

# LAMPIRAN

## Lampiran 1. Uji Stasioneritas

### ROA

Null Hypothesis: ROA\_\_ has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.119317	0.1177
Test critical values:		
1% level	-4.243644	
5% level	-3.544284	
10% level	-3.204699	

\*MacKinnon (1996) one-sided p-values.

### BOPO

Null Hypothesis: BOPO\_\_ has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.682628	0.2494
Test critical values:		
1% level	-4.243644	
5% level	-3.544284	
10% level	-3.204699	

### FDR

Null Hypothesis: FDR\_\_ has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.256408	0.8818
Test critical values:		
1% level	-4.252879	
5% level	-3.548490	
10% level	-3.207094	

### CAR

Null Hypothesis: CAR\_\_ has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.264620	0.4412
Test critical values:		
1% level	-4.243644	
5% level	-3.544284	
10% level	-3.204699	

### Lampiran 2. Uji Stasioneritas First Differencing

### ROA

Null Hypothesis: D(ROA \_\_) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.263945	0.0000
Test critical values:		
1% level	-4.252879	
5% level	-3.548490	
10% level	-3.207094	

## BOPO

Null Hypothesis: D(BOPO\_) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.313559	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

## FDR

Null Hypothesis: D(FDR\_) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.931970	0.0000
Test critical values:	1% level	-4.252879	
	5% level	-3.548490	
	10% level	-3.207094	

## CAR

Null Hypothesis: CAR\_ has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.264620	0.4412
Test critical values:	1% level	-4.243644	

5% level

-3.544284

10% level

-3.204699



### Lampiran 3. Uji Lag Optimal

VAR Lag Order Selection Criteria

Endogenous variables: ROA\_\_ BOPO\_\_ FDR\_\_ CAR\_\_

Exogenous variables: C

Date: 10/14/19 Time: 08:15

Sample: 2016M01 2018M12

Included observations: 31

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-156.8995	NA	0.378779	10.38062	10.56565	10.44093
1	-71.19390	143.7643	0.004268	5.883477	6.808630*	6.185054
2	-48.42383	32.31880*	0.002920*	5.446699	7.111974	5.989537*
3	-39.53500	10.32252	0.005377	5.905484	8.310882	6.689583
4	-22.63004	15.26899	0.006992	5.847099	8.992620	6.872461
5	7.337907	19.33416	0.005352	4.945941*	8.831584	6.212564

\* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)

FPE: Final prediction error

AIC: Akaike information criterion

SC: Schwarz information criterion

HQ: Hannan-Quinn information criterion

### Lampiran 4. Uji Kausalitas Granger

Pairwise Granger Causality Tests

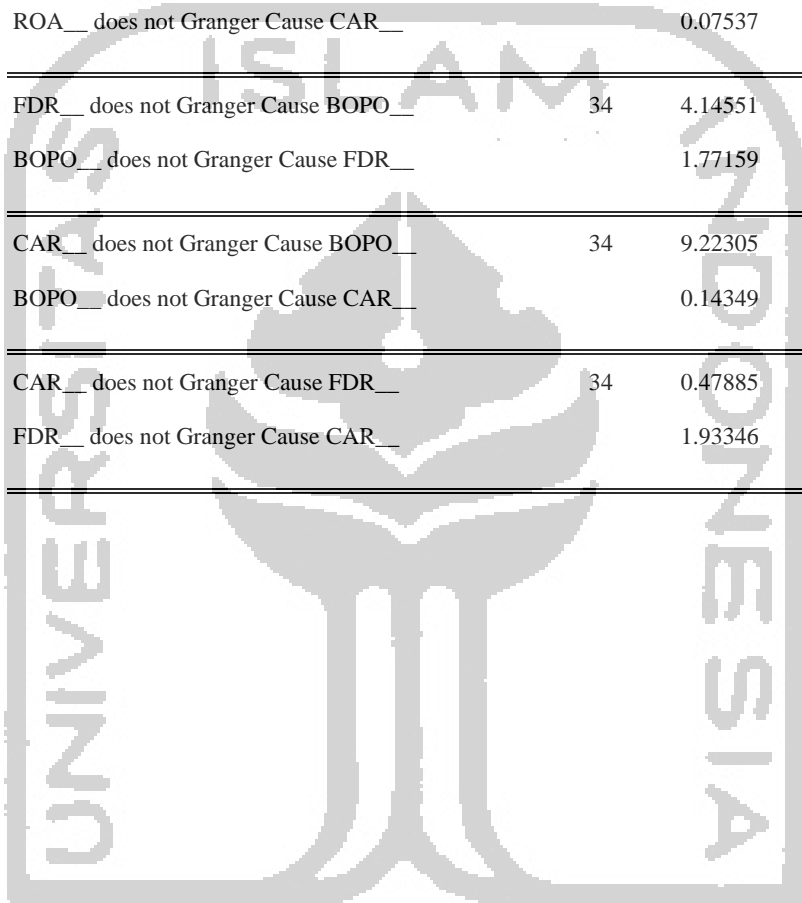
Date: 10/14/19 Time: 08:21

Sample: 2016M01 2018M12

Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
BOPO__ does not Granger Cause ROA__	34	0.57753	0.5676

ROA__ does not Granger Cause BOPO__		0.09329	0.9112
<hr/>			
FDR__ does not Granger Cause ROA__	34	2.60997	0.0907
ROA__ does not Granger Cause FDR__		1.76209	0.1896
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CAR__ does not Granger Cause ROA__	34	5.78620	0.0077
ROA__ does not Granger Cause CAR__		0.07537	0.9276
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FDR__ does not Granger Cause BOPO__	34	4.14551	0.0261
BOPO__ does not Granger Cause FDR__		1.77159	0.1880
<hr/>			
CAR__ does not Granger Cause BOPO__	34	9.22305	0.0008
BOPO__ does not Granger Cause CAR__		0.14349	0.8669
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CAR__ does not Granger Cause FDR__	34	0.47885	0.6243
FDR__ does not Granger Cause CAR__		1.93346	0.1628
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## Lampiran 5. Uji Kointegrasi

Unrestricted Cointegration Rank Test (Trace)

Hypothesized		Trace	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.683500	67.37428	63.87610	0.0247
At most 1	0.355609	29.41000	42.91525	0.5374
At most 2	0.288082	14.90818	25.87211	0.5822
At most 3	0.105929	3.695009	12.51798	0.7857

Trace test indicates 1 cointegrating eqn(s) at the 0.05 level

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized		Max-Eigen	0.05	
No. of CE(s)	Eigenvalue	Statistic	Critical Value	Prob.**
None *	0.683500	37.96428	32.11832	0.0086
At most 1	0.355609	14.50182	25.82321	0.6788
At most 2	0.288082	11.21317	19.38704	0.4916
At most 3	0.105929	3.695009	12.51798	0.7857

## Lampiran 6. Estimasi VECM Jangka Panjang

Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
ROA_(-1)	1.000000
BOPO_(-1)	0.138191 (0.00653) [ 21.1576]

FDR\_(-1)            0.035916  
                               (0.00867)  
                               [ 4.14413]

CAR\_(-1)            -0.088921  
                               (0.01605)  
                               [-5.54126]

@TREND(16M01)    0.041643  
                               (0.00523)  
                               [ 7.95663]

C                        -15.99277

**Lampiran 7. Estimasi VECM Jangka Pendek**

Error Correction:	D(ROA__)	D(BOPO__)	D(FDR__)	D(CAR__)
CointEq1	1.557862 (0.67683) [ 2.30171]	-9.369358 (4.97213) [-1.88438]	-12.25595 (2.75107) [-4.45498]	5.550672 (1.92984) [ 2.87624]
D(ROA_(-1))	-2.026086 (0.79072) [-2.56234]	9.156025 (5.80878) [ 1.57624]	10.68372 (3.21398) [ 3.32414]	-3.669663 (2.25457) [-1.62766]
D(ROA_(-2))	-1.009479 (0.56775) [-1.77802]	5.293332 (4.17085) [ 1.26913]	6.591024 (2.30772) [ 2.85608]	-2.238913 (1.61884) [-1.38304]
D(BOPO_(-1))	-0.250603 (0.10364)	1.206107 (0.76138)	1.485165 (0.42127)	-0.445635 (0.29551)



		[-2.41797]	[ 1.58412]	[ 3.52547]	[-1.50800]
D(BOPO__(-2))	-0.117801	0.587990	0.733394	-0.335207	
	(0.07553)	(0.55488)	(0.30702)	(0.21537)	
	[-1.55960]	[ 1.05966]	[ 2.38878]	[-1.55644]	
D(FDR__(-1))	0.019249	-0.074777	-0.308229	0.149218	
	(0.03784)	(0.27799)	(0.15381)	(0.10790)	
	[ 0.50868]	[-0.26899]	[-2.00391]	[ 1.38295]	
D(FDR__(-2))	0.003355	0.147850	-0.081016	0.182198	
	(0.04021)	(0.29542)	(0.16345)	(0.11466)	
	[ 0.08342]	[ 0.50048]	[-0.49565]	[ 1.58902]	
D(CAR__(-1))	0.037924	0.080626	-0.676591	0.208543	
	(0.07431)	(0.54592)	(0.30205)	(0.21189)	
	[ 0.51033]	[ 0.14769]	[-2.23996]	[ 0.98422]	
D(CAR__(-2))	0.210015	-1.530396	-0.189819	0.061109	
	(0.07144)	(0.52481)	(0.29038)	(0.20370)	
	[ 2.93977]	[-2.91609]	[-0.65370]	[ 0.30000]	
C	-0.054474	0.266687	-0.032830	0.134973	
	(0.04587)	(0.33695)	(0.18643)	(0.13078)	
	[-1.18765]	[ 0.79147]	[-0.17609]	[ 1.03205]	

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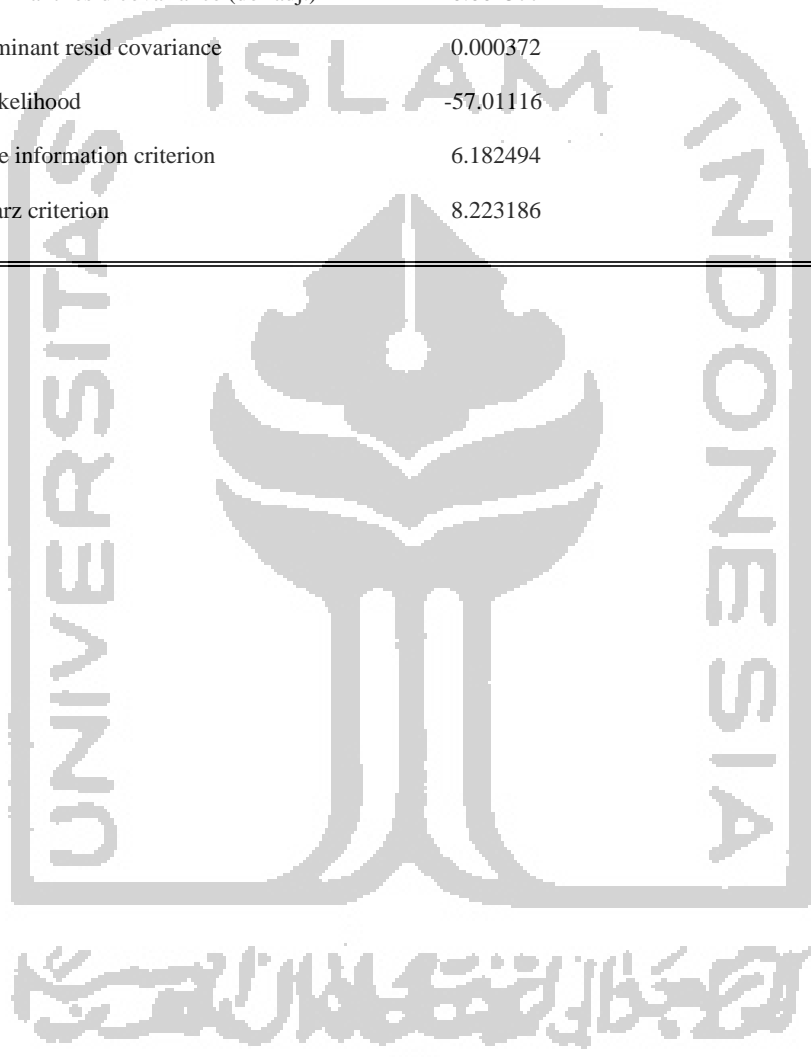
R-squared	0.429037	0.419135	0.598359	0.320324
Adj. R-squared	0.205617	0.191840	0.441195	0.054364
Sum sq. resid	0.873299	47.12934	14.42808	7.099830
S.E. equation	0.194858	1.431468	0.792028	0.555597
F-statistic	1.920313	1.844015	3.807230	1.204407
Log likelihood	13.10277	-52.70538	-33.17401	-21.47377

Akaike AIC	-0.188047	3.800326	2.616606	1.907501
Schwarz SC	0.265440	4.253813	3.070094	2.360988
Mean dependent	0.012103	-0.158182	-0.272439	0.166328
S.D. dependent	0.218626	1.592330	1.059523	0.571345

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Determinant resid covariance (dof adj.)	0.001577
Determinant resid covariance	0.000372
Log likelihood	-57.01116
Akaike information criterion	6.182494
Schwarz criterion	8.223186

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### Lampiran 8. Varians Dekomposition

Variance Decomposition of ROA__:					
Period	S.E.	ROA__	BOPO__	FDR__	CAR__
1	0.194858	100.0000	0.000000	0.000000	0.000000
2	0.261260	92.05842	1.576285	2.286664	4.078634
3	0.304985	92.63254	1.388645	2.374546	3.604268
4	0.355320	89.11353	4.018202	3.897976	2.970291
5	0.392711	85.45420	4.932211	6.411866	3.201726
6	0.437336	82.06355	8.360263	6.098895	3.477291
7	0.471985	80.55236	9.330591	6.373328	3.743724
8	0.502015	79.67893	9.718557	6.809233	3.793278
9	0.532901	79.01174	10.42788	6.722366	3.838018
10	0.560334	78.64144	10.59719	6.903321	3.858050

Variance Decomposition of BOPO__:					
Period	S.E.	ROA__	BOPO__	FDR__	CAR__
1	1.431468	87.47605	12.52395	0.000000	0.000000
2	2.068504	80.96120	13.14249	0.528560	5.367748
3	2.390258	83.91923	11.30184	0.399033	4.379901
4	2.700251	85.76639	8.886465	1.691088	3.656058
5	2.942744	84.80659	7.562115	3.357947	4.273353
6	3.227080	84.18206	7.704186	3.210603	4.903156
7	3.453436	83.93616	7.125728	3.419271	5.518845
8	3.652159	83.99952	6.567815	3.680049	5.752619
9	3.856400	84.17637	6.248098	3.613999	5.961529
10	4.040127	84.35935	5.818565	3.728673	6.093409

Variance Decomposition of FDR__:					
Period	S.E.	ROA__	BOPO__	FDR__	CAR__

1	0.792028	1.994715	4.213593	93.79169	0.000000
2	0.874256	1.644720	5.860613	86.34970	6.144966
3	1.204158	5.543388	17.10801	60.27952	17.06909
4	1.578383	3.629175	32.11189	47.08245	17.17648
5	1.853159	4.590561	34.01154	39.09915	22.29874
6	2.117163	4.694182	36.39928	35.56765	23.33890
7	2.376926	4.345140	37.84055	33.56609	24.24822
8	2.560745	4.680206	37.69340	32.44429	25.18210
9	2.753492	4.642030	38.11547	31.77905	25.46344
10	2.928638	4.624889	38.28313	31.28968	25.80230

Variance Decomposition of CAR<sub>t</sub> :

Period	S.E.	ROA <sub>t</sub>	BOPO <sub>t</sub>	FDR <sub>t</sub>	CAR <sub>t</sub>
1	0.555597	0.085116	0.230204	10.57491	89.10978
2	0.788929	0.070255	2.633111	30.51013	66.78651
3	0.963707	0.051651	6.287425	37.80020	55.86073
4	1.100512	0.368636	12.19398	38.05031	49.38708
5	1.222264	0.313897	12.35108	40.49174	46.84328
6	1.335314	0.303724	12.75621	41.53613	45.40393
7	1.435918	0.342086	13.23383	42.00249	44.42159
8	1.532284	0.337253	13.05940	42.84926	43.75408
9	1.622707	0.346302	13.16745	43.22132	43.26493
10	1.708479	0.358506	13.24850	43.55216	42.84083

Cholesky  
Ordering  
:  
ROA<sub>t</sub>  
BOPO<sub>t</sub>  
FDR<sub>t</sub>  
CAR<sub>t</sub>

**Tabel 4.1 Data variabel Bank Umum Syariah 2016-2018**

Bulan/ tahun	ROA %	BOPO %	FDR %	CAR %
Jan-16	1,01	95,28	87,86	15,11
Feb-16	0,81	94,49	87,30	15,44
Mar-16	0,88	94,40	87,52	14,90
Apr-16	0,80	94,71	88,11	15,43
Mei-16	0,16	99,04	89,31	14,78
Jun-16	0,73	95,61	89,32	14,72
Jul-16	0,63	96,15	87,58	14,86
Agu-16	0,48	96,96	87,53	14,87
Sep-16	0,59	96,27	86,43	15,43
Okt-16	0,46	97,21	86,88	15,27
Nov-16	0,67	95,91	86,27	15,78
Des-16	0,63	96,23	85,99	16,63
Jan-17	1,01	95,09	84,74	16,99
Feb-17	1,00	93,35	83,78	17,04
Mar-17	1,12	92,34	83,53	16,98
Apr-17	1,10	92,31	81,36	16,91
Mei-17	1,11	92,26	81,96	16,88
Jun-17	1,10	90,98	82,69	16,42
Jul-17	1,04	91,56	80,51	17,01
Agu-17	0,98	92,03	81,78	16,42
Sep-17	1,00	91,68	80,12	16,16
Okt-17	0,70	94,16	80,94	16,14
Nov-17	0,73	94,05	80,07	16,46
Des-17	0,63	94,91	79,65	17,91
Jan-18	0,42	97,01	77,93	18,05
Feb-18	0,74	93,81	78,35	18,62
Mar-18	1,23	89,90	77,63	18,47
Apr-18	1,23	89,75	78,05	17,93
Mei-18	1,31	88,90	79,65	19,04
Jun-18	1,37	88,75	78,68	20,59
Jul-18	1,35	88,69	79,45	20,41
Agu-18	1,35	88,64	80,45	20,46
Sep-18	1,41	88,08	78,95	21,25
Okt-18	1,26	89,36	79,17	21,22

Nov-18	1,26	89,17	79,69	21,39
Des-18	1,28	89,18	78,53	20,39

Sumber: situs resmi OJK



## RIWAYAT HIDUP

Penulis dilahirkan di Bekasi pada tanggal 14 Juni 1996 sebagai anak terakhir dari tiga bersaudara dari pasangan Sungkono dan Pujiati. Saat ini penulis bertempat tinggal di Desa Korowelang NO.01 RT. 01, Rw. 01, Kec. Kutowinangun, Kab. Kebumen, Prof. Jawa Tengah. Hp: 085608234822. Alamat E-mail: 14423112@students.uii.ac.id. Pendidikan SMU di tempuh di SMAN 1 Prembun, lulus pada tahun 2014. Pada tahun 2014, penulis diterima di program studi Ekonomi Islam Fakultas Ilmu Agama Islam Universitas Islam Indonesia.

