

Online Appendix to “Worker Betas: Five Facts about Systematic Earnings Risk”

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Appendix A. Sample Description

Table A1: Sample Description by Gender and Age

Earnings percentile	Male				Female			
	26–35	36–45	46–55	56–65	26–35	36–45	46–55	56–65
<i>Panel A. Observations (thousands)</i>								
0	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
10	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
20	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
30	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
40	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
50	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
60	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
70	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
80	5,567	5,073	3,997	2,333	4,758	4,472	3,709	2,088
90	5,011	4,566	3,597	2,100	4,282	4,025	3,339	1,879
99	501	457	360	210	428	402	334	188
99.9	56	51	40	23	48	45	37	21
<i>Panel B. Median earnings (thousands of 2009 dollars)</i>								
0	3	6	7	6	2	2	3	3
10	9	16	20	19	5	6	9	9
20	14	25	29	28	9	11	15	15
30	18	31	37	35	13	16	20	20
40	22	38	45	43	16	21	26	25
50	27	45	53	51	20	26	32	30
60	32	53	62	61	24	32	38	37
70	39	62	74	74	29	39	46	45
80	48	78	94	95	36	50	58	56
90	68	118	150	155	51	72	81	79
99	137	333	504	546	98	159	186	169
99.9	349	1,073	1,714	2,062	192	397	526	480

Appendix B. GDP Beta

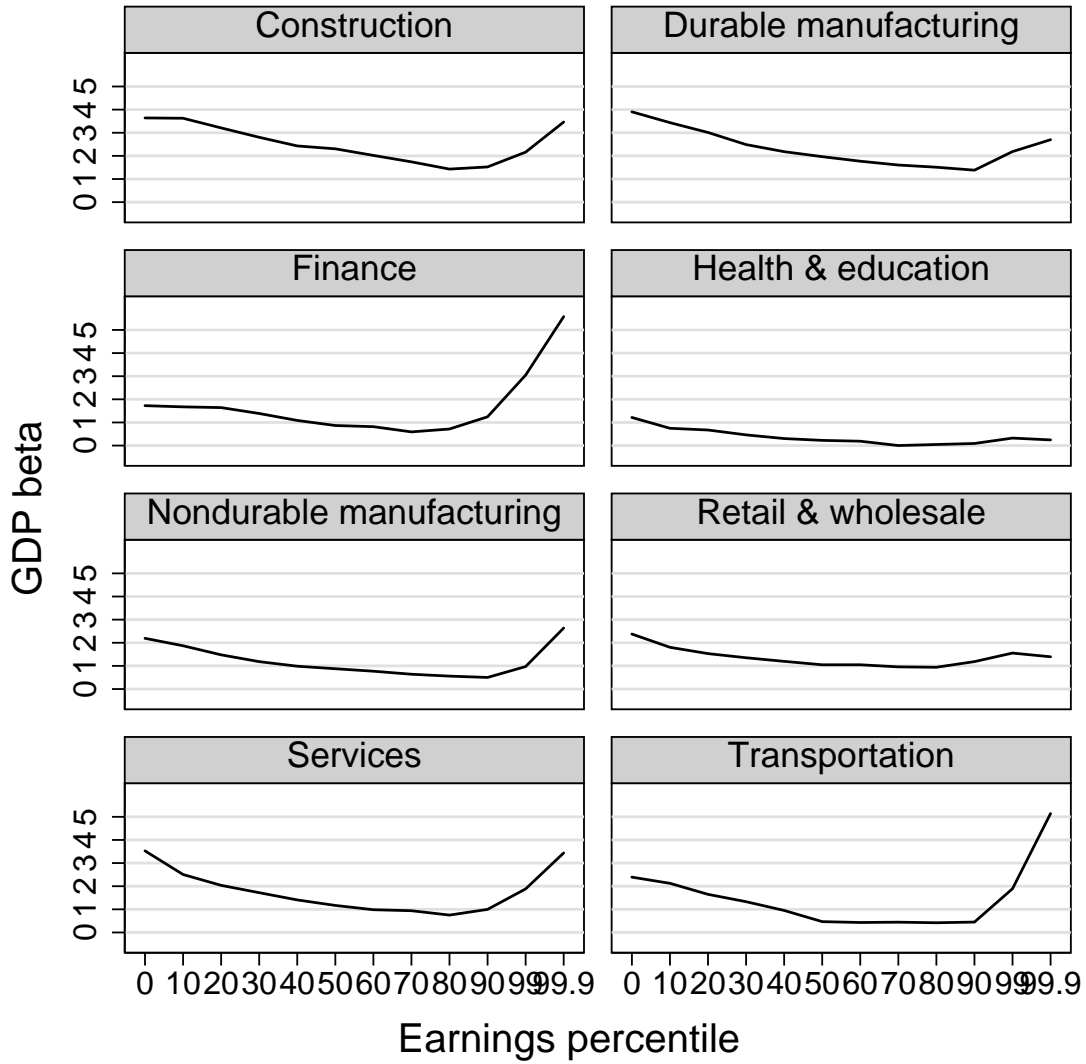


Figure B1: GDP Beta for Males by Industry

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate GDP beta is from year $t - 1$ to t .

Table B1: GDP Beta by Gender and Age

Earnings percentile	Male				Female			
	26–35	36–45	46–55	56–65	26–35	36–45	46–55	56–65
0	3.04 (0.04)	2.88 (0.03)	2.59 (0.03)	1.45 (0.04)	2.32 (0.04)	2.11 (0.04)	1.45 (0.04)	1.11 (0.04)
10	2.50 (0.03)	2.25 (0.02)	2.04 (0.02)	1.32 (0.03)	1.61 (0.03)	1.49 (0.03)	1.11 (0.03)	0.68 (0.03)
20	2.10 (0.02)	1.76 (0.02)	1.67 (0.02)	1.14 (0.03)	1.34 (0.03)	1.18 (0.02)	0.89 (0.02)	0.54 (0.03)
30	1.83 (0.02)	1.45 (0.02)	1.33 (0.02)	0.86 (0.03)	1.09 (0.02)	1.01 (0.02)	0.77 (0.02)	0.47 (0.03)
40	1.66 (0.02)	1.25 (0.02)	1.11 (0.02)	0.56 (0.03)	0.91 (0.02)	0.84 (0.02)	0.69 (0.02)	0.30 (0.03)
50	1.55 (0.02)	1.09 (0.01)	0.86 (0.02)	0.30 (0.03)	0.80 (0.02)	0.69 (0.02)	0.60 (0.02)	0.20 (0.03)
60	1.45 (0.02)	0.92 (0.01)	0.77 (0.02)	0.08 (0.03)	0.67 (0.02)	0.57 (0.02)	0.45 (0.02)	0.11 (0.03)
70	1.31 (0.01)	0.79 (0.01)	0.63 (0.02)	0.06 (0.03)	0.53 (0.02)	0.45 (0.02)	0.36 (0.02)	-0.04 (0.03)
80	1.15 (0.01)	0.77 (0.01)	0.58 (0.02)	0.04 (0.03)	0.41 (0.02)	0.37 (0.02)	0.29 (0.02)	-0.06 (0.03)
90	0.95 (0.01)	0.99 (0.02)	0.90 (0.02)	0.35 (0.03)	0.37 (0.02)	0.43 (0.02)	0.30 (0.02)	-0.24 (0.03)
99	1.30 (0.06)	2.00 (0.07)	1.87 (0.08)	1.58 (0.12)	0.73 (0.07)	1.05 (0.06)	1.09 (0.07)	0.22 (0.11)
99.9	2.90 (0.25)	3.70 (0.28)	3.29 (0.33)	4.23 (0.55)	2.26 (0.21)	2.77 (0.27)	2.79 (0.26)	3.09 (0.47)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B2: GDP Beta by Gender and Age: Construction

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	3.37	3.61	3.58	3.52	3.64	1.95	2.91	2.38	1.87	2.58
	(0.18)	(0.17)	(0.19)	(0.29)	(0.10)	(0.64)	(0.54)	(0.43)	(0.47)	(0.27)
10	3.46	3.46	3.59	3.63	3.63	2.24	2.40	2.29	2.33	2.50
	(0.13)	(0.12)	(0.12)	(0.19)	(0.07)	(0.43)	(0.34)	(0.31)	(0.38)	(0.19)
20	3.04	3.12	3.28	2.80	3.21	2.05	2.55	1.97	1.53	2.25
	(0.11)	(0.10)	(0.10)	(0.17)	(0.06)	(0.37)	(0.30)	(0.30)	(0.39)	(0.17)
30	2.75	2.62	2.83	2.44	2.80	2.28	1.81	2.18	2.23	2.23
	(0.10)	(0.09)	(0.10)	(0.15)	(0.05)	(0.34)	(0.25)	(0.26)	(0.38)	(0.15)
40	2.35	2.26	2.52	2.17	2.43	1.83	1.97	1.54	1.38	1.81
	(0.09)	(0.09)	(0.10)	(0.15)	(0.05)	(0.30)	(0.27)	(0.23)	(0.33)	(0.14)
50	2.46	2.13	2.16	1.83	2.31	0.93	1.72	1.33	1.37	1.41
	(0.09)	(0.08)	(0.09)	(0.14)	(0.05)	(0.26)	(0.22)	(0.21)	(0.30)	(0.12)
60	2.25	1.76	1.94	1.52	2.02	1.36	1.61	1.41	0.99	1.44
	(0.08)	(0.07)	(0.08)	(0.14)	(0.04)	(0.24)	(0.21)	(0.21)	(0.29)	(0.12)
70	2.08	1.61	1.41	1.21	1.74	1.41	1.31	0.99	1.05	1.25
	(0.08)	(0.07)	(0.08)	(0.14)	(0.04)	(0.23)	(0.22)	(0.21)	(0.33)	(0.12)
80	1.70	1.40	1.13	0.61	1.43	0.82	1.38	1.22	1.56	1.20
	(0.07)	(0.07)	(0.09)	(0.17)	(0.04)	(0.24)	(0.22)	(0.24)	(0.36)	(0.13)
90	1.44	1.42	1.72	1.34	1.52	0.88	1.55	1.73	1.49	1.39
	(0.07)	(0.11)	(0.13)	(0.19)	(0.05)	(0.32)	(0.30)	(0.31)	(0.43)	(0.17)
99	1.05	2.97	2.62	2.63	2.16	1.17	3.15	4.29	2.21	2.88
	(0.36)	(0.54)	(0.61)	(0.72)	(0.26)	(1.02)	(1.16)	(1.03)	(0.93)	(0.52)
99.9	0.30	2.99	10.38	4.79	3.46	-1.43	4.02	0.16	8.99	3.04
	(1.35)	(2.02)	(4.17)	(3.13)	(1.16)	(3.31)	(4.30)	(2.87)	(4.38)	(1.95)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B3: GDP Beta by Gender and Age: Nondurable Manufacturing

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	2.26 (0.16)	2.08 (0.15)	2.13 (0.15)	1.37 (0.21)	2.19 (0.08)	2.63 (0.22)	2.26 (0.24)	1.70 (0.23)	1.12 (0.27)	2.29 (0.12)
10	2.32 (0.11)	1.69 (0.09)	1.53 (0.09)	1.10 (0.12)	1.87 (0.05)	1.70 (0.14)	1.72 (0.14)	1.66 (0.14)	1.17 (0.18)	1.73 (0.08)
20	1.92 (0.09)	1.33 (0.07)	1.13 (0.07)	0.83 (0.10)	1.48 (0.04)	1.60 (0.12)	1.34 (0.11)	1.15 (0.11)	1.11 (0.14)	1.43 (0.06)
30	1.49 (0.08)	1.14 (0.06)	0.97 (0.07)	0.53 (0.10)	1.18 (0.04)	1.30 (0.10)	1.25 (0.09)	1.15 (0.08)	1.02 (0.11)	1.26 (0.05)
40	1.26 (0.07)	0.93 (0.06)	0.86 (0.05)	0.29 (0.10)	0.99 (0.03)	1.10 (0.09)	1.03 (0.07)	1.00 (0.07)	0.55 (0.10)	1.01 (0.04)
50	1.21 (0.06)	0.76 (0.05)	0.72 (0.05)	0.20 (0.10)	0.88 (0.03)	0.99 (0.08)	0.89 (0.07)	0.84 (0.07)	0.45 (0.10)	0.88 (0.04)
60	0.93 (0.06)	0.72 (0.05)	0.72 (0.06)	0.08 (0.11)	0.77 (0.03)	0.89 (0.08)	0.70 (0.07)	0.62 (0.07)	0.23 (0.11)	0.70 (0.04)
70	0.88 (0.05)	0.49 (0.05)	0.53 (0.06)	-0.06 (0.11)	0.64 (0.03)	0.57 (0.09)	0.54 (0.07)	0.45 (0.08)	0.13 (0.12)	0.50 (0.04)
80	0.76 (0.05)	0.46 (0.05)	0.45 (0.06)	-0.20 (0.12)	0.56 (0.03)	0.39 (0.08)	0.34 (0.07)	0.32 (0.08)	0.04 (0.14)	0.33 (0.04)
90	0.42 (0.05)	0.57 (0.07)	0.46 (0.09)	0.05 (0.14)	0.50 (0.04)	0.38 (0.08)	0.37 (0.08)	0.36 (0.09)	-0.03 (0.15)	0.34 (0.05)
99	0.15 (0.25)	1.72 (0.32)	0.93 (0.35)	1.17 (0.54)	0.97 (0.17)	0.22 (0.28)	1.09 (0.29)	1.10 (0.36)	0.59 (0.42)	0.79 (0.16)
99.9	3.33 (0.91)	-0.40 (1.34)	0.77 (1.29)	6.11 (1.62)	2.64 (0.64)	1.62 (1.38)	1.83 (1.60)	3.08 (1.39)	-0.53 (1.63)	1.69 (0.74)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B4: GDP Beta by Gender and Age: Durable Manufacturing

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	3.73 (0.16)	3.84 (0.15)	3.83 (0.16)	2.90 (0.22)	3.91 (0.08)	3.96 (0.33)	3.64 (0.35)	3.11 (0.32)	2.44 (0.48)	3.84 (0.18)
10	3.50 (0.10)	3.45 (0.08)	3.09 (0.08)	2.80 (0.12)	3.44 (0.05)	3.19 (0.19)	3.30 (0.20)	3.22 (0.20)	2.85 (0.34)	3.42 (0.11)
20	3.34 (0.08)	2.92 (0.06)	2.60 (0.06)	2.38 (0.09)	3.01 (0.04)	2.90 (0.16)	2.97 (0.14)	3.08 (0.15)	2.47 (0.20)	3.12 (0.08)
30	3.01 (0.07)	2.39 (0.05)	2.06 (0.06)	1.73 (0.09)	2.49 (0.03)	2.52 (0.13)	2.50 (0.11)	2.25 (0.11)	2.11 (0.16)	2.55 (0.06)
40	2.79 (0.06)	2.07 (0.05)	1.78 (0.05)	1.27 (0.08)	2.18 (0.03)	2.41 (0.12)	2.10 (0.09)	1.92 (0.09)	1.66 (0.13)	2.18 (0.05)
50	2.61 (0.05)	1.85 (0.05)	1.45 (0.05)	0.98 (0.08)	1.97 (0.03)	1.94 (0.10)	1.71 (0.09)	1.70 (0.08)	1.42 (0.12)	1.81 (0.05)
60	2.48 (0.05)	1.62 (0.04)	1.23 (0.05)	0.61 (0.09)	1.77 (0.03)	1.80 (0.09)	1.67 (0.07)	1.44 (0.08)	0.87 (0.13)	1.57 (0.04)
70	2.34 (0.04)	1.46 (0.04)	1.02 (0.05)	0.37 (0.09)	1.61 (0.03)	1.51 (0.09)	1.35 (0.07)	1.12 (0.08)	0.69 (0.14)	1.28 (0.05)
80	2.29 (0.04)	1.35 (0.05)	0.95 (0.06)	0.14 (0.10)	1.51 (0.03)	1.41 (0.08)	1.24 (0.09)	1.09 (0.08)	0.74 (0.16)	1.21 (0.05)
90	1.72 (0.05)	1.15 (0.06)	1.25 (0.07)	0.76 (0.11)	1.38 (0.03)	1.26 (0.09)	1.15 (0.09)	1.03 (0.10)	0.48 (0.19)	1.07 (0.05)
99	1.61 (0.28)	2.63 (0.27)	3.00 (0.33)	1.27 (0.41)	2.19 (0.16)	-1.17 (1.00)	1.32 (0.44)	1.51 (0.61)	-0.20 (0.99)	0.33 (0.41)
99.9	3.25 (0.87)	2.65 (1.25)	1.90 (1.20)	2.39 (1.65)	2.70 (0.61)	4.03 (1.80)	2.89 (1.35)	2.36 (1.53)	1.50 (2.08)	2.80 (0.83)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B5: GDP Beta by Gender and Age: Transportation

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	2.95 (0.29)	2.30 (0.26)	2.05 (0.24)	1.29 (0.25)	2.39 (0.13)	3.24 (0.39)	3.28 (0.41)	2.63 (0.35)	0.99 (0.39)	3.14 (0.20)
10	2.22 (0.19)	2.26 (0.15)	1.89 (0.16)	1.19 (0.20)	2.13 (0.09)	2.08 (0.25)	1.94 (0.24)	0.87 (0.21)	0.91 (0.30)	1.82 (0.13)
20	1.95 (0.15)	1.52 (0.13)	1.38 (0.13)	0.81 (0.23)	1.65 (0.08)	1.89 (0.21)	1.56 (0.18)	1.10 (0.21)	0.70 (0.29)	1.63 (0.11)
30	1.84 (0.13)	1.08 (0.10)	1.09 (0.11)	0.58 (0.22)	1.33 (0.06)	1.34 (0.18)	1.51 (0.16)	1.57 (0.18)	0.98 (0.40)	1.56 (0.10)
40	1.41 (0.11)	1.23 (0.10)	0.50 (0.09)	0.15 (0.16)	0.95 (0.05)	1.27 (0.15)	1.37 (0.17)	1.16 (0.16)	-0.16 (0.27)	1.31 (0.09)
50	1.17 (0.09)	0.80 (0.07)	-0.17 (0.06)	-0.32 (0.12)	0.47 (0.04)	0.94 (0.13)	0.82 (0.13)	0.59 (0.18)	0.30 (0.25)	0.90 (0.08)
60	0.98 (0.07)	0.19 (0.05)	0.05 (0.05)	-0.35 (0.11)	0.43 (0.03)	0.74 (0.11)	0.63 (0.13)	0.52 (0.12)	0.32 (0.24)	0.78 (0.07)
70	0.94 (0.07)	0.18 (0.04)	-0.05 (0.04)	-0.53 (0.10)	0.45 (0.03)	0.59 (0.10)	0.24 (0.08)	-0.30 (0.10)	-0.16 (0.18)	0.36 (0.05)
80	0.73 (0.06)	0.19 (0.04)	0.08 (0.04)	-0.63 (0.12)	0.42 (0.03)	0.41 (0.07)	-0.15 (0.06)	-0.09 (0.06)	0.06 (0.13)	0.20 (0.04)
90	0.38 (0.04)	0.57 (0.06)	0.39 (0.09)	-0.31 (0.19)	0.45 (0.03)	0.14 (0.05)	0.02 (0.05)	-0.03 (0.07)	-0.36 (0.15)	0.21 (0.03)
99	1.09 (0.27)	2.48 (0.60)	2.30 (0.78)	2.71 (1.48)	1.89 (0.28)	-0.03 (0.19)	0.64 (0.25)	1.11 (0.32)	-1.22 (0.60)	0.34 (0.14)
99.9	3.26 (1.59)	5.32 (2.28)	2.69 (3.68)	11.28 (4.39)	5.14 (1.40)	0.80 (0.57)	1.27 (0.98)	-0.60 (1.18)	-2.94 (1.73)	0.69 (0.46)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B6: GDP Beta by Gender and Age: Retail and Wholesale

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	2.62 (0.10)	2.44 (0.10)	2.02 (0.09)	1.33 (0.11)	2.38 (0.05)	2.26 (0.12)	2.29 (0.12)	1.59 (0.10)	1.41 (0.12)	2.10 (0.06)
10	2.23 (0.07)	1.76 (0.06)	1.42 (0.06)	0.90 (0.07)	1.80 (0.03)	1.70 (0.08)	1.34 (0.08)	1.01 (0.07)	0.82 (0.08)	1.38 (0.04)
20	1.95 (0.06)	1.38 (0.05)	1.19 (0.05)	0.75 (0.07)	1.53 (0.03)	1.40 (0.08)	1.20 (0.07)	0.99 (0.06)	0.59 (0.07)	1.18 (0.04)
30	1.74 (0.05)	1.29 (0.05)	0.93 (0.05)	0.62 (0.07)	1.35 (0.03)	1.16 (0.07)	0.90 (0.06)	0.67 (0.05)	0.51 (0.07)	0.90 (0.03)
40	1.59 (0.05)	1.01 (0.04)	0.85 (0.05)	0.49 (0.07)	1.20 (0.03)	0.90 (0.07)	0.84 (0.06)	0.66 (0.06)	0.33 (0.07)	0.76 (0.03)
50	1.27 (0.04)	0.90 (0.04)	0.79 (0.05)	0.38 (0.08)	1.05 (0.03)	0.83 (0.07)	0.76 (0.06)	0.75 (0.06)	0.40 (0.08)	0.75 (0.03)
60	1.28 (0.04)	0.90 (0.05)	0.72 (0.06)	0.32 (0.09)	1.05 (0.03)	0.76 (0.07)	0.61 (0.06)	0.44 (0.06)	0.23 (0.09)	0.59 (0.03)
70	1.05 (0.04)	0.90 (0.05)	0.82 (0.06)	0.22 (0.10)	0.96 (0.03)	0.73 (0.07)	0.56 (0.07)	0.52 (0.07)	0.03 (0.11)	0.55 (0.04)
80	0.91 (0.04)	0.98 (0.05)	0.89 (0.06)	0.34 (0.10)	0.94 (0.03)	0.54 (0.07)	0.59 (0.08)	0.20 (0.08)	0.31 (0.13)	0.46 (0.04)
90	1.02 (0.05)	1.26 (0.05)	1.14 (0.06)	0.98 (0.09)	1.19 (0.03)	0.53 (0.08)	0.46 (0.08)	0.46 (0.10)	-0.07 (0.15)	0.43 (0.05)
99	1.20 (0.16)	1.51 (0.26)	1.94 (0.25)	1.62 (0.32)	1.55 (0.12)	0.61 (0.23)	0.91 (0.29)	0.93 (0.30)	0.25 (0.41)	0.72 (0.15)
99.9	0.94 (0.66)	2.27 (0.90)	1.29 (1.03)	0.63 (1.37)	1.39 (0.47)	1.43 (0.91)	2.03 (1.21)	1.38 (1.04)	4.29 (1.37)	2.13 (0.56)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B7: GDP Beta by Gender and Age: Finance

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	2.31 (0.26)	1.71 (0.27)	1.22 (0.22)	0.32 (0.19)	1.73 (0.12)	2.87 (0.30)	2.05 (0.29)	1.45 (0.23)	0.34 (0.20)	2.23 (0.13)
10	1.98 (0.18)	1.68 (0.18)	1.50 (0.17)	-0.01 (0.20)	1.67 (0.09)	1.50 (0.20)	1.60 (0.18)	1.52 (0.17)	-0.09 (0.20)	1.61 (0.09)
20	1.99 (0.14)	1.32 (0.15)	1.32 (0.16)	0.33 (0.21)	1.64 (0.08)	1.68 (0.15)	1.47 (0.15)	1.06 (0.14)	0.47 (0.21)	1.57 (0.08)
30	1.95 (0.14)	1.04 (0.13)	1.05 (0.15)	0.28 (0.21)	1.39 (0.08)	1.39 (0.13)	1.30 (0.12)	0.96 (0.12)	0.29 (0.19)	1.36 (0.07)
40	1.71 (0.12)	1.00 (0.12)	0.57 (0.14)	-0.09 (0.20)	1.09 (0.07)	0.90 (0.10)	0.82 (0.10)	0.81 (0.10)	0.06 (0.16)	0.93 (0.05)
50	1.49 (0.11)	0.65 (0.12)	0.30 (0.13)	0.00 (0.22)	0.87 (0.07)	0.75 (0.08)	0.82 (0.08)	0.54 (0.09)	0.15 (0.14)	0.78 (0.05)
60	1.42 (0.10)	0.69 (0.10)	0.36 (0.12)	-0.27 (0.21)	0.82 (0.06)	0.80 (0.07)	0.84 (0.07)	0.46 (0.07)	0.11 (0.13)	0.76 (0.04)
70	1.23 (0.10)	0.46 (0.09)	0.29 (0.10)	-0.75 (0.20)	0.59 (0.06)	0.52 (0.06)	0.73 (0.06)	0.43 (0.07)	0.05 (0.13)	0.59 (0.04)
80	1.21 (0.09)	0.65 (0.08)	0.43 (0.09)	-0.22 (0.17)	0.72 (0.05)	0.71 (0.06)	0.49 (0.06)	0.31 (0.07)	-0.14 (0.14)	0.54 (0.04)
90	1.03 (0.09)	1.42 (0.08)	1.33 (0.08)	0.80 (0.16)	1.25 (0.05)	0.63 (0.07)	0.61 (0.07)	0.46 (0.08)	-0.31 (0.17)	0.59 (0.04)
99	2.32 (0.22)	3.61 (0.23)	2.80 (0.25)	3.00 (0.41)	3.05 (0.13)	1.83 (0.25)	2.16 (0.26)	2.57 (0.28)	2.15 (0.54)	2.29 (0.15)
99.9	4.25 (0.69)	6.90 (0.68)	5.40 (0.81)	4.74 (1.29)	5.58 (0.39)	3.39 (0.70)	6.34 (1.00)	4.20 (0.89)	4.10 (1.36)	4.72 (0.47)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B8: GDP Beta by Gender and Age: Services

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	3.71 (0.10)	3.71 (0.10)	3.58 (0.09)	1.87 (0.11)	3.53 (0.05)	2.71 (0.11)	2.19 (0.10)	1.81 (0.09)	1.38 (0.10)	2.26 (0.05)
10	2.76 (0.07)	2.55 (0.07)	2.33 (0.07)	1.37 (0.08)	2.51 (0.04)	1.85 (0.08)	1.80 (0.07)	1.47 (0.07)	0.82 (0.08)	1.70 (0.04)
20	2.30 (0.07)	2.00 (0.07)	1.75 (0.07)	1.11 (0.08)	2.04 (0.04)	1.50 (0.07)	1.47 (0.07)	1.12 (0.06)	0.71 (0.08)	1.38 (0.04)
30	2.01 (0.06)	1.62 (0.06)	1.41 (0.06)	0.86 (0.09)	1.72 (0.03)	1.33 (0.07)	1.22 (0.06)	0.98 (0.06)	0.54 (0.08)	1.18 (0.04)
40	1.84 (0.06)	1.30 (0.06)	0.94 (0.07)	0.42 (0.09)	1.41 (0.03)	1.00 (0.07)	0.93 (0.06)	0.83 (0.06)	0.40 (0.08)	0.92 (0.03)
50	1.67 (0.06)	1.10 (0.06)	0.59 (0.06)	-0.04 (0.10)	1.17 (0.03)	0.92 (0.06)	0.78 (0.06)	0.64 (0.06)	0.20 (0.08)	0.77 (0.03)
60	1.41 (0.05)	0.95 (0.05)	0.61 (0.06)	-0.39 (0.11)	0.98 (0.03)	0.67 (0.06)	0.68 (0.06)	0.42 (0.06)	0.15 (0.08)	0.60 (0.03)
70	1.29 (0.05)	0.95 (0.05)	0.59 (0.06)	-0.21 (0.10)	0.94 (0.03)	0.53 (0.06)	0.44 (0.06)	0.20 (0.06)	-0.13 (0.09)	0.39 (0.03)
80	1.08 (0.05)	0.84 (0.04)	0.43 (0.05)	-0.33 (0.09)	0.75 (0.03)	0.41 (0.05)	0.33 (0.05)	0.17 (0.06)	-0.41 (0.09)	0.29 (0.03)
90	1.02 (0.05)	1.14 (0.05)	0.94 (0.05)	0.08 (0.08)	1.00 (0.03)	0.32 (0.06)	0.49 (0.06)	0.13 (0.06)	-0.62 (0.10)	0.28 (0.03)
99	1.65 (0.17)	2.32 (0.19)	1.97 (0.22)	0.87 (0.32)	1.88 (0.10)	0.93 (0.16)	1.01 (0.19)	1.07 (0.21)	0.07 (0.28)	0.93 (0.10)
99.9	3.65 (0.77)	3.42 (0.80)	3.09 (0.89)	3.26 (1.22)	3.44 (0.44)	2.23 (0.58)	3.31 (0.76)	3.82 (0.72)	4.06 (0.99)	3.20 (0.36)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B9: GDP Beta by Gender and Age: Health and Education

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	1.40 (0.15)	0.98 (0.17)	0.73 (0.15)	0.64 (0.16)	1.22 (0.08)	1.24 (0.13)	1.20 (0.09)	0.67 (0.08)	0.60 (0.11)	1.21 (0.05)
10	0.96 (0.12)	0.55 (0.11)	0.49 (0.09)	0.20 (0.11)	0.75 (0.06)	0.73 (0.09)	0.74 (0.06)	0.40 (0.05)	-0.02 (0.08)	0.71 (0.04)
20	0.78 (0.11)	0.61 (0.10)	0.60 (0.09)	0.10 (0.11)	0.67 (0.05)	0.58 (0.08)	0.43 (0.06)	0.30 (0.05)	-0.09 (0.07)	0.49 (0.03)
30	0.64 (0.11)	0.28 (0.08)	0.40 (0.08)	-0.00 (0.12)	0.46 (0.05)	0.35 (0.07)	0.35 (0.05)	0.13 (0.04)	0.00 (0.07)	0.36 (0.03)
40	0.53 (0.10)	0.19 (0.07)	0.22 (0.07)	-0.26 (0.11)	0.30 (0.04)	0.34 (0.06)	0.22 (0.05)	0.12 (0.04)	-0.24 (0.07)	0.26 (0.03)
50	0.50 (0.10)	0.12 (0.06)	0.10 (0.06)	-0.42 (0.11)	0.23 (0.04)	0.10 (0.06)	0.01 (0.05)	0.11 (0.04)	-0.39 (0.07)	0.09 (0.03)
60	0.51 (0.09)	0.10 (0.06)	-0.01 (0.06)	-0.45 (0.11)	0.19 (0.04)	0.01 (0.05)	-0.09 (0.04)	-0.01 (0.04)	-0.38 (0.07)	0.01 (0.02)
70	0.23 (0.09)	-0.01 (0.07)	-0.02 (0.07)	-0.61 (0.12)	0.00 (0.04)	-0.16 (0.05)	-0.08 (0.04)	0.04 (0.04)	-0.41 (0.07)	-0.01 (0.02)
80	0.26 (0.09)	-0.08 (0.08)	-0.04 (0.08)	-0.21 (0.12)	0.05 (0.05)	-0.34 (0.05)	-0.04 (0.04)	0.01 (0.03)	-0.18 (0.07)	0.01 (0.02)
90	0.23 (0.12)	0.12 (0.08)	0.03 (0.06)	-0.32 (0.09)	0.09 (0.04)	-0.48 (0.06)	-0.16 (0.05)	-0.13 (0.04)	-0.48 (0.07)	-0.16 (0.03)
99	0.12 (0.29)	0.37 (0.10)	0.24 (0.11)	-0.11 (0.19)	0.33 (0.07)	-0.32 (0.30)	-0.11 (0.22)	-0.37 (0.20)	-0.38 (0.29)	-0.25 (0.12)
99.9	0.43 (0.96)	0.20 (0.43)	-0.08 (0.60)	0.11 (1.03)	0.25 (0.31)	0.26 (1.00)	0.75 (0.48)	0.12 (0.54)	-0.30 (0.93)	0.40 (0.33)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table B10: GDP Beta by Gender and Age: Other Industries

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	3.06 (0.05)	2.79 (0.05)	2.47 (0.05)	1.39 (0.05)	2.72 (0.03)	2.30 (0.06)	2.24 (0.06)	1.47 (0.05)	1.09 (0.06)	2.04 (0.03)
10	2.47 (0.04)	2.21 (0.03)	2.07 (0.03)	1.37 (0.05)	2.26 (0.02)	1.64 (0.04)	1.54 (0.04)	1.16 (0.04)	0.77 (0.05)	1.49 (0.02)
20	1.97 (0.03)	1.66 (0.03)	1.65 (0.03)	1.19 (0.04)	1.79 (0.02)	1.34 (0.04)	1.18 (0.03)	0.88 (0.03)	0.56 (0.04)	1.18 (0.02)
30	1.68 (0.03)	1.37 (0.02)	1.30 (0.03)	0.84 (0.04)	1.47 (0.01)	1.07 (0.03)	1.02 (0.03)	0.79 (0.03)	0.43 (0.04)	0.99 (0.02)
40	1.52 (0.02)	1.21 (0.02)	1.12 (0.02)	0.56 (0.04)	1.30 (0.01)	0.91 (0.03)	0.86 (0.03)	0.69 (0.03)	0.34 (0.04)	0.84 (0.01)
50	1.47 (0.02)	1.08 (0.02)	0.94 (0.02)	0.31 (0.04)	1.16 (0.01)	0.85 (0.03)	0.73 (0.02)	0.60 (0.02)	0.22 (0.04)	0.73 (0.01)
60	1.40 (0.02)	0.91 (0.02)	0.83 (0.02)	0.05 (0.04)	1.02 (0.01)	0.70 (0.02)	0.58 (0.02)	0.49 (0.02)	0.16 (0.04)	0.60 (0.01)
70	1.28 (0.02)	0.78 (0.02)	0.70 (0.02)	0.15 (0.05)	0.93 (0.01)	0.57 (0.02)	0.51 (0.02)	0.44 (0.02)	0.04 (0.04)	0.51 (0.01)
80	1.13 (0.02)	0.77 (0.02)	0.63 (0.02)	0.15 (0.05)	0.87 (0.01)	0.45 (0.02)	0.43 (0.02)	0.39 (0.02)	-0.04 (0.04)	0.43 (0.01)
90	0.94 (0.02)	0.95 (0.02)	0.89 (0.03)	0.25 (0.05)	0.94 (0.01)	0.41 (0.02)	0.48 (0.02)	0.36 (0.02)	-0.16 (0.05)	0.42 (0.01)
99	1.23 (0.09)	1.98 (0.11)	2.22 (0.14)	2.05 (0.24)	1.88 (0.06)	0.84 (0.08)	1.09 (0.08)	1.13 (0.09)	0.22 (0.15)	0.96 (0.05)
99.9	2.58 (0.35)	3.69 (0.51)	4.01 (0.59)	5.28 (1.07)	3.70 (0.28)	2.31 (0.28)	2.47 (0.39)	3.17 (0.40)	3.53 (0.85)	2.79 (0.21)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t-6$ to $t-2$, while real earnings growth used to estimate GDP beta is from year $t-1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Appendix C. Stock Return Beta

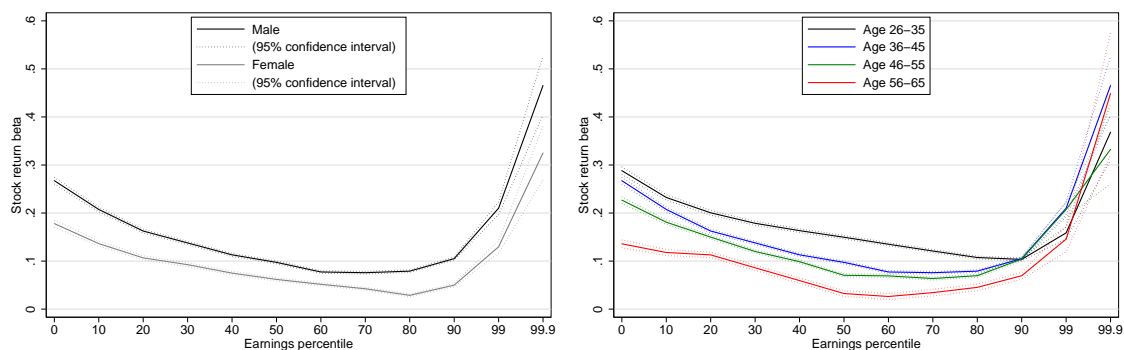


Figure C1: Stock Return Beta at Age 36–45 by Gender and for Males by Age Group
Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . The dotted lines represent the 95 percent confidence interval.

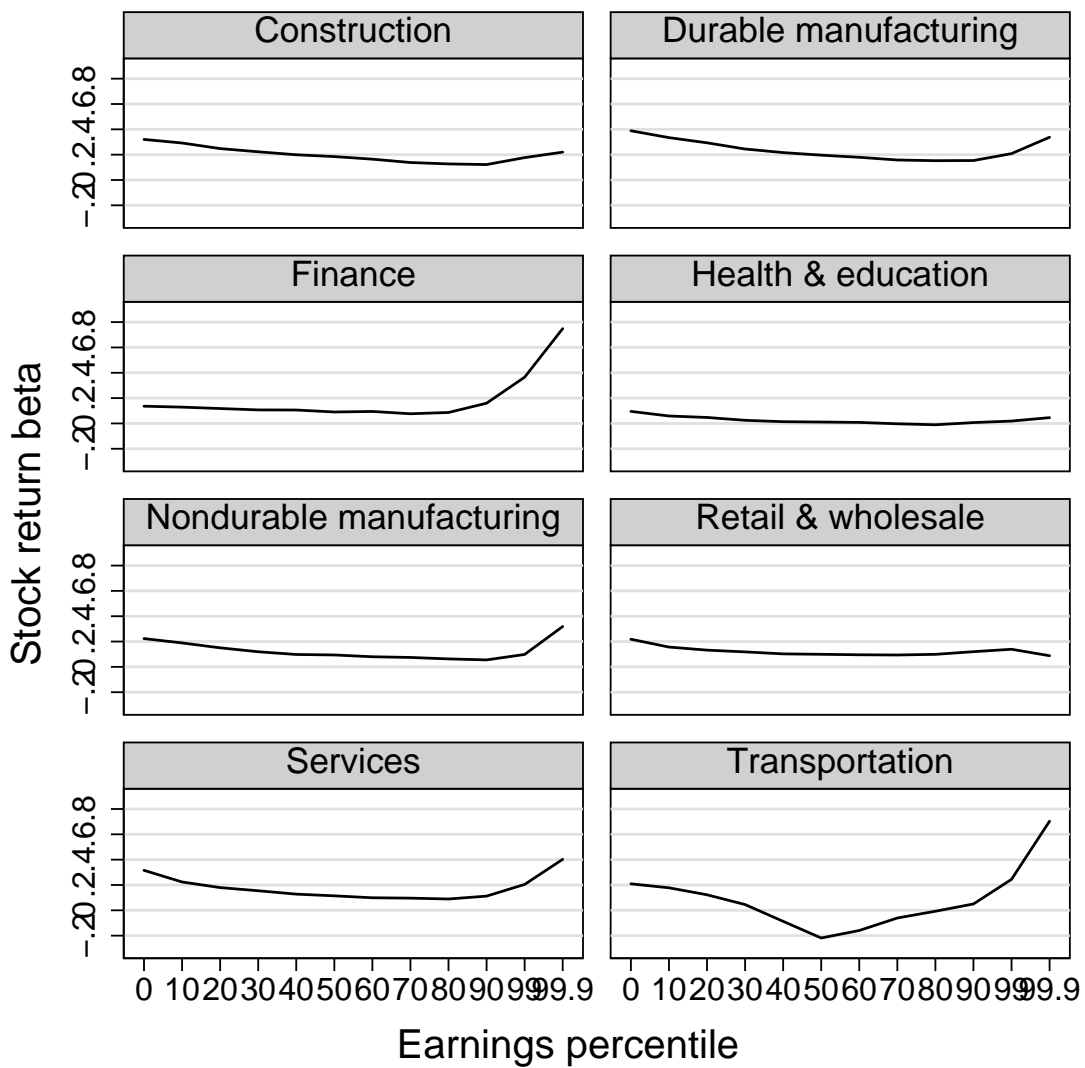


Figure C2: Stock Return Beta for Males by Industry

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t .

Table C1: Stock Return Beta by Gender and Age

Earnings percentile	Male				Female			
	26–35	36–45	46–55	56–65	26–35	36–45	46–55	56–65
0	0.29 (0.00)	0.27 (0.00)	0.23 (0.00)	0.14 (0.00)	0.21 (0.00)	0.18 (0.00)	0.12 (0.00)	0.09 (0.00)
10	0.23 (0.00)	0.21 (0.00)	0.18 (0.00)	0.12 (0.00)	0.16 (0.00)	0.14 (0.00)	0.10 (0.00)	0.06 (0.00)
20	0.20 (0.00)	0.16 (0.00)	0.15 (0.00)	0.11 (0.00)	0.13 (0.00)	0.11 (0.00)	0.07 (0.00)	0.04 (0.00)
30	0.18 (0.00)	0.14 (0.00)	0.12 (0.00)	0.09 (0.00)	0.10 (0.00)	0.09 (0.00)	0.07 (0.00)	0.04 (0.00)
40	0.16 (0.00)	0.11 (0.00)	0.10 (0.00)	0.06 (0.00)	0.09 (0.00)	0.08 (0.00)	0.06 (0.00)	0.03 (0.00)
50	0.15 (0.00)	0.10 (0.00)	0.07 (0.00)	0.03 (0.00)	0.08 (0.00)	0.06 (0.00)	0.05 (0.00)	0.03 (0.00)
60	0.14 (0.00)	0.08 (0.00)	0.07 (0.00)	0.03 (0.00)	0.07 (0.00)	0.05 (0.00)	0.04 (0.00)	0.02 (0.00)
70	0.12 (0.00)	0.08 (0.00)	0.06 (0.00)	0.03 (0.00)	0.06 (0.00)	0.04 (0.00)	0.02 (0.00)	0.00 (0.00)
80	0.11 (0.00)	0.08 (0.00)	0.07 (0.00)	0.05 (0.00)	0.05 (0.00)	0.03 (0.00)	0.03 (0.00)	-0.00 (0.00)
90	0.10 (0.00)	0.11 (0.00)	0.10 (0.00)	0.07 (0.00)	0.05 (0.00)	0.05 (0.00)	0.04 (0.00)	0.01 (0.00)
99	0.16 (0.01)	0.21 (0.01)	0.21 (0.01)	0.15 (0.01)	0.11 (0.01)	0.13 (0.01)	0.12 (0.01)	0.05 (0.01)
99.9	0.37 (0.03)	0.47 (0.03)	0.33 (0.04)	0.45 (0.07)	0.29 (0.02)	0.33 (0.03)	0.28 (0.03)	0.32 (0.05)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C2: Stock Return Beta by Gender and Age: Construction

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.34 (0.02)	0.31 (0.02)	0.29 (0.02)	0.27 (0.03)	0.32 (0.01)	0.17 (0.07)	0.20 (0.05)	0.22 (0.04)	0.17 (0.05)	0.22 (0.03)
10	0.29 (0.01)	0.27 (0.01)	0.30 (0.01)	0.30 (0.02)	0.29 (0.01)	0.20 (0.05)	0.20 (0.04)	0.24 (0.03)	0.19 (0.04)	0.22 (0.02)
20	0.24 (0.01)	0.23 (0.01)	0.25 (0.01)	0.23 (0.02)	0.25 (0.01)	0.24 (0.04)	0.21 (0.03)	0.16 (0.03)	0.11 (0.04)	0.20 (0.02)
30	0.22 (0.01)	0.21 (0.01)	0.22 (0.01)	0.19 (0.02)	0.22 (0.01)	0.15 (0.04)	0.16 (0.03)	0.16 (0.03)	0.21 (0.04)	0.17 (0.02)
40	0.20 (0.01)	0.18 (0.01)	0.21 (0.01)	0.17 (0.02)	0.20 (0.01)	0.18 (0.03)	0.15 (0.03)	0.12 (0.02)	0.09 (0.03)	0.15 (0.01)
50	0.19 (0.01)	0.18 (0.01)	0.18 (0.01)	0.15 (0.01)	0.19 (0.00)	0.08 (0.03)	0.14 (0.02)	0.09 (0.02)	0.11 (0.03)	0.11 (0.01)
60	0.18 (0.01)	0.14 (0.01)	0.16 (0.01)	0.14 (0.01)	0.16 (0.00)	0.17 (0.03)	0.15 (0.02)	0.13 (0.02)	0.06 (0.03)	0.14 (0.01)
70	0.17 (0.01)	0.13 (0.01)	0.11 (0.01)	0.10 (0.02)	0.14 (0.00)	0.15 (0.02)	0.16 (0.02)	0.11 (0.02)	0.10 (0.04)	0.14 (0.01)
80	0.15 (0.01)	0.11 (0.01)	0.10 (0.01)	0.08 (0.02)	0.13 (0.00)	0.06 (0.03)	0.12 (0.02)	0.10 (0.02)	0.08 (0.04)	0.09 (0.01)
90	0.13 (0.01)	0.11 (0.01)	0.13 (0.01)	0.09 (0.02)	0.12 (0.01)	0.08 (0.03)	0.13 (0.03)	0.12 (0.03)	0.13 (0.04)	0.11 (0.02)
99	0.10 (0.04)	0.21 (0.06)	0.23 (0.06)	0.14 (0.08)	0.18 (0.03)	-0.03 (0.12)	0.36 (0.11)	0.41 (0.11)	0.22 (0.09)	0.27 (0.05)
99.9	-0.08 (0.20)	0.47 (0.24)	0.46 (0.37)	0.17 (0.43)	0.22 (0.14)	-0.27 (0.36)	0.82 (0.34)	0.15 (0.24)	0.71 (0.42)	0.37 (0.18)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C3: Stock Return Beta by Gender and Age: Nondurable Manufacturing

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.24 (0.02)	0.20 (0.02)	0.22 (0.02)	0.14 (0.03)	0.22 (0.01)	0.23 (0.03)	0.21 (0.03)	0.18 (0.02)	0.14 (0.03)	0.21 (0.01)
10	0.24 (0.01)	0.16 (0.01)	0.16 (0.01)	0.12 (0.01)	0.19 (0.01)	0.18 (0.02)	0.17 (0.02)	0.15 (0.01)	0.11 (0.02)	0.17 (0.01)
20	0.19 (0.01)	0.14 (0.01)	0.11 (0.01)	0.11 (0.01)	0.15 (0.00)	0.18 (0.01)	0.13 (0.01)	0.11 (0.01)	0.11 (0.02)	0.14 (0.01)
30	0.15 (0.01)	0.12 (0.01)	0.10 (0.01)	0.06 (0.01)	0.12 (0.00)	0.14 (0.01)	0.13 (0.01)	0.10 (0.01)	0.08 (0.01)	0.12 (0.01)
40	0.13 (0.01)	0.09 (0.01)	0.09 (0.01)	0.04 (0.01)	0.10 (0.00)	0.13 (0.01)	0.10 (0.01)	0.09 (0.01)	0.06 (0.01)	0.11 (0.00)
50	0.13 (0.01)	0.08 (0.01)	0.08 (0.01)	0.04 (0.01)	0.09 (0.00)	0.11 (0.01)	0.08 (0.01)	0.09 (0.01)	0.04 (0.01)	0.09 (0.00)
60	0.10 (0.01)	0.07 (0.01)	0.08 (0.01)	0.03 (0.01)	0.08 (0.00)	0.11 (0.01)	0.08 (0.01)	0.07 (0.01)	0.01 (0.01)	0.08 (0.00)
70	0.10 (0.01)	0.06 (0.01)	0.06 (0.01)	0.03 (0.01)	0.07 (0.00)	0.05 (0.01)	0.06 (0.01)	0.05 (0.01)	0.02 (0.01)	0.05 (0.00)
80	0.08 (0.01)	0.05 (0.01)	0.05 (0.01)	0.01 (0.01)	0.06 (0.00)	0.07 (0.01)	0.02 (0.01)	0.03 (0.01)	-0.03 (0.02)	0.03 (0.01)
90	0.05 (0.01)	0.05 (0.01)	0.06 (0.01)	0.02 (0.02)	0.06 (0.00)	0.05 (0.01)	0.03 (0.01)	0.03 (0.01)	-0.01 (0.02)	0.03 (0.01)
99	0.03 (0.03)	0.12 (0.04)	0.09 (0.04)	0.13 (0.07)	0.10 (0.02)	0.06 (0.03)	0.11 (0.03)	0.04 (0.04)	0.01 (0.05)	0.06 (0.02)
99.9	0.29 (0.14)	0.12 (0.17)	0.11 (0.16)	0.71 (0.21)	0.32 (0.09)	0.12 (0.16)	0.06 (0.15)	0.25 (0.14)	0.09 (0.19)	0.14 (0.08)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C4: Stock Return Beta by Gender and Age: Durable Manufacturing

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.36 (0.02)	0.39 (0.02)	0.37 (0.02)	0.32 (0.03)	0.39 (0.01)	0.38 (0.04)	0.31 (0.04)	0.29 (0.03)	0.26 (0.05)	0.35 (0.02)
10	0.31 (0.01)	0.34 (0.01)	0.31 (0.01)	0.28 (0.01)	0.33 (0.01)	0.31 (0.02)	0.32 (0.02)	0.32 (0.02)	0.30 (0.03)	0.33 (0.01)
20	0.33 (0.01)	0.27 (0.01)	0.26 (0.01)	0.26 (0.01)	0.29 (0.00)	0.32 (0.02)	0.30 (0.02)	0.30 (0.01)	0.24 (0.02)	0.32 (0.01)
30	0.29 (0.01)	0.23 (0.01)	0.21 (0.01)	0.21 (0.01)	0.24 (0.00)	0.29 (0.02)	0.26 (0.01)	0.23 (0.01)	0.25 (0.02)	0.27 (0.01)
40	0.28 (0.01)	0.19 (0.01)	0.19 (0.01)	0.17 (0.01)	0.22 (0.00)	0.27 (0.01)	0.21 (0.01)	0.18 (0.01)	0.19 (0.01)	0.22 (0.01)
50	0.25 (0.01)	0.17 (0.00)	0.17 (0.01)	0.13 (0.01)	0.20 (0.00)	0.23 (0.01)	0.18 (0.01)	0.18 (0.01)	0.16 (0.01)	0.19 (0.01)
60	0.24 (0.01)	0.16 (0.00)	0.15 (0.01)	0.11 (0.01)	0.18 (0.00)	0.21 (0.01)	0.18 (0.01)	0.16 (0.01)	0.12 (0.01)	0.18 (0.00)
70	0.21 (0.00)	0.14 (0.00)	0.13 (0.01)	0.09 (0.01)	0.16 (0.00)	0.18 (0.01)	0.14 (0.01)	0.13 (0.01)	0.09 (0.02)	0.15 (0.01)
80	0.20 (0.00)	0.14 (0.00)	0.12 (0.01)	0.08 (0.01)	0.15 (0.00)	0.18 (0.01)	0.13 (0.01)	0.13 (0.01)	0.09 (0.02)	0.14 (0.01)
90	0.16 (0.01)	0.14 (0.01)	0.15 (0.01)	0.13 (0.01)	0.15 (0.00)	0.15 (0.01)	0.13 (0.01)	0.13 (0.01)	0.10 (0.02)	0.13 (0.01)
99	0.15 (0.02)	0.25 (0.03)	0.31 (0.04)	0.06 (0.05)	0.21 (0.02)	0.01 (0.06)	0.17 (0.04)	0.17 (0.04)	-0.07 (0.08)	0.09 (0.03)
99.9	0.33 (0.11)	0.31 (0.14)	0.47 (0.16)	0.17 (0.19)	0.34 (0.07)	0.17 (0.20)	0.13 (0.14)	0.32 (0.16)	0.02 (0.17)	0.17 (0.09)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C5: Stock Return Beta by Gender and Age: Transportation

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.26 (0.03)	0.21 (0.03)	0.19 (0.02)	0.10 (0.03)	0.21 (0.01)	0.37 (0.04)	0.29 (0.04)	0.20 (0.03)	0.09 (0.04)	0.28 (0.02)
10	0.18 (0.02)	0.17 (0.02)	0.17 (0.02)	0.10 (0.02)	0.18 (0.01)	0.22 (0.03)	0.19 (0.02)	0.09 (0.02)	0.14 (0.03)	0.18 (0.01)
20	0.20 (0.02)	0.11 (0.01)	0.06 (0.01)	0.05 (0.02)	0.12 (0.01)	0.21 (0.02)	0.12 (0.02)	0.09 (0.02)	0.06 (0.03)	0.15 (0.01)
30	0.16 (0.01)	0.04 (0.01)	-0.05 (0.01)	-0.03 (0.02)	0.05 (0.01)	0.18 (0.02)	0.14 (0.02)	0.12 (0.02)	0.09 (0.03)	0.15 (0.01)
40	0.13 (0.01)	-0.03 (0.01)	-0.22 (0.01)	-0.25 (0.02)	-0.09 (0.01)	0.15 (0.02)	0.10 (0.02)	0.06 (0.02)	0.01 (0.03)	0.11 (0.01)
50	0.11 (0.01)	-0.16 (0.01)	-0.34 (0.01)	-0.37 (0.01)	-0.22 (0.00)	0.08 (0.01)	0.02 (0.01)	-0.00 (0.01)	0.01 (0.03)	0.04 (0.01)
60	0.05 (0.01)	-0.25 (0.01)	-0.18 (0.01)	-0.22 (0.01)	-0.16 (0.00)	0.06 (0.01)	-0.05 (0.01)	-0.05 (0.01)	-0.08 (0.02)	-0.01 (0.01)
70	-0.01 (0.01)	-0.11 (0.00)	-0.07 (0.00)	-0.12 (0.01)	-0.06 (0.00)	0.03 (0.01)	-0.14 (0.01)	-0.28 (0.01)	-0.25 (0.02)	-0.16 (0.01)
80	-0.07 (0.01)	-0.00 (0.00)	0.01 (0.00)	-0.07 (0.01)	-0.01 (0.00)	-0.04 (0.01)	-0.22 (0.01)	-0.16 (0.01)	-0.17 (0.02)	-0.15 (0.00)
90	0.01 (0.00)	0.09 (0.01)	0.06 (0.01)	0.01 (0.02)	0.05 (0.00)	-0.06 (0.01)	-0.06 (0.01)	-0.05 (0.01)	-0.15 (0.02)	-0.05 (0.00)
99	0.12 (0.04)	0.20 (0.07)	0.32 (0.08)	0.58 (0.17)	0.24 (0.04)	0.07 (0.03)	0.19 (0.03)	0.16 (0.04)	-0.02 (0.08)	0.13 (0.02)
99.9	0.74 (0.25)	0.73 (0.31)	0.30 (0.36)	1.02 (0.41)	0.70 (0.17)	0.37 (0.12)	0.28 (0.19)	0.35 (0.18)	-0.22 (0.24)	0.28 (0.09)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C6: Stock Return Beta by Gender and Age: Retail and Wholesale

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.25 (0.01)	0.24 (0.01)	0.17 (0.01)	0.14 (0.01)	0.22 (0.01)	0.21 (0.01)	0.21 (0.01)	0.14 (0.01)	0.12 (0.01)	0.19 (0.01)
10	0.20 (0.01)	0.16 (0.01)	0.12 (0.01)	0.08 (0.01)	0.16 (0.00)	0.18 (0.01)	0.14 (0.01)	0.10 (0.01)	0.08 (0.01)	0.14 (0.00)
20	0.18 (0.01)	0.12 (0.01)	0.10 (0.00)	0.07 (0.01)	0.13 (0.00)	0.14 (0.01)	0.12 (0.01)	0.09 (0.01)	0.06 (0.01)	0.11 (0.00)
30	0.16 (0.01)	0.11 (0.00)	0.09 (0.00)	0.06 (0.01)	0.12 (0.00)	0.12 (0.01)	0.10 (0.01)	0.07 (0.01)	0.05 (0.01)	0.09 (0.00)
40	0.14 (0.01)	0.09 (0.00)	0.08 (0.00)	0.05 (0.01)	0.10 (0.00)	0.11 (0.01)	0.08 (0.01)	0.07 (0.01)	0.04 (0.01)	0.08 (0.00)
50	0.12 (0.00)	0.09 (0.00)	0.08 (0.00)	0.06 (0.01)	0.10 (0.00)	0.10 (0.01)	0.08 (0.01)	0.07 (0.01)	0.04 (0.01)	0.08 (0.00)
60	0.11 (0.00)	0.09 (0.00)	0.08 (0.01)	0.05 (0.01)	0.10 (0.00)	0.09 (0.01)	0.06 (0.01)	0.06 (0.01)	0.03 (0.01)	0.07 (0.00)
70	0.10 (0.00)	0.09 (0.00)	0.08 (0.01)	0.04 (0.01)	0.09 (0.00)	0.08 (0.01)	0.07 (0.01)	0.07 (0.01)	0.02 (0.01)	0.07 (0.00)
80	0.09 (0.00)	0.09 (0.00)	0.09 (0.01)	0.08 (0.01)	0.10 (0.00)	0.09 (0.01)	0.08 (0.01)	0.06 (0.01)	0.04 (0.02)	0.07 (0.00)
90	0.11 (0.01)	0.12 (0.01)	0.12 (0.01)	0.10 (0.01)	0.12 (0.00)	0.08 (0.01)	0.07 (0.01)	0.09 (0.01)	0.04 (0.02)	0.07 (0.00)
99	0.11 (0.02)	0.14 (0.02)	0.19 (0.03)	0.09 (0.04)	0.14 (0.01)	0.10 (0.02)	0.18 (0.03)	0.14 (0.03)	0.03 (0.04)	0.13 (0.02)
99.9	0.10 (0.07)	0.28 (0.11)	-0.00 (0.20)	-0.15 (0.18)	0.09 (0.07)	0.10 (0.09)	0.39 (0.11)	0.07 (0.10)	0.40 (0.15)	0.23 (0.05)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C7: Stock Return Beta by Gender and Age: Finance

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.22 (0.03)	0.15 (0.03)	0.11 (0.02)	0.01 (0.02)	0.14 (0.01)	0.26 (0.03)	0.13 (0.03)	0.10 (0.02)	-0.01 (0.02)	0.13 (0.01)
10	0.17 (0.02)	0.16 (0.02)	0.10 (0.02)	-0.01 (0.02)	0.13 (0.01)	0.16 (0.02)	0.12 (0.02)	0.12 (0.02)	0.02 (0.02)	0.13 (0.01)
20	0.16 (0.02)	0.10 (0.02)	0.09 (0.02)	0.02 (0.02)	0.12 (0.01)	0.16 (0.02)	0.13 (0.02)	0.08 (0.01)	0.02 (0.02)	0.12 (0.01)
30	0.14 (0.01)	0.10 (0.01)	0.09 (0.02)	0.01 (0.02)	0.11 (0.01)	0.14 (0.01)	0.11 (0.01)	0.06 (0.01)	0.01 (0.02)	0.11 (0.01)
40	0.15 (0.01)	0.10 (0.01)	0.07 (0.01)	0.03 (0.02)	0.11 (0.01)	0.09 (0.01)	0.05 (0.01)	0.05 (0.01)	0.00 (0.02)	0.07 (0.01)
50	0.13 (0.01)	0.08 (0.01)	0.06 (0.01)	0.01 (0.02)	0.09 (0.01)	0.07 (0.01)	0.05 (0.01)	0.04 (0.01)	0.00 (0.01)	0.05 (0.00)
60	0.14 (0.01)	0.10 (0.01)	0.07 (0.01)	-0.01 (0.02)	0.09 (0.01)	0.07 (0.01)	0.08 (0.01)	0.04 (0.01)	0.00 (0.01)	0.06 (0.00)
70	0.12 (0.01)	0.07 (0.01)	0.07 (0.01)	-0.04 (0.02)	0.08 (0.01)	0.06 (0.01)	0.06 (0.01)	0.04 (0.01)	-0.01 (0.01)	0.05 (0.00)
80	0.14 (0.01)	0.07 (0.01)	0.07 (0.01)	-0.01 (0.02)	0.09 (0.01)	0.09 (0.01)	0.05 (0.01)	0.04 (0.01)	-0.01 (0.01)	0.06 (0.00)
90	0.17 (0.01)	0.17 (0.01)	0.15 (0.01)	0.12 (0.02)	0.16 (0.00)	0.09 (0.01)	0.08 (0.01)	0.06 (0.01)	0.02 (0.02)	0.08 (0.00)
99	0.36 (0.02)	0.40 (0.02)	0.31 (0.03)	0.35 (0.05)	0.37 (0.01)	0.32 (0.03)	0.25 (0.03)	0.22 (0.03)	0.21 (0.05)	0.26 (0.02)
99.9	0.68 (0.07)	0.89 (0.07)	0.66 (0.09)	0.58 (0.15)	0.75 (0.04)	0.61 (0.07)	0.77 (0.10)	0.37 (0.08)	0.29 (0.13)	0.57 (0.05)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C8: Stock Return Beta by Gender and Age: Services

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.34 (0.01)	0.34 (0.01)	0.31 (0.01)	0.17 (0.01)	0.32 (0.01)	0.25 (0.01)	0.19 (0.01)	0.17 (0.01)	0.12 (0.01)	0.20 (0.00)
10	0.26 (0.01)	0.24 (0.01)	0.20 (0.01)	0.12 (0.01)	0.22 (0.00)	0.19 (0.01)	0.18 (0.01)	0.14 (0.01)	0.08 (0.01)	0.16 (0.00)
20	0.22 (0.01)	0.17 (0.01)	0.15 (0.01)	0.10 (0.01)	0.18 (0.00)	0.16 (0.01)	0.15 (0.01)	0.10 (0.01)	0.08 (0.01)	0.14 (0.00)
30	0.19 (0.01)	0.14 (0.01)	0.12 (0.01)	0.08 (0.01)	0.15 (0.00)	0.13 (0.01)	0.12 (0.01)	0.10 (0.01)	0.05 (0.01)	0.11 (0.00)
40	0.17 (0.01)	0.12 (0.01)	0.10 (0.01)	0.05 (0.01)	0.13 (0.00)	0.11 (0.01)	0.10 (0.01)	0.08 (0.01)	0.04 (0.01)	0.09 (0.00)
50	0.16 (0.01)	0.11 (0.01)	0.07 (0.01)	0.03 (0.01)	0.11 (0.00)	0.10 (0.01)	0.08 (0.01)	0.07 (0.01)	0.02 (0.01)	0.08 (0.00)
60	0.13 (0.01)	0.10 (0.01)	0.08 (0.01)	0.02 (0.01)	0.10 (0.00)	0.08 (0.01)	0.07 (0.01)	0.04 (0.01)	0.03 (0.01)	0.06 (0.00)
70	0.13 (0.00)	0.10 (0.00)	0.07 (0.01)	0.02 (0.01)	0.10 (0.00)	0.08 (0.01)	0.07 (0.01)	0.03 (0.01)	0.01 (0.01)	0.06 (0.00)
80	0.12 (0.00)	0.10 (0.00)	0.07 (0.00)	0.01 (0.01)	0.09 (0.00)	0.07 (0.01)	0.05 (0.00)	0.03 (0.01)	-0.01 (0.01)	0.04 (0.00)
90	0.12 (0.00)	0.13 (0.00)	0.11 (0.01)	0.04 (0.01)	0.11 (0.00)	0.06 (0.01)	0.07 (0.00)	0.05 (0.01)	0.01 (0.01)	0.06 (0.00)
99	0.21 (0.02)	0.23 (0.02)	0.22 (0.02)	0.09 (0.03)	0.20 (0.01)	0.12 (0.02)	0.14 (0.02)	0.14 (0.02)	0.06 (0.03)	0.12 (0.01)
99.9	0.34 (0.09)	0.43 (0.08)	0.43 (0.09)	0.46 (0.13)	0.40 (0.05)	0.19 (0.05)	0.37 (0.08)	0.33 (0.07)	0.50 (0.10)	0.32 (0.04)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C9: Stock Return Beta by Gender and Age: Health and Education

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.12 (0.02)	0.08 (0.02)	0.07 (0.01)	0.05 (0.02)	0.10 (0.01)	0.14 (0.01)	0.11 (0.01)	0.05 (0.01)	0.04 (0.01)	0.10 (0.00)
10	0.07 (0.01)	0.07 (0.01)	0.04 (0.01)	0.01 (0.01)	0.06 (0.01)	0.08 (0.01)	0.06 (0.01)	0.03 (0.00)	-0.01 (0.01)	0.05 (0.00)
20	0.07 (0.01)	0.04 (0.01)	0.04 (0.01)	0.01 (0.01)	0.05 (0.00)	0.04 (0.01)	0.04 (0.01)	0.02 (0.00)	-0.01 (0.01)	0.03 (0.00)
30	0.03 (0.01)	0.02 (0.01)	0.02 (0.01)	0.00 (0.01)	0.02 (0.00)	0.04 (0.01)	0.03 (0.01)	0.01 (0.00)	0.02 (0.01)	0.03 (0.00)
40	0.04 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.02 (0.01)	0.01 (0.00)	0.03 (0.01)	0.02 (0.00)	0.01 (0.00)	0.00 (0.01)	0.02 (0.00)
50	0.03 (0.01)	0.01 (0.01)	0.01 (0.01)	-0.03 (0.01)	0.01 (0.00)	0.02 (0.01)	0.00 (0.00)	-0.00 (0.00)	-0.02 (0.01)	0.00 (0.00)
60	0.03 (0.01)	-0.01 (0.01)	-0.00 (0.01)	-0.02 (0.01)	0.01 (0.00)	0.00 (0.01)	-0.01 (0.00)	-0.00 (0.00)	-0.03 (0.01)	-0.00 (0.00)
70	0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	-0.03 (0.01)	-0.00 (0.00)	-0.01 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.02 (0.01)	0.00 (0.00)
80	0.00 (0.01)	-0.03 (0.01)	-0.03 (0.01)	-0.01 (0.01)	-0.01 (0.00)	-0.02 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.01 (0.01)	0.00 (0.00)
90	-0.02 (0.01)	0.02 (0.01)	0.01 (0.01)	-0.02 (0.01)	0.01 (0.00)	-0.02 (0.01)	-0.01 (0.00)	-0.01 (0.00)	-0.02 (0.01)	-0.01 (0.00)
99	0.05 (0.03)	0.03 (0.01)	0.02 (0.01)	-0.05 (0.02)	0.02 (0.01)	-0.07 (0.03)	-0.03 (0.02)	0.01 (0.02)	-0.02 (0.03)	-0.02 (0.01)
99.9	0.13 (0.13)	0.13 (0.06)	-0.12 (0.08)	0.00 (0.13)	0.05 (0.04)	0.10 (0.10)	-0.01 (0.05)	0.04 (0.06)	-0.12 (0.08)	0.01 (0.03)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.

Table C10: Stock Return Beta by Gender and Age: Other Industries

Earnings percentile	Male					Female				
	26–35	36–45	46–55	56–65	All	26–35	36–45	46–55	56–65	All
0	0.29	0.26	0.22	0.14	0.25	0.21	0.18	0.11	0.09	0.16
	(0.01)	(0.00)	(0.00)	(0.01)	(0.00)	(0.01)	(0.01)	(0.01)	(0.01)	(0.00)
10	0.24	0.21	0.19	0.13	0.21	0.15	0.13	0.09	0.06	0.12
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
20	0.20	0.17	0.16	0.12	0.17	0.12	0.10	0.07	0.04	0.09
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
30	0.18	0.14	0.12	0.09	0.15	0.10	0.09	0.06	0.03	0.08
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
40	0.16	0.12	0.12	0.08	0.13	0.08	0.07	0.06	0.03	0.07
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
50	0.15	0.11	0.10	0.07	0.12	0.08	0.06	0.05	0.03	0.07
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
60	0.14	0.10	0.09	0.05	0.11	0.07	0.05	0.05	0.03	0.06
	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
70	0.13	0.09	0.08	0.06	0.10	0.06	0.05	0.04	0.02	0.05
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
80	0.11	0.08	0.08	0.07	0.09	0.05	0.04	0.04	0.02	0.05
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
90	0.10	0.10	0.10	0.08	0.10	0.06	0.05	0.05	0.02	0.05
	(0.00)	(0.00)	(0.00)	(0.01)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)	(0.00)
99	0.13	0.21	0.26	0.21	0.20	0.11	0.13	0.13	0.04	0.11
	(0.01)	(0.01)	(0.01)	(0.03)	(0.01)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
99.9	0.28	0.34	0.30	0.54	0.35	0.30	0.29	0.32	0.40	0.32
	(0.04)	(0.05)	(0.06)	(0.12)	(0.03)	(0.03)	(0.04)	(0.04)	(0.11)	(0.03)

Note: Earnings percentiles (conditional on gender and age group) are based on average real earnings from year $t - 6$ to $t - 2$, while real earnings growth used to estimate stock return beta is from year $t - 1$ to t . Heteroscedasticity-robust standard errors are reported in parentheses.