

LAMPIRAN

Kabupaten	Tahun	PRODUKSI PADI (ton)	LL (ha)	TK (jiwa)	LP (ha)
BANTUL	2010	190356	192366	89874	30726
	2011	198004	200015	73972	30699
	2012	205355	207367	76393	30205
	2013	209364	211377	80271	32692
	2014	192847	194861	70450	30190
	2015	199141	201156	64764	28642
SLEMAN	2010	266073	268083	118280	44838
	2011	232713	234724	92941	41080
	2012	312815	314827	111054	46299
	2013	307581	309594	107211	49083
	2014	314203	316217	83437	52232
	2015	328683	330698	78264	50356
KULONPROGO	2010	106857	108867	90873	17476
	2011	133100	108867	86481	21455
	2012	135238	137250	96333	19823
	2013	114702	116715	114840	18402
	2014	121708	123722	118327	19131
	2015	126990	129005	87781	18696
GUNUNG KIDUL	2010	259282	261292	239849	53803
	2011	277813	279824	176614	57375
	2012	291695	293707	218034	56416
	2013	289104	291117	228751	58924
	2014	289787	291801	223439	57201
	2015	289558	291573	202520	57014
YOGYAKARTA	2010	1319	272	827	215
	2011	1304	270	1062	218
	2012	1121	264	756	169
	2013	1073	262	486	165
	2014	948	235	1314	165
	2015	764	232	3200	130

Model Fixed Effect

Dependent Variable: LOG(PP?)
 Method: Pooled Least Squares
 Date: 04/21/17 Time: 14:13
 Sample: 2010 2015
 Included observations: 6
 Cross-sections included: 5
 Total pool (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.145749	0.835138	-1.371928	0.1839
LOG(LP?)	0.724596	0.064449	11.24288	0.0000
LOG(LL?)	0.565329	0.074483	7.590070	0.0000
LOG(TK?)	-0.059950	0.018643	-3.215623	0.0040
Fixed Effects				
(Cross)				
_BANTUL--C	-0.364814			
_SLEMAN--C	-0.497644			
_KULONPROGO--				
C	-0.204330			
_GUNUNGKIDUL-				
-C	-0.598509			
_YOGYAKARTA--				
C	1.665297			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.999895	Mean dependent var	11.20582
Adjusted R-squared	0.999862	S.D. dependent var	2.177647
S.E. of regression	0.025579	Akaike info criterion	-4.270924
Sum squared resid	0.014394	Schwarz criterion	-3.897271
Log likelihood	72.06386	Hannan-Quinn criter.	-4.151389
F-statistic	30023.93	Durbin-Watson stat	2.511578
Prob(F-statistic)	0.000000		

Model Random Effect

Dependent Variable: LOG(PP?)

Method: Pooled EGLS (Cross-section random effects)

Date: 04/27/17 Time: 10:04

Sample: 2010 2015

Included observations: 6

Cross-sections included: 5

Total pool (balanced) observations: 30

Swamy and Arora estimator of component variances

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.554145	0.056997	44.81176	0.0000
LOG(LP?)	0.532533	0.038899	13.69028	0.0000
LOG(LL?)	0.444780	0.032031	13.88576	0.0000
LOG(TK?)	-0.113839	0.012629	-9.014095	0.0000
Random Effects				
(Cross)				
_BANTUL--C	-0.002378			
_SLEMAN--C	0.003486			
_KULONPROGO--				
C	0.010843			
_GUNUNGKIDUL-				
-C	-0.011794			
_YOGYAKARTA--				
C	-0.000156			
Effects Specification				
			S.D.	Rho
Cross-section random			0.012096	0.1828
Idiosyncratic random			0.025579	0.8172
Weighted Statistics				
R-squared	0.999474	Mean dependent var	7.322756	
Adjusted R-squared	0.999413	S.D. dependent var	1.425528	
S.E. of regression	0.034536	Sum squared resid	0.031011	
F-statistic	16460.98	Durbin-Watson stat	2.080204	
Prob(F-statistic)	0.000000			
Unweighted Statistics				
R-squared	0.999754	Mean dependent var	11.20582	
Sum squared resid	0.033886	Durbin-Watson stat	1.903737	

Model Common Effect

Dependent Variable: LOG(PP?)
 Method: Pooled Least Squares
 Date: 04/27/17 Time: 10:03
 Sample: 2010 2015
 Included observations: 6
 Cross-sections included: 5
 Total pool (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LOG(LP?)	1.207423	0.327044	3.691926	0.0010
LOG(LL?)	-0.372498	0.230261	-1.617721	0.1173
LOG(TK?)	0.362853	0.087942	4.126055	0.0003
R-squared	0.981571	Mean dependent var	11.20582	
Adjusted R-squared	0.980206	S.D. dependent var	2.177647	
S.E. of regression	0.306373	Akaike info criterion	0.566616	
Sum squared resid	2.534347	Schwarz criterion	0.706735	
Log likelihood	-5.499234	Hannan-Quinn criter.	0.611441	
Durbin-Watson stat	0.314417			

Uji Multokolinearitas antar Variabel

	LOG(LP)	LOG(LL)	LOG(TK)
LOG(LP)	1.000000	0.745567	0.973310
LOG(LL)	0.745567	1.000000	0.846322
LOG(TK)	0.973310	0.846322	1.000000

Uji Heterokedastisitas

Dependent Variable: RESID?
 Method: Pooled Least Squares
 Date: 04/20/17 Time: 15:50
 Sample: 2010 2015
 Included observations: 6
 Cross-sections included: 5
 Total pool (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.106775	0.510552	0.209137	0.8363
LOG(LP?)	0.005641	0.039400	0.143163	0.8875
LOG(LL?)	-0.002490	0.045534	-0.054680	0.9569
LOG(TK?)	-0.010840	0.011397	-0.951060	0.3519
Fixed Effects (Cross)				
_BANTUL—C	0.006468			
_SLEMAN—C	0.008512			
_KULONPROGO—				
C	0.008510			
_GUNUNGKIDUL				
—C	0.009031			
_YOGYAKARTA				
—C	-0.032521			

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.092291	Mean dependent var	0.016800
Adjusted R-squared	-0.196525	S.D. dependent var	0.014296
S.E. of regression	0.015637	Akaike info criterion	-5.255132
Sum squared resid	0.005380	Schwarz criterion	-4.881479
Log likelihood	86.82698	Hannan-Quinn criter.	-5.135597
F-statistic	0.319549	Durbin-Watson stat	3.133000
Prob(F-statistic)	0.937056		

Uji Chow

Redundant Fixed Effects Tests

Pool: PANEL

Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	7.117700	(4,22)	0.0008
Cross-section Chi-square	24.910576	4	0.0001

Cross-section fixed effects test equation:

Dependent Variable: LOG(PP?)

Method: Panel Least Squares

Date: 04/21/17 Time: 14:14

Sample: 2010 2015

Included observations: 6

Cross-sections included: 5

Total pool (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.583331	0.058212	44.37830	0.0000
LOG(LP?)	0.499664	0.041250	12.11299	0.0000
LOG(LL?)	0.471390	0.032848	14.35053	0.0000
LOG(TK?)	-0.114817	0.014849	-7.732187	0.0000
R-squared	0.999760	Mean dependent var	11.20582	
Adjusted R-squared	0.999732	S.D. dependent var	2.177647	
S.E. of regression	0.035638	Akaike info criterion	-3.707238	
Sum squared resid	0.033022	Schwarz criterion	-3.520412	
Log likelihood	59.60857	Hannan-Quinn criter.	-3.647471	
F-statistic	36084.33	Durbin-Watson stat	1.985951	
Prob(F-statistic)	0.000000			

Uji Hausman

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	24.397500	3	0.0000

Cross-section random effects test comparisons:

Variable	Fixed	Random	Var(Diff.)	Prob.
LOG(LP?)	0.724596	0.532533	0.002641	0.0002
LOG(LL?)	0.565329	0.444780	0.004522	0.0730
LOG(TK?)	-0.059950	-0.113839	0.000188	0.0001

Cross-section random effects test equation:

Dependent Variable: LOG(PP?)

Method: Panel Least Squares

Date: 04/21/17 Time: 14:15

Sample: 2010 2015

Included observations: 6

Cross-sections included: 5

Total pool (balanced) observations: 30

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.145749	0.835138	-1.371928	0.1839
LOG(LP?)	0.724596	0.064449	11.24288	0.0000
LOG(LL?)	0.565329	0.074483	7.590070	0.0000
LOG(TK?)	-0.059950	0.018643	-3.215623	0.0040

Effects Specification

Cross-section fixed (dummy variables)

R-squared	0.999895	Mean dependent var	11.20582
Adjusted R-squared	0.999862	S.D. dependent var	2.177647
S.E. of regression	0.025579	Akaike info criterion	-4.270924
Sum squared resid	0.014394	Schwarz criterion	-3.897271
Log likelihood	72.06386	Hannan-Quinn criter.	-4.151389
F-statistic	30023.93	Durbin-Watson stat	2.511578
Prob(F-statistic)	0.000000		

Efek Wilayah

$$\begin{aligned} \text{LOG}(\text{PP_BANTUL}) &= -0.364814213874 - 1.14574923339 + \\ &0.724596260029 * \text{LOG}(\text{LP_BANTUL}) + 0.565328610546 * \text{LOG}(\text{LL_BANTUL}) \\ &- 0.0599496255403 * \text{LOG}(\text{TK_BANTUL}) \end{aligned}$$

$$\begin{aligned} \text{LOG}(\text{PP_SLEMAN}) &= -0.497643902798 - 1.14574923339 + \\ &0.724596260029 * \text{LOG}(\text{LP_SLEMAN}) + 0.565328610546 * \text{LOG}(\text{LL_SLEMAN}) \\ &- 0.0599496255403 * \text{LOG}(\text{TK_SLEMAN}) \end{aligned}$$

$$\begin{aligned} \text{LOG}(\text{PP_KULONPROGO}) &= -0.204330093221 - 1.14574923339 + \\ &0.724596260029 * \text{LOG}(\text{LP_KULONPROGO}) + \\ &0.565328610546 * \text{LOG}(\text{LL_KULONPROGO}) - \\ &0.0599496255403 * \text{LOG}(\text{TK_KULONPROGO}) \end{aligned}$$

$$\begin{aligned} \text{LOG}(\text{PP_GUNUNGGKIDUL}) &= -0.598509279521 - 1.14574923339 + \\ &0.724596260029 * \text{LOG}(\text{LP_GUNUNGGKIDUL}) + \\ &0.565328610546 * \text{LOG}(\text{LL_GUNUNGGKIDUL}) - \\ &0.0599496255403 * \text{LOG}(\text{TK_GUNUNGGKIDUL}) \end{aligned}$$

$$\begin{aligned} \text{LOG}(\text{PP_YOGYAKARTA}) &= 1.66529748941 - 1.14574923339 + \\ &0.724596260029 * \text{LOG}(\text{LP_YOGYAKARTA}) + \\ &0.565328610546 * \text{LOG}(\text{LL_YOGYAKARTA}) - \\ &0.0599496255403 * \text{LOG}(\text{TK_YOGYAKARTA}) \end{aligned}$$