

# *Determinants of securing academic interviews after tenure denial: evidence from a zero-inflated Poisson model*

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This paper uses a new data set to estimate empirically the optimal job search strategies for recently non-tenured economists seeking to obtain an academic job. Estimates from a zero inflated Poisson model suggest that a portion of interview counts is beyond the candidate's control as age, colour of skin, gender, and citizenship all play a part in the interview decision. A candidate can substantially enhance the probability of obtaining initial interviews by maintaining quality research and teaching portfolios, however.

## I. INTRODUCTION

Is there hope for academic re-employment after tenure denial? Within the next decade over 100 000 US faculties may have to confront this question (Academe, 1997). Within this group of faculties are more than 2000 economists who are expecting to apply for tenure and promotion in the next six years (AEA, 1996). Given the uncertainties of the tenure decision, furthering our understanding of the academic job market for re-entrants is worthwhile. Although previous studies have analysed the market for new Ph.D. economists (see, e.g. Carson and Navarro, 1988; List, 2000), the market for non-tenured faculties has been largely ignored. Numerous reasons may explain why this void exists, but one logical explanation is data availability.<sup>1</sup>

This paper uses a new data set gathered at the 1997 American Economic Association (AEA) meetings to estimate empirically the optimal job search strategies for recently non-tenured economists. Its purpose is to increase the amount of information available to job seekers who have been denied tenure, but remain interested in academic employment. Benefits of these findings, however, are not exclusively for current job seekers. Findings may also aid in

shaping the behaviour of assistant professors that plan to apply for promotion and tenure in the near future. Additionally, for academic departments, these results may provide a comparative baseline for institutional decisions to interview.

## II. DATA AND EMPIRICAL METHODS

The market for Ph.D. economists can be divided into three segments: (i) primary market, which is the market that takes place each year at the AEA annual meetings; (ii) pre-emptive market, which compresses initial interviews, campus visits, and job offers into the time period before the annual AEA meetings; and (iii) secondary market, which extends from January until late May (Carson and Navarro, 1988). Since seven of ten jobs are advertised in the three-month period before the AEA meetings and a majority of initial interviews for these positions take place during the AEA meetings, this paper focuses on the primary market.

Data was gathered via a personal survey given to job market participants at the AEA meetings in New Orleans, Louisiana (2–5 January 1997).<sup>2</sup> Completion of

<sup>1</sup> To the author's best knowledge, a database for untenured economists currently does not exist.

<sup>2</sup> The nature of the data gathering approach is akin to the field studies of List (2000) and List and Lucking-Reilly (2000).

the survey typically followed a two-step process. In step 1, a monitor approached a person at the AEA meetings and asked if he/she would like to participate in a survey that would take about five minutes. If the individual agreed, the second step began. In step 2, the monitor briefly explained the survey and typically worked one-on-one with the participant while he/she filled out the survey.<sup>3</sup> A total of 72 survey participants indicated they were looking for academic employment due to recent tenure denial. Of these 72 surveys, approximately 50% were completed at the AEA job service/interview area, 31% were completed at an officially registered hotel of the conference, and approximately 19% of surveys were completed at points of conference registration.

Table 1 contains arithmetic means, standard deviations, and variable minimums and maximums for the 72 survey respondents. Data on the endogenous variable – number of academic interviews – indicate the average survey participant had 5.60 academic interviews scheduled (denoted ‘Academic’ in Table 1) before arriving in New Orleans. ‘Before arrival’ is stressed since many candidates acquired interviews during the course of the meetings. Table 1 also contains the exogenous variables hypothesized to affect the total number of initial interviews scheduled. First moments of the demographic variables indicate that 76% of the participants were men (Male), 72% were white (White), 7% were black (Black), and 15% were Asian (Asian). Other demographic information indicates that 79% of those sampled were US citizens (US citizen), and the average age was 34.54 (Age).

Job searchers also provided information regarding their teaching and research credentials. Teaching evaluations were requested, but most participants declined to furnish them. Therefore, two other variables that signal applicant teaching ability/quality were used. The first indicator is the number of different courses the candidate has taught, and is included to account for teaching experience and ability/willingness to teach a variety of courses. The average survey participant taught 4.50 different courses (#Diff.classes). The second teaching indicator is a dichotomous variable that equals 1 if the applicant received a teaching award or special recognition for their classroom performance, 0 if not. Thirteen (18%) respondents indicated they had received an award or obtained special recognition for their teaching (Teach.Award).

In terms of research credentials, the average job seeker had 2.04 publications (#Pubs.) and 0.47 ‘top publications’ (#TopPubs.). A ‘top publication’ was defined as a publication in one of the top 36 economics journals, as compiled by Scott and Mitias (1996). The average candidate also had 0.40 ‘other publications’ (OtherPubs.), which includes book chapters, unrefereed publications, book reviews and

Table 1. *Descriptive statistics*<sup>a,b,c</sup>

|                      | Mean             | Minimum         | Maximum |
|----------------------|------------------|-----------------|---------|
| Interviews           |                  |                 |         |
| Academic             | 5.60<br>(6.19)   | 0<br>(20 zeros) | 25      |
| Exogenous parameters |                  |                 |         |
| Male                 | 0.76<br>(0.43)   | 0               | 1       |
| White                | 0.72<br>(0.42)   | 0               | 1       |
| Black                | 0.07<br>(0.26)   | 0               | 1       |
| Asian                | 0.15<br>(0.36)   | 0               | 1       |
| Other                | 0.06<br>(0.23)   | 0               | 1       |
| US Citizen           | 0.79<br>(0.41)   | 0               | 1       |
| Age                  | 34.54<br>(5.51)  | 28              | 53      |
| #Diff.classes        | 4.50<br>(2.5)    | 0               | 15      |
| Teach. Award         | 0.18<br>(0.39)   | 0               | 1       |
| #Pubs.               | 2.04<br>(2.32)   | 0               | 12      |
| #TopPubs.            | 0.47<br>(0.79)   | 0               | 3       |
| OtherPubs.           | 0.40<br>(0.57)   | 0               | 3       |
| #Sub.                | 1.75<br>(2.15)   | 0               | 10      |
| #TopSub.             | 0.88<br>(1.98)   | 0               | 11      |
| Denied-Top           | 0.18<br>(0.35)   | 0               | 1       |
| Denied-AAA           | 0.21<br>(0.41)   | 0               | 1       |
| Denied-AA            | 0.22<br>(0.42)   | 0               | 1       |
| Denied-A             | 0.39<br>(0.49)   | 0               | 1       |
| Grad. Top            | 0.14<br>(0.25)   | 0               | 1       |
| Grad. AAA            | 0.24<br>(0.43)   | 0               | 1       |
| Grad. AA             | 0.30<br>(0.46)   | 0               | 1       |
| Grad. A              | 0.32<br>(0.49)   | 0               | 1       |
| HOF Ref.             | 0.07<br>(0.26)   | 0               | 1       |
| Extra                | 0.49<br>(0.50)   | 0               | 1       |
| App(Aca.)            | 39.82<br>(34.03) | 0               | 200     |
| App(Bus.)            | 9.92<br>(29.68)  | 0               | 200     |
| App(Govt.)           | 3.03<br>(7.13)   | 0               | 50      |

Notes: <sup>a</sup> Sample includes 72 nontenured job seekers.

<sup>b</sup> Standard deviations are in parentheses.

<sup>c</sup> Interviews scheduled prior to arrival in New Orleans.

<sup>3</sup> The appendix contains a copy of the survey instrument.

papers and proceedings of conferences and symposia. The final research variable is unpublished manuscripts. The average survey participant had 0.88 manuscript submissions to top 36 journals (#TopSub.) and 1.75 submissions (#Sub.) to other refereed journals.

Participants also provided information about their institution of higher education and the college or university that denied them tenure. Departmental rankings from Scott and Mitias (1996) were used to indicate institutional quality. Scott and Mitias (1996) partition economic departments into four categories: top 19 schools or the ‘major leagues’ (Top); schools ranked 20–49 (AAA); schools ranked 50–100 (AA), and the rest of the institutions ranked 101+ (A). The sample consists of 13 (18%), 15 (21%), 16 (22%), and 28 (39%) participants who were denied tenure at top 19 (Denied-Top), AAA (Denied-AAA), AA (Denied-AA), and A (Denied-A) institutions. Also, 10 (14%), 17, (24%), 22 (30%), and 23 (32%) survey participants received an economics Ph.D. from a top (Grad.Top), AAA (Grad.AAA), AA (Grad.AA), and A (Grad.A) institution.

The final category of exogenous factors includes three variables that control for applicant effort, or effort put forth by others in support of the job candidate. The first variable in this category is special effort the candidate received from a mentor or colleague. Survey participants were asked whether anyone made a telephone call or wrote a personal letter on their behalf to potential academic employers. Of those surveyed 49% indicated someone provided extra help (Extra). A second variable considered in the effort category is reference letters. Since reference letters from prestigious economists may be influential in the interview decision, the list of ‘Hall of Fame Economists’ compiled by Scott and Mitias (1996) was used to control for the influence of reference letters. Table 1 indicates 5 (7%) survey participants received reference letters from a ‘Hall of Fame Economist’ (HOF Ref.). A final consideration in the effort category is the number of applications submitted. Data indicate the average job seeker submitted 39.82, 9.92, and 3.03 applications to academic departments (App(Aca.)), business/industry (App(Bus.)), and governmental (App(Govt.)) agencies.<sup>4</sup> Inclusion of this third variable allows us to control for search intensity and strategy, leading us to make demand side inferences below.

*Empirical methods*

To test for optimal job candidate signals, the probability of obtaining an interview is made a function of the job seeker’s qualifications:

$$\text{Prob}(y_i) = f\left(\sum_1^n X_i\right) \tag{1}$$

where  $y_i$  represents the number of initial interviews job seeker  $i$  has obtained and  $X_i$  are the individual’s attributes defined in Section II and presented in Table 1. A common way to specify this type of discrete probability function is as a Poisson process. A Poisson specification models the integer property of the endogenous parameter explicitly and is given by:

$$\text{Prob}(Y = y_i) = \frac{e^{-\lambda_i} \lambda_i^{y_i}}{y_i!} \quad y = 0, 1, \dots \quad \ln \lambda_i = \beta' X_i \tag{2}$$

where  $y_i$  and  $X_i$  are defined above, and  $\beta$  is the vector of unknown parameters.

Although estimation of Equation 2 is straightforward, Table 1 reveals an interesting statistic: 20 (28%) jobseekers had zero interviews scheduled in the academic market. This finding represents a potential problem in estimation of Equation 2 since the number of candidates with zero interviews exceeds what the standard Poisson model would predict. To amend this problem, the underlying data generation process is best understood by considering a typical applicant’s response to the following question: how many academic interviews have you obtained? The answer to this question naturally arises from a two-step process. First, due to certain characteristics, such as inferior teaching and research, some job seekers may not attract any attention from academic institutions. These candidates would always attract zero interviews, independent of the data generation process. Whereas there are other candidates for whom the number of interviews conceivably follows a Poisson process, but may again be zero, in part due to the data generating process.

A technique to account for this two-step process is discussed in Lambert (1992) and Greene (1994), amongst others. The procedure has been termed a variety of names, including zero-inflated Poisson (ZIP), and is a natural extension of the Poisson formulation in Equation 2:

$$y_i = 0 \quad \text{with probability } P_i \tag{3}$$

$$y_i \sim \text{Poisson}(\lambda_i) \quad \text{with probability } 1 - P_i \tag{4}$$

where  $\ln \lambda_i = \beta' X_i$ , and therefore:

$$\text{Prob}[y_i = 0] = P_i + [1 - P_i]R_i(0) \tag{5}$$

$$\text{Prob}[y_i > 0] = [1 - P_i]R_i(\text{not } 0) \tag{6}$$

$P_i$  represents the state probability and  $R_i$  is the Poisson distribution for  $y_i$ . To model the state probability,  $P_i$ , we use the logistic specification:

<sup>4</sup> To control for the possibility that time could be a constraint, or that, for example, interviews in academia are ‘crowded out’ by interviews in business/industry and government (two popular submarkets), the number of applications to these employers are included as exogenous variables.

$$P_i \sim \text{Logistic}(z_i) \quad (7)$$

where:

$$z_i = \nu' w_i \quad (8)$$

When estimating Equation 8 it is important to include, in vector  $w_i$ , variables that signal whether job seeker  $i$  will clear the initial hurdle. Since success is a function of applicant preferences and skills, two explanatory variables are included in vector  $w_i$  – number of applications submitted to academia (App(Aca<sub>*i*</sub>)) and the dummy variable indicator of extra help (Extra<sub>*i*</sub>). Use of these two variables is justified for numerous reasons. For instance, if a job candidate does not strongly prefer employment in academia, he/she will send few (if any) applications to academic departments since there is a positive opportunity cost associated with each application. The same reasoning can be used for inclusion of the extra help variable – if a candidate has inferior skills, colleagues or other mentors will have little incentive to write personal letters or make phone calls to potential employers. Hence, under the zero inflated model job seekers that do not actively seek employment, or have inferior skills, will fail to clear the initial hurdle, and thus will be predicted to have zero initial interviews.

A final nuance of zero inflated models is that the changed probability induces a divergence between the mean and variance of the distribution, even in the absence of heterogeneity. As such, zero inflated models induce overdispersion; the more likely the zero state, the greater is the overdispersion. Since the ZIP model is not nested within the Poisson model, testing for this phenomenon cannot be carried out using normal techniques. Vuong (1989), however, has proposed a test statistic for nonnested models that has powerful statistical properties. The Vuong statistic is directional and therefore if  $|V| < 1.96$  the test supports neither model (ZIP versus Poisson). If the test statistic is positive and larger than 1.96, the zero inflated model is favoured, while large negative values support the unaugmented, or standard Poisson model. Below the Vuong (1989) statistic is used when comparing estimates from the augmented and unaugmented models.

### III. RESULTS AND DISCUSSION

Table 2 contains estimation results from models of ordinary least squares (OLS; column 2), Poisson (column 3), and

zero inflated Poisson (ZIP; column 4).<sup>5</sup> Also included in Table 2 are Vuong statistics ( $V$ ), number of estimated 0 interview values ( $\hat{N}$ ), measures of fit ( $R^2$  and pseudo  $R^2$ ), and log-likelihood values. A potential concern regarding the Poisson estimates in Table 2 is that their variances will be inconsistently estimated if  $\lambda_i \neq \text{mean } y_i$  or  $\lambda_i \neq \text{variance } y_i$ . This concern is mitigated given regression based tests of overdispersion, due to Cameron and Trivedi (1990), yield  $t$ -ratios less than 1.3 in absolute value, which suggest overdispersion is not evident in the data.<sup>6</sup>

Since Poisson is the specification of choice, another important issue regards which of the Poisson models is appropriate. Log-likelihood values in column 8 (ZIP) are smaller than those in column 7 (Poisson), but as previously mentioned the models are nonnested and therefore the log-likelihood values are not directly comparable. The number of predicted zero interview outcomes ( $\hat{N}$ ) and the Vuong statistic ( $V = 2.40$ ), however, clearly suggest the ZIP model is more appropriate than the unaugmented model. Thus, when discussing estimation results below, primary focus will be on the ZIP estimates.

Coefficient estimates in Table 2 are calculated at the sample means and are interpreted as semi-elasticities since  $\ln \lambda_i = \beta' X_i$ . Estimates from the ZIP model suggest a degree of discrimination is evident in the interview decision as age, gender and US citizenship were considered when institutions scheduled interviews.<sup>7</sup> Although prevailing wisdom is that women receive more interviews than their male counterparts, our estimates suggest that non-tenured men received 61% more interviews than recently non-tenured women. Another demographic factor that appears important is age; an estimate of  $-0.12$  implies that older candidates received fewer interviews than younger candidates. In summary, coefficient estimates of the demographic variables imply that at least a portion of initial interview counts is beyond the candidate's control.

Other coefficient estimates imply that teaching and research credentials were important to academic departments. Estimates from the ZIP specification suggest that recipients of teaching awards had 144% more interviews than non-award winning candidates. Coefficient estimates on the research variables imply that academic departments desired job seekers with quality publications. Furthermore, results suggest that research activity, in itself, was important to academic employers as 'other publications' and

<sup>5</sup> An ordered probit model is also estimated. These results are qualitatively similar to those in Table 2 and for brevity's sake they are suppressed.

<sup>6</sup> Cameron and Trivedi (1990) label this procedure *Topt*. Note that 18 dummy variables to control for fields of specialization were included in initial regressions. A likelihood ratio test of the restriction that the dummy variable coefficients are jointly equal to zero could not be rejected at the 95% significance level ( $\chi^2(18) = 27.16$ ). Therefore, specialization dummies are excluded from the model. Nonetheless, results including field dummies mirror those in Table 2.

<sup>7</sup> White, Grad.top, and Denied-Top are not included in the estimated equation and therefore represent baseline comparisons.

Table 2. Parameter estimates for the academic marker<sup>a,b</sup>

| Variable       | Model               |                     |                      |
|----------------|---------------------|---------------------|----------------------|
|                | OLS                 | Poisson             | ZIP                  |
| Constant       | 10.12***<br>(3.35)  | 7.50***<br>(4.05)   | 7.40***<br>(8.05)    |
| Male           | 0.15<br>(0.15)      | -0.33<br>(-0.58)    | 0.61*<br>(1.82)      |
| Black          | 0.83<br>(0.52)      | -0.20<br>(-0.19)    | -0.86<br>(-1.27)     |
| Asian          | -0.62<br>(1.27)     | -0.53<br>(-0.76)    | 0.72*<br>(1.73)      |
| Other          | -1.04<br>(-0.56)    | -0.56<br>(-0.46)    | -0.05<br>(-0.09)     |
| US Citizen     | -0.24<br>(-0.21)    | 0.64<br>(1.17)      | 0.77*<br>(1.87)      |
| Age            | -0.11<br>(-1.36)    | -0.13***<br>(-2.36) | -0.12***<br>(-3.73)  |
| #Diff.classes  | 0.17<br>(1.17)      | 0.13<br>(1.57)      | 0.05<br>(1.01)       |
| Teach.Award    | 3.40***<br>(2.82)   | 0.90*<br>(1.77)     | 1.44***<br>(4.54)    |
| #Pubs.         | -0.08<br>(-0.42)    | 0.08<br>(0.91)      | 0.01<br>(0.19)       |
| #TopPubs.      | 0.88<br>(0.57)      | 0.56***<br>(2.36)   | 0.68***<br>(3.26)    |
| Otherpubs.     | 0.73<br>(1.09)      | 0.36<br>(1.14)      | 0.34*<br>(1.67)      |
| #Sub.          | 0.14<br>(0.73)      | -0.02<br>(-0.18)    | 0.49***<br>(5.12)    |
| #TopSub.       | 0.40**<br>(1.97)    | -0.01<br>(-0.14)    | 0.08<br>(1.10)       |
| Denied-AAA     | -3.90***<br>(-3.04) | -1.42***<br>(-2.56) | -0.74***<br>(-2.50)  |
| Denied-AA      | -3.97***<br>(-3.22) | -1.62***<br>(-3.12) | -2.10***<br>(-6.38)  |
| Denied-A       | -5.98***<br>(-4.53) | -4.85***<br>(-7.11) | -4.20***<br>(-11.08) |
| Grad.AAA       | -2.06<br>(-1.43)    | -0.55<br>(-0.64)    | 0.38<br>(0.69)       |
| Grad.AA        | -0.87<br>(-0.66)    | 0.34<br>(0.51)      | 0.61<br>(1.05)       |
| Grad.A         | -1.46<br>(-1.05)    | 0.19<br>(0.24)      | 0.48<br>(0.84)       |
| HOF Ref.       | 9.85***<br>(5.94)   | 2.54***<br>(4.14)   | 2.68***<br>(4.40)    |
| Extra          | 1.56**<br>(2.00)    | 1.36**<br>(3.18)    | 1.83***<br>(6.08)    |
| App(Aca.)      | 0.02*<br>(1.86)     | 0.02***<br>(3.50)   | 0.03***<br>(6.90)    |
| App(Bus.)      | -0.03<br>(-1.16)    | -0.03<br>(-1.29)    | -0.04***<br>(-4.35)  |
| App(Govt.)     | 0.04<br>(0.63)      | -0.04<br>(-0.53)    | -0.09**<br>(-2.36)   |
| V              | —                   | —                   | 2.40                 |
| N̂             | —                   | 3.8                 | 9.4                  |
| (actual = 20)  |                     |                     |                      |
| R <sup>2</sup> | 0.87                | 0.80                | —                    |
| Loglike.       | -158.54             | -142.0              | -137.06              |

Notes: <sup>a</sup> Dependent variable is number of initial academic interviews scheduled.

<sup>b</sup> Asymptotic *t*-ratios are in parentheses.

\*\*\* Significant at the 1% level.

\*\* Significant at the 5% level.

\* Significant at the 10% level.

submissions of manuscripts to refereed journals significantly increased interview counts.

Interestingly, academic departments also considered where the candidate's tenure application was denied. Candidates denied tenure at top institutions received significantly more interviews than those candidates who were denied tenure at lower ranked schools. The estimates suggest that a 'pecking order' exists – coefficient magnitudes (in absolute value) are inversely related to an institution's rank. In the limit, candidates who were denied tenure at 'top tier' schools received nearly five times more interviews than those candidates who were denied tenure at 'A' schools. Alternatively, where the candidate earned a Ph.D. had little effect on the interview decision. Together, these results imply that academic departments were concerned with the candidate's recent whereabouts, rather than where the Ph.D. was earned.

Other results in Table 2 indicate that networking was important on the job market. For example, coefficient estimates suggest that letters of recommendation from eminent economists significantly increased interview counts. Specifically, parameter estimates indicate that those candidates who had letters of recommendation from 'Hall of Fame' economists obtained 268% more interviews than those candidates that did not have such letters. Candidates' interview counts were also increased by the extra help they received on the job market – estimates suggest that 183% more interviews were secured by those candidates receiving extra support from a mentor or colleague. Given the magnitudes of these networking coefficients, it appears that the academic job market is a world of 'who knows who', suggesting it is advantageous for assistant professors to co-author work with well-known scholars and network at conferences and seminars. Finally, coefficient estimates of the application variables imply that candidates used submarkets as substitutes – applications to business/industry and government significantly decreased the number of academic interviews secured.

#### IV. CONCLUSION

This paper uses a new data set gathered from recently non-tenured job seekers to estimate empirically the appropriate signals market re-entrants should send when trying to obtain an academic position. Its importance is heightened given the recent fiscal constraints that have been placed on many academic institutions, which presumably will increase the number of economists who re-enter the academic market in the near future. In certain respects, empirical results suggest that a portion of interview counts are beyond the candidate's control as age, colour of skin, gender, and citizenship all play a part in the interview decision. Nevertheless, a candidate can enhance the probability of obtaining initial interviews by main-

taining quality teaching and research portfolios and networking.

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APPENDIX

Job survey

Please answer all of the questions unless instructed otherwise. Check the appropriate space(s) that correspond with your answer or fill in the blanks for each question.

**Please note that ALL INFORMATION IN THIS STUDY IS CONFIDENTIAL AND WILL NOT BE ASSOCIATED WITH ANY PERSONS NAME; AND WILL BE DESTROYED AFTER THE STUDY IS COMPLETE.**

Did you search for employment as a Ph.D. in Economics during the 1995–1996 academic year? YES NO

Is this your first year on the job market? YES NO

If not, have you been a faculty member? YES NO  
Where?: \_\_\_\_\_

If this is not your first year on the job market, what are your reasons for participating on the job market this year?

Are you participating in the job service provided by ASSA? YES NO

**First, we would like some information about you, your education, and your area(s) of specialization.**

1. What is your age? \_\_\_\_\_
2. Are you Male Female
3. Are you White Black Hispanic Asian or Pacific Islander  
American Indian or Alaska Native Other (please specify) \_\_\_\_\_
4. Are you married? YES NO
5. Do you have any dependent children? YES NO
6. Are you a citizen or permanent resident of the United States? YES NO
- 7A. Graduate GPA \_\_\_\_\_ Graduate Institution \_\_\_\_\_  
Undergraduate GPA \_\_\_\_\_ Undergrad. Institution \_\_\_\_\_
- 7B. Have you obtained a Master's degree? YES NO  
if YES: What area (e.g. MBA, Economics, etc.): \_\_\_\_\_  
Granting institution: \_\_\_\_\_
8. Month, year obtained PhD (expected to obtain) \_\_\_\_\_
9. Which of the following most closely indicates your primary field(s) of specialization. (check all that apply)  

|                                   |                                   |                              |
|-----------------------------------|-----------------------------------|------------------------------|
| ____ Comparative Systems          | ____ Econometrics & Statistics    | ____ Growth & Development    |
| ____ Health Economics             | ____ History of Econ. Thought     | ____ Industrial Organization |
| ____ International Finance        | ____ International Trade          | ____ Labor Economics         |
| ____ Macroeconomic Theory         | ____ Managerial Economics         | ____ Mathematical Econ.      |
| ____ Microeconomic Theory         | ____ Monetary Economics           | ____ Public Finance          |
| ____ Regional-Urban Economics     | ____ Welfare Economics            |                              |
| ____ Resource/Environmental Econ. | ____ Other (please specify) _____ |                              |

10. Please list how many articles you have published or submitted to professional journals.

Published: \_\_\_\_\_ Names of journals:

Submitted: \_\_\_\_\_ Names of journals:

Other publications (book chapters, etc):

11. Names of persons who wrote reference letters:

\_\_\_\_\_

\_\_\_\_\_

12. As a graduate student, did you receive a scholarship or fellowship? YES NO

13. Have you ever been a teaching assistant? YES NO

*If yes:*

13A. How many semesters have you been a teaching assistant? \_\_\_\_\_

14. How many semesters have you been an instructor? \_\_\_\_\_

15. How many **different** classes have you taught? \_\_\_\_\_

15a. Please list all awards or special recognition you have received in regards to teaching or research.

16. Have you had any previous research experience, either in previous employment or as a research assistant?  
(Exclude research activities associated with your thesis and/or dissertation) YES NO

*If yes:*

16A. How many years of experience do you have as a research assistant? \_\_\_\_\_

17. For each of the areas listed below, please indicate in column (1) the approximate number of openings that you applied for and in column (2) the number of these applications that were solicited by the employer (e.g. employer contacted you and asked you to apply).

| <u>Area</u>                         | (1)<br>Approximate<br>Number of<br><u>Applications</u> | (2)<br>Number of<br>Applications<br><u>Solicited by employer</u> |
|-------------------------------------|--|--|
| Academia, private and public        | _____  | _____  |
| Business/ Industry/Consulting       | _____  | _____  |
| Federal, State, or Local Government | _____  | _____  |
| Non-profit Research Organizations   | _____  | _____  |
| International Agencies              | _____  | _____  |



18. For each of the areas listed below, please indicate (1) the total number of initial interviews you have had (are scheduled). Out of the total number of interviews also indicate (2) the number that were held at regional meetings, (3) the number that were held (scheduled) at the American Economic Association national meeting in New Orleans, (4) the number that were held (scheduled) at your institution (e.g. on-campus), and (5) the number that were held at some other location (e.g. at the employers place of business or on the telephone).

| <u>Area</u>                         | (1)<br>Number of<br>initial<br>interviews | (2)<br>Regional<br>Meetings | (3)<br>New Orleans<br>National<br>Meeting | (4)<br>On-Campus | (5)<br>Other |
|-------------------------------------|---|-----------------------------|---|------------------|--------------|
| Academia, private and public        | _____                                     | _____                       | _____                                     | _____            | _____        |
| Business/Industry/ Consulting       | _____                                     | _____                       | _____                                     | _____            | _____        |
| Federal, State, or Local Government | _____                                     | _____                       | _____                                     | _____            | _____        |
| Non-profit Research Organizations   | _____                                     | _____                       | _____                                     | _____            | _____        |
| International Agencies              | _____                                     | _____                       | _____                                     | _____            | _____        |

18A. How many of the above interviews from column three (New Orleans interviews) have you picked up through the ASSA job service? \_\_\_\_\_

19. If you had any interviews at regional meetings, please specify the meetings attended and number of interviews.

20. In the past academic year, did you withdraw from searching for employment without receiving a job offer?

YES                      NO (skip question #21 and continue)

21. Please state your primary reason(s) for withdrawing from search.

22. To your knowledge, has your faculty advisor, or anyone else, wrote a personal letter or made a phone call to an academic employer?                      YES                      NO

23. To your knowledge, has your faculty advisor, or anyone else, wrote a personal letter or made a phone call to a business/industry employer?                      YES                      NO

24. To your knowledge, has your faculty advisor, or anyone else, wrote a personal letter or made a phone call to a governmental employer?                      YES                      NO

For a follow-up survey, could you please provide:

Name \_\_\_\_\_

Email \_\_\_\_\_