

COMMEN EFFECT

Dependent Variable: LOG(Y?)

Method: Pooled Least Squares

Date: 12/23/16 Time: 22:12

Sample: 2010 2014

Included observations: 5

Cross-sections included: 11

Total pool (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-5.827185	3.599193	-1.619025	0.1117
LOG(X1?)	0.915598	0.067505	13.56333	0.0000
LOG(X2?)	0.217894	0.263500	0.826922	0.4122
(X3?)	-0.158776	0.155909	-1.018390	0.3134
LOG(X4?)	-0.665745	0.153095	-4.348580	0.0001
R-squared	0.786927	Mean dependent var		10.73534
Adjusted R-squared	0.769881	S.D. dependent var		0.605946
S.E. of regression	0.290677	Akaike info criterion		0.453299
Sum squared resid	4.224651	Schwarz criterion		0.635784
Log likelihood	-7.465717	Hannan-Quinn criter.		0.523867
F-statistic	46.16521	Durbin-Watson stat		0.111849
Prob(F-statistic)	0.000000			

FIXED EFFECT

Dependent Variable: LOG(Y?)
Method: Pooled Least Squares
Date: 01/22/17 Time: 12:39
Sample: 2010 2014
Included observations: 5
Cross-sections included: 11
Total pool (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.485842	4.803706	0.933829	0.3560
LOG(X1?)	0.399938	0.328617	1.217033	0.2307
LOG(X2?)	-0.338414	0.219146	-1.544241	0.1304
X3?	-0.008231	0.005841	-1.409323	0.1665
LOG(X4?)	0.306713	0.224274	1.367584	0.1791
Fixed Effects (Cross)				
_MTB--C	0.106206			
_MBD--C	0.212991			
_MTENGGARA--C	-0.116515			
_MTENGAH--C	0.440165			
_BURU--C	0.217771			
_BSELATAN--C	0.036412			
_KEPARU--C	-0.210839			
_SBB--C	0.184583			
_SBT--C	-0.245536			
_AMBON--C	0.081260			
_TUAL--C	-0.706500			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.987477	Mean dependent var	10.73534
Adjusted R-squared	0.983095	S.D. dependent var	0.605946
S.E. of regression	0.078786	Akaike info criterion	-2.017168
Sum squared resid	0.248288	Schwarz criterion	-1.469713
Log likelihood	70.47211	Hannan-Quinn criter.	-1.805462
F-statistic	225.3019	Durbin-Watson stat	1.705253
Prob(F-statistic)	0.000000		

RANDOM EFFECT

Dependent Variable: LOG(Y?)

Method: Pooled EGLS (Cross-section random effects)

Date: 01/22/17 Time: 12:40

Sample: 2010 2014

Included observations: 5

Cross-sections included: 11

Total pool (balanced) observations: 55

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.086591	2.860831	1.778012	0.0815
LOG(X1?)	0.353194	0.196652	1.796032	0.0785
LOG(X2?)	-0.431663	0.171059	-2.523480	0.0148
X3?	-0.006953	0.005535	-1.256255	0.2149
LOG(X4?)	0.408217	0.184900	2.207768	0.0319
Random Effects (Cross)				
_MTB--C	0.121966			
_MBD--C	0.245662			
_MTENGGARA--C	-0.106613			
_MTENGAH--C	0.371981			
_BURU--C	0.235037			
_BSELATAN--C	0.063660			
_KEPARU--C	-0.223175			
_SBB--C	0.211323			
_SBT--C	-0.253906			
_AMBON--C	-0.008668			
_TUAL--C	-0.657268			

Effects Specification		S.D.	Rho
Cross-section random		0.321801	0.9434
Idiosyncratic random		0.078786	0.0566

Weighted Statistics			
R-squared	0.450195	Mean dependent var	1.168431
Adjusted R-squared	0.406211	S.D. dependent var	0.100965
S.E. of regression	0.077801	Sum squared resid	0.302654
F-statistic	10.23533	Durbin-Watson stat	1.417670
Prob(F-statistic)	0.000004		

Unweighted Statistics			
R-squared	0.761366	Mean dependent var	10.73534
Sum squared resid	4.731451	Durbin-Watson stat	0.090683

UJI CHOW

Redundant Fixed Effects Tests

Pool: PANEL

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	67.817078	(10,40)	0.0000
Cross-section Chi-square	158.830537	10	0.0000

Cross-section fixed effects test equation:

Dependent Variable: LOG(Y?)

Method: Panel Least Squares

Date: 01/22/17 Time: 12:42

Sample: 2010 2014

Included observations: 5

Cross-sections included: 11

Total pool (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.226951	3.480614	2.363649	0.0220
LOG(X1?)	0.123666	0.142764	0.866228	0.3905
LOG(X2?)	-0.654221	0.244662	-2.673982	0.0101
X3?	-0.003895	0.019290	-0.201908	0.8408
LOG(X4?)	0.667242	0.147864	4.512542	0.0000

R-squared	0.775166	Mean dependent var	10.73534
Adjusted R-squared	0.757179	S.D. dependent var	0.605946
S.E. of regression	0.298591	Akaike info criterion	0.507024
Sum squared resid	4.457830	Schwarz criterion	0.689509
Log likelihood	-8.943162	Hannan-Quinn criter.	0.577592
F-statistic	43.09658	Durbin-Watson stat	0.102887
Prob(F-statistic)	0.000000		

UJI HAUSMANN

Correlated Random Effects - Hausman Test

Pool: PANEL

Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.000000	4	1.0000

* Cross-section test variance is invalid. Hausman statistic set to zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(X1?)	0.399938	0.353194	0.069317	0.8591
LOG(X2?)	-0.338414	-0.431663	0.018764	0.4960
X3?	-0.008231	-0.006953	0.000003	0.4931
LOG(X4?)	0.306713	0.408217	0.016111	0.4239

Cross-section random effects test equation:

Dependent Variable: LOG(Y?)

Method: Panel Least Squares

Date: 01/22/17 Time: 12:46

Sample: 2010 2014

Included observations: 5

Cross-sections included: 11

Total pool (balanced) observations: 55

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.485842	4.803706	0.933829	0.3560
LOG(X1?)	0.399938	0.328617	1.217033	0.2307
LOG(X2?)	-0.338414	0.219146	-1.544241	0.1304
X3?	-0.008231	0.005841	-1.409323	0.1665
LOG(X4?)	0.306713	0.224274	1.367584	0.1791

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.987477	Mean dependent var	10.73534
Adjusted R-squared	0.983095	S.D. dependent var	0.605946
S.E. of regression	0.078786	Akaike info criterion	-2.017168
Sum squared resid	0.248288	Schwarz criterion	-1.469713
Log likelihood	70.47211	Hannan-Quinn criter.	-1.805462
F-statistic	225.3019	Durbin-Watson stat	1.705253
Prob(F-statistic)	0.000000		

UJI LM

Lagrange multiplier (LM) test for panel data

Date: 01/24/17 Time: 11:01

Sample: 2010 2014

Total panel observations: 55

Probability in ()

Null (no rand. effect) Alternative	Cross-section One-sided	Period One-sided	Both
Breusch-Pagan	90.18510 (0.0000)	2.416021 (0.1201)	92.60112 (0.0000)
Honda	9.496584 (0.0000)	-1.554356 (0.9400)	5.616003 (0.0000)
King-Wu	9.496584 (0.0000)	-1.554356 (0.9400)	3.762467 (0.0001)
GHM	-- --	-- --	90.18510 (0.0000)

UJI MULTIKOLINERITAS

	C	LOG(X1?)	LOG(X2?)	X3?	LOG(X4?)
C	8.184354	-0.541908	-0.334080	0.004871	0.374519
LOG(X1?)	-0.541908	0.038672	0.021682	-0.000299	-0.027553
LOG(X2?)	-0.334080	0.021682	0.029261	-0.000433	-0.029758
X3?	0.004871	-0.000299	-0.000433	3.06E-05	0.000409
LOG(X4?)	0.374519	-0.027553	-0.029758	0.000409	0.034188

UJI HETEROSKEDASTISITAS

Dependent Variable: RESID?

Method: Pooled Least Squares

Date: 12/20/16 Time: 12:48

Sample: 2010 2014

Included observations: 5

Cross-sections included: 11

Total pool (unbalanced) observations: 54

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-38630.92	33234.79	-1.162364	0.2522
X1?	0.001160	0.001313	0.883377	0.3824
X2?	-0.013142	0.013308	-0.987503	0.3295
X3?	112.5909	562.4343	0.200185	0.8424
X4?	2258.924	2853.532	0.791624	0.4334
Fixed Effects (Cross)				
_MTB--C	16194.80			
_MBD--C	34301.60			
_MTENGGARA--C	-900.1268			
_MTENGAH--C	11320.39			
_BURU--C	14588.71			
_BSELATAN--C	30462.24			
_KEPARU--C	10265.47			
_SBB--C	-14168.93			
_SBT--C	-1788.300			
_AMBON--C	-79184.61			
_TUAL--C	-21271.26			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.851715	Mean dependent var	78.35837
Adjusted R-squared	0.798484	S.D. dependent var	14287.35
S.E. of regression	6413.669	Akaike info criterion	20.60038
Sum squared resid	1.60E+09	Schwarz criterion	21.15288
Log likelihood	-541.2104	Hannan-Quinn criter.	20.81346
F-statistic	16.00044	Durbin-Watson stat	1.706555
Prob(F-statistic)	0.000000		

REPRESENTAS RANDOM

Estimation Command:

=====
LS(CX=R) LOG(Y?) LOG(X1?) LOG(X2?) X3? LOG(X4?)

Estimation Equations:

=====
LOG(Y_MTB) = C(6) + C(1) + C(2)*LOG(X1_MTB) + C(3)*LOG(X2_MTB) + C(4)*X3_MTB + C(5)*LOG(X4_MTB)

LOG(Y_MBD) = C(7) + C(1) + C(2)*LOG(X1_MBD) + C(3)*LOG(X2_MBD) + C(4)*X3_MBD + C(5)*LOG(X4_MBD)

LOG(Y_MTENGGARA) = C(8) + C(1) + C(2)*LOG(X1_MTENGGARA) + C(3)*LOG(X2_MTENGGARA) + C(4)*X3_MTENGGARA + C(5)*LOG(X4_MTENGGARA)

LOG(Y_MTENGAH) = C(9) + C(1) + C(2)*LOG(X1_MTENGAH) + C(3)*LOG(X2_MTENGAH) + C(4)*X3_MTENGAH + C(5)*LOG(X4_MTENGAH)

LOG(Y_BURU) = C(10) + C(1) + C(2)*LOG(X1_BURU) + C(3)*LOG(X2_BURU) + C(4)*X3_BURU + C(5)*LOG(X4_BURU)

LOG(Y_BSELATAN) = C(11) + C(1) + C(2)*LOG(X1_BSELATAN) + C(3)*LOG(X2_BSELATAN) + C(4)*X3_BSELATAN + C(5)*LOG(X4_BSELATAN)

LOG(Y_KEPARU) = C(12) + C(1) + C(2)*LOG(X1_KEPARU) + C(3)*LOG(X2_KEPARU) + C(4)*X3_KEPARU + C(5)*LOG(X4_KEPARU)

LOG(Y_SBB) = C(13) + C(1) + C(2)*LOG(X1_SBB) + C(3)*LOG(X2_SBB) + C(4)*X3_SBB + C(5)*LOG(X4_SBB)

LOG(Y_SBT) = C(14) + C(1) + C(2)*LOG(X1_SBT) + C(3)*LOG(X2_SBT) + C(4)*X3_SBT + C(5)*LOG(X4_SBT)

LOG(Y_AMBON) = C(15) + C(1) + C(2)*LOG(X1_AMBON) + C(3)*LOG(X2_AMBON) + C(4)*X3_AMBON + C(5)*LOG(X4_AMBON)

LOG(Y_TUAL) = C(16) + C(1) + C(2)*LOG(X1_TUAL) + C(3)*LOG(X2_TUAL) + C(4)*X3_TUAL + C(5)*LOG(X4_TUAL)

Substituted Coefficients:

=====
LOG(Y_MTB) = 0.121966377595 + 5.08659074263 + 0.353193683999*LOG(X1_MTB) -
0.43166317053*LOG(X2_MTB) - 0.00695320227312*X3_MTB + 0.408216557061*LOG(X4_MTB)

LOG(Y_MBD) = 0.245661500902 + 5.08659074263 + 0.353193683999*LOG(X1_MBD) -
0.43166317053*LOG(X2_MBD) - 0.00695320227312*X3_MBD + 0.408216557061*LOG(X4_MBD)

LOG(Y_MTENGGARA) = -0.106613078481 + 5.08659074263 + 0.353193683999*LOG(X1_MTENGGARA) -
0.43166317053*LOG(X2_MTENGGARA) - 0.00695320227312*X3_MTENGGARA +
0.408216557061*LOG(X4_MTENGGARA)

LOG(Y_MTENGAH) = 0.371981254682 + 5.08659074263 + 0.353193683999*LOG(X1_MTENGAH) -
0.43166317053*LOG(X2_MTENGAH) - 0.00695320227312*X3_MTENGAH +
0.408216557061*LOG(X4_MTENGAH)

LOG(Y_BURU) = 0.235037477629 + 5.08659074263 + 0.353193683999*LOG(X1_BURU) -
0.43166317053*LOG(X2_BURU) - 0.00695320227312*X3_BURU + 0.408216557061*LOG(X4_BURU)

LOG(Y_BSELATAN) = 0.0636598421644 + 5.08659074263 + 0.353193683999*LOG(X1_BSELATAN) -
0.43166317053*LOG(X2_BSELATAN) - 0.00695320227312*X3_BSELATAN +
0.408216557061*LOG(X4_BSELATAN)

LOG(Y_KEPARU) = -0.22317503127 + 5.08659074263 + 0.353193683999*LOG(X1_KEPARU) -
0.43166317053*LOG(X2_KEPARU) - 0.00695320227312*X3_KEPARU + 0.408216557061*LOG(X4_KEPARU)

$$\text{LOG}(Y_{\text{SBB}}) = 0.211323427866 + 5.08659074263 + 0.353193683999 \cdot \text{LOG}(X1_{\text{SBB}}) - 0.43166317053 \cdot \text{LOG}(X2_{\text{SBB}}) - 0.00695320227312 \cdot X3_{\text{SBB}} + 0.408216557061 \cdot \text{LOG}(X4_{\text{SBB}}) -$$

$$\text{LOG}(Y_{\text{SBT}}) = -0.253905752347 + 5.08659074263 + 0.353193683999 \cdot \text{LOG}(X1_{\text{SBT}}) - 0.43166317053 \cdot \text{LOG}(X2_{\text{SBT}}) - 0.00695320227312 \cdot X3_{\text{SBT}} + 0.408216557061 \cdot \text{LOG}(X4_{\text{SBT}}) -$$

$$\text{LOG}(Y_{\text{AMBON}}) = -0.00866754876798 + 5.08659074263 + 0.353193683999 \cdot \text{LOG}(X1_{\text{AMBON}}) - 0.43166317053 \cdot \text{LOG}(X2_{\text{AMBON}}) - 0.00695320227312 \cdot X3_{\text{AMBON}} + 0.408216557061 \cdot \text{LOG}(X4_{\text{AMBON}}) -$$

$$\text{LOG}(Y_{\text{TUAL}}) = -0.657268469974 + 5.08659074263 + 0.353193683999 \cdot \text{LOG}(X1_{\text{TUAL}}) - 0.43166317053 \cdot \text{LOG}(X2_{\text{TUAL}}) - 0.00695320227312 \cdot X3_{\text{TUAL}} + 0.408216557061 \cdot \text{LOG}(X4_{\text{TUAL}}) -$$