User: test http://www.stata.com stata@stata.com

MP - Parallel Edition

Copyright 1985-2013 StataCorp LP StataCorp

4905 Lakeway Drive

College Station, Texas 77845 USA

800-STATA-PC 979-696-4600

979-696-4601 (fax)

3-user 8-core Stata network perpetual license:

Serial number: 501306208483 Licensed to: IDRE-UCLA IDRE-UCLA

Notes:

1. (/v# option or -set maxvar-) 5000 maximum variables

1 . use "C:\Users\pddes\Desktop\ae project 2\WHO Africa Panel Data.dta"

2 . drop country code doctors

3 . save "C:\Users\pddes\Desktop\ae project 2\WHO Africa Panel Data.dta", replace file C:\Users\pddes\Desktop\ae project 2\WHO Africa Panel Data.dta saved

4 . keep doctors

variable doctors not found r(111);

- 5 . do "C:\Users\pddes\Desktop\ae project 2\WHO Africa Panel Data.do"
- 6 . *cleaning data
- 7 . drop region doctors life exp60 age519thinness age519obesity hospitals une infant une life une in > ne literacy une school

variable region not found r(111);

end of do-file

r(111);

8 . xtset country_num year

panel variable: country_num (strongly balanced)
time variable: year, 2000 to 2016
delta: 1 unit

9. 10 . xtreg life_expect adult_mortality infant_mort age14mort alcohol bmi hepatitis measles polio diph > doctors gni capita gghed che gdp une pop une hiv une gni une edu spend i.year, fe variable doctors not found

r(111);

12 . estimates store fixed

last estimation results not found, nothing to store r(301);

Saturday April 16 18:56:41 2022 Page 2 13 . 14 . xtreg life_expect adult_mortality infant_mort age14mort alcohol bmi hepatitis measles polio diph > doctors gni_capita gghed che_gdp une_pop une_hiv une_gni une_edu_spend i.year, re variable doctors not found r(111); 16 . estimates store random last estimation results not found, nothing to store 18 . hausman fixed random, sigmamore estimation result fixed not found <u>r(111);</u>

19 . xtset country num year

panel variable: country_num (strongly balanced)
time variable: year, 2000 to 2016
delta: 1 unit

21 . xtreg life expect adult mortality infant mort age14mort alcohol bmi hepatitis measles polio diph > gni_capita gghed che_gdp une_pop une_hiv une_gni une_edu_spend i.year, fe

Fixed-effects (within) regression Number of obs Number of groups = Group variable: country_num 111 R-sq: within = 0.9797Obs per group: min = between = **0.9308** avg = 8.0 overall = **0.9262** max = 14 F(30,749) = 1203.04 Prob > F = 0.0000corr(u i, Xb) = 0.7189

life_expect	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
adult_mortality	038614	.0005538	-69.72	0.000	0397012	0375268
infant_mort	-42.77758	4.505838	-9.49	0.000	-51.62315	-33.932
age14mort	-152.8186	16.16631	-9.45	0.000	-184.5553	-121.0819
alcohol	.0137867	.0109787	1.26	0.210	007766	.0353393
bmi	2467772	.0776584	-3.18	0.002	3992313	0943232
hepatitis	0014865	.0009053	-1.64	0.101	0032638	.0002907
measles	.0100405	.0024414	4.11	0.000	.0052477	.0148332
polio	.0011732	.0030074	0.39	0.697	0047307	.0070771
diphtheria	0048754	.0032838	-1.48	0.138	0113219	.0015711
basic_water	.0041906	.0058338	0.72	0.473	007262	.0156432
gni_capita	3.42e-06	.0000225	0.15	0.879	0000408	.0000476
gghed	0826417	.0305164	-2.71	0.007	1425495	0227338
che_gdp	045382	.0157202	-2.89	0.004	0762429	014521
une_pop	-3.73e-06	3.54e-06	-1.06	0.292	0000107	3.21e-06
une_hiv	0570253	.024641	-2.31	0.021	1053988	0086517
une_gni	9.48e-06	.0000209	0.45	0.650	0000315	.0000505
une_edu_spend	.0430417	.0131566	3.27	0.001	.0172135	.06887
year						
2001	.2582378	.0540812	4.77	0.000	.1520689	.3644066
2002	.3151027	.0548009	5.75	0.000	.2075211	.4226842
2003	.3997189	.058494	6.83	0.000	.2848872	.5145505
2004	.5701967	.0621744	9.17	0.000	.4481398	.6922536
2005	.736396	.0696175	10.58	0.000	.5997273	.8730647
2006	.9053688	.0763755	11.85	0.000	.7554333	1.055304
2007	1.046454	.0820833	12.75	0.000	.8853131	1.207595
2008	1.169585	.0890231	13.14	0.000	.994821	1.34435
2009	1.32254	.0968737	13.65	0.000	1.132364	1.512717
2010	1.448559	.1030297	14.06	0.000	1.246298	1.65082

2011 2012 2013	1.623439 1.74626 1.920876	.1109539 .1170058 .1245512	14.63 14.92 15.42	0.000 0.000 0.000	1.405622 1.516562 1.676365	1.841257 1.975958 2.165387
_cons	82.881	1.905433	43.50	0.000	79.14038	86.62163
sigma_u sigma_e rho	3.4724111 .22636677 .99576824	(fraction	of varia	nce due t	o u_i)	

F test that all $u_i=0$: F(110, 749) = 161.40 Prob > F = 0.0000

22.

23 . estimates store fixed

24 .

25 . xtreg life_expect adult_mortality infant_mort age14mort alcohol bmi hepatitis measles polio diph > gni_capita gghed che_gdp une_pop une_hiv une_gni une_edu_spend i.year, re

Random-effects GLS regression Group variable: country_num	Number of obs = 89 Number of groups = 13	90 11
R-sq: within = 0.9756 between = 0.9716 overall = 0.9735	- 9	1 . 0 14
$corr(u_i, X) = 0 $ (assumed)	Wald chi2(30) = 31370.3 Prob > chi2 = 0.000	

life_expect	Coef.	Std. Err.	Z	P> z	[95% Conf.	Interval]
adult_mortality	0396134	.0006323	-62.65	0.000	0408527	0383741
infant_mort	-57.91783	4.652903	-12.45	0.000	-67.03735	-48.7983
age14mort	-156.8811	18.0618	-8.69	0.000	-192.2816	-121.4806
alcohol	.0075592	.012087	0.63	0.532	0161309	.0312492
bmi	.2491593	.0595902	4.18	0.000	.1323646	.365954
hepatitis	0008642	.0010513	-0.82	0.411	0029248	.0011963
measles	.0102684	.0028495	3.60	0.000	.0046835	.0158533
polio	001255	.0035194	-0.36	0.721	0081529	.005643
diphtheria	0049315	.003838	-1.28	0.199	0124538	.0025909
basic_water	.0216604	.0058649	3.69	0.000	.0101653	.0331555
gni_capita	.0000324	.0000249	1.30	0.194	0000165	.0000812
gghed	.0705717	.0331599	2.13	0.033	.0055795	.1355639
che_gdp	0413348	.0176666	-2.34	0.019	0759608	0067089
une_pop	3.78e-07	2.17e-06	0.17	0.862	-3.88e-06	4.63e-06
une_hiv	0650407	.0206081	-3.16	0.002	1054319	0246495
une_gni	.0000248	.0000238	1.04	0.298	0000219	.0000716
une_edu_spend	.0241497	.0151516	1.59	0.111	005547	.0538464
year						
2001	.1509906	.0628093	2.40	0.016	.0278867	.2740946
2002	.1255386	.0618346	2.03	0.042	.004345	.2467322
2003	.1182394	.0630286	1.88	0.061	0052944	.2417732
2004	.1872846	.0631441	2.97	0.003	.0635244	.3110447
2005	.2454835	.0670738	3.66	0.000	.1140214	.3769457
2006	.2974137	.0693341	4.29	0.000	.1615214	. 433306
2007	.3460705	.0706976	4.90	0.000	.2075058	.4846353
2008	.3635465	.0730178	4.98	0.000	.2204343	.5066586
2009	.4079732	.0765676	5.33	0.000	.2579035	.558043
2010	.445606	.0790484	5.64	0.000	.2906739	.6005381
2011	.5232636	.082489	6.34	0.000	.3615882	.6849391
2012	.5683583	.0854594	6.65	0.000	.400861	.7358556
2013	.646044	.0894465	7.22	0.000	. 4707322	.8213559
_cons	69.72225	1.408661	49.50	0.000	66.96133	72.48318

 sigma_u
 1.0611028

 sigma_e
 .22636677

 rho
 .95647066

ho .95647066 (fraction of variance due to u_i)

26

27 . estimates store random

28

29 . hausman fixed random, sigmamore

Note: the rank of the differenced variance matrix (13) does not equal the number of coefficients be sure this is what you expect, or there may be problems computing the test. Examine the estimators for anything unexpected and possibly consider scaling your variables so that the on a similar scale.

	Coeffi	cients		
	(b)	(B)	(b-B)	sqrt(diag(V b-V B))
	fixed	random	Difference	S.E.
adult mort~y	038614	0396134	.0009994	.0001549
infant mort	-42.77758	-57.91783	15.14025	2.530458
age14mort	-152.8186	-156.8811	4.062509	5.906473
alcohol	.0137867	.0075592	.0062275	.0045218
bmi	2467772	.2491593	4959365	.069152
hepatitis	0014865	0008642	0006223	.0001649
measles	.0100405	.0102684	0002279	.0003405
polio	.0011732	001255	.0024281	.0003323
diphtheria	0048754	0049315	.0000561	.0004112
basic water	.0041906	.0216604	0174698	.0035535
gni capita	3.42e-06	.0000324	0000289	8.87e-06
gahed	0826417	.0705717	1532134	.0136807
che qdp	045382	0413348	0040471	.0054177
une pop	-3.73e-06	3.78e-07	-4.11e-06	3.54e-06
une hiv	0570253	0650407	.0080155	.0203534
une gni	9.48e-06	.0000248	0000154	5.87e-06
une edu sp~d	.0430417	.0241497	.018892	.0030986
2001bn.year	.2582378	.1509906	.1072472	.009811
2002.year	.3151027	.1255386	.189564	.0180557
2003.year	.3997189	.1182394	.2814794	.0274782
2004.year	.5701967	.1872846	.3829121	.0367985
2005.year	.736396	.2454835	.4909124	.0468808
2006.year	.9053688	.2974137	.6079551	.0570327
2007.year	1.046454	.3460705	.7003833	.0656621
2007.year	1.169585	.3635465	.8060389	.0749585
2000.year	1.32254	.4079732	.9145671	.0842869
2010.year	1.448559	.445606	1.002953	.0917528
2010.year	1.623439	.5232636	1.100176	.1010235
2011.year	1.74626	.5683583	1.177902	.1077641
2012.year 2013.year	1.920876	. 646044	1.274832	.1159058

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

 $chi2(13) = (b-B)'[(V_b-V_B)^(-1)](b-B)$

= 238.87

Prob>chi2 = **0.0000**

30 . xtreg life expect adult mortality infant mort age14mort alcohol bmi hepatitis measles polio diph > gni_capita gghed che_gdp une_pop une_hiv une_gni une_edu_spend i.year, fe

Number of obs = 890 Number of groups = 111 Fixed-effects (within) regression Group variable: country num Obs per group: min = avg = max = R-sq: within = 0.97978.0 between = **0.9308** overall = **0.9262** F(30,749) = 1203.04 Prob > F = 0.0000 $corr(u_i, Xb) = 0.7189$

life_expect	Coef.	Std. Err.	t	P> t	[95% Conf.	Interval]
adult_mortality	038614	.0005538	-69.72	0.000	0397012	0375268
infant_mort	-42.77758	4.505838	-9.49	0.000	-51.62315	-33.932
age14mort	-152.8186	16.16631	-9.45	0.000	-184.5553	-121.0819
alcohol	.0137867	.0109787	1.26	0.210	007766	.0353393
bmi	2467772	.0776584	-3.18	0.002	3992313	0943232
hepatitis	0014865	.0009053	-1.64	0.101	0032638	.0002907
measles	.0100405	.0024414	4.11	0.000	.0052477	.0148332
polio	.0011732	.0030074	0.39	0.697	0047307	.0070771
diphtheria	0048754	.0032838	-1.48	0.138	0113219	.0015711
basic_water	.0041906	.0058338	0.72	0.473	007262	.0156432
gni capita	3.42e-06	.0000225	0.15	0.879	0000408	.0000476
gghed	0826417	.0305164	-2.71	0.007	1425495	0227338
che_gdp	045382	.0157202	-2.89	0.004	0762429	014521
une pop	-3.73e-06	3.54e-06	-1.06	0.292	0000107	3.21e-06
une hiv	0570253	.024641	-2.31	0.021	1053988	0086517
une gni	9.48e-06	.0000209	0.45	0.650	0000315	.0000505
une_edu_spend	.0430417	.0131566	3.27	0.001	.0172135	.06887
year 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013	.2582378 .3151027 .3997189 .5701967 .736396 .9053688 1.046454 1.169585 1.32254 1.448559 1.623439 1.74626 1.920876	.0540812 .0548009 .058494 .0621744 .0696175 .0763755 .0820833 .0890231 .0968737 .1030297 .1109539 .1170058	4.77 5.75 6.83 9.17 10.58 11.85 12.75 13.14 13.65 14.06 14.63 14.92 15.42	0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000 0.000	.1520689 .2075211 .2848872 .4481398 .5997273 .7554333 .8853131 .994821 1.132364 1.246298 1.405622 1.516562 1.676365	.3644066 .4226842 .5145505 .6922536 .8730647 1.055304 1.207595 1.34435 1.512717 1.65082 1.841257 1.975958 2.165387
_cons	82.881	1.905433	43.50	0.000	79.14038	86.62163
sigma_u sigma_e rho	3.4724111 .22636677 .99576824	(fraction	of varia	nce due t	o u_i)	

F test that all u i=0: F(110, 749) = 161.40 Prob > F = 0.0000

31 . outreg2 using test.doc, append ctitle(Main Model) test.doc dir : seeout

32 . xtreg life_expect adult_mortality infant_mort age14mort alcohol bmi hepatitis measles polio diph > gni_capita gghed che_gdp une_pop une_hiv une_gni une_edu_spend i.year, re

Number of obs = 890 Number of groups = 111 Random-effects GLS regression Group variable: country num R-sq: within = 0.9756 between = 0.9716 overall = 0.9735Wald chi2(30) = 31370.35 Prob > chi2 = 0.0000

 $corr(u_i, X) = 0$ (assumed)

infant_mort agel4mort alcohol							
infant mort agel4mort -156.8811 18.0618 -8.69 0.000 -67.03735 -48.7 agel4mort alcohol .0075592 .012087 0.63 0.5320161309 .0312 .015087 0.63 0.5320161309 .0312 .0161309 .0312 .0161309 .0312 .0102684 .0010513 -0.82 0.411 -0.0029248 .0011 measles .0102684 .0028495 3.60 0.000 .0046835 .0158 .0158 .0160 .001513 .003838 -1.28 0.1990124538 .0025 .0035194 .0.36 0.7210081529 .005 .0035194 .003838 -1.28 0.199 .01024538 .0025 .0035194 .003838 -1.28 0.199 .01024538 .0025 .0035194 .003838 .0000 .0101653 .0331 .0058649 3.69 0.000 .0101653 .0331 .005717 .0331599 2.13 0.033 .005795 .1355 .06 .004 .0058649 3.69 0.000 .0101655 .0000 .000 .0001655 .0000 .000165 .00000 .0001655 .0000 .0001655 .00000 .00000 .00000 .000000 .00000000	life_expect	Coef.	Std. Err.	Z	P> z	[95% Conf.	Interval]
age14mort -156.8811	adult_mortality	0396134	.0006323	-62.65	0.000	0408527	0383741
Calcohol Dmi		-57.91783	4.652903	-12.45		-67.03735	-48.7983
hemi hepatitis	age14mort	-156.8811	18.0618	-8.69	0.000	-192.2816	-121.4806
hepatitis measles 0008642 .0010513 -0.82 0.411 0029248 .0011 measles .0102684 .0028495 3.60 0.000 .0046835 .0158 polio 001255 .0035194 -0.36 0.721 0081529 .005 diphtheria 0049315 .003838 -1.28 0.199 0124538 .0025 basic_water .0216604 .0058649 3.69 0.000 .0101653 .0331 gni_capita .0000324 .0000249 1.30 0.194 0000165 .0000 de_gdp .0705717 .0331599 2.13 .0033 .0055795 .1355 che_gdp 0413348 .0176666 -2.34 0.019 0759608 0067 une_hiv 0650407 .0206081 -3.16 0.002 1054319 0246 une_gni .0000248 .0000238 1.04 0.298 0000219 .0000 une_dus_geni .1509906 .0628093 2.40 <td>alcohol</td> <td>.0075592</td> <td>.012087</td> <td></td> <td></td> <td>0161309</td> <td>.0312492</td>	alcohol	.0075592	.012087			0161309	.0312492
measles polio	bmi	.2491593	.0595902			.1323646	.365954
Dolio Company Compan	hepatitis						.0011963
diphtheria 0049315 .003838 -1.28 0.199 0124538 .0025 basic_water .0216604 .0058649 3.69 0.000 .0101653 .0331 gni_capita .0000324 .0000249 1.30 0.194 0000165 .0000 gqhed .0705717 .0331599 2.13 0.033 .0055795 .1355 che_gdp 0413348 .0176666 -2.34 0.019 0759608 0067 une_pop 3.78e-07 2.17e-06 0.17 0.862 -3.88e-06 4.63e une_gni .0000248 .0000238 1.04 0.298 000219 .0000 une_edu_spend .0241497 .0151516 1.59 0.111 005547 .0538 year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .063028	measles	.0102684					.0158533
basic_water gni_capita	-						.005643
gni_capita gghed	-						.0025909
gghed che_gdp		.0216604	.0058649				.0331555
che_gdp une_pop une_pop une_hiv une_gni une_edu_spend 0413348 .0176666 -2.34 0.019 0759608 0067 une_hiv une_gni une_edu_spend 0650407 .0206081 -3.16 0.002 1054319 0246 une_gni une_edu_spend .0000248 .0000238 1.04 0.298 0000219 .0000 year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2075058 .4846 2008 .3635465 .							.0000812
une_pop une_hiv une_gni 3.78e-07 2.17e-06 0.17 0.862 -3.88e-06 4.63e une_hiv une_gni .00650407 .0206081 -3.16 0.002 1054319 0246 une_gni .0000248 .0000238 1.04 0.298 0000219 .0000 une_edu_spend .0241497 .0151516 1.59 0.111 005547 .0538 year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2075058 .4846 20	gghed	.0705717	.0331599				.1355639
une_hiv une_gni une_edu_spend 0650407 .0206081 -3.16 0.002 1054319 0246 une_edu_spend .0000248 .0000238 1.04 0.298 0000219 .0000 une_edu_spend .0241497 .0151516 1.59 0.111 005547 .0538 Year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2204343 .5066 2008 .3635465 .0730	che_gdp	0413348	.0176666	-2.34	0.019	0759608	0067089
une_gni une_edu_spend .0000248 .0241497 .0000238 .0151516 1.04 0.298 0.111 0000219 005547 .0000 .0538 year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2075058 .4846 2008 .3635465 .0730178 4.98 0.000 .2204343 .5066 2009 .4079732 .0765676 5.33 0.000 .2579035 .558 2010 .5232636 .082489 6.34 <t< td=""><td>une_pop</td><td>3.78e-07</td><td></td><td>0.17</td><td>0.862</td><td>-3.88e-06</td><td>4.63e-06</td></t<>	une_pop	3.78e-07		0.17	0.862	-3.88e-06	4.63e-06
une_edu_spend .0241497 .0151516 1.59 0.111 005547 .0538 year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2075058 .4846 2008 .3635465 .0730178 4.98 0.000 .2204343 .5066 2009 .4079732 .0765676 5.33 0.000 .2579035 .558 2010 .445606 .0790484 5.64 0.000 .36158	une_hiv	0650407	.0206081				0246495
year 2001 .1509906 .0628093 2.40 0.016 .0278867 .2740 2002 .1255386 .0618346 2.03 0.042 .004345 .2467 2003 .1182394 .0630286 1.88 0.061 0052944 .2417 2004 .1872846 .0631441 2.97 0.003 .0635244 .3110 2005 .2454835 .0670738 3.66 0.000 .1140214 .3769 2006 .2974137 .0693341 4.29 0.000 .1615214 .433 2007 .3460705 .0706976 4.90 0.000 .2075058 .4846 2008 .3635465 .0730178 4.98 0.000 .2204343 .5066 2009 .4079732 .0765676 5.33 0.000 .2579035 .558 2010 .445606 .0790484 5.64 0.000 .2906739 .6005 2011 .5232636 .082489 6.34 0.000 .3615882 .6849 2012 .5683583 .0854594 6.65 0.000 <td>une_gni</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>.0000716</td>	une_gni						.0000716
2001	une_edu_spend	.0241497	.0151516	1.59	0.111	005547	.0538464
2001							
2002							
2003							.2740946
2004							.2467322
2005		.1182394	.0630286				.2417732
2006							.3110447
2007		.2454835	.0670738			.1140214	.3769457
2008							. 433306
2009							.4846353
2010		.3635465	.0730178			.2204343	.5066586
2011	2009	.4079732	.0765676			.2579035	.558043
2012 .5683583 .0854594 6.65 0.000 .400861 .7358 2013 .646044 .0894465 7.22 0.000 .4707322 .8213 _cons 69.72225 1.408661 49.50 0.000 66.96133 72.48 sigma_u 1.0611028	2010	.445606	.0790484		0.000	.2906739	.6005381
2013 .646044 .0894465 7.22 0.000 .4707322 .8213cons 69.7225 1.408661 49.50 0.000 66.96133 72.48sigma_u 1.0611028	2011	.5232636	.082489	6.34	0.000	.3615882	.6849391
cons 69.72225 1.408661 49.50 0.000 66.96133 72.48 sigma_u 1.0611028	2012	.5683583	.0854594	6.65		.400861	.7358556
sigma_u 1.0611028	2013	.646044	.0894465	7.22	0.000	.4707322	.8213559
	_cons	69.72225	1.408661	49.50	0.000	66.96133	72.48318
· · · · · · · · · · · · · · · · · · ·	siama u	1 0611028					
Sigma e i 22hihh//	sigma_d sigma e	.22636677					
rho .95647066 (fraction of variance due to u i)			(fraction	of waria	nce due +	· 0 11 i)	
		.55047000	(114001011	OI VAIIAI		ω_±/	

- 33 . outreg2 using test.doc, append ctitle(Model Estimation using Random Effects) $\frac{\texttt{test.doc}}{\texttt{dir} \; : \; \texttt{seeout}}$
- 34 . huasman fixed random, sigmamore unrecognized command: huasman
- 35 . hausman fixed random, sigmamore

r(199);

Note: the rank of the differenced variance matrix (13) does not equal the number of coefficients be sure this is what you expect, or there may be problems computing the test. Examine the estimators for anything unexpected and possibly consider scaling your variables so that the on a similar scale.

	Coeffi	cients		
	(b)	(B)	(b-B)	sqrt(diag(V b-V B))
	fixed	random	Difference	S.E.
adult mort~y	038614	0396134	.0009994	.0001549
infant mort	-42.77758	-57.91783	15.14025	2.530458
age14mort	-152.8186	-156.8811	4.062509	5.906473
alcohol	.0137867	.0075592	.0062275	.0045218
bmi	2467772	.2491593	4959365	.069152
hepatitis	0014865	0008642	0006223	.0001649
measles	.0100405	.0102684	0002279	.0003405
polio	.0011732	001255	.0024281	.0003323
diphtheria	0048754	0049315	.0000561	.0004112
basic water	.0041906	.0216604	0174698	.0035535
gni capita	3.42e-06	.0000324	0000289	8.87e-06
gghed	0826417	.0705717	1532134	.0136807
che gdp	045382	0413348	0040471	.0054177
une pop	-3.73e-06	3.78e-07	-4.11e-06	3.54e-06
une hiv	0570253	0650407	.0080155	.0203534
une gni	9.48e-06	.0000248	0000154	5.87e-06
une edu sp~d	.0430417	.0241497	.018892	.0030986
2001bn.year	.2582378	.1509906	.1072472	.009811
2002.year	.3151027	.1255386	.189564	.0180557
2003.year	.3997189	.1182394	.2814794	.0274782
2004.year	.5701967	.1872846	.3829121	.0367985
2005.year	.736396	.2454835	.4909124	.0468808
2006.year	.9053688	.2974137	.6079551	.0570327
2007.year	1.046454	.3460705	.7003833	.0656621
2008.year	1.169585	.3635465	.8060389	.0749585
2009.year	1.32254	.4079732	.9145671	.0842869
2010.year	1.448559	.445606	1.002953	.0917528
2011.year	1.623439	.5232636	1.100176	.1010235
2012.year	1.74626	.5683583	1.177902	.1077641
2013.year	1.920876	.646044	1.274832	.1159058

 $\mbox{b = consistent under Ho and Ha; obtained from xtreg} \mbox{ B = inconsistent under Ha, efficient under Ho; obtained from xtreg}$

Test: Ho: difference in coefficients not systematic

 $chi2(13) = (b-B)'[(V_b-V_B)^(-1)](b-B)$

= 238.87

Prob>chi2 = **0.0000**

- 36 . outreg2 using hausman.doc, replace ctitle(Results of Wu-Hausman Test) $\frac{\text{hausman.doc}}{\text{dir} \; : \; \underline{\text{seeout}}}$
- 37 . drop une_gni
- 38 . pwcorr adult_mortality infant_mort age14mort alcohol bmi hepatitis measles polio diphtheria basi
 > gghed che_gdp une_pop une_hiv une_edu_spend, star(0.05) sig

	adult_~y :	infant~t a	age14m~t	alcohol	bmi 1	hepati~s	measles
adult_mort~y	1.0000						
infant_mort	0.8132* 0.0000	1.0000					
age14mort	0.7562* 0.0000	0.9090* 0.0000	1.0000				
alcohol	-0.2465* 0.0000	-0.4446* 0.0000	-0.3057* 0.0000	1.0000			
bmi	-0.5171* 0.0000	-0.6419* 0.0000	-0.6152* 0.0000	0.2728* 0.0000	1.0000		
hepatitis	-0.2769* 0.0000	-0.4257* 0.0000	-0.3889* 0.0000	0.1190* 0.0000	0.2916* 0.0000	1.0000	
measles	-0.5262* 0.0000	-0.7202* 0.0000	-0.6986* 0.0000	0.2917* 0.0000	0.4688* 0.0000	0.6803* 0.0000	1.0000
polio	-0.5380*	-0.7286*	-0.7008*	0.2898*	0.4413*	0.6932*	0.9242*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
diphtheria	-0.5300*	-0.7207*	-0.6941*	0.2943*	0.4462*	0.7221*	0.9232*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
basic_water	-0.7327*	-0.8515*	-0.8023*	0.4077*	0.6733*	0.3656*	0.6599*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
gni_capita	-0.5277*	-0.5395*	-0.4178*	0.3050*	0.4108*	0.1860*	0.3436*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
gghed	-0.4858*	-0.5768*	-0.4474*	0.5296*	0.4617*	0.1646*	0.3970*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
che_gdp	-0.1986*	-0.2384*	-0.1623*	0.3722*	0.2480*	0.0692*	0.2038*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0006	0.0000
une_pop	-0.0615*	-0.0040	-0.0330	-0.0378*	-0.1662*	-0.1205*	-0.0158
	0.0006	0.8260	0.0677	0.0376	0.0000	0.0000	0.3812
une_hiv	0.6806*	0.3416*	0.2920*	-0.0383	-0.1547*	-0.0476*	-0.1108*
	0.0000	0.0000	0.0000	0.0645	0.0000	0.0388	0.0000
une_edu_sp~d	-0.1471*	-0.3187*	-0.2830*	0.2160*	0.3124*	0.1498*	0.2701*
	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000

	polio d	iphth~a k	pasic_~r o	gni_ca~a	gghed	che_gdp	une_pop
polio	1.0000						
diphtheria	0.9645* 0.0000	1.0000					
basic_water	0.6621* 0.0000	0.6517* 0.0000	1.0000				
gni_capita	0.3569* 0.0000	0.3557* 0.0000	0.5210* 0.0000	1.0000			
gghed	0.4127* 0.0000	0.4096* 0.0000	0.5100* 0.0000	0.4248* 0.0000	1.0000		
che_gdp	0.2239* 0.0000	0.22 42 * 0.0000	0.2054* 0.0000	0.1274* 0.0000	0.6899* 0.0000	1.0000	
une_pop	-0.0297 0.1008	-0.0282 0.1197	0.0289 0.1108	-0.0389 0.0566	-0.0812* 0.0000	-0.0710* 0.0001	1.0000
une_hiv	-0.1078* · 0.0000	-0.0935* 0.0000	-0.2871* 0.0000	-0.1907* 0.0000	-0.0866* 0.0000	0.0249 0.2338	-0.1023* 0.0000
une_edu_sp~d	0.3143* 0.0000	0.2980* 0.0000	0.2711* 0.0000	0.2257* 0.0000	0.5216* 0.0000	0.3415* 0.0000	-0.1008* 0.0000
	une_hiv u	ne_ed~d					
une_hiv	1.0000						
une_edu_sp~d	0.1888* 0.0000	1.0000					
39 .							