

APPENDIX TABLE A1: AMERICAN COMMUNITY SURVEY OCCUPATIONS AND CLASSIFICATIONS BY GROUP

Occ. #	Occupation title	Occ. #	Occupation title
	<i>Technology Occupations</i>		<i>Business Occupations</i>
11	Computer and information systems managers	1	Chief executives and legislators
30	Engineering managers	2	General and operations managers
100	Computer scientists and systems analysts	4	Advertising and promotions managers
101	Computer programmers	5	Marketing and sales managers
102	Computer software engineers	6	Public relations managers
104*	Computer support specialists	10	Administrative services managers
110	Network and computer systems admins.	12	Financial managers
111*	Network systems, data analysts	13	Human resources managers
120	Actuaries	14	Industrial production managers
122	Operations research analysts	15	Purchasing managers
132	Aerospace engineers	60	Cost estimators
134	Biomedical and agricultural engineers	71	Management analysts
135	Chemical engineers	73	Other business operations specialists
136	Civil Engineers	80	Accountants and auditors
140	Computer hardware engineers	82	Budget analysts
141	Electrical and electronics engineers	84	Financial analysts
142	Environmental engineers	85	Personal financial advisors
143	Industrial engineers, incl. health and safety	86	Insurance underwriters
144	Marine engineers and naval architects	90	Financial examiners
145	Materials engineers	91	Loan counselors and officers
146	Mechanical engineers	95	Financial specialists, all other
152	Petroleum, mining and geological engineers	106	Database administrators
153	Misc. engineers including nuclear engineers	180	Economists
155*	Engineering technicians, except drafters	181	Market and survey researchers
284	Technical writers	481	Insurance sales agents
493	Sales engineers	482	Securities, commodities, financial sales agents
903	Aircraft pilots and flight engineers	484	Sales representatives, services, all other
		485	Sales representatives, wholesale and mfg.
		520	Brokerage clerks

TABLE A1 (CONTINUED)

Occ. #	Occupation title	Occ. #	Occupation title
	<i>Health Occupations</i>		<i>Other Occupations</i>
35	Medical and health services managers	22	Construction managers
36	Natural sciences managers	23	Education administrators
182	Psychologists	32	Funeral directors, undertakers, misc. managers
300	Chiropractors	43	Misc. managers including postmasters
301	Dentists	56	Compliance officers, with exceptions
304	Optometrists	130	Architects, except naval
305	Pharmacists	184	Urban and regional planners
306	Physicians and surgeons	210	Lawyers, and judges, magistrates, etc.
311	Physician assistants	220	Postsecondary teachers
312	Podiatrists	271	Producers and directors
313	Registered nurses	282	Public relations specialists
314	Audiologists	371	First-line supervisors of police and detectives
315	Occupational therapists	382	Detectives and criminal investigators
316	Physical therapists	471	First-line supervisors, non-retail sales
320	Radiation therapists	490	Models, demonstrators, product promoters
323	Speech-language pathologists	496	Sales and related workers, all other
325	Veterinarians	904	Air traffic controllers and operations specialists
326	Health diagnosing and treating practitioners		
	<i>Science Occupations</i>		
124	Misc. mathematical science occupations		
165	Medical scientists		
170	Astronomers and physicists		
171	Atmospheric and space scientists		
172	Chemists and materials scientists		
174	Environmental scientists and geoscientists		
176	Physical scientists, all other		

* Indicates a technology occupation included in the expanded group of 27 technology occupations used in on-line Appendix Table A2.

APPENDIX TABLE A2: ROLE OF INDUSTRY VERSUS OCCUPATION IN THE IMPACT OF TECHNOLOGY ON THE GENDER EARNINGS GAP

	Dependent variable: Log Wage and Business Annual Income			
	(1)	(2)	(3)	(4)
	Basic Regression	Adding Fraction in Technology	Adding Technology × Female	Adding Occupation × Female
Female	-0.129*** (0.00348)	-0.125*** (0.00349)	-0.129*** (0.00485)	-0.122*** (0.0824)
Log hours	0.506*** (0.0118)	0.499*** (0.0118)	0.499*** (0.0118)	0.500*** (0.0118)
Log weeks	1.112*** (0.0493)	1.129*** (0.0492)	1.129*** (0.0492)	1.128*** (0.0491)
Fraction of industry in technology		0.129*** (0.00724)	0.125*** (0.00801)	0.125*** (0.00808)
Fraction in technology × female			0.0170 (0.0169)	0.0187 (0.0178)
Other variables included:				
Age as a quartic	Yes	Yes	Yes	Yes
Dummy variables:				
Race	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
Education	Yes	Yes	Yes	Yes
Occupation (27)	Yes	Yes	Yes	Yes
Occupation (27) × female	No	No	No	Yes
Constant	1.241** (0.570)	1.244** (0.569)	1.245** (0.569)	1.253** (0.569)
Observations	156,201	156,201	156,201	156,201
R-squared	0.294	0.296	0.296	0.297

Sources and Notes: American Community Survey 2009 to 2011, 27 technology occupations included (see on-line Appendix Table A1). Only full-time, full-year workers, 25 to 64 years old are included. Education is primarily in years but uses census groupings. Fraction in technology is the fraction of the individual's industry employment in the 27 technology occupations (see on-line Appendix Table A3). Omitted occupation is computer scientists and systems analysts. Robust standard errors are in parentheses.

*** $p < 0.01$

** $p < 0.05$

* $p < 0.1$

APPENDIX TABLE A3: FRACTION OF INDUSTRY EMPLOYMENT IN TECHNOLOGY OCCUPATIONS: 35
 HIGHEST INDUSTRIES (OF 267), 2009 TO 2011

Industry	ACS number	Fraction in Technology
Computer systems design and related services	7380	0.642
Software publishing	6490	0.458
Aerospace product and parts mfg.	3590	0.410
Computer and peripheral equipment mfg.	3360	0.406
Architectural, engineering, and related services	7290	0.372
Internet publishing and broadcasting	6672	0.372
Electronic component and product mfg., n.e.c.	3390	0.363
Communications, audio, and video equipment mfg.	3370	0.356
Data processing, hosting, and related services	6695	0.308
Navigational, measuring, electromedical, mfg.	3380	0.279
Other telecommunication services	6690	0.270
Aircraft and parts mfg.	3580	0.268
Electronic auctions	5591	0.252
Wired telecommunications carriers	6680	0.225
Air transportation	6070	0.212
Other information services	6780	0.204
Engines, turbines, and power transmission equipment mfg.	3180	0.181
Scientific research and development services	7460	0.180
Commercial and service industry machinery mfg.	3090	0.179
Electronic shopping and mail-order houses	5590	0.169
National security and international affairs	9590	0.165
Medical equipment and supplies mfg.	3960	0.154
Electric and gas and other combinations	590	0.151
Electrical machinery, equipment, and supplies mfg., n.e.c.	3490	0.149
Radio, TV, and computer stores	4790	0.145
Administration of economic programs and space research	9570	0.144
Electric power generation transmission and distribution	570	0.143
Construction mining and oil field machinery mfg.	3080	0.142
Petroleum refining	2070	0.140
Oil and gas extraction	370	0.129
Management of companies and enterprises	7570	0.126
Other transportation equipment mfg.	3690	0.126
Management, scientific and technical consulting services	7390	0.123
Machinery manufacturing, n.e.c.	3190	0.121
Motor vehicles and motor vehicle equipment mfg.	3570	0.120

Sources and Notes: American Community Survey 2009 to 2011. “Fraction in technology” is the fraction of full-time, full-year, 25 to 64 year old employees who are in one of the 27 technology occupations in on-line Appendix Table A1. 59 percent of all workers in technology occupations are in these highest 35 industries.