LAMPIRAN

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

Perpustakaan Universitas Muhammadiyah Yogyakarta menyatakan bahwa Skripsi atas nama :

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Judul	: Analisis Pengaruh Jumlah Uang Beredar, Pendapatan Perkapita, dan Kecepatan Perputaran Uang terhadap Permintaan Uang Elektronik di Indonesia
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Telah dilakukan tes Turnitin filter 1%, dengan indeks similaritasnya sebagaimana terlampir.
Semoga surat keterangan ini dapat digunakan sebagaimana mestinya.

Yogyakarta, 2017-12-11
PJ. Referensi Fakultas Teknik

Yuliana Ramawati,A.Md.

LAMPIRAN

Data permintaan *e-money,* JUB, Pendapatan Perkapita dan Kecepatan Perputaran Uang di Indonesia

Tahun	E Money (milyar)	JUB M1 (milyar)	Pendapatan Perkapita	Perputaran Uang
Jan-13	168,394	787859,68	306.884.133.873.456	115,419
Feb-13	165,335	786548,67	309.164.353.780.864	116,968
Mar-13	252,791	810054,88	311.460.418.595.679	114,767
Apr-13	219,757	832213,49	313.772.328.317.901	113,288
Mei-13	214,515	822876,47	316.100.082.947.530	113,772
Jun-13	250,006	858498,99	318.443.682.484.568	110.633
Jul-13	387,171	879986,02	320.803.126.929.012	111,938
Agust-13	279,902	855782,79	323.178.416.280.864	116,873
Sep-13	231,602	867714,92	325.569.550.540.123	115,337
Okt-13	245,149	856171,21	327.976.529.706.790	117,477
Nop-13	244,577	870412,35	330.399.353.780.864	116,163
Des-13	248,233	887083,50	332.838.022.762.345	115,073
Jan-14	239,691	842677,91	336.026.983.989.197	91,936
Feb-14	212,101	834532,41	338.466.526.813.271	93,454
Mar-14	297,160	853502,40	340.891.098.572.531	91,823
Apr-14	231,800	880470,30	343.300.699.266.975	89,355
Mei-14	270,601	906726,69	345.695.328.896.605	87,259
Jun-14	331,492	945717,83	348.074.987.461.419	84,361
Jul-14	361,063	918565,80	350.439.674.961.419	88,014
Agust-14	274,586	895827,12	352.789.391.396.605	91,035
Sep-14	305,574	949168,33	355.124.136.766.975	86,499
Okt-14	239,473	940348,73	357.443.911.072.531	88,068
Nop-14	274,630	955534,99	359.748.714.313.271	88,322
Des-14	281,383	942221,34	362.038.546.489.197	92,141
Jan-15	253,373	918079,49	364.653.804.976.852	85,639
Feb-15	246,223	927847,53	366.899.412.615.740	85,519
Mar-15	339,241	957580,46	369.115.766.782.407	83,126
Apr-15	294,805	959376,46	371.302.867.476.852	83,503
Mei-15	478,024	980915,30	373.460.714.699.074	82,188
Jun-15	663,652	1039517,98	375.589.308.449.074	78,082
Jul-15	665,753	1031905,82	377.688.648.726.852	79,281
Agust-15	527,866	1026322,91	379.758.735.532.407	80,042
Sep-15	471,545	1063038,71	381.799.568.865.740	78,238

Okt-15	450,389	1036310,68	383.811.148.726.852	80,787
Nop-15	461,044	1051190,74	385.793.475.115.740	79,786
Des-15	431,102	1055439,82	387.746.548.032.407	79,862
Jan-16	387,404	1046257,23	389.670.367.476.852	90,792
Feb-16	519,364	1035550,68	391.564.933.449.074	92,025
Mar-16	492,166	1064737,89	393.430.245.949.074	90,044
Apr-16	515,232	1089212,20	395.266.304.976.852	87,983
Mei-16	587,052	1118768,26	397.073.110.532.407	86,214
Jun-16	673,151	1184328,91	398.850.662.615.740	82,314
Jul-16	561,862	1144500,83	400.598.961.226.852	86,122
Agust-16	616,484	1135548,18	402.318.006.365.741	87,147
Sep-16	554,916	1126046,04	404.007.798.032.407	88,444
Okt-16	584,319	1142785,81	405.668.336.226.852	87,637
Nop-16	831,972	1182729,89	407.299.620.949.074	85,429
Des-16	749,766	1237642,57	408.901.652.199.074	82,323

Olah data menggunakan Eviews7

1. Uji Stasioneritas

a. Tingkat level

Null Hypothesis: EM 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		-4.837856	0.0015
Test critical values:	1% level	-4.165756	
	5% level	-3.508508	
	10% level	-3.184230	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EM)
Method: Least Squares
Date: 12/03/17 Time: 09:41
Sample (adjusted): 2 48
Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EM(-1)	-0.698156	0.144311	-4.837856	0.0000
C	3.706493	0.764614	4.847534	0.0000
@TREND(1)	0.016334	0.004419	3.696487	0.0006

R-squared	0.347263	Mean dependent var	0.031776
Adjusted R-squared	0.317594	S.D. dependent var	0.325665
S.E. of regression	0.269025	Akaike info criterion	0.273678
Sum squared resid	3.184479	Schwarz criterion	0.391772
Log likelihood	-3.431424	Hannan-Quinn criter.	0.318117
F-statistic	11.70425	Durbin-Watson stat	1.975993
Prob(F-statistic)	0.000084		

Null Hypothesis: JUB 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		-3.221022	0.0928
Test critical values:	1% level	-4.165756	
	5% level	-3.508508	
	10% level	-3.184230	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(JUB)
Method: Least Squares
Date: 12/03/17 Time: 09:44
Sample (adjusted): 2 48
Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
JUB(-1)	-0.426384	0.132375	-3.221022	0.0024
C	5.794712	1.797113	3.224456	0.0024
@TREND(1)	0.003629	0.001113	3.259338	0.0022

R-squared	0.195198	Mean dependent var	0.009609
Adjusted R-squared	0.158616	S.D. dependent var	0.026292
S.E. of regression	0.024117	Akaike info criterion	-4.550075
Sum squared resid	0.025592	Schwarz criterion	-4.431980
Log likelihood	109.9268	Hannan-Quinn criter.	-4.505635
F-statistic	5.335923	Durbin-Watson stat	1.720167
Prob(F-statistic)	0.008417		

Null Hypothesis: PP 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		3.011909	1.0000
Test critical values:	1% level	-4.165756	
	5% level	-3.508508	
	10% level	-3.184230	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PP)
Method: Least Squares
Date: 12/03/17 Time: 09:50
Sample (adjusted): 2 48
Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PP(-1)	0.023250	0.007719	3.011909	0.0043
C	-0.767514	0.257555	-2.980003	0.0047
@TREND(1)	-0.000233	4.84E-05	-4.815813	0.0000

R-squared	0.900228	Mean dependent var	0.006106

Adjusted R-squared	0.895693	S.D. dependent var	0.001286
S.E. of regression	0.000415	Akaike info criterion	-12.67353
Sum squared resid	7.59E-06	Schwarz criterion	-12.55543
Log likelihood	300.8278	Hannan-Quinn criter.	-12.62909
F-statistic	198.5038	Durbin-Watson stat	1.607650
Prob(F-statistic)	0.000000		

Null Hypothesis: V has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 6 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.540073	0.3084
Test critical values:	1% level	-4.198503	
	5% level	-3.523623	
	10% level	-3.192902	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(V)
Method: Least Squares
Date: 12/03/17 Time: 09:51
Sample (adjusted): 8 48
Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
V(-1)	-0.274164	0.107936	-2.540073	0.0161
D(V(-1))	-0.041533	0.032552	-1.275922	0.2112
D(V(-2))	-0.024941	0.027983	-0.891305	0.3794
D(V(-3))	-0.014425	0.022676	-0.636131	0.5292
D(V(-4))	-9.01E-05	0.017602	-0.005120	0.9959
D(V(-5))	0.010738	0.012238	0.877447	0.3868
D(V(-6))	0.021182	0.007008	3.022533	0.0049
C	1.223156	0.482441	2.535350	0.0163
@TREND(1)	-0.000184	0.000640	-0.287659	0.7755

R-squared	0.598009	Mean dependent var	-0.007495
Adjusted R-squared	0.497511	S.D. dependent var	0.049288
S.E. of regression	0.034938	Akaike info criterion	-3.679277
Sum squared resid	0.039062	Schwarz criterion	-3.303127
Log likelihood	84.42517	Hannan-Quinn criter.	-3.542303
F-statistic	5.950465	Durbin-Watson stat	1.799275
Prob(F-statistic)	0.000109		

b. Tingkat *First Difference*

Null Hypothesis: D(EM) 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		-9.234474	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EM,2)
Method: Least Squares
Date: 12/03/17 Time: 09:53
Sample (adjusted): 3 48
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EM(-1))	-1.331521	0.144190	-9.234474	0.0000
C	0.038651	0.098389	0.392837	0.6964
@TREND(1)	0.000234	0.003530	0.066217	0.9475

R-squared	0.664845	Mean dependent var	-0.001863
Adjusted R-squared	0.649256	S.D. dependent var	0.536573
S.E. of regression	0.317778	Akaike info criterion	0.608065
Sum squared resid	4.342256	Schwarz criterion	0.727324
Log likelihood	-10.98548	Hannan-Quinn criter.	0.652740
F-statistic	42.64942	Durbin-Watson stat	2.069801
Prob(F-statistic)	0.000000		

Null Hypothesis: D(JUB) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 9 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.327787	0.0005
Test critical values:	1% level	-4.226815	
	5% level	-3.536601	
	10% level	-3.200320	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(JUB,2)
Method: Least Squares
Date: 12/03/17 Time: 09:55
Sample (adjusted): 12 48
Included observations: 37 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(JUB(-1))	-5.395305	1.012673	-5.327787	0.0000
D(JUB(-1),2)	4.212566	0.932165	4.519123	0.0001
D(JUB(-2),2)	3.629083	0.822822	4.410531	0.0002
D(JUB(-3),2)	3.209966	0.738003	4.349530	0.0002
D(JUB(-4),2)	2.464923	0.653985	3.769082	0.0009
D(JUB(-5),2)	2.110375	0.540423	3.905043	0.0006
D(JUB(-6),2)	1.704118	0.430324	3.960077	0.0005
D(JUB(-7),2)	1.350511	0.354926	3.805055	0.0008
D(JUB(-8),2)	0.614032	0.264592	2.320670	0.0288
D(JUB(-9),2)	0.545094	0.170660	3.194044	0.0038
C	0.017196	0.010214	1.683566	0.1047
@TREND(1)	0.000916	0.000324	2.826894	0.0091

R-squared	0.835868	Mean dependent var	0.000781
Adjusted R-squared	0.763649	S.D. dependent var	0.038855
S.E. of regression	0.018890	Akaike info criterion	-4.843794
Sum squared resid	0.008921	Schwarz criterion	-4.321335
Log likelihood	101.6102	Hannan-Quinn criter.	-4.659603
F-statistic	11.57419	Durbin-Watson stat	2.409932
Prob(F-statistic)	0.000000		

Null Hypothesis: D(PP) 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		-4.881400	0.0014
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PP,2)
Method: Least Squares
Date: 12/03/17 Time: 09:56
Sample (adjusted): 3 48
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PP(-1))	-0.681684	0.139649	-4.881400	0.0000
C	0.005644	0.001166	4.839757	0.0000

@TREND(1)	-6.22E-05	1.31E-05	-4.753775	0.0000

R-squared	0.359429	Mean dependent var	-7.56E-05
Adjusted R-squared	0.329635	S.D. dependent var	0.000515
S.E. of regression	0.000422	Akaike info criterion	-12.64081
Sum squared resid	7.65E-06	Schwarz criterion	-12.52155
Log likelihood	293.7386	Hannan-Quinn criter.	-12.59613
F-statistic	12.06379	Durbin-Watson stat	2.188298
Prob(F-statistic)	0.000069		

Null Hypothesis: D(V) has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 5 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.85605	0.0000
Test critical values:	1% level	-4.198503	
	5% level	-3.523623	
	10% level	-3.192902	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(V,2)
Method: Least Squares
Date: 12/03/17 Time: 09:56
Sample (adjusted): 8 48
Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(V(-1))	-0.811208	0.074724	-10.85605	0.0000
D(V(-1),2)	-0.163018	0.055667	-2.928474	0.0061
D(V(-2),2)	-0.130462	0.039194	-3.328619	0.0022
D(V(-3),2)	-0.099311	0.025417	-3.907328	0.0004
D(V(-4),2)	-0.065052	0.014325	-4.541263	0.0001
D(V(-5),2)	-0.032037	0.005996	-5.343412	0.0000
C	-0.001162	0.022223	-0.052298	0.9586
@TREND(1)	-2.56E-05	0.000687	-0.037290	0.9705

R-squared	0.999006	Mean dependent var	0.167293
Adjusted R-squared	0.998795	S.D. dependent var	1.086386
S.E. of regression	0.037714	Akaike info criterion	-3.544383
Sum squared resid	0.046938	Schwarz criterion	-3.210027
Log likelihood	80.65985	Hannan-Quinn criter.	-3.422629
F-statistic	4736.847	Durbin-Watson stat	2.088227
Prob(F-statistic)	0.000000		

2. Uji Panjang *lag* Optimum

VAR Lag Order Selection Criteria
Endogenous variables: EM JUB PP V
Exogenous variables: C
Date: 12/03/17 Time: 10:00
Sample: 1 48
Included observations: 44

Lag	LogL	LR	FPE	AIC	SC	HQ
0	74.51029	NA	4.77e-07	-3.205013	-3.042814	-3.144862
1	329.5776	452.1649*	9.13e-12*	-14.07171*	-13.26072*	-13.77096*
2	340.4184	17.24668	1.18e-11	-13.83720	-12.37741	-13.29584
3	345.6268	7.339090	2.02e-11	-13.34667	-11.23809	-12.56471
4	353.9354	10.19687	3.16e-11	-12.99706	-10.23968	-11.97449

* 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

3. Uji Stabilitas VAR

Roots of Characteristic Polynomial
Endogenous variables: EM JUB PP V
Exogenous variables: C
Lag specification: 1 2
Date: 12/03/17 Time: 10:02

Root	Modulus
0.984786	0.984786
0.699419	0.699419
0.371063 - 0.329892i	0.496504
0.371063 + 0.329892i	0.496504
-0.201070 - 0.319055i	0.377128
-0.201070 + 0.319055i	0.377128
-0.045476 - 0.246162i	0.250327
-0.045476 + 0.246162i	0.250327

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

4. Analisis Kausalitas Granger

Pairwise Granger Causality Tests
Date: 12/03/17 Time: 10:09
Sample: 1 48
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
JUB does not Granger Cause EM	47	12.6403	0.0009
EM does not Granger Cause JUB		0.65816	0.4216
PP does not Granger Cause EM	47	12.5887	0.0009
EM does not Granger Cause PP		1.03183	0.3153
V does not Granger Cause EM	47	6.09733	0.0482
EM does not Granger Cause V		2.36017	0.1316
PP does not Granger Cause JUB	47	5.61747	0.0222
JUB does not Granger Cause PP		4.51483	0.0393
V does not Granger Cause JUB	47	0.24562	0.6226
JUB does not Granger Cause V		3.51518	0.0675
V does not Granger Cause PP	47	0.73290	0.3966
PP does not Granger Cause V		4.81088	0.0336

5. Uji Kointegrasi

Date: 12/03/17 Time: 10:13
Sample (adjusted): 3 48
Included observations: 46 after adjustments
Trend assumption: Linear deterministic trend
Series: EM JUB PP V
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.511957	83.78796	47.85613	0.0000
At most 1 *	0.432371	50.78978	29.79707	0.0001
At most 2 *	0.336565	24.74060	15.49471	0.0015
At most 3 *	0.119720	5.865709	3.841466	0.0154

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 *	0.511957	32.99818	27.58434	0.0091
At most 1 *	0.432371	26.04918	21.13162	0.0094
At most 2 *	0.336565	18.87489	14.26460	0.0087
At most 3 *	0.119720	5.865709	3.841466	0.0154

Max-eigenvalue 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 Cointegrating Coefficients (normalized by b'*S11*b=I):

EM	JUB	PP	V
-0.491223	21.33877	8.500142	0.591571
1.979740	20.03975	-27.91990	-1.342304
5.012634	-27.22673	13.97063	0.667637
-0.675874	27.78102	-42.71495	0.269319

Unrestricted Adjustment Coefficients (alpha):

D(EM)	-0.044361	-0.136161	-0.099215	-0.034565
D(JUB)	-0.010119	-0.004678	0.005468	-0.005893
D(PP)	-0.000206	-2.50E-05	-2.50E-05	0.000134
D(V)	-0.473153	0.506192	-0.300502	-0.141504

1 Cointegrating Equation(s): Log likelihood 328.5412

Normalized cointegrating coefficients (standard error in parentheses)

EM	JUB	PP	V
1.000000	-43.44006	-17.30403	-1.204281
	(13.4650)	(16.6865)	(0.51337)

Adjustment coefficients (standard error in parentheses)

D(EM)	0.021791
	(0.02251)
D(JUB)	0.004971
	(0.00178)
D(PP)	0.000101
	(3.4E-05)
D(V)	0.232424
	(0.08654)

2 Cointegrating Equation(s): Log likelihood 341.5658

Normalized cointegrating coefficients (standard error in parentheses)

EM	JUB	PP	V
1.000000	0.000000	-14.70779	-0.777475
		(3.14855)	(0.14582)
0.000000	1.000000	0.059766	0.009825
		(0.20242)	(0.00937)

Adjustment coefficients (standard error in parentheses)

D(EM)	-0.247772	-3.675235
	(0.08251)	(1.18406)
D(JUB)	-0.004290	-0.309673
	(0.00725)	(0.10404)
D(PP)	5.18E-05	-0.004901
	(0.00014)	(0.00203)
D(V)	1.234553	0.047459
	(0.32015)	(4.59453)

3 Cointegrating Equation(s): Log likelihood 351.0033

Normalized cointegrating coefficients (standard error in parentheses)

EM	JUB	PP	V
1.000000	0.000000	0.000000	0.018214
			(0.06502)
0.000000	1.000000	0.000000	0.006592
			(0.00853)
0.000000	0.000000	1.000000	0.054100
			(0.00979)

Adjustment coefficients (standard error in parentheses)

D(EM)	-0.745099	-0.973941	2.038431
	(0.20176)	(1.49047)	(1.20633)
D(JUB)	0.023118	-0.458543	0.120977
	(0.01866)	(0.13782)	(0.11155)
D(PP)	-7.33E-05	-0.004221	-0.001404
	(0.00037)	(0.00277)	(0.00224)
D(V)	-0.271753	8.229141	-22.35290
	(0.80953)	(5.98019)	(4.84015)

6. Model Empiris VAR/VECM

Vector Error Correction Estimates
Date: 12/03/17 Time: 10:15
Sample (adjusted): 3 48
Included observations: 46 after adjustments
Standard errors in ( ) & t-statistics in [ ]

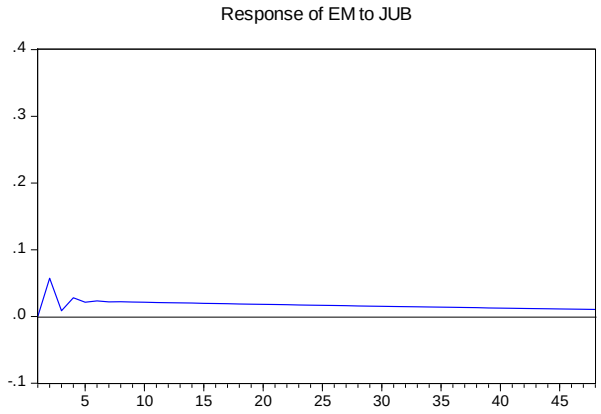
Cointegrating Eq:	CointEq1
EM(-1)	1.000000
JUB(-1)	-43.44006 (13.4650) [-3.22614]
PP(-1)	-17.30403 (16.6865) [-1.03701]
V(-1)	-1.204281 (0.51337) [-2.34583]
C	1178.221

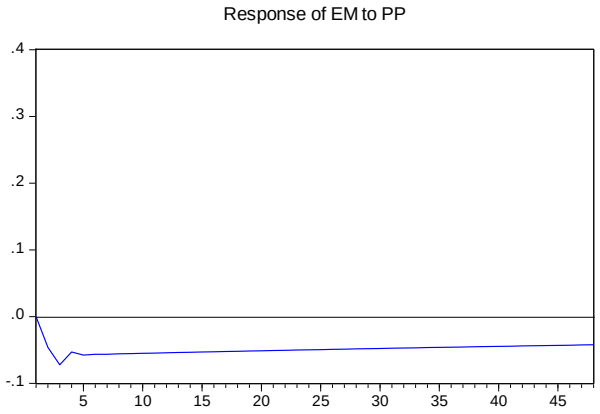
Error Correction:	D(EM)	D(JUB)	D(PP)	D(V)
CointEq1	0.021791 (0.02251) [0.96814]	0.004971 (0.00178) [2.78743]	0.000101 (3.4E-05) [2.96837]	0.232424 (0.08654) [2.68561]
D(EM(-1))	-0.376798 (0.14914) [-2.52649]	0.011100 (0.01182) [0.93937]	-0.000124 (0.00023) [-0.54750]	-0.308457 (0.57344) [-0.53791]
D(JUB(-1))	2.396518 (1.89638) [1.26374]	-0.143907 (0.15025) [-0.95781]	0.005601 (0.00288) [1.94830]	-9.546598 (7.29155) [-1.30927]
D(PP(-1))	-98.40245 (102.819) [-0.95705]	-23.66532 (8.14611) [-2.90511]	0.523246 (0.15588) [3.35672]	-1032.379 (395.337) [-2.61139]
D(V(-1))	0.056060 (0.03423) [1.63771]	0.006832 (0.00271) [2.51913]	4.97E-05 (5.2E-05) [0.95779]	-0.376596 (0.13162) [-2.86129]
C	0.630709 (0.63566) [0.99222]	0.156418 (0.05036) [3.10589]	0.002813 (0.00096) [2.91943]	6.438071 (2.44410) [2.63413]
R-squared	0.207732	0.234300	0.880555	0.398708
Adj. R-squared	0.108698	0.138587	0.865625	0.323546
Sum sq. resids	3.863174	0.024249	8.88E-06	57.11305
S.E. equation	0.310772	0.024622	0.000471	1.194917
F-statistic	2.097589	2.447954	58.97670	5.304684

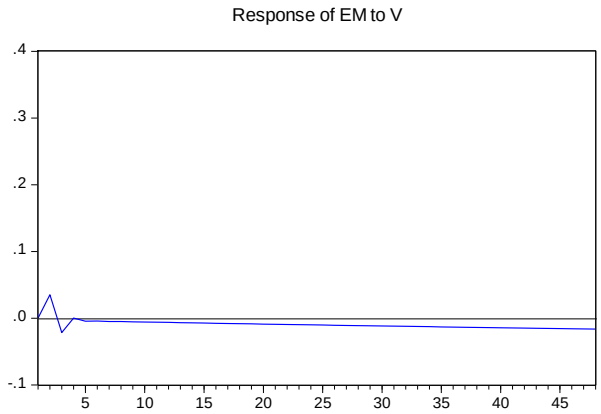
Log likelihood	-8.296669	108.3329	290.3185	-70.24817
Akaike AIC	0.621594	-4.449257	-12.36167	3.315138
Schwarz SC	0.860113	-4.210738	-12.12315	3.553656
Mean dependent	0.032865	0.009855	0.006078	-0.007636
S.D. dependent	0.329177	0.026529	0.001285	1.452843

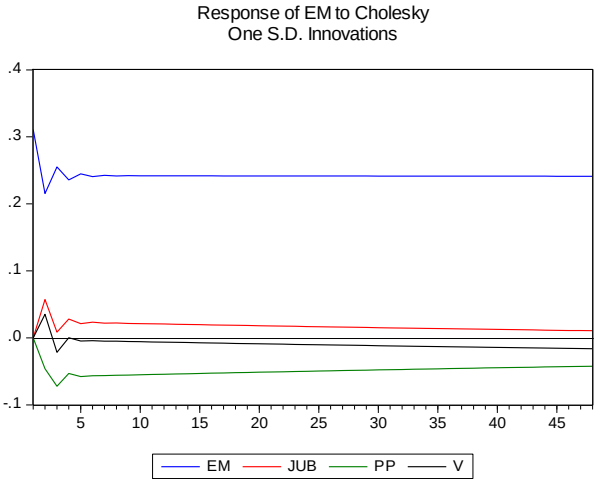
Determinant resid covariance (dof adj.)	1.29E-11
Determinant resid covariance	7.35E-12
Log likelihood	328.5412
Akaike information criterion	-13.06701
Schwarz criterion	-11.95392

7. Analisis *Impulse Respon Function*









8. Analisis *Variance Decomposition*

Variance Decomposition of EM: Period	S.E.	EM	JUB	PP	V
1	0.310772	100.0000	0.000000	0.000000	0.000000
2	0.386800	95.55712	2.193505	1.421305	0.828066
3	0.469440	94.37436	1.521562	3.331992	0.772085
4	0.528754	94.27779	1.481220	3.632395	0.608596
5	0.585922	94.22699	1.338721	3.932405	0.501879
6	0.636415	94.17839	1.269045	4.122776	0.429788
7	0.683740	94.16826	1.201791	4.252336	0.377617
8	0.727691	94.16638	1.153154	4.342363	0.338102
9	0.769204	94.17483	1.110174	4.407328	0.307667
10	0.808500	94.18896	1.074174	4.453337	0.283530
11	0.845956	94.20776	1.042229	4.485848	0.264162
12	0.881778	94.22970	1.013861	4.508037	0.248403
13	0.916172	94.25408	0.988122	4.522315	0.235486
14	0.949287	94.28023	0.964577	4.530358	0.224835
15	0.981256	94.30773	0.942798	4.533438	0.216032
16	1.012188	94.33624	0.922506	4.532504	0.208753
17	1.042175	94.36549	0.903463	4.528296	0.202753
18	1.071297	94.39528	0.885494	4.521386	0.197836
19	1.099624	94.42547	0.868454	4.512233	0.193848
20	1.127216	94.45590	0.852227	4.501203	0.190665
21	1.154126	94.48650	0.836720	4.488596	0.188184
22	1.180402	94.51717	0.821853	4.474656	0.186322
23	1.206085	94.54784	0.807563	4.459585	0.185008
24	1.231212	94.57847	0.793795	4.443553	0.184183
25	1.255818	94.60900	0.780501	4.426703	0.183797
26	1.279932	94.63939	0.767643	4.409153	0.183809
27	1.303583	94.66962	0.755187	4.391008	0.184181
28	1.326796	94.69966	0.743103	4.372355	0.184882
29	1.349593	94.72948	0.731364	4.353269	0.185884
30	1.371996	94.75907	0.719950	4.333816	0.187164
31	1.394024	94.78841	0.708839	4.314052	0.188699
32	1.415695	94.81749	0.698014	4.294028	0.190471
33	1.437025	94.84629	0.687460	4.273785	0.192464
34	1.458030	94.87481	0.677161	4.253363	0.194662
35	1.478723	94.90305	0.667107	4.232794	0.197052
36	1.499118	94.93098	0.657284	4.212109	0.199622
37	1.519227	94.95862	0.647684	4.191333	0.202362
38	1.539061	94.98595	0.638295	4.170490	0.205261
39	1.558632	95.01298	0.629111	4.149600	0.208310
40	1.577949	95.03969	0.620122	4.128682	0.211501
41	1.597022	95.06610	0.611322	4.107753	0.214827
42	1.615860	95.09219	0.602704	4.086826	0.218280
43	1.634470	95.11797	0.594261	4.065915	0.221854
44	1.652861	95.14344	0.585988	4.045032	0.225544
45	1.671041	95.16859	0.577879	4.024188	0.229344
46	1.689016	95.19343	0.569930	4.003392	0.233248
47	1.706793	95.21796	0.562136	3.982652	0.237252
48	1.724378	95.24218	0.554492	3.961976	0.241351

Variance Decomposition of JUB: Period	S.E.	EM	JUB	PP	V
1	0.024622	8.951432	91.04857	0.000000	0.000000
2	0.035150	14.12419	77.66127	8.133867	0.080675
3	0.042712	13.81648	71.75028	13.27324	1.160005
4	0.048932	14.37763	69.96623	14.50206	1.154076
5	0.054546	14.47626	68.93141	15.44431	1.148023
6	0.059649	14.61327	68.07193	16.15493	1.159863
7	0.064368	14.67178	67.51885	16.65523	1.154144
8	0.068785	14.72092	67.08060	17.05298	1.145490
9	0.072955	14.74726	66.74409	17.37501	1.133630
10	0.076916	14.76436	66.47070	17.64492	1.120023
11	0.080701	14.77198	66.24710	17.87588	1.105035
12	0.084333	14.77365	66.05933	18.07779	1.089228
13	0.087831	14.77030	65.89989	18.25697	1.072837
14	0.091209	14.76323	65.76244	18.41824	1.056092
15	0.094482	14.75313	65.64272	18.56501	1.039135
16	0.097658	14.74064	65.53734	18.69993	1.022080
17	0.100749	14.72620	65.44380	18.82499	1.005011
18	0.103760	14.71016	65.36009	18.94176	0.987992
19	0.106699	14.69281	65.28465	19.05147	0.971072
20	0.109571	14.67437	65.21622	19.15512	0.954287
21	0.112383	14.65503	65.15378	19.25352	0.937669
22	0.115137	14.63492	65.09651	19.34733	0.921239
23	0.117838	14.61419	65.04371	19.43709	0.905016
24	0.120489	14.59292	64.99480	19.52327	0.889013
25	0.123094	14.57120	64.94931	19.60625	0.873241
26	0.125656	14.54912	64.90682	19.68635	0.857708
27	0.128176	14.52672	64.86700	19.76386	0.842421
28	0.130658	14.50406	64.82953	19.83902	0.827382
29	0.133104	14.48120	64.79418	19.91203	0.812596
30	0.135515	14.45816	64.76070	19.98308	0.798064
31	0.137893	14.43498	64.72892	20.05231	0.783787
32	0.140239	14.41169	64.69866	20.11988	0.769766
33	0.142557	14.38832	64.66978	20.18590	0.755999
34	0.144845	14.36489	64.64214	20.25048	0.742486
35	0.147107	14.34142	64.61564	20.31371	0.729225
36	0.149343	14.31793	64.59017	20.37569	0.716214
37	0.151554	14.29444	64.56564	20.43648	0.703451
38	0.153741	14.27095	64.54196	20.49616	0.690935
39	0.155906	14.24748	64.51908	20.55478	0.678662
40	0.158049	14.22404	64.49692	20.61241	0.666629
41	0.160170	14.20064	64.47542	20.66910	0.654834
42	0.162272	14.17730	64.45454	20.72489	0.643273
43	0.164354	14.15401	64.43422	20.77982	0.631944
44	0.166417	14.13078	64.41443	20.83394	0.620844
45	0.168462	14.10763	64.39513	20.88727	0.609968
46	0.170489	14.08456	64.37627	20.93986	0.599314
47	0.172500	14.06156	64.35783	20.99172	0.588879
48	0.174494	14.03866	64.33979	21.04290	0.578659

Variance Decomposition

of PP: Period	S.E.	EM	JUB	PP	V
1	0.000471	1.321912	20.68747	77.99062	0.000000
2	0.000862	1.211117	18.51323	79.29631	0.979344
3	0.001276	0.886977	20.60969	75.15494	3.348393
4	0.001737	0.736075	22.34649	70.83216	6.085269
5	0.002245	0.618546	23.61433	67.33666	8.430462
6	0.002793	0.538398	24.53280	64.51550	10.41330
7	0.003380	0.477762	25.23163	62.20482	12.08579
8	0.004002	0.431823	25.76689	60.30755	13.49374
9	0.004657	0.395640	26.18860	58.72694	14.68883
10	0.005343	0.366676	26.52651	57.39540	15.71141
11	0.006057	0.342994	26.80229	56.26069	16.59402
12	0.006799	0.323341	27.03068	55.28392	17.36206
13	0.007565	0.306796	27.22241	54.43520	18.03559
14	0.008357	0.292702	27.38525	53.69159	18.63045
15	0.009170	0.280565	27.52502	53.03514	19.15928
16	0.010006	0.270017	27.64609	52.45168	19.63221
17	0.010863	0.260773	27.75186	51.92989	20.05748
18	0.011739	0.252610	27.84494	51.46064	20.44180
19	0.012634	0.245355	27.92742	51.03650	20.79072
20	0.013547	0.238867	28.00094	50.65135	21.10884
21	0.014478	0.233034	28.06685	50.30011	21.40000
22	0.015425	0.227762	28.12624	49.97855	21.66745
23	0.016389	0.222977	28.17999	49.68309	21.91394
24	0.017367	0.218615	28.22886	49.41072	22.14180
25	0.018361	0.214624	28.27346	49.15885	22.35306
26	0.019368	0.210958	28.31432	48.92528	22.54944
27	0.020389	0.207581	28.35187	48.70811	22.73245
28	0.021424	0.204460	28.38648	48.50567	22.90339
29	0.022471	0.201568	28.41849	48.31653	23.06341
30	0.023530	0.198880	28.44817	48.13943	23.21352
31	0.024601	0.196376	28.47576	47.97327	23.35459
32	0.025684	0.194039	28.50147	47.81707	23.48742
33	0.026777	0.191852	28.52547	47.66997	23.61270
34	0.027881	0.189801	28.54794	47.53120	23.73106
35	0.028995	0.187874	28.56901	47.40008	23.84304
36	0.030120	0.186061	28.58880	47.27600	23.94914
37	0.031253	0.184352	28.60742	47.15841	24.04982
38	0.032396	0.182738	28.62498	47.04681	24.14547
39	0.033548	0.181212	28.64156	46.94077	24.23646
40	0.034709	0.179766	28.65723	46.83989	24.32311
41	0.035878	0.178396	28.67208	46.74379	24.40573
42	0.037055	0.177094	28.68616	46.65215	24.48460
43	0.038240	0.175856	28.69952	46.56467	24.55995
44	0.039432	0.174678	28.71223	46.48107	24.63202
45	0.040632	0.173555	28.72432	46.40111	24.70102
46	0.041839	0.172484	28.73584	46.32454	24.76713
47	0.043052	0.171460	28.74683	46.25117	24.83053
48	0.044273	0.170482	28.75733	46.18080	24.89139

Variance Decomposition of V: Period	S.E.	EM	JUB	PP	V

1	1.194917	0.095158	0.332541	1.979601	97.59270
2	1.376035	0.894997	2.708624	14.12053	82.27585
3	1.554295	1.095330	2.846181	14.08510	81.97339
4	1.711235	1.285299	2.974351	14.84097	80.89938
5	1.850316	1.401250	3.196189	15.43121	79.97135
6	1.978425	1.505123	3.373338	15.74029	79.38125
7	2.097032	1.583592	3.553402	15.94727	78.91574
8	2.207718	1.652482	3.730103	16.07307	78.54435
9	2.311666	1.711393	3.907635	16.14072	78.24026
10	2.409801	1.764123	4.085440	16.16511	77.98533
11	2.502834	1.811642	4.264940	16.15721	77.76621
12	2.591352	1.855309	4.446249	16.12404	77.57441
13	2.675836	1.895819	4.629816	16.07104	77.40332
14	2.756687	1.933813	4.815814	16.00216	77.24822
15	2.834246	1.969725	5.004430	15.92042	77.10542
16	2.908806	2.003908	5.195772	15.82817	76.97215
17	2.980617	2.036632	5.389930	15.72726	76.84618
18	3.049900	2.068114	5.586961	15.61916	76.72576
19	3.116849	2.098526	5.786906	15.50507	76.60950
20	3.181635	2.128010	5.989789	15.38597	76.49624
21	3.244409	2.156679	6.195624	15.26266	76.38504
22	3.305310	2.184629	6.404412	15.13584	76.27512
23	3.364459	2.211937	6.616149	15.00606	76.16585
24	3.421967	2.238671	6.830822	14.87383	76.05667
25	3.477937	2.264885	7.048413	14.73957	75.94714
26	3.532459	2.290627	7.268901	14.60362	75.83685
27	3.585619	2.315935	7.492258	14.46631	75.72549
28	3.637493	2.340845	7.718454	14.32792	75.61278
29	3.688152	2.365384	7.947456	14.18869	75.49847
30	3.737663	2.389579	8.179226	14.04883	75.38237
31	3.786087	2.413450	8.413727	13.90854	75.26429
32	3.833479	2.437017	8.650918	13.76798	75.14408
33	3.879892	2.460294	8.890755	13.62732	75.02163
34	3.925376	2.483298	9.133193	13.48670	74.89681
35	3.969976	2.506038	9.378187	13.34623	74.76955
36	4.013735	2.528526	9.625688	13.20603	74.63975
37	4.056694	2.550772	9.875646	13.06622	74.50736
38	4.098890	2.572782	10.12801	12.92688	74.37232
39	4.140358	2.594564	10.38273	12.78811	74.23460
40	4.181132	2.616124	10.63976	12.64998	74.09414
41	4.221243	2.637468	10.89903	12.51257	73.95093
42	4.260722	2.658598	11.16050	12.37595	73.80496
43	4.299596	2.679521	11.42410	12.24018	73.65619
44	4.337892	2.700238	11.68979	12.10533	73.50464
45	4.375636	2.720753	11.95751	11.97144	73.35029
46	4.412850	2.741068	12.22719	11.83858	73.19316
47	4.449559	2.761186	12.49879	11.70678	73.03324
48	4.485783	2.781109	12.77224	11.57610	72.87055

Cholesky
Ordering: EM
JUB PP V