

# Supplemental Appendix to “Sibling Gender and Wage Differences”

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## **Abstract**

The supplemental appendix contains additional regressions and tabulations referenced in the main text. Table A1 includes only children in the sample for estimating the relationship between wages and sibship sex composition. Descriptive statistics for the data on job finding, home quality, and family roles are provided in Tables A2, A3, and A4. Table A5 reports the most common occupations in various wage brackets, and Table A6 relates sibling gender to occupational group. The sex composition of the jobs held by men and women is summarized in Table A7, and the association of this variable with sibling gender is examined in Table A8.

Table A1: Influence of Siblings and Their Gender on Wages

	Men					Women						
	Worked in Past Year and Hourly Wage at Least					Worked in Past Year and Hourly Wage at Least						
	\$0	\$5	\$10	\$15	\$20	\$25	\$0	\$5	\$10	\$15	\$20	\$25
	Presence of Sibling					Presence of Sibling						
	Number of Siblings					Number of Siblings						
	Presence of Brother					Presence of Brother						
	Number of Brothers					Number of Brothers						
Has At Least One Sibling	-0.290 (.0170)	-0.346 (.0242)	-0.244 (.0480)	-0.471 (.0461)	.0116 (.0314)	.0199 (.0182)	-.0552 (.0354)	-.0739* (.0426)	-.0013 (.0460)	.0243 (.0314)	.0064 (.0200)	.0041 (.0124)
Has At Least One Sibling	-0.200 (.0139)	-0.296 (.0206)	.0038 (.0489)	-0.262 (.0506)	.0363 (.0364)	.0417* (.0225)	-.0283 (.0348)	-.0295 (.0412)	.0189 (.0486)	.0414 (.0363)	.0278 (.0242)	.0203 (.0153)
Number of Additional Siblings	-.0012 (.0022)	.0004 (.0028)	-.0104** (.0048)	-.0086* (.0045)	-.0082** (.0039)	-.0066** (.0027)	-.0106*** (.0035)	-.0176*** (.0040)	-.0080* (.0044)	-.0054 (.0034)	-.0073*** (.0024)	-.0051*** (.0017)
Has At Least One Sibling	-.0166 (.0162)	-.0190 (.0239)	-.0326 (.0519)	-.0598 (.0522)	.0037 (.0374)	.0186 (.0225)	-.0419 (.0385)	-.0568 (.0454)	.0362 (.0516)	.0561 (.0381)	.0193 (.0249)	.0075 (.0159)
Has At Least One Brother	-.0106 (.0120)	-.0149 (.0159)	.0104 (.0259)	.0117 (.0226)	.0099 (.0164)	.0039 (.0109)	-.0146 (.0212)	-.0180 (.0240)	-.0437* (.0250)	-.0339* (.0198)	-.0137 (.0124)	-.0031 (.0078)
Has At Least One Sibling	-.0124 (.0157)	-.0143 (.0233)	-.0062 (.0526)	-.0426 (.0538)	.0267 (.0389)	.0343 (.0292)	-.0271 (.0378)	-.0334 (.0446)	.0469 (.0524)	.0629 (.0400)	.0287 (.0271)	.0147 (.0202)
Number of Additional Siblings	-.0041 (.0031)	-.0051 (.0039)	-.0218*** (.0070)	-.0138** (.0066)	-.0198*** (.0054)	-.0103** (.0041)	-.0131*** (.0051)	-.0209*** (.0059)	-.0089 (.0062)	-.0035 (.0047)	-.0054* (.0032)	-.0035 (.0023)
Has At Least One Brother	-.0108 (.0114)	-.0207 (.0153)	.0216 (.0270)	.0254 (.0250)	.0193 (.0183)	.0142 (.0137)	-.0003 (.0218)	.0075 (.0247)	-.0368 (.0264)	-.0286 (.0215)	-.0020 (.0138)	.0075 (.0095)
Number of Additional Brothers	.0079 (.0057)	.0154** (.0071)	.0220** (.0109)	.0078 (.0100)	.0204*** (.0076)	.0056 (.0055)	.0057 (.0085)	.0067 (.0096)	.0059 (.0097)	-.0013 (.0071)	-.0041 (.0049)	-.0048 (.0031)
Observations	2,650					3,024						

Note: Average marginal effects from probit regressions are reported and can be interpreted as follows. The marginal effect of having a sibling is the difference in the probability of reaching a specified earnings threshold between only children and individuals whose only sibling is a sister. The marginal effect of additional siblings is the change in the probability of a given outcome if a person with a sibling were to have one more sister. The marginal effect of having a brother is the change in the probability if a person whose only siblings are one or more sisters were to have one fewer sister and just one brother. The marginal effect of additional brothers is the change if an individual with both a brother and a sister were to have one more brother and one fewer sister. The main estimation sample is expanded to include only children. All specifications control for race, region of residence, urban location, dummy variables for age, and indicator variables for parental age and education. Huber-White standard errors, clustered at the family level, are reported in parentheses. Single, double, and triple asterisks respectively denote statistical significance at the 10 percent, 5 percent, and 1 percent levels.

Table A2: Summary Statistics on Job Search through Siblings

	Men	Women
Mean (S.D.) Age	20.47 (2.22)	20.66 (2.20)
Pct. Siblings Male	50.65	51.79
Pct. Helped to Get Job by		
Relative	24.17	18.64
Sibling	4.12	4.62
Brother	2.90	1.09
Sister	1.22	3.53
Pct. Also Having Same Employer as		
Relative	17.25	12.54
Sibling	3.17	3.53
Brother	2.26	0.87
Sister	0.91	2.66
Individuals/Families	2,209/1,892	2,296/1,995

Note: The questionnaire on job search methods from the 1982 round of the NLSY79 is used. The dataset comprises individuals with valid sibling data who worked during the past year. Only children are excluded as are members of the military sample.

Table A3: Summary Statistics on Home Environment

	Boys	Girls
Part A: Infant/Toddler		
Mean (S.D.) Age	1.62 (0.93)	1.62 (0.94)
Mean (S.D.) Year	1991.57 (4.80)	1991.78 (4.98)
Pct. Siblings Male	48.94	51.37
Mean (S.D.) Total Raw Score	138.23 (24.95)	139.85 (25.28)
Observations/Individuals/Families	2,768/2,261/1,732	2,657/2,138/1,638
Part B: Early Childhood		
Mean (S.D.) Age	4.53 (0.94)	4.52 (0.94)
Mean (S.D.) Year	1992.77 (5.29)	1992.82 (5.32)
Pct. Siblings Male	50.01	53.60
Mean (S.D.) Total Raw Score	201.14 (37.99)	205.45 (36.52)
Observations/Individuals/Families	3,890/3,016/2,124	3,820/2,940/2,108
Part C: Middle Childhood		
Mean (S.D.) Age	8.03 (1.30)	8.05 (1.30)
Mean (S.D.) Year	1994.79 (6.15)	1994.86 (6.18)
Pct. Siblings Male	48.50	53.41
Mean (S.D.) Total Raw Score	196.89 (38.90)	199.64 (38.43)
Observations/Individuals/Families	5,934/3,718/2,405	5,791/3,579/2,359
Part D: Early Adolescence		
Mean (S.D.) Age	12.20 (1.35)	12.19 (1.36)
Mean (S.D.) Year	1998.28 (6.09)	1998.32 (6.16)
Pct. Siblings Male	48.71	52.92
Mean (S.D.) Total Raw Score	200.17 (36.54)	203.92 (36.06)
Observations/Individuals/Families	6,062/3,404/2,214	6,063/3,370/2,213

Note: The HOME inventory from the NLSY79-CH is used. Parts A, B, C, and D are generally administered to children aged 0-2, 3-5, 6-9, and 10-14 years, respectively. The dataset excludes only children, individuals without sibling data, and the progeny of military sample members.

Table A4: Summary Statistics on Family Attitudes

	Young Men	Young Women
Mean (S.D.) Age	21.08 (5.01)	21.16 (5.06)
Mean (S.D.) Year	2004.84 (6.06)	2004.87 (6.00)
Pct. Siblings Male	49.55	53.42
Pct. Agreeing That		
Place of Women Is in Home	13.12	8.73
Wife with Family Has No Time for Other Employment	15.81	9.50
Working Wife Feels More Useful	61.70	49.96
Employment of Wives Leads to Juvenile Delinquency	14.50	11.37
Inflation Necessitates Employment of Both Parents	76.48	77.51
Traditional Husband and Wife Roles Are Best	29.08	20.81
Men Should Share Housework	93.03	96.40
Women Are Happier in Traditional Roles	30.59	22.93
Observations/Individuals/Families	4,877/3,129/2,071	5,190/3,182/2,111

Note: The module on family attitudes from the NLSY79-YA is used. The dataset excludes only children, individuals without sibling data, and the progeny of military sample members.

Table A5: Wage Intervals and Occupational Groups

	Men	Women
	Three Most Common Occupations	
Wage < \$5	Janitors and Cleaners Groundskeepers and Gardeners Transportation Laborers	Child Care Workers Cashiers Cooks
\$5 ≤ Wage < \$10	Construction Laborers Janitors and Cleaners Transportation Laborers	Nursing Aids Secretaries Cashiers
\$10 ≤ Wage < \$15	Heavy Truck Drivers Carpenters Construction Laborers	Secretaries Elementary School Teachers General Office Clerks
\$15 ≤ Wage < \$20	Computer Programmers Heavy Truck Drivers Construction Laborers	Registered Nurses Secretaries Postal Clerks
\$20 ≤ Wage < \$25	Computer Systems Analysts Computer Programmers Accountants and Auditors	Registered Nurses Computer Systems Analysts Accountants and Auditors
Wage ≥ \$25	Lawyers Financial Services Sales Physicians	Lawyers Financial Managers Registered Nurses
	Most Common Occupational Group	
Wage < \$5	Blue-Collar Worker	Service Worker
\$5 ≤ Wage < \$10	Blue-Collar Worker	Lower White-Collar
\$10 ≤ Wage < \$15	Blue-Collar Worker	Lower White-Collar
\$15 ≤ Wage < \$20	Blue-Collar Worker	Upper White-Collar
\$20 ≤ Wage < \$25	Upper White-Collar	Upper White-Collar
Wage ≥ \$25	Upper White-Collar	Upper White-Collar
Observations	3,634	3,356

Note: The dataset comprises individuals in the 1993 round of the NLSY79 who worked in the past year. Members of the military sample are dropped. The top panel lists the three most frequent 3-digit occupations in each wage interval according to 1990 Census codes. Jobs that do not belong to a well-defined occupation are excluded. The bottom panel identifies the most prevalent occupational group in each wage range. Jobs are classified into occupational groups based on 1990 Census codes. Managers and professionals (codes 3–199) are regarded as upper white-collar workers, and lower white-collar employees perform technical, sales, and clerical functions (codes 203–389). The service sector comprises household workers, protective forces, food preparation, health aides, maintenance jobs, and personal care (codes 403–469). Operatives and laborers as well as craft and resource workers (codes 473–889) are included in the blue-collar category.

Table A6: Influence of Sibling Gender on Occupational Group

	Men			Women				
	Upper White-Collar	Lower White-Collar	Service Worker	Blue-Collar Worker	Upper White-Collar	Lower White-Collar	Service Worker	Blue-Collar Worker
Fraction of Siblings Male	0.0338 (0.0244)	0.0115 (0.0237)	-0.0110 (0.0193)	-0.0231 (0.0302)	0.0144 (0.0237)	-0.0286 (0.0279)	0.0250 (0.0222)	-0.0132 (0.0176)
Observations	2,485			2,857				

Note: Average marginal effects from probit regressions are presented. The main estimation sample is used. Jobs are classified into occupational groups based on 1990 Census codes. Managers and professionals (codes 3–199) are regarded as upper white-collar workers, and lower white-collar employees perform technical, sales, and clerical functions (codes 203–389). The service sector comprises household workers, protective forces, food preparation, health aides, maintenance jobs, and personal care (codes 403–469). Operatives and laborers as well as craft and resource workers (codes 473–889) are included in the blue-collar category. All specifications control for race, region of residence, urban location, dummy variables for age, fixed effects for birth order and sibship size, and indicator variables for parental age and education. Huber-White standard errors, clustered at the family level, are reported in parentheses. Single, double, and triple asterisks respectively denote statistical significance at the 10 percent, 5 percent, and 1 percent levels.

Table A7: Sex Composition of Occupation and Job Search through Siblings

	Men	Women
	Mean Percent Female in Occupation	
All	31.30	70.59
Had Help Getting Job from		
Relative	27.39	67.41
Sibling	34.60	69.10
Brother	31.09	62.95
Sister	42.93	71.00
Also Had Same Employer as		
Relative	27.83	64.38
Sibling	36.16	66.39
Brother	32.53	61.18
Sister	45.21	68.10
Observations	2,209	2,296

Note: The questionnaire on job search methods from the 1982 round of the NLSY79 is used. The dataset comprises individuals with valid sibling data who worked during the past year. Only children are excluded as are members of the military sample. The number of women as a percentage of all workers in the 3-digit occupation of a respondent is calculated based on data from the 1980 Census. The resulting variable is averaged over all men or women that obtain a job through a given relative.

Table A8: Influence of Sibling Gender on Sex Composition of Occupation

	Men		Women	
	Proportion Female in Occupation			
	Linear Regression	Fractional Logit	Linear Regression	Fractional Logit
Fraction of Siblings Male	0.0256 (0.0172)	0.0252 (0.0168)	-0.0146 (0.0167)	-0.0143 (0.0165)
Observations	2,209		2,296	

Note: The dataset comprises individuals from the 1982 wave of the NLSY79 who worked during the past year and have valid sibling data. Only children are excluded as are members of the military sample. Information from the 1980 Census is used to compute the dependent variable, which is the share of workers in the 3-digit occupation of a respondent who are women. Linear regression coefficients are estimated by ordinary least squares. Because the response variable cannot take values outside the unit interval, fractional logit models are fit by the method of quasi-maximum likelihood, and average marginal effects are reported. All specifications control for race, region of residence, urban location, dummy variables for age, fixed effects for birth order and sibship size, and indicator variables for parental age and education. Huber-White standard errors, clustered at the family level, are reported in parentheses. Single, double, and triple asterisks respectively denote statistical significance at the 10 percent, 5 percent, and 1 percent levels.