

```

siblings |          753    3.253652    2.312821          0          8
name: <unnamed>
log: C:\Temp\web\class\stata\tobit_etc.smcl
log type: smcl
opened on: 30 Apr 2010, 10:23:25
    
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. summarize

Variable	Obs	Mean	Std. Dev.	Min	Max
taxableinc	753	21151.9	11891.38	1500	96000
federaltax	753	3275.851	3477.541	0	31386
hsiblings	753	3.450199	2.40743	0	8
hfathereduc	753	8.524568	3.217265	0	17
hmothereduc	753	9.2417	3.355293	0	17
siblings	753	3.253652	2.312821	0	8
lfp	753	.5683931	.4956295	0	1
hours	753	740.5764	871.3142	0	4950
ki dsl 6	753	.2377158	.523959	0	3
ki ds618	753	1.353254	1.319874	0	8
age	753	42.53785	8.072574	30	60
educ	753	12.28685	2.280246	5	17
wage	753	2.374565	3.241829	0	25
wage76	753	1.849734	2.419887	0	9.98
hhours	753	2267.271	595.5666	175	5010
hage	753	45.12085	8.058793	30	60
heduc	753	12.49137	3.020804	3	17
hwage	753	7.482179	4.230559	.4121	40.509
fami nc	753	23080.59	12190.2	1500	96000
mtr	753	.6788632	.0834955	.4415	.9415
mothereduc	753	9.250996	3.367468	0	17
fathereduc	753	8.808765	3.57229	0	17
unempl oymnt	753	8.623506	3.114934	3	14
largeci ty	753	.6427623	.4795042	0	1
exper	753	10.63081	8.06913	0	45

. reg hours ki dsl 6 ki ds618 educ exper

Source	SS	df	MS	Number of obs = 753		
Model	112290748	4	28072686.9	F(4, 748) = 45.79		
Residual	458618976	748	613126.974	Prob > F = 0.0000		
Total	570909724	752	759188.463	R-squared = 0.1967		
				Adj R-squared = 0.1924		
				Root MSE = 783.02		

hours	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
ki dsl 6	-271.0905	56.01654	-4.84	0.000	-381.0589	-161.1222
ki ds618	28.17475	22.70643	1.24	0.215	-16.40116	72.75066
educ	38.6143	12.66051	3.05	0.002	13.75993	63.46867
exper	40.96966	3.77891	10.84	0.000	33.55113	48.38819
_cons	-143.0976	166.1926	-0.86	0.389	-469.357	183.1618

. truncreg hours kidsl6 kids618 educ exper, ll(0)
 (note: 325 obs. truncated)

Fitting full model:

Iteration 0: log likelihood = -3409.2862
 Iteration 1: log likelihood = -3399.198
 Iteration 2: log likelihood = -3399.1232
 Iteration 3: log likelihood = -3399.1232

Truncated regression

Limit: lower = 0 Number of obs = 428
 upper = +inf Wald chi2(4) = 46.24
 Log likelihood = -3399.1232 Prob > chi2 = 0.0000

hours	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
kidsl6	-365.5156	153.1269	-2.39	0.017	-665.6387	-65.39244
kids618	-64.09348	42.88512	-1.49	0.135	-148.1468	19.95982
educ	-24.53318	22.28078	-1.10	0.271	-68.20271	19.13636
exper	31.75749	6.771689	4.69	0.000	18.48523	45.02976
_cons	1144.828	318.7453	3.59	0.000	520.0986	1769.557
/sigma	871.5746	45.78404	19.04	0.000	781.8395	961.3096

. tobit hours kidsl6 kids618 educ exper, ll(0)

Tobit regression

Number of obs = 753
 LR chi2(4) = 181.47
 Prob > chi2 = 0.0000
 Pseudo R2 = 0.0229
 Log likelihood = -3864.1575

hours	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
kidsl6	-591.8274	107.7032	-5.49	0.000	-803.2634	-380.3913
kids618	91.753	38.46956	2.39	0.017	16.232	167.274
educ	93.47303	21.4532	4.36	0.000	51.35747	135.5886
exper	67.15709	6.403916	10.49	0.000	54.58533	79.72885
_cons	-1537.195	294.2802	-5.22	0.000	-2114.907	-959.4824
/sigma	1198.938	44.81063			1110.969	1286.908

Obs. summary: 325 left-censored observations at hours<=0
 428 uncensored observations
 0 right-censored observations

. heckman hours kidsl6 kids618 educ exper, select(lfp= educ faminc mothereduc fathereduc)

Iteration 0: log likelihood = -4237.3682 (not concave)
 Iteration 1: log likelihood = -4087.8249
 Iteration 2: log likelihood = -3969.1964
 Iteration 3: log likelihood = -3951.6753
 Iteration 4: log likelihood = -3929.8196
 Iteration 5: log likelihood = -3929.4925
 Iteration 6: log likelihood = -3929.4886
 Iteration 7: log likelihood = -3929.4886

Heckman selection model

(regression model with sample selection)

Number of obs = 753
 Censored obs = 325
 Uncensored obs = 428

Log likelihood = -3929.489

Wald chi2(4) = 55.03
 Prob > chi2 = 0.0000

	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
hours						
ki dsl 6	-207.1322	93.19668	-2.22	0.026	-389.7943	-24.47008
ki ds618	-44.63878	29.39382	-1.52	0.129	-102.2496	12.97205
educ	-36.84961	19.27697	-1.91	0.056	-74.63178	.932566
exper	24.05303	4.839672	4.97	0.000	14.56745	33.53861
_cons	1744.709	336.5791	5.18	0.000	1085.026	2404.392
lfp						
educ	.0980103	.0252066	3.89	0.000	.0486061	.1474144
fami nc	7.26e-06	4.32e-06	1.68	0.093	-1.20e-06	.0000157
mothereduc	.0165599	.0171519	0.97	0.334	-.0170571	.0501769
fathereduc	-.0204296	.0161736	-1.26	0.207	-.0521293	.0112701
_cons	-1.168469	.2625304	-4.45	0.000	-1.683019	-.6539184
/athrho	-.41111	.2387355	-1.72	0.085	-.879023	.056803
/lnsigma	6.641325	.0622492	106.69	0.000	6.519319	6.763332
rho	-.3894148	.2025327			-.7059296	.0567419
sigma	766.1097	47.68971			678.1166	865.521
lambda	-298.3345	170.9906			-633.47	36.80102

LR test of indep. eqns. (rho = 0): chi2(1) = 1.76 Prob > chi2 = 0.1842

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. log close
name: <unnamed>
log: C:\Temp\web\class\stata\tobit_etc.smcl
log type: smcl
closed on: 30 Apr 2010, 10:23:51
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