Industrial Relations Section
Princeton University
Working Paper #97
June, 1977

Association Economists, Academic Hiring and Publications
on Minority Economic Problems

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by

Robert C. Vowels

This paper surveys the publications activity on minority economic problems during 1970-76 and explores some implications of this activity for the economics profession's hiring practices. The discussion here relies heavily on Eagly's concept of the career-profile characteristics of economists: "... the inter-institutional structure within which they operate and [the] career profile of publication ... activity which they reveal" [5, p. 77]. Data for this paper were assembled from a survey of items -- articles, communications, and comments -- published on minority economic problems in 29 journals for the years 1970 to 1976. In part, the data are organized to conform to the Brimmer and Harper (hereafter BH) review article [3, pp. 783-84]. The next section of this paper examines economists' perceptions of minority economic problems. This is followed by a comparison of career profile characteristics for economists who have written on minority problems with those of other professional economists. The paper's last section contains a bibliography of the material reviewed from my survey of the literature from 1970-76.

Background Materials and Concepts

In the literature, the economics journals are ranked, critiqued, and classified [see 4, 7]. Those ranked near the top are also among those classified as "high-prestige, established journals" [7, p. 1029]. These high prestige journals are also the "Core Journals", the "sociometric stars" of the academic
economic communications network, possessing the highest sending-receiving ratios [6, p. 886]. When a ratio's value -- the frequency of a journal's being cited compared to its citation of other journals -- exceeds one, a "feeder" of network information is identified. All the Core Journals are feeders (i.e., net disseminators) of information to other journals. Besides the above journals, some less prestigious, less highly ranked journals are in the forefront of minority-economic-problem (hereafter MEP) publication. These are the specialized issue-oriented journals in which many authors interested in minority economic problems tend to publish [7, p. 1029 and 3, p. 784]. The "high-prestige, established" journals are: The American Economic Review (AER), Journal of Political Economy (JPE), Quarterly Journal of Economics (QJE), and the Review of Economics and Statistics (RES). The "specialized or issue-oriented" are: Industrial Relations (IR), Industrial Relations Research Associations (IRRA), Industrial and Labor Relations Review (ILRR) and the Journal of Human Resources (JHR).

The American Economic Association (AEA) Directory of Members [1, 2] and the 1966 American Council on Education's (ACE) university classifications [5, p. 81, footnote 8] were used to identify economists and to classify schools, respectively. In this paper, the four ACE classifications (Group I, "distinguished", Group II, "strong", Group III, "good," and Group IV, "adequate plus") were used along with an "others" category which contains the non-ACE classified schools. These classifications will be useful for looking at the hierarchical structure in academic economics. First, however, in terms of their efforts and areas of interest, we look at the economists' perceptions of minority economic problems for the years 1970-76.
Economists' Perception of Minority Economic Problems

During 1970-76, over 645 articles were published in 29 journals on minority economic problems (Table 1). This represents a 27 percent increase (137 more articles) over the 1963-69 period. Some journals showed increases, others decreases, in the number of articles on the economic problems of minorities. In 1963-69, seven journals with 27 or more articles published over 67 percent of the articles surveyed for that period [4, p.784]. For 1970-76, however, seven journals with 38 or more articles accounted for only 57 percent of the surveyed material. For instance, the law journals published 44 articles in 1963-69, about nine percent of the total surveyed in that period [3, p. 785]. They published 110 articles relating to minorities in 1970-76, or seventeen percent of the total. Most of these articles dealt with affirmative action programs and school desegregation cases. Thus there was wider distribution of these articles among journals in the latter period. Changing emphasis over the two periods on minority economic problems probably accounts for some of the observed differences. Compared to BH, however, this paper's more stringent requirement that the articles chosen explicitly integrate minorities and subject matter rather than just identifying topics that reflect the economic aspects of minorities tends to restrict the number of publications [3, p. 787].

On the other side, the Southern Economic Journal, the Journal of the American Statistical Association and The American Journal of Agricultural Economics published a total of 151 articles on minorities in 1963-69 compared with 73 in 1970-76.

Interest remained high, however, in journals specializing in labor and manpower problems. Industrial Relations Research Association, Industrial and
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<th>General Disparities of Economic Disparities</th>
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<td>Education</td>
<td>Low</td>
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<td>Low</td>
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**Note:** The table above represents the distribution of disparities across various economic and research-related categories, highlighting the differences in outcomes based on income, education, and health indicators.
Labor Relations Review, and the Monthly Labor Review showed a composite increase of 13 percent over the previous period. The Journal of Human Resources, showing a strong upsurge of interest in labor and manpower problems, published 50 articles on minorities in 1970-76 compared to six during 1963-69. Altogether, the journals listed in this paragraph published 179 articles on minorities in 1963-69 (35 percent) compared to 245 (38 percent in 1970-76).

Based on numbers only, comparison of the two seven-year periods suggests that the production of information on minority economic problems expanded, especially in the areas of labor and manpower problems. The next step is to explore the impact of the economics profession's structural and hiring practices on the production of this information. To do this, we focus on the career-profile characteristics of economists, making it possible to compare the data on MEP economists with data from Eagle's study of economists listed in the AEA Handbook for the years 1956, 1964 and 1969 and who published articles in the AER during the period 1960-69 [5, 77 footnote 2].

Biographical data were obtained for 216 individuals (total was 293) publishing items on the economic aspects of minority problems from 1970 to 1976. About 15 percent of all authors on MEP in these eight journals were non-economists. Among them were lawyers, psychologists, historians and doctors of education (Ed.D). For the high prestige journals, biographical data were obtained for 94 individuals (total was 123). Also, such data were obtained for 122 (total was 170) individuals publishing in the issue-oriented journals. The latter journals were more likely than the former journals to publish articles from authors not listed in the AEA directory. By comparison, Eagle obtained biographical data for 271 individuals out of a total of 323 authors or about 84 percent [5, p. 87, footnote 9].
Institutional Representation and Hiring of AEA Listed Economists

Given that authors of articles on MEP during 1970-76 were listed in the AEA's membership directory in 1974, what were their academic affiliations? How do their affiliations compare with those of other AEA authors? For these questions, the classification of schools used in the 1966 survey by the American Council on Education (ACE) was merged with the American Economic Association's 1974 listing of members and my list of economists publishing articles on MEP problems during the period 1970-76 [in the eight journals listed on p. 2.] From the interplay of these categories and a study of the biographical characteristics of these authors, we get a picture of institutional relationships.

Examination of the right margin of Table 2 reveals a picture of inter-institutional concentration and hierarchy. Over 40% of the 216 economists under discussion received their Ph.D.'s from Group I universities, while 22 percent received similar degrees from Group II schools. Together, the two groups produced over 72 percent of these Ph.D.'s. On the other hand, the two groups hired about 36 percent of the MEP authors as shown in the bottom margin. In fact, schools excluded from the four ACE classes hired most of these economists (49 percent). An examination of the row intersection of Group I with "Other" (non-ACE group) shows that the latter employed about 33 percent of Group I's Ph.D.'s. Only Group I hired more of its own Ph.D.'s than did the "non-ACE" schools.

School of Ph.D. and Hiring

Behind these institutional relationships, an economist's hiring is affected not only by his school of Ph.D.'s ranking but also by the ranking of the economic journal in which he publishes. To assess the university's impact on hiring,
Table 2. Inter-institutional linkages for MEP authors based on AER, JPE, QJE, RES, ILRR, IRRA, IR and JHR authorship data, 1970-76

<table>
<thead>
<tr>
<th>Group</th>
<th>I</th>
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<th>Other</th>
<th>Total</th>
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<tr>
<td>ACE ranking of universities <em>employing AER, JPE, QJE, RES, ILRR, IRRA, IR and JHR authors</em></td>
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<td>I</td>
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<td>II</td>
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<tr>
<td>Other</td>
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<td>(4.0)</td>
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<td>Total</td>
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<td>(22.0)</td>
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<td>(13.0)</td>
<td>(49.0)</td>
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</table>

* Authors of articles, communications, and comments on minority economic problems only and who are members of AEA. Figures in parenthesis are percentages and may not add to totals due to rounding. Employment is at time of publication. Published items are equally weighted.
Table 2 entries \( a_{ij} \) are normalized as probabilities and shown below the entries in the same table. The table's right hand column and bottom row are marginal probabilities; all others are conditional probabilities of being hired by a school in category \( j \) given that the Ph.D. was earned in a school of category \( i \). This might be thought of as transition probabilities. Internal hiring probabilities are \( P_{ii} \) and external hiring probabilities are \( P_{ij} \). The probability that an economist's school of Ph.D. is from group \( i \) is \( b_i = a_{i1} / n \) and his current employment by group \( j \) is \( b_j = a_{1j} / n \).

For Groups I, II, and III, \( b_1 > b_4 \), indicates net suppliers of MEP economists. The other two groups are net demanders. For instance, Group I's \( P_{11} = .37; b_1 = .49 \) compared to the non-ACE group's \( P_{55} = .90 \) and \( b_5 = .13 \). Comparison of \( P_{ij} \)'s, \( b_i \)'s and \( b_j \)'s for the first two groups with those of the other three suggests that schools in the last three groups both used and produced fewer research and publishing economists. Generally speaking, to a lesser extent, Group II follows the Group I pattern. Group III is marginal, though more in the pattern of the first two groups. And Group IV tends toward the non-ACE classification's mold.

**Economic Journal Classification and Hiring**

As noted above, an economist's hiring situation is likely to be affected by his publications in different economic journal classifications. To show this, the data in Table 2 are divided between the two journal classifications discussed on page 2, and shown in Table 3 as conditional and marginal probabilities. In each Table 3 cell, data for the prestige journals are shown above the diagonal; that for the specialized journals are shown below the diagonal. Ninety-four authors published in the prestige journals and 122 published in the specialized journals.
The question is whether an economist's hiring chances are unrelated to a particular economic journal classification. This relationship is important because economists are often evaluated on the basis of the ranking of the journal in which they publish [7, p. 1017]. The journal's ranking also serves as a barometer for the merits of a publication, thereby, perhaps, affecting the economists' perceptions of fields of specialization.

Following the procedure set out above, let $a_{ij}^h = P_{ij}^h$ be the conditional probability that an economist publishing in the prestige journal with a Ph.D. from group $i$ will be hired by group $j$. Similarly, $a_{ij}^s = P_{ij}^s$ refers to the specialized journal. In the present analysis, the field of specialization is controlled. All economists in the group are publishing on MEP. In Table 3, $P_{1h}^h = .41$ and $P_{1l}^s = .32$. Thus a Group I Ph.D. will more likely be hired within Group I if he publishes in a high prestige journal than if he publishes in a specialized journal. Also $P_{2h}^h > P_{2l}^s; P_{3h}^h = P_{3l}^s$ and for the last two groups, $P_{2h}^h > P_{2l}^s$. Thus the research oriented universities tend to hire their own Ph.D.'s, favoring those who publish in the prestige journals. External hiring is mixed but Groups I and II tend to favor prestige journal publishing economists when they hire each others Ph.D.'s. Moreover, the null hypothesis for independence of hiring and journal classification is rejected ($\chi^2_4 = 10.43$, $\chi^2_{05} > 9.49$). Thus, hiring is related to a journal's ranking, though at $\alpha = .01$ (P > 13.28), the null hypothesis is not rejected. Since the null hypothesis of homogeneity of the two economics journals' Ph.D. population is not rejected ($\chi^2_3 = 4.73$, $\chi^2_{05} > 9.49$), it seems plausible that the more research-oriented universities might use journal rankings to evaluate otherwise perfectly substitutable prospective hires. Such a distinction might not be as important for institutions.
Table 3 - Probability distributions based on minority economic problems authorship data

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<th>IV</th>
<th>Non-ACE</th>
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<td>.10</td>
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<td>Non-ACE</td>
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</table>

Source: survey data
stressing teaching and seeking mainly to maintain accreditation standards. Moreover since \( P^h_{ij} > P^s_{ij} \) for Groups I and II, it is plausible that these institutions see h preferred to s, reflecting the views of the more prolific users as well as contributors to the economic journals. For the lower ranked groups, journal publication is, perhaps, less differentiated.

**Comparative Career Profiles and Hiring in Academic Economics**

How do authors of articles on minority economic problems compare with authors of articles in other fields? Available data suggest that economists publishing in other economic areas are distributed among the schools pretty much as economists publishing articles on minority economic problems. Eagly’s data implies that publishing seems more a function of school classification than fields of specialization. Also, career profiles as reflected in age data are similar for the two groups of economists. On this point, the age distribution of authors’ articles on minority economic problems was calculated and compared to that of authors who published articles in the AER during the period 1959-69 [5, 77]. Similar data and age quinquenniums for authors of articles on minority economic problems and AEA papers given during the period 1959-69 also were compared. Finally, these two sets of data were used to compare the hiring practices of the classes of schools.

The mean age for all authors with articles in the AER during the decade 1960-69 was 38.60 (S.D. = 8.86). For all authors of articles on minority economic problems covering the period 1970-76, the mean age was 35.48 (S.D. = 6.74). The latter authors were younger by a little over three years. Moreover, age variation was smaller for MEP economists than for the AER group. The average
age of authors on minority economic problems in the four prestige journals was 37.04 (S.D. = 8.22) or about one year and a half younger than the AER authors. For those publishing minority economic problem articles in the four specialized journals, the average age was 34.87 (S.D. = 6.74), or about three and a quarter years younger than the AER authors. The specialized journal authors were even younger than those publishing in the prestige journals and with less age dispersion. For AER authors, the modal age quinquennium was 30-34, the same as it was for MEF authors publishing in both the prestige and specialized journals. Comparing age quinquenniums, authors publishing articles on MEF were the same age as AER authors. The average age at which AER authors received their Ph.D.'s was 28.2 years (S.D. = 4.89) and for MEF authors it was 28.4 years (S.D. = 3.54).

Field of Specialization and Employment

Are individuals publishing articles on minority economic problems hired as frequently by their own degree granting institutions as are writers on non-minority topics? Apparently the answer depends on the particular group of schools.

In Table 1, AER and MEF data from the prestige journals are compared using only the AOE classifications. Since the prestige journals include the AER and if we assume the other three of equal prestige, the effect of journal classification is negligible. Moreover, since the AER data (from 1959-69) were collected mostly before this range of problems gained its present prominence in the economics profession [3, p. 783], its minority economic problems content is probably small (about 10 percent). Therefore we assume that the AER data reflect predominantly non-minority economic problem fields of specialization. Hence the following analysis is concerned with the field of specialization's effect on hiring. Is hiring related to an economist's field of specialization?
Table 4 - Probability distributions based on AER and MEP - prestige journal authorship data

<table>
<thead>
<tr>
<th>Employing Universities</th>
<th>I</th>
<th>II</th>
<th>III</th>
<th>IV</th>
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<tr>
<td>I</td>
<td>.56</td>
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<td>.04</td>
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<td>II</td>
<td>.63</td>
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<td>III</td>
<td>.26</td>
<td>.42</td>
<td>.28</td>
<td>.04</td>
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<tr>
<td>IV</td>
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<td>.59</td>
<td>.06</td>
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Ph.D. degree granting universities

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<tr>
<th>I</th>
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</table>

Source: AER data [5, Table 3, p. 82] MEP data from survey
Table 4 entries are conditional probabilities with the AER data \((N = 197)\) shown above the diagonal in each cell and the MEP data \((N = 59)\) shown below. The right hand column and the last row of the table show marginal probabilities. Following the notation used above, let \(a_{ij}^m = p_{ij}^m\) refer to the probability that an economist with a Ph.D. from group \(i\) and specializing in minority economic problems, \(m\), will be hired by group \(j\). Let \(a_{ij}^n = p_{ij}^n\) refer to these conditional probabilities for an economist specializing in non-minority economic problems. The proportion of all economists specializing in \(m\) fields who were awarded Ph.D. degrees from group \(i\) is \(b_j^m\). Similarly, those from \(n\) fields are \(b_j^n\). The analogues for hiring are \(b_j^m\) and \(b_j^n\).

Since Group I tends to produce proportionately more \(n\) economists and hire proportionately more \(m\) economists, there is, perhaps, a stronger relative demand for \(m\) than \(n\) economists from this group. For Group II, the degree awarded situation is reversed and hiring is proportionately balanced between \(m\) and \(n\), suggesting a demand weighted toward \(m\) economists. Since the data are based on authorship, Group II which included the University of Wisconsin in the 1966 ACE rankings, might be reflecting disproportionately the activities of this University's Institute for Research on Poverty activities. Group III's degree awarding and hiring activities tend to favor \(m\) economists while Group IV's entries are too few to base judgements on.

The demand-supply situation just described is reflected in the internal hiring activities of the groups. The \(P_{ij}\)'s for all groups are such that \(P_{ij}^m > P_{ij}^n\), remembering the smallness of Group IV's entries. For instance, the probability that an \(m\) economist with school of Ph.D. Group I will be hired by Group I is \(P_{11}^m = .63\) compared to a lower \(P_{11}^n = .56\) for a non-MEP specializing economist. For Group II, \(P_{22}^m = .59\) compared to \(P_{22}^n = .42\). The probability differences are
even greater for Group III, suggesting that it tends to hire all of its m Ph.D.'s. Similarly for Group IV. Again though the entries for the last two groups are small. For external hiring, Group I tends to seek Group II's m economists. Similarly for Group IV. Groups II and III tend to hire Group I's n economists while Group IV tends to hire Group I's m economists. Although Groups I and II's probability differences for m and n Ph.D.'s reflect, perhaps, their activity inclinations, those for the last two groups seem to reflect their relatively low output of publishing Ph.D.'s. In any case, specialization appears related to hiring. The null hypothesis of independence is rejected at the one-percent level \( \chi^2 \approx 13.67, \chi^2_{.01} > 11.34 \). Moreover, since the null hypothesis of homogeneity is not rejected \( \chi^2 = 7.60, \chi^2_{.05} > 7.81 \), it appears that the field of specialization serves to help allocate these economists among employments.

**Summary and Discussion**

During 1970-76, economists expanded their activity related to minority economic problems. More articles, etc. were published in 1970-76 than in 1963-69. Also in the later period there was a broader distribution of MEP items among the 30 journals. Over 72 percent of the MEP authors received their terminal degrees from Groups I and II schools which includes the more prestigious private and public universities. Economists with degrees from these schools dominated the journal literature on MEP, in the prestige journals as well as in the specialized journals. This picture of interinstitutional concentration and hierarchy in the economics profession is similar to that reported by Eagly for 1959-69.
Institutional relationships and an economics-journal-communications network effectively influenced the hiring of the economists studied in this paper. In 1970-76, the highest hiring frequencies were for economists with Ph.D.'s from their own prestige type universities and publishing in the prestige journals on minority economic problems. A null hypothesis on the independence of field of specialization and employment was rejected at the one percent level. Also a null hypothesis on the independence of economic journal classification and employment was rejected at the five percent level of significance. Since null hypotheses were not rejected on the homogeneity of economists with different fields of specialization and publishing in different economic journal classifications, it should be assumed that these fields and journal classifications affect the employment opportunities of economists.
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Flaim, Paul O., "Employment and Unemployment During the First Half of

"Discouraged Workers and Changes in Unemployment," Monthly


Gallaway, Lowell E. and Dyckman, Zachary, "The Full Employment-Unemploy-


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V. Black-Owned Businesses


VI. Income of Nonwhites


VII. Urban Economics


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VIII. Economic Aspects of Education


IX. Economics of Crime and Social Disorganization


