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LAMPIRAN

Lampiran 1. Data

Wilayah (1)	Tahun (2)	PI (Y) (3)
Sulsel	2013	6.22
Sulsel	2014	8.61
Sulsel	2015	4.48
Sulsel	2016	4.48
Sulsel	2017	4.44
Sulsel	2018	3.5
Sulsel	2019	2.35
Sulut	2013	8.12
Sulut	2014	9.67
Sulut	2015	5.56
Sulut	2016	0.35
Sulut	2017	2.44
Sulut	2018	3.83
Sulut	2019	3.52
Sulteng	2013	7.75
Sulteng	2014	8.85
Sulteng	2015	4.17
Sulteng	2016	4.17
Sulteng	2017	4.33
Sulteng	2018	6.46
Sulteng	2019	2.3
Tenggara	2013	5.92
Tenggara	2014	7.4
Tenggara	2015	1.64
Tenggara	2016	1.64
Tenggara	2017	2.96
Tenggara	2018	2.55
Tenggara	2019	3.22
Gorontalo	2013	5.84
Gorontalo	2014	6.14
Gorontalo	2015	4.3
Gorontalo	2016	4.3

(1)	(2)	(3)
Gorontalo	2017	4.34
Gorontalo	2018	2.15
Gorontalo	2019	2.87
Sulbar	2013	5.91
Sulbar	2014	7.88
Sulbar	2015	5.07
Sulbar	2016	5.07
Sulbar	2017	3.79
Sulbar	2018	1.8
Sulbar	2019	1.43

(X ₁) (4)	PE (X ₂) (5)	UMP (X ₃) (6)	LP_PDRB (X ₄) (7)
144.6	7.618829	1440000	7.62
116.89	7.536645	1800000	7.54
122.13	7.186239	2000000	7.19
125.71	7.41551	2250000	7.42
131.29	7.205926	2435625	7.21
135.89	7.05929	2647767	7.04
139.08	6.921916	2917128	6.91
144.59	6.381421	1550000	7.5
118.61	6.30904	1900000	6.26
125.2	6.124976	2150000	6.88
125.64	6.161604	2400000	6.51
128.71	6.3123	2598000	6.76
133.64	5.995783	2824286	6.4
138.34	5.649324	3330932	6.5
153.12	3.242908	995000	9.59
120.21	6.257866	1250000	5.07
125.22	6.886413	1500000	15.5
127.09	6.51043	1670000	9.94
132.59	6.760751	1807775	7.1
141.15	6.395484	1965232	20.56
144.4	6.503586	2465212	8.83
149.5	7.499724	1125207	7.5
116.16	6.259765	1400000	6.26
118.06	6.884504	1652000	6.88
121.68	6.513225	1850000	6.51
125.28	6.805282	2002625	6.76
128.48	6.348273	2177052	6.4
132.62	6.531706	2620269	6.5
147.46	7.675377	1175000	7.67
115.26	7.271072	1325000	7.27
120.22	6.223587	1600000	6.22
121.78	6.519702	1875000	6.52
127.07	6.742962	2030000	6.73
129.8	6.481041	2206813	6.49
133.53	6.396197	2440313	6.4

(4)	(5)	(6)	(7)
146.41	6.929283	1165000	6.93
116.85	8.855156	1400000	8.86
122.78	7.310278	1655500	7.31
125.52	6.009529	1864000	6.01
130.28	6.674679	2017780	6.39
132.62	5.96704	2193530	6.26
134.52	5.669474	2210165	5.67

JUB (8)	KD (9)	SB (10)
41588463	12189	6.479167
46417548	12440	7.541667
52292291	13795	7.520833
56381720	13436	6
61958557	13548	4.5625
66220040	14481	5.104167
70826470	14102	5.625
41588463	12189	6.479167
46417548	12440	7.541667
52292291	13795	7.520833
56381720	13436	6
61958557	13548	4.5625
66220040	14481	5.104167
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(8)	(9)	(10)
56381720	13436	6
61958557	13548	4.5625
66220040	14481	5.104167
70826470	14102	5.625
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61958557	13548	4.5625
66220040	14481	5.104167
70826470	14102	5.625

Lampiran 2. Regresi data panel MEU dan MET

Dependent Variable: Y
 Method: Panel Least Squares
 Date: 07/13/21 Time: 12:10
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 6
 Total panel (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.07823	5.244302	2.684482	0.0111
X1	-0.100651	0.182763	-0.550718	0.5854
X2	-0.123867	0.402207	-0.307968	0.7600
X3	0.000365	0.000696	0.524471	0.6034
X4	0.387362	0.184492	2.099613	0.0433
X5	-0.000105	0.000345	-0.304033	0.7630
X6	-0.103540	0.047621	-2.174256	0.0367
X7	0.274020	0.501031	0.546912	0.5880
Root MSE	0.363221	R-squared	0.554916	
Mean dependent var	2.066574	Adjusted R-squared	0.463281	
S.D. dependent var	0.551040	S.E. of regression	0.403698	
Akaike info criterion	1.193344	Sum squared resid	5.541051	
Schwarz criterion	1.524329	Log likelihood	-17.06023	
Hannan-Quinn criter.	1.314663	F-statistic	6.055724	
Durbin-Watson stat	1.899778	Prob(F-statistic)	0.000124	

Dependent Variable: Y
 Method: Panel Least Squares
 Date: 07/13/21 Time: 12:10
 Sample: 2013 2019
 Periods included: 7
 Cross-sections included: 6
 Total panel (balanced) observations: 42

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	14.37510	5.872248	2.447973	0.0207
X1	-0.132111	0.193968	-0.681095	0.5012
X2	-0.138696	0.514862	-0.269385	0.7895
X3	0.000130	0.002976	0.043559	0.9656
X4	0.295608	0.244661	1.208234	0.2367
X5	-8.29E-05	0.000910	-0.091077	0.9281
X6	-0.098213	0.052735	-1.862405	0.0727
X7	0.230787	0.574992	0.401374	0.6911

Effects Specification

Cross-section fixed (dummy variables)

Root MSE	0.350686	R-squared	0.585108
Mean dependent var	2.066574	Adjusted R-squared	0.413428
S.D. dependent var	0.551040	S.E. of regression	0.422030
Akaike info criterion	1.361195	Sum squared resid	5.165179
Schwarz criterion	1.899045	Log likelihood	-15.58509
Hannan-Quinn criter.	1.558338	F-statistic	3.408140
Durbin-Watson stat	1.965253	Prob(F-statistic)	0.003389

Lampiran 3. Hasil Analisis Uji Chow dan LM

Redundant Fixed Effects Tests				
Equation: Untitled				
Test cross-section fixed effects				
Effects Test	Statistic	d.f.	Prob.	
Cross-section F	0.505461	(5,29)	0.7697	
Cross-section Chi-square	3.509446	5	0.6220	
Cross-section fixed effects test equation:				
Dependent Variable: Y				
Method: Panel Least Squares				
Date: 07/13/21 Time: 10:45				
Sample: 2013 2019				
Periods included: 7				
Cross-sections included: 6				
Total panel (balanced) observations: 42				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	34.24468	9.717909	3.523873	0.0012
X1	-0.023754	0.028727	-0.826870	0.4141
X2	-0.229872	0.299868	-0.766575	0.4486
X3	8.09E-07	8.75E-07	0.925199	0.3614
X4	0.256034	0.099852	2.564128	0.0149
X5	-1.79E-08	8.07E-08	-0.222345	0.8254
X6	-0.002212	0.000723	-3.060165	0.0043
X7	0.351112	0.365725	0.960044	0.3438
Root MSE	1.315938	R-squared	0.647250	
Mean dependent var	4.567143	Adjusted R-squared	0.574625	
S.D. dependent var	2.242512	S.E. of regression	1.462583	
Akaike info criterion	3.767929	Sum squared resid	72.73112	
Schwarz criterion	4.098914	Log likelihood	-71.12651	
Hannan-Quinn criter.	3.889248	F-statistic	8.912226	
Durbin-Watson stat	1.873705	Prob(F-statistic)	0.000003	

Lagrange Multiplier Tests for Random Effects			
Null hypotheses: No effects			
Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives			
	Test Hypothesis		
	Cross-section	Time	Both
Breusch-Pagan	1.074685 (0.2999)	3.657854 (0.0558)	4.732539 (0.0296)
Honda	-1.036670 (0.8501)	1.912552 (0.0279)	0.619342 (0.2678)
King-Wu	-1.036670 (0.8501)	1.912552 (0.0279)	0.523810 (0.3002)
Standardized Honda	-0.568973 (0.7153)	4.811900 (0.0000)	-1.132725 (0.8713)
Standardized King-Wu	-0.568973 (0.7153)	4.811900 (0.0000)	-1.269720 (0.8979)
Gourieroux, et al.	--	--	3.657854 (0.0680)

Lampiran 4. Hasil Analisis Uji Multikolinearitas

```
. vif
```

Variable	VIF	1/VIF
x5	12.25	0.081649
x6	6.19	0.161573
x3	4.17	0.239882
x7	2.94	0.340441
x1	1.59	0.630027
x4	1.31	0.763964
x2	1.15	0.870737
Mean VIF	4.23	

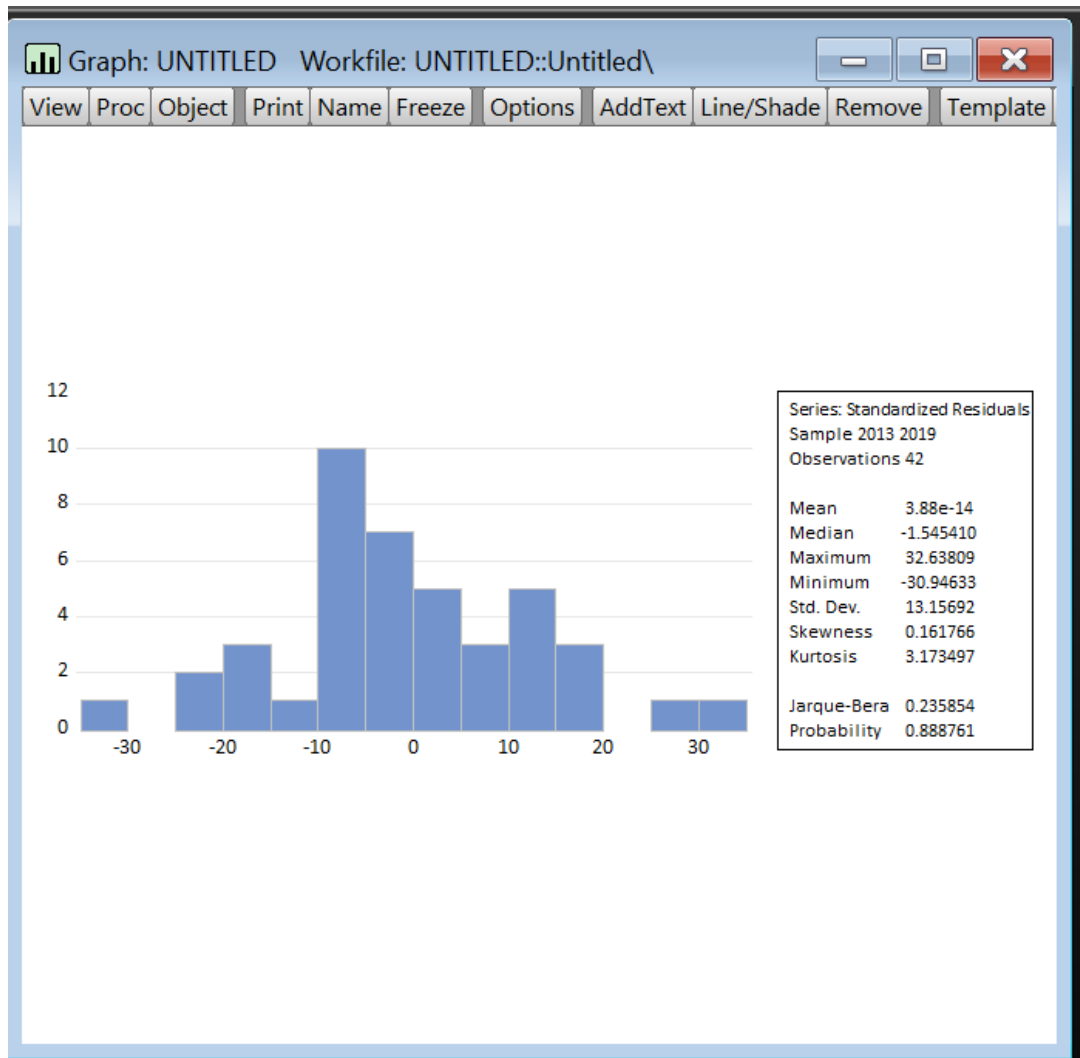
Lampiran 5. Hasil Analisis Uji Heterokedastisitas

```
. quietly reg y x1 x2 x3 x4 x5 x6 x7
. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of y

chi2(1)      =    4.61
Prob > chi2  =    0.0318
```

Lampiran 6. Hasil Analisis Uji Jarque Bera



Lampiran 7. Hasil Analisis Regresi Ridge

```

> #view summary of model
> summary(model)
      Length Class      Mode
a0      100  -none-   numeric
beta    700  dgMatrix S4
df       100  -none-   numeric
dim       2  -none-   numeric
lambda   100  -none-   numeric
dev.ratio 100  -none-   numeric
nulldev   1  -none-   numeric
npasses   1  -none-   numeric
jerr      1  -none-   numeric
offset    1  -none-   logical
call      4  -none-   call
nobs      1  -none-   numeric
>
> #perform k-fold cross-validation to find optimal lambda value
> cv_model <- cv.glmnet(x, y, alpha = 0)
> cv_model

Call:  cv.glmnet(x = x, y = y, alpha = 0)

Measure: Mean-Squared Error

      Lambda Index Measure      SE Nonzero
min  1.71  100  311.7 103.0      7
1se 163.16   51  409.8 100.6      7
>
> #find optimal lambda value that minimizes test MSE
> best_lambda <- cv_model$lambda.min
> best_lambda
[1] 1.709253
\

> #find SST and SSE
> sst <- sum((y - mean(y))^2)
> sse <- sum((y_predicted - y)^2)
>
> #find R-Squared
> rsq <- 1 - sse/sst
> rsq
[1] 0.6651806
>
> mod<-lmridge(y ~ K + PE + UMP + LP_PDRB + JUB + KD + SB, data = as.data.frame(data), K = best_lambda)
> summary(mod)

Call:
lmridge.default(formula = y ~ K + PE + UMP + LP_PDRB + JUB +
  KD + SB, data = as.data.frame(data), K = best_lambda)

Coefficients: for ridge parameter K= 1.709253
              Estimate Estimate (Sc) StdErr (Sc) t-value (Sc) Pr(>|t|)
Intercept  1.1827e+02  1.2259e+09  2.2406e+08   3.4711  <2e-16 ***
K          -4.7600e-02  -3.0541e+00  5.9626e+00   -0.5122  0.6114
PE         -4.6040e-01  -2.4068e+00  0.1785e+00   -0.3895  0.6990
UMP         0.0000e+00  -1.2697e+01  4.8060e+00   -2.6419  0.0118 *
LP_PDRB    3.9050e-01  6.5439e+00  6.1693e+00   1.0607  0.2934
JUB         0.0000e+00  -2.1242e+01  3.9603e+00   -5.3637  <2e-16 ***
KD         -5.3000e-03  -2.7590e+01  4.6797e+00   -5.8956  <2e-16 ***
SB         2.5443e+00  1.7439e+01  5.3203e+00   3.2778  0.0022 **
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Ridge Summary
      R2    adj-R2  DF ridge      F      AIC      BIC
0.224500  0.091500  2.083890  7.407252  239.081994  399.685230
Ridge minimum MSE= 18114.47 at K= 1.709253
P-value for F-test ( 2.08389 , 38.73766 ) = 0.001668722
-----

> rstats1(mod)

Ridge Regression Statistics 1:

      Variance  bias^2  MSE  rsigma2  F  R2  adj-R2  CN
K=1.70925304935203 200.7726 17913.7 18114.47 391.2124 7.4073 0.2245 0.0915 2.7978

> vif(mod)
      K      PE      UMP  LP_PDRB      JUB      KD      SB
k=1.70925304935203 0.12208 0.13109 0.07931 0.13069 0.05386 0.0752 0.0972
>

```