LAMPIRAN

Lampiran 1

Data asli variabel Dependen dan Independen tahun 1987-2017

TAHUN	PDB (Milyar Rupiah)	JUB (Milyar Rupiah)	SUKU BUNGA	KURS
1987	2.353.133,4	33.885	15,2	1.652
1988	2.489.156,3	41.998	16,99	1.729
1989	2.674.762,4	58.705	17,76	1.805
1990	2.868.472,2	84.630	18,12	1.901
1991	3.067.838,4	99.059	18,12	1.992
1992	3.266.002,2	119.053	20,55	2.062
1993	3.478.172,5	145.599	18,27	2.110
1994	3.740.425,7	174.512	12,42	2.200
1995	4.047.889,0	223.300	16,72	2.308
1996	4.364.354,2	288.632	16,92	2.383
1997	4.578.441,0	355.643	23,01	4.650
1998	3.952.189,0	577.381	51,67	7.300
1999	4.001.061,0	646.205	23,97	7.100
2000	4.197.917,1	747.028	11,16	9.595
2001	4.442.798,1	844.053	14,54	10.400
2002	4.538.187,7	883.908	12,81	8.940
2003	4.755.129,8	944.366	6,62	8.447
2004	4.994.354,4	1.033.877	6,43	9.290
2005	5.278.770,1	1.202.762	11,98	9.830
2006	5.569.539,3	1.382.493	8,96	9.020
2007	5.921.330,7	1.649.662	7,19	9.419
2008	6.278.127,5	1.895.839	10,75	10.950
2009	6.563.523,7	2.141.384	6,87	9.400
2010	6.864.133,1	2.471.206	6,83	8.991
2011	7.287.635,5	2.877.220	6,35	9.068
2012	7.727.083,4	3.304.645	5,58	9.670
2013	8.158.193,8	3.730.197	7,92	12.189
2014	8.564.866,6	4.173.327	8,58	12.440
2015	8.982.517,1	4.548.801	7,6	13.795
2016	9.434.632,3	5.004.977	4,75	13.436
2017	9.912.749,3	5.419.165	4,25	13.560

Lampiran 2

Data Diolah

TAHUN	Log(GDP)	log(JUB)	SUKU BUNGA	Log(KURS)
1987	14,67126	10,43073	15,2	7,409742
1988	14,72745	10,64538	16,99	7,455298
1989	14,79937	10,98028	17,76	7,498316
1990	14,86929	11,34604	18,12	7,550135
1991	14,93648	11,50347	18,12	7,596894
1992	14,99908	11,68732	20,55	7,631432
1993	15,06202	11,88861	18,27	7,654443
1994	15,13471	12,06975	12,42	7,696213
1995	15,21371	12,31627	16,72	7,744137
1996	15,28898	12,57291	16,92	7,776115
1997	15,33687	12,78168	23,01	8,444622
1998	15,18978	13,26626	51,67	8,895630
1999	15,20207	13,37887	23,97	8,867850
2000	15,25010	13,52386	11,16	9,168997
2001	15,30679	13,64597	14,54	9,249561
2002	15,32804	13,69211	12,81	9,098291
2003	15,37473	13,75827	6,62	9,041567
2004	15,42382	13,84883	6,43	9,136694
2005	15,47920	14,00013	11,98	9,193194
2006	15,53282	14,13940	8,96	9,107200
2007	15,59407	14,31608	7,19	9,150484
2008	15,65258	14,45517	10,75	9,301095
2009	15,69704	14,57696	6,87	9,148465
2010	15,74182	14,72022	6,83	9,103979
2011	15,80169	14,87233	6,35	9,112507
2012	15,01084	15,01084	5,58	9,176784
2013	15,91453	15,13197	7,92	9,408289
2014	15,96318	15,24422	8,58	9,428672
2015	16,01079	15,33037	7,6	9,532061
2016	16,05990	15,42594	4,75	9,505693
2017	16,10933	15,50545	4,25	9,514880

Lampiran 3

Uji *Level*

Null Hypothesis: LOG_PDB has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.514220	0.8749
Test critical values:	1% level	-3.670170	
	5% level	-2.963972	
	10% level	-2.621007	

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

Null Hypothesis: LOG_JUB has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.149705	0.0030
Test critical values:	1% level	-3.670170	
	5% level	-2.963972	
	10% level	-2.621007	

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

Null Hypothesis: SUKUBUNGA has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.584708	0.1072
Test critical values:	1% level	-3.670170	
	5% level	-2.963972	
	10% level	-2.621007	

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

Null Hypothesis: LOG_KURS has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.226466	0.6496
Test critical values:	1% level	-3.670170	
	5% level	-2.963972	
	10% level	-2.621007	

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

Lampiran 4

Uji *First Difference*

Null Hypothesis: D(LOG_PDB) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.072655	0.0038
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Null Hypothesis: D(LOG_JUB) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.323099	0.0230
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Null Hypothesis: D(SUKUBUNGA) has a unit root
Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.740427	0.0001
Test critical values:	1% level	-3.689194	
	5% level	-2.971853	
	10% level	-2.625121	

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

Null Hypothesis: D(LOG_KURS) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.051737	0.0040
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

Lampiran 5

Uji Panjang Lag

VAR Lag Order Selection Criteria
Endogenous variables: D(LOG_PDB) D(LOG_JUB) D(SUKUBUNGA) D(LOG_KURS)
Exogenous variables: C
Date: 03/22/19   Time: 08:29
Sample: 1987 2017
Included observations: 27

Lag	LogL	LR	FPE	AIC	SC	HQ
0	9.335718	NA	7.92e-06	-0.395238	-0.203263	-0.338154
1	58.18800	79.61113	7.06e-07	-2.828741	-1.868862*	-2.543319
2	79.99128	29.07103*	5.02e-07*	-3.258613*	-1.530831	-2.744853*
3	94.38112	14.92280	7.20e-07	-3.139342	-0.643656	-2.397244

* 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 6

Uji Stabilitas VAR

Roots of Characteristic Polynomial
Endogenous variables: D(LOG_PDB) D(LOG_JUB) D(LOG_KURS) D(SUKUBUNGA)
Exogenous variables: C
Lag specification: 1 2
Date: 03/22/19   Time: 08:29

Root	Modulus
0.637454 - 0.462547i	0.787590
0.637454 + 0.462547i	0.787590
-0.328546 - 0.671569i	0.747628
-0.328546 + 0.671569i	0.747628
-0.446309	0.446309
0.111434 - 0.314113i	0.333293
0.111434 + 0.314113i	0.333293
0.302876	0.302876

No root lies outside the unit circle.
VAR satisfies the stability condition.

Lampiran 7

Uji Granger Casuality

Pairwise Granger Causality Tests
Date: 04/01/19   Time: 07:54
Sample: 1987 2017
Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
LOG_JUB does not Granger Cause LOG_PDB	29	0.33482	0.7188
LOG_PDB does not Granger Cause LOG_JUB		3.37072	0.0513
SUKUBUNGA does not Granger Cause LOG_PDB	29	2.67446	0.0894
LOG_PDB does not Granger Cause SUKUBUNGA		6.02858	0.0076
LOG_KURS does not Granger Cause LOG_PDB	29	14.1449	9.E-05
LOG_PDB does not Granger Cause LOG_KURS		1.23501	0.3087
SUKUBUNGA does not Granger Cause LOG_JUB	29	0.37575	0.6907
LOG_JUB does not Granger Cause SUKUBUNGA		2.43388	0.1090
LOG_KURS does not Granger Cause LOG_JUB	29	6.93055	0.0042
LOG_JUB does not Granger Cause LOG_KURS		2.15616	0.1377
LOG_KURS does not Granger Cause SUKUBUNGA	29	30.1727	3.E-07
SUKUBUNGA does not Granger Cause LOG_KURS		2.56076	0.0982

Lampiran 8

Uji Kointegrasi

Date: 04/01/19   Time: 07:55
Sample (adjusted): 1991 2017
Included observations: 27 after adjustments
Trend assumption: Linear deterministic trend
Series: D(LOG_PDB) D(LOG_JUB) D(SUKUBUNGA) D(LOG_KURS)
Lags interval (in first differences): 1 to 2

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.673645	63.13562	47.85613	0.0010
At most 1 *	0.423247	32.90184	29.79707	0.0213
At most 2 *	0.343402	18.04264	15.49471	0.0202
At most 3 *	0.219299	6.684191	3.841466	0.0097

 Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.673645	30.23378	27.58434	0.0223
At most 1	0.423247	14.85920	21.13162	0.2989
At most 2	0.343402	11.35845	14.26460	0.1371
At most 3 *	0.219299	6.684191	3.841466	0.0097

 Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
 * denotes rejection of the hypothesis at the 0.05 level
 **MacKinnon-Haug-Michelis (1999) p-values

Lampiran 9

Estimasi VAR

Vector Autoregression Estimates
Date: 03/31/19   Time: 15:47
Sample (adjusted): 1990 2017
Included observations: 28 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	D(LOG_PDB)	D(LOG_JUB)	D(SUKUBUNGA)	D(LOG_KURS)
D(LOG_PDB(-1))	0.041225	0.937107	85.04246	-0.136929
	(0.26962)	(0.63893)	(44.2051)	(1.53007)
	[0.15290]	[1.46668]	[1.92381]	[-0.08949]

D(LOG_PDB(-2))	-0.341706	0.607470	114.9842	2.160914
	(0.32809)	(0.77748)	(53.7910)	(1.86187)
	[-1.04151]	[0.78133]	[2.13761]	[1.16061]
D(LOG_JUB(-1))	0.176696	0.491971	-15.81816	0.629487
	(0.08947)	(0.21201)	(14.6683)	(0.50772)
	[1.97499]	[2.32048]	[-1.07839]	[1.23984]
D(LOG_JUB(-2))	-0.004120	-0.105068	-0.893485	-0.276743
	(0.10549)	(0.24998)	(17.2950)	(0.59863)
	[-0.03906]	[-0.42031]	[-0.05166]	[-0.46229]
D(SUKUBUNGA(-1))	0.000620	-0.004092	-0.494772	-0.019200
	(0.00184)	(0.00437)	(0.30231)	(0.01046)
	[0.33616]	[-0.93637]	[-1.63662]	[-1.83486]
D(SUKUBUNGA(-2))	-0.001885	0.005670	0.215512	0.012314
	(0.00092)	(0.00218)	(0.15110)	(0.00523)
	[-2.04531]	[2.59612]	[1.42624]	[2.35440]
D(LOG_KURS(-1))	-0.236322	0.383827	37.26732	0.658828
	(0.04180)	(0.09905)	(6.85316)	(0.23721)
	[-5.65369]	[3.87493]	[5.43797]	[2.77741]
D(LOG_KURS(-2))	-0.014063	-0.122335	-9.869824	-0.162946
	(0.05505)	(0.13045)	(9.02549)	(0.31240)
	[-0.25546]	[-0.93777]	[-1.09355]	[-0.52159]
C	0.049853	0.003262	-9.312003	-0.124836
	(0.01969)	(0.04666)	(3.22827)	(0.11174)
	[2.53188]	[0.06991]	[-2.88452]	[-1.11720]
R-squared	0.715456	0.682591	0.829170	0.478599
Adj. R-squared	0.595648	0.548945	0.757242	0.259062
Sum sq. resids	0.012627	0.070911	339.4314	0.406661
S.E. equation	0.025780	0.061091	4.226678	0.146298
F-statistic	5.971688	5.107457	11.52774	2.180036
Log likelihood	68.12693	43.96920	-74.66122	19.51745
Akaike AIC	-4.223352	-2.497800	5.975802	-0.751247
Schwarz SC	-3.795144	-2.069591	6.404010	-0.323038
Mean dependent	0.046784	0.161613	-0.482500	0.072020
S.D. dependent	0.040542	0.090963	8.578524	0.169961

Determinant resid covariance (dof adj.)	1.74E-07
Determinant resid covariance	3.69E-08
Log likelihood	80.67713
Akaike information criterion	-3.191223
Schwarz criterion	-1.478389

Lampiran 10

Impulse Response Function (IRF)

Response to Cholesky One S.D. Innovations ± 2 S.E.
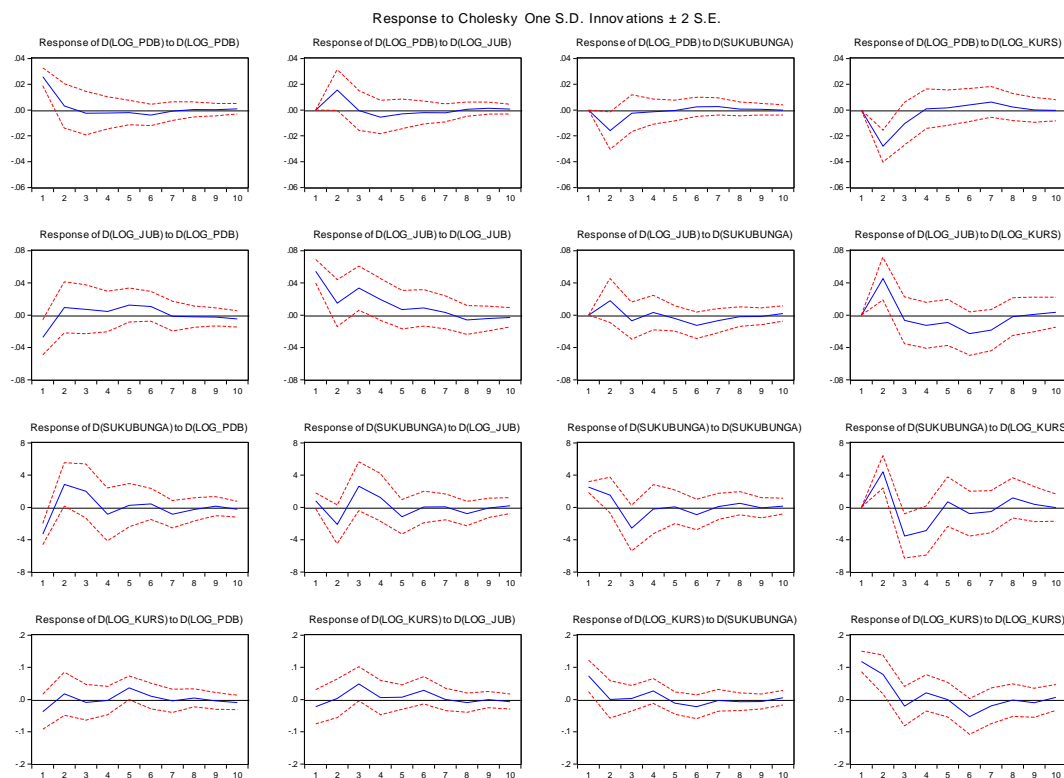
Response of D(LOG_PDB):				
Period	D(LOG_PDB)	D(LOG_JUB)	D(SUKUBUNGA)	D(LOG_KURS)
1	0.025780	0.000000	0.000000	0.000000
	(0.00344)	(0.00000)	(0.00000)	(0.00000)
2	0.003107	0.015444	-0.015910	-0.027963
	(0.00858)	(0.00792)	(0.00720)	(0.00620)
3	-0.002500	-0.000395	-0.002410	-0.010481
	(0.00844)	(0.00772)	(0.00715)	(0.00828)
4	-0.002256	-0.005435	-0.001265	0.000958
	(0.00620)	(0.00647)	(0.00487)	(0.00767)
5	-0.001919	-0.003004	-0.000318	0.001729
	(0.00473)	(0.00575)	(0.00401)	(0.00687)
6	-0.003850	-0.002000	0.002458	0.003906
	(0.00411)	(0.00439)	(0.00371)	(0.00638)
7	-0.000921	-0.002198	0.002729	0.006275
	(0.00361)	(0.00350)	(0.00333)	(0.00598)
8	0.000485	0.000659	0.000811	0.002281
	(0.00290)	(0.00274)	(0.00270)	(0.00522)
9	0.000277	0.001365	0.000621	9.62E-05
	(0.00238)	(0.00235)	(0.00223)	(0.00481)
10	0.000995	0.000718	1.25E-05	-0.000241
	(0.00204)	(0.00187)	(0.00198)	(0.00410)

Lampiran 11

Variance Decomposition

Variance Decomposition of D(LOG_PDB): Period	S.E.	D(LOG_PDB)	D(LOG_JUB)	D(SUKUBUNGA)	D(LOG_KURS)
1	0.025780	100.0000	0.000000	0.000000	0.000000
2	0.044134	34.61563	12.24542	12.99454	40.14441
3	0.045496	32.87604	11.53079	12.50887	43.08431
4	0.045903	32.53792	12.72962	12.36422	42.36825
5	0.046075	32.46927	13.06008	12.27695	42.19370
6	0.046508	32.55228	13.00281	12.32863	42.11628
7	0.047069	31.81912	12.91278	12.37258	42.89552
8	0.047138	31.73619	12.89437	12.36581	43.00364
9	0.047163	31.70633	12.96457	12.37018	42.95893
10	0.047180	31.72852	12.97860	12.36150	42.93138

Lampiran 12

Regresi Model VAR

Dependent Variable: D(LOG_PDB)
Method: Least Squares
Date: 04/01/19   Time: 08:16
Sample (adjusted): 1990 2017
Included observations: 28 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.038366	0.009879	3.883495	0.0007
D(LOG_JUB(-1))	0.143924	0.055752	2.581523	0.0164
D(SUKUBUNGA(-2))	-0.001351	0.000577	-2.341450	0.0278
D(LOG_KURS(-1))	-0.225612	0.032013	-7.047457	0.0000

R-squared	0.676781	Mean dependent var	0.046784
Adjusted R-squared	0.636378	S.D. dependent var	0.040542
S.E. of regression	0.024447	Akaike info criterion	-4.453052
Sum squared resid	0.014344	Schwarz criterion	-4.262737
Log likelihood	66.34273	Hannan-Quinn criter.	-4.394871
F-statistic	16.75100	Durbin-Watson stat	1.737902
Prob(F-statistic)	0.000004		

PERPUSTAKAAN
UNIVERSITAS MUHAMMADIYAH YOGYAKARTA
Terakreditasi "A" (Perpustakaan Nasional RI No: 29/1/ee/XII.2014)

Perpustakaan Universitas Muhammadiyah Yogyakarta menyatakan bahwa Skripsi atas:

Nama   : Eva Fitriasari

NIM   :20150430002

Prodi   : Ilmu Ekonomi

Judul   : ANALISIS JUMLAH UANG BEREDAR, SUKU BUNGA, DAN
                    KURS TERHADAP PRODUK DOMESTIK BRUTO (PDB) DI
                    INDONESIA PERIODE TAHUN 1987-2017 PENDEKATAN
                    VECTOR AUTOREGRESSION (VAR)

DosenPembimbing   : Agus Tri Basuki, SE., M.Si

Telah dilakukan tes Turnitin filter 1%, dengan indeks similaritasnya sebesar 16%.
Semoga surat keterangan ini dapat digunakan sebagaimana mestinya.

Mengetahui   Yogyakarta,10-04-2019
Ka. Ur. Pengelolahan   yang melaksanakanpengecekan

LaelaNiswatin, S.I.Pust   Ikram Al- Zein, S.Kom.I