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CAREER PLANS AND EXPECTATIONS OF YOUNG
WOMEN AND MEN: THE EARNINGS GAP
AND LABOR FORCE PARTICIPATION

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ABSTRACT

Using detailed information on the career plans and earnings expectations of college business school seniors, we test the hypothesis that women who plan to work intermittently choose jobs with lower rewards to work experience in return for lower penalties for labor force interruptions. We find that while men and women expect similar starting salaries, women anticipate considerably lower earnings in subsequent years, even under the assumption of continuous employment after leaving school. While it is also true that women in the sample plan to work fewer years than men, these differences do not explain the observed gender differences in expected earnings profiles. We also find no evidence that gender differences in expected earnings have any effect on the number of years these women plan to be in the labor market.

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Though the male-female earnings gap has been declining in recent years, it remains quite substantial. Because regressions taking into account a wide variety of variables have failed to explain all of this gap, women's lower earnings are often in part ascribed to discrimination. Alternatively, it has been suggested that because women do not intend to work continuously, they choose jobs requiring smaller investments in human capital, and hence with flatter lifetime earnings profiles. Previous research on this issue has not been conclusive, in part because it has generally been based on data describing outcomes, when evidence on plans and expectations is needed. A unique data set on college business school seniors, collected for this purpose, remedies this deficiency.

This paper begins with a brief review of explanations of the earnings gap. The next section describes the data collection and the information obtained for this study, followed by an examination of some of the interesting characteristics of the men and women in this sample. Finally, the evidence is analyzed and discussed and some conclusions and policy recommendations are offered.

Explanations of the Male-Female Earnings Gap

The human capital explanation for the earnings gap emphasizes women's weaker labor force attachment as the major reason why they earn less than men (e.g., Mincer and Polachek, 1974; Polachek, 1975, 1981).¹ Its basic argument is as follows: It is assumed that women, unlike men, tend to work for pay intermittently because of household responsibilities, and the extent to which this is the case is largely

exogenously determined.² Hence, assuming that women and men have the same characteristics, each will, nonetheless, choose different jobs requiring different human capital investments. It is expected that the jobs selected by women will offer lower returns to experience, but also carry smaller penalties for labor force interruptions. Because women intend to spend substantial amounts of time out of the labor market, they are willing to accept lower rewards for experience in return for lower depreciation rates during periods of work interruption. Consequently, the model predicts that women's earnings profiles will be flatter than those of men. Thus, all else equal, women are expected to have higher starting salaries, but after some minimal time, earnings will be higher for males than for females with the same level of experience.³ While the notion of "job" in this model is often equated with "occupation," it could equally well be applied to career trajectories within occupations.

Additionally, it is often argued that women are at a disadvantage in career advancement because they do not have the same priorities. Due to the traditional division of labor in the family, women are believed to seek jobs requiring less effort (Becker, 1985)⁴ and are thought to be less concerned with professional progress and intellectual challenges, more with comfort, flexible hours and a pleasant work environment (e.g., Applebaum and Koppel, 1978; Daymont and Andrisani, 1988; Filer, 1985). These supply-side arguments complement the human capital model presented above.

A number of critics have taken issue with this model (e.g., Corcoran, Duncan and Ponza, 1984; England, 1982), mainly on the ground

that rates of depreciation and wage growth for women are similar in male and female occupations, and that women with more continuous labor force attachment do not tend to choose different jobs than other women. Such findings raise serious doubts about an explanation of the earnings gap which relies so heavily on these differences in depreciation of wage rates during work interruptions and related differences in rewards for experience.⁵ At the same time, this evidence is not conclusive.

As Gronau (1988, p. 280) points out, "Economic theory discusses the effect of planned (or future) career interruptions on current wages. Most empirical studies, however, examine the effect of past interruptions."⁶ Clearly, these are frequently not the same.⁷ Hence some women are likely to end up in jobs ill-suited to maximizing their lifetime earnings, thus reducing the chances of finding the relationship predicted by the human capital model. These difficulties can be avoided by examining planned labor force participation and anticipated earnings. For it is expectations, whether or not they prove to be correct, that determine a person's choices. In order to obtain this information we conducted a survey of a group of young people who are likely to be very career oriented and hence have probably given more thought to job-related issues than most of their contemporaries.

The chief alternative explanation of women's lower earnings is that they are discriminated against (Becker, 1957). We offer no direct evidence on this point. However, lower anticipated earnings for equally qualified women, regardless of their cause, are likely to introduce feedback effects (e.g., Blau and Ferber, 1986; Weiss and

Gronau, 1981). Thus women may plan to spend less time in the labor market, at least in part, because they expect lower rewards. This in turn further depresses their earnings. Our data enable us to test this hypothesis by examining the effect of expected earnings on labor force participation plans.

Data Collection and Sample Description

Questionnaires were sent to all 722 members of the 1987-88 senior class in the College of Commerce and Business Administration (CBA) of the University of Illinois, Urbana-Champaign. This group is particularly suitable for our purposes. Though they are not representative of the entire population, or even of all college students, the women in our sample are of interest because they are likely to be representative of trends among recent cohorts who are spending increasingly more time in the labor market. Further, this is even more true of the college educated who are also increasingly moving into previously male occupations. Another major advantage of this sample is that we have excellent controls for quality and type of education.

After two follow-up waves, responses were received from 227 of the 389 women, and 161 of the 333 men, not all of them entirely complete. Background information for the sample is shown in Table 1.⁸ Though the response rate was higher for women than for men, 58 percent as compared to 48 percent, for both sexes the respondents are reasonably representative of the whole class with respect to distribution by department and grade point average (GPA) (see Table A-1).

Average grades are virtually the same for male and female respondents. There is, however, a substantial difference in their representation by department. Students in the College of Business Administration may major in Accountancy, Business Administration, Finance, or Economics. The vast majority opt for the first three.⁹ Among those, men are considerably less likely to be in Business Administration than women while the opposite is true of Finance and, to a lesser extent, Accountancy. The family backgrounds of the male and female students are in some respects quite similar. The parents of both groups are disproportionately in executive and professional occupations. However, women students are more likely than men to have mothers who are currently executives and professionals, and less likely to have mothers who are currently full-time homemakers. Their mothers had also spent a somewhat higher proportion of prior years in the labor force. This suggests that employed mothers, and especially those who pursue careers, provide the kind of role model that motivates daughters to go to college and choose career-oriented majors.

With respect to their own family plans, the vast majority of men and women plan to marry, however men intended to have somewhat more children than women. The expected number of children for young women in this sample (2.4) is quite similar to that reported by the Bureau of the Census (1988) for recent college graduates (2.2) and young managers and professionals (2.1).

This information provides some insights about the sample we are dealing with. The remainder of the questionnaire focuses on career plans and expectations. Table 2 shows some of the results. First, as

is assumed by proponents of the human capital explanation, men plan to work more years full-time and fewer years part-time, and are less likely to anticipate dropping out of the labor force before retirement, though these differences are not as great as has actually been the case, even in relatively recent years. According to the Bureau of the Census (1987) employed women college graduates between ages 45 and 64 had spent, on average, 23 percent of potential work years away from work, compared to only 1 percent for men. The planned proportions for our sample are 14 percent for women and 4 percent for men, including part-time employment.¹⁰ It is also interesting that women in our sample plan to retire no earlier than men.

These differences may reflect the nature of our sample, college students in career-oriented fields, and/or general increases in labor force attachment of women in younger cohorts (Smith and Ward, 1984). There is, in addition, a question as to whether women are actually likely to work as much as they plan to. Some evidence on this issue is provided by Shaw and Shapiro (1987). Using data from the National Longitudinal Study they found that young women who were between ages 14 and 24 in 1968 initially substantially underestimated their future labor force participation at age 35, while their plans became more nearly realistic as they approached that age. There was no evidence of a tendency of young women to overestimate their future participation.

As would be expected on the basis of their majors, women and men selected somewhat different first choices from among 10 occupations which, according to the CBA Placement Office, comprise the great majority of those students from this College actually take upon

graduation.¹¹ A larger proportion of men opted for financial/credit analyst, and a somewhat larger proportion of women selected personnel/labor relations specialist and marketing analyst. The differences otherwise are more modest, with slightly more men choosing accountancy, and an almost equal proportion of men and women choosing systems analyst, commercial loan officer, and management trainee, by far the most popular job.

Expected salaries by sex are shown in the bottom of Table 2. Because of our interest in the determinants of expected earnings profiles for jobs and in the effect of these profiles on labor force participation plans, we asked the students how much they would expect to earn initially and after 10 and 20 years if they were to be continuously employed in their preferred occupation after leaving school. As may be seen in the table, men and women in the sample anticipate receiving very similar salaries upon graduation--the female-male ratio is 97 percent. The differential in expected salaries, however, increases over time, with the ratio falling to 79 percent after 10 years and to 72 percent after 20 years. Thus women do anticipate flatter earnings profiles.

Table 3 presents female-male earnings ratios within occupations based on expected salaries in each student's top three choices of occupations.¹² With the exception of personnel and labor relations specialists and systems analysts, the fanning out of male and female expected salaries observed on the basis of overall averages occurs within each occupation as well, although not always to the same extent. Anticipated salary differentials are particularly large for

the managerial and financial/credit analyst occupations which were the first choice of 47.2 percent of the men and 41.5 percent of the women in our sample. The expected differentials are, however, in most cases somewhat smaller than actual differentials projected on the basis of 1980 age-earnings data for men and women. Thus, under the assumption of continuous employment, women in the sample do expect to do relatively better than women did in the past when many worked intermittently. Nonetheless, these rather sizable anticipated differentials for continuous employment within occupations would superficially appear to contradict the human capital explanation for gender differences based on the notion that women choose occupations with flatter profiles. It may be, however, that women and men select different detailed occupations or different career trajectories within these categories which require different levels of human capital investments. This issue is investigated more systematically in regression analyses presented below which examine the impact of labor force participation plans on expected earnings profiles.

Last, we asked the students to choose the 3 most important and the 3 least important among 15 job characteristics listed. The results are shown in Table 4. In general, there are striking similarities between the priorities of women and men, as well as some differences. The same three characteristics are rated highest by both groups, and receive very few ratings as lowest from either group: salary, opportunity for advancement, and intellectual challenge,¹³ though men do opt more often for the first two, women for the third.¹⁴ Also, there are no differences by gender in the five characteristics that receive

the lowest ratings: earning acclaim, fringe benefits, not too demanding, opportunity to travel, and flexible hours. Women, however give more low rankings to earning acclaim; men more to opportunity to travel.

Certain aspects of these findings provide modest support for some aspects of traditional views of women's and men's preferences. The greater importance men attach to salary, opportunity, advancement and job security, as well as women's greater emphasis on work environment and, to a lesser extent, on pleasant co-workers, are in line with generally accepted perceptions of gender differences. On the other hand, women's greater concern with having a challenging job, but not with being close to family, pleasant geographic location, or flexible hours is contrary to them. The substantial similarities between the women and men in this sample are less surprising when it is kept in mind that they chose a relatively exacting and nontraditional career path, and that earlier studies (e.g., Diploy, 1987; Ferber and Green, 1989) also found that women and men among successful managers differed considerably less than among other workers.

These descriptive data tell us a good deal about the background, plans, and expectations of the members of the sample. In the next section we turn to the central issue of this paper, an examination of the relationship between planned labor force participation and expected earnings, in order to shed further light on explanations of the male-female earnings gap.

Testing the Hypotheses

Given our data on plans and expectations, we are able to test the human capital hypothesis of women's lower earnings. We also examine whether there are feedback effects of expectations of lower earnings on women's work plans. Again, we focus upon the salaries which students expect to earn in their preferred occupation if they were to work continuously after leaving school. The dependent variables are the natural logs of expected salaries at the beginning of the career, and 10 and 20 years later. The models are estimated for the total sample and for women and men separately in order to investigate the extent of gender differences in coefficients.

To test the human capital hypothesis that planned labor force participation will influence expected earnings profiles, number of years the respondents planned to work full-time is entered in the regression.¹⁵ All else equal, it is expected that individuals who anticipate shorter work lives will select jobs with flatter earnings profiles. Thus, years of planned full-time work are expected to be inversely related to beginning salaries and positively related to salaries 10 and 20 years later. Priorities given to various groupings of job characteristics are also introduced, in order to determine whether differences in tastes have any effect on earnings.¹⁶ These items are added to the more usual variables of college major, GPA and sex.¹⁷

The results of the three regressions are seen in Table 5. (Means and standard deviations of the variables for the regression sample are shown in Appendix Table A-2). Overall, we find no significant gender

differences in expected starting salaries, ceteris paribus. These results are similar to those shown in Table 2, where other variables were not accounted for, and in Table 3, where expected salaries were shown for each of nine occupations. However, as is the case for the unadjusted gender differentials, men expect considerably higher salaries in later years. Sex is significant at the 1 percent level in these regressions, with men expecting approximately 18 percent higher salaries than women 10 years after graduation and 26 percent higher salaries 20 years later, all else equal. These differences are large relative to the unadjusted gender differentials in the log of earnings of .236 and .322, respectively. Thus, the steeper earnings profiles which men anticipate for continuous employment do not appear to be explained to any great extent by gender differences in expected labor market experience, work priorities, or the other variables included in the regression.

Contrary to the predictions of human capital theory, expected labor force participation has no significant effect on expected earnings in any of the regressions. We do not find expected beginning salaries to be higher for those who plan to spend less time in the labor force. Nor does greater planned labor force attachment have a significant positive effect on expected salaries in later years. Varying priorities for different job attributes also have little or no effect for either men or women. Placing a high priority on salary does appear to have a significant positive effect on expected beginning salaries. Also, placing importance on the job being not too demanding significantly reduces expected beginning salaries as well as

those 20 years later. However, it may be recalled that this job characteristic is regarded as just about equally unimportant by women and men. Hence we conclude that at least in this admittedly selected sample of young people such differences in tastes as do exist do not help to explain why men expect higher earnings than women in later years.

An examination of the separate regressions for women and men points toward higher expected returns for GPA in later years giving men the advantage, and suggests that they have greater confidence in obtaining raises, and presumably promotions, in return for better performance.¹⁸ The crucial question, which our data do not enable us to answer, is to what extent these different expectations are realistic.

In view of the possibility that men's steeper earnings profiles may be related to different occupations selected or to further schooling, we also ran regressions with these variables added. The coefficients for them were not significant, and the explanatory power of the regressions remained essentially the same. Hence there is no evidence here that these variables influence earnings, after controlling for college major and the other variables.

One problem with the approach used so far is the implicit assumption that labor force participation plans are exogenous, although a more general theory would suggest that they are likely to be made simultaneously with other career decisions. Even though the bias of the OLS regression is likely to overestimate rather than to understate the effect of work plans, we therefore estimate a two-equation model

using two-stage least squares, which takes into account the interdependence of planned labor force participation and earnings expectations.¹⁹

Virtually all the men anticipate working continuously until retirement (except for withdrawals for full-time schooling). Therefore, these relationships are examined only for the women. We focus on salary 20 years after graduation, because that is where the largest difference in expected earnings between women and men is obtained. The determinants of number of years of planned full-time work include, in addition to expected salary 20 years after graduation, the number of children the woman expects to have as a measure of the anticipated value of home time; grade point average as a proxy for ability, and three background variables, father's and mother's occupation, and the proportion of years the respondent's mother spent in the labor market, as determinants of the daughter's career-orientation and taste for market work.²⁰

The results are shown in Table 6. Note that the sample size is reduced for these estimates due to missing values on the additional variables included in the model as determinants of planned work experience. (Means and standard deviations of the variables are shown in Appendix Table A-3.) The results again give little support to the human capital explanation of the earnings gap in that number of years of expected full-time employment does not influence expected earnings. On the other hand, the results also do not lend support to the proposition that women's lower earnings produce feedback effects causing them to reduce their labor force participation in that

expected salary does not significantly affect planned full-time work. They do, however, provide some evidence on the other determinants of labor force participation plans.

Predictably, children have a negative effect. Each additional child reduces women's planned full-time work by 1.82 years. Thus, at the mean expected number of children, 2.4, full-time work is reduced by 4.37 years. Also of interest is the influence of parents' occupational status, and of the amount of time the mother was employed, clearly suggesting that the labor force participation plans of these women are, at least in part, determined by family background. Beyond that, the relevance of mother's status has important implications about the effect of current changes in women's labor force participation on future developments: Women's rapidly changing occupational and employment status may be expected to provide continued impetus for their daughters to move further in the same direction. It may seem surprising that a high occupational status of the father has a negative effect on women's work plans, all else equal. However, since husband's earnings are inversely related to women's labor force participation, this finding may plausibly be interpreted as indicating that these young women anticipate marrying a man with similar earnings prospects to their father.

Conclusion

Because young people make decisions about jobs and careers on the basis of expectations, information based on outcomes is suggestive but not conclusive for testing hypotheses about the way labor force participation influences earnings, or about the way earnings influence

labor force participation. Therefore, we collected data on work plans and anticipated earnings of college business school seniors that enable us to avoid this difficulty. They were chosen because they are likely to be relatively knowledgeable and career oriented and hence would be likely to have made plans and formulated expectations. Further, the women in this group represent a cohort that is particularly important because they are among the vanguard who are forging ahead in the labor market in a way that increasingly more women want to emulate.

We found that, all else equal, women expect to earn about as much as men at the beginning of their careers, but not later on. Although women did anticipate shorter work lives than men, we found no effect of planned labor force participation on expected earnings profiles. This does not mean actual earnings would not be influenced by actual interruptions. It does, however, show that expected returns to experience for continuous employment are not significantly different in jobs chosen by those who plan to spend different amounts of time in paid work. Thus, we still have no adequate explanation for the full extent of women's lower expected earnings in later years for this group of young women.

At the same time, these findings are consistent with the interpretation that while these women do not expect to be discriminated against at the time they look for their first job, they anticipate that they will do less well in terms of promotions. Such a perception may be based on the fact that the male-female earnings gap actually increases with age, and on the belief of the respondents that this is

the case even when there are no differences in qualifications and tastes. This study does not shed any light on the question of whether this belief is justified or whether these lower expectations may cause women to settle for lower salaries without striving as hard as would men who have higher expectations. Such speculations receive some support from a recent study of college students by Subich et al. (1989) which found clear evidence that men were more willing to take risks, as well as more equivocal evidence that they were more confident. Our study does, however, provide evidence that it is not lower expected earnings that cause women to spend less time in the labor market, and, to that extent, militates against the importance of such feedback effects for this group.

The results of this study clearly have potential policy implications. On the one hand, to the extent the expectations of these students are realistic, they provide no reason to be complacent about equal opportunity having been achieved by women, not even young, well-educated career-oriented women. They no longer expect to encounter difficulties in getting in the door, but that does not mean that the same is true for the portals to the executive suite. Continued efforts on the part of government, business, and individuals to ensure equal rewards for equal qualifications would therefore still be desirable. On the other hand, our findings suggest that increasing the earnings of these women further may not have much influence on their allocation of time between household and employment.

Parenting is by far the dominant reason why many of these women plan to reduce their labor force participation. It is, of course,

entirely possible that other factors, not considered in this study, such as social pressures and the availability of high-quality and convenient child care, are also important. If so, government action, which can, to a greater or lesser degree, set the tone and establish standards, both through its own actions and by influencing employer policies could make a difference. Even in the absence of such policies, however, our findings suggest that the greater labor force participation of women whose daughters are now reaching adulthood set the stage for the further changes in labor force attachment of the next generation, which in turn may be expected to reduce resistance to promoting women to positions of responsibility.

Footnotes

¹ A good deal of the emphasis in this work is on explaining occupational segregation, but our investigation touches on this subject only tangentially.

² It is generally simply assumed that women, but not men, have household responsibilities. Becker (1981) attributes this division of labor to comparative advantage. But that, in turn, raises the question of why women would have a relative advantage in homemaking. These issues are clearly beyond the scope of this paper. We merely want to point out that they are fundamental to any hypothesis that begins with differences in male and female labor force attachment.

³ Human capital theory also suggests that a person who does not plan to work continuously has less incentive to invest in formal human capital, say by acquiring schooling, because there would be fewer years to collect the additional returns. Since the members of our sample, to be described later, all have the same amount of education, we are in no position to address this issue.

⁴ An empirical study by Bielby and Bielby (1985) does not support the Becker view. They find that women actually put more effort into paid work than do men, though their conclusion is based on self-reported data.

⁵ Sandell and Shapiro (1980) and Shaw and Shapiro (1987), using NLS panel data give partial support to the human capital explanation. Both studies find that planning to work yielded a substantial wage advantage, but Shaw and Shapiro showed no evidence of greater returns to work experience. Their data, in any case, have some shortcomings for this purpose. Among their limitations is the fact that the respondents are only asked whether they expect to be working at age 35, not how many years they plan to be in the labor force.

⁶ Gronau (1988) uses expectations data in his recent research. He emphasizes the importance of skill requirements as an explanation of earnings differentials. Not only is the skill intensity in men's jobs high, but it is strongly related to their labor force experience, while it is far lower in women's jobs, independent of their work plans, and only slightly related to experience. Gronau concludes that his findings lend support to the existence of wage discrimination through occupational segregation, and that women face restrictions on their job choice.

⁷ Shaw and Shapiro (1987), found that young women tended to underestimate the extent to which they would be employed at age 35. We shall return to this point later.

⁸ We did not ask for information about race and ethnicity because only about 5 percent of the students in CBA are blacks or other minorities.

⁹ At this University students have the option of being Economics majors in the College of Liberal Arts and Sciences, as well as in the College of Business Administration, and substantial numbers of Liberal Arts students select this major.

¹⁰ Anticipated years of full-time schooling account for most of the time men plan to be out of the work force, while time spent in full-time parenting accounts for the bulk of women's expected time out of the labor market.

¹¹ An open-ended question asked about the job respondents hoped to get upon graduation. We found that of the 217 women and 156 men who answered that question 182 and 113 respectively named the one they gave first preference among the 10 options listed. Of the others, 17 women and 21 men planned to become attorneys.

¹² Data comparing students' expected salaries to actual salaries are presented in Appendix B. We find that both men and women tended to overestimate salaries as compared to prevalent ones. Similar findings are reported for American college students by Subich et. al. (1989). On the other hand, a British study (Williams and Gordon, 1981) found that student's expectations were accurate.

¹³ Lest there be concern that these choices were influenced by the presentation of the questions, it should be noted that they were not grouped in the questionnaire.

¹⁴ Anderson and Anderson (1988) similarly found that women as compared to men are more interested in a "feeling of accomplishment," and in "interesting work," and less concerned with "money."

¹⁵ Using total number of years students expected to be in the labor force instead did not change the outcome. When number of years students expected to work part-time was entered separately, the coefficient was not significant.

¹⁶ Preferences for particular characteristics of the job were grouped as shown in Table 4, except that those in the "other" category were omitted. Using them did not add to the explanatory power of the regressions. The ones included were expressed as an index: 3 = any ranked first; 2 = any ranked second; 1 = any ranked third; -1 = any ranked thirteenth; -2 = any ranked fourteenth; -3 = any ranked fifteenth. Specifying these variables as dummies produced similar results regarding their impact on gender differences in earnings.

¹⁷ Unlike Gronau (1988), we have no information on skill requirements for jobs, which he found to be very important in determining wages. He also found, however, that there were no significant differences in this respect between female and male professional and technical workers, which covers all the occupations used in this study except management trainees.

¹⁸ Twenty years after graduation, when the earnings differential is largest, the difference in returns to GPA evaluated at the overall sample mean (which is virtually the same for men and women) is 0.596. This is more than sufficient to account for the gross gender difference in expected earnings of 0.322. (Differences in the constant term actually favor women.) These findings are reminiscent of those in Ferber and Green (1989) which showed that the reward structure of a sample of individuals self-identified as "top management" provided virtually no evidence that differences in human capital characteristics had any effect on women's earnings, though they influenced those of men.

¹⁹ In view of the crucial role atrophy plays in human capital theory (Polachek, 1981), we also ran a set of two stage regressions using that variable instead of expected salary, but found that we were singularly unsuccessful in explaining atrophy, and that it added nothing to the explanation of work plans. The atrophy rate was calculated by finding how much less these students expected to earn 10 years after leaving school, if they were to drop out of the labor market for years 5-9, as compared to working continuously during the whole period.

²⁰ The instruments in the first-stage regressions included all the exogenous variables in both the planned full-time work and expected salary equations. Since number of children may be viewed as, at least in part, endogenous, we also ran the same model excluding this variable from both the first- and second-stage regressions. The R^2 was somewhat lower for years worked, and somewhat higher for salary, but the same variables remained significant.

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Table 1

Background Information for Sample Members
(sample sizes in parentheses)

<u>Department^a</u> (%)	<u>Women</u>	<u>Men</u>
	(227)	(161)
Accountancy	30.0	34.8
Business Administration	40.1	24.8
Economics	2.2	3.7
Finance	26.9	36.7
N.A.	0.9	0.0
Total	100.0	100.0
<u>Grade Point Average</u>	4.3 (227)	4.3 (161)
<u>Mean Age</u>	21.6 (227)	21.8 (159)
<u>Family Plans</u>		
Plan to be married (%)	94.0 (217)	92.1 (152)
Mean number of children planned	2.4 (194)	2.8 (124)
<u>Mother's Work Status</u>		
Proportion of years in the labor force (%)	43.8 (225)	40.8 (157)

<u>Parents' Occupations^a</u> (%)	<u>Women</u>		<u>Men</u>	
	<u>Mother</u> (226)	<u>Father</u> (222)	<u>Mother</u> (159)	<u>Father</u> (155)
Executive	12.0	25.7	4.4	29.0
Professional & technical	23.5	27.9	18.9	28.4
Sales	5.8	9.5	6.3	10.3
Clerical	22.1	3.2	18.9	0.0
Blue collar	2.7	10.8	3.1	15.5
Other	4.0	14.9	8.2	6.5
Homemaker	28.3	0.0	36.5	0.0
Retired	1.8	8.1	3.8	10.3
Total	100.0	100.0	100.0	100.0

^a Figures may not add up precisely because of rounding.

Table 2
Career Plans and Salary Expectations

<u>Labor Force Participation Plans</u>		
	Women (218)	Men (157)
Mean number of years work full-time	29.1	37.7
Mean number of years work part-time	6.2	1.2
Mean number of years retired before 2038	9.1	9.6
Mean number of years out of labor force before retirement	5.6	1.5
<u>First Choice Among 10 Most Usual Occupations</u>		
	(224)	(161)
Accountant	27.7%	30.4%
Management trainee	26.3	23.6
Financial/credit analyst	15.2	23.6
Sales representative or insurance agent	3.1	4.3
Personnel/labor relations specialist	5.4	3.7
Purchasing agent	3.1	0.6
Marketing analyst	11.2	5.6
Systems analyst	1.8	2.5
Real estate broker	1.3	1.2
Commercial loan officer	4.9	4.3
<u>Expected Salary^a</u>		
	(203)	(148)
Beginning	23,327	23,983
Ten years after graduation	44,063	55,793
Twenty years after graduation	67,076	92,561

^a Geometric means. Assumes continuous employment after leaving school.

Table 3

Female/Male Ratios of Expected and Projected Actual Salaries^a
(1987 Dollars)

		Beginning	Ten Years Later	Twenty Years Later
Accountants:	Expected	98.8	78.4	76.1
	Actual	99.4	71.2	67.7
Managers:	Expected	96.0	77.3	67.4
	Actual	95.0	73.1	61.4
Financial/credit analyst:	Expected	97.3	82.8	68.8
	Actual	94.8	72.2	56.5
Sales representatives, insurance agents:	Expected	100.2	88.3	82.8
	Actual	96.2	81.3	65.8
Personnel and labor relations specialists:	Expected	83.5	88.8	84.0
	Actual	86.3	71.2	63.0
Purchasing agents:	Expected	98.9	86.0	91.0
	Actual	n.a.	n.a.	n.a.
Marketing analysts:	Expected	93.1	80.8	80.0
	Actual	96.6	80.8	78.5
Systems analysts:	Expected	91.6	84.4	91.2
	Actual	95.8	90.7	86.2
Real estate brokers:	Expected	97.3	100.6	71.0
	Actual	96.6	82.5	70.3

^aExpected salaries assume continuous employment after leaving school. Actual salaries are projected based on data for beginning salaries and estimated growth rates based on Census data on earnings^a by age and sex for year-round, full-time workers (see Appendix B).

Table 4

Proportion of Respondents Ranking Job Characteristics Among
Highest and Lowest Three Priorities

	<u>Women</u>		<u>Men</u>	
	<u>High</u>	<u>Low</u>	<u>High</u>	<u>Low</u>
Salary	52.4	4.6	67.5	4.5
Opportunity for advancement	58.7	1.4	65.0	1.3
Challenging job				
Intellectual challenge	55.6	0.5	41.9	3.8
Independent/work autonomy	19.6	10.6	11.9	11.5
Pleasant environment				
Near family	8.9	19.3	11.9	22.3
Work environment	42.2	1.8	32.5	2.6
Pleasant geographic location	6.2	15.1	11.3	17.8
Pleasant co-workers	19.1	2.8	15.6	0.6
Not demanding	1.8	75.2	0.0	76.4
Other				
Making contribution to society	6.2	28.4	9.4	26.1
Earning acclaim	2.2	50.0	2.5	39.5
Fringe benefits	4.0	11.9	2.5	10.2
Job security	13.8	5.5	23.8	3.8
Opportunity to travel	5.3	38.5	2.5	47.1
Flexible hours	2.2	33.5	1.9	31.2

Table 5

Determinants of Expected Ln Salary
(standard errors)

	Beginning			Ten years after graduation			Twenty years after graduation		
	Total Sample (351)	Women (203)	Men (148)	Total Sample (351)	Women (203)	Men (148)	Total Sample (351)	Women (203)	Men (148)
Intercept	9.574*** (0.086)	9.643*** (0.096)	9.466*** (0.160)	9.684*** (0.218)	10.153*** (0.267)	9.303*** (0.381)	9.967*** (0.285)	10.393*** (0.348)	9.672*** (0.504)
Department ^a									
Accountancy	0.169*** (0.019)	0.169*** (0.020)	0.166*** (0.040)	0.437*** (0.049)	0.422*** (0.055)	0.444*** (0.096)	0.547*** (0.065)	0.510*** (0.072)	0.590*** (0.127)
Finance	0.071*** (0.020)	0.076*** (0.021)	0.069* (0.040)	0.150*** (0.051)	0.136** (0.058)	0.175* (0.094)	0.209*** (0.066)	0.210*** (0.076)	0.240* (0.124)
Grade point average	0.081*** (0.019)	0.070*** (0.021)	0.096*** (0.036)	0.166*** (0.049)	0.073 (0.059)	0.274*** (0.085)	0.173*** (0.064)	0.110 (0.077)	0.248** (0.112)
Priorities viewed as important ^b									
Salary	0.016** (0.008)	0.013 (0.009)	0.019 (0.014)	-0.004 (0.020)	-0.023 (0.024)	0.012 (0.034)	-0.002 (0.026)	-0.019 (0.032)	0.006 (0.045)
Challenging job	0.007 (0.007)	0.002 (0.008)	-0.002 (0.013)	0.001 (0.018)	-0.010 (0.022)	0.008 (0.030)	0.004 (0.023)	-0.016 (0.029)	0.014 (0.040)
Pleasant environment	-0.0005 (0.006)	-0.006 (0.006)	0.007 (0.011)	-0.009 (0.015)	-0.016 (0.018)	0.002 (0.025)	-0.002 (0.019)	-0.023 (0.023)	0.020 (0.033)
Not too demanding	-0.015** (0.006)	-0.014** (0.007)	-0.021 (0.013)	-0.019 (0.016)	-0.008 (0.019)	-0.048 (0.031)	-0.037* (0.021)	-0.028 (0.024)	-0.071* (0.041)
Promotion	0.003 (0.007)	0.001 (0.008)	0.003 (0.013)	0.028 (0.018)	0.015 (0.021)	0.042 (0.031)	0.035 (0.023)	0.021 (0.028)	0.043 (0.041)
Number of years expect to work full-time	0.001 (0.001)	0.0001 (0.0008)	0.001 (0.002)	0.002 (0.002)	0.003 (0.002)	0.002 (0.004)	0.002 (0.003)	0.001 (0.003)	0.005 (0.005)
Sex, M=1, F=0	0.004 (0.018)	---	---	0.184*** (0.045)	---	---	0.258*** (0.059)	---	---
Adjusted R ²	0.238	0.298	0.166	0.266	0.223	0.193	0.252	0.197	0.162

^aBusiness Administration and Economics is omitted category.^bCategories as seen in Table 4.

***Significant at 1 percent level.

**Significant at 5 percent level.

*Significant at 10 percent level.

Table 6

Two-Stage Least Squares Results for Number of Years
Women Plan to Work Full-Time and Ln Expected Salary
Twenty Years After Graduation
(n = 170)

<u>Number of Years Plan to Work Full-Time</u>		
	<u>Coeff</u>	<u>Standard Error</u>
Intercept	61.925*	(36.597)
Number of children	-1.822***	(0.673)
Father professional or executive	-4.020***	(1.537)
Mother professional or executive	3.952**	(1.745)
Proportion of years mother was in labor force	5.593*	(2.917)
Grade point average	1.925	(1.998)
Ln salary twenty years after graduation	-3.496	(3.303)
Adjusted R ²	0.135	
<u>Ln Expected Salary Twenty Years After Graduation</u>		
Intercept	10.526***	(0.464)
Department ^a		
Accountancy	0.481***	(0.084)
Finance	0.205**	(0.087)
Grade point average	0.106	(0.090)
Priorities viewed as important ^b		
Salary	-0.031	(0.037)
Challenging job	-0.028	(0.035)
Pleasant environment	-0.034	(0.029)
Not too demanding	-0.017	(0.032)
Promotion	0.034	(0.031)
Number of years expect to work full-time	-0.001	(0.009)
Adjusted R ²	0.167	

^aBusiness Administration and Economics is omitted category.
^bCategories as seen in Table 4.

***Significant at 1 percent level.

**Significant at 5 percent level.

*Significant at 10 percent level.

Table A-1

Background Information for Nonrespondents

<u>Department</u> (%)	<u>Women</u> (162)	<u>Men</u> (172)
Accountancy	32.5	32.0
Business Administration	38.6	20.9
Economics	0.0	2.9
Finance	25.9	42.4
N.A.	3.0	1.7
Total	100.0	100.0
<u>Grade Point Average</u>	4.3	4.2

Table A-2

Means and Standard Deviations of Variables Used in Table 5

	Total (351)	Women (203)	Men (148)
Department			
Accountancy	0.328 (0.470)	0.310 (0.464)	0.351 (0.479)
Finance	0.313 (0.464)	0.266 (0.443)	0.378 (0.487)
Grade point average	4.319 (0.417)	4.330 (0.393)	4.304 (0.449)
Priorities viewed as important ^a			
Salary	0.994 (1.171)	0.852 (1.125)	1.189 (1.209)
Challenging job	1.256 (1.409)	1.434 (1.400)	1.014 (1.390)
Pleasant environment	1.028 (1.688)	1.143 (1.693)	0.872 (1.675)
Not too demanding	-1.698 (1.256)	-1.680 (1.298)	-1.723 (1.200)
Promotion	1.285 (1.262)	1.241 (1.241)	1.345 (1.292)
Number of years expect to work full-time	32.886 (11.023)	29.256 (10.814)	37.865 (9.243)
Ln expected salary			
Beginning	10.069 (0.167)	10.057 (0.139)	10.085 (0.200)
Ten years later	10.793 (0.434)	10.693 (0.365)	10.929 (0.482)
Twenty years later	11.249 (0.562)	11.114 (0.469)	11.436 (0.625)
Sex, M = 1, F = 0	0.422 (0.495)	-- --	-- --

^aCategories are shown in Table 4.

Table A-3

Means and Standard Deviations of Variables Used in Table 6
(n = 170)

Department	
Accountancy	0.324 (0.469)
Finance	0.271 (0.446)
Grade point average	4.322 (0.383)
Priorities viewed as important ^a	
Salary	0.841 (1.106)
Challenging job	1.424 (1.405)
Pleasant environment	1.188 (1.689)
Not too demanding	-1.676 (1.257)
Promotion	1.241 (1.243)
Number of children	2.429 (1.170)
Father professional or executive	0.500 (0.501)
Mother professional or executive	0.365 (0.483)
Proportion of years mother was in labor force	0.467 (0.291)
Numbers of years expect to work full-time	28.976 (10.366)
Ln expected salary, twenty years later	11.123 (0.476)

^aCategories are shown in Table 4.

Appendix B

Information on salaries students expect to earn in the jobs that are among their top three choices if they were to work continuously after leaving school is offered in Table B-1, together with actual salaries offered to 1987 graduates for beginning earnings, and estimated salaries for 10 and 20 years later based on 1980 census data on earnings of workers 35-44 years and 45-55 years of age compared to workers 25-34 years old. This estimate is likely to understate women's earnings in subsequent years, since it assumes that continuously employed women will fare no better in terms of wage growth than women actually did in the past when many of them worked only intermittently. Nonetheless, it gives us a rough estimate against which to compare women's salary expectations.

These data suggest that both men and women are rather optimistic about future earnings, but it must be noted that our projections implicitly assume no overall increases in labor productivity. This seems realistic in view of the virtual absence of changes in real earnings in recent years, but it is also possible that the upward trend of earlier years will resume to a greater or lesser degree. Miller (1965), for instance, found that between 1949 and 1959 productivity rose by about 51 percent for workers aged 35-44, and 14 percent for workers 45 to 54. Were we to return to this upward trend, the unweighted mean of earnings for men in the eight occupations would be \$49,294 ten years after graduation and \$63,200 twenty years later, as compared to \$32,645 and \$36,714, as we projected. These figures are

Appendix B (cont'd.)

not as far below the \$55,625 and \$99,783 men expect to earn. It may be too that students who are likely to be aware of raises in dollar terms tend to underestimate the extent to which they reflect inflation rather than merit raises. Further, these students with a degree from a highly-regarded business school may be correct in expecting to earn more than the average college graduate. Finally, it is worth noting that expected salary ratios by gender are roughly in line with estimates based on projections of actual salaries (Table 3). The anticipated ratios are generally somewhat higher which is to be expected given the assumption of continuous employment.

Table B-1

Expected Salaries (in 1987 dollars) and Projected Actual^a Salaries in 1987

	Women				Men							
	Ten Years		Twenty Years		Ten Years		Twenty Years					
	Beginning	N	Later	N	Beginning	N	Later	N				
<u>Accountants</u>												
Expected	\$25,973	(74)	\$60,225	(71)	\$103,901	(71)	\$26,297	(64)	\$76,844	(64)	\$136,508	(61)
Actual	21,708		22,936		23,776		21,840		32,201		35,144	
<u>Managers</u>												
Expected	21,940	(166)	40,712	(163)	64,250	(164)	22,860	(114)	52,655	(113)	95,301	(113)
Actual	19,464		24,010		24,505		20,484		32,842		39,929	
<u>Financial/credit analysts, commercial loan officers</u>												
Expected	23,530	(134)	45,099	(131)	69,883	(128)	24,191	(126)	54,460	(124)	101,545	(121)
Actual	23,880		28,578		26,560		25,200		39,604		46,998	
<u>Sales representatives, insurance agents</u>												
Expected	22,643	(42)	40,750	(40)	61,175	(40)	22,600	(40)	46,154	(39)	73,923	(39)
Actual	21,228		24,662		22,291		22,062		30,352		33,896	
<u>Personnel and labor relations specialists</u>												
Expected	21,683	(63)	37,148	(61)	53,374	(61)	25,957	(23)	41,826	(23)	63,783	(23)
Actual	17,617		20,714		20,659		20,412		29,112		32,796	
<u>Purchasing agents</u>												
Expected	21,500	(40)	34,641	(39)	52,154	(39)	21,733	(15)	40,267	(15)	57,333	(15)
Actual	--		--		--		--		--		--	
<u>Marketing analysts</u>												
Expected	21,781	(82)	38,506	(81)	58,753	(81)	23,405	(42)	47,683	(41)	73,400	(40)
Actual	21,312		26,711		30,074		22,056		33,051		38,330	
<u>Systems analysts</u>												
Expected	24,143	(21)	46,350	(20)	73,790	(19)	26,353	(17)	56,941	(17)	80,938	(16)
Actual	26,244		31,462		32,519		27,384		34,703		37,704	
<u>Real estate brokers</u>												
Expected	22,333	(18)	70,824	(17)	122,647	(17)	22,957	(23)	70,435	(23)	172,864	(22)
Actual	19,824		24,157		20,335		20,532		29,296		28,919	

^a Beginning salaries are taken from the College Placement Council Salary Survey, Formal Report No. 3, July 1987. Salaries for 10 and 20 years later are adjusted using the rates of increase in the earnings of year-round, full-time college educated workers of the same sex, ages 35-44, and 45-54, as compared to workers 25-34 years old, in the 1980 Census.

^b These categories are combined in the Census.

^c Data not available in the College Placement Council Salary Survey.