

LAMPIRAN

Lampiran I

Uji MWD Linear

Dependent Variable: Y
 Method: Least Squares
 Date: 07/04/19 Time: 21:17
 Sample: 2000 2017
 Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	416923.1	210420.8	1.981378	0.0691
X1	-13213.05	34471.50	-0.383304	0.7077
X2	-18.84960	11.30594	-1.667229	0.1194
X3	0.343640	0.318022	1.080555	0.2995
Z1	305835.6	1373562.	0.222659	0.8273
R-squared	0.465579	Mean dependent var		431680.0
Adjusted R-squared	0.301142	S.D. dependent var		83027.41
S.E. of regression	69409.01	Akaike info criterion		25.36355
Sum squared resid	6.26E+10	Schwarz criterion		25.61088
Log likelihood	-223.2720	Hannan-Quinn criter.		25.39766
F-statistic	2.831353	Durbin-Watson stat		1.594959
Prob(F-statistic)	0.068571			

Uji MWD Log Linear

Dependent Variable: LOG(Y)
 Method: Least Squares
 Date: 07/04/19 Time: 21:18
 Sample: 2000 2017
 Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	15.39228	6.694821	2.299133	0.0387
LOG(X1)	-0.041650	0.158289	-0.263125	0.7966
LOG(X2)	-0.454947	0.269998	-1.685004	0.1158
LOG(X3)	0.131155	0.446668	0.293629	0.7737
Z2	-8.81E-06	7.26E-06	-1.212805	0.2468
R-squared	0.494304	Mean dependent var		12.95870
Adjusted R-squared	0.338705	S.D. dependent var		0.186441
S.E. of regression	0.151614	Akaike info criterion		-0.704827
Sum squared resid	0.298828	Schwarz criterion		-0.457502
Log likelihood	11.34345	Hannan-Quinn criter.		-0.670725
F-statistic	3.176785	Durbin-Watson stat		1.748397
Prob(F-statistic)	0.050104			

Lampiran II

Uji Stasioneritas (Unit Root Test) dengan metode Phillip Perron

Tingkat Level

Null Hypothesis: Unit root (individual unit root process)
Series: Y, X1, X2, X3
Date: 06/20/19 Time: 21:43
Sample: 2000 2017
Exogenous variables: None
Newey-West automatic bandwidth selection and Bartlett kernel
Total (balanced) observations: 68
Cross-sections included: 4

Method	Statistic	Prob.**
PP - Fisher Chi-square	2.83061	0.9445
PP - Choi Z-stat	1.63789	0.9493

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate Phillips-Perron test results GROUP01

Series	Prob.	Bandwidth	Obs
Y	0.4778	8.0	17
X1	0.6521	1.0	17
X2	0.9832	6.0	17
X3	0.7928	2.0	17

Tingkat Diferensiasi Pertama

Null Hypothesis: Unit root (individual unit root process)
Series: Y, X1, X2, X3
Date: 06/20/19 Time: 21:47
Sample: 2000 2017
Exogenous variables: None
Newey-West automatic bandwidth selection and Bartlett kernel
Total (balanced) observations: 64
Cross-sections included: 4

Method	Statistic	Prob.**
PP - Fisher Chi-square	62.4810	0.0000
PP - Choi Z-stat	-6.49541	0.0000

** Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Intermediate Phillips-Perron test results D(GROUP01)

Series	Prob.	Bandwidth	Obs
D(Y)	0.0001	5.0	16
D(X1)	0.0428	2.0	16
D(X2)	0.0001	0.0	16
D(X3)	0.0001	1.0	16

Lampiran III

Uji Kointegrasi

Null Hypothesis: ECT has a unit root
 Exogenous: None
 Bandwidth: 0 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-3.296414	0.0026
Test critical values:		
1% level	-2.708094	
5% level	-1.962813	
10% level	-1.606129	

Lampiran IV

Error Correction Model (ECM)

Jangka Panjang

Dependent Variable: Y
 Method: Least Squares
 Date: 06/20/19 Time: 21:48
 Sample: 2000 2017
 Included observations: 18

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	390247.9	167011.0	2.336660	0.0348
X1	-15025.89	32339.25	-0.464633	0.6493
X2	-19.23927	10.78387	-1.784079	0.0961
X3	0.397470	0.199477	1.992560	0.0662
R-squared	0.463541	Mean dependent var		431680.0
Adjusted R-squared	0.348586	S.D. dependent var		83027.41
S.E. of regression	67011.61	Akaike info criterion		25.25625
Sum squared resid	6.29E+10	Schwarz criterion		25.45411
Log likelihood	-223.3062	Hannan-Quinn criter.		25.28353
F-statistic	4.032357	Durbin-Watson stat		1.562131
Prob(F-statistic)	0.029223			

Jangka Pendek

Dependent Variable: D(Y)
 Method: Least Squares
 Date: 07/04/19 Time: 21:37
 Sample (adjusted): 2001 2017
 Included observations: 17 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-2292.415	16529.08	-0.138690	0.8920
D(X1)	42451.10	40650.75	1.044288	0.3169
D(X2)	-23.67345	15.12934	-1.564738	0.1436
D(X3)	0.207818	0.231951	0.895957	0.3879
ECT(-1)	-0.919639	0.289399	-3.177753	0.0080
R-squared	0.470764	Mean dependent var		-4071.118
Adjusted R-squared	0.294352	S.D. dependent var		75236.47
S.E. of regression	63200.78	Akaike info criterion		25.18595
Sum squared resid	4.79E+10	Schwarz criterion		25.43101
Log likelihood	-209.0806	Hannan-Quinn criter.		25.21031
F-statistic	2.668551	Durbin-Watson stat		1.805177
Prob(F-statistic)	0.084039			

Lampiran V

Uji Asumsi Klasik Jangka Panjang

Uji Multikolinearitas

	HARGA INTERNASIONAL	KURS	PRODUKSI
HARGA INTERNASIONAL	1	0,449212	0,531166
KURS	0,449212	1	-0,068523
PRODUKSI	0,531167	-0,068523	1

Uji Heteroskedastisitas

Heteroskedasticity Test: White

F-statistic	2.383553	Prob. F(9,8)	0.1178
Obs*R-squared	13.11068	Prob. Chi-Square(9)	0.1577
Scaled explained SS	5.887832	Prob. Chi-Square(9)	0.7511

Uji Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.340498	Prob. F(2,12)	0.7181
Obs*R-squared	0.966637	Prob. Chi-Square(2)	0.6167

Uji Asumsi Klasik Jangka Pendek

Uji Multikolinearitas

Variance Inflation Factors

Date: 07/04/19 Time: 21:40

Sample: 2000 2017

Included observations: 17

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.73E+08	1.162790	NA
D(X1)	1.65E+09	1.166404	1.135877
D(X2)	228.8969	1.249981	1.160645
D(X3)	0.053801	1.075664	1.031570
ECT(-1)	0.083752	1.317584	1.317549

Uji Heteroskedastisitas

Heteroskedasticity Test: White

F-statistic	0.093071	Prob. F(14,2)	0.9985
Obs*R-squared	6.706327	Prob. Chi-Square(14)	0.9454
Scaled explained SS	2.990072	Prob. Chi-Square(14)	0.9991

Uji Autokorelasi

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.174390	Prob. F(2,10)	0.8425
Obs*R-squared	0.572941	Prob. Chi-Square(2)	0.7509

Lampiran VI

Data

Tahun	Volume Ekspor Kakao (Ton)	Harga Kakao Internasional (\$/kg)	Nilai Kurs	Produksi (Ton)
2000	424,089	0.91	8,400	421,142
2001	392,072	1.07	10,400	536,804
2002	465,622	1.78	8,940	571,155
2003	355,726	1.75	8,465	698,816
2004	366,855	1.55	9,290	691,704
2005	463,632	1.54	9,830	748,828
2006	609,035	1.59	9,020	769,386
2007	503,522	1.95	9,419	740,006
2008	515,523	2.58	10,950	803,594
2009	535,236	2.89	9,400	809,583
2010	552,880	3.13	8,991	837,918
2011	410,257	2.98	9,068	712,231
2012	387,790	2.39	9,670	740,513
2013	414,092	2.44	12,189	720,862
2014	333,679	3.06	12,440	728,414
2015	355,321	3.14	13,795	593,331
2016	330,029	2.89	13,436	658,399
2017	354,880	2.03	13,548	657,050