The Committee on The Status of Women in the Economics Profession

A major concern of the Committee on the Status of Women in the Economics Profession in 1977 was the need to increase and ensure opportunities for participation by women economists in the annual meetings of the American Economic Association. Such participation includes organizing and chairing sessions, presenting papers, and giving formal discussions of papers. An important part of the program process is the preplanned publication in the *Proceedings* issue of the *American Economic Review*.

By custom, the President-elect of the Association plans the overall program. Normally he selects a theme(s) for that year, selects the chairs for the Association sessions, approves the number of sessions the Association jointly sponsors with other members of the Allied Social Science Association, and has varying degrees of input on the selection of chairs for the joint sessions. He may or may not set guidelines or have informal requests which he makes of the session chairs. He may or may not have a program committee. In conjunction with the editor of the *Proceedings* issue of the journal, he decides which sessions are to be promised publication. This is an important incentive and bonus. In the case of at least one standing committee (not CSWEP), the Executive Committee of the Association has voted a policy of promising publication of papers from sessions to be planned by that committee for several years in the future, with an option to renew the policy at the end of the period.

In the six years of its existence,[1] the Committee has worked with each of the presidents-elect in turn to encourage them to ask their designated chairs to open up the informal network to include women economists. In addition, in each of the six years, the Committee has been asked by the President-elect to sponsor a session at the annual meeting. The first three years, the program dealt with ways to obviate sex discrimination in the economics profession. In the last three years the Committee has sponsored programs fitting in with the president-elect's topical themes. This year the topic was Macroeconomic Goals and Changing Labor Force Participation of Women. Next year the topic will be Equity: Individual versus Family. In planning these programs we have had two goals besides compatibility with the overall program themes. One has been to encourage increased participation by women economists. The other has been to encourage research by female or male economists on economic topics related to women. We have had both men and women economists on the programs in all six years, although women have predominated. We have been offered full publication rights in all but one year; at that time we were given only partial publication of the papers. On behalf of the Committee, I want to thank the previous presidents of the Association for their helpfulness in these matters. Without this, the participation level of women economists would have been far less.

The presidents-elect have varied enormously in the number of sessions sponsored, the number of formal papers versus round table discussions, the extent of participation with other groups in the Allied Social Science Association in joint sessions, and in their explicit concern with opening up the dominant informal networks to less well-known economists, men or women. In some cases, explicit requests to the program chairs to diversify the group giving papers have resulted in negligible pattern changes.

This year, to try to help further increased participation by women, the Committee has done two things. We have started a card

[1]The Committee was established in the spring of 1972 following the affirmative action resolutions encouraging women to participate in the economics profession passed by the Association at the New Orleans meeting in December 1971.

index file of current research by women economists, which we hope to develop in the future into a viable resource for program chairs. Second, we have made a statistical summary by sex of Association programs and publication of program papers since 1969.[2]

As a rule of thumb in interpreting the statistical summary, I would urge that a miniumum of 10–15 percent of the program participants should be women since (1) the annual proportion of women among those receiving Ph.D.'s averaged 11 percent from 1971–72 through 1975–76, and (2) the 1970 Census showed women comprised 14 percent of economists teaching at colleges and universities. In a spirit of affirmative action to redress previous imbalance, a goal of 15 to 20 percent women would be reasonable. The Committee now has on its computerized roster over 1,900 women economists. Of these, about 750 have Ph.D.s in economics. This pool should more than adequately support a goal of 15 to 20 percent women participants. Using the 15 percent goal for 1977, for example, would have translated into 12 women as session chairs, 48 as author or joint author of papers, and 22 as discussants. The program for 1977 had 80 sessions, far more than any program in the last nine years. The previous year had 50 sessions. The 15 percent goal for 1976 would have translated into 8 women as session chairs, 24 women as authors or joint authors, and 16 women as discussants. In actuality, instead of 15 to 20 percent, the participation of women in 1976 and 1977 were 14 and 6 percent, respectively, as session chairs, 12 and 8 percent as paper authors, and 7 and 9 percent as discussants.

Another way of looking at the data is to consider whether there has been any appreciable improvement of women economists' participation since the adoption of the affirmative action resolutions by AEA in December 1971. For this purpose, the three years preceding formation of CSWEP can be compared with the six subsequent years. In the later years, the Committee session alone adds 4 to 6 women. Hopefully, increased awareness of other chair persons should add considerably more. Data on which Appendix Tables 1–3 are based are summarized below in Table 1.

TABLE 1

	1969–71		1972–77	
	Number Women per Year	Percent of Total	Number Women per Year	Percent of Total
AEA Sponsored Sessions:				
Session chairs	1.7	7.3	2.7	11.4
Authors of papers	2.7	4.8	10.2	13.7
Discussants	3.3	4.7	6.3	11.6
Joint Sessions:				
Session chairs	.3	3.3	1.7	6.5
Authors of papers	3.7	3.2	7.3	6.7
Discussants	1.0	4.2	5.6	8.6

In total the number of times a woman appeared on the AEA sponsored program as session chair, paper author or joint author, or discussant increased from nearly 8 per year in 1969–71 to 19 in 1972–77. In joint sessions, the number increased from 5 per year in 1969–71 to 15 in 1972–77. As is true of men participants as well, these numbers represent even fewer individual women because of multiple appearances such as chair of one session and paper author at another. Trying to diversify and avoid excessive multiple appearances are perennial problems for program planners. It suggests that more centralized planning of the program could be useful.

In terms of both numbers and proportions, the opportunities for women to participate in the annual Association program have increased in the last six years. In the last three years although the proportions have not changed much, the numbers of women as authors or joint authors have been enhanced by the increased number of sessions. (See Appendix Table 1.)

In these tabulations, single authors of papers and multiple authors of papers were

[2]Thanks are given to Patricia Kirby Cantrell for help with the tabulations.

given equal weight on the basis that the important element for career advancement is to be on the program. Whether this method gives different results from a method where joint authors are considered to be .5 or .3 of an author, depends on whether female economists tend to be joint authors more than male economists do and whether the proportion of joint authors has changed over time. Both are researchable questions.

Considering all sessions sponsored by the Association, either alone or jointly, women are slightly more apt to be joint authors than are men. In addition, the trend over the last nine years, especially for men, has been to have more multiple author papers. Multiple authorship from 1969 to 1977 in all sessions at the annual Association meetings (except presidential addresses and special lectures) is shown in Table 2.

TABLE 2

Year	Female Coauthors as Percent of All Female Authors on Programs	Male Coauthors as Percent of All Male Authors on Programs
1969–71	40.0	29.5
1972–77	45.0	40.8

It should be noted that opportunities for women economists to participate in the annual sessions sponsored alone by the Association have been greater than in the sessions it sponsors jointly with other members of the Allied Social Science Association. Future presidents-elect of the Association may be able to give some leadership to increasing opportunities for women economists in the joint sessions.

One other major aspect of participation by women economists in the annual meetings is the opportunity to have their papers or discussions, when they are asked to be on the program, published in the *Proceedings* issue of the *AER*. Numbers of authors or multiple authors whose papers or discussions were published by AEA are shown in Table 3.

TABLE 3

Year	Number of Authors per Year		Number of Discussants per Year	
	Female	Male	Female	Male
1969–71	2.7	60.0	1.3	33.3
1972–76	5.4	73.4	.8	8.4

Because publication by and large is promised in advance by the president-elect of the Association in his capacity as overall program chair, the sessions in which publication is promised tend to be the more

TABLE 4—PUBLISHED PAPERS AND DISCUSSIONS FROM ANNUAL PROGRAM, BY SEX, 1969–76[a]

Year[b]	Number of Authors	Female Authors		Number of Discussants	Female Discussants	
		Number	Percent		Number	Percent
1969	65	1	1.5	56	2	3.6
1970	58	3	5.2	38	1	2.6
1971	65	4	6.2	10	1	10.0
1972	70	2	2.8	11	1	9.1
1973	87	5	5.7	9	1	11.1
1974	67	9	13.4	13	2	15.4
1975	87	5	5.7	7	0	0
1976	83	6	7.2	6	0	0

[a]Published in *American Economic Review Proceedings* (excludes presidential addresses and special lectures).

[b]Year of meeting. The *Proceedings* are published in the following year, usually in May.

prestigious sessions. The Committee has worked very hard on the issue of promised publication for CSWEP-sponsored sessions, and for most years has been successful in dealing with individual presidents-elect. Each year, however, is a new ball game. Unfortunately, the increase in women's papers published shown above is largely due to the Committee-sponsored sessions. Again, we are most appreciative of the Association presidents who have offered us this privilege. There is considerable room for improvement in the number of women economists asked to participate in the sessions preordained for publication, as shown by the numbers above and the percentages in Table 4.

I want to thank the members of our six-person committee[3] who have worked so hard this year to carry out the mandate of the Association to a) support and facilitate equality of opportunity for women economists in all aspects of economists' professional activities and b) help eradicate any institutional or personal discrimination against women economists. The commitment of the Association to these purposes is shown by the fact that this is the fourth year since CSWEP was designated a standing committee of the Association, and by its financial support of our basic activities.

[3]Membership from March 1972 to date has included: Walter Adams, Michigan State University; Carolyn Shaw Bell, Wellesley College (Chair, 1972 and 1973); Francine Blau, University of Illinois; Martha Blaxall, Health, Education and Welfare; Kenneth E. Boulding, University of Colorado; Mariam Chamberlain, Ford Foundation; Ann F. Friedlaender, Massachusetts Institute of Technology; John Kenneth Galbraith, Harvard University; Walter W. Heller, University of Minnesota; Janice Madden, University of Pennsylvania; Collette Moser, Michigan State University; Barbara B. Reagan, Southern Methodist University (Chair, 1974–77); Isabel Sawhill, Urban Institute; Margaret Simms, Atlanta University; Myra Strober, Stanford University; Nancy Teeters, Budget Committee, House of Representatives; Phyllis Wallace, Sloan School, Massachusetts Institute of Technology; Florence Weiss, National Economic Research Associates, New York City. In addition, the current president of the Association served *ex officio*. Our apologies to the two past presidents serving regular committee memberships, as well as *ex officio*, whose names were removed by a proofreader from the 1976 report.

During the year the Committee has worked to improve the operation of the market for economists, to increase the supply of women economists, and to add to the research information on the status of women economists. We have also encouraged economic analysis of public policies which affect all women, including women economists. We feel that it is imperative that we collect and analyze data as a basis for our policy recommendations. The activities of the year summarized below support one or more of the above Committee goals.

I. Roster

We have again this year updated the data for each woman economist on our computerized roster by sending each a copy of the previous material she supplied us on areas of specialization, highest degree in economics, school of highest degree, current professional rank or grade, current employer, address, and availability for new employment. We added new members and lost some, with the final number approximately the same as last year.

Prospective employers who requested the service were supplied with a subset of women economists who meet the criteria specified in the request. The prospective employers are then free to contact the women listed to ascertain whether there is mutual interest in the job match. Use of this service, which is made available at a nominal charge, continues to grow.

II. CSWEP Newsletter

Three issues of the CSWEP *Newsletter*, fall, winter, and spring, have been sent to all women economists on our roster. The fall issue was also sent to department chairs in the Chairman's Group and to Association officers. The *Newsletter* gives information of special interest to women economists, summarizes Committee activities, calls for abstracts of paper proposals for the annual AEA meetings, lists conferences and program plans for regional economics meetings, lists grant or fellow-

ship opportunities, notes research findings or publications of special interest, and presents short items submitted by individual women members of the Association.

This year we have also used the CSWEP *Newsletter* to request payment of $3 dues to become an associate member of CSWEP. These dues are in addition to the regular dues paid directly to the Nashville office of the Association.

The CSWEP *Newsletter* is sent bulk mail to reduce mailing costs. This often delays delivery. In spite of the delay, a survey made this year showed that the *Newsletter* is a popular and greatly appreciated service of the Committee. Our associate members want to see the *Newsletter* strengthened, but not abandoned. It clearly has been one of our major techniques to build an informal network among women economists across the country.

The *Newsletter* also carries a section of brief announcements of job openings for economists. The section is made up of those written notices which are sent us by the employers. The marginal cost of carrying these job notices is low, and no charge is made for the service.

The Committee recently completed an extensive evaluation of the usefulness of this service, and found that it is considered valuable by many women economists and many employers. The job listings only partially duplicate the jobs listed in *Job Opportunities for Economists* (*JOE*), and the *Newsletter* carries a note to remind women economists actively in the job market to also subscribe to *JOE*. The Committee has decided to continue to carry job listings for the immediate future as a further effort to improve the job market information flow.

III. National and Regional Meetings

At the annual Association meeting in New York City, CSWEP kept a hospitality room open and staffed with a committee member and volunteer associate members for two and a half days. Although the location this year was less than central, women economists and a few employers found their way to it. An extensive list of job opportunities received since the October *Newsletter* went to press was mimeographed, and distributed at the CSWEP room.

The program session sponsored by the Committee, mentioned early in the report, was well attended by men and women economists. Discussion was lively and extended in spite of the session being scheduled at the end of the meeting.

The Committee also sponsored an open meeting on the first day of the sessions. Although numerous topics were discussed by the associate members, the liveliest topic was the concern expressed by members from various parts of the country that many Association members, men as well as women, may not want to attend meetings in Chicago or Atlanta in 1978 and 1979 if Illinois and Georgia do not ratify the ERA.

As an experiment this year, the Committee cosponsored a special program session at the Southern Economics Association meetings. Papers and discussion centered on economic aspects of at-home time. The Committee also had a booth in the exhibit section at the Southern meetings, with an opportunity for women economists to register for our roster. A special letter was sent to each woman economist living in the southern quadrant of the United States urging them to come to the SEA meetings and advising them of the Committee's participation. The experience with the SEA suggests that continuation and expansion into other regional economic sessions may be a useful way to strengthen our services to women economists.

IV. Research on Salaries of Economists

In 1975 data were collected by the Committee on education and career patterns and current salaries of 710 women economists and from a paired sample of more than 1,200 male and female economists who did their academic work for their highest degree in economics at the same university at the same time. An econometric analysis of the factors influencing the income dif-

ferences between the men and women in spite of their similar investment in human capital was completed this fall by Myra Strober and Barbara B. Reagan. The first draft of the prospective report is now being reviewed. This research gives particular attention to the effect of gaps in women's work history, and finds that relatively few women economists have had such gaps, that those who did have gaps indeed incurred a salary penalty, but that sex per se is a far more important variable than gaps in employment in explaining income variation. This unusually rich data source for a relatively homogeneous group of professional workers permits an extensive list of variables to be considered. Some of the variables, notably the gaps in work history and number of times moved to accommodate a spouse's job needs, are not often available.

V. Academic Labor Market, 1975–76[4]

Women represented about the same proportion of the Ph.D. degree recipients in 1975–76 as the previous year, about 10.5 percent (see Table 5).[5] The number of Ph.D. degrees awarded per department reporting was up slightly. Departments in the Chairman's Group, sometimes called the Cartel, awarded 11.2 Ph.D. degrees in 1975–76 per department reporting compared with 10.5 in 1974–75 per department reporting. The other departments awarding Ph.D. degrees reported 4.7 Ph.D. degrees awarded in 1975–76 compared with 3.8 per department reporting the previous year.

In contrast, the proportion of women earning M.A. degrees in economics in 1975–76 was 13 percent, less than the previous year's 18 percent. Similarly, women receiving bachelor level degrees in economics was less than the previous year, 18 percent compared with 22 percent last year. Informal checks with faculty members in several different areas of the country suggest that increased interest by business in hiring women economists, particularly at entry levels, has attracted increasing numbers of women into business majors. Some of this increase is probably attracting away some of the women who otherwise might have chosen economics at the bachelors or masters level, and well may be even reducing the number of women choosing to get a Ph.D. in economics. Men have long been aware of business opportunities with payoffs as great or greater for an MBA as for a Ph.D. in economics. Women are now beginning to feel more welcome in business, and hope for movement up the career ladder in substantially new ways in large business enterprises.

About 75 percent of all Ph.D. students in economics in the fall of 1976, men and women, received financial aid—tuition, stipend, or both (Table 6). Nearly 40 percent of the M.A. students in economics also received financial aid. At the Ph.D. level the proportion receiving financial aid was the same as the previous year. At the M.A. level, however, the proportion dropped again in 1976, dropping from 53 percent in 1975 to 39 percent in 1976 and continuing a downward trend noted in 1974–75. This decrease in the proportion of M.A. students in economics offered aid, which is related undoubtedly to reduced university and departmental budgets, occurred in those departments which also offer Ph.D.s, both those in the Chairman's Group and the

[4]In 1976–77 for the fifth year, data related to supply of economists and academic demand for them are available from a survey of academic departments of economics. The data from the 1976–77 Universal Academic Questionnaires have been collected under the direction of C. Elton Hinshaw of the Association, and the data classified by sex are analyzed here. The questions asked in the 1976–77 survey are for the most part comparable to the data published in the Committee report in the May 1975 *Proceedings*. The number of departments which had reported in time for this analysis is 331 this year, but was 375 last year. Not all of the departments who reported last year reported again this year. Thus, comparisons of absolute numbers must be made with care. Percentages are more comparable, although, of course, they are subject to sampling error. Tabulations by sex from the 1977–78 survey are not available from the Association office in time to be included in this report.

[5]The 1974–75 comparison data quoted from the 1975–76 Universal Academic Questionnaires are from the Committee report, May 1976 *Proceedings*, pp. 512–20.

TABLE 5—DEGREES GRANTED IN ECONOMICS BY TYPE OF DEPARTMENT AND SEX, 1975–76

Degrees Granted in 1975–76	All Departments	Highest Degree Offered: Ph.D. Chairman's Group	Ph.D. Other	M.A.	B.A.
Number of departments reporting	331	44	45	48	194
Ph.D., number	705	492	213	—	—
Percent women	10.4	10.4	10.3	—	—
M.A., number	1346	664	452	230	—
Percent women	13.4	12.0	15.3	13.5	—
B.A., number	9521	3921	1336	823	3441
Percent women	18.2	14.9	16.6	16.3	23.1
Other degrees from economics departments, number	70	34	36	0	3
Percent women	20.0	11.8	27.8	0	100.0

Source: Departments in United States and Canada reporting on 1976–77 Universal Academic Questionnaire.

other Ph.D. departments. Departments for which the M.A. degree is the highest degree offered in economics slightly increased the proportion of graduate students receiving aid (42 percent in the fall of 1975, 47 percent in the fall of 1976). Given this pattern of financial aid, the question is how women graduate students fared.

The proportion of women Ph.D. candidates receiving some financial aid

TABLE 6—NUMBER OF FULL-TIME "ON CAMPUS" GRADUATE STUDENTS REGISTERED FALL 1976, AND TYPE OF FINANCIAL AID, BY TYPE OF DEPARTMENT AND BY SEX

Type of Department, Degree Sought, and Sex	Total	Receiving Financial Aid: Tuition Only	Stipend Only	Tuition and Stipend	No Aid
All Departments					
Ph.D. students, number	2389	167	423	1212	587
Female as percent of total	14.3	19.2	9.2	15.6	13.8
M.A. students, number	1080	41	89	288	662
Female as percent of total	17.3	26.8	11.2	17.7	17.4
Chairman's Group					
Ph.D. students, number	1951	150	289	1026	486
Female as percent of total	14.5	16.7	10.7	15.6	13.8
M.A. students, number	570	19	36	134	381
Female as percent of total	15.6	21.1	8.3	16.4	15.7
Ph.D., other departments					
Ph.D. students, number	438	17	134	186	101
Female as percent of total	13.2	41.2	6.0	15.6	13.9
M.A. students, number	366	18	46	97	205
Female as percent of total	20.8	33.3	13.0	20.6	21.5
M.A. departments					
M.A. students, number	144	4	7	57	76
Female as percent of total	15.3	[a]	[a]	15.8	14.5

Source: See Table 5.

[a]Percentage not shown when fewer than 10 in cell.

continued in the fall of 1976, as in 1975, to be similar to or better than their proportionate representation among graduate students, except that the proportion of women Ph.D. candidates receiving stipend grants but not tuition in 1976 decreased, falling well below women's proportionate representation among graduate students. In contrast to the general favorable picture for tuition or tuition/stipend aid for women Ph.D. candidates, the proportion of women M.A. candidates receiving financial aid dropped sharply in the fall of 1976 compared with the previous fall. The proportion of women M.A. candidates receiving financial aid in the cartel departments dropped in 1976 compared with the previous year. However, the overall proportion of women M.A. candidates receiving financial aid in the Cartel departments was comparable to their proportionate representation among M.A. candidates, so that although the type of financial aid shifted, the overall cut in numbers of M.A. students offered financial aid was borne proportionately among the men and women studies who remained.

In general, based on tabulations of the approximately 1,600 women economists who have up-dated their current employment on the CSWEP roster of about 1,900 women economists, the type of employment in 1977–78 is shown in Table 7.

TABLE 7
(Shown in Percent)

	All Women Economists	With Ph.D.	With M.A. or B.A. as as Highest Degree
Total	100	100	100
Educational institution	59	77	47
Federal Government	5	4	5
State and Local Government	6	3	8
Quasi-Public Sector[a]	6	6	6
Consulting	12	7	16
Banking or finance	5	2	8
Industry	3	1	4
Students	4	0	6

[a]Often research institutions.

The first job of women after receiving their Ph.D.s in 1975–76 is shown in Appendix Table 4. The tabulation categories differ from those shown above. We know that women economists on the CSWEP roster include few women economists employed outside the United States and underreport the women in banking or finance, industry, and government, particularly women whose highest degree is an M.A. or B.A. Nevertheless, comparison of the first jobs of women after receiving Ph.D.s suggests that relatively fewer went into academic positions and relatively more went into government than was true of women economists as a whole. Of those women receiving M.A.s in economics in 1975–76, far fewer took teaching jobs, more went into industry, more continued as students, and about a third were employed outside the United States. If those employed outside the United States, the students, the unemployed and not known are excluded, the important relative shift of women with new M.A. degrees into industry is revealed.

Women economists in 1976 entering the labor market with a new M.A. or new Ph.D. still are not as apt to go into industry as their male classmates, and are more apt to go into academia. Men with new M.A. degrees in economics are more apt than women economists to be employed in federal or state or local government. Other differences in employment in 1976 between women and men with new degrees were small.

Considering all women economists employed in academic departments of economics, women in 1976–77 comprised 6 percent of the full-time faculty tenure-track positions; 14 percent of the full-time, nontenure-track positions, and 14 percent of the part-time faculty (Appendix Table 5). These proportions are similar to those reported for 1975–76, except the proportion of women in full-time, nontenure-track positions increased.

Within the full-time, tenure-track positions, the proportion of full professors was 5 percent in 1976–77 compared with only 3 percent the previous year. The increase occurred in Ph.D. department that are not in the Cartel and in departments in which the B.A. is the highest degree offered. There was a sharp drop in the proportion of women among instructors in all types of departments, with the sharpest drop in departments in the Chairman's Group. In these departments there was a corresponding increase in women reported in other faculty ranks and other positions. The increase in women at the assistant professor level, noted for 1975–76, leveled off in 1976–77.

The number of new faculty hired in 1976–77 exceeded the number of faculty released at the end of 1975–76 by 148 full-time positions and 43 part-time positions (Appendix Table 6). This represents a net increase of about 4 percent of the 4,070 full-time positions reported by the 331 departments participating in the 1976–77 survey, and 8 percent of the part-time faculty positions. The small net loss in professors and associate professors continues a pattern observed the previous year. The net increase in assistant professors hired was considerably larger than the previous year in spite of the fact that the number of departments participating was lower.

At each professorial rank, women tended to hold their own in these changes and even increased by 1 the number of full professors and associate professors at the same time there were more male retirements than new hires at those levels.

There was little difference between the prior type of economic employment of female and male economists hired in 1976–77 (Appendix Table 7). In the departments in the Chairman's Group, women economists were not hired from industry, banks or financial institutions, or the federal government, as were 7 percent of the men. In these departments, women were less apt than men to be hired from other university faculties. More than 60 percent of the women newly hired in these departments came straight from graduate school, as was also true for the male new hires. Of the female new hires, 15 percent in the Chairman's Group had previously been unemployed.

Women faculty released for 1976–77 were more apt than male economists to go to other faculty positions, and less likely than the men to go to business and industry, banking or financial institutions. This is a different pattern than reported in 1975–76.

In 1976–77 as in the two previous years, the persons reporting for the economics departments were asked to rank women full-time faculty by whether their salaries were above or below the departmental median for the particular rank and whether their length of service in that rank was above or below the median time at that rank for departmental faculty. Such estimates ignore how much the women's salary is above or below the median. From other evidence we know that with increases in experience, women's salaries tend to lag behind men's. For all departments, only 12 percent of the women had salaries more than $250 below the medians for their ranks (Table 8). When time in rank is considered, half of the women with salaries more than $250 below the median had time in rank at or above the median length of experience for that rank in the department. It must be remembered that two-thirds of the women faculty members in economics covered in the 1976–77 survey reported here are at the assistant professor or lower ranks. In general, entrance level faculty positions in universities have little or no difference between men and women in salary.

Women received 7 percent of the promotions for 1976–77 or 19 of the 256 (Table 9). Women comprised 8 percent of the total faculty. Of the 19 promotions for women, 4 were to full professor, 10 were to associate professor, and 5 were to assistant professor. None of the promotions of women to full professor included awarding of tenure. This may well be because the women already had tenure as associate professors. Eight women were awarded

TABLE 8—RELATIVE SALARIES FOR RANK AND TIME IN RANK OF FEMALE FULL-TIME ECONOMISTS, 1976–77, BY TYPE OF DEPARTMENT

Highest Degree Offered by Department and Relative Salary for Rank	All Women		Time in Rank[a]			
	Number	Percent	Total	Above Median	At Median	Below Median
All Departments	770	100.0				
Salary above median	383	49.7	100.0	38.4	35.2	26.4
Within $250 of median	298	38.7	100.0	34.2	52.0	13.7
Salary below median	89	11.6	100.0	41.6	10.1	48.3
Ph.D., Chairman's Group	53	100.0				
Salary above median	20	37.7	100.0	75.0	25.0	0
Within $250 of median	14	26.4	100.0	0	85.7	14.3
Salary below median	19	35.9	100.0	21.1	36.8	42.1
Ph.D., other	546	100.0				
Salary above median	315	57.7	100.0	35.2	33.3	31.4
Within $250 of median	214	39.2	100.0	46.7	52.8	0
Salary below median	17	3.1	100.0	17.6	5.9	76.5
M.A.	46	100.0				
Salary above median	18	39.2	100.0	50.0	44.4	5.5
Within $250 of median	14	30.4	100.0	14.3	57.1	28.6
Salary below median	14	30.4	100.0	28.6	7.1	64.3
B.A.	125	100.0				
Salary above median	30	24.0	100.0	40.0	56.7	3.3
Within $250 of median	56	44.8	100.0	0	39.3	60.7
Salary below median	39	31.2	100.0	66.7	0	33.3

Source: See Table 5.
[a]Shown in percent.

TABLE 9—PROMOTIONS AND TENURE DECISIONS FROM 1975–76 TO 1976–77 BY TYPE OF DEPARTMENT AND SEX

Highest Degree Offered by Department and Rank	Promotions to Rank		Given Tenure at Rank	
	Total Number	Female as Percent of Total	Total Number	Female as Percent of Total
All Departments				
Professor	86	4.7	11	0
Associate Professor	140	7.1	90	8.9
Assistant Professor	30	16.7	30	13.3
Ph.D., Chairman's Group				
Professor	27	3.7	2	0
Associate Professor	27	0	10	10.0
Assistant Professor	3	33.3	0	0
Ph.D., other				
Professor	23	0	3	0
Associate Professor	37	5.4	29	6.9
Assistant Professor	6	0	7	28.6
M.A.				
Professor	19	5.3	3	0
Associate Professor	35	5.7	22	9.1
Assistant Professor	6	16.7	9	11.1
B.A.				
Professor	17	11.8	3	0
Associate Professor	41	14.6	29	10.3
Assistant Professor	15	20.0	14	7.1

Source: See Table 5.

tenure at the associate professor level (compared with 10 promotions to this rank). Only 1 promotion and 1 tenure award to women in the professor and associate professor level were among departments in the Chairman's Group.

Critical to achieving improvements in the opportunities opened to women economists are actions by men of good will and sensitivity that will change traditionally narrow views of women's role potential and help open opportunities so women can have better educational and employment opportunities. Men and women economists must work together on this. Many of the improvements needed to combat role prejudice and sex discrimination in universities involve greater investment in on-the-job training opportunities for women and opening the informal network to women colleagues.

BARBARA B. REAGAN, *Chair*

APPENDIX TABLE 1—PROGRAM CHAIRS FOR ANNUAL AEA PROGRAM, BY SEX, 1969–77[a]

Year and Sponsor	Number of Sessions	Number of Chairs	Percent Female Chairs
1969			
AEA	24	24	8.3
Joint AEA	10	10	10.0
Graduate	1	1	0
Total	35	35	8.6
1970			
AEA	12	12	0
Joint AEA	18	16	0
Graduate	1	1	0
Total	31	29	0
1971			
AEA	21	22	13.6
Joint AEA	9	9	0
Graduate	1	1	0
Total	31	32	9.4
1972			
AEA	20	20	15.0
Joint AEA	13	13	15.4
Graduate	1	1	0
Total	34	34	14.7
1973			
AEA	15	15	6.7
Joint AEA	26	26	3.8
Graduate	1	1	0
Total	42	42	4.8
1974			
AEA	33	33	12.1
Joint AEA	11	11	9.1
Graduate	1	1	0
Total	45	45	11.1
1975			
AEA	31	30	10.0
Joint AEA	39	39	0
Graduate	1	1	0
Total	71	70	4.3
1976			
AEA	28	28	17.9
Joint AEA	21	21	4.8
Graduate	1	1	[b]
Total	50	50	14.0
1977			
AEA	46	46	6.5
Joint AEA	33	33	6.1
Graduate	1	1	0
Total	80	80	6.2

[a]Excludes presidential addresses and special lectures.

[b]Percentage not shown when fewer than 10 in cell.

APPENDIX TABLE 2—AUTHOR OF PAPERS AT ANNUAL AEA PROGRAM, BY SEX, 1969–77[a]

Year and Sponsor	Number of Papers	Number of Persons Writing Papers[b]	Percentage of Females[b] by Paper Given
1969			
AEA	72	85	3.5
Joint AEA	25	28	3.6
Graduate	4	4	0
Total	101	117	3.4
1970			
AEA	34	37	2.7
Joint AEA	59	78	10.3
Graduate	3	3	0
Total	96	118	7.6
1971			
AEA	45	49	8.2
Joint AEA	27	37	5.4
Graduate	4	4	[c]
Total	76	90	7.8
1972			
AEA	44	55	5.5
Joint AEA	34	44	4.5
Graduate	3	3	[c]
Total	81	102	5.9
1973			
AEA	24	30	10.0
Joint AEA	75	103	4.9
Graduate	4	5	0
Total	103	138	5.8
1974			
AEA	16	22	31.8
Joint AEA	125	153	9.8
Graduate	4	4	0
Total	145	179	12.3
1975			
AEA	97	109	13.8
Joint AEA	120	174	4.6
Graduate	3	3	[c]
Total	220	286	8.4
1976			
AEA	91	117	11.1
Joint AEA	64	73	12.3
Graduate	3	3	[c]
Total	158	193	11.9
1977			
AEA	146	200	10.0
Joint AEA	95	117	4.3
Graduate	3	3	[c]
Total	244	320	8.1

[a]Excludes presidential addresses and special lectures.

[b]Includes multiple authors.

[c]Percentage not shown when fewer than 10 in cell.

APPENDIX TABLE 3—DISCUSSANTS OF PAPERS AT ANNUAL AEA PROGRAM, BY SEX, 1969–77

Year and Sponsor	Number of Discussants	Percent Discussants Female
1969		
AEA	71	2.8
Joint AEA	26	0
Graduate	4	[a]
Total	101	3.0
1970		
AEA	28	0
Joint AEA	34	0
Graduate	3	0
Total	65	0
1971		
AEA	70	11.4
Joint AEA	24	12.5
Graduate	3	0
Total	97	11.3
1972		
AEA	66	19.7
Joint AEA	37	5.4
Graduate	3	0
Total	106	14.2
1973		
AEA	48	12.5
Joint AEA	59	8.5
Graduate	0	—
Total	107	10.3
1974		
AEA	32	15.6
Joint AEA	65	10.8
Graduate	0	—
Total	97	12.4
1975		
AEA	64	10.9
Joint AEA	92	9.8
Graduate	3	0
Total	159	10.1
1976		
AEA	52	5.8
Joint AEA	54	7.4
Graduate	2	[a]
Total	108	7.4
1977		
AEA	79	5.1
Joint AEA	70	10.0
Graduate	3	[a]
Total	152	8.6

[a]Percentage not shown when fewer than 10 in cell.

APPENDIX TABLE 4—1976 EMPLOYMENT OF 1975–76 GRADUATES IN ECONOMICS BY LEVEL OF DEGREE, SEX, AND TYPE OF DEPARTMENT

Type of Department and Kind of Employment	Ph.D.[a]		M.A.	
	Male	Female	Male	Female
All Departments:				
Number	532	66	383	58
Percent	89.0	11.0	86.8	13.2
Percent employed as economist in U.S.:				
Educational institution	53.9	57.6	5.5	12.1
Business or industry	2.8	0	13.6	6.9
Federal government	10.0	10.6	4.7	1.7
State/local government	2.1	4.5	8.9	1.7
Banking or finance	2.3	4.5	3.9	3.4
Consulting/research institution	3.2	4.5	1.3	1.7
Percent not employed as economist:				
Seeking employment	1.5	1.5	3.1	6.9
Not in labor force	4.5	6.1	1.0	5.2
Percent in other activities:				
Postdoctoral program	0	1.5	0	0
Entered the Ph.D. program	0	0	22.5	17.2
Employed outside U.S.	12.4	6.1	24.5	32.8
International Agency	3.2	0	0	0
Not known	4.1	1.5	11.0	10.3
Chairman's Group:				
Number	413	54	181	33
Percent	88.4	11.6	84.6	15.4
Percent employed as economist in U.S.:				
Educational institution	53.3	57.4	5.5	6.1
Business or industry	1.7	0	7.7	9.1
Federal government	11.6	13.0	2.8	3.0
State/local government	1.9	1.9	6.6	0
Banking or finance	2.2	5.5	2.8	3.0
Consulting/research institution	3.6	3.7	1.1	0
Percent not employed as economist:				
Seeking employment	1.2	0	2.2	6.1
Not in labor force	5.8	7.4	1.1	6.1
Percent in other activities:				
Postdoctoral program	0	1.9	0	0
Entered Ph.D. program	0	0	27.1	24.2
Employed outside U.S.	13.3	7.4	33.7	30.3
International Agency	3.9	0	0	0
Not known	1.5	1.9	9.4	12.1

Note: Percentages may not add to 100.0 due to rounding.
Source: See Table 5.
[a]Includes graduate students who have not completed their dissertations, if they entered the labor market seeking full-time employment as economists.

APPENDIX TABLE 5—NUMBER OF FACULTY BY RANK AND TYPE OF DEPARTMENT, 1976–77, BY SEX

Type of Appointment, Rank, and Sex	All Depart-ments	Highest Degree Offered			
		Ph.D.			
		Chairman's Group	Other	M.A.	B.A.
Departments reporting	331	44	45	48	194
Full-time faculty, tenure-track:					
All ranks, male and female	3841	1117	1193	572	959
Professors	1405	555	450	182	218
Associate professors	976	208	356	166	246
Assistant professors	1135	290	258	181	406
Instructors	156	17	67	13	59
Other faculty ranks	50	22	17	2	9
Other	119	24	45	28	21
Female percent of total	6.5	4.6	6.2	5.2	8.3
Professors	5.2	1.4	9.1	3.3	8.3
Associate professors	4.4	2.9	3.4	6.0	6.1
Assistant professors	7.7	10.0	5.0	6.1	8.6
Instructors	10.3	11.8	3.0	15.4	16.9
Other faculty ranks	18.0	18.2	17.6	[a]	11.1
Other	5.0	8.0	6.7	0	4.8
Full-time faculty, nontenure-track:					
All ranks, male and female	229	27	73	53	76
Professors	7	0	5	2	0
Associate professors	12	0	5	3	4
Assistant professors	85	12	28	17	28
Instructors	62	11	4	20	27
Other faculty ranks	26	2	8	6	10
Other	37	2	23	5	7
Female, percent of total	14.4	14.8	9.6	24.5	11.8
Professors	0	0	0	0	0
Associate professors	0	0	0	0	0
Assistant professors	15.3	0	14.3	23.5	17.8
Instructors	19.4	18.2	25.0	30.0	11.1
Other faculty ranks	19.2	[a]	[a]	[a]	0
Other	8.2	0	4.3	[a]	[a]
Part-time faculty:					
All ranks, male and female[b]	551	104	158	96	193
Professors	46	15	12	8	11
Associate professors	29	4	11	4	10
Assistant professors	74	8	20	15	31
Instructors	218	35	64	33	86
Other faculty ranks	110	28	28	20	34
Other	74	14	23	16	21
Female, percent of total[c]	14.3	14.4	15.8	12.5	14.0
Professors	4.3	6.7	0	0	9.1
Associate professors	10.3	0	18.2	0	10.0
Assistant professors	13.5	[a]	20.0	6.7	6.4
Instructors	13.3	8.6	12.5	18.2	14.0
Other faculty ranks	21.8	17.9	21.4	25.0	23.5
Other	14.9	21.4	21.7	0	14.3

Note: Percentages may not add to 100.0 due to rounding.
Source: See Table 5.
[a]Percentage not shown when fewer than 10 in cell.
[b]In all departments, 14 of these positions are tenure-track, 7 as professors. All 7 of the professors are in departments that are in the Chairman's Group.
[c]In all departments, 5 of these positions held by women are tenure-track, 1 at each rank.

APPENDIX TABLE 6—NET CHANGE IN FACULTY POSITIONS FROM END OF 1975–76 TO 1976–77, BY SEX, ALL DEPARTMENTS AND CHAIRMAN'S GROUP

Item	All Ranks	Professors	Associate Professors	Assistant Professors	Instructors	Other Faculty
All Departments:						
Faculty released end of AY 1975–75:[a]						
Full time, number	259	43	38	121	48	9
Women as percent of total	6.6	0	5.3	9.1	6.2	[b]
Part time, number	117	1	5	14	50	47
Women as percent of total	21.4	0	[b]	7.1	24.0	23.4
New Hires, faculty, AY 1976–77:						
Full time, number	407	22	32	251	81	21
Women as percent of total	10.8	4.5	9.4	10.0	16.0	9.5
Part time, number	160	4	1	29	88	38
Women as percent of total	15.0	0	0	6.9	13.6	26.3
Net change, 1975–76 and 1976–77:						
Full time, number	+148	−21	−6	+130	+33	+12
Women, number	+ 27	+ 1	+1	+ 14	+10	+ 1
Part time, number	+ 43	+ 3	−4	+ 15	+38	− 9
Women, number	− 1	0	−1	+ 1	0	− 1
Chairman's Group:						
Faculty released end of AY 1975–76:[a]						
Full time, number	79	21	13	35	6	4
Women as percent of total	5.1	0	15.4	5.7	0	0
Part time, number	44	0	0	3	19	22
Women as percent of total	18.2	0	0	0	21.1	18.2
New Hires, Faculty, AY 1976–77:						
Full time, number	107	12	5	71	14	5
Women as percent of total	4.7	0	0	4.2	7.1	[b]
Part time, number	39	0	0	0	31	8
Women as percent of total	5.4	0	0	0	12.9	[b]
Net Change, 1975–76 and 1976–77:						
Full time, number	+ 28	− 9	−8	+ 36	+ 8	+ 1
Women, number	+ 1	0	−2	+ 1	+ 1	+ 1
Part time, number	− 5	0	0	− 3	+12	−14
Women, number	− 2	0	0	0	0	− 2

Source: See Table 5.

[a]Resignation, retirement, and nonrenewal of contracts; AY denotes academic year.

[b]Percentage not shown when fewer than 10 in cell.

APPENDIX TABLE 7—PRIOR ACTIVITY OF NEW 1976–77 APPOINTMENTS AND PRESENT ACTIVITY OF "RELEASES" FOR 1975–76, BY TYPE OF DEPARTMENT AND SEX
(Shown in Percent)

Highest Degree Offered by Department and Activity of Faculty	New Hires in 1976–77[a] by Prior Year Activity		Those Released for 1976–77 by Present Activity[a]	
	Male	Female	Male	Female
All Departments	100.0	100.0	100.0	100.0
U.S. business and industry	2.9	3.0	9.0	0
Fed./state government in U.S.	4.2	4.5	9.3	7.7
Outside U.S.	2.7	0	7.1	7.7
Faculty at another school	26.3	23.9	37.7	50.0
Bank or finance institution	1.0	0	4.1	0
Research institution	2.4	3.0	6.0	0
Graduate student	54.8	55.2	9.0	7.7
Postdoctoral program	1.2	1.5	1.1	3.8
Unemployed	0	4.5	1.9	0
Unknown	0	0	3.0	3.8
Other	4.2	4.5	11.9	19.2

Appendix Table 7—(*Continued*)

Highest Degree Offered by Department and Activity of Faculty	New Hires in 1976–77[a] by Prior Year Activity		Those Released for 1976–77 by Present Activity[a]	
	Male	Female	Male	Female
Chairman's Group	100.0	100.0	100.0	100.0
U.S. business and industry	1.0	0	6.4	0
Fed./state government in U.S.	4.6	0	8.5	0
Outside U.S.	1.5	0	8.5	[a]
Faculty at another school	22.5	15.4	41.5	[a]
Bank or finance institution	1.0	0	7.4	0
Research institution	3.1	7.7	5.3	0
Graduate student	63.5	61.5	9.6	0
Postdoctoral program	1.5	0	0	0
Unemployed	0	15.4	0	0
Unknown	0	0	1.1	0
Other	1.5	0	11.7	[a]
Ph.D., other	100.0	100.0	100.0	100.0
U.S., business and industry	8.0	0	8.7	0
Fed./state government in U.S.	3.4	7.1	11.3	[a]
Outside U.S.	4.5	0	8.8	[a]
Faculty at another school	23.9	14.3	30.0	[a]
Bank or finance institution	2.3	0	3.8	0
Research institution	2.3	0	10.0	0
Graduate student	45.5	71.4	5.0	0
Postdoctoral program	3.4	0	2.5	[a]
Unemployed	0	0	1.2	0
Unknown	0	0	1.3	0
Other	6.8	7.1	17.5	0
M.A.	100.0	100.0	100.0	100.0
U.S. business and industry	0	0	15.4	0
Fed./state government in U.S.	4.8	8.3	7.7	0
Outside U.S.	0	0	7.7	0
Faculty at another school	29.0	33.3	38.5	[a]
Bank or finance institution	0	0	0	0
Research institution	0	0	0	0
Graduate student	56.5	58.3	11.5	[a]
Postdoctoral program	0	0	3.8	0
Unemployed	1.6	0	3.8	0
Unknown	0	0	0	0
Other	8.1	0	11.5	[a]
B.A.	100.0	100.0	100.0	100.0
U.S. business and industry	3.1	7.1	10.3	0
Fed./state government in U.S.	3.9	3.6	8.8	10.0
Outside U.S.	3.9	0	2.9	0
Faculty at another school	30.5	28.6	41.2	50.0
Bank or finance institution	1.0	0	1.5	0
Research institution	3.1	3.6	4.4	0
Graduate student	51.6	42.8	11.8	10.0
Postdoctoral program	0	3.6	0	0
Unemployed	0	3.6	4.4	0
Unknown	0	0	8.8	10.0
Other	3.1	7.1	5.9	20.0

Note: Percentages may not add to 100.0 due to rounding.
Source: See Table 5.
[a]Percentage not shown when fewer than 10 in cell.