

APPENDIX

APPENDIX 1

DATA

PROVINCE	YEAR	LN HEALTH	LN EDUC	HDI	LN WRKG	LN GRDP
DKI Jakarta	2010	28,38	29,49	76,31	15,31	13,89
	2011	28,57	29,72	76,98	15,32	13,95
	2012	28,84	29,95	77,53	15,38	14,02
	2013	29,16	30,18	78,08	15,35	14,08
	2014	30,71	31,83	78,39	15,35	14,13
	2015	30,79	31,90	78,99	15,41	14,19
	2016	30,86	31,96	79,60	15,41	14,25
West Java	2010	26,39	27,57	66,15	16,65	13,72
	2011	26,91	27,25	66,67	16,70	13,78
	2012	27,00	27,32	67,32	16,73	13,84
	2013	26,82	27,45	68,25	16,75	13,90
	2014	27,07	27,25	68,80	16,78	13,95
	2015	27,62	27,53	69,50	16,79	14,00
	2016	29,91	31,18	70,05	16,80	14,06
Central Java	2010	27,33	26,45	66,08	16,58	13,34
	2011	27,35	26,45	66,64	16,59	13,39
	2012	27,60	26,43	67,21	16,62	13,45
	2013	27,85	26,49	68,02	16,62	13,50
	2014	28,12	26,50	68,78	16,63	13,55
	2015	28,29	26,69	69,49	16,64	13,60
	2016	27,25	24,88	69,98	16,64	13,65
DIY	2010	24,70	25,78	75,37	14,44	11,08
	2011	24,85	26,26	75,93	14,43	11,13
	2012	25,57	26,33	76,15	14,45	11,18
	2013	25,85	26,25	76,44	14,45	11,23
	2014	25,80	26,51	76,81	14,49	11,28
	2015	26,03	26,59	77,59	14,48	11,33
	2016	26,03	26,60	78,38	14,53	11,38
East Java	2010	27,84	26,26	65,36	16,77	13,81
	2011	28,18	26,68	66,06	16,76	13,87
	2012	28,24	26,83	66,74	16,77	13,93
	2013	28,36	26,97	67,55	16,79	13,99
	2014	28,44	27,00	68,14	16,79	14,05

PROVINCE	YEAR	LN HEALTH	LN EDUC	HDI	LN WRKG	LN GRDP
	2015	28,72	27,02	68,95	16,79	14,10
	2016	28,84	26,25	69,74	16,78	14,16
Banten	2010	26,04	25,95	67,54	15,25	12,51
	2011	26,16	26,10	68,22	15,30	12,58
	2012	26,16	26,24	68,92	15,38	12,65
	2013	26,67	26,43	69,47	15,39	12,71
	2014	26,70	26,56	69,89	15,40	12,76
	2015	26,62	26,70	70,27	15,43	12,82
	2016	26,43	26,74	70,96	15,46	12,87

APPENDIX 2

DATA (Before Changing into LN)

Province	Year	Health	Education	HDI	Working	GRDP (Billion Rp)
DKI Jakarta	2010	Rp2.118.768.519.841	Rp6.424.169.235.695	76,31	4449333	1075183,48
	2011	Rp2.565.538.877.330	Rp8.115.163.181.942	76,98	4509754	1147558,23
	2012	Rp3.344.062.008.288	Rp10.120.365.568.055	77,53	4762779	1222527,92
	2013	Rp4.634.050.525.091	Rp12.815.350.539.684	78,08	4650732	1296694,57
	2014	Rp21.775.260.000.000	Rp66.798.030.000.000	78,39	4656604	1373389,13
	2015	Rp23.429.170.000.000	Rp71.191.440.000.000	78,99	4904279	1454345,82
	2016	Rp25.256.000.000.000	Rp76.174.000.000.000	79,60	4933190	1539376,65
West Java	2010	Rp288.785.979.162	Rp939.202.077.747	66,15	17062626	906685,76
	2011	Rp487.761.287.271	Rp684.529.308.693	66,67	17866741	965622,06
	2012	Rp532.645.838.342	Rp735.730.856.013	67,32	18508944	1028409,74
	2013	Rp443.863.589.131	Rp831.949.527.205	68,25	18815809	1093543,55
	2014	Rp572.856.381.490	Rp684.577.721.894	68,80	19337363	1149216,06
	2015	Rp992.556.227.055	Rp900.284.557.810	69,50	19624186	1207083,41
	2016	Rp997.300.000.000	Rp948.860.000.000	70,05	19739575	1275546,48
Central Java	2010	Rp740.700.880.000	Rp306.813.067.000	66,08	15882741	623224,62
	2011	Rp752.824.990.000	Rp307.026.510.000	66,64	16045041	656268,13
	2012	Rp973.037.731.000	Rp301.254.205.000	67,21	16466938	691343,12
	2013	Rp1.248.835.708.000	Rp318.510.751.000	68,02	16456362	726655,12
	2014	Rp1.625.097.866.000	Rp324.253.729.000	68,78	16650829	764959,15
	2015	Rp1.931.665.175.000	Rp388.482.721.000	69,49	16878584	806775,36
	2016	Rp2.034.567.816.000	Rp378.689.257.000	69,98	16836595	849383,56

Province	Year	Health	Education	HDI	Working	GRDP (Billion Rp)
DIY	2010	Rp53.381.708.995	Rp156.961.776.750	75,37	1858956	64678,97
	2011	Rp61.995.898.505	Rp254.362.678.225	75,93	1851687	68049,87
	2012	Rp127.525.403.864	Rp273.588.253.822	76,15	1892972	71702,45
	2013	Rp169.183.746.997	Rp251.362.429.396	76,44	1882283	75627,45
	2014	Rp160.130.501.063	Rp326.872.544.761	76,81	1972478	79536,08
	2015	Rp201.172.402.004	Rp352.403.703.595	77,59	1951922	83474,44
	2016	Rp201.299.328.279	Rp355.999.483.223	78,38	2040132	87687,93
East Java	2010	Rp1.237.178.978.544	Rp253.435.340.000	65,36	19194824	990648,84
	2011	Rp1.737.417.121.136	Rp384.641.479.231	66,06	18951550	1054401,77
	2012	Rp1.838.068.137.951	Rp448.573.063.000	66,74	19264872	1124464,64
	2013	Rp2.070.310.334.517	Rp514.845.599.000	67,55	19569700	1192789,8
	2014	Rp2.256.644.386.486	Rp531.299.931.000	68,14	19595949	1262684,5
	2015	Rp2.958.318.404.017	Rp544.119.084.350	68,95	19584086	1331394,99
	2016	Rp3.344.147.112.326	Rp251.204.341.996	69,74	19381614	1405236,11
Banten	2010	Rp203.800.162.540	Rp186.418.506.730	67,54	4198900	271465,28
	2011	Rp229.234.979.134	Rp216.153.651.273	68,22	4431625	290545,84
	2012	Rp228.645.030.442	Rp250.023.567.330	68,92	4760430	310385,59
	2013	Rp382.841.793.400	Rp301.333.060.400	69,47	4835660	331099,11
	2014	Rp395.490.502.500	Rp341.898.260.400	69,89	4896043	349351,23
	2015	Rp363.991.928.905	Rp394.603.407.700	70,27	5016792	368216,55
	2016	Rp300.096.048.391	Rp408.475.826.186	70,96	5161386	387595,37

APPENDIX 3

COMMON EFFECT MODEL

Dependent Variable: LNGRDP?
Method: Pooled Least Squares
Date: 01/16/18 Time: 22:28
Sample: 2010 2016
Included observations: 7
Cross-sections included: 6
Total pool (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNHEALTH?	0.267251	0.114362	2.336885	0.0248
LNEDUC?	0.134431	0.145230	0.925640	0.3605
LNWRKG?	0.076669	0.028699	2.671446	0.0111
HDI?	0.951004	0.237897	3.997542	0.0003
R-squared	0.857759	Mean dependent var		27.50119
Adjusted R-squared	0.846529	S.D. dependent var		1.497711
S.E. of regression	0.586733	Akaike info criterion		1.861899
Sum squared resid	13.08172	Schwarz criterion		2.027392
Log likelihood	-35.09989	Hannan-Quinn criter.		1.922559
Durbin-Watson stat	0.394891			

APPENDIX 4

FIXED EFFECT MODEL

Dependent Variable: LNGRDP?
Method: Pooled Least Squares
Date: 11/20/17 Time: 23:54
Sample: 2010 2016
Included observations: 7
Cross-sections included: 6
Total pool (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.813320	1.582582	0.513920	0.6108
LNHEALTH?	0.024034	0.013199	1.820879	0.0780
LNEDUC?	-0.006823	0.009804	-0.695957	0.4915
IPM?	0.071009	0.005064	14.02230	0.0000
LNWRKG?	0.433097	0.114224	3.791644	0.0006
Fixed Effects (Cross)				
_DKIJAKARTA--C	0.566909			
_JABAR--C	0.524519			
_JATENG--C	0.170256			
_DIY--C	-1.727359			
_JATIM--C	0.613927			
_BANTEN--C	-0.148253			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.999768	Mean dependent var	13.23000
Adjusted R-squared	0.999703	S.D. dependent var	1.024757
S.E. of regression	0.017666	Akaike info criterion	-5.030101
Sum squared resid	0.009987	Schwarz criterion	-4.616370
Log likelihood	115.6321	Hannan-Quinn criter.	-4.878452
F-statistic	15325.31	Durbin-Watson stat	0.743808
Prob(F-statistic)	0.000000		

APPENDIX 5

RANDOM EFFECT MODEL

Dependent Variable: LNGRDP?
 Method: Pooled EGLS (Cross-section random effects)
 Date: 01/16/18 Time: 22:34
 Sample: 2010 2016
 Included observations: 7
 Cross-sections included: 6
 Total pool (balanced) observations: 42
 Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.794024	2.335654	-3.336977	0.0019
LNHEALTH?	0.273844	0.043943	6.231813	0.0000
LNEDUC?	0.526403	0.130021	4.048610	0.0003
LNWRKG?	0.127791	0.018870	6.772338	0.0000
HDI?	0.780168	0.104690	7.452199	0.0000
Random Effects (Cross)				
_DKIJAKARTA--C	0.000000			
_JABAR--C	0.000000			
_JATENG--C	0.000000			
_DIY--C	0.000000			
_JATIM--C	0.000000			
_BANTEN--C	0.000000			
Effects Specification				
			S.D.	Rho
Cross-section random			0.000000	0.0000
Idiosyncratic random			0.225220	1.0000
Weighted Statistics				
R-squared	0.863901	Mean dependent var		27.50119
Adjusted R-squared	0.849187	S.D. dependent var		1.497711
S.E. of regression	0.581631	Sum squared resid		12.51688
F-statistic	58.71500	Durbin-Watson stat		0.399637
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.863901	Mean dependent var		27.50119
Sum squared resid	12.51688	Durbin-Watson stat		0.399637

APPENDIX 6

HAUSMAN TEST

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	12073.140703	4	0.0000

** WARNING: estimated cross-section random effects variance is zero.

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LNHEALTH?	0.024034	0.235475	0.000154	0.0000
LNEDUC?	-0.006823	0.181974	0.000085	0.0000
IPM?	0.071009	-0.023641	0.000023	0.0000
LNWRKG?	0.433097	0.662345	0.012972	0.0441

Cross-section random effects test equation:

Dependent Variable: LNGRDP?

Method: Panel Least Squares

Date: 11/20/17 Time: 23:58

Sample: 2010 2016

Included observations: 7

Cross-sections included: 6

Total pool (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.813320	1.582582	0.513920	0.6108
LNHEALTH?	0.024034	0.013199	1.820879	0.0780
LNEDUC?	-0.006823	0.009804	-0.695957	0.4915
IPM?	0.071009	0.005064	14.02230	0.0000
LNWRKG?	0.433097	0.114224	3.791644	0.0006

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.999768	Mean dependent var	13.23000
Adjusted R-squared	0.999703	S.D. dependent var	1.024757
S.E. of regression	0.017666	Akaike info criterion	-5.030101
Sum squared resid	0.009987	Schwarz criterion	-4.616370
Log likelihood	115.6321	Hannan-Quinn criter.	-4.878452
F-statistic	15325.31	Durbin-Watson stat	0.743808
Prob(F-statistic)	0.000000		

APPENDIX 7

MULTICOLLINEARITY TEST

	_DKIJAKAR TA	_JABAR	_JATENG	_DIY	_JATIM	_BANTEN
_DKIJAKAR TA	1.000000	0.083283	-0.673293	0.007364	0.634434	-0.582658
JABAR	0.083283	1.000000	0.361733	-0.123427	0.173541	0.247074
JATENG	-0.673293	0.361733	1.000000	-0.084422	-0.082704	0.207420
DIY	0.007364	-0.123427	-0.084422	1.000000	0.475703	-0.393603
JATIM	0.634434	0.173541	-0.082704	0.475703	1.000000	-0.725553
BANTEN	-0.582658	0.247074	0.207420	-0.393603	-0.725553	1.000000

APPENDIX 8

HETEROSCEDASTICITY TEST

Dependent Variable: RESID?
 Method: Pooled Least Squares
 Date: 11/25/17 Time: 14:23
 Sample: 2010 2016
 Included observations: 7
 Cross-sections included: 6
 Total pool (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.341852	0.687002	-0.497600	0.6222
LNHEALTH?	-0.007991	0.005730	-1.394678	0.1727
LNEDUC?	0.008457	0.004256	1.986982	0.0555
LNWRKG?	0.019409	0.049585	0.391427	0.6981
IPM?	0.000484	0.002198	0.220128	0.8272
Fixed Effects (Cross)				
_DKIJAKARTA--C	-0.002513			
_JABAR--C	-0.016295			
_JATENG--C	-0.003732			
_DIY--C	0.022546			
_JATIM--C	-0.010455			
_BANTEN--C	0.010450			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.365035	Mean dependent var	0.012931
Adjusted R-squared	0.186451	S.D. dependent var	0.008502
S.E. of regression	0.007669	Akaike info criterion	-6.699052
Sum squared resid	0.001882	Schwarz criterion	-6.285321
Log likelihood	150.6801	Hannan-Quinn criter.	-6.547403
F-statistic	2.044051	Durbin-Watson stat	2.027165
Prob(F-statistic)	0.066415		

