	1.01513E-02	1.47066E-02	0.690	0.4900	5.67590E-02	TEMPPHD	6.81848E-02	3.55113E-02	1.920	0.0548	5.67590E-02
MCITPHD	-3.65366E-03	1.99010E-02	-0.184	0.8543	1.44416E-02	MCITPHD	7.75549E-02	5.31458E-02	1.459	0.1445	1.44416E-02
HISPAN	-1.21967E-02	1.85129E-02	-0.659	0.5100	2.09908E-02	HISPAN	-3.70706E-02	3.95138E-02	-0.938	0.3482	2.09908E-02
BLACK	-1.51736E-02	1.40985E-02	-1.076	0.2818	3.76154E-02	BLACK	9.96931E-03	2.74869E-02	0.363	0.7168	3.76154E-02
ASIAN	1.30784E-02	1.06824E-02	1.224	0.2208	7.03610E-02	ASIAN	-2.30837E-02	2.78276E-02	-0.830	0.4068	7.03610E-02
NATAMER	3.91545E-02	2.44747E-02	1.600	0.1096	5.70949E-03	NATAMER	2.35884E-02	6.74743E-02	0.350	0.7266	5.70949E-03
MARRIED	-1.94647E-04	6.32759E-03	-0.031	0.9755	7.85558E-01	MARRIED	-6.79519E-02	1.44197E-02	-4.712	0.0000	7.85558E-01
MMARRIED	-1.34955E-03	1.58869E-02	-0.085	0.9323	3.15701E-02	MMARRIED	-1.24480E-02	3.36706E-02	-0.370	0.7116	3.15701E-02
DEP6	2.15520E-03	8.50442E-03	0.253	0.7999	5.67590E-02	DEP6	-1.28538E-02	2.01319E-02	-0.638	0.5232	5.67590E-02
DEP618	8.62747E-04	3.70401E-03	0.233	0.8158	5.90428E-01	DEP618	-1.29928E-02	8.21092E-03	-1.582	0.1136	5.90428E-01
MDEP	4.84898E-03	9.03139E-03	0.537	0.5913	3.73300E-01	MDEP	-2.41227E-02	2.09139E-02	-1.153	0.2487	3.73300E-01
WATEACH	-7.60670E-03	6.49131E-03	-1.172	0.2413	5.43577E-01	WATEACH	9.99069E-02	1.43120E-02	6.981	0.0000	5.43577E-01
WAOTh	3.17538E-02	6.64653E-03	4.778	0.0000	1.84551E-01	WAOTh	2.50682E-03	1.84408E-02	0.136	0.8919	1.84551E-01
EMPpRI	1.31192E-03	5.81435E-03	0.226	0.8215	2.45676E-01	EMPpRI	8.15616E-05	1.31087E-02	0.006	0.9950	2.45676E-01
MEMpPRI	3.30954E-02	2.08087E-02	1.590	0.1117	1.29639E-01	MEMpPRI	3.92427E-02	5.89938E-02	0.665	0.5059	1.29639E-01
EMPRES	-5.65570E-03	6.53858E-03	-0.865	0.3871	2.91520E-01	EMPRES	8.70304E-03	1.48400E-02	0.586	0.5576	2.91520E-01
EMPDOc	-8.50078E-03	9.42112E-03	-0.902	0.3669	1.02939E-01	EMPDOc	5.14843E-02	1.88368E-02	2.733	0.0063	1.02939E-01
MEMPCARN	1.72346E-03	2.13623E-02	0.081	0.9357	2.68010E-01	MEMPCARN	2.98236E-02	5.84705E-02	0.510	0.6100	2.68010E-01
BIO	-8.90228E-03	1.14240E-02	-0.779	0.4358	3.02603E-01	BIO	5.10340E-02	2.72975E-02	1.870	0.0615	3.02603E-01
HEALTH	-6.42282E-03	1.46775E-02	-0.438	0.6617	4.19815E-02	HEALTH	-3.51899E-02	3.79914E-02	-0.926	0.3543	4.19815E-02
ENG	-1.77672E-02	1.51433E-02	-1.173	0.2407	6.61629E-02	ENG	-5.15486E-02	3.45126E-02	-1.494	0.1353	6.61629E-02
MATHCOM	-6.54529E-03	1.25356E-02	-0.522	0.6016	1.15197E-01	MATHCOM	2.15703E-02	2.94942E-02	0.731	0.4646	1.15197E-01
PHYSOTH	5.62237E-03	1.35597E-02	0.415	0.6784	5.81024E-02	PHYSOTH	3.49037E-03	3.38730E-02	0.103	0.9179	5.81024E-02
CHEM	7.15267E-03	1.33713E-02	0.535	0.5927	6.59950E-02	CHEM	5.88650E-04	3.36323E-02	0.018	0.9860	6.59950E-02
EAOSCI	-7.48064E-03	1.74073E-02	-0.430	0.6674	3.66079E-02	EAOSCI	-4.63378E-03	3.84282E-02	-0.121	0.9040	3.66079E-02
PSYCH	-1.21296E-02	1.26839E-02	-0.956	0.3389	1.02267E-01	PSYCH	-4.84225E-04	3.04338E-02	-0.016	0.9873	1.02267E-01
ECON	-3.71137E-02	1.92209E-02	-1.931	0.0535	4.03023E-02	ECON	-4.46954E-02	3.81120E-02	-1.173	0.2409	4.03023E-02
POLYSCI	-2.62010E-02	1.83067E-02	-1.431	0.1524	3.12343E-02	POLYSCI	-1.21790E-02	4.01718E-02	-0.303	0.7618	3.12343E-02
SAD	-2.37399E-02	1.46314E-02	-1.623	0.1047	6.09572E-02	SAD	-2.28676E-02	3.33742E-02	-0.685	0.4932	6.09572E-02
OSSCI	-1.02567E-02	1.86432E-02	-0.550	0.5822	2.16625E-02	OSSCI	4.94197E-04	4.35576E-02	0.011	0.9909	2.16625E-02
WAVE97	-1.64914E-02	1.76344E-02	-0.935	0.3497	8.73216E-02	WAVE97	4.59439E-02	4.41455E-02	1.041	0.2980	8.73216E-02
WAVE95	5.92502E-03	1.38262E-02	0.429	0.6683	1.13518E-01	WAVE95	7.97048E-02	2.95056E-02	2.701	0.0069	1.13518E-01
WAVE93	1.43293E-02	2.36398E-02	0.606	0.5444	1.36356E-01	WAVE93	5.96714E-02	6.33047E-02	0.943	0.3459	1.36356E-01
WAVE91	2.00203E-02	1.30364E-02	1.536	0.1246	1.05793E-01	WAVE91	6.89297E-02	2.94350E-02	2.342	0.0192	1.05793E-01
WAVE89	8.96525E-03	1.14331E-02	0.784	0.4330	1.37531E-01	WAVE89	7.45695E-02	2.61146E-02	2.855	0.0043	1.37531E-01
WAVE87	9.50266E-03	1.14052E-02	0.833	0.4047	1.25273E-01	WAVE87	4.40267E-02	2.62191E-02	1.679	0.0931	1.25273E-01
WAVE85	1.74215E-02	1.14549E-02	1.521	0.1283	1.17212E-01	WAVE85	1.18198E-02	2.76912E-02	0.427	0.6695	1.17212E-01
WAVE83	-1.63719E-02	1.37013E-02	-1.195	0.2321	9.99160E-02	WAVE83	3.77874E-03	2.98231E-02	0.127	0.8992	9.99160E-02

TABLE C-58. Maximum likelihood estimates for rank, logit model 6: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						MDEP	1.92738E-02	2.20169E-02	0.875	0.3814	3.73300E-01
Constant	3.43312E-01	9.46534E-02	3.627	0.0003		WATEACH	-9.23002E-02	1.51451E-02	-6.094	0.0000	5.43577E-01
FEMALE	-9.42245E-02	1.42893E-02	-6.594	0.0000	2.38791E-01	WAOth	-3.42607E-02	1.90348E-02	-1.800	0.0719	1.84551E-01
YRPHD21	2.37231E-02	1.17080E-02	2.026	0.0427	4.94878E-01	EMPPRI	-1.39348E-03	1.38685E-02	-0.100	0.9200	2.45676E-01
FELTRA	-2.62489E-02	7.13901E-02	-0.368	0.7131	1.07473E-02	MEMPPRI	-7.23381E-02	6.16680E-02	-1.173	0.2408	1.29639E-01
TARA	4.97284E-03	6.30828E-02	0.079	0.9372	1.98153E-02	EMPRES	-3.04733E-03	1.56150E-02	-0.195	0.8453	2.91520E-01
MPSOURC	5.32931E-02	5.74621E-02	0.927	0.3537	9.58690E-01	EMPDOC	-4.29835E-02	2.02432E-02	-2.123	0.0337	1.02939E-01
TTD1	6.59472E-04	2.86701E-03	0.230	0.8181	7.90814E+00	MEMPCARN	-3.15471E-02	6.11451E-02	-0.516	0.6059	2.68010E-01
MTTD1	2.26903E-02	8.17799E-02	0.277	0.7814	1.46096E-02	BIO	-4.21317E-02	2.85009E-02	-1.478	0.1393	3.02603E-01
PDOCP	-1.15365E-02	1.55081E-02	-0.744	0.4569	2.52057E-01	HEALTH	4.16127E-02	3.93358E-02	1.058	0.2901	4.19815E-02
MPDOCP	1.17759E-02	3.49614E-02	0.337	0.7362	3.87909E-02	ENG	6.93158E-02	3.60007E-02	1.925	0.0542	6.61629E-02
FSWI	-3.34205E-03	1.26713E-02	-0.264	0.7920	3.76826E-01	MATHCOM	-1.50250E-02	3.08632E-02	-0.487	0.6264	1.15197E-01
MFSWI	-6.67365E-03	1.36133E-02	-0.490	0.6240	3.15701E-01	PHYSOTH	-9.11274E-03	3.52342E-02	-0.259	0.7959	5.81024E-02
BAINT	1.23323E-01	3.49138E-02	3.532	0.0004	7.12007E-02	CHEM	-7.74132E-03	3.50432E-02	-0.221	0.8252	6.59950E-02
MBAINT	-4.58754E-02	9.98600E-02	-0.459	0.6459	8.56423E-03	EAOSCI	1.21144E-02	4.03774E-02	0.300	0.7642	3.66079E-02
AGEPHD	-1.07871E-03	2.55025E-03	-0.423	0.6723	3.06581E+01	PSYCH	1.26139E-02	3.17950E-02	0.397	0.6916	1.02267E-01
NATUPHD	-2.80416E-02	3.97161E-02	-0.706	0.4802	2.06549E-02	ECON	8.18091E-02	4.05636E-02	2.017	0.0437	4.03023E-02
PERMPHD	-7.87325E-02	3.47158E-02	-2.268	0.0233	4.38287E-02	POLYSCI	3.83800E-02	4.24471E-02	0.904	0.3659	3.12343E-02
TEMPPHD	-7.83361E-02	3.73951E-02	-2.095	0.0362	5.67590E-02	SAD	4.66076E-02	3.51127E-02	1.327	0.1844	6.09572E-02
MCITPHD	-7.39012E-02	5.56460E-02	-1.328	0.1842	1.44416E-02	OSSCI	9.76248E-03	4.58761E-02	0.213	0.8315	2.16625E-02
HISPAN	4.92672E-02	4.18036E-02	1.179	0.2386	2.09908E-02	WAVE97	-2.94525E-02	4.62826E-02	-0.636	0.5245	8.73216E-02
BLACK	5.20430E-03	2.98073E-02	0.175	0.8614	3.76154E-02	WAVE95	-8.56299E-02	3.12240E-02	-2.742	0.0061	1.13518E-01
ASIAN	1.00053E-02	2.90559E-02	0.344	0.7306	7.03610E-02	WAVE93	-7.40007E-02	6.62080E-02	-1.118	0.2637	1.36356E-01
NATAMER	-6.27429E-02	7.10628E-02	-0.883	0.3773	5.70949E-03	WAVE91	-8.89501E-02	3.09563E-02	-2.873	0.0041	1.05793E-01
MARRIED	6.81466E-02	1.53836E-02	4.430	0.0000	7.85558E-01	WAVE89	-8.35348E-02	2.74328E-02	-3.045	0.0023	1.37531E-01
MMARRIED	1.37976E-02	3.59952E-02	0.383	0.7015	3.15701E-02	WAVE87	-5.35293E-02	2.74953E-02	-1.947	0.0516	1.25273E-01
DEP6	1.06986E-02	2.09930E-02	0.510	0.6103	5.67590E-02	WAVE85	-2.92413E-02	2.88307E-02	-1.014	0.3105	1.17212E-01
DEP618	1.21301E-02	8.69156E-03	1.396	0.1628	5.90428E-01	WAVE83	1.25932E-02	3.13595E-02	0.402	0.6880	9.99160E-02

NOTES: Dependent variable: RANK1; 5955 observations; 7 iterations; log likelihood function = -4047.409; restricted log likelihood = -4266.621; Chi-squared = 438.4238; d.f. = 108; significance = .0000000.

TABLE C-59. Maximum likelihood estimates for rank, logit model I-1: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.75876E-01	5.56726E-02	-3.159	0.0016		Constant	-1.61947E-01	8.35338E-02	-1.939	0.0525	
FEMALE	4.72420E-02	1.52168E-02	3.105	0.0019	2.49196E-01	FEMALE	2.30907E-02	2.16602E-02	1.066	0.2864	2.49196E-01
FMARRIED	4.81126E-02	1.80908E-02	2.660	0.0078	1.40824E-01	FMARRIED	2.97344E-02	2.73737E-02	1.086	0.2774	1.40824E-01
FDEP6	2.12287E-03	3.40939E-02	0.062	0.9504	6.12276E-03	FDEP6	9.91689E-02	6.04930E-02	1.639	0.1011	6.12276E-03
FDEP618	1.04721E-02	9.08538E-03	1.153	0.2491	1.09444E-01	FDEP618	1.25900E-02	1.55275E-02	0.811	0.4175	1.09444E-01
YRPHD21	-8.11104E-03	7.21041E-03	-1.125	0.2606	4.93342E-01	YRPHD21	-1.64354E-02	1.06454E-02	-1.544	0.1226	4.93342E-01
TA	1.84437E-02	3.77432E-02	0.489	0.6251	1.05618E-02	TA	-1.58322E-02	6.42682E-02	-0.246	0.8054	1.05618E-02
RA	-5.34694E-02	4.29399E-02	-1.245	0.2131	1.02556E-02	RA	4.22137E-03	6.35794E-02	0.066	0.9471	1.02556E-02
FELLOW	2.04431E-02	6.65214E-02	0.307	0.7586	1.83683E-03	FELLOW	-4.77230E-02	1.25961E-01	-0.379	0.7048	1.83683E-03
TRAIN	-9.40229E-02	4.91487E-02	-1.913	0.0557	9.49028E-03	TRAIN	6.27831E-02	6.26773E-02	1.002	0.3165	9.49028E-03
MPSOURC	-2.95558E-02	3.08929E-02	-0.957	0.3387	9.55916E-01	MPSOURC	-4.49594E-02	4.93983E-02	-0.910	0.3627	9.55916E-01
TTD1	1.21020E-03	1.77128E-03	0.683	0.4945	7.90295E+00	TTD1	-1.44995E-03	2.61409E-03	-0.555	0.5791	7.90295E+00
MTTD1	4.65447E-02	4.19506E-02	1.110	0.2672	1.45416E-02	MTTD1	-6.37048E-02	7.46506E-02	-0.853	0.3935	1.45416E-02
PDOCP	2.48401E-02	8.76853E-03	2.833	0.0046	2.63738E-01	PDOCP	-9.97105E-03	1.36898E-02	-0.728	0.4664	2.63738E-01
MPDOCP	2.08312E-02	1.92463E-02	1.082	0.2791	4.07164E-02	MPDOCP	-1.00283E-02	3.13533E-02	-0.320	0.7491	4.07164E-02
FSWI	5.29152E-03	7.78969E-03	0.679	0.4969	3.75478E-01	FSWI	-3.25920E-03	1.14860E-02	-0.284	0.7766	3.75478E-01
MFSWI	-1.93819E-03	8.26941E-03	-0.234	0.8147	3.19302E-01	MFSWI	-1.34941E-03	1.22720E-02	-0.110	0.9124	3.19302E-01
BAINT	-1.06743E-02	2.06183E-02	-0.518	0.6047	6.96464E-02	BAINT	-8.49535E-02	3.13950E-02	-2.706	0.0068	6.96464E-02
MBAINT	3.52332E-02	4.96951E-02	0.709	0.4783	8.26573E-03	MBAINT	4.78794E-03	9.35007E-02	0.051	0.9592	8.26573E-03
AGEPHD	9.68752E-04	1.59674E-03	0.607	0.5440	3.06345E+01	AGEPHD	1.98173E-03	2.32059E-03	0.854	0.3931	3.06345E+01
NATUPHD	-1.44499E-02	2.41470E-02	-0.598	0.5496	2.11235E-02	NATUPHD	3.63577E-02	3.47323E-02	1.047	0.2952	2.11235E-02
PERMPHD	-2.38362E-02	2.25260E-02	-1.058	0.2900	4.36247E-02	PERMPHD	7.76370E-02	3.12128E-02	2.487	0.0129	4.36247E-02
TEMPPHD	1.84953E-02	2.12600E-02	0.870	0.3843	5.69417E-02	TEMPPHD	6.61698E-02	3.38330E-02	1.956	0.0505	5.69417E-02
MCITPHD	1.80146E-02	2.95223E-02	0.610	0.5417	1.54600E-02	MCITPHD	4.42282E-02	5.07998E-02	0.871	0.3840	1.54600E-02
HISPAN	-2.21733E-02	2.59784E-02	-0.854	0.3934	2.09705E-02	HISPAN	-3.40413E-02	3.77718E-02	-0.901	0.3675	2.09705E-02
BLACK	-3.06759E-02	1.94297E-02	-1.579	0.1144	3.75019E-02	BLACK	7.03269E-03	2.64354E-02	0.266	0.7902	3.75019E-02
ASIAN	1.64143E-04	1.69590E-02	0.010	0.9923	7.08710E-02	ASIAN	-2.34387E-02	2.65968E-02	-0.881	0.3782	7.08710E-02
NATAMER	4.82598E-02	3.75612E-02	1.285	0.1989	5.81662E-03	NATAMER	2.70191E-02	6.66550E-02	0.405	0.6852	5.81662E-03
MARRIED	-2.45404E-02	1.30517E-02	-1.880	0.0601	7.85550E-01	MARRIED	-7.63791E-02	1.77909E-02	-4.293	0.0000	7.85550E-01
MMARRIED	-2.93511E-02	2.73851E-02	-1.072	0.2838	2.96954E-02	MMARRIED	-9.85513E-03	3.36272E-02	-0.293	0.7695	2.96954E-02
DEP6	1.28964E-02	1.29200E-02	0.998	0.3182	5.80132E-02	DEP6	-2.46966E-02	2.07875E-02	-1.188	0.2348	5.80132E-02
DEP618	-1.74006E-03	5.60778E-03	-0.310	0.7563	5.96663E-01	DEP618	-1.23610E-02	8.34322E-03	-1.482	0.1385	5.96663E-01
MDEP	4.40585E-03	1.39594E-02	0.316	0.7523	3.60478E-01	MDEP	-2.89214E-02	2.02021E-02	-1.432	0.1523	3.60478E-01
BIO	-1.20668E-03	1.83937E-02	-0.066	0.9477	3.07210E-01	BIO	6.52700E-02	2.64183E-02	2.471	0.0135	3.07210E-01
HEALTH	-8.43048E-03	2.44712E-02	-0.345	0.7305	4.13286E-02	HEALTH	-2.19017E-02	3.67658E-02	-0.596	0.5514	4.13286E-02
ENG	-1.32942E-02	2.28153E-02	-0.583	0.5601	6.49013E-02	ENG	-2.76035E-02	3.34711E-02	-0.825	0.4095	6.49013E-02
MATHCOM	-9.86161E-03	2.04622E-02	-0.482	0.6298	1.10975E-01	MATHCOM	5.06410E-02	2.86260E-02	1.769	0.0769	1.10975E-01
PHYSOTH	5.80833E-02	2.03742E-02	2.851	0.0044	6.24522E-02	PHYSOTH	2.16474E-02	3.25373E-02	0.665	0.5059	6.24522E-02
CHEM	4.62280E-02	2.04394E-02	2.262	0.0237	7.02587E-02	CHEM	3.10185E-02	3.20118E-02	0.969	0.3326	7.02587E-02
EAOSCI	2.24061E-02	2.48590E-02	0.901	0.3674	3.68896E-02	EAOSCI	9.89460E-03	3.75425E-02	0.264	0.7921	3.68896E-02
PSYCH	-3.78050E-03	2.00523E-02	-0.189	0.8505	1.03322E-01	PSYCH	2.14062E-02	2.93240E-02	0.730	0.4654	1.03322E-01
ECON	-7.45160E-02	3.06573E-02	-2.431	0.0151	3.78081E-02	ECON	-1.10429E-02	3.75958E-02	-0.294	0.7690	3.78081E-02
POLYSCI	-4.25521E-02	2.89309E-02	-1.471	0.1413	3.01546E-02	POLYSCI	2.18282E-02	3.91511E-02	0.558	0.5772	3.01546E-02
SAD	-5.94191E-02	2.39566E-02	-2.480	0.0131	5.87785E-02	SAD	5.24127E-03	3.25960E-02	0.161	0.8723	5.87785E-02
OSSCI	-2.81691E-02	3.07784E-02	-0.915	0.3601	2.12766E-02	OSSCI	1.86727E-02	4.27632E-02	0.437	0.6624	2.12766E-02
WAVE97	5.50994E-02	2.20190E-02	2.502	0.0123	9.21476E-02	WAVE97	8.38114E-02	3.35523E-02	2.498	0.0125	9.21476E-02
WAVE95	6.53639E-02	1.86209E-02	3.510	0.0004	1.21690E-01	WAVE95	6.15700E-02	2.83133E-02	2.175	0.0297	1.21690E-01
WAVE93	5.72892E-02	1.84595E-02	3.104	0.0019	1.40364E-01	WAVE93	6.30572E-02	2.77297E-02	2.274	0.0230	1.40364E-01
WAVE91	2.10694E-02	1.98582E-02	1.061	0.2887	1.04699E-01	WAVE91	7.08038E-02	2.83717E-02	2.496	0.0126	1.04699E-01
WAVE89	-1.25536E-03	1.76008E-02	-0.071	0.9431	1.34701E-01	WAVE89	7.70963E-02	2.52453E-02	3.054	0.0023	1.34701E-01
WAVE87	-1.08310E-02	1.79127E-02	-0.605	0.5454	1.20465E-01	WAVE87	4.04534E-02	2.55371E-02	1.584	0.1132	1.20465E-01
WAVE85	1.85572E-02	1.75554E-02	1.057	0.2905	1.16026E-01	WAVE85	1.31396E-02	2.68265E-02	0.490	0.6243	1.16026E-01
WAVE83	-5.43844E-02	2.17749E-02	-2.498	0.0125	9.42905E-02	WAVE83	1.68191E-02	2.91230E-02	0.578	0.5636	9.42905E-02

TABLE C-59. Maximum likelihood estimates for rank, logit model I-1: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						ASIAN	2.32746E-02	2.96732E-02	0.784	0.4328	7.08710E-02
Constant	3.37823E-01	9.52280E-02	3.548	0.0004		NATAMER	-7.52789E-02	7.43990E-02	-1.012	0.3116	5.81662E-03
FEMALE	-7.03326E-02	2.52426E-02	-2.786	0.0053	2.49196E-01	MARRIED	1.00920E-01	2.07057E-02	4.874	0.0000	7.85550E-01
FMARRIED	-7.78470E-02	3.13635E-02	-2.482	0.0131	1.40824E-01	MMARRIED	3.92062E-02	3.93675E-02	0.996	0.3193	2.96954E-02
FDEP6	-1.01292E-01	7.17047E-02	-1.413	0.1578	6.12276E-03	DEP6	1.18002E-02	2.24684E-02	0.525	0.5995	5.80132E-02
FDEP618	-2.30621E-02	1.74285E-02	-1.323	0.1858	1.09444E-01	DEP618	1.41010E-02	9.28564E-03	1.519	0.1289	5.96663E-01
YRPHD21	2.45464E-02	1.20121E-02	2.043	0.0410	4.93342E-01	MDEP	2.45155E-02	2.27930E-02	1.076	0.2821	3.60478E-01
TA	-2.61147E-03	7.40588E-02	-0.035	0.9719	1.05618E-02	BIO	-6.40633E-02	2.94658E-02	-2.174	0.0297	3.07210E-01
RA	4.92481E-02	7.45245E-02	0.661	0.5087	1.02556E-02	HEALTH	3.03322E-02	4.05608E-02	0.748	0.4546	4.13286E-02
FELLOW	2.72800E-02	1.42474E-01	0.191	0.8482	1.83683E-03	ENG	4.08977E-02	3.68100E-02	1.111	0.2665	6.49013E-02
TRAIN	3.12398E-02	7.70767E-02	0.405	0.6853	9.49028E-03	MATHCOM	-4.07794E-02	3.21459E-02	-1.269	0.2046	1.10975E-01
MPSOURC	7.45152E-02	5.70656E-02	1.306	0.1916	9.55916E-01	PHYSOTH	-7.97307E-02	3.56392E-02	-2.237	0.0253	6.24522E-02
TTD1	2.39745E-04	2.97311E-03	0.081	0.9357	7.90295E+00	CHEM	-7.72465E-02	3.52983E-02	-2.188	0.0286	7.02587E-02
MTTD1	1.71601E-02	8.11932E-02	0.211	0.8326	1.45416E-02	EAOSCI	-3.23007E-02	4.12700E-02	-0.783	0.4338	3.68896E-02
PDOCP	-1.48690E-02	1.53345E-02	-0.970	0.3322	2.63738E-01	PSYCH	-1.76257E-02	3.26676E-02	-0.540	0.5895	1.03322E-01
MPDOCP	-1.08029E-02	3.49543E-02	-0.309	0.7573	4.07164E-02	ECON	8.55590E-02	4.33293E-02	1.975	0.0483	3.78081E-02
FSWI	-2.03233E-03	1.29797E-02	-0.157	0.8756	3.75478E-01	POLYSCI	2.07240E-02	4.46128E-02	0.465	0.6423	3.01546E-02
MFSWI	3.28760E-03	1.38781E-02	0.237	0.8127	3.19302E-01	SAD	5.41778E-02	3.69896E-02	1.465	0.1430	5.87785E-02
BAINT	9.56277E-02	3.52174E-02	2.715	0.0066	6.96464E-02	OSSCI	9.49640E-03	4.85764E-02	0.195	0.8450	2.12766E-02
MBAINT	-4.00211E-02	9.99487E-02	-0.400	0.6888	8.26573E-03	WAVE97	-1.38911E-01	3.75034E-02	-3.704	0.0002	9.21476E-02
AGEPHD	-2.95048E-03	2.64799E-03	-1.114	0.2652	3.06345E+01	WAVE95	-1.26934E-01	3.13434E-02	-4.050	0.0001	1.21690E-01
NATUPHD	-2.19077E-02	4.03149E-02	-0.543	0.5868	2.11235E-02	WAVE93	-1.20346E-01	3.07674E-02	-3.911	0.0001	1.40364E-01
PERMPHD	-5.38008E-02	3.62282E-02	-1.485	0.1375	4.36247E-02	WAVE91	-9.18732E-02	3.17871E-02	-2.890	0.0038	1.04699E-01
TEMPPHD	-8.46651E-02	3.80160E-02	-2.227	0.0259	5.69417E-02	WAVE89	-7.58409E-02	2.82234E-02	-2.687	0.0072	1.34701E-01
MCITPHD	-6.22428E-02	5.64630E-02	-1.102	0.2703	1.54600E-02	WAVE87	-2.96225E-02	2.84661E-02	-1.041	0.2981	1.20465E-01
HISPAN	5.62146E-02	4.22275E-02	1.331	0.1831	2.09705E-02	WAVE85	-3.16968E-02	2.93694E-02	-1.079	0.2805	1.16026E-01
BLACK	2.36432E-02	3.09159E-02	0.765	0.4444	3.75019E-02	WAVE83	3.75653E-02	3.27391E-02	1.147	0.2512	9.42905E-02

NOTES: Dependent variable: RANK1; 6533 observations; 6 iterations; log likelihood function = -5230.818; restricted log likelihood = -5491.449; Chi-squared = 521.2618; d.f. = 104; significance = .0000000.



TABLE C-60. Maximum likelihood estimates for rank, logit model I-2: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.70834E-01	4.99016E-02	-3.423	0.0006		WAVE91	2.30095E-02	1.77212E-02	1.298	0.1941	1.04699E-01
FEMALE	4.94806E-02	1.36114E-02	3.635	0.0003	2.49196E-01	WAVE89	-9.71433E-04	1.57320E-02	-0.062	0.9508	1.34701E-01
FMARRIED	3.75918E-02	1.61586E-02	2.326	0.0200	1.40824E-01	WAVE87	-9.81739E-03	1.60318E-02	-0.612	0.5403	1.20465E-01
FDEP6	-4.48646E-03	3.01106E-02	-0.149	0.8816	6.12276E-03	WAVE85	2.16876E-02	1.57046E-02	1.381	0.1673	1.16026E-01
FDEP618	7.80231E-03	8.14643E-03	0.958	0.3382	1.09444E-01	WAVE83	-4.97451E-02	1.94870E-02	-2.553	0.0107	9.42905E-02
YRPHD21	-5.81367E-03	6.44367E-03	-0.902	0.3669	4.93342E-01	Constant	-1.84421E-01	8.54030E-02	-2.159	0.0308	
TA	2.57335E-02	3.33564E-02	0.771	0.4404	1.05618E-02	FEMALE	1.95809E-02	2.18433E-02	0.896	0.3700	2.49196E-01
RA	-4.81354E-02	3.78491E-02	-1.272	0.2035	1.02556E-02	FMARRIED	3.26560E-02	2.76269E-02	1.182	0.2372	1.40824E-01
FELLOW	-5.45175E-03	5.89044E-02	-0.093	0.9263	1.83683E-03	FDEP6	9.78658E-02	6.18049E-02	1.583	0.1133	6.12276E-03
TRAIN	-7.78962E-02	4.31205E-02	-1.806	0.0708	9.49028E-03	FDEP618	1.34293E-02	1.56664E-02	0.857	0.3913	1.09444E-01
MPSOURC	-2.71727E-02	2.71071E-02	-1.002	0.3161	9.55916E-01	YRPHD21	-1.93861E-02	1.07166E-02	-1.809	0.0705	4.93342E-01
TTD1	1.71329E-03	1.58407E-03	1.082	0.2794	7.90295E+00	TA	-2.91971E-02	6.51018E-02	-0.448	0.6538	1.05618E-02
MTTD1	3.96245E-02	3.73003E-02	1.062	0.2881	1.45416E-02	RA	5.36128E-03	6.40555E-02	0.084	0.9333	1.02556E-02
PDOCP	1.34733E-02	8.07858E-03	1.668	0.0954	2.63738E-01	FELLOW	-3.37334E-02	1.26191E-01	-0.267	0.7892	1.83683E-03
MPDOCP	1.18346E-02	1.74303E-02	0.679	0.4972	4.07164E-02	TRAIN	5.55144E-02	6.31255E-02	0.879	0.3792	9.49028E-03
FSWI	1.56833E-03	6.93742E-03	0.226	0.8211	3.75478E-01	MPSOURC	-4.65431E-02	4.99228E-02	-0.932	0.3512	9.55916E-01
MFSWI	-4.37847E-03	7.40559E-03	-0.591	0.5544	3.19302E-01	TTD1	-1.73996E-03	2.63443E-03	-0.660	0.5090	7.90295E+00
BAINT	-2.67812E-02	1.87536E-02	-1.428	0.1533	6.96464E-02	MTTD1	-6.28411E-02	7.51335E-02	-0.836	0.4029	1.45416E-02
MBAINT	2.96637E-02	4.46481E-02	0.664	0.5064	8.26573E-03	PDOCP	5.69999E-03	1.40289E-02	0.406	0.6845	2.63738E-01
AGEPHD	1.28427E-03	1.42612E-03	0.901	0.3678	3.06345E+01	MPDOCP	-2.01445E-03	3.13865E-02	-0.064	0.9488	4.07164E-02
NATUPHD	-6.44124E-03	2.15273E-02	-0.299	0.7648	2.11235E-02	FSWI	2.62187E-03	1.15949E-02	0.226	0.8211	3.75478E-01
PERMPHD	-2.83357E-02	2.02956E-02	-1.396	0.1627	4.36247E-02	MFSWI	3.37370E-03	1.23663E-02	0.273	0.7850	3.19302E-01
TEMPPHD	1.28488E-02	1.92701E-02	0.667	0.5049	5.69417E-02	BAINT	-9.09467E-02	3.18450E-02	-2.856	0.0043	6.96464E-02
MCITPHD	1.12122E-02	2.65225E-02	0.423	0.6725	1.54600E-02	MBAINT	1.32582E-02	9.43223E-02	0.141	0.8882	8.26573E-03
HISPAN	-2.36523E-02	2.29102E-02	-1.032	0.3019	2.09705E-02	AGEPHD	9.76882E-04	2.34427E-03	0.417	0.6769	3.06345E+01
BLACK	-3.45440E-02	1.73946E-02	-1.986	0.0470	3.75019E-02	NATUPHD	3.36759E-02	3.50274E-02	0.961	0.3363	2.11235E-02
ASIAN	9.23907E-03	1.51532E-02	0.610	0.5421	7.08710E-02	PERMPHD	8.22021E-02	3.12612E-02	2.630	0.0086	4.36247E-02
NATAMER	5.69445E-02	3.43901E-02	1.656	0.0978	5.81662E-03	TEMPPHD	6.34096E-02	3.41550E-02	1.857	0.0634	5.69417E-02
MARRIED	-2.32878E-02	1.16398E-02	-2.001	0.0454	7.85550E-01	MCITPHD	5.33159E-02	5.08038E-02	1.049	0.2940	1.54600E-02
MMARRIED	-1.96053E-02	2.44278E-02	-0.803	0.4222	2.96954E-02	HISPAN	-3.14073E-02	3.80691E-02	-0.825	0.4094	2.09705E-02
DEP6	7.39701E-03	1.12525E-02	0.657	0.5109	5.80132E-02	BLACK	1.04316E-02	2.66550E-02	0.391	0.6955	3.75019E-02
DEP618	-2.18695E-03	4.99306E-03	-0.438	0.6614	5.96663E-01	ASIAN	-2.20963E-02	2.67851E-02	-0.825	0.4094	7.08710E-02
MDEP	-2.79647E-04	1.24011E-02	-0.023	0.9820	3.60478E-01	NATAMER	1.70245E-02	6.68577E-02	0.255	0.7990	5.81662E-03
WATEACH	-6.65692E-02	8.10550E-03	-8.213	0.0000	5.11557E-01	MARRIED	-7.50108E-02	1.79187E-02	-4.186	0.0000	7.85550E-01
WAOTh	4.30943E-02	7.97975E-03	5.400	0.0000	1.99908E-01	MMARRIED	-1.68427E-02	3.38080E-02	-0.498	0.6184	2.96954E-02
EMPRI	2.05200E-02	7.47331E-03	2.746	0.0060	2.49503E-01	DEP6	-2.01590E-02	2.10001E-02	-0.960	0.3371	5.80132E-02
MEMPRI	-3.92696E-03	1.99392E-02	-0.197	0.8439	1.36691E-01	DEP618	-1.25518E-02	8.38016E-03	-1.498	0.1342	5.96663E-01
EMPRES	1.07542E-02	8.81835E-03	1.220	0.2226	2.93739E-01	MDEP	-2.38565E-02	2.03345E-02	-1.173	0.2407	3.60478E-01
EMPDOC	-1.76723E-02	1.41368E-02	-1.250	0.2113	9.79642E-02	WATEACH	9.50134E-02	1.35542E-02	7.010	0.0000	5.11557E-01
MEMPCARN	9.77591E-02	1.89775E-02	5.151	0.0000	2.81953E-01	WAOTh	-6.77933E-03	1.72915E-02	-0.392	0.6950	1.99908E-01
BIO	2.23118E-03	1.64603E-02	0.136	0.8922	3.07210E-01	EMPRI	-6.00214E-03	1.26737E-02	-0.474	0.6358	2.49503E-01
HEALTH	-1.22918E-02	2.18001E-02	-0.564	0.5729	4.13286E-02	MEMPRI	4.16143E-02	4.79347E-02	0.868	0.3853	1.36691E-01
ENG	-5.86758E-03	2.02815E-02	-0.289	0.7723	6.49013E-02	EMPRES	2.88130E-04	1.42904E-02	0.020	0.9839	2.93739E-01
MATHCOM	8.11222E-03	1.82543E-02	0.444	0.6568	1.10975E-01	EMPDOC	4.29052E-02	1.85434E-02	2.314	0.0207	9.79642E-02
PHYSOTH	5.52286E-02	1.82641E-02	3.024	0.0025	6.24522E-02	MEMPCARN	-8.75944E-04	4.80298E-02	-0.018	0.9854	2.81953E-01
CHEM	5.80142E-02	1.84191E-02	3.150	0.0016	7.02587E-02	BIO	6.16294E-02	2.67390E-02	2.305	0.0212	3.07210E-01
EAOSCI	3.51266E-02	2.20600E-02	1.592	0.1113	3.68896E-02	HEALTH	-2.62280E-02	3.71021E-02	-0.707	0.4796	4.13286E-02
PSYCH	4.81906E-03	1.78978E-02	0.269	0.7877	1.03322E-01	ENG	-4.41992E-02	3.37444E-02	-1.310	0.1903	6.49013E-02
ECON	-4.49689E-02	2.71768E-02	-1.655	0.0980	3.78081E-02	MATHCOM	2.55197E-02	2.90584E-02	0.878	0.3798	1.10975E-01
POLYSCI	-2.64030E-02	2.58965E-02	-1.020	0.3079	3.01546E-02	PHYSOTH	7.69242E-03	3.28842E-02	0.234	0.8150	6.24522E-02
SAD	-4.36397E-02	2.13064E-02	-2.048	0.0405	5.87785E-02	CHEM	7.20602E-03	3.26227E-02	0.221	0.8252	7.02587E-02
OSSCI	-1.36696E-02	2.76053E-02	-0.495	0.6205	2.12766E-02	EAOSCI	-1.02375E-02	3.78163E-02	-0.271	0.7866	3.68896E-02
WAVE97	-3.44817E-02	2.28995E-02	-1.506	0.1321	9.21476E-02	PSYCH	6.15910E-03	2.97309E-02	0.207	0.8359	1.03322E-01
WAVE95	4.67973E-02	1.70457E-02	2.745	0.0060	1.21690E-01	ECON	-3.82785E-02	3.79098E-02	-1.010	0.3126	3.78081E-02
WAVE93	-4.23392E-02	2.37983E-02	-1.779	0.0752	1.40364E-01	POLYSCI	-5.47974E-03	3.95658E-02	-0.138	0.8898	3.01546E-02

TABLE C-60. Maximum likelihood estimates for rank, logit model I-2: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
SAD	-1.27257E-02	3.28870E-02	-0.387	0.6988	5.87785E-02	BLACK	2.41124E-02	3.01542E-02	0.800	0.4239	3.75019E-02
OSSCI	-4.05173E-03	4.31140E-02	-0.094	0.9251	2.12766E-02	ASIAN	1.28573E-02	2.92737E-02	0.439	0.6605	7.08710E-02
WAVE97	5.94252E-02	4.27271E-02	1.391	0.1643	9.21476E-02	NATAMER	-7.39689E-02	7.31155E-02	-1.012	0.3117	5.81662E-03
WAVE95	7.15671E-02	2.85540E-02	2.506	0.0122	1.21690E-01	MARRIED	9.82986E-02	2.02318E-02	4.859	0.0000	7.85550E-01
WAVE93	7.55852E-02	5.33418E-02	1.417	0.1565	1.40364E-01	MMARRIED	3.64480E-02	3.83543E-02	0.950	0.3420	2.96954E-02
WAVE91	6.90848E-02	2.84685E-02	2.427	0.0152	1.04699E-01	DEP6	1.27620E-02	2.21292E-02	0.577	0.5641	5.80132E-02
WAVE89	7.75371E-02	2.53499E-02	3.059	0.0022	1.34701E-01	DEP618	1.47387E-02	9.11074E-03	1.618	0.1057	5.96663E-01
WAVE87	4.02564E-02	2.56201E-02	1.571	0.1161	1.20465E-01	MDEP	2.41361E-02	2.23323E-02	1.081	0.2798	3.60478E-01
WAVE85	8.39062E-03	2.69293E-02	0.312	0.7554	1.16026E-01	WATEACH	-2.84442E-02	1.48829E-02	-1.911	0.0560	5.11557E-01
WAVE83	7.53273E-03	2.92524E-02	0.258	0.7968	9.42905E-02	WAOth	-3.63150E-02	1.82219E-02	-1.993	0.0463	1.99908E-01
Marginal effects: full-professor rank						EMPPRI	-1.45179E-02	1.38930E-02	-1.045	0.2960	2.49503E-01
Constant	3.55255E-01	9.44873E-02	3.760	0.0002		MEMPPRI	-3.76873E-02	5.06158E-02	-0.745	0.4565	1.36691E-01
FEMALE	-6.90615E-02	2.46993E-02	-2.796	0.0052	2.49196E-01	EMPRES	-1.10423E-02	1.56770E-02	-0.704	0.4812	2.93739E-01
FMARRIED	-7.02478E-02	3.07691E-02	-2.283	0.0224	1.40824E-01	EMPDOc	-2.52329E-02	2.14196E-02	-1.178	0.2388	9.79642E-02
FDEP6	-9.33793E-02	7.12720E-02	-1.310	0.1901	6.12276E-03	MEMPCARN	-9.68831E-02	5.02839E-02	-1.927	0.0540	2.81953E-01
FDEP618	-2.12317E-02	1.71798E-02	-1.236	0.2165	1.09444E-01	BIO	-6.38605E-02	2.90967E-02	-2.195	0.0282	3.07210E-01
YRPHD21	2.51998E-02	1.17852E-02	2.138	0.0325	4.93342E-01	HEALTH	3.85198E-02	3.99342E-02	0.965	0.3348	4.13286E-02
TA	3.46368E-03	7.27374E-02	0.048	0.9620	1.05618E-02	ENG	5.00668E-02	3.62327E-02	1.382	0.1670	6.49013E-02
RA	4.27742E-02	7.27176E-02	0.588	0.5564	1.02556E-02	MATHCOM	-3.36319E-02	3.17487E-02	-1.059	0.2895	1.10975E-01
FELLOW	3.91851E-02	1.39800E-01	0.280	0.7793	1.83683E-03	PHYSOTH	-6.29210E-02	3.52504E-02	-1.785	0.0743	6.24522E-02
TRAIN	2.23818E-02	7.47450E-02	0.299	0.7646	9.49028E-03	CHEM	-6.52203E-02	3.51573E-02	-1.855	0.0636	7.02587E-02
MPSOURC	7.37158E-02	5.58514E-02	1.320	0.1869	9.55916E-01	EAOSCI	-2.48891E-02	4.05741E-02	-0.613	0.5396	3.68896E-02
TTD1	2.66669E-05	2.91467E-03	0.009	0.9927	7.90295E+00	PSYCH	-1.09782E-02	3.22811E-02	-0.340	0.7338	1.03322E-01
MTTD1	2.32165E-02	8.02047E-02	0.289	0.7722	1.45416E-02	ECON	8.32474E-02	4.23169E-02	1.967	0.0492	3.78081E-02
PDOCP	-1.91733E-02	1.53703E-02	-1.247	0.2122	2.63738E-01	POLYSCI	3.18827E-02	4.38113E-02	0.728	0.4668	3.01546E-02
MPDOCP	-9.82010E-03	3.42631E-02	-0.287	0.7744	4.07164E-02	SAD	5.63655E-02	3.62640E-02	1.554	0.1201	5.87785E-02
FSWI	-4.19020E-03	1.27551E-02	-0.329	0.7425	3.75478E-01	OSSCI	1.77213E-02	4.76369E-02	0.372	0.7099	2.12766E-02
MFSWI	1.00478E-03	1.36371E-02	0.074	0.9413	3.19302E-01	WAVE97	-2.49436E-02	4.62100E-02	-0.540	0.5893	9.21476E-02
BAINT	1.17728E-01	3.49644E-02	3.367	0.0008	6.96464E-02	WAVE95	-1.18364E-01	3.10169E-02	-3.816	0.0001	1.21690E-01
MBaint	-4.29219E-02	9.92453E-02	-0.432	0.6654	8.26573E-03	WAVE93	-3.32460E-02	5.62981E-02	-0.591	0.5548	1.40364E-01
AGEPHD	-2.26115E-03	2.59841E-03	-0.870	0.3842	3.06345E+01	WAVE91	-9.20944E-02	3.11319E-02	-2.958	0.0031	1.04699E-01
NATUPHD	-2.72346E-02	3.94760E-02	-0.690	0.4903	2.11235E-02	WAVE89	-7.65656E-02	2.76612E-02	-2.768	0.0056	1.34701E-01
PERMPHD	-5.38663E-02	3.53745E-02	-1.523	0.1278	4.36247E-02	WAVE87	-3.04390E-02	2.79051E-02	-1.091	0.2754	1.20465E-01
TEMPPHD	-7.62584E-02	3.75214E-02	-2.032	0.0421	5.69417E-02	WAVE85	-3.00782E-02	2.88704E-02	-1.042	0.2975	1.16026E-01
MCITPHD	-6.45281E-02	5.54326E-02	-1.164	0.2444	1.54600E-02	WAVE83	4.22123E-02	3.20811E-02	1.316	0.1882	9.42905E-02
HISPAN	5.50596E-02	4.14307E-02	1.329	0.1839	2.09705E-02						

NOTES: Dependent variable: RANK1; 6533 observations; 6 iterations; log likelihood function = -5060.438; restricted log likelihood = -5491.449; Chi-squared = 862.0233; d.f. = 118; significance = .0000000.

TABLE C-61. Maximum likelihood estimates for rank, logit model I-3: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.28387E-01	5.07901E-02	-2.528	0.0115		Constant	-1.78415E-01	8.61243E-02	-2.072	0.0383	
FEMALE	4.48700E-02	1.25163E-02	3.585	0.0003	2.48808E-01	FEMALE	2.29948E-02	2.22902E-02	1.032	0.3023	2.48808E-01
FMARRIED	3.37689E-02	1.48008E-02	2.282	0.0225	1.39180E-01	FMARRIED	3.55177E-02	2.82103E-02	1.259	0.2080	1.39180E-01
FDEP6	4.48511E-03	2.76237E-02	0.162	0.8710	5.87861E-03	FDEP6	1.06755E-01	6.37444E-02	1.675	0.0940	5.87861E-03
FDEP618	8.37278E-03	7.31568E-03	1.144	0.2524	1.07404E-01	FDEP618	1.37056E-02	1.60478E-02	0.854	0.3931	1.07404E-01
YRPHD21	-7.06394E-03	5.95218E-03	-1.187	0.2353	4.92850E-01	YRPHD21	-1.74144E-02	1.09298E-02	-1.593	0.1111	4.92850E-01
TA	5.38355E-02	3.85581E-02	1.396	0.1626	1.00095E-02	TA	-2.83227E-02	6.66570E-02	-0.425	0.6709	1.00095E-02
RA	-4.72191E-02	5.35062E-02	-0.882	0.3775	9.69177E-03	RA	2.64662E-03	6.62488E-02	0.040	0.9681	9.69177E-03
FELLOW	1.29911E-02	7.21493E-02	0.180	0.8571	1.58881E-03	FELLOW	-5.54262E-02	1.30981E-01	-0.423	0.6722	1.58881E-03
TRAIN	-2.21607E-02	4.77172E-02	-0.464	0.6423	9.53289E-03	TRAIN	4.71453E-02	6.48930E-02	0.727	0.4675	9.53289E-03
MPSOURC	1.71973E-03	3.46420E-02	0.050	0.9604	9.58214E-01	MPSOURC	-5.52714E-02	5.12935E-02	-1.078	0.2812	9.58214E-01
TTD1	1.05963E-03	1.40856E-03	0.752	0.4519	7.90785E+00	TTD1	-1.55231E-03	2.67491E-03	-0.580	0.5617	7.90785E+00
MTTD1	6.01531E-02	3.34830E-02	1.797	0.0724	1.47760E-02	MTTD1	-7.05616E-02	7.67843E-02	-0.919	0.3581	1.47760E-02
PDOCP	1.28138E-02	7.34115E-03	1.745	0.0809	2.58659E-01	PDOCP	-6.40201E-03	1.40769E-02	-0.455	0.6493	2.58659E-01
MPDOCP	1.08133E-02	1.64662E-02	0.657	0.5114	3.97204E-02	MPDOCP	-8.40767E-03	3.21592E-02	-0.261	0.7938	3.97204E-02
FSWI	4.68430E-03	6.44840E-03	0.726	0.4676	3.76708E-01	FSWI	-3.19225E-03	1.17919E-02	-0.271	0.7866	3.76708E-01
MFSWI	5.00285E-03	6.85234E-03	0.730	0.4653	3.18716E-01	MFSWI	-3.52207E-03	1.26082E-02	-0.279	0.7800	3.18716E-01
BAINT	1.09429E-02	1.69375E-02	0.646	0.5182	7.19733E-02	BAINT	-9.49781E-02	3.22677E-02	-2.943	0.0032	7.19733E-02
MBAINT	9.69446E-03	3.75532E-02	0.258	0.7963	8.57960E-03	MBAINT	1.00769E-02	9.59851E-02	0.105	0.9164	8.57960E-03
AGEPHD	3.99185E-04	1.27455E-03	0.313	0.7541	3.06465E+01	AGEPHD	2.29642E-03	2.37746E-03	0.966	0.3341	3.06465E+01
NATUPHD	-2.87263E-02	2.40987E-02	-1.192	0.2333	2.04957E-02	NATUPHD	4.02607E-02	3.58901E-02	1.122	0.2620	2.04957E-02
PERMPHD	-2.81225E-02	1.95635E-02	-1.437	0.1506	4.38513E-02	PERMPHD	8.14371E-02	3.20526E-02	2.541	0.0111	4.38513E-02
TEMPPHD	1.08516E-02	1.85043E-02	0.586	0.5576	5.73562E-02	TEMPPHD	7.33407E-02	3.49014E-02	2.101	0.0356	5.73562E-02
MCITPHD	-1.46079E-03	2.54110E-02	-0.057	0.9542	1.49349E-02	MCITPHD	5.32329E-02	5.21996E-02	1.020	0.3078	1.49349E-02
HISPAN	-1.75884E-02	2.40029E-02	-0.733	0.4637	2.08135E-02	HISPAN	-3.77735E-02	3.88198E-02	-0.973	0.3305	2.08135E-02
BLACK	-2.30910E-02	1.85413E-02	-1.245	0.2130	3.68605E-02	BLACK	6.84931E-03	2.72259E-02	0.252	0.8014	3.68605E-02
ASIAN	9.07352E-04	1.39113E-02	0.065	0.9480	7.08611E-02	ASIAN	-2.43878E-02	2.73470E-02	-0.892	0.3725	7.08611E-02
NATAMER	4.01655E-02	3.30120E-02	1.217	0.2237	5.56085E-03	NATAMER	3.08187E-02	6.86541E-02	0.449	0.6535	5.56085E-03
MARRIED	-1.74479E-02	1.14289E-02	-1.527	0.1269	7.84557E-01	MARRIED	-8.14438E-02	1.83386E-02	-4.441	0.0000	7.84557E-01
MMARRIED	-1.88477E-02	2.00228E-02	-0.941	0.3465	3.06641E-02	MMARRIED	-1.34349E-02	3.43364E-02	-0.391	0.6956	3.06641E-02
DEP6	7.29202E-03	1.18560E-02	0.615	0.5385	5.68796E-02	DEP6	-2.44788E-02	2.12666E-02	-1.151	0.2497	5.68796E-02
DEP618	-2.67745E-03	5.24036E-03	-0.511	0.6094	5.92151E-01	DEP618	-1.30378E-02	8.60032E-03	-1.516	0.1295	5.92151E-01
MDEP	2.19512E-03	1.10956E-02	0.198	0.8432	3.71942E-01	MDEP	-3.03168E-02	2.06875E-02	-1.465	0.1428	3.71942E-01
BIO	-1.16570E-02	1.42809E-02	-0.816	0.4143	3.07595E-01	BIO	7.01361E-02	2.70349E-02	2.594	0.0095	3.07595E-01
HEALTH	-9.85898E-03	1.91196E-02	-0.516	0.6061	4.17858E-02	HEALTH	-2.31954E-02	3.76456E-02	-0.616	0.5378	4.17858E-02
ENG	-4.09642E-02	2.04008E-02	-2.008	0.0446	6.40292E-02	ENG	-2.02282E-02	3.43140E-02	-0.590	0.5555	6.40292E-02
MATHCOM	-2.16057E-02	1.59390E-02	-1.356	0.1752	1.12647E-01	MATHCOM	5.46884E-02	2.92880E-02	1.867	0.0619	1.12647E-01
PHYSOTH	1.69991E-02	1.64963E-02	1.030	0.3028	5.97394E-02	PHYSOTH	3.11188E-02	3.33948E-02	0.932	0.3514	5.97394E-02
CHEM	1.10431E-02	1.61236E-02	0.685	0.4934	6.86368E-02	CHEM	4.13648E-02	3.27773E-02	1.262	0.2070	6.86368E-02
EAOSCI	-9.67917E-03	2.09677E-02	-0.462	0.6444	3.65427E-02	EAOSCI	1.70688E-02	3.84873E-02	0.443	0.6574	3.65427E-02
PSYCH	-2.30616E-02	1.58583E-02	-1.454	0.1459	1.02796E-01	PSYCH	2.62163E-02	3.00614E-02	0.872	0.3832	1.02796E-01
ECON	-6.02047E-02	2.33840E-02	-2.575	0.0100	3.89260E-02	ECON	-1.55141E-02	3.83457E-02	-0.405	0.6858	3.89260E-02
POLYSCI	-4.12478E-02	2.28623E-02	-1.804	0.0712	3.06641E-02	POLYSCI	2.06456E-02	4.00936E-02	0.515	0.6066	3.06641E-02
SAD	-5.20581E-02	1.92386E-02	-2.706	0.0068	5.94217E-02	SAD	2.38877E-03	3.33850E-02	0.072	0.9430	5.94217E-02
OSSCI	-3.27338E-02	2.47707E-02	-1.321	0.1863	2.14490E-02	OSSCI	2.12941E-02	4.38100E-02	0.486	0.6269	2.14490E-02
WAVE97	-1.09617E-02	1.89714E-02	-0.578	0.5634	8.77026E-02	WAVE97	1.01525E-01	3.44215E-02	2.949	0.0032	8.77026E-02
WAVE95	-9.21395E-03	1.51768E-02	-0.607	0.5438	1.14395E-01	WAVE95	7.82934E-02	2.89694E-02	2.703	0.0069	1.14395E-01
WAVE93	-6.35742E-04	1.44960E-02	-0.044	0.9650	1.34890E-01	WAVE93	7.73153E-02	2.83465E-02	2.728	0.0064	1.34890E-01
WAVE91	-6.90641E-03	1.51313E-02	-0.456	0.6481	1.05497E-01	WAVE91	8.00073E-02	2.89589E-02	2.763	0.0057	1.05497E-01
WAVE89	-1.16266E-02	1.26604E-02	-0.918	0.3584	1.37750E-01	WAVE89	8.17454E-02	2.57690E-02	3.172	0.0015	1.37750E-01
WAVE87	-2.04426E-02	1.30113E-02	-1.571	0.1162	1.22974E-01	WAVE87	4.37172E-02	2.60642E-02	1.677	0.0935	1.22974E-01
WAVE85	1.33272E-02	1.22938E-02	1.084	0.2783	1.20432E-01	WAVE85	1.50886E-02	2.73802E-02	0.551	0.5816	1.20432E-01
WAVE83	-3.82394E-02	1.52711E-02	-2.504	0.0123	9.78710E-02	WAVE83	1.30361E-02	2.96696E-02	0.439	0.6604	9.78710E-02

TABLE C-61. Maximum likelihood estimates for rank, logit model I-3: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: full-professor rank						ASIAN	2.34804E-02	2.93421E-02	0.800	0.4236	7.08611E-02
Constant	3.06802E-01	9.54214E-02	3.215	0.0013		NATAMER	-7.09841E-02	7.45561E-02	-0.952	0.3411	5.56085E-03
FEMALE	-6.78648E-02	2.46607E-02	-2.752	0.0059	2.48808E-01	MARRIED	9.88916E-02	2.04624E-02	4.833	0.0000	7.84557E-01
FMARRIED	-6.92866E-02	3.08107E-02	-2.249	0.0245	1.39180E-01	MMARRIED	3.22826E-02	3.75263E-02	0.860	0.3896	3.06641E-02
FDEP6	-1.11240E-01	7.14328E-02	-1.557	0.1194	5.87861E-03	DEP6	1.71868E-02	2.26714E-02	0.758	0.4484	5.68796E-02
FDEP618	-2.20783E-02	1.72540E-02	-1.280	0.2007	1.07404E-01	DEP618	1.57153E-02	9.40342E-03	1.671	0.0947	5.92151E-01
YRPHD21	2.44783E-02	1.18535E-02	2.065	0.0389	4.92850E-01	MDEP	2.81216E-02	2.23674E-02	1.257	0.2087	3.71942E-01
TA	-2.55128E-02	7.55349E-02	-0.338	0.7355	1.00095E-02	BIO	-5.84791E-02	2.87804E-02	-2.032	0.0422	3.07595E-01
RA	4.45725E-02	7.95280E-02	0.560	0.5752	9.69177E-03	HEALTH	3.30544E-02	3.98423E-02	0.830	0.4067	4.17858E-02
FELLOW	4.24350E-02	1.47138E-01	0.288	0.7730	1.58881E-03	ENG	6.11924E-02	3.69115E-02	1.658	0.0974	6.40292E-02
TRAIN	-2.49846E-02	7.73340E-02	-0.323	0.7466	9.53289E-03	MATHCOM	-3.30827E-02	3.13483E-02	-1.055	0.2913	1.12647E-01
MPSOURC	5.35517E-02	5.92967E-02	0.903	0.3665	9.58214E-01	PHYSOTH	-4.81179E-02	3.53382E-02	-1.362	0.1733	5.97394E-02
TTD1	4.92681E-04	2.89995E-03	0.170	0.8651	7.90785E+00	CHEM	-5.24079E-02	3.47611E-02	-1.508	0.1316	6.86368E-02
MTTD1	1.04086E-02	8.08268E-02	0.129	0.8975	1.47760E-02	EAOSCI	-7.38958E-03	4.10386E-02	-0.180	0.8571	3.65427E-02
PDOCP	-6.41179E-03	1.52156E-02	-0.421	0.6735	2.58659E-01	PSYCH	-3.15468E-03	3.20796E-02	-0.098	0.9217	1.02796E-01
MPDOCP	-2.40559E-03	3.47403E-02	-0.069	0.9448	3.97204E-02	ECON	7.57188E-02	4.16134E-02	1.820	0.0688	3.89260E-02
FSWI	-1.49205E-03	1.28080E-02	-0.116	0.9073	3.76708E-01	POLYSCI	2.06022E-02	4.34521E-02	0.474	0.6354	3.06641E-02
MFSWI	-1.48079E-03	1.37003E-02	-0.108	0.9139	3.18716E-01	SAD	4.96694E-02	3.61551E-02	1.374	0.1695	5.94217E-02
BAINT	8.40352E-02	3.47617E-02	2.417	0.0156	7.19733E-02	OSSCI	1.14397E-02	4.75022E-02	0.241	0.8097	2.14490E-02
MBAINT	-1.97714E-02	9.94987E-02	-0.199	0.8425	8.57960E-03	WAVE97	-9.05630E-02	3.74095E-02	-2.421	0.0155	8.77026E-02
AGEPHD	-2.69560E-03	2.58255E-03	-1.044	0.2966	3.06465E+01	WAVE95	-6.90795E-02	3.10411E-02	-2.225	0.0261	1.14395E-01
NATUPHD	-1.15344E-02	4.09368E-02	-0.282	0.7781	2.04957E-02	WAVE93	-7.66796E-02	3.02744E-02	-2.533	0.0113	1.34890E-01
PERMPHD	-5.33146E-02	3.56705E-02	-1.495	0.1350	4.38513E-02	WAVE91	-7.31008E-02	3.10018E-02	-2.358	0.0184	1.05497E-01
TEMPPHD	-8.41924E-02	3.78737E-02	-2.223	0.0262	5.73562E-02	WAVE89	-7.01189E-02	2.73575E-02	-2.563	0.0104	1.37750E-01
MCITPHD	-5.17721E-02	5.61830E-02	-0.921	0.3568	1.49349E-02	WAVE87	-2.32746E-02	2.76385E-02	-0.842	0.3997	1.22974E-01
HISPAN	5.53619E-02	4.25584E-02	1.301	0.1933	2.08135E-02	WAVE85	-2.84158E-02	2.86109E-02	-0.993	0.3206	1.20432E-01
BLACK	1.62417E-02	3.10807E-02	0.523	0.6013	3.68605E-02	WAVE83	2.52032E-02	3.14347E-02	0.802	0.4227	9.78710E-02

NOTES: Dependent variable: RANK1; 6294 observations; 7 iterations; log likelihood function = -4697.007; restricted log likelihood = -4923.011; Chi-squared = 452.0094; d.f. = 104; significance = .0000000.

TABLE C-62. Maximum likelihood estimates for rank, logit model I-4: 20 or 21 years since doctorate

Variable	Coefficient	Standard Error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard Error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.32566E-01	4.81552E-02	-2.753	0.0059		WAVE91	-3.40040E-03	1.43133E-02	-0.238	0.8122	1.05497E-01
FEMALE	4.56526E-02	1.18602E-02	3.849	0.0001	2.48808E-01	WAVE89	-1.03028E-02	1.20086E-02	-0.858	0.3909	1.37750E-01
FMARRIED	3.00872E-02	1.39969E-02	2.150	0.0316	1.39180E-01	WAVE87	-1.86310E-02	1.23463E-02	-1.509	0.1313	1.22974E-01
FDEP6	3.42150E-03	2.59288E-02	0.132	0.8950	5.87861E-03	WAVE85	1.50371E-02	1.16755E-02	1.288	0.1978	1.20432E-01
FDEP618	6.39718E-03	6.93774E-03	0.922	0.3565	1.07404E-01	WAVE83	-3.57754E-02	1.45057E-02	-2.466	0.0137	9.78710E-02
YRPHD21	-5.85229E-03	5.62754E-03	-1.040	0.2984	4.92850E-01	Constant	-1.95142E-01	8.74315E-02	-2.232	0.0256	
TA	5.49775E-02	3.62613E-02	1.516	0.1295	1.00095E-02	FEMALE	1.99443E-02	2.23200E-02	0.894	0.3716	2.48808E-01
RA	-4.23050E-02	5.01311E-02	-0.844	0.3987	9.69177E-03	FMARRIED	3.63240E-02	2.82545E-02	1.286	0.1986	1.39180E-01
FELLOW	-6.70373E-04	6.80274E-02	-0.010	0.9921	1.58881E-03	FDEP6	1.02326E-01	6.41327E-02	1.596	0.1106	5.87861E-03
TRAIN	-1.92824E-02	4.47370E-02	-0.431	0.6665	9.53289E-03	FDEP618	1.44883E-02	1.60498E-02	0.903	0.3667	1.07404E-01
MPSOURC	3.68474E-04	3.24824E-02	0.011	0.9909	9.58214E-01	YRPHD21	-2.01449E-02	1.09344E-02	-1.842	0.0654	4.92850E-01
TTD1	1.17186E-03	1.33137E-03	0.880	0.3788	7.90785E+00	TA	-3.97148E-02	6.69348E-02	-0.593	0.5530	1.00095E-02
MTTD1	5.32963E-02	3.17941E-02	1.676	0.0937	1.47760E-02	RA	2.14834E-03	6.62602E-02	0.032	0.9741	9.69177E-03
PDOCP	8.98702E-03	7.10395E-03	1.265	0.2058	2.58659E-01	FELLOW	-4.84735E-02	1.29887E-01	-0.373	0.7090	1.58881E-03
MPDOCP	7.95410E-03	1.57527E-02	0.505	0.6136	3.97204E-02	TRAIN	4.19160E-02	6.49351E-02	0.646	0.5186	9.53289E-03
FSWI	2.95678E-03	6.09849E-03	0.485	0.6278	3.76708E-01	MPSOURC	-5.53727E-02	5.14628E-02	-1.076	0.2819	9.58214E-01
MFSWI	3.56133E-03	6.48824E-03	0.549	0.5831	3.18716E-01	TTD1	-1.70944E-03	2.68012E-03	-0.638	0.5236	7.90785E+00
BAINT	3.37473E-03	1.62433E-02	0.208	0.8354	7.19733E-02	MTTD1	-6.77925E-02	7.67667E-02	-0.883	0.3772	1.47760E-02
MBAINT	8.64993E-03	3.58660E-02	0.241	0.8094	8.57960E-03	PDOCP	7.61751E-03	1.43388E-02	0.531	0.5952	2.58659E-01
AGEPHD	6.94023E-04	1.20365E-03	0.577	0.5642	3.06465E+01	MPDOCP	-1.18531E-03	3.20095E-02	-0.037	0.9705	3.97204E-02
NATUPHD	-2.47908E-02	2.26622E-02	-1.094	0.2740	2.04957E-02	FSWI	2.32264E-03	1.18274E-02	0.196	0.8443	3.76708E-01
PERMPHD	-3.09838E-02	1.85702E-02	-1.668	0.0952	4.38513E-02	MFSWI	1.25863E-03	1.26297E-02	0.100	0.9206	3.18716E-01
TEMPPHD	6.45528E-03	1.77059E-02	0.365	0.7154	5.73562E-02	BAINT	-1.00903E-01	3.25489E-02	-3.100	0.0019	7.19733E-02
MCITPHD	-7.31857E-03	2.42853E-02	-0.301	0.7631	1.49349E-02	MBAINT	1.69719E-02	9.62412E-02	0.176	0.8600	8.57960E-03
HISPAN	-1.79151E-02	2.25579E-02	-0.794	0.4271	2.08135E-02	AGEPHD	1.22965E-03	2.38789E-03	0.515	0.6066	3.06465E+01
BLACK	-2.62924E-02	1.75721E-02	-1.496	0.1346	3.68605E-02	NATUPHD	3.67568E-02	3.59246E-02	1.023	0.3062	2.04957E-02
ASIAN	6.89589E-03	1.30696E-02	0.528	0.5978	7.08611E-02	PERMPHD	8.40797E-02	3.19488E-02	2.632	0.0085	4.38513E-02
NATAMER	4.52377E-02	3.15514E-02	1.434	0.1516	5.56085E-03	TEMPPHD	6.83559E-02	3.50724E-02	1.949	0.0513	5.73562E-02
MARRIED	-1.62201E-02	1.07933E-02	-1.503	0.1329	7.84557E-01	MCITPHD	5.85611E-02	5.19413E-02	1.127	0.2596	1.49349E-02
MMARRIED	-1.27441E-02	1.89584E-02	-0.672	0.5014	3.06641E-02	HISPAN	-3.50764E-02	3.88760E-02	-0.902	0.3669	2.08135E-02
DEP6	4.02432E-03	1.10675E-02	0.364	0.7161	5.68796E-02	BLACK	1.16494E-02	2.72494E-02	0.428	0.6690	3.68605E-02
DEP618	-2.33363E-03	4.91721E-03	-0.475	0.6351	5.92151E-01	ASIAN	-2.21908E-02	2.73489E-02	-0.811	0.4171	7.08611E-02
MDEP	5.65136E-05	1.04564E-02	0.005	0.9957	3.71942E-01	NATAMER	1.82805E-02	6.83758E-02	0.267	0.7892	5.56085E-03
WATEACH	-2.93548E-02	7.07402E-03	-4.150	0.0000	5.28440E-01	MARRIED	-7.92471E-02	1.83389E-02	-4.321	0.0000	7.84557E-01
WAOETH	2.64514E-02	7.44200E-03	3.554	0.0004	1.88751E-01	MMARRIED	-1.97768E-02	3.43542E-02	-0.576	0.5648	3.06641E-02
EMPPRI	9.68612E-03	6.49611E-03	1.491	0.1359	2.49126E-01	DEP6	-2.01697E-02	2.13370E-02	-0.945	0.3445	5.68796E-02
MEMPPRI	5.20273E-02	2.56192E-02	2.031	0.0423	1.31077E-01	DEP618	-1.32589E-02	8.57788E-03	-1.546	0.1222	5.92151E-01
EMPRES	6.94563E-03	7.25657E-03	0.957	0.3385	2.96791E-01	MDEP	-2.52110E-02	2.07001E-02	-1.218	0.2233	3.71942E-01
EMPDOC	-1.26948E-02	1.13602E-02	-1.117	0.2638	1.00731E-01	WATEACH	8.72838E-02	1.38696E-02	6.293	0.0000	5.28440E-01
MEMPCARN	-9.45241E-03	2.64603E-02	-0.357	0.7209	2.67398E-01	WAOETH	-3.14269E-03	1.77158E-02	-0.177	0.8592	1.88751E-01
BIO	-9.56720E-03	1.36512E-02	-0.701	0.4834	3.07595E-01	EMPPRI	-4.29794E-03	1.29322E-02	-0.332	0.7396	2.49126E-01
HEALTH	-1.28096E-02	1.81465E-02	-0.706	0.4802	4.17858E-02	MEMPPRI	4.18887E-02	5.81738E-02	0.720	0.4715	1.31077E-01
ENG	-3.39762E-02	1.92649E-02	-1.764	0.0778	6.40292E-02	EMPRES	1.31285E-03	1.45562E-02	0.090	0.9281	2.96791E-01
MATHCOM	-1.14405E-02	1.51915E-02	-0.753	0.4514	1.12647E-01	EMPDOC	4.29625E-02	1.88440E-02	2.280	0.0226	1.00731E-01
PHYSOTH	2.06349E-02	1.56649E-02	1.317	0.1877	5.97394E-02	MEMPCARN	1.06306E-02	5.81377E-02	0.183	0.8549	2.67398E-01
CHEM	1.98646E-02	1.54930E-02	1.282	0.1998	6.86368E-02	BIO	6.52717E-02	2.72282E-02	2.397	0.0165	3.07595E-01
EAOSCI	-1.27978E-03	1.97885E-02	-0.065	0.9484	3.65427E-02	HEALTH	-2.82395E-02	3.77827E-02	-0.747	0.4548	4.17858E-02
PSYCH	-1.70340E-02	1.51055E-02	-1.128	0.2595	1.02796E-01	ENG	-3.85237E-02	3.44423E-02	-1.119	0.2634	6.40292E-02
ECON	-4.63748E-02	2.21463E-02	-2.094	0.0363	3.89260E-02	MATHCOM	2.95359E-02	2.95842E-02	0.998	0.3181	1.12647E-01
POLYSCI	-3.50787E-02	2.18109E-02	-1.608	0.1078	3.06641E-02	PHYSOTH	1.39605E-02	3.35463E-02	0.416	0.6773	5.97394E-02
SAD	-4.43097E-02	1.82255E-02	-2.431	0.0150	5.94217E-02	CHEM	1.61875E-02	3.32464E-02	0.487	0.6263	6.86368E-02
OSSCI	-2.48028E-02	2.35210E-02	-1.054	0.2917	2.14490E-02	EAOSCI	-3.63856E-03	3.85461E-02	-0.094	0.9248	3.65427E-02
WAVE97	-4.75867E-02	2.06718E-02	-2.302	0.0213	8.77026E-02	PSYCH	9.84021E-03	3.03159E-02	0.325	0.7455	1.02796E-01
WAVE95	-6.93266E-03	1.44407E-02	-0.480	0.6312	1.14395E-01	ECON	-3.97748E-02	3.85034E-02	-1.033	0.3016	3.89260E-02
WAVE93	9.57663E-03	2.82635E-02	0.339	0.7347	1.34890E-01	POLYSCI	-5.56579E-03	4.02994E-02	-0.138	0.8902	3.06641E-02

TABLE C-62. Maximum likelihood estimates for rank, logit model I-4: 20 or 21 years since doctorate

Variable	Coefficient	Standard Error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard Error	z=b/se	P[ Z >z]	Mean of x
SAD	-1.48427E-02	3.35031E-02	-0.443	0.6577	5.94217E-02	BLACK	1.46430E-02	3.06701E-02	0.477	0.6331	3.68605E-02
OSSCI	-1.45085E-03	4.39136E-02	-0.033	0.9736	2.14490E-02	ASIAN	1.52949E-02	2.91393E-02	0.525	0.5997	7.08611E-02
WAVE97	6.39871E-02	4.33576E-02	1.476	0.1400	8.77026E-02	NATAMER	-6.35182E-02	7.36516E-02	-0.862	0.3885	5.56085E-03
WAVE95	8.31819E-02	2.89952E-02	2.869	0.0041	1.14395E-01	MARRIED	9.54672E-02	2.02307E-02	4.719	0.0000	7.84557E-01
WAVE93	7.60470E-02	6.27554E-02	1.212	0.2256	1.34890E-01	MMARRIED	3.25209E-02	3.71716E-02	0.875	0.3816	3.06641E-02
WAVE91	7.65701E-02	2.89092E-02	2.649	0.0081	1.05497E-01	DEP6	1.61454E-02	2.24883E-02	0.718	0.4728	5.68796E-02
WAVE89	8.07711E-02	2.57394E-02	3.138	0.0017	1.37750E-01	DEP618	1.55926E-02	9.28441E-03	1.679	0.0931	5.92151E-01
WAVE87	4.25863E-02	2.60161E-02	1.637	0.1016	1.22974E-01	MDEP	2.51545E-02	2.21648E-02	1.135	0.2564	3.71942E-01
WAVE85	1.06390E-02	2.73392E-02	0.389	0.6972	1.20432E-01	WATEACH	-5.79290E-02	1.48673E-02	-3.896	0.0001	5.28440E-01
WAVE83	3.91145E-03	2.96694E-02	0.132	0.8951	9.78710E-02	WAOth	-2.33087E-02	1.84929E-02	-1.260	0.2075	1.88751E-01
Marginal effects: full-professor rank						EMPPRI	-5.38818E-03	1.38619E-02	-0.389	0.6975	2.49126E-01
Constant	3.27709E-01	9.55848E-02	3.428	0.0006		MEMPPRI	-9.39160E-02	6.22342E-02	-1.509	0.1313	1.31077E-01
FEMALE	-6.55969E-02	2.44337E-02	-2.685	0.0073	2.48808E-01	EMPRES	-8.25848E-03	1.55046E-02	-0.533	0.5943	2.96791E-01
FMARRIED	-6.64111E-02	3.05497E-02	-2.174	0.0297	1.39180E-01	EMPDOG	-3.02677E-02	2.07737E-02	-1.457	0.1451	1.00731E-01
FDEP6	-1.05747E-01	7.12196E-02	-1.485	0.1376	5.87861E-03	MEMPCARN	-1.17815E-03	6.21996E-02	-0.019	0.9849	2.67398E-01
FDEP618	-2.08855E-02	1.71292E-02	-1.219	0.2227	1.07404E-01	BIO	-5.57045E-02	2.87974E-02	-1.934	0.0531	3.07595E-01
YRPHD21	2.59972E-02	1.17492E-02	2.213	0.0269	4.92850E-01	HEALTH	4.10492E-02	3.96785E-02	1.035	0.3009	4.17858E-02
TA	-1.52627E-02	7.48338E-02	-0.204	0.8384	1.00095E-02	ENG	7.24999E-02	3.67047E-02	1.975	0.0482	6.40292E-02
RA	4.01567E-02	7.80853E-02	0.514	0.6071	9.69177E-03	MATHCOM	-1.80954E-02	3.14141E-02	-0.576	0.5646	1.12647E-01
FELLOW	4.91438E-02	1.44853E-01	0.339	0.7344	1.58881E-03	PHYSOTH	-3.45954E-02	3.52480E-02	-0.981	0.3264	5.97394E-02
TRAIN	-2.26336E-02	7.61268E-02	-0.297	0.7662	9.53289E-03	CHEM	-3.60521E-02	3.50174E-02	-1.030	0.3032	6.86368E-02
MPSOURC	5.50042E-02	5.85570E-02	0.939	0.3476	9.58214E-01	EAOSCI	4.91835E-03	4.07502E-02	0.121	0.9039	3.65427E-02
TTD1	5.37575E-04	2.87581E-03	0.187	0.8517	7.90785E+00	PSYCH	7.19382E-03	3.20994E-02	0.224	0.8227	1.02796E-01
MTTD1	1.44963E-02	8.03557E-02	0.180	0.8568	1.47760E-02	ECON	8.61496E-02	4.13882E-02	2.082	0.0374	3.89260E-02
PDOCP	-1.66045E-02	1.53719E-02	-1.080	0.2801	2.58659E-01	POLYSCI	4.06445E-02	4.32872E-02	0.939	0.3478	3.06641E-02
MPDOCP	-6.76880E-03	3.43739E-02	-0.197	0.8439	3.97204E-02	SAD	5.91524E-02	3.59524E-02	1.645	0.0999	5.94217E-02
FSWI	-5.27942E-03	1.27200E-02	-0.415	0.6781	3.76708E-01	OSSCI	2.62537E-02	4.71687E-02	0.557	0.5778	2.14490E-02
MFSWI	-4.81996E-03	1.36018E-02	-0.354	0.7231	3.18716E-01	WAVE97	-1.64005E-02	4.62699E-02	-0.354	0.7230	8.77026E-02
BAINT	9.75279E-02	3.48117E-02	2.802	0.0051	7.19733E-02	WAVE95	-7.62492E-02	3.08300E-02	-2.473	0.0134	1.14395E-01
MBAINT	-2.56219E-02	9.92510E-02	-0.258	0.7963	8.57960E-03	WAVE93	-8.56236E-02	6.69361E-02	-1.279	0.2008	1.34890E-01
AGEPHD	-1.92367E-03	2.56499E-03	-0.750	0.4533	3.06465E+01	WAVE91	-7.31697E-02	3.07048E-02	-2.383	0.0172	1.05497E-01
NATUPHD	-1.19660E-02	4.03739E-02	-0.296	0.7669	2.04957E-02	WAVE89	-7.04683E-02	2.71258E-02	-2.598	0.0094	1.37750E-01
PERMPHD	-5.30958E-02	3.52358E-02	-1.507	0.1318	4.38513E-02	WAVE87	-2.39553E-02	2.73948E-02	-0.874	0.3819	1.22974E-01
TEMPPHD	-7.48112E-02	3.77319E-02	-1.983	0.0474	5.73562E-02	WAVE85	-2.56761E-02	2.83977E-02	-0.904	0.3659	1.20432E-01
MCITPHD	-5.12425E-02	5.56203E-02	-0.921	0.3569	1.49349E-02	WAVE83	3.18640E-02	3.12159E-02	1.021	0.3074	9.78710E-02
HISPAN	5.29915E-02	4.21666E-02	1.257	0.2089	2.08135E-02						

NOTES: Dependent variable: RANK1; 6294 observations; 7 iterations; log likelihood function = -4624.580; restricted log likelihood = -4923.011; Chi-squared = 596.8627; d.f. = 118; significance = .0000000.

TABLE C-63. Maximum likelihood estimates for rank, logit model I-5: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						FDEP6	1.19787E-01	6.45668E-02	1.855	0.0636	5.20571E-03
Constant	-1.38237E-01	4.21682E-02	-3.278	0.0010		FDEP618	9.06213E-03	1.65931E-02	0.546	0.5850	9.99160E-02
FEMALE	2.68107E-02	1.08149E-02	2.479	0.0132	2.38791E-01	YRPHD21	-1.63288E-02	1.11013E-02	-1.471	0.1413	4.94878E-01
FMARRIED	1.80628E-02	1.28532E-02	1.405	0.1599	1.30982E-01	FELTRA	2.45809E-02	6.48773E-02	0.379	0.7048	1.07473E-02
FDEP6	-2.32660E-02	3.15519E-02	-0.737	0.4609	5.20571E-03	TARA	-8.51528E-03	5.77176E-02	-0.148	0.8827	1.98153E-02
FDEP618	8.23609E-03	6.49638E-03	1.268	0.2049	9.99160E-02	MPSOURC	-5.92826E-02	5.26601E-02	-1.126	0.2603	9.58690E-01
YRPHD21	-5.34157E-03	5.16991E-03	-1.033	0.3015	4.94878E-01	TTD1	-9.49569E-04	2.71628E-03	-0.350	0.7267	7.90814E+00
FELTRA	-2.60038E-03	3.56548E-02	-0.073	0.9419	1.07473E-02	MTTD1	-6.16259E-02	7.96162E-02	-0.774	0.4389	1.46096E-02
TARA	7.09540E-03	3.01661E-02	0.235	0.8140	1.98153E-02	PDOCP	-9.54434E-03	1.44640E-02	-0.660	0.5093	2.52057E-01
MPSOURC	4.14003E-03	2.77136E-02	0.149	0.8812	9.58690E-01	MPDOCP	-3.47086E-02	3.38455E-02	-1.026	0.3051	3.87909E-02
TTD1	1.97525E-04	1.17318E-03	0.168	0.8663	7.90814E+00	FSWI	-7.07599E-03	1.19867E-02	-0.590	0.5550	3.76826E-01
MTTD1	4.35099E-02	2.68117E-02	1.623	0.1046	1.46096E-02	MFSWI	1.88296E-03	1.28373E-02	0.147	0.8834	3.15701E-01
PDOCP	5.11185E-03	6.59935E-03	0.775	0.4386	2.52057E-01	BAINT	-1.04085E-01	3.29745E-02	-3.157	0.0016	7.12007E-02
MPDOCP	1.84186E-02	1.30712E-02	1.409	0.1588	3.87909E-02	MBAINT	1.76302E-02	9.77240E-02	0.180	0.8568	8.56423E-03
FSWI	4.18852E-03	5.53382E-03	0.757	0.4491	3.76826E-01	AGEPHD	2.05446E-03	2.41581E-03	0.850	0.3951	3.06581E+01
MFSWI	-1.27008E-03	6.10020E-03	-0.208	0.8351	3.15701E-01	NATUPHD	5.20300E-02	3.60144E-02	1.445	0.1485	2.06549E-02
BAINT	-3.45719E-03	1.40986E-02	-0.245	0.8063	7.12007E-02	PERMPHD	8.25391E-02	3.26464E-02	2.528	0.0115	4.38287E-02
MBAINT	8.86152E-03	2.94040E-02	0.301	0.7631	8.56423E-03	TEMPPHD	7.57494E-02	3.54333E-02	2.138	0.0325	5.67590E-02
AGEPHD	8.02123E-04	1.05467E-03	0.761	0.4469	3.06581E+01	MCITPHD	7.27742E-02	5.35239E-02	1.360	0.1739	1.44416E-02
NATUPHD	-2.58658E-02	2.18986E-02	-1.181	0.2375	2.06549E-02	HISPAN	-4.05528E-02	3.95370E-02	-1.026	0.3050	2.09908E-02
PERMPHD	-8.06898E-03	1.57991E-02	-0.511	0.6095	4.38287E-02	BLACK	2.53607E-03	2.75064E-02	0.092	0.9265	3.76154E-02
TEMPPHD	1.37743E-02	1.53471E-02	0.898	0.3694	5.67590E-02	ASIAN	-2.86716E-02	2.79285E-02	-1.027	0.3046	7.03610E-02
MCITPHD	-1.36229E-03	2.08532E-02	-0.065	0.9479	1.44416E-02	NATAMER	3.52430E-02	6.80134E-02	0.518	0.6043	5.70949E-03
HISPAN	-9.89954E-03	1.97817E-02	-0.500	0.6168	2.09908E-02	MARRIED	-8.61936E-02	1.84692E-02	-4.667	0.0000	7.85558E-01
BLACK	-1.27204E-02	1.49776E-02	-0.849	0.3957	3.76154E-02	MMARRIED	-1.52446E-02	3.40303E-02	-0.448	0.6542	3.15701E-02
ASIAN	8.60425E-03	1.15467E-02	0.745	0.4562	7.03610E-02	DEP6	-2.78073E-02	2.18470E-02	-1.273	0.2031	5.67590E-02
NATAMER	3.61643E-02	2.59319E-02	1.395	0.1631	5.70949E-03	DEP618	-1.31253E-02	8.77289E-03	-1.496	0.1346	5.90428E-01
MARRIED	-1.01731E-02	9.75321E-03	-1.043	0.2969	7.85558E-01	MDEP	-2.65308E-02	2.10575E-02	-1.260	0.2077	3.73300E-01
MMARRIED	-1.07831E-02	1.70808E-02	-0.631	0.5278	3.15701E-02	BIO	5.89743E-02	2.71503E-02	2.172	0.0298	3.02603E-01
DEP6	7.45509E-03	9.26739E-03	0.804	0.4211	5.67590E-02	HEALTH	-2.63032E-02	3.79260E-02	-0.694	0.4880	4.19815E-01
DEP618	-1.65494E-03	4.47212E-03	-0.370	0.7113	5.90428E-01	ENG	-2.81504E-02	3.44419E-02	-0.817	0.4137	6.61629E-02
MDEP	6.43720E-03	9.68999E-03	0.664	0.5065	3.73300E-01	MATHCOM	5.15279E-02	2.92471E-02	1.762	0.0781	1.15197E-01
BIO	-1.00241E-02	1.19488E-02	-0.839	0.4015	3.02603E-01	PHYSOTH	2.50634E-02	3.38125E-02	0.741	0.4585	5.81024E-02
HEALTH	-2.62113E-03	1.54870E-02	-0.169	0.8656	4.19815E-02	CHEM	3.17910E-02	3.31493E-02	0.959	0.3375	6.59950E-02
ENG	-2.12411E-02	1.60425E-02	-1.324	0.1855	6.61629E-02	EAOSCI	2.13373E-02	3.84280E-02	0.555	0.5787	3.66079E-02
MATHCOM	-1.20451E-02	1.31694E-02	-0.915	0.3604	1.15197E-01	PSYCH	1.86599E-02	3.02561E-02	0.617	0.5374	1.02267E-01
PHYSOTH	2.65609E-03	1.43057E-02	0.186	0.8527	5.81024E-02	ECON	-1.69464E-02	3.80137E-02	-0.446	0.6557	4.03023E-02
CHEM	3.81288E-03	1.38876E-02	0.275	0.7837	6.59950E-02	POLYSCI	1.83582E-02	4.00421E-02	0.458	0.6466	3.12343E-02
EAOSCI	-1.47189E-02	1.84952E-02	-0.796	0.4261	3.66079E-02	SAD	-3.40941E-03	3.33278E-02	-0.102	0.9185	6.09572E-02
PSYCH	-1.54093E-02	1.33236E-02	-1.157	0.2475	1.02267E-01	OSSCI	2.81169E-02	4.35110E-02	0.646	0.5181	2.16625E-02
ECON	-4.59071E-02	2.03455E-02	-2.256	0.0240	4.03023E-02	WAVE97	9.09044E-02	3.51972E-02	2.583	0.0098	8.73216E-02
POLYSCI	-2.69734E-02	1.92028E-02	-1.405	0.1601	3.12343E-02	WAVE95	7.23649E-02	2.95562E-02	2.448	0.0143	1.13518E-01
SAD	-2.78121E-02	1.54378E-02	-1.802	0.0716	6.09572E-02	WAVE93	7.22852E-02	2.88028E-02	2.510	0.0121	1.36356E-01
OSSCI	-1.56487E-02	1.97501E-02	-0.792	0.4282	2.16625E-02	WAVE91	7.10870E-02	2.95506E-02	2.406	0.0161	1.05793E-01
WAVE97	1.98847E-02	1.65140E-02	1.204	0.2285	8.73216E-02	WAVE89	7.23892E-02	2.62303E-02	2.760	0.0058	1.37531E-01
WAVE95	3.45568E-03	1.46641E-02	0.236	0.8137	1.13518E-01	WAVE87	4.20312E-02	2.63405E-02	1.596	0.1106	1.25273E-01
WAVE93	1.98875E-02	1.35663E-02	1.466	0.1427	1.36356E-01	WAVE85	1.44913E-02	2.78161E-02	0.521	0.6024	1.17212E-01
WAVE91	2.00831E-02	1.39252E-02	1.442	0.1492	1.05793E-01	WAVE83	9.89085E-03	2.98919E-02	0.331	0.7407	9.99160E-02
WAVE89	9.07281E-03	1.21654E-02	0.746	0.4558	1.37531E-01	Marginal effects: full-professor rank					
WAVE87	9.58824E-03	1.21212E-02	0.791	0.4289	1.25273E-01	Constant	3.07784E-01	9.44830E-02	3.258	0.0011	
WAVE85	1.72139E-02	1.21687E-02	1.415	0.1572	1.17212E-01	FEMALE	-5.32423E-02	2.42769E-02	-2.193	0.0283	2.38791E-01
WAVE83	-1.54806E-02	1.45033E-02	-1.067	0.2858	9.99160E-02	FMARRIED	-5.21997E-02	3.05879E-02	-1.707	0.0879	1.30982E-01
Marginal effects: associate-professor rank						FDEP6	-9.65211E-02	7.14043E-02	-1.352	0.1765	5.20571E-03
Constant	-1.69548E-01	8.78295E-02	-1.930	0.0536		FDEP618	-1.72982E-02	1.75055E-02	-0.988	0.3231	9.99160E-02
FEMALE	2.64316E-02	2.24319E-02	1.178	0.2387	2.38791E-01	YRPHD21	2.16704E-02	1.18102E-02	1.835	0.0665	4.94878E-01
FMARRIED	3.41369E-02	2.85735E-02	1.195	0.2322	1.30982E-01	FELTRA	-2.19805E-02	7.24413E-02	-0.303	0.7616	1.07473E-02

TABLE C-63. Maximum likelihood estimates for rank, logit model I-5: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
TARA	1.41988E-03	6.37961E-02	0.022	0.9822	1.98153E-02	DEP618	1.47803E-02	9.37444E-03	1.577	0.1149	5.90428E-01
MPSOURC	5.51426E-02	5.80525E-02	0.950	0.3422	9.58690E-01	MDEP	2.00936E-02	2.23406E-02	0.899	0.3684	3.73300E-01
TTD1	7.52045E-04	2.88326E-03	0.261	0.7942	7.90814E+00	BIO	-4.89502E-02	2.84693E-02	-1.719	0.0855	3.02603E-01
MTTD1	1.81160E-02	8.21380E-02	0.221	0.8254	1.46096E-02	HEALTH	2.89243E-02	3.94555E-02	0.733	0.4635	4.19815E-02
PDOCP	4.43250E-03	1.53683E-02	0.288	0.7730	2.52057E-01	ENG	4.93915E-02	3.61414E-02	1.367	0.1717	6.61629E-02
MPDOCP	1.62900E-02	3.53607E-02	0.461	0.6450	3.87909E-02	MATHCOM	-3.94828E-02	3.07770E-02	-1.283	0.1995	1.15197E-01
FSWI	2.88746E-03	1.27457E-02	0.227	0.8208	3.76826E-01	PHYSOTH	-2.77195E-02	3.53591E-02	-0.784	0.4331	5.81024E-02
MFSWI	-6.12878E-04	1.37064E-02	-0.045	0.9643	3.15701E-01	CHEM	-3.56039E-02	3.46992E-02	-1.026	0.3049	6.59950E-02
BAINT	1.07542E-01	3.47589E-02	3.094	0.0020	7.12007E-02	EAOSCI	-6.61840E-03	4.06405E-02	-0.163	0.8706	3.66079E-02
MBAINT	-2.64917E-02	9.99938E-02	-0.265	0.7911	8.56423E-03	PSYCH	-3.25062E-03	3.17759E-02	-0.102	0.9185	1.02267E-01
AGEPHD	-2.85658E-03	2.56620E-03	-1.113	0.2656	3.06581E+01	ECON	6.28536E-02	4.07444E-02	1.543	0.1229	4.03023E-02
NATUPHD	-2.61641E-02	4.02578E-02	-0.650	0.5157	2.06549E-02	POLYSCI	8.61518E-03	4.25880E-02	0.202	0.8397	3.12343E-02
PERMPHD	-7.44701E-02	3.51568E-02	-2.118	0.0342	4.38287E-02	SAD	3.12215E-02	3.52579E-02	0.886	0.3759	6.09572E-02
TEMPPHD	-8.95237E-02	3.75165E-02	-2.386	0.0170	5.67590E-02	OSSCI	-1.24682E-02	4.61420E-02	-0.270	0.7870	2.16625E-02
MCITPHD	-7.14119E-02	5.62037E-02	-1.271	0.2039	1.44416E-02	WAVE97	-1.10789E-01	3.74574E-02	-2.958	0.0031	8.73216E-02
HISPAN	5.04524E-02	4.21392E-02	1.197	0.2312	2.09908E-02	WAVE95	-7.58206E-02	3.14990E-02	-2.407	0.0161	1.13518E-01
BLACK	1.01843E-02	3.01550E-02	0.338	0.7356	3.76154E-02	WAVE93	-9.21726E-02	3.05188E-02	-3.020	0.0025	1.36356E-01
ASIAN	2.00673E-02	2.93073E-02	0.685	0.4935	7.03610E-02	WAVE91	-9.11702E-02	3.12936E-02	-2.913	0.0036	1.05793E-01
NATAMER	-7.14073E-02	7.20217E-02	-0.991	0.3215	5.70949E-03	WAVE89	-8.14620E-02	2.77228E-02	-2.938	0.0033	1.37531E-01
MARRIED	9.63666E-02	2.00964E-02	4.795	0.0000	7.85558E-01	WAVE87	-5.16195E-02	2.77776E-02	-1.858	0.0631	1.25273E-01
MMARRIED	2.60278E-02	3.65908E-02	0.711	0.4769	3.15701E-02	WAVE85	-3.17052E-02	2.91060E-02	-1.089	0.2760	1.17212E-01
DEP6	2.03522E-02	2.26616E-02	0.898	0.3691	5.67590E-02	WAVE83	5.58979E-03	3.16033E-02	0.177	0.8596	9.99160E-02

NOTES: Dependent variable: RANK1; 5955 observations; 7 iterations; log likelihood function = -4112.080; restricted log likelihood = -4266.621; Chi-squared = 309.0832; d.f. = 100; significance = .0000000.



TABLE C-64. Maximum likelihood estimates for rank, logit model I-6: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
Marginal effects: junior ranks						Marginal effects: associate-professor rank					
Constant	-1.36786E-01	3.97241E-02	-3.443	0.0006		WAVE87	9.05408E-03	1.13852E-02	0.795	0.4265	1.25273E-01
FEMALE	2.72406E-02	1.01745E-02	2.677	0.0074	2.38791E-01	WAVE85	1.74613E-02	1.14344E-02	1.527	0.1267	1.17212E-01
FMARRIED	1.50825E-02	1.20752E-02	1.249	0.2116	1.30982E-01	WAVE83	-1.67429E-02	1.36492E-02	-1.227	0.2200	9.99160E-02
FDEP6	-2.08610E-02	2.86499E-02	-0.728	0.4665	5.20571E-03	Constant	-1.95172E-01	8.90437E-02	-2.192	0.0284	
FDEP618	6.56048E-03	6.13228E-03	1.070	0.2847	9.99160E-02	FEMALE	2.21859E-02	2.24285E-02	0.989	0.3226	2.38791E-01
YRPHD21	-4.30654E-03	4.85971E-03	-0.886	0.3755	4.94878E-01	FMARRIED	3.38314E-02	2.85510E-02	1.185	0.2360	1.30982E-01
FELTRA	-3.96715E-03	3.32747E-02	-0.119	0.9051	1.07473E-02	FDEP6	1.12461E-01	6.47377E-02	1.737	0.0824	5.20571E-03
TARA	7.29143E-03	2.80744E-02	0.260	0.7951	1.98153E-02	FDEP618	1.03245E-02	1.65154E-02	0.625	0.5319	9.99160E-02
MPSOURC	1.14353E-03	2.57789E-02	0.044	0.9646	9.58690E-01	YRPHD21	-1.88934E-02	1.10768E-02	-1.706	0.0881	4.94878E-01
TTD1	2.58245E-04	1.10436E-03	0.234	0.8151	7.90814E+00	FELTRA	2.39041E-02	6.48175E-02	0.369	0.7123	1.07473E-02
MTTD1	3.76495E-02	2.54927E-02	1.477	0.1397	1.46096E-02	TARA	-1.23507E-02	5.78404E-02	-0.214	0.8309	1.98153E-02
PDOCP	5.86136E-03	6.33874E-03	0.925	0.3551	2.52057E-01	MPSOURC	-5.69953E-02	5.27934E-02	-1.080	0.2803	9.58690E-01
MPDOCP	1.60510E-02	1.24655E-02	1.288	0.1979	3.87909E-02	TTD1	-9.06680E-04	2.71610E-03	-0.334	0.7385	7.90814E+00
FSWI	4.03917E-03	5.21412E-03	0.775	0.4385	3.76826E-01	MTTD1	-6.10271E-02	7.96165E-02	-0.767	0.4434	1.46096E-02
MFSWI	-1.10780E-03	5.75602E-03	-0.192	0.8474	3.15701E-01	PDOCP	6.57237E-03	1.46932E-02	0.447	0.6547	2.52057E-01
BAINT	-1.18247E-02	1.35442E-02	-0.873	0.3826	7.12007E-02	MPDOCP	-2.81570E-02	3.35343E-02	-0.840	0.4011	3.87909E-02
MBAINT	1.21026E-02	2.81435E-02	0.430	0.6672	8.56423E-03	FSWI	-7.49493E-04	1.19963E-02	-0.062	0.9502	3.76826E-01
AGEPHD	8.55548E-04	9.91263E-04	0.863	0.3881	3.06581E+01	MFSWI	7.42231E-03	1.28357E-02	0.578	0.5631	3.15701E-01
NATUPHD	-2.26791E-02	2.05226E-02	-1.105	0.2691	2.06549E-02	BAINT	-1.13312E-01	3.32648E-02	-3.406	0.0007	7.12007E-02
PERMPHD	-8.38815E-03	1.49115E-02	-0.563	0.5738	4.38287E-02	MBAINT	3.01553E-02	9.79211E-02	0.308	0.7581	8.56423E-03
TEMPPHD	1.06730E-02	1.46909E-02	0.727	0.4675	5.67590E-02	AGEPHD	6.95726E-04	2.42395E-03	0.287	0.7741	3.06581E+01
MCITPHD	-3.84405E-03	1.98787E-02	-0.193	0.8467	1.44416E-02	NATUPHD	4.96129E-02	3.59564E-02	1.380	0.1676	2.06549E-02
HISPAN	-1.23014E-02	1.84827E-02	-0.666	0.5057	2.09908E-02	PERMPHD	8.66454E-02	3.24611E-02	2.669	0.0076	4.38287E-02
BLACK	-1.59748E-02	1.07311E-02	-1.135	0.2563	3.76154E-02	TEMPPHD	7.04420E-02	3.55791E-02	1.980	0.0477	5.67590E-02
ASIAN	1.26639E-02	1.06986E-02	1.184	0.2365	7.03610E-02	MCITPHD	7.90299E-02	5.31406E-02	1.487	0.1370	1.44416E-02
NATAMER	3.84807E-02	2.43995E-02	1.577	0.1148	5.70949E-03	HISPAN	-3.76386E-02	3.95527E-02	-0.952	0.3413	2.09908E-02
MARRIED	-9.59621E-03	9.15652E-03	-1.048	0.2946	7.85558E-01	BLACK	8.31961E-03	2.74775E-02	0.303	0.7621	3.76154E-02
MMARRIED	-5.09540E-03	1.59981E-02	-0.318	0.7501	3.15701E-02	ASIAN	-2.52220E-02	2.78690E-02	-0.905	0.3655	7.03610E-02
DEP6	5.69043E-03	8.59852E-03	0.662	0.5081	5.67590E-02	NATAMER	2.27051E-02	6.74819E-02	0.336	0.7365	5.70949E-03
DEP618	-6.66039E-04	4.17420E-03	-0.160	0.8732	5.90428E-01	MARRIED	-8.37965E-02	1.84426E-02	-4.544	0.0000	7.85558E-01
MDEP	6.43388E-03	9.10116E-03	0.707	0.4796	3.73300E-01	MMARRIED	-2.08885E-02	3.39740E-02	-0.615	0.5387	3.15701E-02
WATEACH	-7.35991E-03	6.47460E-03	-1.137	0.2556	5.43577E-01	DEP6	-2.31534E-02	2.18944E-02	-1.058	0.2903	5.67590E-02
WAOth	3.15749E-02	6.63459E-03	4.759	0.0000	1.84551E-01	DEP618	-1.35151E-02	8.71766E-03	-1.550	0.1211	5.90428E-01
EMPPRI	1.12597E-03	5.79978E-03	0.194	0.8461	2.45676E-01	MDEP	-2.11044E-02	2.10247E-02	-1.004	0.3155	3.73300E-01
MEMPPRI	3.24526E-02	2.08602E-02	1.556	0.1198	1.29639E-01	WATEACH	1.00110E-01	1.43123E-02	6.995	0.0000	5.43577E-01
EMPRES	-5.66121E-03	6.51793E-03	-0.869	0.3851	2.91520E-01	WAOth	2.76687E-03	1.84432E-02	0.150	0.8807	1.84551E-01
EMPDOC	-8.92446E-03	9.39280E-03	-0.950	0.3420	1.02939E-01	EMPPRI	-1.56180E-04	1.31031E-02	-0.012	0.9905	2.45676E-01
MEMPCARN	1.69885E-03	2.14083E-02	0.079	0.9368	2.68010E-01	MEMPPRI	3.78711E-02	5.92235E-02	0.639	0.5225	1.29639E-01
BIO	-9.35590E-03	1.14162E-02	-0.820	0.4125	3.02603E-01	EMPRES	8.63442E-03	1.48315E-02	0.582	0.5605	2.91520E-01
HEALTH	-6.07324E-03	1.46425E-02	-0.415	0.6783	4.19815E-02	EMPDOC	5.06942E-02	1.88316E-02	2.692	0.0071	1.02939E-01
ENG	-1.78141E-02	1.51177E-02	-1.178	0.2387	6.61629E-02	MEMPCARN	2.84117E-02	5.86972E-02	0.484	0.6284	2.68010E-01
MATHCOM	-7.34313E-03	1.25288E-02	-0.586	0.5578	1.15197E-01	BIO	5.13745E-02	2.73044E-02	1.882	0.0599	3.02603E-01
PHYSOTH	4.67756E-03	1.35540E-02	0.345	0.7300	5.81024E-02	HEALTH	-3.44665E-02	3.79768E-02	-0.908	0.3641	4.19815E-02
CHEM	6.69710E-03	1.33630E-02	0.501	0.6163	6.59950E-02	ENG	-5.19807E-02	3.45245E-02	-1.506	0.1322	6.61629E-02
EAOSCI	-7.93379E-03	1.73590E-02	-0.457	0.6476	3.66079E-02	MATHCOM	2.16650E-02	2.95118E-02	0.734	0.4629	1.15197E-01
PSYCH	-1.26898E-02	1.26722E-02	-1.001	0.3166	1.02267E-01	PHYSOTH	2.70378E-03	3.38979E-02	0.080	0.9364	5.81024E-02
ECON	-3.75987E-02	1.91670E-02	-1.962	0.0498	4.03023E-02	CHEM	1.14641E-03	3.36365E-02	0.034	0.9728	6.59950E-02
POLYSCI	-2.61778E-02	1.82577E-02	-1.434	0.1516	3.12343E-02	EAOSCI	-4.99586E-03	3.84317E-02	-0.130	0.8966	3.66079E-02
SAD	-2.41358E-02	1.45927E-02	-1.654	0.0981	6.09572E-02	PSYCH	-2.26865E-03	3.04706E-02	-0.074	0.9406	1.02267E-01
OSSCI	-1.11987E-02	1.86240E-02	-0.601	0.5476	2.16625E-02	ECON	-4.47713E-02	3.81069E-02	-1.175	0.2400	4.03023E-02
WAVE97	-1.60408E-02	1.76010E-02	-0.911	0.3621	8.73216E-02	POLYSCI	-1.33406E-02	4.01729E-02	-0.332	0.7398	3.12343E-02
WAVE95	6.36365E-03	1.38349E-02	0.460	0.6455	1.13518E-01	SAD	-2.39480E-02	3.33757E-02	-0.718	0.4730	6.09572E-02
WAVE93	1.48782E-02	2.36637E-02	0.629	0.5295	1.36356E-01	OSSCI	3.72242E-04	4.35221E-02	0.009	0.9932	2.16625E-02
WAVE91	2.07597E-02	1.30391E-02	1.592	0.1114	1.05793E-01	WAVE97	4.78795E-02	4.41671E-02	1.084	0.2783	8.73216E-02
WAVE89	8.77359E-03	1.14134E-02	0.769	0.4421	1.37531E-01	WAVE95	7.97645E-02	2.95198E-02	2.702	0.0069	1.13518E-01

TABLE C-64. Maximum likelihood estimates for rank, logit model I-6: 20 or 21 years since doctorate

Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z]	Mean of x
WAVE93	6.05649E-02	6.34991E-02	0.954	0.3402	1.36356E-01	MARRIED	9.33927E-02	1.98966E-02	4.694	0.0000	7.85558E-01
WAVE91	6.98655E-02	2.94381E-02	2.373	0.0176	1.05793E-01	MMARRIED	2.59839E-02	3.62540E-02	0.717	0.4735	3.15701E-02
WAVE89	7.33552E-02	2.61272E-02	2.808	0.0050	1.37531E-01	DEP6	1.74629E-02	2.25174E-02	0.776	0.4380	5.67590E-02
WAVE87	4.33488E-02	2.62253E-02	1.653	0.0983	1.25273E-01	DEP618	1.41811E-02	9.24880E-03	1.533	0.1252	5.90428E-01
WAVE85	1.14947E-02	2.76840E-02	0.415	0.6780	1.17212E-01	MDEP	1.46705E-02	2.21579E-02	0.662	0.5079	3.73300E-01
WAVE83	2.44702E-03	2.98029E-02	0.082	0.9346	9.99160E-02	WATEACH	-9.27502E-02	1.51483E-02	-6.123	0.0000	5.43577E-01
Marginal effects: full-professor rank						WAOOTH	-3.43418E-02	1.90427E-02	-1.803	0.0713	1.84551E-01
Constant	3.31958E-01	9.48200E-02	3.501	0.0005		EMPPRI	-9.69791E-04	1.38619E-02	-0.070	0.9442	2.45676E-01
FEMALE	-4.94265E-02	2.40790E-02	-2.053	0.0401	2.38791E-01	MEMPPRI	-7.03236E-02	6.18930E-02	-1.136	0.2559	1.29639E-01
FMARRIED	-4.89139E-02	3.03382E-02	-1.612	0.1069	1.30982E-01	EMPRES	-2.97321E-03	1.56041E-02	-0.191	0.8489	2.91520E-01
FDEP6	-9.15998E-02	7.10364E-02	-1.289	0.1972	5.20571E-03	EMPDOC	-4.17697E-02	2.02349E-02	-2.064	0.0390	1.02939E-01
FDEP618	-1.68849E-02	1.73504E-02	-0.973	0.3305	9.99160E-02	MEMPCARN	-3.01106E-02	6.13698E-02	-0.491	0.6237	2.68010E-01
YRPHD21	2.32000E-02	1.17065E-02	1.982	0.0475	4.94878E-01	BIO	-4.20186E-02	2.85132E-02	-1.474	0.1406	3.02603E-01
FELTRA	-1.99369E-02	7.15914E-02	-0.278	0.7806	1.07473E-02	HEALTH	4.05398E-02	3.93096E-02	1.031	0.3024	4.19815E-02
TARA	5.05928E-03	6.31536E-02	0.080	0.9361	1.98153E-02	ENG	6.97948E-02	3.60219E-02	1.938	0.0527	6.61629E-02
MPSOURC	5.58517E-02	5.74774E-02	0.972	0.3312	9.58690E-01	MATHCOM	-1.43219E-02	3.08889E-02	-0.464	0.6429	1.15197E-01
TTD1	6.48435E-04	2.86248E-03	0.227	0.8208	7.90814E+00	PHYSOTH	-7.38134E-03	3.52718E-02	-0.209	0.8342	5.81024E-02
MTTD1	2.33776E-02	8.18480E-02	0.286	0.7752	1.46096E-02	CHEM	-7.84352E-03	3.50555E-02	-0.224	0.8230	6.59950E-02
PDOCP	-1.24337E-02	1.55250E-02	-0.801	0.4232	2.52057E-01	EAOSCI	1.29296E-02	4.03847E-02	0.320	0.7488	3.66079E-02
MPDOCP	1.21060E-02	3.49401E-02	0.346	0.7290	3.87909E-02	PSYCH	1.49585E-02	3.18356E-02	0.470	0.6385	1.02267E-01
FSWI	-3.28967E-03	1.26675E-02	-0.260	0.7951	3.76826E-01	ECON	8.23700E-02	4.05435E-02	2.032	0.0422	4.03023E-02
MFSWI	-6.31452E-03	1.36176E-02	-0.464	0.6429	3.15701E-01	POLYSCI	3.95183E-02	4.24454E-02	0.931	0.3518	3.12343E-02
BAINT	1.25137E-01	3.49401E-02	3.581	0.0003	7.12007E-02	SAD	4.80838E-02	3.51036E-02	1.370	0.1708	6.09572E-02
MBaint	-4.22579E-02	9.99403E-02	-0.423	0.6724	8.56423E-03	OSSCI	1.08265E-02	4.58386E-02	0.236	0.8133	2.16625E-02
AGEPHD	-1.55127E-03	2.55442E-03	-0.607	0.5437	3.06581E+01	WAVE97	-3.18387E-02	4.63274E-02	-0.687	0.4919	8.73216E-02
NATUPHD	-2.69338E-02	3.97343E-02	-0.678	0.4979	2.06549E-02	WAVE95	-8.61281E-02	3.12523E-02	-2.756	0.0059	1.13518E-01
PERMPHD	-7.82573E-02	3.47804E-02	-2.250	0.0244	4.38287E-02	WAVE93	-7.54431E-02	6.64074E-02	-1.136	0.2559	1.36356E-01
TEMPPHD	-8.11150E-02	3.74786E-02	-2.164	0.0304	5.67590E-02	WAVE91	-9.06251E-02	3.09724E-02	-2.926	0.0034	1.05793E-01
MCITPHD	-7.51859E-02	5.56764E-02	-1.350	0.1769	1.44416E-02	WAVE89	-8.21288E-02	2.74398E-02	-2.993	0.0028	1.37531E-01
HISPAN	4.99400E-02	4.18578E-02	1.193	0.2328	2.09908E-02	WAVE87	-5.24029E-02	2.74929E-02	-1.906	0.0566	1.25273E-01
BLACK	7.65524E-03	2.97915E-02	0.257	0.7972	3.76154E-02	WAVE85	-2.89560E-02	2.88165E-02	-1.005	0.3150	1.17212E-01
ASIAN	1.25581E-02	2.91072E-02	0.431	0.6661	7.03610E-02	WAVE83	1.42959E-02	3.13187E-02	0.456	0.6481	9.99160E-02
NATAMER	-6.11858E-02	7.10711E-02	-0.861	0.3893	5.70949E-03						

NOTES: Dependent variable: RANK1; 5955 observations; 7 iterations; log likelihood function = -4042.298; restricted log likelihood = -4266.621; Chi-squared = 448.6461; d.f. = 114; significance = .0000000.

# APPENDIX D. PHASE II MULTIVARIATE HAZARD ANALYSES

This appendix reports the detailed statistical results of our Phase II analyses. These include the following:

- Tenure (tables D-1 through D-8).
- Promotion to the associate-professor rank (tables D-9 through D-16).
- Promotion to the full-professor rank (tables D-17 through D-24).

All reported coefficients and corresponding statistics are estimates of the multivariate hazard models.<sup>1</sup> Refer to Appendix A for detailed descriptions of the statistical models and Appendix B for a list of variable acronyms and definitions. Descriptions of the models are provided in Section 2 of this report and are summarized in table 2-5.<sup>2</sup>

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<sup>1</sup> All models were estimated using LIMDEP ver. 7.0. See Greene, 1995.

<sup>2</sup> Models labeled with the prefix "I" include the female-interaction variables.

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TABLE D-1. Maximum likelihood estimates for tenure, hazard model 1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.67275E-01	4.72032E-02	-3.544	0.0004	3.31197E-01	HCAPPHD	-4.39366E-02	2.44044E-01	-0.180	0.8571	7.35156E+05
DEP63	1.40756E-02	3.20942E-02	0.439	0.6610	4.36381E-01	MHCAPPHD	-1.33286E-01	6.95479E-02	-1.916	0.0553	6.97078E-01
DEP183	-3.03728E-03	2.77201E-02	-0.110	0.9128	3.76249E-01	HISPAN	2.97081E-02	8.19855E-02	0.362	0.7171	6.29595E+06
MDEP3	-4.26837E-02	7.41346E-02	-0.576	0.5648	2.07540E-01	BLACK	-2.07407E-01	8.34690E-02	-2.485	0.0130	6.03205E+06
MAR3	1.16230E-01	5.78507E-02	2.009	0.0445	5.97549E-01	ASIAN	-9.95383E-02	7.53985E-02	-1.320	0.1868	1.15174E-01
MMAR3	-1.42060E-01	8.42774E-02	-1.686	0.0919	1.36475E-01	NATAMER	-1.27768E-01	2.21136E-01	-0.578	0.5634	8.10556E+05
TA	9.49776E-02	6.11945E-02	1.552	0.1206	1.66447E-01	BIO	-6.27874E-01	9.66409E-02	-6.497	0.0000	3.06880E-01
RA	-3.08362E-02	5.85102E-02	-0.527	0.5982	2.58812E-01	HEALTH	-1.48879E-01	1.07360E-01	-1.387	0.1655	7.78511E+06
FELLOW	2.04201E-01	1.04772E-01	1.949	0.0513	3.92083E+06	CHEMENG	2.28074E-01	1.71209E-01	1.332	0.1828	1.35721E+06
TRAIN	-2.91530E-02	7.00134E-02	-0.416	0.6771	1.44769E-01	ELECENG	2.65000E-01	1.23517E-01	2.145	0.0319	3.03487E+06
MPSOURC	1.32601E-01	7.71042E-02	1.720	0.0855	1.22337E-01	OTHENG	4.76217E-02	9.83091E-02	0.484	0.6281	9.74552E+06
TTD1	-5.97228E-03	1.03542E-02	-0.577	0.5641	9.06956E+00	COMP	3.51981E-01	1.41073E-01	2.495	0.0126	1.97926E+06
MTTD1	2.47862E-01	3.63429E-01	0.682	0.4952	2.63902E+06	MATH	3.64103E-01	1.10853E-01	3.285	0.0010	4.80679E+06
PDOCP	-5.99027E-01	5.33555E-02	-11.227	0.0000	4.27144E-01	PHYSICS	-4.08977E-01	1.23436E-01	-3.313	0.0009	5.18379E+06
MPDOCP	-4.12769E-01	1.37331E-01	-3.006	0.0027	4.56173E+06	CHEM	-1.61817E-01	1.25253E-01	-1.292	0.1964	4.75024E+06
FSWI	-2.42012E-02	4.48848E-02	-0.539	0.5898	3.77568E-01	EAOSCI	-1.37935E-01	1.27456E-01	-1.082	0.2792	3.58153E+06
MFSWI	-1.51770E-01	5.07772E-02	-2.989	0.0028	3.47220E-01	OPSCI	-3.31528E-01	5.07343E-01	-0.653	0.5135	1.69651E+05
BAINT	-5.46395E-02	1.09300E-01	-0.500	0.6171	1.09896E-01	PSYCH	-3.37825E-01	1.05668E-01	-3.197	0.0014	8.21866E+06
MBAINT	4.40162E-02	3.17114E-01	0.139	0.8896	2.18662E+06	ECON	9.62142E-02	1.21647E-01	0.791	0.4290	3.31762E+06
AGEPHD	6.92856E-03	9.25986E-03	0.748	0.4543	3.11889E+01	POLYSCI	1.63206E-01	1.34393E-01	1.214	0.2246	2.29972E+06
NATUPHD	-2.34555E-01	1.07819E-01	-2.175	0.0296	4.59943E+06	SAD	-6.65323E-02	1.08734E-01	-0.612	0.5406	5.86239E+06
PERMPHD	-2.10154E-02	1.23294E-01	-0.170	0.8647	3.54383E+06	OSSCI	3.56129E-02	1.39298E-01	0.256	0.7982	2.18662E+06
TEMPPHD	1.48333E-01	1.17519E-01	1.262	0.2069	8.74647E+06	PHD70S	-3.89051E-01	1.22592E-01	-3.174	0.0015	5.57964E+06
MCITPHD	6.13294E-02	1.90376E-01	0.322	0.7473	2.43167E+06	PHD80S	-2.42383E-01	9.44127E-02	-2.567	0.0103	7.65127E-01

NOTES: Dependent variable: YRSTEN; 5305 observations; 5 iterations; log likelihood function = -21123.25; restricted log likelihood = -21578.65; Chi-squared = 910.7983; d.f. = 48; significance = .0000000. Log-rank test with 48 degrees of freedom: Chi-squared = 924.443, Prob = .0000.

TABLE D-2. Maximum likelihood estimates for tenure, hazard model 2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.27535E-01	4.80278E-02	-2.655	0.0079	3.31197E-01	ASIAN	-8.62726E-02	7.55908E-02	-1.141	0.2537	1.15174E-01
DEP63	-1.28691E-02	3.22177E-02	-0.399	0.6896	4.36381E-01	NATAMER	-1.65913E-02	2.21888E-01	-0.075	0.9404	8.10556E+05
DEP183	-3.28113E-02	2.82825E-02	-1.160	0.2460	3.76249E-01	PNACAFI	-2.57446E-02	1.03725E-03	-24.820	0.0000	1.99235E+01
MDEP3	-2.54479E-01	7.51191E-02	-3.388	0.0007	2.07540E-01	PMCRGL	-3.13226E-02	1.39808E-03	-22.404	0.0000	4.26341E+01
MAR3	1.22453E-01	5.80739E-02	2.109	0.0350	5.97549E-01	PEMPRSL	-3.51468E-03	5.41739E-04	-6.488	0.0000	3.94820E+01
MMAR3	-5.55707E-02	8.97948E-02	-0.619	0.5360	1.36475E-01	PEMPDOL	-1.99826E-03	7.49272E-04	-2.667	0.0077	8.67979E+00
TA	3.03770E-02	6.13714E-02	0.495	0.6206	1.66447E-01	PMWAL	2.72821E-02	1.36107E-03	20.045	0.0000	2.66102E+01
RA	2.05916E-02	5.88605E-02	0.350	0.7265	2.58812E-01	PTEACHL	1.41907E-03	6.92648E-04	2.049	0.0405	3.29655E+01
FELLOW	1.82338E-01	1.05116E-01	1.735	0.0828	3.92083E+06	PRESCHL	-6.52291E-05	7.50462E-04	-0.087	0.9307	4.86857E+01
TRAIN	-4.45222E-03	7.00671E-02	-0.064	0.9493	1.44769E-01	BIO	-5.38232E-01	9.69782E-02	-5.550	0.0000	3.06880E-01
MPSOURC	1.11374E-01	7.66844E-02	1.452	0.1464	1.22337E-01	HEALTH	-1.73065E-01	1.08424E-01	-1.596	0.1104	7.78511E+06
TTD1	2.94418E-03	1.05523E-02	0.279	0.7802	9.06956E+00	CHEMENG	4.03864E-01	1.72235E-01	2.345	0.0190	1.35721E+06
MTTD1	2.26753E-01	3.70590E-01	0.612	0.5406	2.63902E+06	ELECENG	3.88805E-01	1.24711E-01	3.118	0.0018	3.03487E+06
PDOCP	-3.16768E-01	5.42140E-02	-5.843	0.0000	4.27144E-01	OTHENG	1.40450E-01	9.91299E-02	1.417	0.1565	9.74552E+06
MPDOCP	-3.27711E-01	1.36892E-01	-2.394	0.0167	4.56173E+06	COMP	2.54497E-01	1.42253E-01	1.789	0.0736	1.97926E+06
FSWI	3.43846E-02	4.50037E-02	0.764	0.4448	3.77568E-01	MATH	1.90279E-01	1.12586E-01	1.690	0.0910	4.80679E+06
MFSWI	-8.39701E-02	5.04127E-02	-1.666	0.0958	3.47220E-01	PHYSICS	-1.87585E-01	1.24368E-01	-1.508	0.1315	5.18379E+06
BAINT	-6.13519E-02	1.08313E-01	-0.566	0.5711	1.09896E-01	CHEM	-3.22071E-02	1.26459E-01	-0.255	0.7990	4.75024E+06
MBAINT	1.59264E-01	3.22418E-01	0.494	0.6213	2.18662E+06	EAOSCI	-1.44023E-01	1.28028E-01	-1.125	0.2606	3.58153E+06
AGEPHD	4.20529E-03	9.39632E-03	0.448	0.6545	3.11889E+01	OPSCI	7.03661E-02	5.07685E-01	0.139	0.8898	1.69651E+05
NATUPHD	-2.09172E-01	1.07744E-01	-1.941	0.0522	4.59943E+06	PSYCH	-2.66347E-01	1.07818E-01	-2.470	0.0135	8.21866E+06
PERMPHD	-5.05689E-02	1.22173E-01	-0.414	0.6789	3.54383E+06	ECON	-4.34317E-02	1.22910E-01	-0.353	0.7238	3.31762E+06
TEMPPHD	5.02761E-02	1.17355E-01	0.428	0.6684	8.74647E+06	POLYSCI	5.03868E-02	1.36189E-01	0.370	0.7114	2.29972E+06
MCITPHD	4.80697E-02	1.89389E-01	0.254	0.7996	2.43167E+06	SAD	-1.31138E-01	1.10379E-01	-1.188	0.2348	5.86239E+06
HCAPPHD	-3.32712E-01	2.45570E-01	-1.355	0.1755	7.35156E+05	OSSCI	-2.51587E-02	1.40936E-01	-0.179	0.8583	2.18662E+06
MHCAPPHD	-4.74488E-01	7.28713E-02	-6.511	0.0000	6.97078E-01	PHD70S	-7.43779E-01	1.24056E-01	-5.996	0.0000	5.57964E+06
HISPAN	2.86442E-02	8.23709E-02	0.348	0.7280	6.29595E+06	PHD80S	-4.67626E-01	9.57075E-02	-4.886	0.0000	7.65127E-01
BLACK	-2.68039E-01	8.37245E-02	-3.201	0.0014	6.03205E+06						

NOTES: Dependent variable: YRSTEN; 5305 observations; 5 iterations; log likelihood function = -20599.52; restricted log likelihood = -21578.65; Chi-squared = 1958.262; d.f. = 55; significance = .000000. Log-rank test with 55 degrees of freedom: Chi-squared = 1867.067, Prob = .0000.

TABLE D-3. Maximum likelihood estimates for tenure, hazard model 3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.08125E-01	4.75510E-02	-2.274	0.0230	3.31197E-01	MHCAPPHD	-7.70083E-02	6.96612E-02	-1.105	0.2690	6.97078E-01
DEP63	2.37737E-03	3.20162E-02	0.074	0.9408	4.36381E-01	HISPAN	-7.38159E-03	8.19690E-02	-0.090	0.9282	6.29595E+06
DEP183	7.53713E-03	2.75671E-02	0.273	0.7845	3.76249E-01	BLACK	-2.96342E-01	8.36038E-02	-3.545	0.0004	6.03205E+06
MDEP3	2.15764E-02	7.44368E-02	0.290	0.7719	2.07540E-01	ASIAN	-1.24317E-01	7.52738E-02	-1.652	0.0986	1.15174E-01
MAR3	1.21692E-01	5.78365E-02	2.104	0.0354	5.97549E-01	NATAMER	-1.11542E-01	2.21315E-01	-0.504	0.6143	8.10556E+05
MMAR3	-3.91815E-01	8.92302E-02	-4.391	0.0000	1.36475E-01	PNTRAC	-1.78866E-02	1.16137E-03	-15.401	0.0000	1.33011E+01
TA	7.89489E-02	6.10466E-02	1.293	0.1959	1.66447E-01	PMTENL	3.65214E-03	8.38749E-04	4.354	0.0000	2.67670E+01
RA	-3.07077E-02	5.85290E-02	-0.525	0.5998	2.58812E-01	BIO	-5.24892E-01	9.70679E-02	-5.407	0.0000	3.06880E-01
FELLOW	1.80436E-01	1.04784E-01	1.722	0.0851	3.92083E+06	HEALTH	-9.17691E-02	1.07607E-01	-0.853	0.3938	7.78511E+06
TRAIN	-4.83215E-02	7.01981E-02	-0.688	0.4912	1.44769E-01	CHEMENG	1.82888E-01	1.71311E-01	1.068	0.2857	1.35721E+06
MPSOURC	9.67857E-02	7.71039E-02	1.255	0.2094	1.22337E-01	ELECENG	2.08221E-01	1.23725E-01	1.683	0.0924	3.03487E+06
TTD1	1.76252E-04	1.03216E-02	0.017	0.9864	9.06956E+00	OTHENG	4.66134E-02	9.83597E-02	0.474	0.6356	9.74552E+06
MTTD1	1.32128E-01	3.62110E-01	0.365	0.7152	2.63902E+06	COMP	3.46521E-01	1.41232E-01	2.454	0.0141	1.97926E+06
PDOCP	-5.24021E-01	5.34997E-02	-9.795	0.0000	4.27144E-01	MATH	3.87606E-01	1.10700E-01	3.501	0.0005	4.80679E+06
MPDOCP	-4.18967E-01	1.37778E-01	-3.041	0.0024	4.56173E+06	PHYSICS	-3.40971E-01	1.23582E-01	-2.759	0.0058	5.18379E+06
FSWI	-4.35754E-02	4.51592E-02	-0.965	0.3346	3.77568E-01	CHEM	-1.40925E-01	1.25398E-01	-1.124	0.2611	4.75024E+06
MFSWI	-1.40038E-01	5.09161E-02	-2.750	0.0060	3.47220E-01	EAOSCI	-3.10406E-02	1.27665E-01	-0.243	0.8079	3.58153E+06
BAINT	-7.39927E-02	1.09504E-01	-0.676	0.4992	1.09896E-01	OPSCI	-4.70430E-02	5.07602E-01	-0.093	0.9262	1.69651E+05
MBAINT	5.34486E-02	3.13556E-01	0.170	0.8646	2.18662E+06	PSYCH	-2.74454E-01	1.05895E-01	-2.592	0.0095	8.21866E+06
AGEPHD	5.74831E-03	9.29267E-03	0.619	0.5362	3.11889E+01	ECON	1.51637E-01	1.21764E-01	1.245	0.2130	3.31762E+06
NATUPHD	-2.14287E-01	1.07693E-01	-1.990	0.0466	4.59943E+06	POLYSCI	2.04520E-01	1.34276E-01	1.523	0.1277	2.29972E+06
PERMPHD	1.44531E-03	1.24625E-01	0.012	0.9907	3.54383E+06	SAD	8.53931E-03	1.08970E-01	0.078	0.9375	5.86239E+06
TEMPPHD	1.29614E-01	1.17588E-01	1.102	0.2703	8.74647E+06	OSSCI	5.48512E-02	1.39706E-01	0.393	0.6946	2.18662E+06
MCITPHD	5.44497E-02	1.89070E-01	0.288	0.7734	2.43167E+06	PHD70S	-4.11243E-01	1.22860E-01	-3.347	0.0008	5.57964E+06
HCAPPHD	-3.04392E-02	2.44500E-01	-0.124	0.9009	7.35156E+05	PHD80S	-3.02022E-01	9.42827E-02	-3.203	0.0014	7.65127E-01

NOTES: Dependent variable: YRSTEN; 5305 observations; 6 iterations; log likelihood function = -20947.19; restricted log likelihood = -21578.65; Chi-squared = 1262.936; d.f. = 50; significance = .0000000. Log-rank test with 50 degrees of freedom: Chi-squared = 1196.258, Prob = .0000.

TABLE D-4. Maximum likelihood estimates for tenure, hazard model 4

Variable	Coefficient	Standard Error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard Error	z=b/se	P[ Z >z	Mean of x
FEMALE	-7.11164E-02	4.81728E-02	-1.476	0.1399	3.31197E-01	NATAMER	2.03647E-02	2.22307E-01	0.092	0.9270	8.10556E+05
DEP63	-2.90564E-02	3.22519E-02	-0.901	0.3676	4.36381E-01	PNACFT	-2.59157E-02	1.03544E-03	-25.029	0.0000	1.99235E+01
DEP183	-2.51673E-02	2.81838E-02	-0.893	0.3719	3.76249E-01	PMCRGL	-3.41393E-02	1.54885E-03	-22.042	0.0000	4.26341E+01
MDEP3	-2.30429E-01	7.55673E-02	-3.049	0.0023	2.07540E-01	PEMPRSL	-2.98739E-03	5.43370E-04	-5.498	0.0000	3.94820E+01
MAR3	1.26639E-01	5.82286E-02	2.175	0.0296	5.97549E-01	PEMPDOL	-2.04006E-03	7.49002E-04	-2.724	0.0065	8.67979E+00
MMAR3	-1.48587E-01	9.01376E-02	-1.648	0.0993	1.36475E-01	PMWAL	2.12181E-02	1.73807E-03	12.208	0.0000	2.66102E+01
TA	-3.86653E-03	6.13189E-02	-0.063	0.9497	1.66447E-01	PTEACHL	6.73962E-04	7.01678E-04	0.961	0.3368	3.29655E+01
RA	-2.00522E-02	5.87273E-02	-0.341	0.7328	2.58812E-01	PRESCHL	-1.07939E-05	7.55764E-04	-0.014	0.9886	4.86857E+01
FELLOW	1.34058E-01	1.05263E-01	1.274	0.2028	3.92083E+06	PNTRAC	-1.91357E-02	1.17341E-03	-16.308	0.0000	1.33011E+01
TRAIN	-3.97828E-02	7.02590E-02	-0.566	0.5712	1.44769E-01	PMTENL	7.38895E-03	1.80257E-03	4.099	0.0000	2.67670E+01
MPSOURC	4.86248E-02	7.67007E-02	0.634	0.5261	1.22337E-01	BIO	-4.08460E-01	9.74925E-02	-4.190	0.0000	3.06880E-01
TTD1	6.37012E-03	1.05291E-02	0.605	0.5452	9.06956E+00	HEALTH	-1.01392E-01	1.08958E-01	-0.931	0.3521	7.78511E+06
MTTD1	2.14344E-01	3.71014E-01	0.578	0.5635	2.63902E+06	CHEMENG	3.84743E-01	1.72459E-01	2.231	0.0257	1.35721E+06
PDOCP	-2.64897E-01	5.43449E-02	-4.874	0.0000	4.27144E-01	ELECENG	4.16784E-01	1.24840E-01	3.339	0.0008	3.03487E+06
MPDOCP	-2.83498E-01	1.37734E-01	-2.058	0.0396	4.56173E+06	OTHENG	1.89518E-01	9.90812E-02	1.913	0.0558	9.74552E+06
FSWI	2.66291E-02	4.52636E-02	0.588	0.5563	3.77568E-01	COMP	2.46304E-01	1.42367E-01	1.730	0.0836	1.97926E+06
MFSWI	-7.17450E-02	5.04951E-02	-1.421	0.1554	3.47220E-01	MATH	2.90237E-01	1.12834E-01	2.572	0.0101	4.80679E+06
BAINT	-1.02655E-01	1.07858E-01	-0.952	0.3412	1.09896E-01	PHYSICS	-6.07298E-02	1.24828E-01	-0.487	0.6266	5.18379E+06
MBAINT	1.40937E-01	3.20962E-01	0.439	0.6606	2.18662E+06	CHEM	1.83758E-02	1.26561E-01	0.145	0.8846	4.75024E+06
AGEPHD	6.44446E-03	9.45110E-03	0.682	0.4953	3.11889E+01	EAOSCI	8.58204E-03	1.28214E-01	0.067	0.9466	3.58153E+06
NATUPHD	-1.67659E-01	1.07809E-01	-1.555	0.1199	4.59943E+06	OPSCI	3.92667E-01	5.08543E-01	0.772	0.4400	1.69651E+05
PERMPHD	-1.61494E-02	1.23253E-01	-0.131	0.8958	3.54383E+06	PSYCH	-1.61351E-01	1.07980E-01	-1.494	0.1351	8.21866E+06
TEMPPHD	9.16478E-02	1.16553E-01	0.786	0.4317	8.74647E+06	ECON	5.42468E-02	1.22774E-01	0.442	0.6586	3.31762E+06
MCITPHD	9.72084E-02	1.88773E-01	0.515	0.6066	2.43167E+06	POLYSCI	1.20817E-01	1.35995E-01	0.888	0.3743	2.29972E+06
HCAPPHD	-2.26704E-01	2.45567E-01	-0.923	0.3559	7.35156E+05	SAD	-6.21472E-02	1.10619E-01	-0.562	0.5742	5.86239E+06
MHCAPPHD	-4.50294E-01	7.43130E-02	-6.059	0.0000	6.97078E-01	OSSCI	2.54335E-02	1.41355E-01	0.180	0.8572	2.18662E+06
HISPAN	1.44039E-02	8.23335E-02	0.175	0.8611	6.29595E+06	PHD70S	-8.10404E-01	1.24557E-01	-6.506	0.0000	5.57964E+06
BLACK	-2.93695E-01	8.39575E-02	-3.498	0.0005	6.03205E+06	PHD80S	-5.42280E-01	9.57938E-02	-5.661	0.0000	7.65127E-01
ASIAN	-9.42709E-02	7.56194E-02	-1.247	0.2125	1.15174E-01						

NOTES: Dependent variable: YRSTEN; 5305 observations; 6 iterations; log likelihood function = -20412.06; restricted log likelihood = -21578.65; Chi-squared = 2333.183; d.f. = 57; significance = .0000000. Log-rank test with 57 degrees of freedom: Chi-squared = 2192.675, Prob = .0000.



TABLE D-5. Maximum likelihood estimates for tenure, hazard model I-1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-7.07869E-02	7.04538E-02	-1.005	0.3150	3.31197E-01	MCITPHD	4.91603E-02	1.90806E-01	0.258	0.7967	2.43167E+06
FDEP63	-1.28081E-01	7.61377E-02	-1.682	0.0925	1.01791E-01	HCAPPHD	-3.97941E-02	2.44163E-01	-0.163	0.8705	7.35156E+05
FDEP183	-1.93478E-01	6.91942E-02	-2.796	0.0052	8.91612E+06	MHCAPPHD	-1.29885E-01	6.95808E-02	-1.867	0.0619	6.97078E-01
FMAR3	2.27921E-02	1.03955E-01	0.219	0.8265	1.69651E-01	HISPAN	3.81743E-02	8.20477E-02	0.465	0.6417	6.29595E+06
DEP63	3.73094E-02	3.54489E-02	1.052	0.2926	4.36381E-01	BLACK	-2.00501E-01	8.34095E-02	-2.404	0.0162	6.03205E+06
DEP183	3.45575E-02	3.03930E-02	1.137	0.2555	3.76249E-01	ASIAN	-9.96364E-02	7.54818E-02	-1.320	0.1868	1.15174E-01
MDEP3	-5.61893E-02	7.42021E-02	-0.757	0.4489	2.07540E-01	NATAMER	-1.14805E-01	2.21258E-01	-0.519	0.6038	8.10556E+05
MAR3	1.20669E-01	6.96307E-02	1.733	0.0831	5.97549E-01	BIO	-6.16418E-01	9.67473E-02	-6.371	0.0000	3.06880E-01
MMAR3	-1.25709E-01	8.45955E-02	-1.486	0.1373	1.36475E-01	HEALTH	-1.20914E-01	1.07572E-01	-1.124	0.2610	7.78511E+06
TA	9.39246E-02	6.12449E-02	1.534	0.1251	1.66447E-01	CHEMENG	2.39301E-01	1.71323E-01	1.397	0.1625	1.35721E+06
RA	-2.37091E-02	5.85773E-02	-0.405	0.6857	2.58812E-01	ELECENG	2.79162E-01	1.23717E-01	2.256	0.0240	3.03487E+06
FELLOW	2.05202E-01	1.04777E-01	1.958	0.0502	3.92083E+06	OTHENG	5.02060E-02	9.83836E-02	0.510	0.6098	9.74552E+06
TRAIN	-2.92893E-02	7.00614E-02	-0.418	0.6759	1.44769E-01	COMP	3.68930E-01	1.41264E-01	2.612	0.0090	1.97926E+06
MPSOURC	1.36907E-01	7.72167E-02	1.773	0.0762	1.22337E-01	MATH	3.79713E-01	1.11030E-01	3.420	0.0006	4.80679E+06
TTD1	-3.49378E-03	1.03793E-02	-0.337	0.7364	9.06956E+00	PHYSICS	-3.97006E-01	1.23499E-01	-3.215	0.0013	5.18379E+06
MTTD1	1.67158E-01	3.64515E-01	0.459	0.6465	2.63902E+06	CHEM	-1.43915E-01	1.25280E-01	-1.149	0.2507	4.75024E+06
PDOCP	-6.01976E-01	5.33220E-02	-11.289	0.0000	4.27144E-01	EAOSCI	-1.21286E-01	1.27619E-01	-0.950	0.3419	3.58153E+06
MPDOCP	-4.07224E-01	1.37404E-01	-2.964	0.0030	4.56173E+06	OPSCI	-3.37213E-01	5.07366E-01	-0.665	0.5063	1.69651E+05
FSWI	-2.32033E-02	4.48749E-02	-0.517	0.6051	3.77568E-01	PSYCH	-3.24014E-01	1.05790E-01	-3.063	0.0022	8.21866E+06
MFSWI	-1.50374E-01	5.07752E-02	-2.962	0.0031	3.47220E-01	ECON	1.12219E-01	1.21820E-01	0.921	0.3570	3.31762E+06
BAINT	-5.32289E-02	1.09429E-01	-0.486	0.6267	1.09896E-01	POLYSCI	1.70503E-01	1.34440E-01	1.268	0.2047	2.29972E+06
MBAINT	5.14788E-02	3.17572E-01	0.162	0.8712	2.18662E+06	SAD	-6.01590E-02	1.08796E-01	-0.553	0.5803	5.86239E+06
AGEPHD	3.84736E-03	9.30966E-03	0.413	0.6794	3.11889E+01	OSSCI	4.65714E-02	1.39393E-01	0.334	0.7383	2.18662E+06
NATUPHD	-2.17004E-01	1.08026E-01	-2.009	0.0446	4.59943E+06	PHD70S	-3.88301E-01	1.22565E-01	-3.168	0.0015	5.57964E+06
PERMPHD	-1.69961E-02	1.23156E-01	-0.138	0.8902	3.54383E+06	PHD80S	-2.39368E-01	9.43731E-02	-2.536	0.0112	7.65127E-01
TEMPPHD	1.52424E-01	1.17774E-01	1.294	0.1956	8.74647E+06						

NOTES: Dependent variable: YRSTEN; 5305 observations; 5 iterations; log likelihood function = -21116.85; restricted log likelihood = -21578.65; Chi-squared = 923.6105; d.f. = 51; significance = .000000. Log-rank test with 51 degrees of freedom: Chi-squared = 938.963, Prob = .0000.

TABLE D-6. Maximum likelihood estimates for tenure, hazard model I-2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-2.96597E-02	7.10565E-02	-0.417	0.6764	3.31197E-01	HISPAN	3.37463E-02	8.24478E-02	0.409	0.6823	6.29595E+06
FDEP63	-1.10557E-01	7.56253E-02	-1.462	0.1438	1.01791E-01	BLACK	-2.64194E-01	8.36955E-02	-3.157	0.0016	6.03205E+06
FDEP183	-9.25581E-02	7.00528E-02	-1.321	0.1864	8.91612E+06	ASIAN	-8.73616E-02	7.57696E-02	-1.153	0.2489	1.15174E-01
FMAR3	-4.85245E-02	1.04621E-01	-0.464	0.6428	1.69651E-01	NATAMER	-1.72467E-02	2.21972E-01	-0.078	0.9381	8.10556E+05
DEP63	5.83582E-03	3.55986E-02	0.164	0.8698	4.36381E-01	PNACAFI	-2.56343E-02	1.03877E-03	-24.678	0.0000	1.99235E+01
DEP183	-1.70791E-02	3.11014E-02	-0.549	0.5829	3.76249E-01	PMCRGL	-3.13527E-02	1.39651E-03	-22.451	0.0000	4.26341E+01
MDEP3	-2.61835E-01	7.51620E-02	-3.484	0.0005	2.07540E-01	PEMPRSL	-3.51454E-03	5.42076E-04	-6.483	0.0000	3.94820E+01
MAR3	1.49680E-01	7.02419E-02	2.131	0.0331	5.97549E-01	PEMPDOL	-1.97260E-03	7.49436E-04	-2.632	0.0085	8.67979E+00
MMAR3	-3.96686E-02	9.00593E-02	-0.440	0.6596	1.36475E-01	PMWAL	2.73037E-02	1.36043E-03	20.070	0.0000	2.66102E+01
TA	2.85921E-02	6.13987E-02	0.466	0.6414	1.66447E-01	PTEACHL	1.40076E-03	6.92589E-04	2.022	0.0431	3.29655E+01
RA	2.64294E-02	5.89388E-02	0.448	0.6538	2.58812E-01	PRESCHL	-7.54097E-05	7.51513E-04	-0.100	0.9201	4.86857E+01
FELLOW	1.84297E-01	1.05145E-01	1.753	0.0796	3.92083E+06	BIO	-5.29148E-01	9.70892E-02	-5.450	0.0000	3.06880E-01
TRAIN	-3.24323E-03	7.00956E-02	-0.046	0.9631	1.44769E-01	HEALTH	-1.59324E-01	1.08622E-01	-1.467	0.1424	7.78511E+06
MPSOURC	1.15408E-01	7.67448E-02	1.504	0.1326	1.22337E-01	CHEMENG	4.16421E-01	1.72375E-01	2.416	0.0157	1.35721E+06
TTD1	4.27189E-03	1.05595E-02	0.405	0.6858	9.06956E+00	ELECENG	4.04872E-01	1.24929E-01	3.241	0.0012	3.03487E+06
MTTD1	1.70260E-01	3.71394E-01	0.458	0.6466	2.63902E+06	OTHENG	1.43273E-01	9.91807E-02	1.445	0.1486	9.74552E+06
PDOCP	-3.21282E-01	5.42424E-02	-5.923	0.0000	4.27144E-01	COMP	2.61655E-01	1.42417E-01	1.837	0.0662	1.97926E+06
MPDOCP	-3.28524E-01	1.37016E-01	-2.398	0.0165	4.56173E+06	MATH	2.02901E-01	1.12778E-01	1.799	0.0720	4.80679E+06
FSWI	3.27964E-02	4.49976E-02	0.729	0.4661	3.77568E-01	PHYSICS	-1.73458E-01	1.24498E-01	-1.393	0.1635	5.18379E+06
MFSWI	-8.28416E-02	5.04324E-02	-1.643	0.1005	3.47220E-01	CHEM	-1.71684E-02	1.26576E-01	-0.136	0.8921	4.75024E+06
BAINT	-5.18808E-02	1.08533E-01	-0.478	0.6326	1.09896E-01	EAOSCI	-1.34816E-01	1.28118E-01	-1.052	0.2927	3.58153E+06
MBAINT	1.63568E-01	3.22687E-01	0.507	0.6122	2.18662E+06	OPSCI	7.06371E-02	5.07751E-01	0.139	0.8894	1.69651E+05
AGEPHD	2.28188E-03	9.42324E-03	0.242	0.8087	3.11889E+01	PSYCH	-2.56124E-01	1.07903E-01	-2.374	0.0176	8.21866E+06
NATUPHD	-1.99040E-01	1.07884E-01	-1.845	0.0650	4.59943E+06	ECON	-3.41787E-02	1.23000E-01	-0.278	0.7811	3.31762E+06
PERMPHD	-5.63256E-02	1.22120E-01	-0.461	0.6446	3.54383E+06	POLYSCI	6.20240E-02	1.36284E-01	0.455	0.6490	2.29972E+06
TEMPPHD	4.39564E-02	1.17654E-01	0.374	0.7087	8.74647E+06	SAD	-1.20364E-01	1.10489E-01	-1.089	0.2760	5.86239E+06
MCITPHD	4.50851E-02	1.89738E-01	0.238	0.8122	2.43167E+06	OSSCI	-1.63989E-02	1.40991E-01	-0.116	0.9074	2.18662E+06
HCAPPHD	-3.37431E-01	2.45696E-01	-1.373	0.1696	7.35156E+05	PHD70S	-7.42045E-01	1.24043E-01	-5.982	0.0000	5.57964E+06
MHCAPPHD	-4.77617E-01	7.29506E-02	-6.547	0.0000	6.97078E-01	PHD80S	-4.63024E-01	9.56829E-02	-4.839	0.0000	7.65127E-01

NOTES: Dependent variable: YRSTEN; 5305 observations; 5 iterations; log likelihood function = -20596.25; restricted log likelihood = -21578.65; Chi-squared = 1964.800; d.f. = 58; significance = .0000000. Log-rank test with 58 degrees of freedom: Chi-squared = 1876.292, Prob = .0000.

TABLE D-7. Maximum likelihood estimates for tenure, hazard model I-3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-4.37450E-02	7.06029E-02	-0.620	0.5355	3.31197E-01	HCAPPHD	-2.22572E-02	2.44537E-01	-0.091	0.9275	7.35156E+05
FDEP63	-1.00358E-01	7.61880E-02	-1.317	0.1878	1.01791E-01	MHCAPPHD	-7.51671E-02	6.96955E-02	-1.079	0.2808	6.97078E-01
FDEP183	-1.55549E-01	6.91713E-02	-2.249	0.0245	8.91612E+06	HISPAN	3.40827E-04	8.20386E-02	0.004	0.9967	6.29595E+06
FMAR3	3.64278E-02	1.03961E-01	0.350	0.7260	1.69651E-01	BLACK	-2.88013E-01	8.35791E-02	-3.446	0.0006	6.03205E+06
DEP63	2.14756E-02	3.53541E-02	0.607	0.5436	4.36381E-01	ASIAN	-1.22862E-01	7.53648E-02	-1.630	0.1031	1.15174E-01
DEP183	3.74049E-02	3.02480E-02	1.237	0.2162	3.76249E-01	NATAMER	-1.03972E-01	2.21363E-01	-0.470	0.6386	8.10556E+05
MDEP3	1.16873E-02	7.45070E-02	0.157	0.8754	2.07540E-01	PNTRAC	-1.77950E-02	1.16239E-03	-15.309	0.0000	1.33011E+01
MAR3	1.18237E-01	6.97344E-02	1.696	0.0900	5.97549E-01	PMTENL	3.64616E-03	8.38378E-04	4.349	0.0000	2.67670E+01
MMAR3	-3.79881E-01	8.95927E-02	-4.240	0.0000	1.36475E-01	BIO	-5.15123E-01	9.71738E-02	-5.301	0.0000	3.06880E-01
TA	7.80463E-02	6.10986E-02	1.277	0.2015	1.66447E-01	HEALTH	-7.26131E-02	1.07788E-01	-0.674	0.5005	7.78511E+06
RA	-2.57938E-02	5.85919E-02	-0.440	0.6598	2.58812E-01	CHEMENG	1.91528E-01	1.71401E-01	1.117	0.2638	1.35721E+06
FELLOW	1.81093E-01	1.04806E-01	1.728	0.0840	3.92083E+06	ELECENG	2.16455E-01	1.23865E-01	1.748	0.0805	3.03487E+06
TRAIN	-4.91589E-02	7.02362E-02	-0.700	0.4840	1.44769E-01	OTHENG	5.04429E-02	9.84405E-02	0.512	0.6084	9.74552E+06
MPSOURC	9.95256E-02	7.72127E-02	1.289	0.1974	1.22337E-01	COMP	3.64757E-01	1.41537E-01	2.577	0.0100	1.97926E+06
TTD1	1.96557E-03	1.03464E-02	0.190	0.8493	9.06956E+00	MATH	3.99791E-01	1.10880E-01	3.606	0.0003	4.80679E+06
MTTD1	7.73951E-02	3.62950E-01	0.213	0.8311	2.63902E+06	PHYSICS	-3.33371E-01	1.23628E-01	-2.697	0.0070	5.18379E+06
PDOCP	-5.26453E-01	5.34692E-02	-9.846	0.0000	4.27144E-01	CHEM	-1.25745E-01	1.25477E-01	-1.002	0.3163	4.75024E+06
MPDOCP	-4.12380E-01	1.37841E-01	-2.992	0.0028	4.56173E+06	EAOSCI	-1.75985E-02	1.27821E-01	-0.138	0.8905	3.58153E+06
FSWI	-4.40628E-02	4.51486E-02	-0.976	0.3291	3.77568E-01	OPSCI	-4.93156E-02	5.07717E-01	-0.097	0.9226	1.69651E+05
MFSWI	-1.39370E-01	5.09208E-02	-2.737	0.0062	3.47220E-01	PSYCH	-2.59892E-01	1.06056E-01	-2.451	0.0143	8.21866E+06
BAINT	-7.43955E-02	1.09638E-01	-0.679	0.4974	1.09896E-01	ECON	1.62612E-01	1.21893E-01	1.334	0.1822	3.31762E+06
MBAINT	6.30955E-02	3.13837E-01	0.201	0.8407	2.18662E+06	POLYSCI	2.10953E-01	1.34344E-01	1.570	0.1164	2.29972E+06
AGEPHD	3.57285E-03	9.33520E-03	0.383	0.7019	3.11889E+01	SAD	1.28725E-02	1.09010E-01	0.118	0.9060	5.86239E+06
NATUPHD	-2.04819E-01	1.07883E-01	-1.899	0.0576	4.59943E+06	OSSCI	6.37614E-02	1.39782E-01	0.456	0.6483	2.18662E+06
PERMPHD	4.58204E-03	1.24589E-01	0.037	0.9707	3.54383E+06	PHD70S	-4.10231E-01	1.22834E-01	-3.340	0.0008	5.57964E+06
TEMPPHD	1.32495E-01	1.17786E-01	1.125	0.2606	8.74647E+06	PHD80S	-2.98596E-01	9.42644E-02	-3.168	0.0015	7.65127E-01
MCITPHD	4.14970E-02	1.89388E-01	0.219	0.8266	2.43167E+06						

NOTES: Dependent variable: YRSTEN; 5305 observations; 6 iterations; log likelihood function = -20943.35; restricted log likelihood = -21578.65; Chi-squared = 1270.599; d.f. = 53; significance = .000000. Log-rank test with 53 degrees of freedom: Chi-squared = 1206.229, Prob = .0000.

TABLE D-8. Maximum likelihood estimates for tenure, hazard model I-4

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-7.08329E-03	7.09921E-02	-0.100	0.9205	3.31197E-01	BLACK	-2.90711E-01	8.39548E-02	-3.463	0.0005	6.03205E+06
FDEP63	-6.50800E-02	7.60719E-02	-0.856	0.3923	1.01791E-01	ASIAN	-9.48519E-02	7.57378E-02	-1.252	0.2104	1.15174E-01
FDEP183	-5.24392E-02	6.99007E-02	-0.750	0.4531	8.91612E+06	NATAMER	1.87825E-02	2.22365E-01	0.084	0.9327	8.10556E+05
FMAR3	-4.18365E-02	1.04839E-01	-0.399	0.6899	1.69651E-01	PNACAFI	-2.58559E-02	1.03648E-03	-24.946	0.0000	1.99235E+01
DEP63	-1.89234E-02	3.55705E-02	-0.532	0.5947	4.36381E-01	PMCRGL	-3.41675E-02	1.54958E-03	-22.050	0.0000	4.26341E+01
DEP183	-1.69194E-02	3.10104E-02	-0.546	0.5853	3.76249E-01	PEMPSRL	-2.99373E-03	5.43607E-04	-5.507	0.0000	3.94820E+01
MDEP3	-2.34481E-01	7.56365E-02	-3.100	0.0019	2.07540E-01	PEMPDOL	-2.02047E-03	7.49217E-04	-2.697	0.0070	8.67979E+00
MAR3	1.48177E-01	7.04181E-02	2.104	0.0354	5.97549E-01	PMWAL	2.12434E-02	1.73800E-03	12.223	0.0000	2.66102E+01
MMAR3	-1.38269E-01	9.04379E-02	-1.529	0.1263	1.36475E-01	PTEACHL	6.57707E-04	7.01739E-04	0.937	0.3486	3.29655E+01
TA	-5.18163E-03	6.13462E-02	-0.084	0.9327	1.66447E-01	PRESCHL	-1.65188E-05	7.56553E-04	-0.022	0.9826	4.86857E+01
RA	-1.67211E-02	5.87999E-02	-0.284	0.7761	2.58812E-01	PNTRAC	-1.90594E-02	1.17472E-03	-16.225	0.0000	1.33011E+01
FELLOW	1.34644E-01	1.05349E-01	1.278	0.2012	3.92083E+06	PMTENL	7.40060E-03	1.80336E-03	4.104	0.0000	2.67670E+01
TRAIN	-3.91689E-02	7.02884E-02	-0.557	0.5774	1.44769E-01	BIO	-4.04094E-01	9.75689E-02	-4.142	0.0000	3.06880E-01
MPSOURC	5.13771E-02	7.67530E-02	0.669	0.5033	1.22337E-01	HEALTH	-9.50087E-02	1.09076E-01	-0.871	0.3837	7.78511E+06
TTD1	7.09338E-03	1.05370E-02	0.673	0.5008	9.06956E+00	CHEMENG	3.93369E-01	1.72584E-01	2.279	0.0226	1.35721E+06
MTTD1	1.81675E-01	3.71659E-01	0.489	0.6250	2.63902E+06	ELECENG	4.25256E-01	1.24994E-01	3.402	0.0007	3.03487E+06
PDOCP	-2.67751E-01	5.43741E-02	-4.924	0.0000	4.27144E-01	OTHENG	1.90599E-01	9.91330E-02	1.923	0.0545	9.74552E+06
MPDOCP	-2.85117E-01	1.37829E-01	-2.069	0.0386	4.56173E+06	COMP	2.51338E-01	1.42573E-01	1.763	0.0779	1.97926E+06
FSWI	2.55460E-02	4.52596E-02	0.564	0.5725	3.77568E-01	MATH	2.97196E-01	1.12975E-01	2.631	0.0085	4.80679E+06
MFSWI	-7.08480E-02	5.05223E-02	-1.402	0.1608	3.47220E-01	PHYSICS	-5.36758E-02	1.24909E-01	-0.430	0.6674	5.18379E+06
BAINT	-9.82487E-02	1.08008E-01	-0.910	0.3630	1.09896E-01	CHEM	2.73759E-02	1.26696E-01	0.216	0.8289	4.75024E+06
MBAINT	1.46264E-01	3.21143E-01	0.455	0.6488	2.18662E+06	EAOSCI	1.40617E-02	1.28295E-01	0.110	0.9127	3.58153E+06
AGEPHD	5.38373E-03	9.47254E-03	0.568	0.5698	3.11889E+01	OPSCI	3.96124E-01	5.08700E-01	0.779	0.4362	1.69651E+05
NATUPHD	-1.63267E-01	1.07927E-01	-1.513	0.1303	4.59943E+06	PSYCH	-1.54468E-01	1.08093E-01	-1.429	0.1530	8.21866E+06
PERMPHD	-2.10891E-02	1.23304E-01	-0.171	0.8642	3.54383E+06	ECON	5.94056E-02	1.22855E-01	0.484	0.6287	3.31762E+06
TEMPPHD	8.84813E-02	1.16743E-01	0.758	0.4485	8.74647E+06	POLYSCI	1.28784E-01	1.36115E-01	0.946	0.3441	2.29972E+06
MCITPHD	9.58555E-02	1.88972E-01	0.507	0.6120	2.43167E+06	SAD	-5.72547E-02	1.10685E-01	-0.517	0.6050	5.86239E+06
HCAPPHD	-2.26550E-01	2.45572E-01	-0.923	0.3562	7.35156E+05	OSSCI	3.04360E-02	1.41384E-01	0.215	0.8296	2.18662E+06
MHCAPPHD	-4.53088E-01	7.43679E-02	-6.093	0.0000	6.97078E+01	PHD70S	-8.09376E-01	1.24563E-01	-6.498	0.0000	5.57964E+06
HISPAN	1.73719E-02	8.23843E-02	0.211	0.8330	6.29595E+06	PHD80S	-5.38506E-01	9.57980E-02	-5.621	0.0000	7.65127E-01

NOTES: Dependent variable: YRSTEN; 5305 observations; 6 iterations; log likelihood function = -20410.81; restricted log likelihood = -21578.65; Chi-squared = 2335.688; d.f. = 60; significance = .000000. Log-rank test with 60 degrees of freedom: Chi-squared = 2197.186, Prob = .0000.

TABLE D-9. Maximum likelihood estimates for associate-professor rank, hazard model 1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.87094E-01	4.43117E-02	-4.222	0.0000	3.31197E-01	MHCAPPHD	-7.84611E-02	6.56054E-02	-1.196	0.2317	6.97078E-01
DEP63	2.58555E-03	3.01958E-02	0.086	0.9318	4.36381E-01	HISPAN	6.06797E-02	7.83754E-02	0.774	0.4388	6.29595E+06
DEP183	3.70692E-02	2.60252E-02	1.424	0.1543	3.76249E-01	BLACK	-1.79971E-01	7.95318E-02	-2.263	0.0236	6.03205E+06
MDEP3	-1.35827E-01	5.77693E-02	-2.351	0.0187	2.07540E-01	ASIAN	-1.09098E-01	7.25644E-02	-1.503	0.1327	1.15174E-01
MAR3	1.82412E-01	5.23324E-02	3.486	0.0005	5.97549E-01	NATAMER	-1.64786E-01	2.11273E-01	-0.780	0.4354	8.10556E+05
TA	6.46185E-02	5.87742E-02	1.099	0.2716	1.66447E-01	BIO	-3.94705E-01	9.24262E-02	-4.270	0.0000	3.06880E-01
RA	3.71340E-03	5.55844E-02	0.067	0.9467	2.58812E-01	HEALTH	1.65149E-01	1.01612E-01	1.625	0.1041	7.78511E+06
FELLOW	1.15454E-01	1.01121E-01	1.142	0.2536	3.92083E+06	CHEMENG	4.90418E-01	1.60037E-01	3.064	0.0022	1.35721E+06
TRAIN	2.75761E-02	6.44142E-02	0.428	0.6686	1.44769E-01	ELECENG	2.02985E-01	1.23563E-01	1.643	0.1004	3.03487E+06
MPSOURC	6.96953E-02	7.44916E-02	0.936	0.3495	1.22337E-01	OTHENG	1.37525E-01	9.62496E-02	1.429	0.1531	9.74552E+06
TTD1	-1.60428E-02	9.45069E-03	-1.698	0.0896	9.06956E+00	COMP	5.74855E-01	1.36966E-01	4.197	0.0000	1.97926E+06
MTTD1	2.53562E-01	3.50943E-01	0.723	0.4700	2.63902E+06	MATH	2.48707E-01	1.10535E-01	2.250	0.0244	4.80679E+06
PDOCP	-5.56992E-01	5.00872E-02	-11.120	0.0000	4.27144E-01	PHYSICS	-3.79263E-01	1.19773E-01	-3.167	0.0015	5.18379E+06
MPDOCP	-4.86565E-01	1.35590E-01	-3.588	0.0003	4.56173E+06	CHEM	-2.40692E-01	1.22618E-01	-1.963	0.0497	4.75024E+06
FSWI	-5.00193E-02	4.26510E-02	-1.173	0.2409	3.77568E-01	EAOSCI	-1.33441E-01	1.25530E-01	-1.063	0.2878	3.58153E+06
MFSWI	-7.53699E-02	4.76059E-02	-1.583	0.1134	3.47220E-01	OPSCI	-6.31225E-02	4.54903E-01	-0.139	0.8896	1.69651E+05
BAINT	-1.35549E-02	1.04176E-01	-0.130	0.8965	1.09896E-01	PSYCH	-2.54965E-01	1.02449E-01	-2.489	0.0128	8.21866E+06
MBAINT	8.67835E-02	3.11730E-01	0.278	0.7807	2.18662E+06	ECON	1.25939E-01	1.20199E-01	1.048	0.2948	3.31762E+06
AGEPHD	1.54977E-02	8.38965E-03	1.847	0.0647	3.11889E+01	POLYSCI	1.51019E-02	1.36508E-01	0.111	0.9119	2.29972E+06
NATUPHD	-1.42293E-01	9.97829E-02	-1.426	0.1539	4.59943E+06	SAD	5.36260E-02	1.06025E-01	0.506	0.6130	5.86239E+06
PERMPHD	3.04219E-04	1.17328E-01	0.003	0.9979	3.54383E+06	OSSCI	1.96328E-01	1.37275E-01	1.430	0.1527	2.18662E+06
TEMPPHD	1.46860E-01	1.12730E-01	1.303	0.1927	8.74647E+06	PHD70S	-4.22020E-01	1.16985E-01	-3.607	0.0003	5.57964E+06
MCITPHD	2.19034E-01	1.82644E-01	1.199	0.2304	2.43167E+06	PHD80S	-2.53415E-01	8.77648E-02	-2.887	0.0039	7.65127E-01
HCAPPHD	2.62904E-01	2.16535E-01	1.214	0.2247	7.35156E+05						

NOTES: Dependent variable: YRSASO; 5305 observations; 6 iterations; log likelihood function = -23374.40; restricted log likelihood = -3770.29; Chi-squared = 791.7813; d.f. = 47; significance = .0000000. Log-rank test with 47 degrees of freedom: Chi-squared = 814.773, Prob = .0000.

TABLE D-10. Maximum likelihood estimates for associate-professor rank, hazard model 2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.64590E-01	4.49672E-02	-3.660	0.0003	3.31197E-01	ASIAN	-7.56942E-02	7.31822E-02	-1.034	0.3010	1.15174E-01
DEP63	-1.02542E-02	3.04297E-02	-0.337	0.7361	4.36381E-01	NATAMER	-1.09712E-01	2.11709E-01	-0.518	0.6043	8.10556E+05
DEP183	2.56790E-02	2.63330E-02	0.975	0.3295	3.76249E-01	PNACAFA	-2.12447E-02	8.83091E-04	-24.057	0.0000	2.06880E+01
MDEP3	-2.80519E-01	5.89952E-02	-4.755	0.0000	2.07540E-01	PMCARGA	-2.92386E-02	1.24551E-03	-23.475	0.0000	4.26743E+01
MAR3	1.68310E-01	5.26502E-02	3.197	0.0014	5.97549E-01	PEMPRSA	-4.53432E-03	5.17327E-04	-8.765	0.0000	3.87165E+01
TA	2.29155E-04	5.89787E-02	0.004	0.9969	1.66447E-01	PEMPDOA	-3.16836E-03	7.42380E-04	-4.268	0.0000	8.40889E+00
RA	4.45892E-02	5.58624E-02	0.798	0.4248	2.58812E-01	PMWAA	2.40920E-02	1.22863E-03	19.609	0.0000	2.72773E+01
FELLOW	9.89237E-02	1.01592E-01	0.974	0.3302	3.92083E+06	PTEACHA	5.25887E-04	6.45978E-04	0.814	0.4156	3.24328E+01
TRAIN	2.13167E-02	6.45254E-02	0.330	0.7411	1.44769E-01	PRESCHA	-1.57077E-04	6.90428E-04	-0.228	0.8200	4.84227E+01
MPSOURC	3.54290E-02	7.41027E-02	0.478	0.6326	1.22337E-01	BIO	-3.82015E-01	9.27369E-02	-4.119	0.0000	3.06880E-01
TTD1	-9.29645E-03	9.68598E-03	-0.960	0.3372	9.06956E+00	HEALTH	1.13264E-01	1.02834E-01	1.101	0.2707	7.78511E+06
MTTD1	2.14762E-01	3.59310E-01	0.598	0.5500	2.63902E+06	CHEMENG	6.68258E-01	1.61017E-01	4.150	0.0000	1.35721E+06
PDOCP	-3.16667E-01	5.09675E-02	-6.213	0.0000	4.27144E-01	ELECENG	3.16205E-01	1.24580E-01	2.538	0.0111	3.03487E+06
MPDOCP	-4.68821E-01	1.35034E-01	-3.472	0.0005	4.56173E+06	OTHENG	2.16475E-01	9.72602E-02	2.226	0.0260	9.74552E+06
FSWI	3.15458E-03	4.27787E-02	0.074	0.9412	3.77568E-01	COMP	5.00549E-01	1.38168E-01	3.623	0.0003	1.97926E+06
MFSWI	-5.43441E-03	4.75451E-02	-0.114	0.9090	3.47220E-01	MATH	6.51974E-02	1.12177E-01	0.581	0.5611	4.80679E+06
BAINT	-6.28775E-03	1.02827E-01	-0.061	0.9512	1.09896E-01	PHYSICS	-2.03713E-01	1.20687E-01	-1.688	0.0914	5.18379E+06
MBAINT	1.55694E-01	3.16999E-01	0.491	0.6233	2.18662E+06	CHEM	-2.09880E-01	1.24062E-01	-1.692	0.0907	4.75024E+06
AGEPHD	1.30864E-02	8.59448E-03	1.523	0.1278	3.11889E+01	EAOSCI	-1.82433E-01	1.26325E-01	-1.444	0.1487	3.58153E+06
NATUPHD	-1.49103E-01	1.00114E-01	-1.489	0.1364	4.59943E+06	OPSCI	1.16199E-01	4.55252E-01	0.255	0.7985	1.69651E+05
PERMPHD	8.62580E-03	1.15331E-01	0.075	0.9404	3.54383E+06	PSYCH	-2.61220E-01	1.04571E-01	-2.498	0.0125	8.21866E+06
TEMPPHD	6.46121E-02	1.12231E-01	0.576	0.5648	8.74647E+06	ECON	-1.54103E-02	1.21398E-01	-0.127	0.8990	3.31762E+06
MCITPHD	3.19560E-01	1.82858E-01	1.748	0.0805	2.43167E+06	POLYSCI	-8.95082E-02	1.38648E-01	-0.646	0.5186	2.29972E+06
HCAPPHD	-9.25762E-03	2.18263E-01	-0.042	0.9662	7.35156E+05	SAD	-2.01227E-02	1.07746E-01	-0.187	0.8518	5.86239E+06
MHCAPPHD	-4.00534E-01	6.84128E-02	-5.855	0.0000	6.97078E-01	OSSCI	1.29880E-01	1.38674E-01	0.937	0.3490	2.18662E+06
HISPAN	3.82433E-02	7.86462E-02	0.486	0.6268	6.29595E+06	PHD70S	-7.34430E-01	1.18149E-01	-6.216	0.0000	5.57964E+06
BLACK	-2.59914E-01	7.99072E-02	-3.253	0.0011	6.03205E+06	PHD80S	-4.55345E-01	8.90992E-02	-5.111	0.0000	7.65127E-01

NOTES: Dependent variable: YRSASO; 5305 observations; 5 iterations; log likelihood function = -22896.80; restricted log likelihood = -23770.29; Chi-squared = 1746.981; d.f. = 54; significance = .0000000. Log-rank test with 54 degrees of freedom: Chi-squared = 1711.700, Prob = .0000.

TABLE D-11. Maximum likelihood estimates for associate-professor rank, hazard model 3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.90851E-01	4.43648E-02	-4.302	0.0000	3.31197E-01	HISPAN	7.24973E-04	7.85869E-02	0.009	0.9926	6.29595E+06
DEP63	-2.77672E-02	3.03638E-02	-0.914	0.3605	4.36381E-01	BLACK	-2.78332E-01	7.96343E-02	-3.495	0.0005	6.03205E+06
DEP183	1.99947E-02	2.59574E-02	0.770	0.4411	3.76249E-01	ASIAN	-1.56098E-01	7.32788E-02	-2.130	0.0332	1.15174E-01
MDEP3	-2.97538E-01	5.98122E-02	-4.975	0.0000	2.07540E-01	NATAMER	-2.02048E-01	2.11369E-01	-0.956	0.3391	8.10556E+05
MAR3	1.80993E-01	5.35275E-02	3.381	0.0007	5.97549E-01	PRNKANA	-4.92996E-02	2.72984E-03	-18.060	0.0000	1.16226E+01
TA	3.09793E-02	5.88595E-02	0.526	0.5987	1.66447E-01	PMASO	2.67429E-03	7.63524E-04	3.503	0.0005	2.62742E+01
RA	1.54469E-02	5.54848E-02	0.278	0.7807	2.58812E-01	BIO	-3.82373E-01	9.23909E-02	-4.139	0.0000	3.06880E-01
FELLOW	2.75733E-02	1.01143E-01	0.273	0.7851	3.92083E+06	HEALTH	8.75357E-02	1.02057E-01	0.858	0.3910	7.78511E+06
TRAIN	-5.65863E-03	6.44833E-02	-0.088	0.9301	1.44769E-01	CHEMENG	5.29046E-01	1.60295E-01	3.300	0.0010	1.35721E+06
MPSOURC	3.61085E-02	7.47063E-02	0.483	0.6289	1.22337E-01	ELECENG	1.83126E-01	1.24151E-01	1.475	0.1402	3.03487E+06
TTD1	-8.34612E-03	9.25185E-03	-0.902	0.3670	9.06956E+00	OTHENG	1.35853E-01	9.66472E-02	1.406	0.1598	9.74552E+06
MTTD1	3.00736E-01	3.47430E-01	0.866	0.3867	2.63902E+06	COMP	4.25862E-01	1.37401E-01	3.099	0.0019	1.97926E+06
PDOCP	-4.55419E-01	4.97707E-02	-9.150	0.0000	4.27144E-01	MATH	9.32554E-02	1.11010E-01	0.840	0.4009	4.80679E+06
MPDOCP	-4.48441E-01	1.36117E-01	-3.295	0.0010	4.56173E+06	PHYSICS	-1.74545E-01	1.19874E-01	-1.456	0.1454	5.18379E+06
FSWI	-7.57283E-02	4.26268E-02	-1.777	0.0756	3.77568E-01	CHEM	-2.43946E-01	1.22694E-01	-1.988	0.0468	4.75024E+06
MFSWI	-6.91549E-03	4.80153E-02	-0.144	0.8855	3.47220E-01	EAOSCI	-1.18116E-02	1.25615E-01	-0.094	0.9251	3.58153E+06
BAINT	2.49628E-03	1.03054E-01	0.024	0.9807	1.09896E-01	OPSCI	-1.57217E-01	4.54953E-01	-0.346	0.7297	1.69651E+05
MBAINT	1.03027E-01	3.07668E-01	0.335	0.7377	2.18662E+06	PSYCH	-2.32708E-01	1.02769E-01	-2.264	0.0236	8.21866E+06
AGEPHD	1.53341E-02	8.24380E-03	1.860	0.0629	3.11889E+01	ECON	5.42021E-02	1.20545E-01	0.450	0.6530	3.31762E+06
NATUPHD	-1.22197E-01	1.00111E-01	-1.221	0.2222	4.59943E+06	POLYSCI	-6.45541E-02	1.36636E-01	-0.472	0.6366	2.29972E+06
PERMPHD	-6.53672E-02	1.18172E-01	-0.553	0.5802	3.54383E+06	SAD	2.51496E-02	1.06383E-01	0.236	0.8131	5.86239E+06
TEMPPHD	1.29552E-01	1.11614E-01	1.161	0.2458	8.74647E+06	OSSCI	1.39064E-01	1.37711E-01	1.010	0.3126	2.18662E+06
MCITPHD	8.51118E-02	1.81447E-01	0.469	0.6390	2.43167E+06	PHD70S	-4.43877E-01	1.16718E-01	-3.803	0.0001	5.57964E+06
HCAPPHD	3.14009E-01	2.17190E-01	1.446	0.1482	7.35156E+05	PHD80S	-3.26268E-01	8.77395E-02	-3.719	0.0002	7.65127E-01
MHCAPPHD	-1.29127E-01	6.57938E-02	-1.963	0.0497	6.97078E-01						

NOTES: Dependent variable: YRSASO; 5305 observations; 7 iterations; log likelihood function = -22932.24; restricted log likelihood = -23770.29; Chi-squared = 1676.105; d.f. = 49; significance = .0000000. Log-rank test with 49 degrees of freedom: Chi-squared = 1316.600, Prob = .0000.

TABLE D-12. Maximum likelihood estimates for associate-professor rank, hazard model 4

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.26241E-01	4.50032E-02	-2.805	0.0050	3.31197E-01	NATAMER	-7.92094E-02	2.11804E-01	-0.374	0.7084	8.10556E+05
DEP63	-2.56972E-02	3.07178E-02	-0.837	0.4028	4.36381E-01	PNACAFA	-2.04198E-02	8.61516E-04	-23.702	0.0000	2.06880E+01
DEP183	2.57128E-02	2.63332E-02	0.976	0.3288	3.76249E-01	PMCRGA	-2.99232E-02	1.61907E-03	-18.482	0.0000	4.26743E+01
MDEP3	-3.66162E-01	5.95337E-02	-6.150	0.0000	2.07540E-01	PEMPRSA	-3.17717E-03	5.22539E-04	-6.080	0.0000	3.87165E+01
MAR3	1.38229E-01	5.30921E-02	2.604	0.0092	5.97549E-01	PEMPDOA	-2.24515E-03	7.46546E-04	-3.007	0.0026	8.40889E+00
TA	1.27179E-02	5.92317E-02	0.215	0.8300	1.66447E-01	PMWAA	9.11268E-03	2.21665E-03	4.111	0.0000	2.72773E+01
RA	3.95505E-02	5.60289E-02	0.706	0.4803	2.58812E-01	PTEACHA	-3.34094E-03	6.71000E-04	-4.979	0.0000	3.24328E+01
FELLOW	2.27548E-03	1.01700E-01	0.022	0.9821	3.92083E+06	PRESCHA	-2.13180E-03	7.06093E-04	-3.019	0.0025	4.84227E+01
TRAIN	-1.09178E-03	6.46162E-02	-0.017	0.9865	1.44769E-01	PRNKANA	-4.60270E-02	2.73761E-03	-16.813	0.0000	1.16226E+01
MPSOURC	2.00990E-02	7.44940E-02	0.270	0.7873	1.22337E-01	PMASO	1.52786E-02	2.55464E-03	5.981	0.0000	2.62742E+01
TTD1	-7.18689E-03	9.54435E-03	-0.753	0.4515	9.06956E+00	BIO	-3.51054E-01	9.29027E-02	-3.779	0.0002	3.06880E-01
MTTD1	2.81885E-01	3.58353E-01	0.787	0.4315	2.63902E+06	HEALTH	5.73869E-02	1.02858E-01	0.558	0.5769	7.78511E+06
PDOCP	-2.60992E-01	5.05458E-02	-5.163	0.0000	4.27144E-01	CHEMENG	6.03898E-01	1.61052E-01	3.750	0.0002	1.35721E+06
MPDOCP	-4.39935E-01	1.35784E-01	-3.240	0.0012	4.56173E+06	ELECENG	2.65893E-01	1.24950E-01	2.128	0.0333	3.03487E+06
FSWI	-2.93648E-02	4.26196E-02	-0.689	0.4908	3.77568E-01	OTHENG	2.12955E-01	9.77014E-02	2.180	0.0293	9.74552E+06
MFSWI	3.80488E-02	4.76900E-02	0.798	0.4250	3.47220E-01	COMP	3.77372E-01	1.38346E-01	2.728	0.0064	1.97926E+06
BAINT	-7.31178E-03	1.01889E-01	-0.072	0.9428	1.09896E-01	MATH	2.84243E-02	1.12486E-01	0.253	0.8005	4.80679E+06
MBAINT	2.26197E-01	3.15988E-01	0.716	0.4741	2.18662E+06	PHYSICS	-4.21472E-02	1.20809E-01	-0.349	0.7272	5.18379E+06
AGEPHD	1.75318E-02	8.50978E-03	2.060	0.0394	3.11889E+01	CHEM	-1.73997E-01	1.24381E-01	-1.399	0.1618	4.75024E+06
NATUPHD	-1.12926E-01	1.00584E-01	-1.123	0.2616	4.59943E+06	EAOSCI	-3.53185E-02	1.26643E-01	-0.279	0.7803	3.58153E+06
PERMPHD	-2.14879E-02	1.15998E-01	-0.185	0.8530	3.54383E+06	OPSCI	-1.84447E-02	4.55233E-01	-0.041	0.9677	1.69651E+05
TEMPPHD	1.03663E-01	1.11175E-01	0.932	0.3511	8.74647E+06	PSYCH	-2.37032E-01	1.04398E-01	-2.270	0.0232	8.21866E+06
MCITPHD	2.31798E-01	1.81404E-01	1.278	0.2013	2.43167E+06	ECON	1.08943E-02	1.21881E-01	0.089	0.9288	3.31762E+06
HCAPPHD	1.02737E-01	2.19100E-01	0.469	0.6391	7.35156E+05	POLYSCI	-7.11953E-02	1.38690E-01	-0.513	0.6077	2.29972E+06
MHCAPPHD	-4.68282E-01	7.01365E-02	-6.677	0.0000	6.97078E-01	SAD	4.82150E-04	1.07696E-01	0.004	0.9964	5.86239E+06
HISPAN	6.67539E-03	7.87208E-02	0.085	0.9324	6.29595E+06	OSSCI	1.59957E-01	1.39027E-01	1.151	0.2499	2.18662E+06
BLACK	-2.88088E-01	7.98939E-02	-3.606	0.0003	6.03205E+06	PHD70S	-8.34161E-01	1.18776E-01	-7.023	0.0000	5.57964E+06
ASIAN	-1.17568E-01	7.33486E-02	-1.603	0.1090	1.15174E-01	PHD80S	-5.35458E-01	8.92751E-02	-5.998	0.0000	7.65127E-01

NOTES: Dependent variable: YRSASO; 5305 observations; 7 iterations; log likelihood function = -22533.95; restricted log likelihood = -23770.29; Chi-squared = 2472.669; d.f. = 56; significance = .0000000. Log-rank test with 56 degrees of freedom: Chi-squared = 2113.252, Prob = .0000.



TABLE D-13. Maximum likelihood estimates for associate-professor rank, hazard model I-1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.02297E-01	6.71995E-02	-1.522	0.1279	3.31197E-01	MCITPHD	2.00989E-01	1.82581E-01	1.101	0.2710	2.43167E+06
FDEP63	-1.44711E-01	7.11107E-02	-2.035	0.0419	1.01791E-01	HCAPPHD	2.42590E-01	2.16920E-01	1.118	0.2634	7.35156E+05
FDEP183	-2.37485E-01	6.28011E-02	-3.782	0.0002	8.91612E+06	MHCAPPHD	-7.45528E-02	6.57047E-02	-1.135	0.2565	6.97078E-01
FMAR3	6.55210E-02	9.90049E-02	0.662	0.5081	1.69651E-01	HISPAN	7.45140E-02	7.84299E-02	0.950	0.3421	6.29595E+06
DEP63	4.75091E-02	3.37270E-02	1.409	0.1589	4.36381E-01	BLACK	-1.57616E-01	7.94909E-02	-1.983	0.0474	6.03205E+06
DEP183	9.77699E-02	2.87705E-02	3.398	0.0007	3.76249E-01	ASIAN	-9.57960E-02	7.24682E-02	-1.322	0.1862	1.15174E-01
MDEP3	5.22073E-02	7.05524E-02	0.740	0.4593	2.07540E-01	NATAMER	-1.42758E-01	2.11337E-01	-0.676	0.4994	8.10556E+05
MAR3	8.33067E-02	6.59435E-02	1.263	0.2065	5.97549E-01	BIO	-3.91083E-01	9.26093E-02	-4.223	0.0000	3.06880E-01
MMAR3	-3.56675E-01	8.11211E-02	-4.397	0.0000	1.36475E-01	HEALTH	1.93176E-01	1.01952E-01	1.895	0.0581	7.78511E+06
TA	5.36558E-02	5.88480E-02	0.912	0.3619	1.66447E-01	CHEMENG	5.15690E-01	1.60109E-01	3.221	0.0013	1.35721E+06
RA	2.52727E-03	5.56366E-02	0.045	0.9638	2.58812E-01	ELECENG	2.28427E-01	1.23761E-01	1.846	0.0649	3.03487E+06
FELLOW	1.07966E-01	1.01175E-01	1.067	0.2859	3.92083E+06	OTHENG	1.42750E-01	9.63651E-02	1.481	0.1385	9.74552E+06
TRAIN	2.00873E-02	6.45117E-02	0.311	0.7555	1.44769E-01	COMP	5.82885E-01	1.37263E-01	4.246	0.0000	1.97926E+06
MPSOURC	5.82773E-02	7.45848E-02	0.781	0.4346	1.22337E-01	MATH	2.70806E-01	1.10784E-01	2.444	0.0145	4.80679E+06
TTD1	-1.44328E-02	9.44956E-03	-1.527	0.1267	9.06956E+00	PHYSICS	-3.68969E-01	1.19902E-01	-3.077	0.0021	5.18379E+06
MTTD1	2.56127E-01	3.51991E-01	0.728	0.4668	2.63902E+06	CHEM	-2.25331E-01	1.22665E-01	-1.837	0.0662	4.75024E+06
PDOCP	-5.65391E-01	5.00691E-02	-11.292	0.0000	4.27144E-01	EAOSCI	-1.19495E-01	1.25748E-01	-0.950	0.3420	3.58153E+06
MPDOCP	-4.59965E-01	1.35384E-01	-3.397	0.0007	4.56173E+06	OPSCI	-7.16497E-02	4.54940E-01	-0.157	0.8749	1.69651E+05
FSWI	-4.74556E-02	4.26642E-02	-1.112	0.2660	3.77568E-01	PSYCH	-2.52598E-01	1.02630E-01	-2.461	0.0138	8.21866E+06
MFSWI	-7.05217E-02	4.75780E-02	-1.482	0.1383	3.47220E-01	ECON	1.55624E-01	1.20463E-01	1.292	0.1964	3.31762E+06
BAINT	-1.51405E-02	1.03990E-01	-0.146	0.8842	1.09896E-01	POLYSCI	1.41315E-02	1.36584E-01	0.103	0.9176	2.29972E+06
MBAINT	3.68467E-02	3.12143E-01	0.118	0.9060	2.18662E+06	SAD	3.50518E-02	1.06239E-01	0.330	0.7415	5.86239E+06
AGEPHD	1.38666E-02	8.41470E-03	1.648	0.0994	3.11889E+01	OSSCI	1.75595E-01	1.37528E-01	1.277	0.2017	2.18662E+06
NATUPHD	-9.50339E-02	1.00162E-01	-0.949	0.3427	4.59943E+06	PHD70S	-4.22503E-01	1.16996E-01	-3.611	0.0003	5.57964E+06
PERMPHD	2.43658E-02	1.17440E-01	0.207	0.8356	3.54383E+06	PHD80S	-2.34753E-01	8.78656E-02	-2.672	0.0075	7.65127E-01
TEMPPHD	1.44348E-01	1.12573E-01	1.282	0.1998	8.74647E+06						

NOTES: Dependent variable: YRSASO; 5305 observations; 6 iterations; log likelihood function = -23353.82; restricted log likelihood = -23770.29; Chi-squared = 832.9312; d.f. = 51; significance = .000000. Log-rank test with 51 degrees of freedom: Chi-squared = 858.780, Prob = .0000.

TABLE D-14. Maximum likelihood estimates for associate-professor rank, hazard model I-2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-7.19004E-02	6.75882E-02	-1.064	0.2874	3.31197E-01	HISPAN	4.39082E-02	7.87157E-02	0.558	0.5770	6.29595E+06
FDEP63	-1.51545E-01	7.09847E-02	-2.135	0.0328	1.01791E-01	BLACK	-2.47773E-01	7.98851E-02	-3.102	0.0019	6.03205E+06
FDEP183	-1.60035E-01	6.30405E-02	-2.539	0.0111	8.91612E+06	ASIAN	-7.49742E-02	7.31029E-02	-1.026	0.3051	1.15174E-01
FMAR3	1.63670E-02	9.96356E-02	0.164	0.8695	1.69651E-01	NATAMER	-1.06068E-01	2.11776E-01	-0.501	0.6165	8.10556E+05
DEP63	2.96974E-02	3.39392E-02	0.875	0.3816	4.36381E-01	PNACAFSA	-2.09208E-02	8.87287E-04	-23.578	0.0000	2.06880E+01
DEP183	6.44040E-02	2.92688E-02	2.200	0.0278	3.76249E-01	PMCRGA	-2.86633E-02	1.25645E-03	-22.813	0.0000	4.26743E+01
MDEP3	-1.70610E-01	7.17175E-02	-2.379	0.0174	2.07540E-01	PEMPRSA	-4.51913E-03	5.17755E-04	-8.728	0.0000	3.87165E+01
MAR3	1.23274E-01	6.66650E-02	1.849	0.0644	5.97549E-01	PEMPDOA	-3.03398E-03	7.43964E-04	-4.078	0.0000	8.40889E+00
MMAR3	-2.26588E-01	8.56097E-02	-2.647	0.0081	1.36475E-01	PMWAA	2.43327E-02	1.22644E-03	19.840	0.0000	2.72773E+01
TA	-8.04044E-03	5.90542E-02	-0.136	0.8917	1.66447E-01	PTEACHA	6.10125E-04	6.46673E-04	0.943	0.3454	3.24328E+01
RA	4.96005E-02	5.58769E-02	0.888	0.3747	2.58812E-01	PRESCHA	-9.47453E-05	6.91766E-04	-0.137	0.8911	4.84227E+01
FELLOW	9.83406E-02	1.01582E-01	0.968	0.3330	3.92083E+06	BIO	-3.70732E-01	9.28346E-02	-3.993	0.0001	3.06880E-01
TRAIN	2.03876E-02	6.45316E-02	0.316	0.7521	1.44769E-01	HEALTH	1.35376E-01	1.03076E-01	1.313	0.1891	7.78511E+06
MPSOURC	3.15688E-02	7.42176E-02	0.425	0.6706	1.22337E-01	CHEMENG	6.79845E-01	1.61091E-01	4.220	0.0000	1.35721E+06
TTD1	-7.82815E-03	9.65243E-03	-0.811	0.4174	9.06956E+00	ELECENG	3.29567E-01	1.24764E-01	2.642	0.0083	3.03487E+06
MTTD1	1.82957E-01	3.59741E-01	0.509	0.6110	2.63902E+06	OTHENG	2.17662E-01	9.73631E-02	2.236	0.0254	9.74552E+06
PDOCP	-3.27977E-01	5.09943E-02	-6.432	0.0000	4.27144E-01	COMP	5.13040E-01	1.38457E-01	3.705	0.0002	1.97926E+06
MPDOCP	-4.56246E-01	1.35066E-01	-3.378	0.0007	4.56173E+06	MATH	8.53340E-02	1.12375E-01	0.759	0.4476	4.80679E+06
FSWI	1.70944E-03	4.27917E-02	0.040	0.9681	3.77568E-01	PHYSICS	-1.94063E-01	1.20826E-01	-1.606	0.1082	5.18379E+06
MFSWI	-4.15061E-03	4.75418E-02	-0.087	0.9304	3.47220E-01	CHEM	-1.95951E-01	1.24188E-01	-1.578	0.1146	4.75024E+06
BAINT	-5.50973E-03	1.02930E-01	-0.054	0.9573	1.09896E-01	EAOSCI	-1.73044E-01	1.26390E-01	-1.369	0.1710	3.58153E+06
MBAINT	1.27269E-01	3.17199E-01	0.401	0.6883	2.18662E+06	OPSCI	1.12687E-01	4.55308E-01	0.247	0.8045	1.69651E+05
AGEPHD	1.13010E-02	8.59393E-03	1.315	0.1885	3.11889E+01	PSYCH	-2.48162E-01	1.04611E-01	-2.372	0.0177	8.21866E+06
NATUPHD	-1.17548E-01	1.00399E-01	-1.171	0.2417	4.59943E+06	ECON	6.83103E-03	1.21512E-01	0.056	0.9552	3.31762E+06
PERMPHD	2.04275E-02	1.15639E-01	0.177	0.8598	3.54383E+06	POLYSCI	-7.57855E-02	1.38711E-01	-0.546	0.5848	2.29972E+06
TEMPPHD	5.90065E-02	1.12268E-01	0.526	0.5992	8.74647E+06	SAD	-2.13651E-02	1.07864E-01	-0.198	0.8430	5.86239E+06
MCITPHD	3.01491E-01	1.82855E-01	1.649	0.0992	2.43167E+06	OSSCI	1.22829E-01	1.38801E-01	0.885	0.3762	2.18662E+06
HCAPPHD	-4.19281E-02	2.18722E-01	-0.192	0.8480	7.35156E+05	PHD70S	-7.26745E-01	1.18124E-01	-6.152	0.0000	5.57964E+06
MHCAPPHD	-3.96041E-01	6.85052E-02	-5.781	0.0000	6.97078E-01	PHD80S	-4.41432E-01	8.91224E-02	-4.953	0.0000	7.65127E-01

NOTES: Dependent variable: YRSASO; 5305 observations; 5 iterations; log likelihood function = -22886.23; restricted log likelihood = -23770.29; Chi-squared = 1768.113; d.f. = 58; significance = .0000000. Log-rank test with 58 degrees of freedom: Chi-squared = 1737.345, Prob = .0000.

TABLE D-15. Maximum likelihood estimates for associate-professor rank, hazard model I-3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-9.70868E-02	6.71744E-02	-1.445	0.1484	3.31197E-01	HCAPPHD	2.77838E-01	2.17537E-01	1.277	0.2015	7.35156E+05
FDEP63	-1.10261E-01	7.10785E-02	-1.551	0.1208	1.01791E-01	MHCAPPHD	-1.33624E-01	6.58918E-02	-2.028	0.0426	6.97078E-01
FDEP183	-2.52205E-01	6.25236E-02	-4.034	0.0001	8.91612E+06	HISPAN	1.14700E-02	7.86081E-02	0.146	0.8840	6.29595E+06
FMAR3	3.02355E-02	9.88310E-02	0.306	0.7597	1.69651E-01	BLACK	-2.63014E-01	7.96119E-02	-3.304	0.0010	6.03205E+06
DEP63	1.43630E-02	3.38413E-02	0.424	0.6713	4.36381E-01	ASIAN	-1.41912E-01	7.31200E-02	-1.941	0.0523	1.15174E-01
DEP183	8.89724E-02	2.88134E-02	3.088	0.0020	3.76249E-01	NATAMER	-1.72659E-01	2.11410E-01	-0.817	0.4141	8.10556E+05
MDEP3	-4.89605E-03	7.05612E-02	-0.069	0.9447	2.07540E-01	PRNKANA	-4.96467E-02	2.73874E-03	-18.128	0.0000	1.16226E+01
MAR3	5.66903E-02	6.60783E-02	0.858	0.3909	5.97549E-01	PMASO	4.40695E-03	7.96239E-04	5.535	0.0000	2.62742E+01
MMAR3	-5.80577E-01	8.56154E-02	-6.781	0.0000	1.36475E-01	BIO	-3.75970E-01	9.25194E-02	-4.064	0.0000	3.06880E-01
TA	1.57338E-02	5.88802E-02	0.267	0.7893	1.66447E-01	HEALTH	1.20486E-01	1.02223E-01	1.179	0.2385	7.78511E+06
RA	1.25952E-02	5.54581E-02	0.227	0.8203	2.58812E-01	CHEMENG	5.37424E-01	1.60288E-01	3.353	0.0008	1.35721E+06
FELLOW	8.54871E-03	1.01193E-01	0.084	0.9327	3.92083E+06	ELECENG	1.82970E-01	1.24363E-01	1.471	0.1412	3.03487E+06
TRAIN	-1.59037E-02	6.45402E-02	-0.246	0.8054	1.44769E-01	OTHENG	1.30380E-01	9.67563E-02	1.348	0.1778	9.74552E+06
MPSOURC	1.37842E-02	7.48828E-02	0.184	0.8540	1.22337E-01	COMP	4.26832E-01	1.37596E-01	3.102	0.0019	1.97926E+06
TTD1	-6.23075E-03	9.26762E-03	-0.672	0.5014	9.06956E+00	MATH	9.97672E-02	1.11195E-01	0.897	0.3696	4.80679E+06
MTTD1	2.72442E-01	3.48108E-01	0.783	0.4338	2.63902E+06	PHYSICS	-1.81372E-01	1.19936E-01	-1.512	0.1305	5.18379E+06
PDOCP	-4.68696E-01	4.97265E-02	-9.425	0.0000	4.27144E-01	CHEM	-2.39017E-01	1.22849E-01	-1.946	0.0517	4.75024E+06
MPDOCP	-4.18473E-01	1.36038E-01	-3.076	0.0021	4.56173E+06	EAOSCI	-3.70801E-04	1.25804E-01	-0.003	0.9976	3.58153E+06
FSWI	-7.14570E-02	4.26314E-02	-1.676	0.0937	3.77568E-01	OPSCI	-1.68169E-01	4.55006E-01	-0.370	0.7117	1.69651E+05
MFSWI	3.19541E-03	4.80448E-02	0.067	0.9470	3.47220E-01	PSYCH	-2.30218E-01	1.02883E-01	-2.238	0.0252	8.21866E+06
BAINT	-3.87257E-03	1.03134E-01	-0.038	0.9700	1.09896E-01	ECON	7.71849E-02	1.20822E-01	0.639	0.5229	3.31762E+06
MBAINT	4.65107E-02	3.07592E-01	0.151	0.8798	2.18662E+06	POLYSCI	-6.90509E-02	1.36684E-01	-0.505	0.6134	2.29972E+06
AGEPHD	1.30782E-02	8.29584E-03	1.576	0.1149	3.11889E+01	SAD	1.52377E-02	1.06528E-01	0.143	0.8863	5.86239E+06
NATUPHD	-6.46556E-02	1.00340E-01	-0.644	0.5193	4.59943E+06	OSSCI	1.01625E-01	1.37940E-01	0.737	0.4613	2.18662E+06
PERMPHD	-3.33240E-02	1.18474E-01	-0.281	0.7785	3.54383E+06	PHD70S	-4.55875E-01	1.16766E-01	-3.904	0.0001	5.57964E+06
TEMPPHD	1.16123E-01	1.11553E-01	1.041	0.2979	8.74647E+06	PHD80S	-3.08628E-01	8.77395E-02	-3.518	0.0004	7.65127E-01
MCITPHD	5.03028E-02	1.80869E-01	0.278	0.7809	2.43167E+06						

NOTES: Dependent variable: YRSASO; 5305 observations; 7 iterations; log likelihood function = -22897.63; restricted log likelihood = -23770.29; Chi-squared = 1745.322; d.f. = 53; significance = .000000. Log-rank test with 53 degrees of freedom: Chi-squared = 1388.322, Prob = .0000.

TABLE D-16. Maximum likelihood estimates for associate-professor rank, hazard model I-4

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.83230E-02	6.76294E-02	-0.271	0.7864	3.31197E-01	BLACK	-2.73697E-01	7.98642E-02	-3.427	0.0006	6.03205E+06
FDEP63	-1.31536E-01	7.15906E-02	-1.837	0.0662	1.01791E-01	ASIAN	-1.13815E-01	7.32855E-02	-1.553	0.1204	1.15174E-01
FDEP183	-1.84011E-01	6.28103E-02	-2.930	0.0034	8.91612E+06	NATAMER	-7.78174E-02	2.11946E-01	-0.367	0.7135	8.10556E+05
FMAR3	-1.09831E-02	9.96846E-02	-0.110	0.9123	1.69651E-01	PNACAFSA	-2.00960E-02	8.65313E-04	-23.224	0.0000	2.06880E+01
DEP63	1.40268E-02	3.42997E-02	0.409	0.6826	4.36381E-01	PMCRGA	-2.92965E-02	1.62484E-03	-18.030	0.0000	4.26743E+01
DEP183	7.26878E-02	2.93813E-02	2.474	0.0134	3.76249E-01	PEMPRSA	-3.10963E-03	5.23139E-04	-5.944	0.0000	3.87165E+01
MDEP3	-1.93195E-01	7.16958E-02	-2.695	0.0070	2.07540E-01	PEMPDOA	-2.03862E-03	7.48148E-04	-2.725	0.0064	8.40889E+00
MAR3	7.86319E-02	6.67968E-02	1.177	0.2391	5.97549E-01	PMWAA	8.94369E-03	2.21929E-03	4.030	0.0001	2.72773E+01
MMAR3	-3.46762E-01	8.57391E-02	-4.044	0.0001	1.36475E-01	PTEACHA	-3.29743E-03	6.72677E-04	-4.902	0.0000	3.24328E+01
TA	2.24752E-03	5.92906E-02	0.038	0.9698	1.66447E-01	PRESCHA	-2.09795E-03	7.08423E-04	-2.961	0.0031	4.84227E+01
RA	4.11691E-02	5.60098E-02	0.735	0.4623	2.58812E-01	PRNKANA	-4.64611E-02	2.74875E-03	-16.903	0.0000	1.16226E+01
FELLOW	-7.72267E-03	1.01712E-01	-0.076	0.9395	3.92083E+06	PMASO	1.59921E-02	2.56014E-03	6.247	0.0000	2.62742E+01
TRAIN	-4.68443E-03	6.46348E-02	-0.072	0.9422	1.44769E-01	BIO	-3.42780E-01	9.29781E-02	-3.687	0.0002	3.06880E-01
MPSOURC	1.13425E-02	7.46218E-02	0.152	0.8792	1.22337E-01	HEALTH	8.09871E-02	1.03043E-01	0.786	0.4319	7.78511E+06
TTD1	-5.71273E-03	9.52236E-03	-0.600	0.5486	9.06956E+00	CHEMENG	6.11588E-01	1.61071E-01	3.797	0.0001	1.35721E+06
MTTD1	2.50515E-01	3.59057E-01	0.698	0.4854	2.63902E+06	ELECENG	2.69616E-01	1.25153E-01	2.154	0.0312	3.03487E+06
PDOCP	-2.74642E-01	5.05765E-02	-5.430	0.0000	4.27144E-01	OTHENG	2.10267E-01	9.77842E-02	2.150	0.0315	9.74552E+06
MPDOCP	-4.21517E-01	1.35935E-01	-3.101	0.0019	4.56173E+06	COMP	3.86959E-01	1.38609E-01	2.792	0.0052	1.97926E+06
FSWI	-2.88944E-02	4.26100E-02	-0.678	0.4977	3.77568E-01	MATH	4.08054E-02	1.12573E-01	0.362	0.7170	4.80679E+06
MFSWI	4.21847E-02	4.77273E-02	0.884	0.3768	3.47220E-01	PHYSICS	-4.27510E-02	1.20983E-01	-0.353	0.7238	5.18379E+06
BAINT	-1.48273E-02	1.01973E-01	-0.145	0.8844	1.09896E-01	CHEM	-1.72417E-01	1.24599E-01	-1.384	0.1664	4.75024E+06
MBAINT	1.85442E-01	3.16183E-01	0.587	0.5575	2.18662E+06	EAOSCI	-3.23767E-02	1.26685E-01	-0.256	0.7983	3.58153E+06
AGEPHD	1.57542E-02	8.52882E-03	1.847	0.0647	3.11889E+01	OPSCI	-2.58912E-02	4.55289E-01	-0.057	0.9547	1.69651E+05
NATUPHD	-7.21001E-02	1.00878E-01	-0.715	0.4748	4.59943E+06	PSYCH	-2.28230E-01	1.04401E-01	-2.186	0.0288	8.21866E+06
PERMPHD	-2.49535E-03	1.16371E-01	-0.021	0.9829	3.54383E+06	ECON	2.85871E-02	1.21964E-01	0.234	0.8147	3.31762E+06
TEMPPHD	1.00402E-01	1.11088E-01	0.904	0.3661	8.74647E+06	POLYSCI	-6.06253E-02	1.38709E-01	-0.437	0.6621	2.29972E+06
MCITPHD	2.10733E-01	1.81322E-01	1.162	0.2452	2.43167E+06	SAD	1.04048E-03	1.07840E-01	0.010	0.9923	5.86239E+06
HCAPPHD	7.16571E-02	2.19438E-01	0.327	0.7440	7.35156E+05	OSSCI	1.45179E-01	1.39185E-01	1.043	0.2969	2.18662E+06
MHCAPPHD	-4.61317E-01	7.01672E-02	-6.575	0.0000	6.97078E-01	PHD70S	-8.35292E-01	1.18825E-01	-7.030	0.0000	5.57964E+06
HISPAN	1.63211E-02	7.88177E-02	0.207	0.8360	6.29595E+06	PHD80S	-5.20300E-01	8.92769E-02	-5.828	0.0000	7.65127E-01

NOTES: Dependent variable: YRSASO; 5305 observations; 7 iterations; log likelihood function = -22517.44; restricted log likelihood = -23770.29; Chi-squared = 2505.693; d.f. = 60; significance = .000000. Log-rank test with 60 degrees of freedom: Chi-squared = 2142.723, Prob = .0000.

TABLE D-17. Maximum likelihood estimates for full-professor rank, hazard model 1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-2.91647E-01	9.15540E-02	-3.186	0.0014	3.00601E-01	MCITPHD	3.36589E-01	3.70217E-01	0.909	0.3633	2.00401E+06
DEP66	6.39114E-02	6.29420E-02	1.015	0.3099	2.69739E-01	HISPAN	1.51064E-01	1.68026E-01	0.899	0.3686	4.84970E+06
DEP186	6.98758E-02	4.03710E-02	1.731	0.0835	7.00601E-01	BLACK	-3.24577E-01	1.63254E-01	-1.988	0.0468	6.33267E+06
MDEP6	-5.52596E-02	1.91370E-01	-0.289	0.7728	3.88778E+06	ASIAN	5.58244E-02	1.47346E-01	0.379	0.7048	9.73948E+06
MAR6	1.01133E-01	1.00524E-01	1.006	0.3144	6.26052E-01	NATAMER	2.38403E-01	4.53426E-01	0.526	0.5990	5.21042E+05
TA	-6.59604E-02	1.15498E-01	-0.571	0.5679	1.78357E-01	BIO	-5.11920E-01	1.59225E-01	-3.215	0.0013	3.32665E-01
RA	-2.03950E-03	1.08427E-01	-0.019	0.9850	2.53307E-01	HEALTH	-4.47016E-02	1.79861E-01	-0.249	0.8037	7.65531E+06
FELLOW	2.46947E-02	1.98425E-01	0.124	0.9010	4.28858E+06	CHEMENG	1.00410E+00	3.01673E-01	3.328	0.0009	8.01603E+05
TRAIN	1.96760E-02	1.25951E-01	0.156	0.8759	1.72745E-01	ELECENG	-4.71447E-02	2.51231E-01	-0.188	0.8511	2.12425E+06
MPSOURC	1.16626E-01	1.56593E-01	0.745	0.4564	9.69940E+06	OTHENG	2.01820E-02	1.85076E-01	0.109	0.9132	5.77154E+06
TTD1	1.82341E-02	2.29604E-02	0.794	0.4271	8.60040E+00	COMP	-5.91202E-01	3.76652E-01	-1.570	0.1165	1.08216E+06
MTTD1	1.87462E-01	7.64349E-01	0.245	0.8063	2.24449E+06	MATH	-1.10637E-01	1.90939E-01	-0.579	0.5623	5.65130E+06
PDOCP	-5.40578E-01	1.00976E-01	-5.354	0.0000	4.25251E-01	PHYSICS	-4.33039E-01	2.17994E-01	-1.986	0.0470	5.17034E+06
MPDOCP	-5.54563E-01	2.78871E-01	-1.989	0.0467	4.04810E+06	CHEM	-1.16818E-01	2.25351E-01	-0.518	0.6042	4.56914E+06
FSWI	4.63546E-02	8.32408E-02	0.557	0.5776	3.46293E-01	EAOSCI	-1.89162E-01	2.10268E-01	-0.900	0.3683	3.68737E+06
MFSWI	-3.01690E-01	9.64035E-02	-3.129	0.0018	3.50701E-01	OPSCI	8.69290E-01	6.02202E-01	1.444	0.1489	1.20240E+05
BAINT	-1.14219E-01	2.35061E-01	-0.486	0.6270	9.01804E+06	PSYCH	-4.96654E-01	1.83393E-01	-2.708	0.0068	8.85772E+06
MBAINT	-9.92510E-02	6.46353E-01	-0.154	0.8780	1.80361E+06	ECON	-1.75073E-02	2.00991E-01	-0.087	0.9306	3.80762E+06
AGEPHD	-1.30682E-02	2.07801E-02	-0.629	0.5294	3.06160E+01	POLYSCI	-1.29917E-01	2.43720E-01	-0.533	0.5940	2.52505E+06
NATUPHD	-5.53404E-01	2.36792E-01	-2.337	0.0194	3.88778E+06	SAD	-3.16708E-01	1.87050E-01	-1.693	0.0904	6.77355E+06
PERMPHD	-7.51902E-02	2.55370E-01	-0.294	0.7684	3.80762E+06	OSSCI	-5.41869E-02	2.43983E-01	-0.222	0.8242	2.04409E+06
TEMPPHD	3.19745E-01	2.48813E-01	1.285	0.1988	6.49299E+06	PHD70S	-7.92723E-02	1.05020E-01	-0.755	0.4504	1.18637E-01

NOTES: Dependent variable: YRSFULL; 2495 observations; 7 iterations; log likelihood function = -5574.609; restricted log likelihood = -5686.806; Chi-squared = 224.3925; d.f. = 44; significance = .0000000. Log-rank test with 44 degrees of freedom: Chi-squared = 241.731, Prob = .0000.

TABLE D-18. Maximum likelihood estimates for full-professor rank, hazard model 2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-3.14598E-01	9.40552E-02	-3.345	0.0008	3.00601E-01	NATAMER	5.04218E-01	4.57758E-01	1.101	0.2707	5.21042E+05
DEP66	6.89205E-02	6.47455E-02	1.064	0.2871	2.69739E-01	PNACAFF	-3.23800E-02	2.23685E-03	-14.476	0.0000	2.01484E+01
DEP186	2.62883E-02	4.09341E-02	0.642	0.5207	7.00601E-01	PMCRGF	-5.54270E-02	3.34247E-03	-16.583	0.0000	3.76460E+01
MDEP6	-1.91800E-01	1.98040E-01	-0.968	0.3328	3.88778E+06	PEMPRSF	-3.48197E-03	1.04210E-03	-3.341	0.0008	4.06703E+01
MAR6	1.06586E-02	1.01795E-01	0.105	0.9166	6.26052E-01	PEMPDOF	-4.30518E-03	1.53407E-03	-2.806	0.0050	9.26544E+00
TA	-4.06624E-02	1.16479E-01	-0.349	0.7270	1.78357E-01	PMWACF	4.87980E-02	3.21924E-03	15.158	0.0000	2.52032E+01
RA	2.08111E-02	1.09316E-01	0.190	0.8490	2.53307E-01	PTEACHF	-2.11009E-03	1.51967E-03	-1.389	0.1650	3.63611E+01
FELLOW	2.16496E-01	2.01808E-01	1.073	0.2834	4.28858E+06	PRESCHF	3.15695E-04	1.55111E-03	0.204	0.8387	4.88544E+01
TRAIN	4.75468E-02	1.25554E-01	0.379	0.7049	1.72745E-01	BIO	-4.08702E-01	1.60526E-01	-2.546	0.0109	3.32665E-01
MPSOURC	4.52041E-02	1.56802E-01	0.288	0.7731	9.69940E+06	HEALTH	2.89128E-02	1.81905E-01	0.159	0.8737	7.65531E+06
TTD1	6.71281E-03	2.25336E-02	0.298	0.7658	8.60040E+00	CHEMENG	1.02867E+00	3.02152E-01	3.404	0.0007	8.01603E+05
MTTD1	8.54179E-01	7.63929E-01	1.118	0.2635	2.24449E+06	ELECENG	1.80130E-01	2.57445E-01	0.700	0.4841	2.12425E+06
PDOCP	-2.97151E-01	1.03561E-01	-2.869	0.0041	4.25251E-01	OTHENG	1.08035E-01	1.86217E-01	0.580	0.5618	5.77154E+06
MPDOCP	-2.14369E-01	2.71913E-01	-0.788	0.4305	4.04810E+06	COMP	-6.70354E-01	3.79074E-01	-1.768	0.0770	1.08216E+06
FSWI	1.43727E-01	8.39596E-02	1.712	0.0869	3.46293E-01	MATH	-1.74587E-01	1.96561E-01	-0.888	0.3744	5.65130E+06
MFSWI	-2.58461E-01	9.57705E-02	-2.699	0.0070	3.50701E-01	PHYSICS	-2.73476E-02	2.21509E-01	-0.123	0.9017	5.17034E+06
BAINT	-1.75706E-02	2.32072E-01	-0.076	0.9396	9.01804E+06	CHEM	-3.28244E-02	2.28974E-01	-0.143	0.8860	4.56914E+06
MBAINT	-4.43652E-01	6.51878E-01	-0.681	0.4961	1.80361E+06	EAOSCI	-1.33650E-01	2.12878E-01	-0.628	0.5301	3.68737E+06
AGEPHD	1.36137E-03	2.00888E-02	0.068	0.9460	3.06160E+01	OPSCI	1.38445E+00	6.11910E-01	2.263	0.0237	1.20240E+05
NATUPHD	-5.04468E-01	2.39020E-01	-2.111	0.0348	3.88778E+06	PSYCH	-3.50583E-01	1.87947E-01	-1.865	0.0621	8.85772E+06
PERMPHD	-6.73732E-02	2.45994E-01	-0.274	0.7842	3.80762E+06	ECON	4.68710E-02	2.07190E-01	0.226	0.8210	3.80762E+06
TEMPPHD	2.14460E-01	2.48121E-01	0.864	0.3874	6.49299E+06	POLYSCI	-1.09806E-01	2.48387E-01	-0.442	0.6584	2.52505E+06
MCITPHD	1.69833E-01	3.65195E-01	0.465	0.6419	2.00401E+06	SAD	-3.17592E-01	1.94141E-01	-1.636	0.1019	6.77355E+06
HISPAN	7.06908E-02	1.70797E-01	0.414	0.6790	4.84970E+06	OSSCI	-2.71716E-02	2.49471E-01	-0.109	0.9133	2.04409E+06
BLACK	-3.86079E-01	1.65331E-01	-2.335	0.0195	6.33267E+06	PHD70S	-2.49934E-01	1.04724E-01	-2.387	0.0170	1.18637E-01
ASIAN	1.30848E-01	1.50512E-01	0.869	0.3847	9.73948E+06						

NOTES: Dependent variable: YRSFULL; 2495 observations; 7 iterations; log likelihood function = -5398.742; restricted log likelihood = -5686.806; Chi-squared = 576.1268; d.f. = 51; significance = .000000. Log-rank test with 51 degrees of freedom: Chi-squared = 536.080, Prob = .0000.

TABLE D-19. Maximum likelihood estimates for full-professor rank, hazard model 3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-2.90030E-01	9.16503E-02	-3.165	0.0016	3.00601E-01	HISPAN	8.47557E-02	1.68517E-01	0.503	0.6150	4.84970E+06
DEP66	3.97859E-02	6.26994E-02	0.635	0.5257	2.69739E-01	BLACK	-3.57858E-01	1.64375E-01	-2.177	0.0295	6.33267E+06
DEP186	4.81554E-02	4.04121E-02	1.192	0.2334	7.00601E-01	ASIAN	4.38903E-02	1.49340E-01	0.294	0.7688	9.73948E+06
MDEP6	-1.75049E-01	1.97032E-01	-0.888	0.3743	3.88778E+06	NATAMER	1.57294E-01	4.54100E-01	0.346	0.7291	5.21042E+05
MAR6	1.20799E-01	1.00816E-01	1.198	0.2308	6.26052E-01	PRANKNA	-5.45833E-02	7.73663E-03	-7.055	0.0000	6.15836E+00
TA	-8.74555E-02	1.15685E-01	-0.756	0.4497	1.78357E-01	PMFULL	1.76936E-03	1.71774E-03	1.030	0.3030	2.45000E+01
RA	-2.65245E-02	1.08457E-01	-0.245	0.8068	2.53307E-01	BIO	-4.85564E-01	1.58851E-01	-3.057	0.0022	3.32665E-01
FELLOW	-3.30134E-02	1.98773E-01	-0.166	0.8681	4.28858E+06	HEALTH	-7.63251E-02	1.80610E-01	-0.423	0.6726	7.65531E+06
TRAIN	-7.23610E-03	1.26027E-01	-0.057	0.9542	1.72745E-01	CHEMENG	1.03300E+00	3.01661E-01	3.424	0.0006	8.01603E+05
MPSOURC	7.89840E-02	1.57019E-01	0.503	0.6149	9.69940E+06	ELECENG	2.28346E-02	2.53596E-01	0.090	0.9283	2.12425E+06
TTD1	1.73640E-02	2.25293E-02	0.771	0.4409	8.60040E+00	OTHENG	5.99849E-02	1.85847E-01	0.323	0.7469	5.77154E+06
MTTD1	3.80207E-01	7.65476E-01	0.497	0.6194	2.24449E+06	COMP	-6.39426E-01	3.77198E-01	-1.695	0.0900	1.08216E+06
PDOCP	-4.86335E-01	1.00342E-01	-4.847	0.0000	4.25251E-01	MATH	-1.71745E-01	1.92083E-01	-0.894	0.3713	5.65130E+06
MPDOCP	-4.62104E-01	2.78332E-01	-1.660	0.0969	4.04810E+06	PHYSICS	-2.08280E-01	2.19497E-01	-0.949	0.3427	5.17034E+06
FSWI	1.81389E-02	8.36611E-02	0.217	0.8284	3.46293E-01	CHEM	-5.68222E-02	2.26429E-01	-0.251	0.8019	4.56914E+06
MFSWI	-2.65764E-01	9.71166E-02	-2.737	0.0062	3.50701E-01	EAOSCI	-2.86248E-02	2.11629E-01	-0.135	0.8924	3.68737E+06
BAINT	-9.86312E-02	2.31607E-01	-0.426	0.6702	9.01804E+06	OPSCI	7.88920E-01	6.02759E-01	1.309	0.1906	1.20240E+05
MBAINT	-1.04764E-01	6.49668E-01	-0.161	0.8719	1.80361E+06	PSYCH	-4.69479E-01	1.83780E-01	-2.555	0.0106	8.85772E+06
AGEPHD	-5.17854E-03	2.03492E-02	-0.254	0.7991	3.06160E+01	ECON	1.03812E-02	2.01484E-01	0.052	0.9589	3.80762E+06
NATUPHD	-5.56331E-01	2.37661E-01	-2.341	0.0192	3.88778E+06	POLYSCI	-1.68834E-01	2.44094E-01	-0.692	0.4891	2.52505E+06
PERMPHD	-1.16765E-01	2.55455E-01	-0.457	0.6476	3.80762E+06	SAD	-3.38302E-01	1.87349E-01	-1.806	0.0710	6.77355E+06
TEMPPHD	3.04038E-01	2.45284E-01	1.240	0.2151	6.49299E+06	OSSCI	-1.52369E-01	2.45155E-01	-0.622	0.5343	2.04409E+06
MCITPHD	2.48520E-01	3.66187E-01	0.679	0.4973	2.00401E+06	PHD70S	-2.30888E-02	1.04694E-01	-0.221	0.8255	1.18637E-01

NOTES: Dependent variable: YRSFULL; 2495 observations; 8 iterations; log likelihood function = -5508.145; restricted log likelihood = -5686.806; Chi-squared = 357.3212; d.f. = 46; significance = .0000000. Log-rank test with 46 degrees of freedom: Chi-squared = 311.375, Prob = .0000.

TABLE D-20. Maximum likelihood estimates for full-professor rank, hazard model 4

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-2.71489E-01	9.38841E-02	-2.892	0.0038	3.00601E-01	PNACAFF	-3.01318E-02	2.16543E-03	-13.915	0.0000	2.01484E+01
DEP66	4.50484E-02	6.49167E-02	0.694	0.4877	2.69739E-01	PMCRGF	-8.03817E-02	5.16237E-03	-15.571	0.0000	3.76460E+01
DEP186	1.84465E-02	4.09759E-02	0.450	0.6526	7.00601E-01	PEMPSRF	-2.52101E-03	1.05167E-03	-2.397	0.0165	4.06703E+01
MDEP6	-4.73739E-01	2.00387E-01	-2.364	0.0181	3.88778E+06	PEMPDOF	-3.38884E-03	1.53356E-03	-2.210	0.0271	9.26544E+00
MAR6	-3.69567E-02	1.01389E-01	-0.365	0.7155	6.26052E-01	PMWACF	2.52185E-02	5.29582E-03	4.762	0.0000	2.52032E+01
TA	-7.09937E-02	1.16435E-01	-0.610	0.5420	1.78357E-01	PTEACHF	-4.65933E-03	1.58005E-03	-2.949	0.0032	3.63611E+01
RA	-8.08078E-02	1.10646E-01	-0.730	0.4652	2.53307E-01	PRESCHF	-6.81563E-04	1.58140E-03	-0.431	0.6665	4.88544E+01
FELLOW	1.73545E-01	2.01983E-01	0.859	0.3902	4.28858E+06	PRANKNA	-5.14757E-02	7.99105E-03	-6.442	0.0000	6.15836E+00
TRAIN	3.12711E-02	1.25862E-01	0.248	0.8038	1.72745E-01	PMFULL	4.97132E-02	6.92878E-03	7.175	0.0000	2.45000E+01
MPSOURC	2.37179E-02	1.58180E-01	0.150	0.8808	9.69940E+06	BIO	-3.32233E-01	1.61937E-01	-2.052	0.0402	3.32665E-01
TTD1	1.27823E-02	2.23521E-02	0.572	0.5674	8.60040E+00	HEALTH	6.21757E-02	1.83887E-01	0.338	0.7353	7.65531E+06
MTTD1	1.10285E+00	7.66388E-01	1.439	0.1501	2.24449E+06	CHEMENG	9.65252E-01	3.04194E-01	3.173	0.0015	8.01603E+05
PDOCP	-2.78972E-01	1.02824E-01	-2.713	0.0067	4.25251E-01	ELECENG	1.53984E-01	2.60111E-01	0.592	0.5539	2.12425E+06
MPDOCP	-2.22601E-01	2.74681E-01	-0.810	0.4177	4.04810E+06	OTHENG	1.45958E-01	1.87645E-01	0.778	0.4367	5.77154E+06
FSWI	8.15302E-02	8.37314E-02	0.974	0.3302	3.46293E-01	COMP	-6.68459E-01	3.79780E-01	-1.760	0.0784	1.08216E+06
MFSWI	-2.44660E-01	9.64333E-02	-2.537	0.0112	3.50701E-01	MATH	-5.69535E-02	2.00184E-01	-0.285	0.7760	5.65130E+06
BAINT	-3.93900E-02	2.27182E-01	-0.173	0.8623	9.01804E+06	PHYSICS	9.55867E-02	2.22836E-01	0.429	0.6680	5.17034E+06
MBAINT	-8.83080E-01	6.55607E-01	-1.347	0.1780	1.80361E+06	CHEM	8.41893E-02	2.31353E-01	0.364	0.7159	4.56914E+06
AGEPHD	3.15947E-03	1.99674E-02	0.158	0.8743	3.06160E+01	EAOSCI	1.04887E-01	2.15178E-01	0.487	0.6259	3.68737E+06
NATUPHD	-5.36341E-01	2.40868E-01	-2.227	0.0260	3.88778E+06	OPSCI	1.67865E+00	6.11154E-01	2.747	0.0060	1.20240E+05
PERMPHD	-3.75925E-02	2.45244E-01	-0.153	0.8782	3.80762E+06	PSYCH	-3.21164E-01	1.89410E-01	-1.696	0.0900	8.85772E+06
TEMPPHD	2.70032E-01	2.42067E-01	1.116	0.2646	6.49299E+06	ECON	1.92089E-01	2.10021E-01	0.915	0.3604	3.80762E+06
MCITPHD	2.21671E-01	3.65209E-01	0.607	0.5439	2.00401E+06	POLYSCI	-4.61258E-02	2.50552E-01	-0.184	0.8539	2.52505E+06
HISPAN	7.42475E-03	1.70903E-01	0.043	0.9653	4.84970E+06	SAD	-2.45547E-01	1.95328E-01	-1.257	0.2087	6.77355E+06
BLACK	-4.07881E-01	1.65640E-01	-2.462	0.0138	6.33267E+06	OSSCI	5.09277E-03	2.50216E-01	0.020	0.9838	2.04409E+06
ASIAN	9.02437E-02	1.50050E-01	0.601	0.5476	9.73948E+06	PHD70S	-3.50317E-01	1.06232E-01	-3.298	0.0010	1.18637E-01
NATAMER	3.40324E-01	4.61290E-01	0.738	0.4607	5.21042E+05						

NOTES: Dependent variable: YRSFULL; 2495 observations; 8 iterations; log likelihood function = -5324.159; restricted log likelihood = -5686.806; Chi-squared = 725.2924; d.f. = 53; significance = .0000000. Log-rank test with 53 degrees of freedom: Chi-squared = 639.777, Prob = .0000.



TABLE D-21. Maximum likelihood estimates for full-professor rank, hazard model I-1

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	4.51201E-02	1.45839E-01	0.309	0.7570	3.00601E-01	TEMPPHD	3.29281E-01	2.49027E-01	1.322	0.1861	6.49299E+06
FDEP66	-1.79643E-01	1.68481E-01	-1.066	0.2863	6.41283E+06	MCITPHD	3.21151E-01	3.73562E-01	0.860	0.3900	2.00401E+06
FDEP186	-4.42963E-01	1.23377E-01	-3.590	0.0003	1.45491E-01	HISPAN	1.70031E-01	1.68222E-01	1.011	0.3121	4.84970E+06
FMAR6	-6.40573E-02	2.02914E-01	-0.316	0.7522	1.52705E-01	BLACK	-3.20323E-01	1.63024E-01	-1.965	0.0494	6.33267E+06
DEP66	9.05774E-02	6.78824E-02	1.334	0.1821	2.69739E-01	ASIAN	2.99392E-02	1.47877E-01	0.202	0.8396	9.73948E+06
DEP186	1.20619E-01	4.30969E-02	2.799	0.0051	7.00601E-01	NATAMER	2.09294E-01	4.53716E-01	0.461	0.6446	5.21042E+05
MDEP6	-5.02218E-02	1.91650E-01	-0.262	0.7933	3.88778E+06	BIO	-5.02414E-01	1.59322E-01	-3.153	0.0016	3.32665E-01
MAR6	1.57247E-01	1.22661E-01	1.282	0.1999	6.26052E-01	HEALTH	-5.09824E-02	1.80436E-01	-0.283	0.7775	7.65531E+06
TA	-8.23675E-02	1.15633E-01	-0.712	0.4763	1.78357E-01	CHEMENG	1.02028E+00	3.01809E-01	3.381	0.0007	8.01603E+05
RA	-8.74586E-03	1.08514E-01	-0.081	0.9358	2.53307E-01	ELECENG	-3.96556E-02	2.51505E-01	-0.158	0.8747	2.12425E+06
FELLOW	1.96830E-02	1.98764E-01	0.099	0.9211	4.28858E+06	OTHENG	4.18700E-02	1.85213E-01	0.226	0.8212	5.77154E+06
TRAIN	1.29060E-02	1.26033E-01	0.102	0.9184	1.72745E-01	COMP	-5.27007E-01	3.77478E-01	-1.396	0.1627	1.08216E+06
MPSOURC	9.72169E-02	1.56499E-01	0.621	0.5345	9.69940E+06	MATH	-1.12170E-01	1.91537E-01	-0.586	0.5581	5.65130E+06
TTD1	2.33422E-02	2.28698E-02	1.021	0.3074	8.60040E+00	PHYSICS	-4.35708E-01	2.18109E-01	-1.998	0.0458	5.17034E+06
MTTD1	1.25920E-01	7.65487E-01	0.164	0.8693	2.24449E+06	CHEM	-1.08452E-01	2.25521E-01	-0.481	0.6306	4.56914E+06
PDOCP	-5.42021E-01	1.00999E-01	-5.367	0.0000	4.25251E-01	EAOSCI	-1.79172E-01	2.10349E-01	-0.852	0.3943	3.68737E+06
MPDOCP	-5.24658E-01	2.79561E-01	-1.877	0.0606	4.04810E+06	OPSCI	8.78176E-01	6.02346E-01	1.458	0.1449	1.20240E+05
FSWI	3.78058E-02	8.32086E-02	0.454	0.6496	3.46293E-01	PSYCH	-4.70683E-01	1.83589E-01	-2.564	0.0104	8.85772E+06
MFSWI	-3.03307E-01	9.64903E-02	-3.143	0.0017	3.50701E-01	ECON	2.06126E-02	2.01339E-01	0.102	0.9185	3.80762E+06
BAINT	-1.19143E-01	2.35476E-01	-0.506	0.6129	9.01804E+06	POLYSCI	-1.49999E-01	2.43897E-01	-0.615	0.5385	2.52505E+06
MBAINT	-2.03681E-01	6.46769E-01	-0.315	0.7528	1.80361E+06	SAD	-3.35820E-01	1.87961E-01	-1.787	0.0740	6.77355E+06
AGEPHD	-2.01860E-02	2.07852E-02	-0.971	0.3315	3.06160E+01	OSSCI	-7.02316E-02	2.44735E-01	-0.287	0.7741	2.04409E+06
NATUPHD	-5.43578E-01	2.37274E-01	-2.291	0.0220	3.88778E+06	PHD70S	-7.77925E-02	1.05075E-01	-0.740	0.4591	1.18637E-01
PERMPHD	-2.47611E-02	2.56395E-01	-0.097	0.9231	3.80762E+06						

NOTES: Dependent variable: YRSFULL; 2495 observations; 7 iterations; log likelihood function = -5564.474; restricted log likelihood = -5686.806; Chi-squared = 244.6636; d.f. = 47; significance = .000000. Log-rank test with 47 degrees of freedom: Chi-squared = 261.508, Prob = .0000.

TABLE D-22. Maximum likelihood estimates for full-professor rank, hazard model I-2

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-1.36574E-01	1.47551E-01	-0.926	0.3547	3.00601E-01	BLACK	-3.64887E-01	1.65237E-01	-2.208	0.0272	6.33267E+06
FDEP66	-1.32271E-01	1.73078E-01	-0.764	0.4447	6.41283E+06	ASIAN	1.07929E-01	1.50669E-01	0.716	0.4738	9.73948E+06
FDEP186	-3.50738E-01	1.20846E-01	-2.902	0.0037	1.45491E-01	NATAMER	4.66845E-01	4.58821E-01	1.017	0.3089	5.21042E+05
FMAR6	6.20336E-02	2.03349E-01	0.305	0.7603	1.52705E-01	PNACAFF	-3.14658E-02	2.24717E-03	-14.002	0.0000	2.01484E+01
DEP66	9.37955E-02	6.97602E-02	1.345	0.1788	2.69739E-01	PMCRGF	-5.52196E-02	3.34929E-03	-16.487	0.0000	3.76460E+01
DEP186	7.31436E-02	4.42861E-02	1.652	0.0986	7.00601E-01	PEMPSRF	-3.57136E-03	1.04380E-03	-3.422	0.0006	4.06703E+01
MDEP6	-1.93853E-01	1.98040E-01	-0.979	0.3277	3.88778E+06	PEMPDOF	-4.25239E-03	1.53426E-03	-2.772	0.0056	9.26544E+00
MAR6	9.84845E-03	1.23966E-01	0.079	0.9367	6.26052E-01	PMWACF	4.86377E-02	3.23107E-03	15.053	0.0000	2.52032E+01
TA	-4.37485E-02	1.16692E-01	-0.375	0.7077	1.78357E-01	PTEACHF	-1.93203E-03	1.52253E-03	-1.269	0.2045	3.63611E+01
RA	2.71686E-02	1.09397E-01	0.248	0.8039	2.53307E-01	PRESCHF	4.86685E-04	1.55836E-03	0.312	0.7548	4.88544E+01
FELLOW	2.35975E-01	2.02550E-01	1.165	0.2440	4.28858E+06	BIO	-4.12081E-01	1.60945E-01	-2.560	0.0105	3.32665E-01
TRAIN	4.97133E-02	1.25543E-01	0.396	0.6921	1.72745E-01	HEALTH	2.90339E-02	1.82577E-01	0.159	0.8737	7.65531E+06
MPSOURC	4.97184E-02	1.56853E-01	0.317	0.7513	9.69940E+06	CHEMENG	1.02950E+00	3.02650E-01	3.402	0.0007	8.01603E+05
TTD1	9.63756E-03	2.23811E-02	0.431	0.6668	8.60040E+00	ELECENG	1.70853E-01	2.58050E-01	0.662	0.5079	2.12425E+06
MTTD1	8.41174E-01	7.64541E-01	1.100	0.2712	2.24449E+06	OTHENG	9.98719E-02	1.86430E-01	0.536	0.5922	5.77154E+06
PDOCP	-3.06033E-01	1.03450E-01	-2.958	0.0031	4.25251E-01	COMP	-6.11026E-01	3.80618E-01	-1.605	0.1084	1.08216E+06
MPDOCP	-2.19263E-01	2.72409E-01	-0.805	0.4209	4.04810E+06	MATH	-1.72666E-01	1.97558E-01	-0.874	0.3821	5.65130E+06
FSWI	1.37248E-01	8.39640E-02	1.635	0.1021	3.46293E-01	PHYSICS	-3.01334E-02	2.21655E-01	-0.136	0.8919	5.17034E+06
MFSWI	-2.60029E-01	9.59243E-02	-2.711	0.0067	3.50701E-01	CHEM	-4.01643E-02	2.29367E-01	-0.175	0.8610	4.56914E+06
BAINT	-6.85485E-03	2.33336E-01	-0.029	0.9766	9.01804E+06	EAOSCI	-1.37343E-01	2.13141E-01	-0.644	0.5193	3.68737E+06
MBAINT	-5.35736E-01	6.53758E-01	-0.819	0.4125	1.80361E+06	OPSCI	1.42182E+00	6.12134E-01	2.323	0.0202	1.20240E+05
AGEPHD	-2.83772E-03	2.00247E-02	-0.142	0.8873	3.06160E+01	PSYCH	-3.26946E-01	1.88143E-01	-1.738	0.0823	8.85772E+06
NATUPHD	-4.89447E-01	2.39206E-01	-2.046	0.0407	3.88778E+06	ECON	5.25258E-02	2.07501E-01	0.253	0.8002	3.80762E+06
PERMPHD	-4.69047E-02	2.46277E-01	-0.190	0.8490	3.80762E+06	POLYSCI	-1.28475E-01	2.48716E-01	-0.517	0.6055	2.52505E+06
TEMPPHD	2.11382E-01	2.48984E-01	0.849	0.3959	6.49299E+06	SAD	-3.29764E-01	1.94622E-01	-1.694	0.0902	6.77355E+06
MCITPHD	1.71372E-01	3.67154E-01	0.467	0.6407	2.00401E+06	OSSCI	-5.71139E-02	2.50526E-01	-0.228	0.8197	2.04409E+06
HISPAN	7.89974E-02	1.71426E-01	0.461	0.6449	4.84970E+06	PHD70S	-2.53691E-01	1.04797E-01	-2.421	0.0155	1.18637E-01

NOTES: Dependent variable: YRSFULL; 2495 observations; 7 iterations; log likelihood function = -5393.415; restricted log likelihood = -5686.806; Chi-squared = 586.7801; d.f. = 54; significance = .000000. Log-rank test with 54 degrees of freedom: Chi-squared = 550.971, Prob = .0000.

TABLE D-23. Maximum likelihood estimates for full-professor rank, hazard model I-3

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	5.61679E-02	1.45990E-01	0.385	0.7004	3.00601E-01	MCITPHD	2.36521E-01	3.69691E-01	0.640	0.5223	2.00401E+06
FDEP66	-1.77309E-01	1.67469E-01	-1.059	0.2897	6.41283E+06	HISPAN	1.02931E-01	1.68735E-01	0.610	0.5419	4.84970E+06
FDEP186	-4.28722E-01	1.24227E-01	-3.451	0.0006	1.45491E-01	BLACK	-3.48792E-01	1.64160E-01	-2.125	0.0336	6.33267E+06
FMAR6	-9.73134E-02	2.03187E-01	-0.479	0.6320	1.52705E-01	ASIAN	2.18174E-02	1.49740E-01	0.146	0.8842	9.73948E+06
DEP66	6.54611E-02	6.77150E-02	0.967	0.3337	2.69739E-01	NATAMER	1.15337E-01	4.54467E-01	0.254	0.7997	5.21042E+05
DEP186	9.56487E-02	4.31517E-02	2.217	0.0267	7.00601E-01	PRANKNA	-5.45957E-02	7.74001E-03	-7.054	0.0000	6.15836E+00
MDEP6	-1.70110E-01	1.97343E-01	-0.862	0.3887	3.88778E+06	PMFULL	1.77603E-03	1.71914E-03	1.033	0.3016	2.45000E+01
MAR6	1.86498E-01	1.23161E-01	1.514	0.1300	6.26052E-01	BIO	-4.70134E-01	1.58782E-01	-2.961	0.0031	3.32665E-01
TA	-1.03017E-01	1.15810E-01	-0.890	0.3737	1.78357E-01	HEALTH	-7.47841E-02	1.81026E-01	-0.413	0.6795	7.65531E+06
RA	-3.71318E-02	1.08534E-01	-0.342	0.7323	2.53307E-01	CHEMENG	1.04608E+00	3.02150E-01	3.462	0.0005	8.01603E+05
FELLOW	-4.65767E-02	1.99164E-01	-0.234	0.8151	4.28858E+06	ELECENG	3.18255E-02	2.53914E-01	0.125	0.9003	2.12425E+06
TRAIN	-2.20197E-02	1.26129E-01	-0.175	0.8614	1.72745E-01	OTHENG	8.51708E-02	1.85944E-01	0.458	0.6469	5.77154E+06
MPSOURC	6.01774E-02	1.57155E-01	0.383	0.7018	9.69940E+06	COMP	-5.71457E-01	3.78012E-01	-1.512	0.1306	1.08216E+06
TTD1	2.36377E-02	2.25380E-02	1.049	0.2943	8.60040E+00	MATH	-1.72646E-01	1.92404E-01	-0.897	0.3696	5.65130E+06
MTTD1	2.45074E-01	7.67846E-01	0.319	0.7496	2.24449E+06	PHYSICS	-2.09410E-01	2.19438E-01	-0.954	0.3399	5.17034E+06
PDOCP	-4.88684E-01	1.00190E-01	-4.878	0.0000	4.25251E-01	CHEM	-4.12450E-02	2.26630E-01	-0.182	0.8556	4.56914E+06
MPDOCP	-4.30245E-01	2.79667E-01	-1.538	0.1239	4.04810E+06	EAOSCI	-1.63057E-02	2.11551E-01	-0.077	0.9386	3.68737E+06
FSWI	1.32178E-02	8.36228E-02	0.158	0.8744	3.46293E-01	OPSCI	7.94978E-01	6.02829E-01	1.319	0.1873	1.20240E+05
MFSWI	-2.68529E-01	9.72114E-02	-2.762	0.0057	3.50701E-01	PSYCH	-4.33552E-01	1.83908E-01	-2.357	0.0184	8.85772E+06
BAINT	-1.18517E-01	2.32858E-01	-0.509	0.6108	9.01804E+06	ECON	5.26369E-02	2.01849E-01	0.261	0.7943	3.80762E+06
MBAINT	-1.65775E-01	6.49804E-01	-0.255	0.7986	1.80361E+06	POLYSCI	-1.90632E-01	2.44350E-01	-0.780	0.4353	2.52505E+06
AGEPHD	-1.35811E-02	2.04631E-02	-0.664	0.5069	3.06160E+01	SAD	-3.49367E-01	1.87967E-01	-1.859	0.0631	6.77355E+06
NATUPHD	-5.43337E-01	2.38070E-01	-2.282	0.0225	3.88778E+06	OSSCI	-1.65038E-01	2.45856E-01	-0.671	0.5020	2.04409E+06
PERMPHD	-8.16888E-02	2.56842E-01	-0.318	0.7504	3.80762E+06	PHD70S	-1.94837E-02	1.04762E-01	-0.186	0.8525	1.18637E-01
TEMPPHD	3.22148E-01	2.46303E-01	1.308	0.1909	6.49299E+06						

NOTES: Dependent variable: YRSFULL; 2495 observations; 8 iterations; log likelihood function = -5498.315; restricted log likelihood = -5686.806; Chi-squared = 376.9814; d.f. = 49; significance = .000000. Log-rank test with 49 degrees of freedom: Chi-squared = 330.866, Prob = .0000.

TABLE D-24. Maximum likelihood estimates for full-professor rank, hazard model I-4

Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x	Variable	Coefficient	Standard error	z=b/se	P[ Z >z	Mean of x
FEMALE	-8.00738E-02	1.47636E-01	-0.542	0.5876	3.00601E-01	ASIAN	7.04009E-02	1.50310E-01	0.468	0.6395	9.73948E+06
FDEP66	-1.17306E-01	1.71204E-01	-0.685	0.4932	6.41283E+06	NATAMER	2.82833E-01	4.63304E-01	0.610	0.5416	5.21042E+05
FDEP186	-3.24240E-01	1.23062E-01	-2.635	0.0084	1.45491E-01	PNACAFF	-2.94184E-02	2.16617E-03	-13.581	0.0000	2.01484E+01
FMAR6	8.96871E-03	2.03332E-01	0.044	0.9648	1.52705E-01	PMCRGF	-7.98721E-02	5.16834E-03	-15.454	0.0000	3.76460E+01
DEP66	6.58044E-02	7.01899E-02	0.938	0.3485	2.69739E-01	PEMPRSF	-2.61185E-03	1.05308E-03	-2.480	0.0131	4.06703E+01
DEP186	5.81600E-02	4.41518E-02	1.317	0.1877	7.00601E-01	PEMPDOF	-3.30970E-03	1.53455E-03	-2.157	0.0310	9.26544E+00
MDEP6	-4.68563E-01	2.00281E-01	-2.340	0.0193	3.88778E+06	PMWACF	2.45527E-02	5.32301E-03	4.613	0.0000	2.52032E+01
MAR6	-1.97481E-02	1.23550E-01	-0.160	0.8730	6.26052E-01	PTEACHF	-4.56418E-03	1.58277E-03	-2.884	0.0039	3.63611E+01
TA	-7.01358E-02	1.16657E-01	-0.601	0.5477	1.78357E-01	PRESCHF	-6.36747E-04	1.58503E-03	-0.402	0.6879	4.88544E+01
RA	-7.75518E-02	1.10762E-01	-0.700	0.4838	2.53307E-01	PRANKNA	-5.14752E-02	7.98205E-03	-6.449	0.0000	6.15836E+00
FELLOW	1.82919E-01	2.02741E-01	0.902	0.3669	4.28858E+06	PMFULL	4.98403E-02	6.95248E-03	7.169	0.0000	2.45000E+01
TRAIN	3.09710E-02	1.25929E-01	0.246	0.8057	1.72745E-01	BIO	-3.37923E-01	1.62162E-01	-2.084	0.0372	3.32665E-01
MPSOURC	2.67949E-02	1.58319E-01	0.169	0.8656	9.69940E+06	HEALTH	6.27611E-02	1.84395E-01	0.340	0.7336	7.65531E+06
TTD1	1.63725E-02	2.22778E-02	0.735	0.4624	8.60040E+00	CHEMENG	9.66334E-01	3.04809E-01	3.170	0.0015	8.01603E+05
MTTD1	1.02253E+00	7.67415E-01	1.332	0.1827	2.24449E+06	ELECENG	1.42129E-01	2.60637E-01	0.545	0.5855	2.12425E+06
PDOCP	-2.86936E-01	1.02640E-01	-2.796	0.0052	4.25251E-01	OTHENG	1.41275E-01	1.87717E-01	0.753	0.4517	5.77154E+06
MPDOCP	-2.23542E-01	2.75304E-01	-0.812	0.4168	4.04810E+06	COMP	-6.18120E-01	3.80859E-01	-1.623	0.1046	1.08216E+06
FSWI	7.54116E-02	8.37232E-02	0.901	0.3677	3.46293E-01	MATH	-7.03429E-02	2.00694E-01	-0.350	0.7260	5.65130E+06
MFSWI	-2.42580E-01	9.65663E-02	-2.512	0.0120	3.50701E-01	PHYSICS	8.23961E-02	2.23206E-01	0.369	0.7120	5.17034E+06
BAINT	-4.80380E-02	2.28503E-01	-0.210	0.8335	9.01804E+06	CHEM	7.57598E-02	2.31491E-01	0.327	0.7435	4.56914E+06
MBAINT	-9.33420E-01	6.56400E-01	-1.422	0.1550	1.80361E+06	EAOSCI	1.02209E-01	2.15392E-01	0.475	0.6351	3.68737E+06
AGEPHD	-1.90177E-03	1.99881E-02	-0.095	0.9242	3.06160E+01	OPSCI	1.70489E+00	6.11533E-01	2.788	0.0053	1.20240E+05
NATUPHD	-5.15933E-01	2.41071E-01	-2.140	0.0323	3.88778E+06	PSYCH	-2.93713E-01	1.89404E-01	-1.551	0.1210	8.85772E+06
PERMPHD	-1.35810E-02	2.46358E-01	-0.055	0.9560	3.80762E+06	ECON	1.96601E-01	2.10237E-01	0.935	0.3497	3.80762E+06
TEMPPHD	2.81048E-01	2.43284E-01	1.155	0.2480	6.49299E+06	POLYSCI	-7.58200E-02	2.51059E-01	-0.302	0.7627	2.52505E+06
MCITPHD	2.23248E-01	3.67054E-01	0.608	0.5430	2.00401E+06	SAD	-2.55195E-01	1.95685E-01	-1.304	0.1922	6.77355E+06
HISPAN	1.31578E-02	1.71372E-01	0.077	0.9388	4.84970E+06	OSSCI	-1.89685E-02	2.51129E-01	-0.076	0.9398	2.04409E+06
BLACK	-3.86698E-01	1.65515E-01	-2.336	0.0195	6.33267E+06	PHD70S	-3.49883E-01	1.06244E-01	-3.293	0.0010	1.18637E-01

NOTES: Dependent variable: YRSFULL; 2495 observations; 8 iterations; log likelihood function = -5319.539; restricted log likelihood = -5686.806; Chi-squared = 734.5331; d.f. = 56; significance = .0000000. Log-rank test with 56 degrees of freedom: Chi-squared = 652.036, Prob = .0000.

# APPENDIX E. DATA MANAGEMENT AND DATA ISSUES

Here we describe the procedures we used to create the databases for the Phase I and II analyses presented in this report. We also discuss several issues involving the data. As noted in Section 2 of this report, both phases of this study used data from the Survey of Doctorate Recipients (SDR). The SDR is a nationally representative sample survey of doctorates earned in the United States in science and engineering (S&E).<sup>1</sup> The survey is conducted every two years and provides information on individual doctorate recipients' academic fields, career outcomes, and numerous personal characteristics (e.g., birth date, sex, race/ethnicity).<sup>2</sup> The SDR is longitudinal in the sense that individuals are tracked over time in successive survey waves throughout their careers as long as they remain in the sample frame.

## PROCEDURES FOR CREATING DATABASES

We used a four-step process to create the databases for the Phase I and II analyses: (1) review documentation for outcome and control variables; (2) extract raw data from SDR files; (3) create variables for analyses; and (4) merge files across SDR waves.

Step 1 is relatively straightforward. We reviewed documentation for the SDR files to select the outcome variables of interest and the control variables used in the multivariate analyses. We also recorded the file positions for each selected variable.

During step 2 we extracted the raw data selected in step 1. Records were retained for individuals who reported full-time employment in academia and who earned their doctorates in S&E fields. Because the codes for some of the outcome and control variables are not consistently defined across SDR waves, we created separate files of the raw data for each SDR wave. After the data files were created, we computed summary statistics—including means and sample minima and

maxima—for each of the raw variables. We then reviewed the summary statistics for potential errors in the raw data.

In step 3 we first wrote computer code for creating variables suitable for the analyses from the raw data. We then generated separate files of created variables for each SDR wave.<sup>3</sup> Finally, we computed summary statistics for each file and reviewed them for potential errors.

Finally, in step 4, we merged the files created in step 3 to create two large files of created variables—one each for Phases I and II. Merging the SDR files for the Phase I database was relatively straightforward because there was no requirement to link individual records across SDR waves. However, because the Phase II analyses are longitudinal in nature, we had to match records across files using doctorate recipients' identification numbers.<sup>4</sup> It was also necessary to create some of the Phase II analytical variables after the files were merged. These include the outcome, outcome status, and employment variables that require linked historical records for construction. As a final quality control check, we generated summary statistics for each of the two merged files and reviewed them for potential errors.

## DATA ISSUES

Issues involving the data, such as missing data, data errors, changes in the SDR survey instrument, constructing Phase II historical records, and limited control variables, surfaced during the course of this study.

### MISSING DATA

Missing data occur in the samples we used for this study for two reasons. First, some individuals failed to complete the entire survey questionnaire. Second, the design of the SDR survey instrument has changed over time. As a result, some of the variables we used are available for some SDR waves but not for others.

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<sup>1</sup> Although some SDR waves also include doctorates earned in business and the humanities, this study is limited to doctorates in S&E.

<sup>2</sup> A license is required to obtain SDR data in order to protect the anonymity of survey respondents and the confidentiality of their responses.

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<sup>3</sup> Because the codes for some raw variables in the SDR files are not consistently defined across all waves, it was necessary to edit the computer code for the created variables accordingly.

<sup>4</sup> The Phase II data include individuals reporting full-time academic employment in the 1997 SDR wave, but the analyses require that historical records be constructed from previous SDR waves. See Section 2 of this report.

Our analyses excluded observations for which the outcome (i.e., the dependent) variables were missing; however, we did not discard observations for which control variables were missing (see Section 2). Instead, we adopted the approach of including “missing” dummy (i.e., dichotomous) variables as additional controls. This approach, which allowed us to retain larger samples, treats missing cases as special categories and allowed us to control for the marginal relations between missing characteristics and outcomes.

## DATA ERRORS

The data appear to be relatively free of errors. Our quality control measures detected only one apparent error in the raw data. We computed age at the time of the doctorate as the year of the doctorate minus the year of birth. This procedure yielded an illogical age for one individual, apparently because of an error in the birth date. We recorded age at the time of the doctorate as missing for this individual.

## CHANGES IN THE SDR SURVEY

### INSTRUMENT

Changes in the SDR survey questionnaire have occurred over time. For example, the 1995 and 1997 SDR questionnaires ask for very detailed information on the number and ages of dependents in the family. Information on dependents reported in earlier waves, however, is less detailed. As a result, we were forced to limit our construction of family characteristics to two variables describing dependents, the number of children younger than age 6, and the number of children between the ages of 6 and 18. This was the most detailed common denominator that could be constructed for the family variables over the 1981 through 1997 SDR waves. Moreover, information on the characteristics of dependents is so sparse in SDR waves before 1981 that we excluded these from our analyses.

## CONSTRUCTING PHASE II HISTORICAL RECORDS

The Phase II analysis required us to identify the date at which key outcomes occurred in doctorate recipients’ careers (i.e., dates of tenure and promotions to higher

academic ranks).<sup>5</sup> Unfortunately, the SDR files simply indicate whether an individual is tenured (or has achieved a given academic rank) as of the date of the survey but do not indicate the date of tenure (or date of promotion). As a result, we had to search through all SDR records to determine first occurrences of reported tenure or employment in senior ranks. This procedure introduces the possibility of measurement error if data are missing at the dates of tenure or promotion (see Section 2).<sup>6</sup>

## LIMITED CONTROL VARIABLES

The controls we have used in this study are limited by the data available in the SDR files. In our view, the most serious limitation is the lack of measures of productivity. We acknowledge that measures of teaching productivity and service to the institution and community are difficult to construct. However, we believe that measures of scholarly productivity—counts of articles and books published and papers presented at professional conferences—would have been useful. Apart from simple cumulative counts of publications, the timing of scholarly productivity is likely to be important. For example, establishing a scholarly record early in the postdoctoral career is likely to be an important criterion for earning tenure and for promotion to the associate professor rank at most academic institutions.

The 1995 SDR file does report measures of scholarship—the number articles published and papers presented.<sup>7</sup> The sample size from this single wave, however, is not adequate to estimate the models we have specified in this study.

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<sup>5</sup> Dates for outcomes are required to construct variables measuring the time elapsed between earning the doctorate and tenure and promotions.

<sup>6</sup> Apart from the issue of potential measurement error, the design of the SDR files is somewhat awkward for use in longitudinal studies of career outcomes. The files indicate the states of outcomes as of the date of each survey wave but not when the outcomes first occurred. For example, the data for each survey wave indicate whether doctorate recipients are tenured at a given point in time but not when tenure first occurred. The same is true for promotions to higher academic ranks. Constructing the longitudinal variables also required matching individuals across files for different survey waves by respondent identification numbers.

<sup>7</sup> The 1995 wave also reports information on patent activity.