name: <unnamed>

log: /Users/dgaskin/Documents/WPDOCS/Health Economics Program/Advanced Methods in HS

> R/Data/Lecture 3 Example.log

log type: text

opened on: 7 Sep 2015, 20:23:09

. do "/var/folders/33/6k2hslfx3dggf37z68mv2g040000gq/T//SD00740.000000"

. reg wages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 & w > ages > 0

Source	ss	df	MS			r of obs		
Model	2.7437e+12	20 1.	3718e+11		,	, 14741) > F	= 364.99 = 0.0000	
Residual	5.5405e+12	14741 3	75855004		R-squ		= 0.3312	
Total	8.2842e+12	14761 5	14761 561220486		Adj R-squared = 0.3303 Root MSE = 19387			
	wages	Coe	f. Std.	Err.	t	P> t	[95% Conf.	Interval]
	age	2104.5	17 58 <b>.</b> 0	0955	36.28	0.000	1990.811	2218.223
	agesq	-20.979	75 <b>.</b> 639	5985 -	-32.80	0.000	-22.23344	-19.72606
	female	-6576.3	49 321 <b>.</b>	4973	-20.46	0.000	-7206.524	-5946.174
	race							
	Black	-4931.1	94 462.	5926	-10.66	0.000	-5837.934	-4024.455
	Hispanic	-4115.9	37 445.	0568	-9.25	0.000	-4988.304	-3243.57
	Asian	-675.55	688.	1842	-0.98	0.326	-2024.485	673.3689
	Other	-3143.6	96 1105	0.059	-2.84	0.004	-5309.749	-977.6429
	education							
	Some High	2579.0	76 760 <b>.</b>	7606	3.39	0.001	1087.891	4070.262
High	School/GED	7277.4	08 689.	1604	10.56	0.000	5926.567	8628.248
Some College/	Tech Scho	11429.	43 744.	8291	15.35	0.000	9969.476	12889.39
	College	24280.	51 763 <b>.</b>	8995	31.78	0.000	22783.18	25777.85
Advar	nced Degree	30544.	65 869 <b>.</b>	6153	35.12	0.000	28840.09	32249.2
	msa	3611.6	17 483.	9424	7.46	0.000	2663.03	4560.205
	region	1076 0	21 400	2050	2 21	0 027	2024 220	110 6222
	South	-1076.9	OI 468.	3859	-2.21	0.027	-2034.228	-119.6333

Midwest West	-695.3526 723.9923	549.3364 519.7043	-1.27 1.39	0.206 0.164	-1772.121 -294.6931	381.4153 1742.678
healthstatus						
Very Good	-535.0051	420.2906	-1.27	0.203	-1358.827	288.817
Good	-2855.088	439.7147	-6.49	0.000	-3716.984	-1993.192
Fair	-6090.048	651.4859	-9.35	0.000	-7367.042	-4813.055
Poor	-8187.529	1251.917	-6.54	0.000	-10641.44	-5733.616
_cons	-23930.47	1534.303	-15.60	0.000	-26937.9	-20923.05

# . rvfplot

## . estat ovtest

Ramsey RESET test using powers of the fitted values of wages  ${\tt Ho:}\ {\tt model}\ {\tt has}\ {\tt no}\ {\tt omitted}\ {\tt variables}$ 

$$F(3, 14738) = 49.50$$
  
 $Prob > F = 0.0000$ 

## . linktest

Source	SS	df	MS		Number of obs F( 2, 14759)	
Model   Residual	2.7652e+12 5.5189e+12		1.3826e+12 373937042		Prob > F R-squared Adj R-squared	= 0.0000 = 0.3338
Total	8.2842e+12	14761	561220486		Root MSE	= 19337
wages	Coef.	Std. E	rr. t	P> t	[95% Conf.	Interval]
_hat   _hatsq   _cons	.6644017 5.31e-06 4304.168	.04573 6.99e-0 685.53	07 7.59	0.000	.5747631 3.94e-06 2960.437	.7540403 6.68e-06 5647.898

## . estat hettest

## Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of wages

chi2(1) = 2491.75Prob > chi2 = 0.0000

. reg lnwages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 & > wages > 0

Source	SS	df		MS		er of obs 0, 14741)	= 14762 = 325.33	
Model	4452.1358	20	222.	60679	Prob	> F	= 0.0000	
Residual	10086.4996	14741	.6842	47989	-	uared	= 0.3062	
Total	14538.6354	14761	.9849	35669	Root	R-squared MSE	= 0.3053 = .82719	
	lnwages	   	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
	age	.1	11819	.0024751	45.18	0.000	.1069675	.1166705
	agesq	00	11231	.0000273	-41.15	0.000	0011766	0010696
	female	25	49684	.0137175	-18.59	0.000	2818564	2280805
	race							
	Black	17	79442	.0197376	-9.02	0.000	2166325	139256
	Hispanic	07	31087	.0189894	-3.85	0.000	1103303	035887
	Asian	07	16333	.0293631	-2.44	0.015	1291886	0140781
	Other	11	08497	.04715	-2.35	0.019	2032697	0184298
	education							
	Some High	00	53227	.0324597	-0.16	0.870	0689478	.0583024
High	School/GED	.32	94355	.0294047	11.20	0.000	.2717986	.3870724
Some College/	Tech Scho	.4	74558	.03178	14.93	0.000	.4122653	.5368507
	College	.87	27789	.0325936	26.78	0.000	.8088913	.9366665
Advar	nced Degree	1.0	00223	.0371043	26.96	0.000	.9274936	1.072952
	msa	.10	93024	.0206486	5.29	0.000	.0688286	.1497762
	region	[ 						
	South	0	46428	.0208382	-2.23	0.026	0872734	0055826

Midwest West	0392333 .0186769	.0234388 .0221745	-1.67 0.84	0.094	0851763 0247878	.0067096
West	•0100709	.0221745	0.04	0.400	0247070	.0021410
healthstatus						
Very Good	0098539	.0179327	-0.55	0.583	0450043	.0252965
Good	1004453	.0187615	-5.35	0.000	1372202	0636704
Fair	2541906	.0277972	-9.14	0.000	3086767	1997046
Poor	3995893	.0534161	-7.48	0.000	5042915	2948871
_cons	   7.217982	.0654648	110.26	0.000	7.089663	7.346301

. rvfplot

. estat ovtest

Ramsey RESET test using powers of the fitted values of lnwages

Ho: model has no omitted variables F(3, 14738) = 14.40

Prob > F = 0.0000

. linktest

Source	SS	df	MS		Number of obs	
Model   Residual   Total	4461.11231 10077.5231 	14759 .	230.55616 682805278  984935669		Prob > F R-squared Adj R-squared	= 3266.75 = 0.0000 = 0.3068 = 0.3068 = .82632
lnwages	Coef.	Std. Er	r. t	P> t	[95% Conf.	Interval]
_hat   _hatsq _cons	2.240311 0629024 -6.094752	.342301 .017348 1.68544	5 -3.6	3 0.000		2.911264 0288972 -2.791071

. estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of lnwages

chi2(1) = 327.31Prob > chi2 = 0.0000

. reg lnwages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 &
> wages > 0, robust

Linear regression

Number of obs = 14762 F(20, 14741) = 305.34 Prob > F = 0.0000 R-squared = 0.3062 Root MSE = .82719

Robust lnwages Coef. Std. Err. P>|t| [95% Conf. Interval] .111819 .0029267 38.21 0.000 .1060822 .1175558 age agesq -.0011231 .0000333 **-**33.72 0.000 -.0011884 -.0010578 female **-.**2549684 .0137313 -18.57 0.000 **-.**2818834 -.2280535 race Black **-.**1779442 .0201128 -8.85 0.000 -.2173677 -.1385207 Hispanic -.0731087 .0192133 -3.81 0.000 **-.**1107692 -.0354482 Asian -.0716333 .0294127 -2.440.015 -.1292858 -.0139808 Other -.1108497 .0502684 -2.21 0.027 -.209382 -.0123174 education Some High -.0053227 .032081 -0.17 0.868 -.0682055 .0575601 High School/GED .3294355 .0288307 11.43 0.000 .2729237 .3859473 Some College/Tech Scho.. .474558 .0311748 15.22 0.000 .4134514 .5356646 College .8727789 .0315582 27.66 0.000 .8109209 .934637 Advanced Degree 1.000223 .0357051 28.01 0.000 .9302362 1.070209 5.22 0.000 msa .1093024 .0209348 .0682676 .1503371 region South -.046428 .0204452 -2.27 0.023 -.0865032 -.0063528 -1.66 Midwest -.0392333 .0236174 0.097 -.0855264 .0070597 0.85 West .0186769 .0219198 0.394 -.0242887 .0616425 healthstatus

Very Good	0098539	.017652	-0.56	0.577	044454	.0247462
Good	1004453	.0184943	-5.43	0.000	1366965	0641941
Fair	2541906	.0298357	-8.52	0.000	3126723	1957089
Poor	3995893	.0620704	-6.44		5212551	2779235
_cons	   7.217982	.072215	99.95	0.000	7.076431	7.359532

Linear regression

Number of obs = 14762 F(24, 14737) = 268.18 Prob > F = 0.0000 R-squared = 0.3194 Root MSE = .81943

Robust lnwages Coef. Std. Err. t P>|t| [95% Conf. Interval] .179314 .0075524 23.74 0.000 .1645103 .1941176 age1 -.154367 .0082289 -18.76 0.000 -.1704967 -.1382373 age2 age3 -.0316411 .0024185 -13.08 0.000 -.0363816 -.0269007 age4 -.2725644 .0672389 -4.05 0.000 -.404361 -.1407679 age5 .2439514 .0755689 3.23 0.001 .0958269 .3920759 age6 .0358313 .0221336 1.62 0.105 -.0075532 .0792158 female -.2491782 .0136251 -18.29 0.000 **-.**2758851 -.2224714 race Black -.1807056 .0199919 -9.04 0.000 -.2198923 -.141519 Hispanic -.0942848 .0191207 -4.93 0.000 **-.**1317637 -.056806 Asian -.0732809 .0287559 -2.55 0.011 -.129646 -.0169159 Other -.1025259 .0498138 -2.06 0.040 -.2001672 -.0048847 education Some High .0654193 .0319416 2.05 0.041 .0028098 .1280287 High School/GED 0.000 .3189299 .0285812 11.16 .2629073 .3749526 Some College/Tech Scho.. .4492108 .0309681 14.51 0.000 .3885094 .5099122 College .0314577 26.52 0.000 .7727113 .8343723 .8960334 Advanced Degree .9791394 .0356799 27.44 0.000 .9092024 1.049076

<sup>.</sup> reg lnwages age1-age6 female i.race i.education msa i.region i.healthstatus if age08x>17 & > wages > 0, robust

msa	.1050436	.0208273	5.04	0.000	.0642194	.1458678
region   South	0471085	.0202877	-2.32	0.020	0868748	0073421
Midwest	0379154	.0234308	-2.32 -1.62	0.106	0838427	.0080119
West	.0192192	.0217118	0.89	0.376	0233387	.0617771
healthstatus						
Very Good	0156859	.017435	-0.90	0.368	0498607	.0184889
Good	1073096	.0183157	-5.86	0.000	1432108	0714085
Fair	2690309	.0295592	-9.10	0.000	3269707	2110912
Poor	4255002	.0618607	-6.88	0.000	5467548	3042455
_cons	5.209809	.1752159	29.73	0.000	4.866364	5.553254

. reg lnwages age1-age6 i.race i.education msa i.region i.healthstatus if age08x>17 & female
> == 0 & wages > 0, robust

Linear regression

Number of obs = 7472 F(23, 7448) = 127.10 Prob > F = 0.0000 R-squared = 0.2974 Root MSE = .81297

Robust P>|t| Coef. lnwages Std. Err. [95% Conf. Interval] 0.000 age1 .2013654 .0106742 18.86 .180441 .2222898 age2 **-.**1768068 .0115644 -15.29 0.000 -.1994762 -.1541374 age3 **-.**0340759 .0033436 -10.19 0.000 -.0406303 -.0275214 age4 -.1792188 .0954034 -1.88 0.060 -.3662364 .0077987 .1464648 1.35 0.176 -.0656844 .3586139 age5 .1082238 .0398932 .0346879 1.15 0.250 -.0281049 .1078913 age6 race Black **-.**2467336 .029966 -8.23 0.000 **-.**3054755 -.1879916 -3.50 Hispanic -.0908205 .025942 0.000 **-.**1416741 -.039967 Asian -.0827207 .0406708 -2.03 0.042 -.1624471 -.0029944 Other -.1980141 .0705347 -2.81 0.005 -.336282 -.0597462

education						
Some High	.1038178	.0410957	2.53	0.012	.0232586	.1843769
High School/GED	.2946474	.037213	7.92	0.000	.2216995	.3675954
Some College/Tech Scho	.412197	.0407567	10.11	0.000	.3323024	.4920916
College	.7509625	.0417373	17.99	0.000	.6691457	.8327794
Advanced Degree	.8445165	.0480226	17.59	0.000	.7503787	.9386542
msa	.0893354	.0298783	2.99	0.003	.0307654	.1479053
region						
South	043997	.027711	-1.59	0.112	0983184	.0103244
Midwest	0352855	.0324531	-1.09	0.277	0989028	.0283318
West	.0045111	.0296327	0.15	0.879	0535774	.0625996
healthstatus						
Very Good	0048469	.0241767	-0.20	0.841	0522401	.0425463
Good	1106111	.0253965	-4.36	0.000	1603955	0608268
Fair	2744475	.0437878	-6.27	0.000	3602839	1886111
Poor	4948394	.0874729	-5.66	0.000	666311	3233677
_cons	4.764838	.2479363	19.22	0.000	4.278813	5.250864

. reg lnwages age1-age6 i.race i.education msa i.region i.healthstatus if age08x>17 & female > == 1 & wages > 0, robust

Linear regression

Number of obs = 7290 F(23, 7266) = 147.45 Prob > F = 0.0000 R-squared = 0.3286 Root MSE = .82281

Robust P>|t| Coef. Std. Err. [95% Conf. Interval] lnwages age1 .1533284 .0106689 14.37 0.000 .1324142 .1742426 -10.90 0.000 age2 **-.**1273942 .0116884 -.150307 -.1044815 -.0295443 age3 .0034903 -8.46 0.000 -.0363864 -.0227023 -.3653569 age4 .0942743 -3.88 0.000 -.550162 -.1805518 .3424133 3.26 0.001 age5 .1050173 .1365489 .5482778 .0287114 age6 .0280016 1.03 0.305 -.0261798 .0836027

Page							
Hispanic	race						
Asian Other 0.025894 0.0407065 -1.33 0.1841338927 0.257005 0ther 0.0025894 0.069638 0.04 0.9701339214 0.1391002  education Some High 0.0311079 0.0505027 0.62 0.5380678921 0.1301078 0.069638 0.04 0.970 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.000 0.2756102 0.4515708 0.000 0.000 0.2756102 0.4515708 0.000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.000000	Black	1240479	.0267987	-4.63	0.000	1765812	0715146
Asian Other 0.025894 0.0407065 -1.33 0.1841338927 0.257005 0ther 0.0025894 0.069638 0.04 0.9701339214 0.1391002  education Some High 0.0311079 0.0505027 0.62 0.5380678921 0.1301078 0.069638 0.04 0.970 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.2756102 0.4515708 0.000 0.000 0.2756102 0.4515708 0.000 0.000 0.2756102 0.4515708 0.000 0.000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.0000 0.00000 0.0000 0.0000 0.0000 0.000000	Hispanic	1062535	.0281355	-3.78	0.000	1614072	0510999
education Some High .0311079 .0505027 0.62 0.5380678921 .1301078 High School/GED .3635905 .0448813 8.10 0.000 .2756102 .4515708 Some College/Tech Scho5093371 .0480025 10.61 0.000 .4152383 .6034359 College .9418468 .0484327 19.45 0.000 .8469048 1.036789 Advanced Degree 1.134108 .0535808 21.17 0.000 1.029074 1.239142 msa .1243462 .0289697 4.29 0.000 .0675571 .1811353 region South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349 healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008	<del>-</del> :	0540961	.0407065	-1.33	0.184	1338927	
Some High   .0311079   .0505027   0.62   0.538  0678921   .1301078     High School/GED   .3635905   .0448813   8.10   0.000   .2756102   .4515708     Some College/Tech Scho.   .5093371   .0480025   10.61   0.000   .4152383   .6034359     College   .9418468   .0484327   19.45   0.000   .8469048   1.036789     Advanced Degree   1.134108   .0535808   21.17   0.000   1.029074   1.239142     msa   .1243462   .0289697   4.29   0.000   .0675571   .1811353     region	Other	.0025894	.069638	0.04	0.970	1339214	.1391002
Some High   .0311079   .0505027   0.62   0.538  0678921   .1301078     High School/GED   .3635905   .0448813   8.10   0.000   .2756102   .4515708     Some College/Tech Scho.   .5093371   .0480025   10.61   0.000   .4152383   .6034359     College   .9418468   .0484327   19.45   0.000   .8469048   1.036789     Advanced Degree   1.134108   .0535808   21.17   0.000   1.029074   1.239142     msa   .1243462   .0289697   4.29   0.000   .0675571   .1811353     region	į						
High School/GED	education						
Some College/Tech Scho  College 9418468 0484327 19.45 0.000 8469048 1.036789 Advanced Degree 1.134108 0535808 21.17 0.000 1.029074 1.239142  msa 1.243462 0289697 4.29 0.000 0.675571 1811353  region South South0504848 0294222 -1.72 0.0861081609 0071913 Midwest0433659 0336507 -1.29 0.198109331 0225993 West 0377723 0315579 1.20 0.2310240904 0996349  healthstatus Very Good0272772 0251031 -1.09 0.2770764865 0219322 Good0993263 0263867 -3.76 0.00015105190476008	Some High	.0311079	.0505027	0.62	0.538	0678921	.1301078
College	High School/GED	.3635905	.0448813	8.10	0.000	.2756102	.4515708
Advanced Degree 1.134108 .0535808 21.17 0.000 1.029074 1.239142  msa .1243462 .0289697 4.29 0.000 .0675571 .1811353  region South0504848 .0294222 -1.72 0.0861081609 .0071913  Midwest0433659 .0336507 -1.29 0.198109331 .0225993  West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322  Good0993263 .0263867 -3.76 0.00015105190476008	Some College/Tech Scho	.5093371	.0480025	10.61	0.000	.4152383	.6034359
msa .1243462 .0289697 4.29 0.000 .0675571 .1811353  region South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008	College	.9418468	.0484327	19.45	0.000	.8469048	1.036789
region South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008	Advanced Degree	1.134108	.0535808	21.17	0.000	1.029074	1.239142
region South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008							
South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008	msa	.1243462	.0289697	4.29	0.000	.0675571	.1811353
South0504848 .0294222 -1.72 0.0861081609 .0071913 Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008							
Midwest0433659 .0336507 -1.29 0.198109331 .0225993 West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus Very Good0272772 .0251031 -1.09 0.2770764865 .0219322 Good0993263 .0263867 -3.76 0.00015105190476008	region						
West .0377723 .0315579 1.20 0.2310240904 .0996349  healthstatus  Very Good0272772 .0251031 -1.09 0.2770764865 .0219322  Good0993263 .0263867 -3.76 0.00015105190476008	South	0504848	.0294222	-1.72	0.086	1081609	.0071913
healthstatus Very Good  0272772 .0251031 -1.09 0.2770764865 .0219322 Good  0993263 .0263867 -3.76 0.00015105190476008	Midwest	0433659	.0336507	-1.29	0.198	109331	.0225993
Very Good    0272772     .0251031     -1.09     0.277    0764865     .0219322       Good    0993263     .0263867     -3.76     0.000    1510519    0476008	West	.0377723	.0315579	1.20	0.231	0240904	.0996349
Very Good    0272772     .0251031     -1.09     0.277    0764865     .0219322       Good    0993263     .0263867     -3.76     0.000    1510519    0476008							
Good0993263 .0263867 -3.76 0.00015105190476008	healthstatus						
!	Very Good	0272772	.0251031	-1.09		0764865	.0219322
		0993263	.0263867	-3.76		<b></b> 1510519	0476008
	Fair	<b></b> 2530774	.0404405	-6.26	0.000	3323524	1738023
Poor3604149 .0872549 -4.13 0.00053145991893698	Poor	3604149	.0872549	-4.13	0.000	<b></b> 5314599	1893698
_cons   5.459618 .246315 22.17 0.000 4.976769 5.942466	_cons	5.459618	.246315	22.17	0.000	4.976769	5.942466

end of do-file

. reg wages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 & w > ages > 0

Source	SS	df	MS	Number o	of obs =	14762
	·			F( 20, 1	14741) =	364.99
Model	2.7437e+12	20	1.3718e+11	Prob > I	F =	0.0000
Residual	5.5405e+12	14741	375855004	R-square	ed =	0.3312
	+			Adj R-so	quared =	0.3303

<sup>.</sup> do "/var/folders/33/6k2hslfx3dggf37z68mv2g040000gq/T//SD00740.000000"

wages	Coef.	Std. Err.	t	P>   t	[95% Conf.	Interval]
age	2104.517	58.00955	36.28	0.000	1990.811	2218.223
agesq	-20.97975	.6395985	-32.80	0.000	-22.23344	-19.72606
female	-6576.349	321.4973	-20.46	0.000	-7206.524	-5946.174
race						
Black	-4931.194	462.5926	-10.66	0.000	-5837.934	-4024.455
Hispanic	-4115.937	445.0568	-9.25	0.000	-4988.304	-3243.57
Asian	-675.5581	688.1842	-0.98	0.326	-2024.485	673.3689
Other	-3143.696	1105.059	-2.84	0.004	-5309.749	-977.6429
education						
Some High	2579.076	760.7606	3.39	0.001	1087.891	4070.262
High School/GED	7277.408	689.1604	10.56	0.000	5926.567	8628.248
Some College/Tech Scho	11429.43	744.8291	15.35	0.000	9969.476	12889.39
College	24280.51	763.8995	31.78	0.000	22783.18	25777.85
Advanced Degree	30544.65	869.6153	35.12	0.000	28840.09	32249.2
msa	3611.617	483.9424	7.46	0.000	2663.03	4560.205
region						
South	-1076.931	488.3859	-2.21	0.027	-2034.228	-119.6333
Midwest	-695.3526	549.3364	-1.27	0.206	-1772.121	381.4153
West	723.9923	519.7043	1.39	0.164	-294.6931	1742.678
healthstatus						
Very Good	-535.0051	420.2906	-1.27	0.203	-1358.827	288.817
Good	-2855.088	439.7147	-6.49	0.000	-3716.984	-1993.192
Fair	-6090.048	651.4859	-9.35	0.000	-7367.042	-4813.055
Poor	-8187.529	1251.917	-6.54	0.000	-10641.44	-5733.616
_cons	   -23930.47	1534.303	-15.60	0.000	-26937.9	-20923.05

<sup>.</sup> rvfplot

Ramsey RESET test using powers of the fitted values of wages

<sup>.</sup> estat ovtest

Ho: model has no omitted variables F(3, 14738) = 49.50Prob > F = 0.0000

#### . linktest

Source	SS	df	MS		Number of obs F( 2, 14759)	
Model   Residual   	2.7652e+12 5.5189e+12 8.2842e+12	14759 373	26e+12 937042 		Prob > F R-squared Adj R-squared Root MSE	= 0.0000 = 0.3338
wages   +-	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
_hat   _hatsq   _cons	.6644017 5.31e-06 4304.168	.0457311 6.99e-07 685.5331	14.53 7.59 6.28	0.000 0.000 0.000	.5747631 3.94e-06 2960.437	.7540403 6.68e-06 5647.898

### . estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of wages

chi2(1) = 2491.75Prob > chi2 = 0.0000

. reg lnwages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 & > wages > 0

	Source	SS	df	MS		Number of obs			
-	Model	4452.1358	20	222.60679		F( 20, 14741) Prob > F	=	0.0000	
_	1	10086.4996 				R-squared Adj R-squared			
	Total	14538.6354	14761	.984935669				.82719	
_									
		lnwages		Coef. Std.	Err.	t P> t		[95% Conf.	<pre>Interval]</pre>

	·					
age	.111819	.0024751	45.18	0.000	.1069675	.1166705
agesq	0011231	.0000273	-41.15	0.000	0011766	0010696
female	2549684	.0137175	-18.59	0.000	2818564	2280805
race						
Black	1779442	.0197376	-9.02	0.000	2166325	139256
Hispanic	0731087	.0189894	-3.85	0.000	1103303	035887
Asian	0716333	.0293631	-2.44	0.015	1291886	0140781
Other	1108497	.04715	-2.35	0.019	2032697	0184298
education						
Some High	0053227	.0324597	-0.16	0.870	0689478	.0583024
High School/GED	.3294355	.0294047	11.20	0.000	.2717986	.3870724
Some College/Tech Scho	.474558	.03178	14.93	0.000	.4122653	.5368507
College	.8727789	.0325936	26.78	0.000	.8088913	.9366665
Advanced Degree	1.000223	.0371043	26.96	0.000	.9274936	1.072952
msa	.1093024	.0206486	5.29	0.000	.0688286	.1497762
region						
South	046428	.0208382	-2.23	0.026	0872734	0055826
Midwest	0392333	.0234388	-1.67	0.094	0851763	.0067096
West	.0186769	.0221745	0.84	0.400	0247878	.0621416
healthstatus						
Very Good	0098539	.0179327	-0.55	0.583	0450043	.0252965
Good	1004453	.0187615	-5.35	0.000	1372202	0636704
Fair	2541906	.0277972	-9.14	0.000	3086767	1997046
Poor	3995893	.0534161	<b>-7.48</b>	0.000	5042915	2948871
_cons	7.217982	.0654648	110.26	0.000	7.089663	7.346301

. rvfplot

. estat ovtest

Ramsey RESET test using powers of the fitted values of lnwages  $\mbox{\ensuremath{\mbox{\sc Ho:}}}$  model has no omitted variables

F(3, 14738) = 14.40Prob > F = 0.0000

### . linktest

Source	ss 	df		MS		Number of obs F( 2, 14759)		14762 3266.75
Model Residual	4461.11231   10077.5231	2 14759		0.55616 2805278		Prob > F R-squared Adj R-squared	=	0.0000 0.3068 0.3068
Total	14538.6354	14761	.984	1935669		Root MSE	=	
lnwages	Coef.	Std.	Err.	t	P> t	[95% Conf.	Ir	nterval]
_hat _hatsq _cons	2.240311 0629024 -6.094752	.3423 .0173 1.685	485	6.54 -3.63 -3.62	0.000 0.000 0.000	1.569357 0969076 -9.398433		2.911264 0288972 2.791071

#### . estat hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity

Ho: Constant variance

Variables: fitted values of lnwages

chi2(1) = 327.31Prob > chi2 = 0.0000

. reg lnwages age agesq female i.race i.education msa i.region i.healthstatus if age08x>17 & > wages > 0, robust

Linear regression

Number of obs = 14762 F(20, 14741) = 305.34 Prob > F = 0.0000 R-squared = 0.3062 Root MSE = .82719

Robust P>|t| lnwages Coef. Std. Err. [95% Conf. Interval] 38.21 0.000 .111819 .0029267 age .1060822 .1175558 -33.72 0.000 agesq -.0011231 .0000333 -.0011884 -.0010578 -.2549684 -.2818834 female .0137313 -18.57 0.000 -.2280535

race						
Black	1779442	.0201128	-8.85	0.000	<b></b> 2173677	<b></b> 1385207
Hispanic	0731087	.0192133	-3.81	0.000	1107692	0354482
Asian	0716333	.0294127	-2.44	0.015	1292858	0139808
Other	1108497	.0502684	-2.21	0.027	209382	0123174
education	005005	000001	0 15	0.000	0.600055	0555601
Some High	0053227	.032081	-0.17	0.868	0682055	.0575601
High School/GED	.3294355	.0288307	11.43	0.000	.2729237	.3859473
Some College/Tech Scho	.474558	.0311748	15.22	0.000	.4134514	.5356646
College	.8727789	.0315582	27.66	0.000	.8109209	.934637
Advanced Degree	1.000223	.0357051	28.01	0.000	.9302362	1.070209
msa	.1093024	.0209348	5.22	0.000	.0682676	.1503371
region						
South	046428	.0204452	-2.27	0.023	0865032	0063528
Midwest	0392333	.0236174	-1.66	0.023	0855264	.0070597
West	.0186769	.0230174	0.85	0.394	0242887	.0616425
West	0100709	.0219190	0.03	0.394	0242007	.0010423
healthstatus						
Very Good	0098539	.017652	-0.56	0.577	044454	.0247462
Good	1004453	.0184943	-5.43	0.000	1366965	0641941
Fair	2541906	.0298357	-8.52	0.000	3126723	1957089
Poor	3995893	.0620704	-6.44	0.000	5212551	2779235
_cons	7.217982	.072215	99.95	0.000	7.076431	7.359532

. reg lnwages age1-age6 female i.race i.education msa i.region i.healthstatus if age08x>17 & > wages > 0, robust

Linear regression

Number of obs = 14762 F(24, 14737) = 268.18 Prob > F = 0.0000 R-squared = 0.3194 Root MSE = .81943

The bound

age1	.179314	.0075524	23.74	0.000	.1645103	.1941176
age2	154367	.0082289	-18.76	0.000	1704967	1382373
age3	0316411	.0024185	-13.08	0.000	0363816	0269007
age4	2725644	.0672389	-4.05	0.000	404361	1407679
age5	.2439514	.0755689	3.23	0.001	.0958269	.3920759
age6	.0358313	.0221336	1.62	0.105	0075532	.0792158
female	2491782	.0136251	-18.29	0.000	2758851	2224714
race						
Black	1807056	.0199919	-9.04	0.000	2198923	141519
Hispanic	0942848	.0191207	-4.93	0.000	1317637	056806
Asian	0732809	.0287559	-2.55	0.011	129646	0169159
Other	1025259	.0498138	-2.06	0.040	2001672	0048847
education						
Some High	.0654193	.0319416	2.05	0.041	.0028098	.1280287
High School/GED	.3189299	.0285812	11.16	0.000	.2629073	.3749526
Some College/Tech Scho	.4492108	.0309681	14.51	0.000	.3885094	.5099122
College	.8343723	.0314577	26.52	0.000	.7727113	.8960334
Advanced Degree	.9791394	.0356799	27.44	0.000	.9092024	1.049076
ļ	1050426	0000073	F 0.4	0 000	0640104	1450650
msa	.1050436	.0208273	5.04	0.000	.0642194	.1458678
region						
South	0471085	.0202877	-2.32	0.020	0868748	0073421
Midwest	0379154	.0234308	-1.62	0.106	0838427	.0080119
West	.0192192	.0217118	0.89	0.376	0233387	.0617771
West	•0172172	•0217110	0.03	0.370	0233307	•001///1
healthstatus						
Very Good	0156859	.017435	-0.90	0.368	0498607	.0184889
Good	1073096	.0183157	-5.86	0.000	1432108	0714085
Fair	2690309	.0295592	-9.10	0.000	3269707	2110912
Poor	4255002	.0618607	-6.88	0.000	5467548	3042455
	<b>-</b>				<b></b>	
cons	5.209809	.1752159	29.73	0.000	4.866364	5.553254

<sup>.</sup> reg lnwages age1-age6 i.race i.education msa i.region i.healthstatus if age08x>17 & female > == 0 & wages > 0, robust

F( 23, 7448) = 127.10 Prob > F = 0.0000 R-squared = 0.2974 Root MSE = .81297

		Robust				
lnwages	Coef.	Std. Err.	t	P> t	[95% Conf	. Interval]
age1	.2013654	.0106742	18.86	0.000	.180441	.2222898
age2	1768068	.0115644	-15.29	0.000	1994762	1541374
age3	0340759	.0033436	-10.19	0.000	0406303	0275214
age4	1792188	.0954034	-1.88	0.060	3662364	.0077987
age5	.1464648	.1082238	1.35	0.176	0656844	.3586139
age6	.0398932	.0346879	1.15	0.250	0281049	.1078913
race						
Black	2467336	.029966	-8.23	0.000	3054755	1879916
Hispanic	0908205	.025942	-3.50	0.000	1416741	039967
Asian	0827207	.0406708	-2.03	0.042	1624471	0029944
Other	1980141	.0705347	-2.81	0.005	336282	0597462
education						
Some High	.1038178	.0410957	2.53	0.012	.0232586	.1843769
High School/GED	.2946474	.037213	7.92	0.000	.2216995	.3675954
Some College/Tech Scho	.412197	.0407567	10.11	0.000	.3323024	.4920916
College	.7509625	.0417373	17.99	0.000	.6691457	.8327794
Advanced Degree	.8445165	.0480226	17.59	0.000	.7503787	.9386542
msa	.0893354	.0298783	2.99	0.003	.0307654	.1479053
region						
South	043997	.027711	-1.59	0.112	0983184	.0103244
Midwest	0352855	.0324531	-1.09	0.277	0989028	.0283318
West	.0045111	.0296327	0.15	0.879	0535774	.0625996
healthstatus						
Very Good	0048469	.0241767	-0.20	0.841	0522401	.0425463
Good	1106111	.0253965	-4.36	0.000	1603955	0608268
Fair	2744475	.0437878	-6.27	0.000	3602839	1886111
Poor	4948394	.0874729	-5.66	0.000	666311	3233677
cons	4.764838	.2479363	19.22	0.000	4.278813	5.250864

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.

. reg lnwages age1-age6 i.race i.education msa i.region i.healthstatus if age08x>17 & female
> == 1 & wages > 0, robust

Linear regression

Number of obs = 7290 F(23, 7266) = 147.45 Prob > F = 0.0000 R-squared = 0.3286 Root MSE = .82281

Robust P>|t| lnwages Coef. Std. Err. [95% Conf. Interval] 0.000 age1 .1533284 .0106689 14.37 .1324142 .1742426 .0116884 0.000 age2 -.1273942 -10.90 -.150307 -.1044815 -.0227023 age3 -.0295443 .0034903 -8.46 0.000 -.0363864 age4 **-.**3653569 .0942743 -3.88 0.000 -.550162 -.1805518 age5 .3424133 .1050173 3.26 0.001 .1365489 .5482778 age6 .0287114 .0280016 1.03 0.305 -.0261798 .0836027 race Black .0267987 -4.63 0.000 -.1765812 -.0715146 **-.**1240479 Hispanic -3.78 -.1062535 .0281355 0.000 **-.**1614072 -.0510999 Asian -.0540961 .0407065 -1.33 0.184 -.1338927 .0257005 Other .0025894 0.04 0.970 .069638 -.1339214 .1391002 education Some High 0.538 .0311079 .0505027 0.62 -.0678921 .1301078 High School/GED .3635905 .0448813 8.10 0.000 .2756102 .4515708 Some College/Tech Scho.. .5093371 .0480025 10.61 0.000 .4152383 .6034359 College .9418468 .0484327 19.45 0.000 .8469048 1.036789 Advanced Degree 0.000 1.134108 .0535808 21.17 1.029074 1.239142 .1243462 .0289697 4.29 0.000 .0675571 .1811353 msa region South -.0504848 .0294222 -1.72 0.086 -.1081609 .0071913 Midwest -.0433659 .0336507 -1.29 0.198 -.109331 .0225993 0.231 West .0377723 .0315579 1.20 -.0240904 .0996349

healthstatus						
Very Good	0272772	.0251031	-1.09	0.277	0764865	.0219322
Good	0993263	.0263867	-3.76	0.000	<b></b> 1510519	0476008
Fair	2530774	.0404405	-6.26	0.000	3323524	1738023
Poor	3604149	.0872549	-4.13	0.000	5314599	1893698
_cons	5.459618	.246315	22.17	0.000	4.976769	5.942466

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