name: <unnamed>

log: /Users/arbor/Documents/github repos/hons-project/logs/first regressions/Firm size.smcl

log type: smcl

3 Jul 2023, 10:44:04

1 . do "/var/folders/d7/2n8wylhx08g71ycdjqqj0pmw0000gn/T//SD04605.000000"

2 . clear

3.

4 . \*use "/home/sean/Code/honours/hons-project/cleaned\_data/v3/basic\_cleaned.dta"

5 . use "/Users/arbor/Documents/github repos/hons-project/cleaned\_data/v3/basic\_cleaned.dta"

7 . // males public

8 . regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne > ng married\_yes married\_sep urban\_no state\_VIC state\_WA state\_QLD state\_SA state\_NT state\_TAS state\_ACT shiftwork\_yes parttime long\_hours casual union\_yes f > irm\_size\_20\_99 firm\_size\_100\_199 firm\_size\_200\_499 firm\_size\_500 firm\_size\_unknown if sex\_male == 1 & sector\_public == 1, vce(robust) note:  ${\bf sector\_public}$  omitted because of collinearity.

Linear regression Number of obs 15,135 F(31, 15103) 101.56 Prob > F = 0.0000 R-squared 0.1947 Root MSE .41441

		Robust				
log_wage	Coefficient	std. err.	t	P> t	[95% conf.	interval]
sector public	0	(omitted)				
experience	.0126201	.0013936	9.06	0.000	.0098884	.0153518
experience sq	0001339	.0000283	-4.72	0.000	0001894	0000783
edu_uni	.3821408	.0103167	37.04	0.000	.3619187	.4023629
edu_diploma_cert	.1763902	.009511	18.55	0.000	.1577476	.1950328
children_1	.0269686	.009504	2.84	0.005	.0083396	. 0455975
children_2	.0484357	.0095361	5.08	0.000	.0297439	.0671276
children_3	.0941884	.0136477	6.90	0.000	.0674374	.1209395
children_4_plus	.0083183	.0263578	0.32	0.752	0433461	.0599827
health_poor	0814101	.0103329	-7.88	0.000	1016639	0611563
birth_eng	0020408	.0126347	-0.16	0.872	0268065	.0227248
birth_neng	0452673	.0128099	-3.53	0.000	0703764	0201583
married_yes	.1268655	.0121971	10.40	0.000	.1029577	.1507733
married_sep	.1004918	.0176435	5.70	0.000	.0659084	.1350752
urban_no	0659272	.010721	-6.15	0.000	0869416	0449128
state_VIC	0186156	.0094603	-1.97	0.049	0371589	0000722
state_WA	.0202687	.0161862	1.25	0.211	0114581	.0519955
state_QLD	0025969	.0093725	-0.28	0.782	0209681	.0157742
state_SA	074699	.0144814	-5.16	0.000	1030843	0463137
state_NT	.1587245	.0237958	6.67	0.000	.1120818	.2053671
state_TAS	0388983	.0182294	-2.13	0.033	0746302	0031665
state_ACT	.1383926	.0137169	10.09	0.000	.1115058	.1652795
shiftwork_yes	.0676483	.0084956	7.96	0.000	.0509959	.0843007
parttime	0186164	.0172636	-1.08	0.281	0524552	.0152224
long_hours	0515506	.0070826	-7.28	0.000	0654333	0376679
casual	0247302	.0212138	-1.17	0.244	0663118	.0168515
union_yes	0212895	.0072483	-2.94	0.003	0354971	0070818
firm_size_20_99	.0275695	.010557	2.61	0.009	.0068764	.0482625
firm_size_100_199	.075973	.0120556	6.30	0.000	.0523426	.0996034
firm_size_200_499	.1571357	.0120634	13.03	0.000	.13349	.1807815
firm_size_500	.1906904	.0108957	17.50	0.000	. 1693335	.2120473
firm_size_unknown	1357236	.0646775	-2.10	0.036	2624993	0089479
_cons	2.902813	.0192667	150.67	0.000	2.865048	2.940578

10 . //males private

11 . regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne > ng married\_yes married\_sep urban\_no state\_VIC state\_WA state\_QLD state\_SA state\_NT state\_TAS state\_ACT shiftwork\_yes parttime long\_hours casual union\_yes f
> irm\_size\_20\_99 firm\_size\_100\_199 firm\_size\_200\_499 firm\_size\_500 firm\_size\_unknown if sex\_male == 1 & sector\_public == 0, vce(robust) note: **sector\_public** omitted because of collinearity.

Linear regression Number of obs 49.723 F(31, 49691) 459.65 Prob > F 0.0000

R-squared = 0.2347 Root MSE .45471

log_wage	Coefficient	Robust std. err.	t	P> t	[95% conf	. interval]
sector_public experience experience_sq edu_uni edu_diploma_cert children_1 children_2 children 3	.018587 0002728 .3895511 .1419182 .0253045 .0930844 .089905	(omitted) .0007961 .0000169 .0063734 .004574 .0059942 .0063035	23.35 -16.17 61.12 31.03 4.22 14.77 9.91	0.000 0.000 0.000 0.000 0.000 0.000	.0170266 0003058 .3770592 .1329532 .0135558 .0807294	.0201473 0002397 .4020431 .1508832 .0370532 .1054393 .1076856



children_4_plus	0156126	.0153196	-1.02	0.308	0456393	.0144141
health_poor	0922872	.0062093	-14.86	0.000	1044575	080117
birth_eng	.0080192	.0070896	1.13	0.258	0058765	.0219148
birth_neng	1419913	.0067748	-20.96	0.000	15527	1287125
married_yes	.1101804	.005886	18.72	0.000	.0986437	. 1217171
married_sep	.0231952	.0100634	2.30	0.021	.0034707	.0429197
urban_no	0468063	.0068795	-6.80	0.000	0602901	0333225
state_VIC	0327314	.0054889	-5.96	0.000	0434898	0219731
state_WA	.0326318	.0082276	3.97	0.000	.0165057	.048758
state_QLD	0348514	.0057922	-6.02	0.000	0462042	0234986
state_SA	1279272	.0079483	-16.09	0.000	1435061	1123484
state_NT	0041932	.0245162	-0.17	0.864	0522453	.043859
state_TAS	1201798	.0106949	-11.24	0.000	1411418	0992177
state_ACT	.1622117	.0221566	7.32	0.000	.1187844	. 2056389
shiftwork_yes	0193467	.0059567	-3.25	0.001	0310219	0076715
parttime	0320584	.0090754	-3.53	0.000	0498463	0142705
long_hours	0206491	.0042372	-4.87	0.000	028954	0123441
casual	0271799	.0067442	-4.03	0.000	0403987	0139611
union_yes	.0082428	.0053943	1.53	0.127	0023301	.0188156
firm_size_20_99	.1038115	.0049537	20.96	0.000	.0941021	.1135208
firm_size_100_199	.1700305	.0074573	22.80	0.000	. 1554142	. 1846469
firm_size_200_499	.2699843	.0078595	34.35	0.000	. 2545797	. 2853889
firm_size_500	.3670075	.0077195	47.54	0.000	.3518772	.3821378
firm_size_unknown	.00107	.0355104	0.03	0.976	0685307	.0706708
_cons	2.834349	.0090114	314.53	0.000	2.816686	2.852011

<sup>12 .</sup> 

Linear regression

Number of obs F(31, 22904) 22.936 138.79 Prob > F 0.0000 R-squared Root MSE 0.1730 .40199

		Robust				
log_wage	Coefficient	std. err.	t	P> t	[95% conf.	interval]
sector_public	0	(omitted)				
experience	.0106934	.0011441	9.35	0.000	.0084509	.0129359
experience_sq	0000804	.0000256	-3.14	0.002	0001306	0000303
edu_uni	.378422	.0078069	48.47	0.000	.3631199	.393724
edu_diploma_cert	.2277041	.0077509	29.38	0.000	.2125118	.2428963
children_1	.0120196	.0079812	1.51	0.132	0036241	.0276634
children_2	.0063094	.0075316	0.84	0.402	008453	.0210719
children_3	.0148601	.0103926	1.43	0.153	0055101	.0352303
children_4_plus	0163189	.0191339	-0.85	0.394	0538227	.0211849
health_poor	0195669	.0074546	-2.62	0.009	0341784	0049553
birth_eng	0112006	.0100347	-1.12	0.264	0308694	.0084681
birth_neng	0530718	.0103484	-5.13	0.000	0733553	0327883
married_yes	.0575915	.0082568	6.98	0.000	.0414076	. 0737755
married_sep	0108476	.0109542	-0.99	0.322	0323187	.0106234
urban_no	0106155	.0085381	-1.24	0.214	0273508	.0061198
state_VIC	0611337	.0074396	-8.22	0.000	0757159	0465515
state_WA	0047875	.0104422	-0.46	0.647	025255	.01568
state_QLD	066875	.007943	-8.42	0.000	0824437	0513062
state_SA	0647229	.0101756	-6.36	0.000	0846678	0447781
state_NT	.0332685	.0230749	1.44	0.149	0119598	. 0784969
state_TAS	0824802	.0141739	-5.82	0.000	110262	0546984
state_ACT	.0795372	.0132902	5.98	0.000	.0534876	. 1055869
shiftwork_yes	0169727	.0077262	-2.20	0.028	0321166	0018289
parttime	0112426	.0063475	-1.77	0.077	0236841	.0011988
long_hours	0854924	.0074274	-11.51	0.000	1000505	0709342
casual	051793	.0130382	-3.97	0.000	0773487	0262372
union_yes	.0349612	.0057428	6.09	0.000	.0237048	.0462175
firm_size_20_99	.0459066	.0089326	5.14	0.000	.028398	.0634152
firm_size_100_199	.1150914	.0104927	10.97	0.000	.0945249	. 1356578
firm_size_200_499	.1228533	.0106347	11.55	0.000	.1020085	.1436981
firm_size_500	.2036933	.009227	22.08	0.000	.1856078	.2217788
firm_size_unknown	.0445806	.0352712	1.26	0.206	0245532	. 1137145
_cons	2.895341	.0163149	177.47	0.000	2.863363	2.92732
	L					

16 . //females private
17 . regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne
18 . regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne
19 . regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne > ng married\_yes married\_sep urban\_no state\_VIC state\_WA state\_QLD state\_SA state\_NT state\_TAS state\_ACT shiftwork\_yes parttime long\_hours casual union\_yes f > irm\_size\_20\_99 firm\_size\_100\_199 firm\_size\_200\_499 firm\_size\_500 firm\_size\_unknown if sex\_female == 1 & sector\_public == 0, vce(robust) note: **sector\_public** omitted because of collinearity.

Number of obs F(31, 43981) Linear regression 44,013 = 276.77 0.0000 Prob > F R-squared 0.1770 Root MSE .43028



<sup>13 . //</sup>females public

<sup>14 ·</sup> regress log\_wage sector\_public experience experience\_sq edu\_uni edu\_diploma children\_1 children\_2 children\_3 children\_4\_plus health\_poor birth\_eng birth\_ne 
> ng married\_yes married\_sep urban\_no state\_VIC state\_WA state\_QLD state\_SA state\_NT state\_TAS state\_ACT shiftwork\_yes parttime long\_hours casual union\_yes f
> irm\_size\_20\_99 firm\_size\_100\_199 firm\_size\_200\_499 firm\_size\_500 firm\_size\_unknown if sex\_female == 1 & sector\_public == 1, vce(robust) note: sector\_public omitted because of collinearity.

log_wage	Coefficient	Robust std. err.	t	P> t	[95% conf.	interval]
sector_public	0	(omitted)				
experience	.0140929	.0008356	16.87	0.000	.012455	.0157307
experience_sq	0001835	.0000189	-9.69	0.000	0002206	0001463
edu_uni	.3922605	.0059069	66.41	0.000	.380683	.4038383
edu_diploma_cert	.1697541	.0047127	36.02	0.000	.1605172	.178991
children_1	.0216306	.005819	3.72	0.000	.0102254	.0330359
children_2	.058654	.0058724	9.99	0.000	.047144	.070164
children_3	.061299	.0090921	6.74	0.000	.0434784	.0791197
children_4_plus	0109905	.0171358	-0.64	0.521	0445769	. 0225959
health_poor	0395791	.0058079	-6.81	0.000	0509628	0281955
birth_eng	0009746	.0074998	-0.13	0.897	0156744	.0137253
birth_neng	0649668	.0067152	-9.67	0.000	0781287	0518049
married_yes	.0665384	.0060517	10.99	0.000	.0546769	. 0783998
married_sep	0073213	.0081122	-0.90	0.367	0232214	.0085788
urban_no	0355302	.007209	-4.93	0.000	0496599	0214005
state_VIC	0311645	.0056188	-5.55	0.000	0421775	0201514
state_WA	.0066622	.0082028	0.81	0.417	0094155	. 0227398
state_QLD	0578838	.0057912	-10.00	0.000	0692346	046533
state_SA	0735056	.0082427	-8.92	0.000	0896615	0573497
state_NT	0518118	.0231514	-2.24	0.025	0971889	0064347
state_TAS	0586917	.010878	-5.40	0.000	0800128	0373706
state_ACT	.0759196	.0197403	3.85	0.000	.0372283	.114611
shiftwork_yes	010625	.0058689	-1.81	0.070	0221282	.0008782
parttime	0092139	.0049939	-1.85	0.065	019002	.0005741
long_hours	0168958	.0058298	-2.90	0.004	0283222	0054693
casual	06412	.0059504	-10.78	0.000	0757829	052457
union_yes	.0201209	.0055011	3.66	0.000	.0093387	.0309031
firm_size_20_99	.0525632	.0048568	10.82	0.000	.0430437	.0620827
firm_size_100_199	.0770329	.0073344	10.50	0.000	.0626573	.0914085
firm_size_200_499	.1241752	.0082072	15.13	0.000	.108089	.1402614
firm_size_500	.2641039	.0084692	31.18	0.000	.2475041	.2807037
firm_size_unknown	0333614	.0265438	-1.26	0.209	0853878	.0186649
cons	2.799348	.0095979	291.66	0.000	2.780536	2.81816

18 . end of do-file

19 . log close
name: 
closed on: 
log type: 
closed on: 
3 Jul 2023, 10:44:18

