THE SURVEY OF INCOME AND PROGRAM PARTICIPATION

Job Tenure, Lifetime Work Interruptions, and Wage Differentials

No. 33

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U.S. Census Bureau

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George Washington University

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U.S. Department of Commerce U.S. CENSUS BUREAU

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INTRODUCTION

This paper is a regression study that quantifies the effect of various factors on the earnings of men and women. The validity of such a study depends on the proper specification of the model and the accurate measurement of the variables. Many interesting and useful studies have been published but analysts continue to attempt to improve the model and improve the measurement of variables.

Our paper is based on a relatively new data set that was designed to provide improved measures of education and experience, variables that are assumed to have a critical relationship to earnings.

The Survey of Income and Program Participation (SIPP) was initiated in October 1983, following several years of developmental work. There are three basic features of SIPP. First, it is a panel survey. That is, persons and families in each panel are interviewed a number of times over a period of 2 1/2 Second, it has a relatively short recall period. Visits are made every 4 months in an effort to get accurate data on income and program participation. Third, it is a comprehensive survey. It is comprehensive in the sense that it collects information on detailed sources of income and a detailed list of programs, but it is also comprehensive in the sense that supplements obtain information on a wide range of subjects, often in considerable detail.

The third wave supplement to the 1984 Panel was designed to provide the sort of personal history information that might be useful in explaining differences in income and program participation. The approach here will be to identify major variables that can be considered part of the human capital model of earnings determination, describe the way in which these variables are usually measured, and describe the way in which these variables were measured in the

third wave supplement. Following this description we present regres n results results that show the effect of these variables when measured n the traditional way and when measured in the SIPP. Finally, we decc se the earnings gap in terms of the contribution of the variables in t model.

The first variable to be considered is experience. Analysts using traditional sources of data such as the Current Population Survey or the decennial census have adopted "Age minus years of schooling minus 6" as a proxy for years of general work experience. The SIPP supplement attempted to capture several aspects of this complex variable. SIPP obtained information on the following:

1. Year first worked 6 straight months or longer.
2. Number of years since that date in which person worked at least 6 months.
3. Whether usually worked full time or part time.
4. Periods since age 21 when person went 6 months or longer without working at a job or business and reason for not working.
5. Years spent in current occupation.
6. Years spent with current employer.

The second variable we consider is education. The typical measure used is number of school years completed. SIPP obtained the following dimensions of education:

1. Number of school years completed.
2. Types of courses taken in high school.
3. Whether received high school diploma.
4. Highest college degree.
5. Field of college study.

In addition to experience and education variables, the third e SIPP supplement also collected data on variables that are frequentl navailable on other data files. Information was obtained on:

1. Health variables including perceived health status, work disability status, and functional impairment status.
2. Job characteristics including size of firm and whether covered by a union contract.

MODELS OF EARNINGS DETERMINATION

Two models of earnings determination are presented in this paper; a basic model that uses the traditional measures of experience and education described above, and an extended model that uses the expanded experience and education variables as well as selected other variables that are available from SIPP. The models are estimated separately for males and females and, because there are likely to be interaction effects between education and other variables, they are estimated separately for (a) persons who did not complete high school, (b) persons who completed high school but not college, and (c) persons who completed college.

Because occupation and earnings are jointly determined, occupation is not included as one of the independent variables that explain the levels of earnings. There are two aspects of occupation, however, that enter into the models. First, because education variables do not fully capture the training and skill required for certain trades (e.g., electrician, carpenter, plumber), a SKILL variable has been entered into the equations that were estimated for persons who did not complete high school. The SKILL variable differentiates between persons in "precision production, craft, and repair" occupations and persons in other occupations. A second variable related to occupation, PERCENT FEMALE, measures the percent of persons in each occupation who are female. Females have an occupational structure much different from males and they tend to be in occupations with low earnings. It is hypothesized that, regardless of sex, persons in female-dominated occupations will have lower earnings than persons in integrated or male-dominated occupations.

The coefficients and "t" ratios of the basic models for the six sex and education groups are shown in table A. The coefficients show the percent

change in earnings associated with a unit change in the independent variable. The "t" statistics measure statistical significance.

Table A shows that experience, as measured by the variable "Age minus years of school minus 6," produced greater returns for college graduates than for high school graduates, and greater returns for high school graduates than for those who didn't finish high school. Males had greater returns to experience than females.

Most of the variables have the expected coefficients; being Black or another racial minority, being Spanish-origin, or being disabled has a negative effect on earnings. Living in a large metropolitan area has a positive effect on earnings as does being covered by a union contract (at least for those persons without a college education). Among males who did not finish high school, working in a job that was classified as a "precision production, craft, or repair" occupation had a large positive effect on earnings. The other occupation-related variable described above, "percent in occupation who are female (Percent Female)," had a strong negative effect on earnings. Other things being equal, workers in female-dominated occupations have substantially lower earnings than other workers.

Table B shows the coefficients and "t" ratios for the extended model. The effect of experience is now measured by (a) the number of years with current employer, (b) the number of years spent in the same occupation with different employers, and (c) the number of years spent in the labor force since current occupation. Other variables related to experience include a measure of whether the person usually worked at full-time jobs during his or her time in the labor force, and the time that elapsed between the start of his or her current job and the end of the previous job.

For high school graduates, three education variables were added: (a) whether his or her high school program was academic or college preparatory, (b) the number of high school courses in math (algebra, trigonometry, or geometry), sciences (chemistry or physics), and foreign languages, and (c) whether he or she attended a private high school. These variables were also included in the model for college graduates; and, in addition, variables were added on highest degree and field of study. For the purpose of studying the effect of the latter variable, fields of study were grouped into eight categories: (a) law, medicine, or dentistry, (b) science or mathematics, (c) business or economics, (d) engineering, (e) education, (f) nursing, pharmacy, or health technologies, (g) vocational or technical studies, and (h) other.

A look at the coefficients in table B suggests that the expanded version of the experience variable is appropriate. For five of the six sex and age groups, there is a consistent and plausible relationship among the three major measures, current tenure, previous occupational experience, and other work experience. The coefficients are positive and of descending importance. In the sixth group, females who did not graduate from high school, the results are less satisfactory. The current job tenure variable is strongly positive but the variable "years of work experience less years in current occupation" has a negative coefficient that is significant.

Within the extended model, the effect of certain variables included in the basic model remained significant. Living in a large metropolitan area had a positive effect on earnings. For non-high school graduates, working at a skilled trade had a positive effect on earnings as did being covered by a union contract for those who were not college graduates. Occupational structure, as measured by the percent of persons in the occupation who were

female, had a large effect on earnings. For each sex and age group, there was a strong negative relationship between wage rates and the relative number of females in the occupaton. In the basic model, a work disability variable had a negative effect on earnings. In the extended model, a perceived health status variable was added (set equal to "1" if the person's health was very good or excellent). The health variable was positive and was significant for four of the six groups (those who were not college graduates). Being Black had a strong negative effect on the earnings of high school graduates and those who did not finish high school, but race and ethnicity variables were not significant for college graduates.

The additional education variables were significant for some of the groups. The number of math, science, and foreign language courses taken in high school had a positive effect on the earnings of high school graduates, and the highest degree received significantly effected the earnings of college graduates. Those males whose major field of study was law, medicine, dentistry, math, science, business, economics, or engineering had, other things being equal, higher earnings than those in other fields, but, among female college graduates, only one field of study (nursing, pharmacy, or health technologies) was significantly higher than the control group.

The data in table B tell us something about the variables tha ffect earnings levels. The data in table C show how males and females differ the charac-teristics that effect earnings.

Females do have somewhat lower levels of work experience than ma s. On average, males have 2 to 3 years of additional job tenure and 3 to 5 years of additional total work experience.

Among non-high school graduates, 28 percent of males, but only 6 percent of females, worked at an occupation that was in the "precision production, craft, and repair" category.

The segregation of occupations is apparent in table C. Among high school graduates, for example, the average male worked in an occupation that was 21 percent female; the average female worked in an occupation that was 68 percent female. The figures were not much different for the other two education groups.

Another notable difference between males and females is in the field of study of college graduates. The proportions in the various fields were as follows:

	Male	Female
Law, medicine, or dentistry	6%	3%
Science or mathematics	11	6
Business or economics	27	17
Engineering	13	2
Education	9	30
Nursing, pharmacy, or health technologies	1	9
Vocational or technical studies	3	1

CONTRIBUTION OF DIFFERENCES IN MEAN CHARACTERISTICS TO DIFFERENCES IN EARNINGS

Table D shows the proportion of the earnings gap accounted for by differences between the sexes in the mean values of the independent variables. The figures are calculated by multiplying both the male and female mean values by the male coefficients.

Differences between males and females in experience variables account for a little over 20 percent of the earnings gap among high school and college graduates and about 13 percent for those who didn't finish high school. Among college graduates, field of study accounts for 10 percent of the gap.

Among those who didn't finish high school, being employed at a skilled trade accounted for 13 percent of the gap. Occupational structure (the existence of male' and female-dominated occupations) accounted for 30 percent of the earnings gap among those without a college degree and 17 percent of the gap among college graduates.

Overall, differences in mean values explained between 62 and 69 percent of the earnings gap. The residual represents earnings differences that are not explained by occupational structure or by differences in the other independent variables in the model. This means that between 31 and 38 percent of the earnings gap is due to wage differences within individual occupational categories.

The figures in table D are a product of the model that we have specified and do not necessarily provide measures of discrimination. For example, among persons without a high school education, differences between the sexes in the proportion working in "skilled trades" accounted for 13 percent of the wage gap. The difference between the sexes, however, may reflect the existence of barriers rather than differences of choice. Similarly, among those with a college degree, differences in fields of study accounted for 10 percent of the wage gap. The difference in field of study may be at least partially the result of females facing different expected salary levels than males. In fact, the equation for females show that field of study had small effect on earnings.

SUMMARY

The model that we have presented here is based on a rich new source of data, but the model itself should be viewed as a work in progress. There may be more useful ways of specifying some of the variables and the list of variables may be usefully shortened or expanded. In some instances, we were not able to develop a satisfactory variable from information collected in the survey. For example, we have not yet analyzed the data on vocational training to the extent that we were able to design a usable independent variable.

There are, we believe, several interesting aspects to this study. First is the finding that a household survey can provide the data to design an experience variable that is superior to the proxies based on age and schooling variables. Second is the finding that a household survey can provide data that shed light on the importance of high school courses and college fields of study. Third is the finding that, other things being equal, changing the occupational structure to eliminate male and female dominance of occupations would reduce the earnings gap by approximately 20 to 30 percent. Approximately 30 to 40 percent of the earnings gap was not explained by occupational structure or by differences in human capital characteristics.

SELECTED REFERENCES

Corcoran, Mary. "Work Experience, Labor Force Withdrawals and Women's Wages: Empirical Results Using the 1976 Panel of Income Dynamics," Women in the Labor Market, pp. 216-245. Edited by Cynthia B. Lloyd, Emily S. Andrews, and Curtis L. Gilroy, New York: Columbia University Press, 1979.

Daymont, Thomas N. and Paul J. Anderson. "Job Preferences, College Major, and the Gender Gap in Earnings," Journal of Human Resources 19 (Summer 1984): pp. 408-427.

McNeil, John M. and Joseph J. Salvo. "Lifetime Work Experience and Its Effects on Earnings: Data from the Income Survey Development Program," Proceedings of the Social Statistics Section, American Statistical Association, 1984.

Mincer, Jacob, and Haim Ofek. "Interrupted Work Careers: Depreciation and Restoration of Human Capital," The Journal of Human Resources 17 (Spring 1982): pp. 3-24.

Mincer, Jacob, and Solomon Polachek, "Family Investments in Human Capital: Earnings of Women, " Journal of Political Economy 82 (March/April 1974): pp. S76-108.

Polachek, Solomon William. "Potential Biases in Measuring Male-Female Discrimination, " Journal of Human Resources 10 (Spring 1975): pp. 205-229.

Sandell, Steven H., and David Shapiro. "An Exchange: The Theory of Human Capital and the Earnings of Women: A Reexamination of the Evidence," Journal of Human Resources 13 (Winter 1978): pp. 103-117.

Suter, Larry E., and Herman P. Miller. "Income Differences Between Men and Women," American Journal of Sociology 78 (January 1973): pp. 962-974.

Table A. Coefficients of the Basic Model: Dependent Variable Is Log of Mean Hourly Earnings, Universe is Full-Time Workers

("t" statistics shown in parentheses)

Variable	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
1. EXPER (age minus schooling minus 6)..	.0146 (3.1)	.0115 (1.6)	.3191 (10.5)	.0215 (6.9)	.0491 (10.6)	.0335 (7.4)
2. EXPERSQ (EXPER squared).....	-.0002 (-3.0)	-.0002 (-1.7)	-.0005 (-8.3)	-.0004 (-6.0)	-.0009 (-7.6)	-.0007 (-5.9)
3. MSI (married, spouse present).....	.0516 (1.3)	-.0050 (-0.1)	.0766 (3.2)	.0471 (2.5)	.1280 (2.5)	.0123 (0.3)
4. MS3 (never married)..	-.2177 (-4.2)	-.0814 (-1.2)	-.0829 (-2.9)	.0230 (0.9)	.0128 (0.7)	.0167 (0.4)
5. MET1 (in metro area of 1,000,000 or more).....	.2054 (6.6)	.1583 (3.6)	.2058 (11.1)	.2534 (12.3)	.2570 (7.1)	.1617 (4.2)
6. MET2 (in metro area of less than 1,000,000).....	.0696 (2.3)	.0582 (1.4)	.1035 (5.6)	.1239 (5.9)	.1162 (3.1)	.0242 (0.6)
7. UNION (covered by a union contract)...	.2523 (9.3)	.2325 (5.7)	.1470 (9.7)	.1393 (6.6)	-.0449 (-1.4)	.1159 (3.3)
8. SKLBLUE (precision production, craft, or repair worker)...	.2142 (6.0)	.1197 (1.6)	(NA)	(NA)	(NA)	(NA)
9. OTHBLUE (other blue collar worker).....	.0795 (2.6)	.0246 (0.7)	(NA)	(NA)	(NA)	(NA)
10. PCTFEM (proportion in occupation who are female).....	-.2219 (-3.2)	-.4082 (-6.5)	-.1669 (-4.9)	-.2439 (-8.8)	-.2945 (-5.1)	-.3829 (-7.2)
11. VETERAN.....	.0931 (3.3)	-.1884 (-0.6)	-.0068 (-0.4)	.1596 (2.1)	.0191 (0.6)	.1206 (0.7)
12. BLACK.....	-.1488 (-4.1)	-.1398 (-3.0)	-.2363 (-9.7)	-.0727 (-3.1)	-.1116 (-1.9)	-.0371 (-0.8)

Table A. (continued)

Variable	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
13. OTHER (race other than White or Black).....	-.2204 (-2.9)	-.0372 (-0.4)	-.1127 (-2.5)	-.0138 (-0.3)	-.1192 (-1.9)	-.0379 (-0.6)
14. SPAN (of Spanish origin).....	-.1022 (-2.6)	-.0923 (-1.7)	-.0870 (-2.5)	-.1141 (-3.0)	-.1395 (-1.8)	-.0400 (-0.4)
15. DISAB (with a work disability).....	-.0838 (-2.3)	-.1509 (-2.9)	-.1117 (-3.9)	-.1347 (-3.8)	-.0813 (-1.2)	-.2230 (-3.0)
16. KLT6 (with children under 6).....	.1369 (0.6)	-.0040 (-0.1)	-.0391 (-2.8)	-.0092 (-0.5)	.0002 (0.0)	.0559 (1.7)
17. K6T17 (with children 6 to 17, none under 6).....	-.0070 (-0.5)	-.0392 (-2.0)	.0085 (1.0)	-.0373 (-3.7)	.0059 (0.4)	-.0447 (-2.5)
18. Constant	1.5863	1.7004	1.7293	1.6526	1.8633	2.0275
Number of cases.....	1,414	804	4,414	3,288	2,339	1,463
R^2.....	.27	.18	.18	.13	.18	.14
Mean hourly earnings.....	$8.05	$5.66	$10.16	$7.01	$13.92	$9.99

The control groups for the above model were made up of (a) persons who were divorced, widowed, or separated, (b) persons in nonmetropolitan areas, (c) persons not covered by a union contract, (d) nonveterans, (e) Whites, (f) non-Spanish-origin persons, (g) persons with no work disability, and (h) persons with no children. For persons who did not finish high school, white collar workers were also used as a control group.

Table B. Coefficients of the Extended Model: Dependent Variable in Log of Mean Hourly Earnings, Universe is Full-Time Workers

("t" statistics shown in parentheses) --

Variable	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
1. JOBTENUR (number of years with current employer).....	.0194 (4.6)	.0374 (5.7)	.0240 (10.3)	.0272 (11.3)	.0358 (7.1)	.033 (5.7
2. JOBTENURSQ.....	-.00028 (-2.5)	-.00097 (-4.7)	-.00037 (-5.7)	-.00039 (-5.6)	-.00061 (-3.7)	-.0006 (-2.9
3. POCCEXP (years in current occupation less years with current employer.....	.0133 (3.1)	-.0041 (-0.6)	.0136 (4.6)	.0072 (2.1)	.0142 (2.9)	.019 (3.0
4. POCCEXPSQ.....	-.00019 (-1.2)	.00025 (1.0)	-.00040 (-3.3)	-.00016 (-1.1)	-.00032 (-1.7)	-.0007 (-2.3
5. PWORKEXP (years of work experience less years in current occupation).....	.0071 (2.1)	-.0080 (-2.6)	.0069 (3.8)	.0066 (3.6)	.0115 (3.3)	.000 (0.1
6. PWORKEXPSQ.....	-.00026 (-2.9)	.00017 (2.7)	-.00006 (-1.6)	-.00011 (-2.5)	-.00024 (-3.1)	-.0000 (-0.6)
7. FT (has usually worked full time).....	.0876 (1.2)	.0989 (1.7)	.0694 (1.4)	.1092 (3.7)	.0932 (1.5)	.0499 (1.2)
8. MS1.....	.0290 (0.8)	-.0023 (-0.1)	.0368 (1.6)	.0183 (1.0)	.0410 (0.8)	-.0232 (-0.6)
9. MS3.....	-.1991 (-4.1)	-.0365 (-0.6)	-.0914 (-3.4)	-.0188 (-0.8)	-.0883 (-1.6)	-.0305 (-0.7)
10. MET1.....	.2041 (6.8)	.1801 (4.4)	.1698 (9.4)	.2180 (11.1)	.1846 (5.1)	.1853 (4.9)
11. MET2.....	.0612 (2.1)	.0830 (2.1)	.0858 (4.8)	.1024 (5.2)	.0608 (1.7)	.0416 (1.1)

Table B. (continued)

Variable	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
12. UNION.....	.1731 (6.2)	.1290 (3.3)	.0910 (5.9)	.0867 (4.2)	-.0295 (0.8)	.0169 (0.5)
13. SKLBLUE.....	.1940 (5.6)	.1035 (1.5)	(NA)	(NA)	(NA)	(NA)
14. OTHBLUE.....	.0757 (2.5)	-.0429 (-1.2)	(NA)	(NA)	(NA)	(NA)
15. PCTFEM.....	-.2372 (-3.5)	-.3454 (-5.8)	-.2270 (-6.8)	-.2118 (-8.0)	-.1867 (-3.0)	-.4175 (-7.5)
16. FIRMSZ1 (25-99 persons employed by firm)....	.0800 (2.2)	.2171 (3.7)	.1293 (5.3)	.0649 (2.3)	.1707 (3.6)	.0230 (0.5)
17. FIRMSZ2 (100-499 persons employed by firm).....	.1074 (2.7)	.2082 (3.9)	.1510 (5.9)	.1347 (5.2)	.1514 (3.3)	.1469 (3.1)
18. FIRMSZ3 (500-999 persons employed by firm).....	.0748 (1.4)	.2145 (3.2)	.2012 (6.1)	.1480 (4.5)	.1932 (3.4)	.1601 (2.9)
19. FIRMSZ4 (1,000 or more persons employed by firm).....	.1428 (4.6)	.3333 (7.2)	.2294 (11.7)	.1646 (7.8)	.2239 (5.9)	.1619 (3.9)
20. PSECTOR (employed in private sector).....	.1004 (2.5)	.3360 (0.5)	.0701 (3.1)	.0427 (1.9)	.0660 (1.9)	.0699 (2.0)
21. FED (employed by Federal government)..	.2191 (2.2)	.1112 (0.8)	.0846 (2.2)	.0728 (1.8)	.0917 (1.7)	-.0528 (-0.8)
22. INVOL (involuntarily left last job).....	-.0296 (-0.8)	.0654 (1.3)	-.0481 (-2.2)	-.0577 (-2.2)	-.0142 (-0.3)	.0014 (0.0)

Table B. (continued)

Variable	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
23. BETWEEN (time spent between current and last job).....	.0004 (0.0)	.0015 (0.2)	-.0536 (-4.4)	-.0102 (-3.6)	-.0286 (-1.7)	-.0044 (-0.9)
24. VETERAN.....	.0518 (1.9)	-.1539 (-0.6)	-.0105 (-0.7)	.1181 (1.7)	.0567 (1.9)	.1487 (0.9)
25. BLACK.....	-.1621 (-4.7)	-.1379 (-3.1)	-.2154 (-9.1)	-.0782 (-3.5)	-.0733 (-1.3)	-.0304 (-0.7)
26. OTHER.....	-.2094 (-2.9)	.0510 (0.6)	-.0650 (-1.5)	-.0073 (-0.2)	-.0836 (-1.3)	.0106 (0.2)
27. SPAN.....	-.0955 (-2.6)	-.0209 (-0.4)	-.0516 (-1.5)	-.1112 (-3.1)	-.0868 (-1.2)	.0126 (0.1)
28. DISAB.....	-.0545 (-1.5)	-.0939 (-1.9)	-.0697 (-2.5)	-.0685 (-2.0)	-.0566 (-0.9)	-.1983 (-2.8)
29. HEALTH (perceived health status is very good or excellent)...	.0833 (3.5)	.0687 (2.1)	.0518 (3.4)	.1125 (7.0)	.0396 (1.2)	.0443 (1.4)
30. KLT6.....	.0314 (1.4)	-.0132 (-0.4)	-.0221 (-1.7)	.0110 (0.7)	-.0008 (0.0)	.0392 (1.3)
31. K6T17.....	.0047 (0.4)	-.0174 (-1.0)	.0231 (2.9)	.0017 (0.2)	.0181 (1.3)	-.0157 (-1.0)
32. CURRIC (took academic program in high school).....	(NA)	(NA)	.0371 (2.2)	-.0059 (-0.3)	.0611 (1.9)	.0653 (1.9)
33. HSCOURSES (number of math, science, and foreign language classes in high school).....	(NA)	(NA)	.0280 (4.9)	.0364 (5.8)	.0373 (2.7)	.0242 (1.8)

Table B. (continued)

Variable	Not a high school graduate		High school graduate		College gradua	
	Males	Females	Males	Females	Males	Femal
34. PRVTHS (attended private high school)...	(NA)	(NA)	.0078 (0.3)	.0395 (1.5)	.0319 (0.9)	-.0C (-0.
35. MASTERS (obtained master's degree).....	(NA)	(NA)	(NA)	(NA)	.1408 (4.3)	.1: (4.
36. PHD (obtained doctorate).....	(NA)	(NA)	(NA)	(NA)	.1369 (2.6)	.34 (3.
37. FLDSTDY1 (college field was law, medicine or dentistry).	(NA)	(NA)	(NA)	(NA)	.2082 (3.3)	-.0E (-0.
38. FLDSTDY2 (college field was math or science).....	(NA)	(NA)	(NA)	(NA)	.1468 (3.4)	.0C (0.
39. FLDSTDY3 (college field was business or economics).....	(NA)	(NA)	(NA)	(NA)	.1932 (3.4)	.0E (1.
40. FLDSTDY4 (college field was engineering).	(NA)	(NA)	(NA)	(NA)	.2775 (6.6)	.0E (0.
41. FLDSTDY5 (college field was education)...	(NA)	(NA)	(NA)	(NA)	.0721 (1.5)	.02 (0.
42. FLDSTDY6 (college field was nursing, pharmacy, or health technologies).....	(NA)	(NA)	(NA)	(NA)	.1782 (1.7)	.2C (4.
43. FLDSTDY7 (college field was technical or vocational).....	(NA)	(NA)	(NA)	(NA)	.0251 (0.3)	-.1E (-1.
44. CONSTANT.....	1.3023	1.2491	1.5031	1.2633	1.3683	1.75

Table B. (continued)

	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
Number of cases.....	1,414	804	4,414	3,288	2,339	1,463
R^2.....	.34	.33	.26	.24	.25	.26
Mean hourly earnings.....	$8.05	$5.66	$10.16	$7.01	$13.92	$9.99

The control groups for the above model were made up of (a) persons who were divorced, widowed, or separated, (b) persons in nonmetropolitan areas, (c) persons not covered by a union contract, (d) nonveterans, (e) whites, (f) non-Spanish origin persons, (g) persons with no work disability, (h) persons with perceived health status other than very good or excellent, (i) persons with no children, (j) persons who usually worked at part-time jobs during their work life, (k) persons employed by a firm with fewer than 25 employees and (l) persons who left their last job voluntarily. For persons who did not finish high school, white collar workers were also used as a control group. Additional control groups for high school and college graduates included persons who did not take an academic curriculum in high school and persons who attended a public high school. For college graduates, other additional control groups included those who received a Bachelor's degree and those whose field of study was other than those listed in FLDSTDY1-FLDSTDY6.

Table C. Mean Values of Independent Variables

	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
1. JOBTENUR...	11.22	8.00	9.73	7.19	8.46	6.72
2. POCCTENUR..	3.53	2.27	2.74	2.21	2.82	2.37
3. PWORKEXP...	13.24	10.25	10.71	8.11	10.49	7.41
4. USUALFT....	.97	.92	.98	.93	9.6	.89
5. MS1.....	.77	.59	.72	.59	.74	.55
6. MS6.....	.12	.08	.17	.17	.19	.28
7. MET1.....	.38	.39	.41	.42	.50	.49
8. MET2.....	.32	.31	.36	.35	.35	.33
9. UNION.....	.31	.24	.32	.17	.17	.20
10. SKLBLUE....	.28	.06	(NA)	(NA)	(NA)	(NA)
11. OTHBLUE....	.43	.39	(NA)	(NA)	(NA)	(NA)
12. PCTFEM.....	.17	.61	.21	.68	.30	.61
13. FIRMSZ1....	.16	.12	.13	.12	.12	.12
14. FIRMSZ2....	.13	.18	.12	.15	.15	.19
15. FIRMSZ3....	.06	.08	.05	.07	.07	.10
16. FIRMSZ4....	.40	.45	.51	.50	.53	.46
17. PSECTOR....	.90	.92	.85	.83	.72	.59
18. FED.....	.02	.02	.05	.04	.07	.04
19. INVOL.....	.14	.11	.12	.09	.07	.05
20. BETWEEN....	.20	.70	.15	.68	.19	.70

Table C. (continued)

	Not a high school graduate		High school graduate		College graduate	
	Males	Females	Males	Females	Males	Females
21. VETERAN....	.33	-	.43	.01	.33	.01
22. BLACK.....	.14	.16	.09	.14	.05	.10
23. OTHER.....	.03	.04	.02	.02	.04	.04
24. SPAN.....	.13	.12	.04	.04	.03	.02
25. DISAB.....	.12	.12	.06	.05	.04	.04
26. HEALTH.....	.48	.39	.70	.66	.84	.79
27. KLT6.....	.25	.17	.25	.18	.28	.15
28. K6T17.....	.63	.67	.57	.53	.61	.42
29. CURRIC.....	(NA)	(NA)	.30	.30	.75	.78
30. HSCOURSES..	(NA)	(NA)	1.94	1.84	3.26	3.18
31. PRVTHS.....	(NA)	(NA)	.08	.09	.15	.15
32. MASTERS....	(NA)	(NA)	(NA)	(NA)	.19	.23
33. PHD.....	(NA)	(NA)	(NA)	(NA)	.09	.03
34. FLDSTDY1...	(NA)	(NA)	(NA)	(NA)	.06	.03
35. FLDSTDY2...	(NA)	(NA)	(NA)	(NA)	.11	.06
36. FLDSTDY3...	(NA)	(NA)	(NA)	(NA)	.27	.17
37. FLDSTDY4...	(NA)	(NA)	(NA)	(NA)	.13	.02
38. FLDSTDY5...	(NA)	(NA)	(NA)	(NA)	.09	.30
39. FLDSTDY6...	(NA)	(NA)	(NA)	(NA)	.01	.09
40. FLDSTDY7...	(NA)	(NA)	(NA)	(NA)	.03	.01

(NA) Not applicable.
- Rounds to zero.

Table D. Proportion of Male-Female Earnings Differential Accounted for by Differences in the Mean Values of the Independent Variables

(Based on coefficients for males)

Characteristic	Not high school graduates	High school graduates	College graduates
Experience.....	.139	.222	.226
Schooling.....	(NA)	.008	.127
Field of study.....	(NA)	(NA)	.116
Skilled trades.....	.129	(NA)	(NA)
Occupational structure..	.303	.300	.174
Other characteristics...	.024	.071	.128
All characteristics.....	.595	.601	.655
Residual.....	.405	.399	.345

Experience: Number of years with current employer, years in current occupation less years with current employer, years of work experience less years in current occupation, whether usually worked full time during work years, length of time between current and previous job.

Schooling: Type of high school program, number of math, science, and foreign language courses in high school, whether public or private high school (high school and college graduates); highest degree and field of study (college graduates).

Skilled trades: Whether in "precision production, craft, or repair" occupation.

Occupational structure: Percent of persons in occupation who are female.

Other characteristics: Marital status, type of geographic area, whether covered by a union contract, size of firm, class of worker, whether involuntarily left last job, race and Spanish origin, disability and health status, presence of children.