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log: c:\DII\IN540\log\panel.log
log type: text
opened on: 31 Aug 2005, 18:11:25
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. u f:\papers\resida\dta\sam6,clear
. reg lning age age2 kids fsize ded* dyr*
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Source	SS	df	MS	Number of obs =	31690
Model	6432.0593	31	207.485784	F(31, 31658) =	813.79
Residual	8071.63216	31658	.254963427	Prob > F =	0.0000
				R-squared =	0.4435
				Adj R-squared =	0.4429
Total	14503.6915	31689	.457688518	Root MSE =	.50494

lning	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]
age	.0687204	.0036266	18.95	0.000	.0616121 .0758287
age2	-.0007064	.0000466	-15.16	0.000	-.0007978 -.0006151
kids	-.0122749	.0051725	-2.37	0.018	-.0224132 -.0021365
fsize	.0199675	.0043044	4.64	0.000	.0115306 .0284043
ded1	-.8149091	.0089965	-90.58	0.000	-.8325426 -.7972755
ded2	-.3524492	.0070419	-50.05	0.000	-.3662515 -.3386469
ded3	(dropped)				
dyr2	.0120967	.0264512	0.46	0.647	-.0397488 .0639421
dyr3	.007262	.0259772	0.28	0.780	-.0436542 .0581783
dyr4	-.0466674	.0255948	-1.82	0.068	-.0968342 .0034994
dyr5	-.0868683	.0252351	-3.44	0.001	-.1363301 -.0374064
dyr6	-.1026179	.0249002	-4.12	0.000	-.1514232 -.0538125
dyr7	-.1286209	.0245436	-5.24	0.000	-.1767273 -.0805144
dyr8	-.2768039	.0243511	-11.37	0.000	-.324533 -.2290749
dyr9	-.3868957	.0242713	-15.94	0.000	-.4344684 -.3393229
dyr10	-.3833746	.0241913	-15.85	0.000	-.4307905 -.3359588
dyr11	-.4232796	.0240173	-17.62	0.000	-.4703545 -.3762047
dyr12	-.4716982	.0239064	-19.73	0.000	-.5185556 -.4248407
dyr13	-.5425168	.0238085	-22.79	0.000	-.5891824 -.4958513
dyr14	-.6939687	.0236982	-29.28	0.000	-.7404181 -.6475192
dyr15	-.7811542	.0235971	-33.10	0.000	-.8274054 -.734903
dyr16	-.8923221	.0235848	-37.83	0.000	-.9385492 -.8460951
dyr17	-.9174283	.0235719	-38.92	0.000	-.9636301 -.8712265
dyr18	-.920075	.0234665	-39.21	0.000	-.9660703 -.8740797
dyr19	-.9576766	.0232857	-41.13	0.000	-1.003317 -.9120358
dyr20	-.9788456	.0231607	-42.26	0.000	-1.024241 -.9334498
dyr21	-1.018167	.0230265	-44.22	0.000	-1.063299 -.9730338
dyr22	-1.047403	.0231864	-45.17	0.000	-1.09285 -1.001957
dyr23	-1.113692	.0233747	-47.65	0.000	-1.159507 -1.067877
dyr24	-1.164848	.0235675	-49.43	0.000	-1.211042 -1.118655
dyr25	-1.210463	.0237959	-50.87	0.000	-1.257104 -1.163823
dyr26	-1.235807	.0242103	-51.04	0.000	-1.28326 -1.188354
_cons	15.07256	.0713385	211.28	0.000	14.93274 15.21239

```
. xtreg lning age age2 fsize, fe i(newid) /* effect aleatorio o random effect */
```

Fixed-effects (within) regression		Number of obs =	31690
Group variable (i): newid		Number of groups =	2546
R-sq: within =	0.3087	Obs per group: min =	6
between =	0.1730	avg =	12.4
overall =	0.0166	max =	26
corr(u_i, Xb) = -0.5809		F(3,29141) =	4337.08
		Prob > F =	0.0000

lning	Coef.	Std. Err.	t	P> t	[95% Conf. Interval]	
age	.0184247	.0026295	7.01	0.000	.0132708	.0235786
age2	-.000769	.0000345	-22.32	0.000	-.0008366	-.0007015
fsize	.019475	.0020673	9.42	0.000	.015423	.0235271
_cons	15.9644	.0464713	343.53	0.000	15.87332	16.05549
sigma_u	.7948092					
sigma_e	.30473187					
rho	.87184147	(fraction of variance due to u_i)				

F test that all u_i=0: F(2545, 29141) = 47.98 Prob > F = 0.0000

. est store in540 /* guardo los coeficientes */

. xtreg lning age age2 fsize, re i(newid) /* efect fijo o fixed effect */

Random-effects GLS regression Number of obs = 31690
 Group variable (i): newid Number of groups = 2546

R-sq: within = 0.3075 Obs per group: min = 6
 between = 0.1683 avg = 12.4
 overall = 0.0143 max = 26

Random effects u_i ~ Gaussian Wald chi2(3) = 10405.97
 corr(u_i, X) = 0 (assumed) Prob > chi2 = 0.0000

lning	Coef.	Std. Err.	z	P> z	[95% Conf. Interval]	
age	.0124859	.0026886	4.64	0.000	.0072163	.0177555
age2	-.0006294	.0000351	-17.93	0.000	-.0006983	-.0005606
fsize	.0305468	.0020444	14.94	0.000	.0265398	.0345538
_cons	15.85171	.0489499	323.84	0.000	15.75577	15.94765
sigma_u	.55287996					
sigma_e	.30473187					
rho	.76699444	(fraction of variance due to u_i)				

. hausman in540 . /* realizo el test */

---- Coefficients ----				
	(b)	(B)	(b-B)	sqrt(diag(V_b-V_B))
	in540	.	Difference	S.E.
age	.0184247	.0124859	.0059388	.
age2	-.000769	-.0006294	-.0001396	.
fsize	.019475	.0305468	-.0110718	.000307

b = consistent under Ho and Ha; obtained from xtreg
 B = inconsistent under Ha, efficient under Ho; obtained from xtreg

Test: Ho: difference in coefficients not systematic

chi2(3) = (b-B)' [(V_b-V_B)^(-1)] (b-B)
 = 978.51
 Prob>chi2 = 0.0000

. /* para mas info escriban help hausman */

. log close
 log: c:\DII\IN540\log\panel.log
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