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# LAMPIRAN

## Lampiran 1 : Data yang Digunakan

### 1) Data Sebelum Ln

Tahun	Kuartal	DPK	Suku Bunga KMK	Inflasi	Nilai Tukar Riil
2005	Q1	14,480.99	13.36	8.52	12,755.78
	Q2	15,424.57	13.29	7.67	13,000.37
	Q3	16,430.74	13.77	9.02	13,722.23
	Q4	17,336.37	15.77	15.21	11,917.29
2006	Q1	16,786.60	16.33	15.23	10,826.13
	Q2	17,972.82	16.23	16.85	11,208.00
	Q3	18,469.05	16	16.52	11,318.56
	Q4	21,016.14	15.34	7.21	10,510.98
2007	Q1	20,680.90	14.54	6.68	10,474.93
	Q2	21,948.51	14.08	5.11	10,564.33
	Q3	22,800.85	13.55	6.98	10,513.83
	Q4	24,713.32	13.1	5.71	10,693.15
2008	Q1	24,170.67	12.7	7.96	10,239.39
	Q2	25,950.31	12.44	11.92	10,194.15
	Q3	26,435.33	12.93	12.29	10,155.55
	Q4	28,743.25	18.18	12.4	11,369.99
2009	Q1	28,625.67	15.1	9.01	11,939.92
	Q2	29,520.99	14.67	3.8	10,661.69
	Q3	29,450.83	14.31	2.7	10,035.94
	Q4	33,601.07	13.91	3.39	9,651.65
2010	Q1	29,844	13.66	3.46	9,284.75
	Q2	32,401	13.28	5	9,234.65
	Q3	33,597	13.13	6.58	8,817.62
	Q4	36,882	12.93	6.57	8,793.53
2011	Q1	37,461.05	12.6	6.32	8,481.78
	Q2	39,159.37	12.26	6.37	8,537.37
	Q3	41,077.42	12.48	3.37	8,641.89
	Q4	45,722.22	12.28	2.88	8,798.61
2012	Q1	45,734	12.06	4.06	8,862.08
	Q2	48,024	11.81	3.84	9,179.53
	Q3	49,917	11.74	4.48	9,140.62
	Q4	53,717	11.59	4.41	9,156.52
2013	Q1	52,302	11.46	4.61	9,109.67
	Q2	53,457	11.44	4.36	9,263.80
	Q3	57,359	11.7	7.24	10,422.66
	Q4	60,444	12.04	6.21	10,843.29
2014	Q1	58,162	12.31	5.88	10,058.58

	Q2	61,402	12.55	5.92	10,641.71
	Q3	64,339	12.75	3.72	10,690.49
	Q4	66,112	12.82	8.61	10,523.23
2015	Q1	66,420	12.77	7.13	10,824.87
	Q2	68,867	12.72	8.06	11,067.13
	Q3	72,433	12.62	8.36	11,994.60
	Q4	78,467	12.53	4.48	11,185.64
2016	Q1	78,342	12.38	5.7	10,641.07
	Q2	82,097	11.98	4.3	10,685.67
	Q3	82,025	11.71	3.07	10,440.05
	Q4	82,396	11.49	2.94	10,736.14
2017	Q1	81,891	11.26	3.42	10,563.20
	Q2	85,232	11.16	4.49	10,550.94
	Q3	85,032	11.04	4.17	10,644.81
	Q4	87,322	10.83	4.44	10,681.23
2018	Q1	85,383	10.67	3.7	10,795.80
	Q2	87,794	10.51	4.14	11,350.52
	Q3	90,331	10.54	3.09	11,727.28
	Q4	92,814	10.43	3.5	11,309.46
2019	Q1	92,366	10.53	3.08	11,072.06
	Q2	95,372	10.44	2.98	10,999.28
	Q3	96,343	10.35	3.57	10,957.31
	Q4	97,005	10.15	2.35	10,759.84

## 2) Data Setelah Ln

Tahun	Kuartal	Ln Kredit Modal Kerja	Ln DPK	Suku Bunga KMK	Inflasi	Ln Nilai Tukar Riil
2005	Q1	8.52	9.58	13.36	8.52	9.45
	Q2	8.59	9.64	13.29	7.67	9.47
	Q3	8.64	9.71	13.77	9.02	9.53
	Q4	8.64	9.76	15.77	15.21	9.39
2006	Q1	8.72	9.73	16.33	15.23	9.29
	Q2	8.74	9.80	16.23	16.85	9.32
	Q3	8.72	9.82	16	16.52	9.33
	Q4	8.85	9.95	15.34	7.21	9.26
2007	Q1	8.87	9.94	14.54	6.68	9.26
	Q2	8.96	10.00	14.08	5.11	9.27
	Q3	9.05	10.03	13.55	6.98	9.26
	Q4	9.14	10.12	13.1	5.71	9.28
2008	Q1	9.22	10.09	12.7	7.96	9.23
	Q2	9.35	10.16	12.44	11.92	9.23

	Q3	9.42	10.18	12.93	12.29	9.23
	Q4	9.42	10.27	18.18	12.40	9.34
2009	Q1	9.41	10.26	15.1	9.01	9.39
	Q2	9.49	10.29	14.67	3.80	9.27
	Q3	9.52	10.29	14.31	2.70	9.21
	Q4	9.59	10.42	13.91	3.39	9.17
2010	Q1	9.54	10.30	13.66	3.46	9.14
	Q2	9.61	10.39	13.28	5.00	9.13
	Q3	9.64	10.42	13.13	6.58	9.08
	Q4	9.67	10.52	12.93	6.57	9.08
2011	Q1	9.76	10.53	12.6	6.32	9.05
	Q2	9.84	10.58	12.26	6.37	9.05
	Q3	9.91	10.62	12.48	3.37	9.06
	Q4	10.00	10.73	12.28	2.88	9.08
2012	Q1	9.93	10.73	12.06	4.06	9.09
	Q2	10.04	10.78	11.81	3.84	9.12
	Q3	10.02	10.82	11.74	4.48	9.12
	Q4	10.15	10.89	11.59	4.41	9.12
2013	Q1	10.17	10.86	11.46	4.61	9.12
	Q2	10.19	10.89	11.44	4.36	9.13
	Q3	10.17	10.96	11.7	7.24	9.25
	Q4	10.21	11.01	12.04	6.21	9.29
2014	Q1	10.21	10.97	12.31	5.88	9.22
	Q2	10.28	11.03	12.55	5.92	9.27
	Q3	10.30	11.07	12.75	3.72	9.28
	Q4	10.36	11.10	12.82	8.61	9.26
2015	Q1	10.40	11.10	12.77	7.13	9.29
	Q2	10.45	11.14	12.72	8.06	9.31
	Q3	10.46	11.19	12.62	8.36	9.39
	Q4	10.51	11.27	12.53	4.48	9.32
2016	Q1	10.53	11.27	12.38	5.7	9.27
	Q2	10.58	11.32	11.98	4.3	9.28
	Q3	10.59	11.31	11.71	3.07	9.25
	Q4	10.60	11.32	11.49	2.94	9.28
2017	Q1	10.61	11.31	11.26	3.42	9.27
	Q2	10.65	11.35	11.16	4.49	9.26
	Q3	10.67	11.35	11.04	4.17	9.27
	Q4	10.70	11.38	10.83	4.44	9.28
2018	Q1	10.69	11.35	10.67	3.7	9.29
	Q2	10.70	11.38	10.51	4.14	9.34
	Q3	10.72	11.41	10.54	3.09	9.37
	Q4	10.73	11.44	10.43	3.5	9.33

2019	Q1	10.71	11.43	10.53	3.08	9.31
	Q2	10.74	11.47	10.44	2.98	9.31
	Q3	10.76	11.48	10.35	3.57	9.30
	Q4	10.77	11.48	10.15	2.35	9.28

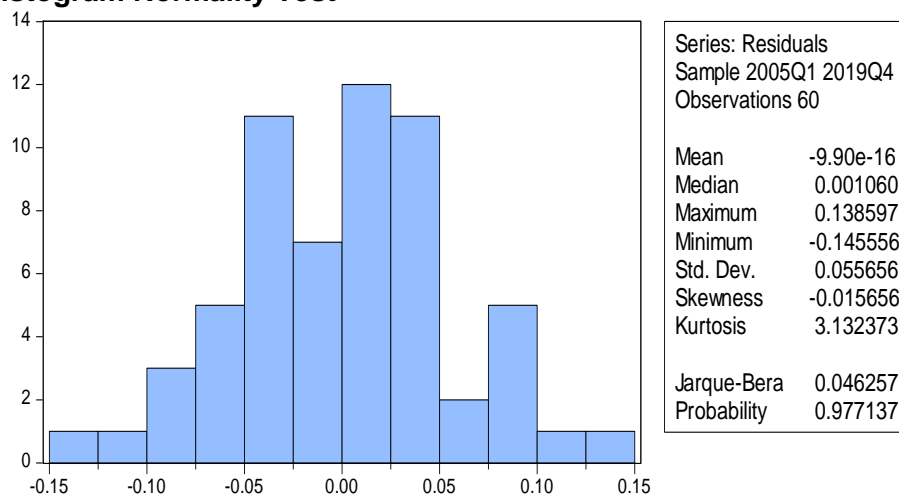


## Lampiran 2 : Estimasi Data

### 1) Hasil Estimasi Regresi

Dependent Variable: LNY1				
Method: Least Squares				
Date: 07/25/21 Time: 01:36				
Sample: 2005Q1 2019Q4				
Included observations: 60				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.614685	0.736415	0.834700	0.4075
LNx1	1.180740	0.021505	54.90488	0.0000
X2	-0.002389	0.008151	-0.293129	0.7705
X3	-0.000445	0.003233	-0.137719	0.8910
LNx4	-0.359355	0.076300	-4.709745	0.0000
R-squared	0.993782	Mean dependent var	9.890500	
Adjusted R-squared	0.993330	S.D. dependent var	0.705810	
S.E. of regression	0.057644	Akaike info criterion	-2.789394	
Sum squared resid	0.182758	Schwarz criterion	-2.614865	
Log likelihood	88.68181	Hannan-Quinn criter.	-2.721126	
F-statistic	2197.582	Durbin-Watson stat	0.622636	
Prob(F-statistic)	0.000000			

### 2) Histogram Normality Test



### 3) Heteroskedasticity Test: Harvey

Heteroskedasticity Test: Harvey			
F-statistic	1.354688	Prob. F(4,55)	0.2616
Obs*R-squared	5.381194	Prob. Chi-Square(4)	0.2504
Scaled explained SS	6.098793	Prob. Chi-Square(4)	0.1919

#### 4) Variance Inflation Factors

Variance Inflation Factors			
Date: 07/25/21 Time: 01:37			
Sample: 2005Q1 2019Q4			
Included observations: 60			
Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.542307	9792.255	NA
LNx1	0.000462	958.8887	2.843715
X2	6.64E-05	197.1806	3.384559
X3	1.05E-05	9.683165	2.307900
LNx4	0.005822	8999.475	1.145051

#### 5) Breusch-Godfrey Serial Correlation LM Test:

Breusch-Godfrey Serial Correlation LM Test:			
F-statistic	27.23111	Prob. F(2,53)	0.0000
Obs*R-squared	30.40820	Prob. Chi-Square(2)	0.0000

#### 6) Breusch-Godfrey Serial Correlation LM Test (Setelah perbaikan masalah autokolerasi)

Breusch-Godfrey Serial Correlation LM Test:				
F-statistic	1.128844	Prob. F(2,52)	0.3312	
Obs*R-squared	2.455018	Prob. Chi-Square(2)	0.2930	
Test Equation:				
Dependent Variable: RESID				
Method: Least Squares				
Date: 07/25/21 Time: 01:39				
Sample: 2005Q2 2019Q4				
Included observations: 59				
Presample missing value lagged residuals set to zero.				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000188	0.005920	0.031730	0.9748
D(LNx1)	-0.013589	0.111312	-0.122080	0.9033
D(X2)	-0.001577	0.005722	-0.275530	0.7840
D(X3)	-9.77E-05	0.002293	-0.042614	0.9662
D(LNx4)	-0.024098	0.106248	-0.226808	0.8215
RESID(-1)	0.000562	0.145744	0.003859	0.9969
RESID(-2)	0.214259	0.143553	1.492539	0.1416
R-squared	0.041610	Mean dependent var	-1.18E-19	
Adjusted R-squared	-0.068973	S.D. dependent var	0.034493	
S.E. of regression	0.035662	Akaike info criterion	-3.718451	
Sum squared resid	0.066134	Schwarz criterion	-3.471963	
Log likelihood	116.6943	Hannan-Quinn criter.	-3.622232	
F-statistic	0.376281	Durbin-Watson stat	2.026137	
Prob(F-statistic)	0.890804			

### 7) Hasil Estimasi Regresi Setelah Perbaikan Masalah Autokolerasi

Dependent Variable: D(LNY1)				
Method: Least Squares				
Date: 07/25/21 Time: 01:39				
Sample (adjusted): 2005Q2 2019Q4				
Included observations: 59 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.018519	0.005933	3.121279	0.0029
D(LNX1)	0.569667	0.110991	5.132538	0.0000
D(X2)	-0.008339	0.005616	-1.484899	0.1434
D(X3)	-0.001070	0.002245	-0.476481	0.6357
D(LNX4)	-0.245144	0.102568	-2.390064	0.0204
R-squared	0.366316	Mean dependent var		0.038136
Adjusted R-squared	0.319377	S.D. dependent var		0.043330
S.E. of regression	0.035747	Akaike info criterion		-3.743746
Sum squared resid	0.069005	Schwarz criterion		-3.567684
Log likelihood	115.4405	Hannan-Quinn criter.		-3.675019
F-statistic	7.804010	Durbin-Watson stat		2.034014
Prob(F-statistic)	0.000049			

### 8) Hasil Uji Stationer

Null Hypothesis: LNY1 has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 1 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-0.000503	0.9954
Test critical values:	1% level		-4.124265	
	5% level		-3.489228	
	10% level		-3.173114	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNY1)				
Method: Least Squares				
Date: 10/15/21 Time: 19:44				
Sample (adjusted): 2005Q3 2019Q4				
Included observations: 58 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNY1(-1)	-2.17E-05	0.043191	-0.000503	0.9996
D(LNY1(-1))	-0.322338	0.132778	-2.427642	0.0186
C	0.084002	0.373193	0.225091	0.8228
@TREND("2005Q1")	-0.001109	0.001781	-0.622484	0.5362

R-squared	0.195738	Mean dependent var	0.037555
Adjusted R-squared	0.151057	S.D. dependent var	0.044060
S.E. of regression	0.040596	Akaike info criterion	-3.503798
Sum squared resid	0.088996	Schwarz criterion	-3.361699
Log likelihood	105.6101	Hannan-Quinn criter.	-3.448448
F-statistic	4.380780	Durbin-Watson stat	1.876606
Prob(F-statistic)	0.007846		

Null Hypothesis: D(LNY1) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-10.36326	0.0000
Test critical values:	1% level		-4.124265	
	5% level		-3.489228	
	10% level		-3.173114	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNY1,2)				
Method: Least Squares				
Date: 10/15/21 Time: 19:46				
Sample (adjusted): 2005Q3 2019Q4				
Included observations: 58 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNY1(-1))	-1.322355	0.127600	-10.36326	0.0000
C	0.083815	0.013720	6.108880	0.0000
@TREND("2005Q1")	-0.001110	0.000334	-3.325286	0.0016
R-squared	0.661330	Mean dependent var	-0.000947	
Adjusted R-squared	0.649015	S.D. dependent var	0.067898	
S.E. of regression	0.040226	Akaike info criterion	-3.538281	
Sum squared resid	0.088996	Schwarz criterion	-3.431706	
Log likelihood	105.6101	Hannan-Quinn criter.	-3.496768	
F-statistic	53.70009	Durbin-Watson stat	1.876611	
Prob(F-statistic)	0.000000			

Null Hypothesis: LNX1 has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 1 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-0.258795	0.9901
Test critical values:	1% level		-4.124265	
	5% level		-3.489228	

	10% level		-3.173114	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNX1)				
Method: Least Squares				
Date: 10/15/21 Time: 19:47				
Sample (adjusted): 2005Q3 2019Q4				
Included observations: 58 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNX1(-1)	-0.016676	0.064438	-0.258795	0.7968
D(LNX1(-1))	-0.507399	0.122535	-4.140839	0.0001
C	0.235973	0.622272	0.379212	0.7060
@TREND("2005Q1")	-0.000300	0.002199	-0.136533	0.8919
R-squared	0.304912	Mean dependent var		0.031703
Adjusted R-squared	0.266296	S.D. dependent var		0.043096
S.E. of regression	0.036915	Akaike info criterion		-3.693927
Sum squared resid	0.073587	Schwarz criterion		-3.551827
Log likelihood	111.1239	Hannan-Quinn criter.		-3.638576
F-statistic	7.895986	Durbin-Watson stat		2.052613
Prob(F-statistic)	0.000185			

Null Hypothesis: D(LNX1) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 2 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.531363	0.0000
Test critical values:	1% level		-4.130526	
	5% level		-3.492149	
	10% level		-3.174802	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNX1,2)				
Method: Least Squares				
Date: 10/15/21 Time: 19:47				
Sample (adjusted): 2006Q1 2019Q4				
Included observations: 56 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNX1(-1))	-2.282021	0.303002	-7.531363	0.0000
D(LNX1(-1),2)	0.696285	0.235136	2.961204	0.0046
D(LNX1(-2),2)	0.403471	0.127372	3.167662	0.0026
C	0.110652	0.018122	6.105910	0.0000

@TREND("2005Q1")	-0.001223	0.000330	-3.708242	0.0005
R-squared	0.801803	Mean dependent var		-0.000836
Adjusted R-squared	0.786258	S.D. dependent var		0.074550
S.E. of regression	0.034466	Akaike info criterion		-3.812634
Sum squared resid	0.060584	Schwarz criterion		-3.631799
Log likelihood	111.7537	Hannan-Quinn criter.		-3.742524
F-statistic	51.57982	Durbin-Watson stat		1.594835
Prob(F-statistic)	0.000000			

Null Hypothesis: X2 has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 1 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-4.972045	0.0008
Test critical values:	1% level		-4.124265	
	5% level		-3.489228	
	10% level		-3.173114	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(X2)				
Method: Least Squares				
Date: 10/15/21 Time: 19:48				
Sample (adjusted): 2005Q3 2019Q4				
Included observations: 58 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
X2(-1)	-0.268966	0.054096	-4.972045	0.0000
D(X2(-1))	0.636783	0.097038	6.562198	0.0000
C	4.098434	0.824361	4.971649	0.0000
@TREND("2005Q1")	-0.023313	0.005006	-4.657095	0.0000
R-squared	0.521404	Mean dependent var		-0.057414
Adjusted R-squared	0.494816	S.D. dependent var		0.440425
S.E. of regression	0.313038	Akaike info criterion		0.581485
Sum squared resid	5.291597	Schwarz criterion		0.723585
Log likelihood	-12.86307	Hannan-Quinn criter.		0.636836
F-statistic	19.61005	Durbin-Watson stat		1.882278
Prob(F-statistic)	0.000000			

Null Hypothesis: D(X2) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*

Augmented Dickey-Fuller test statistic					-4.056750	0.0120
Test critical values:	1% level				-4.124265	
	5% level				-3.489228	
	10% level				-3.173114	
*MacKinnon (1996) one-sided p-values.						
Augmented Dickey-Fuller Test Equation						
Dependent Variable: D(X2,2)						
Method: Least Squares						
Date: 10/15/21 Time: 19:48						
Sample (adjusted): 2005Q3 2019Q4						
Included observations: 58 after adjustments						
	Variable	Coefficient	Std. Error	t-Statistic	Prob.	
	D(X2(-1))	-0.461156	0.113676	-4.056750	0.0002	
	C	0.021802	0.102341	0.213029	0.8321	
	@TREND("2005Q1")	-0.001677	0.002961	-0.566549	0.5733	
	R-squared	0.230349	Mean dependent var		-0.005345	
	Adjusted R-squared	0.202362	S.D. dependent var		0.419332	
	S.E. of regression	0.374508	Akaike info criterion		0.923931	
	Sum squared resid	7.714093	Schwarz criterion		1.030506	
	Log likelihood	-23.79401	Hannan-Quinn criter.		0.965444	
	F-statistic	8.230473	Durbin-Watson stat		1.603286	
	Prob(F-statistic)	0.000747				

Null Hypothesis: X3 has a unit root						
Exogenous: Constant, Linear Trend						
Lag Length: 2 (Automatic - based on SIC, maxlag=2)						
			t-Statistic	Prob.*		
Augmented Dickey-Fuller test statistic					-4.523093	0.0032
Test critical values:	1% level				-4.127338	
	5% level				-3.490662	
	10% level				-3.173943	
*MacKinnon (1996) one-sided p-values.						
Augmented Dickey-Fuller Test Equation						
Dependent Variable: D(X3)						
Method: Least Squares						
Date: 10/15/21 Time: 19:48						
Sample (adjusted): 2005Q4 2019Q4						
Included observations: 57 after adjustments						
	Variable	Coefficient	Std. Error	t-Statistic	Prob.	
	X3(-1)	-0.514426	0.113733	-4.523093	0.0000	

D(X3(-1))	0.285502	0.128740	2.217656	0.0310
D(X3(-2))	0.309816	0.131248	2.360539	0.0220
C	5.280426	1.303495	4.050975	0.0002
@TREND("2005Q1")	-0.068690	0.021640	-3.174167	0.0025
R-squared	0.285329	Mean dependent var		-0.117018
Adjusted R-squared	0.230354	S.D. dependent var		2.232605
S.E. of regression	1.958653	Akaike info criterion		4.266022
Sum squared resid	199.4887	Schwarz criterion		4.445237
Log likelihood	-116.5816	Hannan-Quinn criter.		4.335671
F-statistic	5.190178	Durbin-Watson stat		2.022082
Prob(F-statistic)	0.001355			

Null Hypothesis: D(X3) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.103320	0.0000
Test critical values:	1% level		-4.124265	
	5% level		-3.489228	
	10% level		-3.173114	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(X3,2)				
Method: Least Squares				
Date: 10/15/21 Time: 19:49				
Sample (adjusted): 2005Q3 2019Q4				
Included observations: 58 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(X3(-1))	-0.957647	0.134817	-7.103320	0.0000
C	0.043709	0.616258	0.070927	0.9437
@TREND("2005Q1")	-0.004322	0.017712	-0.244015	0.8081
R-squared	0.478641	Mean dependent var		-0.006379
Adjusted R-squared	0.459682	S.D. dependent var		3.071926
S.E. of regression	2.258059	Akaike info criterion		4.517227
Sum squared resid	280.4357	Schwarz criterion		4.623801
Log likelihood	-127.9996	Hannan-Quinn criter.		4.558740
F-statistic	25.24675	Durbin-Watson stat		1.984715
Prob(F-statistic)	0.000000			



Null Hypothesis: LNX4 has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 0 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-2.266124	0.4452
Test critical values:	1% level		-4.121303	
	5% level		-3.487845	
	10% level		-3.172314	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNX4)				
Method: Least Squares				
Date: 10/15/21 Time: 19:49				
Sample (adjusted): 2005Q2 2019Q4				
Included observations: 59 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNX4(-1)	-0.127743	0.056371	-2.266124	0.0273
C	1.167716	0.522094	2.236601	0.0293
@TREND("2005Q1")	0.000376	0.000347	1.083250	0.2833
R-squared	0.104240	Mean dependent var		-0.002884
Adjusted R-squared	0.072248	S.D. dependent var		0.047064
S.E. of regression	0.045332	Akaike info criterion		-3.300107
Sum squared resid	0.115078	Schwarz criterion		-3.194470
Log likelihood	100.3532	Hannan-Quinn criter.		-3.258871
F-statistic	3.258362	Durbin-Watson stat		1.755025
Prob(F-statistic)	0.045853			

Null Hypothesis: D(LNX4) has a unit root				
Exogenous: Constant, Linear Trend				
Lag Length: 1 (Automatic - based on SIC, maxlag=2)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.117170	0.0000
Test critical values:	1% level		-4.127338	
	5% level		-3.490662	
	10% level		-3.173943	
*MacKinnon (1996) one-sided p-values.				
Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(LNX4,2)				
Method: Least Squares				
Date: 10/15/21 Time: 19:49				
Sample (adjusted): 2005Q4 2019Q4				

Included observations: 57 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNX4(-1))	-1.231693	0.173059	-7.117170	0.0000
D(LNX4(-1),2)	0.317036	0.127163	2.493144	0.0158
C	-0.026843	0.013040	-2.058510	0.0445
@TREND("2005Q1")	0.000710	0.000371	1.915264	0.0609
R-squared	0.533896	Mean dependent var		-0.001267
Adjusted R-squared	0.507513	S.D. dependent var		0.063775
S.E. of regression	0.044755	Akaike info criterion		-3.307617
Sum squared resid	0.106161	Schwarz criterion		-3.164245
Log likelihood	98.26710	Hannan-Quinn criter.		-3.251898
F-statistic	20.23619	Durbin-Watson stat		1.673459
Prob(F-statistic)	0.000000			

## Lampiran 3 : Biodata

**BIODATA****Identitas Diri**

Nama : NADIA EKANANDA RAMMA  
 Tempat/Tanggal Lahir : Nanggala, 26 Januari 1999  
 Jenis Kelamin : Perempuan  
 Alamat Rumah : Jl. Perintis Kemerdekaan, Makassar  
 Alamat E-mail : [ekanandaramma@gmail.com](mailto:ekanandaramma@gmail.com)

**Riwayat Pendidikan****Pendidikan Formal**

1. SDN Saatu Poso Pesisir Kabupaten Poso, Provinsi Sulawesi Tengah
2. SMPN 1 Nanggala Kabupaten Toraja Utara, Provinsi Sulawesi Selatan
3. SMA Kristen 2 Rantepao/Sekolah Lentera Harapan Toraja (SMA)

**Pendidikan Non-Formal**

1. *Basic Learning Skills, Character & Creativity (BALANCE)* Universitas Hasanuddin tahun 2017
2. *In House Training* LPM MEDIA EKONOMI FEB-UH
3. *Economics Leadership Training* Himpunan Mahasiswa Jurusan Ilmu Ekonomi (Himajie) FEB-UH
4. Latihan Dasar Kepemimpinan Kristen Persekutuan Mahasiswa Kristen Oikumene (PMKO) FEB-UH

**Pengalaman Organisasi**

1. Anggota Divisi Kerohanian PMKO FEB-UH periode 2018/2019
2. Koordinator Pembinaan dan Keilmuan PMKO FEB UH periode 2019/2020
3. Anggota Biro Keilmuekonomian, Departemen Keilmuan dan Advokasi Himajie FEB-UH periode 2019/2020
4. Sekretaris Umum Himajie FEB-UH Periode 2021
5. Anggota Divisi Pendidikan Generasi Baru Indonesia (GenBI) komisariat Universitas Hasanuddin Periode 2020
6. Anggota Departemen Penerbitan, Pelatihan, dan Pengembangan LPM MEDKOM FEB-UH Periode 2021

Makassar, 20 Oktober 2021

**Nadia Ekananda Ramma**