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Differential Earnings of the Agricultural Graduates New Evidence from the Agribusiness Industry

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Abstract

Utilizing an original data set, we use regression analysis to estimate the impact of various factors on the earnings and the gender wage gap of the agribusiness graduates. Findings indicate that factors such as education, experience, gender, job sector, status and specialty, etc., are important factors in determining earnings. In particular, characteristics such as experience through a foreign internship during college, marketing, accounting and finance specialties are associated with a relatively high market value. Despite progress in recent years, results suggest that a 19 % wage gap still exists between men and women due to differences in human capital characteristics, differences in labor force participation behavior and individual lifestyle choices.

Keywords: Agribusiness, determinants, earnings, gender wage gap

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Introduction

Extensive research and numerous studies have long confirmed that despite the rise in women's active participation in the labor force, important gender differences remain in wages received (Blau and Kahn 2000, 2007, O'Neill, Leonhardt). Data from the Bureau of Labor Statistics (BLS) show that in 1999, women earned approximately 77 percent as much as men did. Recent evidence from the General Accounting Office study (GAO) confirms that though the gap in earnings has diminished in recent years, women on average still earn about 80 percent of what men earn.

In a comprehensive study of the gender wage gap, Blau and Kahn (2007) analyze the progress made over the years in the US. The evidence shows remarkable progress in narrowing the gap starting in the late 1970s and continuing throughout the 1980s and early 1990s, but slowing down in the late 1990s. According to Blau and Kahn, the wage gap has closed due to improvements in gender specific factors, such as increases in women's labor market experience, increases in the number of women employed as professionals and managers, improvements in women's wages due to the decline of unions, and lastly, a decrease in the "unexplained" portion of gender differential.

Though magnitudes of the estimated gender wage gap vary (due to methodology, type of data and variables used in the analysis), studies from various fields (Goldin, Fuller and Schoenenberger, Blau, Barkley, Stock and Sylvius) collectively agree that women continue to earn less than men in every sector of economy.

Much debate, however, exists around the causes of this wage disparity with explanations ranging from differences in human capital characteristics (such as education levels, work patterns, etc.), segregation of men and women with respect to occupation or industries, to the existence of gender discrimination in the labor market.

Though empirical studies on gender differences are numerous, very few have dealt with the gender wage gap in agriculture (to the authors' knowledge the study of Barkley, Stock and Sylvius is the only one). The primary objective of this study is to provide new empirical evidence on the status of gender gap in the agribusiness industry by first, investigating the determinants of the earnings of agricultural graduates and second, exploring the possible causes of wage differentials between the graduates.

Results from this study should prove helpful to students when choosing their academic and career path by providing a list of potential factors influencing their future earnings. Also, findings might prove helpful to the industry when crafting their human resource policies, as well as to the academia when designing the course

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curriculums. Further, this study complements gender gap literature with evidence from the agricultural sector. A better knowledge of the process of wage determination from various sectors of the economy will improve chances of successful policy measures to address the existing wage gap.

Data

This study uses data collected by a survey of agribusiness graduates of California Polytechnic State University, San Luis Obispo, one of the largest agribusiness departments in the nation. The purpose of the survey was to learn about the careers of the program graduates by asking a wide variety of questions including wages, job characteristics, work history, demographics, etc. A total of 2800 surveys were sent to agribusiness alumni during the summer of 2002 with a 40 percent response rate.

Respondents were required to be employed at the time survey was completed in order to be included in the sample for this analysis. The sample was further truncated to include data only on respondents aged 20 to 64 years that were working full time. Data on starting wages were deflated to 2002 dollars using the Personal Consumption Expenditure Index (U.S. Department of Commerce).

The Model

Following the standard Mincer specification, a wage regression equation that relates yearly individual earnings to a set of independent variables is specified. The following regression is estimated:

$$\ln W_i = \mathrm{X}_i \beta_i + \varepsilon_i \qquad (1)$$

Where the dependent variable $\ln W_i$ represents the natural logarithmic wage, vector X_i contains sets of explanatory variables, i denotes individuals within the sample, and the error term is assumed to have mean zero and constant variance σ^2. The first set of explanatory variables consists of individual and family related characteristics containing demographic information such as educational background, gender, marital status, and presence of children less than 18 years old living in the same household. Following literature, interaction terms between gender, marital status and children are also included to capture interactions between these qualitative factors on earnings.

The second set of explanatory variables includes a measurement of past work experience, as well as measurements of extra curricular activities during school years. To deduce past work experience a “potential experience” variable is constructed, which is essentially the number of years since graduation.

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The job related set of independent variables includes variables that specify work related characteristics such as the field of employment, type of employment, position status, job benefits offered by the company, and the starting wage.

While the difference of average annual wages of men and women gives a first idea of the gender pay gap, it conceals the contribution of particular factors that are of interest to be explored. To examine the gender wage gap, the most commonly used decomposition procedure for cross-sectional data as defined by Oaxaca is followed. This technique is used to determine the share of the difference in wages between two groups (male and female) due to differences in human capital stock—(explained factors) and the share of the difference in wages that could not be attributed to human capital characteristics — (unexplained factors).

Specifically, if the fitted values of earnings for men and women evaluated at the means of the independent variables ($X's$) are:

$$\overline{\ln(W_M)} = \overline{X_M}\,\hat{\beta}_M \qquad (3)$$

$$\overline{\ln(W_F)} = \overline{X_F}\,\hat{\beta}_F \qquad (4)$$

then the raw wage differential between men and women is expressed by the difference in the logarithmic mean wages:

$$\overline{\ln(W_M)} - \overline{\ln(W_F)} = \underbrace{\left(\overline{X_M} - \overline{X_F}\right)\hat{\beta}_F}_{Explained} + \underbrace{\overline{X_F}\left(\hat{\beta}_M - \hat{\beta}_F\right)}_{Unexplained} \qquad (5)$$

where $\hat{\beta}$'s are the estimated coefficients and M and F represent male and female respectively. The first term on the right side of equation (5) expresses the difference in wages due to the remuneration of different human capital characteristics that affect productivity of the two groups when both groups are treated the same. This component is offered referred to as the explained component of the difference in wages (*or the characteristics effect*). It implies that if women as a group have lower average human capital characteristics, then it is expected that they earn a lower average wage. Oaxaca suggests that the structure of wage for either men $\hat{\beta}_M$ or women $\hat{\beta}_F$ can be used as the prevailing (nondiscriminatory) market wage structure. In this study, the wage structure of men is used as the non-discriminating wage structure as specified in equation (5) since most authors argue

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that in the economy, men form the largest group of workers and that face virtually no discrimination. The second term of equation (5) expresses the portion of the gap in wages due to differences in the remuneration of the human capital characteristics. It measures how much less than men, women are earning if they possess the same human capital as the average man, but receive a woman's return to that human capital. This component of the difference in wages is referred to as the unexplained portion (*or the remuneration effect unrelated to productive characteristics)*.

Results

The model specified in the equation (1) is estimated by the ordinary least squares method. We first describe results from the general model and then comment on the findings of separate regressions to explore the gender gap. Table 1 summarizes the estimated results for the overall regression model. Diagnostic measures were performed on the data. Normal probability plots of the residuals reveal no violations of the normality assumption. Further, the Breusch-Pagan test indicates that the data are consistent with the assumption of a constant variance of the error term. However, variance inflation factors (VIF) [1] revealed that "work experience" variables were collinear, but they are kept in the model since estimates are still unbiased and these variables are statistically significant. The model is statistically significant and explains 41 percent of the variation in the current earnings of the graduates. Results indicate that "work experience" variables are important factors in determining the status of current earnings. Estimates show that labor market rewards each year of additional experience with a 3.3 percent increase in earnings; however, the relationship between earnings and years of experience evolves overtime with a decreasing rate.

Experience gained during college years through a "foreign internship" increased wages by 26 percent. Businesses have expanded internationally to increase their markets and the importance of foreign internship variable may be a proxy for the ability to work in a global environment. The impact of job characteristics was considered in the model by including variables such as type of employment, field of employment, position in the firm, and starting salary.

Agriculture and sectors directly related to it, remunerated graduates up to 12.4 percent less than other sectors of economy. Specialties such as marketing, accounting, and finance both in the agricultural and nonagricultural sector had higher returns. Positions in marketing and accounting within the agriculture sector increased wages by 25 and 21 percent, respectively, *ceteris paribus.* As expected, job status influenced earnings. Positions in upper management were compensated about 48 percent more than non- management positions, whereas proprietors

[1] VIF's were above 5 for "experience" and "experience square" variables.

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earned about 70 percent more on average than professional agriculturalists, holding everything else constant. Starting salary significantly impacted future earnings. Among benefits that increased salaries, health insurance and retirement benefits were quite important. Retirement packages increased earnings 21 percent on average and health benefits were associated with a 35 percent increase. Individual and demographic characteristics also were important determinants of earnings for agribusiness alumni. Advanced degrees such as MBA and JD increased earnings of about 16-36 percent compared to the graduates with a bachelors degree (the control group).

Gender was statistically a significant variable and results showed that women earned less than men, *ceteris paribus.* We explore the gender impact on wages in more detail later in the paper. Other factors, such as marital status and presence of children in the household also are expected to affect annual wages. Estimates show that on average married women earned about 19.3 percent less than married men. Being married increases earnings for men, as married men earned on average about 18 percent more than men that never married and 23 percent more than previously married men. Women that had never been married earned around 2 percent (19.3% - 17.4%) less than married men. Children did not affect significantly wages of male graduates. Literature suggests that a strong relationship exists between children, wages, and job experience of mothers, especially when children are young. Women with children are less likely to be employed and tend to prefer jobs that do not require overtime work or high work intensity. Indeed, regression results indicate that the presence of children under eighteen in the household was associated with a decrease in women's earnings of about 23 percent as compared to men's earnings. Estimated coefficients of the interaction variables such as gender*marital status and gender*children are statistically significant, indicating the relevance of family relationships in the annual earnings.

Gender Gap

Although the raw difference in annual wages between men and women offers an overall picture of the actual gender pay gap, identifying and measuring the components the wage gap between men and women is important for policy purposes. As mentioned, wage differentials between men and women are assumed to be due to at least two factors: differences in productivity characteristics and differences in market remuneration of these characteristics. Table 2 reports the mean values of the human capital characteristics separately for men and women included in the sample. Data show the differences between groups that exist in the human capital stock.

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Table 2: Mean Values of Human Capital Characteristics for Men and Women

	MEN		WOMEN	
Variable	**Mean**	**Standard Deviation**	**Mean**	**Standard Deviation**
Ln (Current Salary)	11.3212	0.64131	10.8557	0.65141
Past Experience				
Experience	17.4525	10.36976	10.1452	6.92234
Experience Squared	411.969	404.42508	150.7229	191.0065
Extracurricular Activities				
Club Member	0.4775	049984	0.4848	0.50040
Club Officer	0.3070	0.46159	0.3990	0.49031
Foreign Programs				
Study Abroad	0.352	0.18444	0.0631	0.24351
Internship Abroad	0.0155	0.12359	0.0152	0.12231
Job Characteristics				
Ln (Starting Salary)	10.3625	0.40855	10.2213	0.36683
Type of Job				
Ag Sector	0.5254	0.49971	0.3662	0.48236
Related to Ag Sector	0.3479	0.47664	0.4091	0.49229
Job Status				
Lower Management	0.3211	0.46724	0.4217	0.49446
Upper Management	0.2479	0.43209	0.1187	0.32383
Proprietor	0.2930	0.45544	0.1591	0.36622
Job Specialty				
Accounting	0.1028	0.30393	0.1288	0.33539
Marketing	0.1944	0.39599	0.1439	0.35147
Greenhouse	0.1915	0.39380	0.0732	0.26085
All Other Ag	0.1254	0.33135	0.1389	0.34627
Non-ag Marketing	0.0859	0.28044	0.1323	0.42138
Non-ag Finance	0.0408	0.19807	0.0707	0.25666
Non-ag Services	0.0859	0.2844	0.1010	0.30172
Job Benefits				
Health	0.8310	0.37503	0.8359	0.37087
Retirement/Savings	0.7183	0.45014	0.7555	0.43356
Vacation	0.6423	0.47967	0.6869	0.46435
EquipmentUse/Discounts	0.8592	0.34811	0.8384	0.36856
Individual Characteristics				
Education				
MBA	0.0606	0.23870	0.0455	0.20856
MS	0.0577	0.23343	0.0758	0.26494
JD	0.0183	0.13416	0.0101	0.10012
Children				
Children under 18	0.4972	0.50034	0.4116	0.49275
Marital Status				
Never Married	0.1437	0.35099	0.2727	0.44593
Previously Married	0.0465	0.21067	0.0379	0.19114

The major difference evidently is in the category of work experience; men report almost twice as many years of experience on the job (17.5 years) as women (10

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years). Another difference noticed in the productivity characteristics has to do with the fact that men tend to hold more upper management and proprietor positions than women which are concentrated in staff and non-supervisory positions.
To further investigate the wage gap separate regressions were run for men and women. The estimated coefficients express the remuneration of productivity characteristics for men and women in the labor market. Results are reported in Table 3 and 4.

Results show that the considered variables generally affect both groups in the same direction. Exceptions were marital status and presence of children variables. The presence of young children negatively affects the earnings of women, but does not turn to be a significant factor on the earnings of men (similar results to the overall regression). Married men earn 18 percent more than never married men and 21 percent more than previously married men. Women on the other hand, did not report any statistically significant differences with regard to marital status.

Next, the Oaxaca decomposition was applied and the results of the decomposition analysis are reported in Table 5[2]. The raw wage gap between men and women is estimated to be approximately 0.465. This reveals that on average, men earn a log wage 46.5 percent higher than women.

Results show that 55 percent (0.257) of the wage gap between men and women can be attributed to differences in productivity characteristics (explained component), while 45 percent (0.211) is due to the remuneration effects on these characteristics (unexplained component). The existence of the wage gap due to remuneration is some times interpreted as mainly caused by some sort of discriminating behavior in the labor market towards women. However, these results must be interpreted with some caution, given the difficulty of measuring important factors such as labor market experience (the difference between actual and potential experience), motivation and intelligence. In this model, the inclusion of potential experience variable approximates the real experience; however, it has been suggested that this variable overstates women's actual labor market experience (generally women spend less time in the labor market compared to men, especially in the presence of young children). As a result, the use of men's wage structure to experience overestimates the remuneration of women's experience, and inflates the unexplained part of the wage gap. Also, factors such as motivation and intelligence are likely to play an important role on earnings; however, variables representing them are missing in the model, leaving their effect to be captured in the error term.

[2]The decomposition is based on the assumption that men wage structure prevails in the market Results when the female wage prevails were also obtained and are available from the authors upon request.

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Positive values in the decomposition columns of Table 5 indicate an earning advantage for men, while negative values indicate an advantage for women. Results show that men have a relative advantage in the human capital characteristics due essentially to work experience and job status (Figure 1). Women on the other hand have an advantage over men in the remuneration component attributable mainly to starting salary (Barkley, Stock and Sylvius found the opposite effect)[3], marital status and education. However, these advantages are offset by disadvantages due to the remunerations of variables related to the presence of children, extracurricular experience and the difference in the intercept of the regressions, which include the unmeasured effects not identified in the regressions[4]. These results agree with findings of other studies, such as Barkley, Stock and Sylvius.

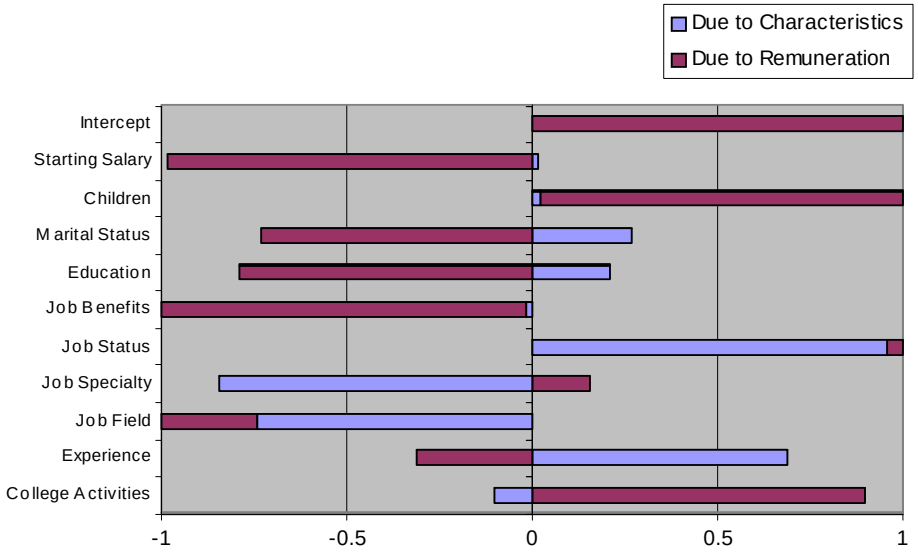

Figure1: Contributions of Characteristics and Remuneration to the Gender Wage Gap.

Conclusions

Various studies continue to debate the role and importance of gender in the process of wage determination. The objective of this study was to identify the main factors that influence the earnings of graduates and to provide new empirical evidence on

[3] This may be a result of a higher proportion of the female sample having starting salaries in later years.

[4] To illustrate the interpretation of the chart we focus on two variables: 'job status' and 'children'. Each variable contributes about a one percent point to the overall gender pay gap. However, the contribution of the differences due to characteristics and differences due to remuneration differs strongly for these two variables. In the case of the 'job status', the effect on the overall gap is mainly due to the fact that women are assigned to managerial positions less often than men, and not to differences in the remuneration between men and women in managerial functions. On the other hand, the effect of the 'children' variable on the wage gap, is almost entirely due to the fact that women seem to earn less than men with similar family situations, and not due to differences in the occurrence of these situations.

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the status of gender wage gap in the agriculture industry. Based on survey data from agribusiness graduates of Cal Poly, San Luis Obispo, regression analysis was used to estimate the impact of various factors on the earnings. Findings indicate factors such as education beyond the bachelor degree, starting salaries, work experience, gender, job status and specialty, job sector, and marital status are all important determinants of earnings. In particular, characteristics such as, experience gained through a foreign internship during college, specialties such as marketing, accounting and finance and managerial positions are all factors that retain a relatively high market value. Results show that women are paid 81 percent of men's wage, indicating a wage gap of 19 percent. It is interesting to note the striking similarity of the gender wage gap in agriculture, this once male dominated sector, and the estimated gap from the other industries (GAO report estimated a 20 % pay gap in other industries). When comparing results from this study with those from earlier studies, it appears that the gender gap in agriculture has been slowly decreasing (Barkley, Stock and Sylvius found a 30 % wage differential for agricultural graduates).

Three key elements mark the findings of this study with respect to the gender wage gap: first, the importance of differences in men and women labor market participation rates; second, the differences in men and women wage structures; third, concentration of women in low paying positions and occupations. Differences in human capital characteristics explained to a large extent (55 percent) the gender wage gap; however, a large, unexplained differential remains between the earnings of men and women. Aside from labor market discrimination effect, literature has emphasized the role of preferences as important determinants of work-lifestyle choices and behavior as a possible justification of the unexplained component of the gender wage gap. It is suggested that though men and women do not differ in many of their underlying abilities, yet they do differ in their attitudes toward work, with a large share of them continuing to attach importance to traditional gender roles (Hakim). As a result, women make lifestyle choices that trade greater flexibility to manage work and family against potentially higher earnings.

Findings from this study have a number of implications. For academia, the integration of internships in the curriculum is becoming increasingly important. Industry feedback and circumstantial evidence indicate that graduates who participate in internships adjust faster on the job, need less on-the - job training and have a more open minded attitude. By actively partnering with the industry, universities might be able to enhance their curriculums to include more foreign internships and expand the set of opportunities that would expose students to real life problems in a globally competitive environment.

The presence of the gender wage gap in the industry has implications for agribusiness companies. Bureau of Labor Statistics projects that women's labor force participation rates are expected to keep rising, and the majority of expected

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jobs to be created over the next decade will be filled by women. This implies that companies must actively compete to attract and retain workers from this group, by creating and expanding policies that facilitate the integration of work and family responsibilities. By implementing "family-friendly" programs (such as child care services, work-hours flexibility) not only will help women in the industry to successfully balance their work and family life, but will give businesses a competitive advantage to hire and retain the best-qualified employees, male or female. Further, to be successful, companies should try to find ways to help the advancement and promotion of the women employees to leadership and management positions.

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Appendix:

Table 1: Coefficient Estimates for the Overall Regression Model of Earnings

Variables	Mean	Estimated Coefficients	Standard Error	t-values
Dependent: **Ln (Current Salary)**	11.1546			
Independent:				
Intercept		8.053	0.438	18.398***
Past Experience				
Experience	14.8361	0.0330	0.0069	4.7878***
Experience Squared	318.4305	-0.0006	0.0002	-3.0598***
Extracurricular Activities				
[Did not Participate]				
Club Member	0.4801	0.0222	0.0444	0.5011
Club Officer	0.3400	0.0227	0.0474	0.4789
Foreign Programs				
[Did not participate]				
Study Abroad	0.0452	-0.0006	0.0784	-0.0079
Internship Abroad	0.0154	0.2581	0.1310	1.9698**
Job Characteristics				
Ln (Starting Salary)	10.3120	0.2023	0.4377	4.8919***
Type of Employment				
[Not in the Ag Sector]				
Ag Sector	0.4684	-0.1244	0.0569	-2.1848**
Related to Ag Sector	0.3698	-0.0986	0.0499	-1.9757**
Job Status				
[Entry Level Position]				
Lower Management	0.3571	0.1609	0.0462	3.4774***
Upper Management	0.2016	0.4772	0.0541	8.8219***
Proprietor	0.2450	0.6994	0.0574	12.1704***
Employment Specialty				
[Other Non-ag]				
Accounting	0.1121	0.2050	0.0639	3.2061***
Marketing	0.1763	0.2471	0.0599	4.1186***
Greenhouse	0.1492	-0.0707	0.0645	-1.0962
All Other Ag	0.1302	0.0156	0.0627	0.2487
Non-ag Marketing	0.1049	0.3766	0.0633	5.9509***
Non-ag Finance	0.0515	0.1606	0.0800	2.0068**
Non-ag Services	0.0913	0.0226	0.0660	0.3427
Benefits				
[Other]				
Health	0.8327	0.3525	0.0615	5.7318***
Retirement/Savings	0.7297	0.2057	0.0537	3.8273***
Vacation	0.6582	-0.0243	0.0399	-0.6080
Equip Use /Discounts	0.8517	0.0221	0.0692	0.3203
Individual and Family Characteristics				
Education				
[BS]				
MBA	0.0552	0.1625	0.0709	2.2884**
MS	0.0642	0.0204	0.0676	0.3019
JD	0.0154	0.3627	0.1351	2.6847**

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Table: 1 (Continued)

Gender				
[Male]				
Female	0.3580	-0.1932	0.0641	-3.0109***
Children				
[No Children < 18]				
Children < 18	0.4665	0.0180	0.0505	0.3583
Marital Status				
[Married]				
Never Married	0.1899	-0.1759	0.0664	-2.6488***
Previously married	0.0434	-0.2248	0.0962	-2.3379**
Interaction Terms				
Fem & Never Married	0.0976	0.1737	0.0961	1.8084*
Fem & Prev Married	0.0136	0.3116	0.1714	1.8182*
Female & Children<18	0.1474	-0.2269	0.0785	-2.8925**
N = 1106	Adjusted R^2 = 0.424		F-value = 23.91	

For two-sided test: * indicates $\alpha = 0.10$ ** indicates $\alpha = 0.05$ *** indicates $\alpha = 0.01$

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Table 3: Coefficient Estimates for Men's Regression Model of Earnings

Variable	Estimated Coefficient	Standard Error	t-value
Dependent Ln (Current Salary)			
Independent			
Intercept	8.60	0.537	15.981***
Past Experience			
Experience	0.03	0.0087	3.4896***
Experience Squared	-0.0004	0.0002	-2.307**
Extracurricular Activities			
[Did not participate]			
Club Member	0.03089	0.0520	0.5936
Club Officer	0.03699	0.0569	0.6485
Foreign Programs			
[Did not Participate]			
Study Abroad	0.01534	0.1118	0.1373
Internship Abroad	0.160	0.1637	0.9790
Job Characteristics			
Ln (Starting Salary)	0.15735	0.0502	3.1474***
Type of Employment			
[Not in the Ag Sector]			
Ag Sector	-0.1312	0.0774	-1.7042*
Related to Ag Sector	-0.108	0.0698	-1.5535
Job Status			
[Entry Level Position]			
Lower Management	0.15688	0.0663	2.3768**
Upper Management	0.51	0.0707	7.1848***
Proprietor	0.72758	0.0755	9.7011***
Employment Specialty			
[Other non-ag]			
Accounting	0.21364	0.0835	2.5738**
Marketing	0.227	0.0752	3.0290***
Greenhouse	-0.12	0.0771	-1.4828
All other ag	0.01004	0.0809	0.1237
Non-ag Marketing	0.3401	0.0847	4.0610***
Non-ag Finance	0.246	0.1106	2.2256**
Non-ag Services	0.09082	0.0857	1.0324
Benefits			
[Other]			
Health	0.298	0.0759	3.9252***
Retirement/Savings	0.1902	0.0629	3.0187***
Vacation	-0.08	0.0488	-1.1828
Equipment Use/Discounts	0.0503	0.0853	0.5896
Individual Characteristics			
Education			
[BS]			
MBA	0.10217	0.0863	1.1881
MS	-0.004	0.0895	-0.4339
JD	0.3374	0.1559	2.1627**
Children			
[No children under 18]			
Children under 18	0.02356	0.0525	0.4535
Marital Status			
[Married]			
Never Married	-0.185	0.0674	-2.7267***
Previously Married	-0.23	0.0971	-2.1757**
N = 710	Adjusted R^2 = 0.33	F-value = 12.867	

For two-sided test, * indicates $\alpha = 0.10$, ** indicates $\alpha = 0.05$ and *** indicates $\alpha = 0.01$.

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Table 4: Coefficient Estimates for Women's Regression Model of Earnings

Variable	Estimated Coefficient	Standard Error	t-value
Dependent Ln (Current Salary)			
Independent			
Intercept	6.919	0.803	8.618***
Past Experience			
Experience	0.044	0.0147	2.9708***
Experience Squared	-0.001	0.0005	-1.7517*
Extracurricular Activities			
[Did not Participate]			
Club Member	-0.004	0.0889	-0.0439
Club Officer	-0.020	0.0914	-0.2239
Foreign Programs			
[Did not Participate]			
Study Abroad	-0.0131	0.1138	-0.1182
Internship Abroad	0.4151	0.2258	1.8392*
Job Characteristics			
Ln (Starting Salary)	0.284	0.0775	3.6668***
Job Field			
[Not in the Ag Sector]			
Ag Sector	-0.123	0.0889	-1.3861
Related to Ag Sector	-0.104	0.0738	-1.4133
Job Status			
[Entry Level Position]			
Lower Management	0.1831	0.0663	2.7617***
Upper Management	0.4413	0.0977	4.5187***
Proprietor	0.6392	0.0984	6.5005***
Job Specialty			
[Other non-ag]			
Accounting	0.188	0.1019	1.8439**
Marketing	0.2830	0.1030	2.7469***
Greenhouse	0.063	0.1355	0.4612
All other ag	0.002	0.1023	0.0157
Non-ag Marketing	0.372	0.0985	3.7767***
Non-ag Finance	0.0620	0.1197	0.5219
Non-ag Services	-0.101	0.1059	-0.9534
Job Benefits			
[Other]			
Health	0.436	0.1084	4.0171***
Retirement/Savings	0.260	0.1088	2.3873**
Vacation	0.033	0.0733	0.4531
Equipment Use/discounts	-0.062	0.1263	-0.4929
Individual Characteristics			
Education			
[BS]			
MBA	0.212	0.1322	1.6039
MS	0.124	0.1057	1.1754
JD	0.421	0.2801	1.5026
Children			
[No children under 18]			
Children under 18	-0.204	0.0699	-2.9117***
Marital Status			
[Married]			
Never Married	-0.009	0.0725	-0.1215
Previously Married	0.083	0.1473	0.5629
N = 396	Adjusted R^2 = 0.35	F-value = 8.164	

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Table 5: Decomposition Results of Wage Gap by Components

Ln (Current Salary)	Men	11.3212	Women	10.8557	Effects Due to	Effects Due to
		Wage Gap = 0.4655			Characteristics	Remuneration
Variable	$\hat{\beta}_M$	$\bar{X}_M$	$\hat{\beta}_F$	$\bar{X}_F$	$\left(\bar{X}_M - \bar{X}_F\right)\hat{\beta}_M$	$\left(\hat{\beta}_M - \hat{\beta}_F\right)\bar{X}_F$
Intercept	8.581797		6.919			**1.662**
St Salary	0.15735	10.3625	0.284	10.2213	**0.0222**	**-1.3**
Past Experience					**0.1147**	**-0.0520**
Experience	0.03	17.4525	0.044	10.1452	0.2192	-0.1420
Exp Square	-0.0004	411.9689	-0.001	150.7229	-0.1044	0.09
Extracurricular Activities	0.03	17.4525	0.044	10.1452	0.2192	-0.1420
Club Member	-0.0004	411.9689	-0.001	150.7229	-0.1044	0.09
Club Officer	0.030888	0.4775	-0.004	0.4848	-0.000	0.0169
Foreign Programs	0.036993	0.307	-0.02	0.399	-0.003	0.022
Study abroad	0.015344	0.0352	-0.013	0.0631	-0.000	0.001
Internship abroad	0.16	0.0155	0.415	0.0152	0.000	-0.004
Job Characteristics						
Job Field					**-0.0143**	**-0.0050**
Ag Sector	-0.131208	0.5254	-0.123	0.3662	-0.0208	-0.0030
Related to Ag Sector	-0.108	0.3479	-0.104	0.4091	0.0066	-0.002
Job Status					**0.1475**	**0.0070**
Lower Management	0.156882	0.3211	0.183	0.4217	-0.0157	-0.0110
Upper Management	0.51	0.2479	0.441	0.1187	0.0659	0.008
Proprietor	0.727575	0.293	0.639	0.1591	0.0974	0.01
Job Specialty					**-0.0352**	**0.0065**
Accounting	0.213642	0.1028	0.188	0.1288	-0.0056	0.003
Marketing	0.227	0.1944	0.283	0.1439	0.0114	-0.0081
Greenhouse	-0.12	0.1915	0.063	0.0732	-0.0142	-0.0134
All other ag	0.010044	0.1254	0.002	0.1389	-0.0001	0.001
Non-ag Marketing	0.34	0.0859	0.372	0.1389	-0.0180	-0.005
Non-ag Finance	0.246	0.0408	0.062	0.0707	-0.0074	0.01
Non-ag Services	0.090816	0.0859	-0.101	0.101	-0.0014	0.019
Job Benefits					**-0.0029**	**-0.158**
Health	0.298	0.831	0.436	0.8359	-0.0015	-0.12
Retirement/Savings	0.190197	0.7183	0.26	0.75	-0.0060	-0.053
Vacation	-0.08	0.6423	0.033	0.6869	0.0036	-0.078
Equipment /Discounts	0.05	0.8592	-0.062	0.8384	0.0010	0.093

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Table: 5 (Continued)

Variable	$\hat{\beta}_M$	$\bar{X}_M$	$\hat{\beta}_F$	$\bar{X}_F$	$\left(\bar{X}_M - \bar{X}_F\right)\hat{\beta}_M$	$\left(\hat{\beta}_M - \hat{\beta}_F\right)\bar{X}_F$
Individual Characteristics						
Education					**0.005033417**	**-0.018997356**
MBA	0.102168	0.0606	0.212	0.0455	0.001542737	-0.004997356
MS	-0.04	0.0577	0.124	0.0758	0.000724	-0.013
JD	0.3374	0.0183	0.421	0.0101	0.00276668	-0.001
Children					**0.002016394**	**0.09366205**
Children under 18	0.023556	0.4972	-0.204	0.4116	0.002016394	0.09366205
Marital Status					**0.021887**	**-0.06**
Never Married	-0.185	0.1437	-0.009	0.2727	0.023865	-0.048
Previously Married	-0.23	0.0465	0.083	0.0379	-0.001978	-0.012
SUM					**0.2570685**	**0.211016**

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