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**LAMPIRAN****Lampiran 1 (Biodata Penulis)**

**Nama** : Andika Fadil Rachman  
**Tempat/Tanggal lahir** : Makassar, 14 Agustus 1999  
**Jenis kelamin** : Laki-laki  
**Agama** : Islam  
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**Riwayat Pendidikan**

**2005-2011** : SD Inpres Bawakaraeng Makassar  
**2011-2014** : SMPN 1 Mamuju  
**2014-2017** : SMAN 1 Mamuju  
**2017-2018** : S1 Ilmu Hukum UIN Alauddin Makassar  
**2018-2022** : S1 Ilmu Ekonomi Universitas Hasanuddin

**Pengalaman Organisasi**

1. Anggota Himpunan Mahasiswa Jurusan Ilmu Ekonomi (Himajie FEB-UH)
2. Anggota Aiesec in Unhas

**Makassar, 20 Maret 2022**



**Andika Fadil Rachman**

## Lampiran 2

### 1. Data sebelum Di Ln kan

Y (RCA)	X1 (Harga nikel Internasional)	X2 (volatilitas nilai tukar)	X3 (inflasi (WPI))	D1 (dummy kebijakan hilirisasi)
11,38594	14733	56,09%	23,4%	0
12,4666	23246,75	25,21%	6,9%	0
13,6024	36817	26,38%	-21,1%	0
11,4093	20648	61,01%	11,8%	0
7,464053	14950	76,02%	12,0%	0
10,87044	22287,17	64,64%	20,5%	0
7,430443	23053,4	18,50%	-50,9%	0
6,106454	17435	8,66%	15,6%	0
6,061314	14863,46	42,98%	4,6%	0
7,11023	16780,63	82,56%	-52,5%	1
7,171796	11583,58	27,57%	4,2%	1
6,276136	9595,042	39,86%	7,3%	1
5,685714	10566,46	15,30%	4,4%	0
5,751948	14071,25	28,76%	5,2%	0
5,665052	14076,25	23,54%	0,9%	0
5,955298	12349,77	52,40%	-60,4%	1

### 2. Data setelah di Ln kan

Y (RCA)	X1 (Harga nikel Internasional)	X2 (volatilitas nilai tukar)	X3 (inflasi (WPI))	D1 (dummy kebijakan hilirisasi)
2,432379511	9,597845	56,0944277	23,44217129	0
2,523052864	10,05392	25,209155	6,93906497	0
2,610246388	10,51371	26,3784083	-21,07661823	0
2,434428996	9,935374	61,0059338	11,82294700	0
2,010098527	9,612467	76,0186651	12,02541374	0
2,386047281	10,01177	64,6375932	20,52044307	0
2,005585441	10,04557	18,4997307	-50,91881261	0
1,809346228	9,766235	8,66215862	15,55866937	0
1,801926577	9,606661	42,9830377	4,58529339	0
1,961534558	9,72798	82,5597975	-52,48414376	1
1,970156085	9,357344	27,569822	4,20946044	1

1,836754563	9,169002	39,8592565	7,30758917	1
1,737956741	9,26544	15,3012168	4,43974630	0
1,749538552	9,551889	28,7591378	5,17010936	0
1,734316161	9,552244	23,5406636	0,92096551	0
1,784281293	9,421393	52,402582	-60,43457267	1

### Lampiran 3. Estimasi data dan uji asumsi klasik

#### 1. Hasil estimasi data

Dependent Variable: SER01  
Method: Least Squares  
Date: 01/10/22 Time: 12:28  
Sample: 2005 2020  
Included observations: 16

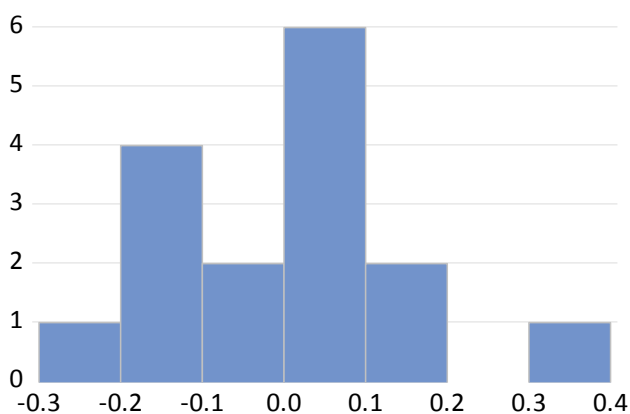
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-6.771877	1.699584	-3.984433	0.0021
LnX1	0.894311	0.174446	5.126571	0.0003
X2	0.002696	0.002163	1.246142	0.2386
X3	0.005948	0.002209	2.692070	0.0210
D1	0.250978	0.156657	1.602091	0.1374

R-squared	0.763717	Mean dependent var	2.049228
Adjusted R-squared	0.677796	S.D. dependent var	0.314662
S.E. of regression	0.178611	Akaike info criterion	-0.356902
Sum squared resid	0.350922	Schwarz criterion	-0.115468
Log likelihood	7.855213	Hannan-Quinn criter.	-0.344538
F-statistic	8.888581	Durbin-Watson stat	1.077976
Prob(F-statistic)	0.001862		

#### 2. Histogram normality test

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Series: Residuals	
Sample 2005 2020	
Observations 16	
Mean	-3.99e-16
Median	0.015053
Maximum	0.330142
Minimum	-0.268724
Std. Dev.	0.152954
Skewness	0.352926
Kurtosis	2.695008
Jarque-Bera	0.394164
Probability	0.821123

### 3. Variance inflation factors

Variance Inflation Factors

Date: 01/10/22 Time: 12:31

Sample: 2005 2020

Included observations: 16

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	2.888585	1448.727	NA
SER02	0.030432	1437.558	1.717970
SER03	4.68E-06	4.980176	1.112517
SER04	4.88E-06	1.702797	1.658612
SER05	0.024541	3.077081	2.307811

### 4. Heteroskedasticity test : Harvey

Heteroskedasticity Test: Harvey

Null hypothesis: Homoskedasticity

F-statistic	1.718346	Prob. F(4,11)	0.2158
Obs*R-squared	6.152956	Prob. Chi-Square(4)	0.1880
Scaled explained SS	4.454696	Prob. Chi-Square(4)	0.3480

### 5. Breusch-Godfrey Serial Correlation LM Test

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	0.777325	Prob. F(2,9)	0.4882
Obs*R-squared	2.356725	Prob. Chi-Square(2)	0.3078

### Lampiran 4 volatilitas nilai tukar

rupiah/dollar	dollar/rupiah	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
11645,9	8,58671E-05	-0,166740063	-16,674006%	0,046745356	2005	56%
9857,318	0,000101447	0,018316177	1,831618%			
10039,53	9,96063E-05	0,005350454	0,535045%			
10093,39	9,90747E-05	0,013695016	1,369502%			
10232,57	9,77272E-05	-0,024373433	-2,437343%			
9986,182	0,000100138	-0,018892812	-1,889281%			
9799,286	0,000102048	-0,018833832	-1,883383%			
9616,455	0,000103988	-0,014312475	-1,431247%			
9479,8	0,000105487	0,005789449	0,578945%			

9534,842	0,000104879	-0,017383651	-1,738365%			
9370,524	0,000106718	-0,01349221	-1,349221%			
9244,944	0,000108167	-0,004422338	-0,442234%			
9204,15	0,000108647	0,002064761	0,206476%			
9.223	0,000108423					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9086,8	0,00011005	0,005245605	0,524560%	0,021007629	2006	25,209%
9134,591	0,000109474	0,005740183	0,574018%			
9187,176	0,000108847	-0,004783619	-0,478362%			
9143,333	0,000109369	-0,005382634	-0,538263%			
9094,25	0,00010996	0,003427717	0,342772%			
9125,476	0,000109583	0,025666532	2,566653%			
9362,727	0,000106806	-0,04119599	-4,119599%			
8984,857	0,000111298	-0,005346908	-0,534691%			
8936,944	0,000111895	0,025914895	2,591489%			
9171,571	0,000109033	0,008855443	0,885544%			
9253,15	0,000108071	0,025590651	2,559065%			
9493	0,000105341	-0,030900216	-3,090022%			
9204,15	0,000108647					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9333,6	0,00010714	-0,007384272	-0,738427%	0,021982007	2007	26,3784%
9264,932	0,000107934	-0,017283656	-1,728366%			
9106,176	0,000109816	0,022125485	2,212549%			
9309,9	0,000107413	0,006080575	0,608057%			
9366,682	0,000106761	-0,032502477	-3,250248%			
9067,136	0,000110288	-0,009250189	-0,925019%			
8983,65	0,000111313	-0,015629344	-1,562934%			
8844,333	0,000113067	0,028228232	2,822823%			
9097,55	0,00010992	0,00727238	0,727238%			
9163,952	0,000109123	-0,01054785	-1,054785%			
9067,8	0,00011028	-0,000133448	-0,013345%			
9066,59	0,000110295	0,045958456	4,595846%			
9493	0,000105341					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
11324,842	8,83015E-05	0,03354266	3,3543%	0,050838278	2008	61,0059%
11711,15	8,53887E-05	-0,153132938	-15,3133%			

10048,35	9,95188E-05	-0,072842159	-7,2842%			
9342,429	0,000107039	-0,020894374	-2,0894%			
9149,25	0,000109299	0,001551382	0,1551%			
9163,455	0,000109129	0,014330143	1,4330%			
9295,714	0,000107576	-0,00052877	-0,0529%			
9290,8	0,000107633	-0,008882815	-0,8883%			
9208,637	0,000108594	-0,002576226	-0,2576%			
9184,944	0,000108874	-0,000413153	-0,0413%			
9181,15	0,000108919	0,024232524	2,4233%			
9406,35	0,000106311	-0,036788764	-3,6789%			
9066,59	0,000110295					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9457,4	0,000105737	0,001326124	0,1326%	0,063348888	2009	76,0187%
9469,95	0,000105597	0,001348306	0,1348%			
9482,727	0,000105455	0,043135751	4,3136%			
9900,722	0,000101003	0,007734897	0,7735%			
9977,6	0,000100225	0,013290755	1,3291%			
10111,095	9,89013E-05	0,009404761	0,9405%			
10206,636	9,79755E-05	0,018575383	1,8575%			
10398	9,61723E-05	0,058538336	5,8538%			
11024,85	9,07042E-05	0,072138076	7,2138%			
11849,55	8,43914E-05	0,000270016	0,0270%			
11852,75	8,43686E-05	-0,059695865	-5,9696%			
11165,895	8,95584E-05	-0,17151626	-17,1516%			
9406	0,000106315					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9022,619	0,000110833	-0,00938017	-0,938%	0,053864661	2010	64,6376%
8938,381	0,000111877	-0,001172712	-0,117%			
8927,905	0,000112008	0,005354981	0,535%			
8975,842	0,00011141	-0,000454657	-0,045%			
8971,762	0,000111461	0,008622446	0,862%			
9049,455	0,000110504	0,010870531	1,087%			
9148,364	0,000109309	0,00380186	0,380%			
9183,211	0,000108894	-0,017119951	-1,712%			
9027,333	0,000110775	0,016086663	1,609%			
9173,727	0,000109007	0,01884135	1,884%			
9348,211	0,000106972	-0,007813863	-0,781%			



9275,45	0,000107811	0,185492918	18,549%			
11165,895	8,95584E-05					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9088,476	0,000110029	-0,008097192	-0,8097%	0,015416442	2011	18,4997%
9015,182	0,000110924	-0,013393968	-1,3394%			
8895,238	0,00011242	-0,014692516	-1,4693%			
8765,5	0,000114084	-0,026999761	-2,7000%			
8532	0,000117206	0,00014509	0,0145%			
8533,238	0,000117189	0,00359848	0,3598%			
8564	0,000116768	-0,000957955	-0,0958%			
8555,8	0,00011688	0,011100183	1,1100%			
8651,3	0,00011559	0,012655014	1,2655%			
8761,478	0,000114136	0,017096457	1,7096%			
8912,556	0,000112201	0,013908351	1,3908%			
9037,381	0,000110652	0,026001705	2,6002%			
9275,45	0,000107811					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
9645,889	0,000103671	-0,001861487	-0,1861%	0,007218466	2012	8,66%
9627,95	0,000103864	-0,003205606	-0,3206%			
9597,136	0,000104198	-0,003212988	-0,3213%			
9566,35	0,000104533	-0,006976566	-0,6977%			
9499,842	0,000105265	-0,004563208	-0,4563%			
9456,591	0,000105746	-0,000576272	-0,0576%			
9451,143	0,000105807	-0,017171515	-1,7172%			
9290,238	0,00010764	-0,012427283	-1,2427%			
9175,5	0,000108986	-0,001108674	-0,1109%			
9165,333	0,000109107	-0,015345282	-1,5345%			
9025,762	0,000110794	0,009195702	0,9196%			
9109,143	0,00010978	-0,007909214	-0,7909%			
9037,381	0,000110652					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
12087,1	8,27328E-05	-0,061432705	-6,1433%	0,035819198	2013	43%
11613,1	8,61097E-05	-0,023247536	-2,3248%			
11366,905	8,79747E-05	-0,070868144	-7,0868%			
11346,238	8,81349E-05	-0,118988842	-11,8989%			

10589,235	9,44355E-05	-0,069170966	-6,9171%			
10073,391	9,92714E-05	-0,031511862	-3,1512%			
9881,526	0,000101199	-0,016065269	-1,6065%			
9760,909	0,000102449	-0,00528888	-0,5289%			
9724,045	0,000102838	-0,003853035	-0,3853%			
9709,421	0,000102993	-0,002277805	-0,2278%			
9686,65	0,000103235	-0,061470014	-6,1470%			
9687,33	0,000103228	-0,061540212	-6,1540%			
9109,143	0,00010978					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
12438,286	8,03969E-05	-0,022767232	-2,2767%	0,068799831	2014	82,560%
12158,3	8,22483E-05	-0,001105206	-0,1105%			
12144,87	8,23393E-05	-0,021144137	-2,1144%			
11890,773	8,40988E-05	-0,015604213	-1,5604%			
11706,667	8,54214E-05	-0,001505489	-0,1505%			
11689,056	8,55501E-05	0,017264936	1,7265%			
11892,619	8,40858E-05	-0,031317461	-3,1317%			
11525,944	8,67608E-05	-0,007856081	-0,7856%			
11435,75	8,74451E-05	-0,000761062	-0,0761%			
11427,05	8,75116E-05	0,043500287	4,3500%			
11935,1	8,37865E-05	0,020282888	2,0283%			
12179,65	8,21042E-05	-0,22894768	-22,8948%			
9687,33	0,000103228					
rupiah/dollar	dollar/rupee	perubahan aritmatik	aritmatik change (percentage)	standar deviasi perubahan aritmatik		
13854,6	7,21782E-05	-0,013225598	-1,3226%	0,022974852	2015	27,57%
13672,571	7,31391E-05	0,008976621	0,8977%			
13795,857	7,24855E-05	0,04258866	4,2589%			
14396,095	6,94633E-05	-0,043611736	-4,3612%			
13781,75	7,25597E-05	-0,029973736	-2,9974%			
13374,789	7,47675E-05	-0,004612638	-0,4613%			
13313,238	7,51132E-05	-0,013057836	-1,3058%			
13140,526	7,61005E-05	-0,014778088	-1,4778%			
12947,762	7,72334E-05	0,009153085	0,9153%			
13066,818	7,65297E-05	-0,02455716	-2,4557%			
12749,842	7,84323E-05	-0,01348257	-1,3483%			
12579,095	7,9497E-05	-0,032269783	-3,2270%			
12179,65	8,21042E-05					

rupiah/dollar	dollar/ruipah	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
13416,75	7,45337E-05	-0,007288464	-0,7288%	0,033216047	2016	39,86%
13319,318	7,50789E-05	-0,022940984	-2,2941%			
13017,238	7,68212E-05	0,007728997	0,7729%			
13118,238	7,62297E-05	0,003558317	0,3558%			
13165	7,5959E-05	-0,003767056	-0,3767%			
13115,5	7,62457E-05	0,018099479	1,8099%			
13355,045	7,48781E-05	0,004825835	0,4826%			
13419,65	7,45176E-05	-0,018030371	-1,8030%			
13179,857	7,58734E-05	0,001007546	0,1008%			
13193,143	7,57969E-05	0,024154748	2,4155%			
13515,7	7,3988E-05	0,027248787	2,7249%			
13889,05	7,19992E-05	-0,099064451	-9,9064%			
12579,095	7,9497E-05					
rupiah/dollar	dollar/ruipah	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
13556,667	7,37644E-05	-0,002163859	-0,216386%	0,012751014	2017	15,301%
13527,364	7,39242E-05	-0,000100838	-0,010084%			
13526	7,39317E-05	-0,016588555	-1,658856%			
13303,474	7,51683E-05	0,002878109	0,287811%			
13341,818	7,49523E-05	2,07616E-05	0,002076%			
13342,095	7,49507E-05	-0,003291627	-0,329163%			
13298,25	7,51979E-05	0,001885687	0,188569%			
13323,35	7,50562E-05	-0,001241149	-0,124115%			
13306,824	7,51494E-05	0,002902263	0,290226%			
13345,5	7,49316E-05	-0,000349092	-0,034909%			
13340,842	7,49578E-05	0,001242553	0,124255%			
13357,429	7,48647E-05	0,03902805	3,902805%			
13889,05	7,19992E-05					
rupiah/dollar	dollar/ruipah	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
14496,947	6,898E-05	0,045966254	4,5966%	0,023965948	2018	28,759%
14696,857	6,80418E-05	0,011627159	1,1627%			
15178,87	6,58811E-05	-0,041636108	-4,1636%			
14868,737	6,72552E-05	-0,031026176	-3,1026%			
14559,857	6,8682E-05	-0,035717002	-3,5717%			
14414,5	6,93746E-05	-0,024922095	-2,4922%			

14049	7,11794E-05	-0,017668737	-1,7669%			
14059,7	7,11253E-05	-0,021671288	-2,1671%			
13802,952	7,24483E-05	-0,015544354	-1,5544%			
13758,286	7,26835E-05	-0,027853002	-2,7853%			
13590,053	7,35832E-05	-0,017265419	-1,7265%			
13380,364	7,47364E-05	-0,00171555	-0,1716%			
13357,429	7,48647E-05					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
14017,452	7,13396E-05	0,003650484	0,36505%	0,01961722	2019	23,541%
14068,716	7,10797E-05	0,003466158	0,34662%			
14117,565	7,08337E-05	-0,000458399	-0,04584%			
14111,095	7,08662E-05	0,009237138	0,92371%			
14242,045	7,02146E-05	-0,01408065	-1,40806%			
14042,913	7,12103E-05	0,012990887	1,29909%			
14226,533	7,02912E-05	0,011620034	1,16200%			
14392,81	6,94791E-05	-0,017538742	-1,75387%			
14142,579	7,07085E-05	0,004826278	0,48263%			
14211	7,0368E-05	-0,012447069	-1,24471%			
14035,211	7,12494E-05	0,009073289	0,90733%			
14163,136	7,06058E-05	-0,056854274	-5,68543%			
13380,364	7,47364E-05					
rupiah/dollar	dollar/rupee	perubahan aritmatik	perubahan aritmatik (percentage)	standar deviasi perubahan aritmatik		
14165,686	7,05931E-05	0,005008443	0,5008%	0,043668818	2020	52,40%
14236,812	7,02404E-05	0,035986557	3,5987%			
14758,476	6,77577E-05	0,006044718	0,6045%			
14847,957	6,73493E-05	-0,008349303	-0,8349%			
14724,503	6,7914E-05	-0,0096969	-0,9697%			
14582,411	6,85758E-05	-0,026859012	-2,6859%			
14195,955	7,04426E-05	0,048819565	4,8820%			
14906,191	6,70862E-05	0,062492077	6,2492%			
15867,432	6,30222E-05	-0,043330316	-4,3330%			
15194,574	6,5813E-05	-0,097999337	-9,7999%			
13776,153	7,25892E-05	-0,003193575	-0,3194%			
13732,228	7,28214E-05	0,030897054	3,0897%			
14163,136	7,06058E-05					