BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Berdasarkan hasil analisis data dan pembahasan yang telah dijelaskan, dapat diambil kesimpulan sebagai berikut :

1. Dalam jangka panjang inflasi berpengaruh negatif. dan signifikan terhadap indeks harga saham gabungan sesuai dengan hipotesis yang telah disusun. Diluar dari dugaan atau hipotesis yang telah disusun bahwa hasil dari pengujian menunjukkan variabel *Fed rate* dan *kurs* tidak berpengaruh terhadap indeks harga saham gabungan.
2. Dalam jangka pendek, *Fed rate* tidak berpengaruh terhadap tingkat indeks harga saham gabungan, sedangkan inflasi berpengaruh negatif dan signifikan terhadap tingkat indeks harga saham gabungan pada bulan pertama dan keempat. Kurs tidak berpengaruh berpengaruh terhadap indeks harga saham gabungan.
3. *Granger Causality* hanya terjadi terjadi antara inflasi dengan indeks harga saham gabungan, dan antara *Fed rate* dengan kurs. Pengujian yang telah dilakukan dengan metode *impulse response* dan *variance decomposition* membuktikan bahwa variabel tingkat indeks harga saham gabungan (IHSG) merespon adanya *shock* atau gunjangan akibat variabel-variabel ekonomi yang diamati.

5.2. Saran

Berdasarkan hasil penelitian, maka peneliti menyarankan sebagai berikut:

1. Bagi pemerintah khususnya otoritas moneter hendaknya tetap memperhatikan kondisi perekonomian makro, supaya tidak terjadi inflasi yang tinggi yang dapat mengganggu kestabilan kegiatan investasi khususnya pasar saham. Sehingga, dapat menarik banyak investor baru untuk mendongrak perekonomian dalam negeri.
2. Bagi para investor untuk tetap memperhatikan faktor-faktor ekonomi makro dalam melakukan kegiatan investasi jangka panjang di pasar saham, terutama saat terjadi inflasi yang tinggi, supaya tidak mengalami kerugian.
3. Hubungan kausalitas antar variabel, dan adanya respon variabel IHSG terhadap variabel fed rate, inflasi, dan kurs akibat gunjangan dari masing-masing variabel dapat mempengaruhi pergerakan IHSG. Sehingga, para investor harus cermat dalam mengatasi situasi tersebut,
4. Penelitian ini memiliki beberapa keterbatasan. Variabel-variabel ekonomi yang diamati tidak berpengaruh secara signifikan atau kurang direspon oleh variabel IHSG. Bagi penelitian selanjutnya, maka perlu dikaji kembali faktor-faktor baik non-ekonomi maupun ekonomi lainnya yang lebih berpengaruh terhadap pergerakan IHSG, serta diharapkan peneliti selanjutnya mampu mengambil periode yang lebih lama, sehingga hasil penelitian menjadi lebih kuat dalam mencerminkan keadaan yang sebenarnya.

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LAMPIRAN

Data
Output Eviews8

LAMPIRAN 1

DATA

BULAN/ TAHUN	IHSG	*FED RATE (%)*	INFLASI %	KURS (Nilai USD 1 dalam Rupiah)
Nov-12	4,276.14	0,16	4.32	13417.67
Dec-12	4,316.69	0,16	4.3	13310.5
Jan-13	4,453.70	0,14	4.57	13017.24
Feb-13	4,795.79	0,15	5.31	13118.24
Mar-13	4,940.99	0,14	5.9	13165
Apr-13	5,034.07	0,15	5.57	13118.82
May-13	5,068.63	0,11	5.47	13355.05
Jun-13	4,818.90	0,09	5.9	13419.65
Jul-13	4,610.38	0,09	8.61	13179.86
Aug-13	4,195.09	0,08	8.79	13193.14
Sep-13	4,316.18	0,08	8.4	13515.7
Oct-13	4,510.63	0,09	8.32	13889.05
Nov-13	4,256.44	0,08	8.37	13854.6
Dec-13	4,274.18	0,09	8.37	13672.57
Jan-14	4,418.76	0,07	8.22	13795.86
Feb-14	4,620.22	0,07	7.75	14396.1
Mar-14	4,768.28	0,08	7.32	13781.75
Apr-14	4,840.15	0,09	7.25	13374.79
May-14	4,893.91	0,09	7.32	13313.24
Jun-14	4,878.58	0,1	6.7	13140.53
Jul-14	5,088.80	0,09	4.53	12947.76
Aug-14	5,136.86	0,09	3.99	13066.82
Sep-14	5,137.58	0,09	4.53	12749.84
Oct-14	5,089.55	0,09	4.83	12579.1
Nov-14	5,149.89	0,09	6.23	12438.29
Dec-14	5,226.95	0,12	8.36	12158.3
Jan-15	5,289.40	0,11	6.96	12144.87
Feb-15	5,450.29	0,11	6.29	11890.77
Mar-15	5,518.67	0,11	6.39	11706.67
Apr-15	5,086.42	0,12	6.79	11689.06
May-15	5,216.38	0,12	7.15	11892.62
Jun-15	4,910.66	0,13	7.26	11525.94
Jul-15	4,802.53	0,13	7.26	11435.75
Aug-15	4,509.61	0,14	7.18	11427.05
Sep-15	4,223.91	0,14	6.83	11935.1
Oct-15	4,455.18	0,12	6.25	12179.65
Nov-15	4,446.46	0,12	4.89	12087.1
Dec-15	4,593.01	0,24	3.35	11613.1
Jan-16	4,615.16	0,34	4.14	11366.9
Feb-16	4,770.96	0,38	4.42	11346.24

BULAN/ TAHUN	IHSG	*FED RATE (%)*	INFLASI %	KURS (Nilai USD 1 dalam Rupiah)
Apr-16	**4,838.58**	**0,37**	**3.6**	**10073.39**
May-16	**4,796.87**	**0,37**	**3.33**	**9881.53**
Jun-16	**5,016.65**	**0,38**	**3.45**	**9760.91**
Jul-16	**5,215.99**	**0,39**	**3.21**	**9724.05**
Aug-16	**5,386.08**	**0,4**	**2.79**	**9709.42**
Sep-16	**5,364.80**	**0,4**	**3.07**	**9686.65**
Oct-16	**5,422.54**	**0,4**	**3.31**	**9687.33**
Nov-16	**5,148.91**	**0,41**	**3.58**	**9645.89**
Dec-16	**5,296.71**	**0,54**	**3.02**	**9627.95**

LAMPIRAN 2

UJI STATONERITAS: *UNIT ROOT TESTING*
***Augmented Dickey Fuller* (ADF)**
OUTPUT EVIEWS 8

LEVEL

Indek Harga Saham Gabungan (LnY)

Null Hypothesis: LNY has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.920071	0.3206
Test critical values:	1% level	-3.571310	
	5% level	-2.922449	
	10% level	-2.599224	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNY)
Method: Least Squares
Date: 03/22/17 Time: 13:12
Sample (adjusted): 2012M12 2016M12
Included observations: 49 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNY(-1)	-0.132325	0.068917	-1.920071	0.0609
C	1.126659	0.584528	1.927467	0.0600

R-squared	0.072735	Mean dependent var	0.004368
Adjusted R-squared	0.053005	S.D. dependent var	0.037523
S.E. of regression	0.036515	Akaike info criterion	-3.742226
Sum squared resid	0.062667	Schwarz criterion	-3.665009
Log likelihood	93.68454	Hannan-Quinn criter.	-3.712930
F-statistic	3.686672	Durbin-Watson stat	1.571841
Prob(F-statistic)	0.060929		

LEVEL

Fed Rate (FR)

Null Hypothesis: FR has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		1.472395	0.9990
Test critical values:	1% level	-3.577723	
	5% level	-2.925169	
	10% level	-2.600658	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(FR)
Method: Least Squares
Date: 03/22/17 Time: 20:43
Sample (adjusted): 2013M02 2016M12
Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FR(-1)	0.057886	0.039314	1.472395	0.1482
D(FR(-1))	0.492997	0.184481	2.672343	0.0106
D(FR(-2))	-0.321405	0.190766	-1.684820	0.0993
C	-0.250815	0.770848	-0.325375	0.7465

R-squared	0.203036	Mean dependent var	0.851064
Adjusted R-squared	0.147434	S.D. dependent var	3.148352
S.E. of regression	2.907014	Akaike info criterion	5.053396
Sum squared resid	363.3815	Schwarz criterion	5.210855
Log likelihood	-114.7548	Hannan-Quinn criter.	5.112649
F-statistic	3.651594	Durbin-Watson stat	1.766788
Prob(F-statistic)	0.019714		

LEVEL
Inflasi (I)

Null Hypothesis: I has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.865910	0.3452
Test critical values:	1% level	-3.574446	
	5% level	-2.923780	
	10% level	-2.599925	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(I)
Method: Least Squares
Date: 03/22/17 Time: 20:44
Sample (adjusted): 2013M01 2016M12
Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
I(-1)	-0.119280	0.063926	-1.865910	0.0686
D(I(-1))	0.337500	0.143203	2.356789	0.0228
C	0.676472	0.390795	1.731015	0.0903

R-squared	0.140045	Mean dependent var	-0.026667
Adjusted R-squared	0.101824	S.D. dependent var	0.814158
S.E. of regression	0.771594	Akaike info criterion	2.379746
Sum squared resid	26.79111	Schwarz criterion	2.496696
Log likelihood	-54.11391	Hannan-Quinn criter.	2.423942
F-statistic	3.664146	Durbin-Watson stat	1.831674
Prob(F-statistic)	0.033551		

LEVEL

Kurs (LnK)

Null Hypothesis: LNK has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		0.550599	0.9868
Test critical values:	1% level	-3.571310	
	5% level	-2.922449	
	10% level	-2.599224	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNK)
Method: Least Squares
Date: 03/22/17 Time: 20:45
Sample (adjusted): 2012M12 2016M12
Included observations: 49 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNK(-1)	0.014486	0.026310	0.550599	0.5845
C	-0.142985	0.247407	-0.577935	0.5661

R-squared	0.006409	Mean dependent var	-0.006774
Adjusted R-squared	-0.014731	S.D. dependent var	0.021185
S.E. of regression	0.021340	Akaike info criterion	-4.816462
Sum squared resid	0.021405	Schwarz criterion	-4.739245
Log likelihood	120.0033	Hannan-Quinn criter.	-4.787166
F-statistic	0.303159	Durbin-Watson stat	1.510205
Prob(F-statistic)	0.584517		

LAMPIRAN 3

UJI STATONERITAS: DERAJAT INTEGRASI

***Augmented Dickey Fuller* (ADF)**

OUTPUT EVIEWS 8

FIRST DIFFERENCE

Indek Harga Saham Gabungan (LnY)

Null Hypothesis: D(LNY) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.699830	0.0000
Test critical values:	1% level	-3.574446	
	5% level	-2.923780	
	10% level	-2.599925	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNY,2)
Method: Least Squares
Date: 03/22/17 Time: 20:48
Sample (adjusted): 2013M01 2016M12
Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNY(-1))	-0.831994	0.145968	-5.699830	0.0000
C	0.003612	0.005483	0.658875	0.5133

R-squared	0.413924	Mean dependent var	0.000393
Adjusted R-squared	0.401183	S.D. dependent var	0.048825
S.E. of regression	0.037782	Akaike info criterion	-3.673171
Sum squared resid	0.065666	Schwarz criterion	-3.595204
Log likelihood	90.15610	Hannan-Quinn criter.	-3.643707
F-statistic	32.48807	Durbin-Watson stat	2.011286
Prob(F-statistic)	0.000001		

FIRST DIFFERENCE

Fed Rate (FR)

Null Hypothesis: D(FR) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.325123	0.0191
Test critical values:	1% level	-3.574446	
	5% level	-2.923780	
	10% level	-2.599925	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(FR,2)
Method: Least Squares
Date: 03/22/17 Time: 20:52
Sample (adjusted): 2013M01 2016M12
Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FR(-1))	-0.556995	0.167511	-3.325123	0.0017
C	0.560935	0.435878	1.286909	0.2046

R-squared	0.193781	Mean dependent var	0.270833
Adjusted R-squared	0.176254	S.D. dependent var	3.259941
S.E. of regression	2.958737	Akaike info criterion	5.048176
Sum squared resid	402.6897	Schwarz criterion	5.126142
Log likelihood	-119.1562	Hannan-Quinn criter.	5.077639
F-statistic	11.05644	Durbin-Watson stat	1.502138
Prob(F-statistic)	0.001742		

FIRST DIFFERENCE

Inflasi (I)

Null Hypothesis: D(I) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.312707	0.0001
Test critical values:	1% level	-3.577723	
	5% level	-2.925169	
	10% level	-2.600658	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(I,2)
Method: Least Squares
Date: 03/22/17 Time: 20:53
Sample (adjusted): 2013M02 2016M12
Included observations: 47 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(I(-1))	-0.929903	0.175034	-5.312707	0.0000
D(I(-1),2)	0.280044	0.145739	1.921551	0.0612
C	-0.033633	0.113346	-0.296727	0.7681

R-squared	0.411541	Mean dependent var	-0.017660
Adjusted R-squared	0.384793	S.D. dependent var	0.990284
S.E. of regression	0.776730	Akaike info criterion	2.394255
Sum squared resid	26.54564	Schwarz criterion	2.512349
Log likelihood	-53.26498	Hannan-Quinn criter.	2.438694
F-statistic	15.38579	Durbin-Watson stat	1.990549
Prob(F-statistic)	0.000009		

FIRST DIFFERENCE

Kurs (LnK)

Null Hypothesis: D(LNK) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=10)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.193071	0.0001
Test critical values:	1% level	-3.574446	
	5% level	-2.923780	
	10% level	-2.599925	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(LNK,2)
Method: Least Squares
Date: 03/22/17 Time: 20:54
Sample (adjusted): 2013M01 2016M12
Included observations: 48 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNK(-1))	-0.739708	0.142441	-5.193071	0.0000
C	-0.004958	0.003171	-1.563522	0.1248

R-squared	0.369587	Mean dependent var	0.000128
Adjusted R-squared	0.355882	S.D. dependent var	0.026035
S.E. of regression	0.020895	Akaike info criterion	-4.857865
Sum squared resid	0.020083	Schwarz criterion	-4.779898
Log likelihood	118.5887	Hannan-Quinn criter.	-4.828401
F-statistic	26.96799	Durbin-Watson stat	1.909285
Prob(F-statistic)	0.000005		

LAMPIRAN 4

LAG LENGTH CRITERIA
OUTPUT EVIEWS 8

VAR Lag Order Selection Criteria
Endogenous variables: LNY FR I LNK
Exogenous variables: C
Date: 03/22/17 Time: 21:08
Sample: 2012M11 2016M12
Included observations: 44

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-115.3917	NA	0.002673	5.426894	5.589093	5.487045
1	40.91554	277.0900	4.56e-06*	-0.950706	-0.139711*	-0.649950*
2	52.07650	17.75607	5.79e-06	-0.730750	0.729042	-0.189389
3	60.20951	11.46015	8.70e-06	-0.373159	1.735428	0.408807
4	80.08830	24.39669	8.03e-06	-0.549468	2.207916	0.473103
5	107.2477	28.39392*	5.72e-06	-1.056714*	2.349467	0.206462
6	121.5738	12.37251	8.14e-06	-0.980625	3.074351	0.523155

* 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 5

JOHANSEN COINTEGRATION TEST
OUTPUT EVIEWS 8

Date: 03/22/17 Time: 21:31
Sample (adjusted): 2013M05 2016M12
Included observations: 44 after adjustments
Trend assumption: Linear deterministic trend
Series: LNY FR I LNK
Lags interval (in first differences): 1 to 5

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.556169	55.58400	47.85613	0.0080
At most 1	0.250418	19.84227	29.79707	0.4336
At most 2	0.149680	7.159718	15.49471	0.5592
At most 3	0.000578	0.025435	3.841466	0.8732

Trace 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

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.556169	35.74173	27.58434	0.0036
At most 1	0.250418	12.68255	21.13162	0.4819
At most 2	0.149680	7.134283	14.26460	0.4734
At most 3	0.000578	0.025435	3.841466	0.8732

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

Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):

LNY	FR	I	LNK
12.12261	0.074530	-0.353967	-1.133887
40.49238	0.201659	-0.306899	32.94420
-12.19076	-0.056068	-1.552085	9.001671
-34.33349	-0.568534	-0.883668	-49.85474

Unrestricted Adjustment Coefficients (alpha):

D(LNY)	-0.000641	-0.009054	0.003487	0.000299
D(FR)	1.590904	0.085280	-0.042303	0.019425
D(I)	-0.010400	0.163992	0.198371	-0.002912
D(LNK)	0.000142	-0.004888	0.000645	-0.000221

1 Cointegrating Equation(s): Log likelihood 111.6526

Normalized cointegrating coefficients (standard error in parentheses)

LNY	FR	I	LNK
1.000000	0.006148	-0.029199	-0.093535
	(0.00490)	(0.02752)	(0.47418)

Adjustment coefficients (standard error in parentheses)

D(LNY)	-0.007765
	(0.06137)
D(FR)	19.28591
	(4.25758)
D(I)	-0.126076
	(1.60378)
D(LNK)	0.001723
	(0.03496)

2 Cointegrating Equation(s): Log likelihood 117.9939

Normalized cointegrating coefficients (standard error in parentheses)

LNY	FR	I	LNK
1.000000	0.000000	0.084616	4.681936
		(0.13483)	(1.68478)
0.000000	1.000000	-18.51247	-776.7481
		(25.4478)	(317.984)

Adjustment coefficients (standard error in parentheses)

D(LNY)	-0.374373	-0.001874
	(0.19781)	(0.00101)
D(FR)	22.73910	0.135768
	(14.8251)	(0.07541)
D(I)	6.514364	0.032295
	(5.39312)	(0.02743)
D(LNK)	-0.196214	-0.000975
	(0.11368)	(0.00058)

3 Cointegrating Equation(s): Log likelihood 121.5610

Normalized cointegrating coefficients (standard error in parentheses)

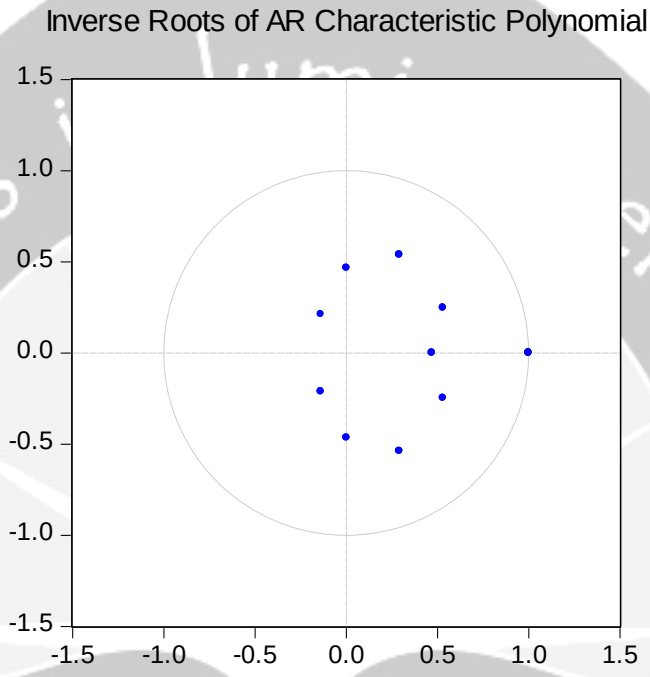
LNY	FR	I	LNK
1.000000	0.000000	0.000000	5.905036
			(1.33736)
0.000000	1.000000	0.000000	-1044.340
			(257.955)
0.000000	0.000000	1.000000	-14.45467
			(4.86045)

Adjustment coefficients (standard error in parentheses)

D(LNY)	-0.416885	-0.002069	-0.002407
	(0.20325)	(0.00103)	(0.00749)
D(FR)	23.25481	0.138140	-0.523643
	(15.4243)	(0.07790)	(0.56845)
D(I)	4.096068	0.021173	-0.354537
	(5.29563)	(0.02675)	(0.19517)
D(LNK)	-0.204080	-0.001011	0.000448
	(0.11815)	(0.00060)	(0.00435)

LAMPIRAN 6

VECM *LAG STRUCTURE TEST*
OUTPUT EVIEWS 8



LAMPIRAN 7

VECM *LAG STRUCTURE TEST*
OUTPUT EVIEWS 8

Roots of Characteristic Polynomial
Endogenous variables: LNY FR I LNK
Exogenous variables:
Lag specification: 1 2
Date: 03/24/17 Time: 22:07

Root	Modulus
1.000000	1.000000
1.000000	1.000000
1.000000	1.000000
0.292334 - 0.538651i	0.612866
0.292334 + 0.538651i	0.612866
0.531517 - 0.248476i	0.586728
0.531517 + 0.248476i	0.586728
0.469464	0.469464
0.001907 - 0.464937i	0.464941
0.001907 + 0.464937i	0.464941
-0.137988 - 0.210633i	0.251807
-0.137988 + 0.210633i	0.251807

VEC specification imposes 3 unit root(s).

LAMPIRAN 8

VECM *AUTOCORELATION TEST*
OTPUT EVIEWS 8

VEC Residual Serial Correlation LM Tests
Null Hypothesis: no serial correlation at lag order h
Date: 03/22/17 Time: 22:19
Sample: 2012M11 2016M12
Included observations: 47

Lags	LM-Stat	Prob
1	11.98970	0.7447
2	20.89632	0.1825
3	20.62335	0.1934
4	24.76991	0.0740
5	20.25240	0.2091
6	17.61091	0.3472

Probs from chi-square with 16 df.

LAMPIRAN 9

VECM *HETEROSKEDASTISITY (WHITE) TEST*
OUTPUT EVIEWS 8

VEC Residual Heteroskedasticity Tests: No Cross Terms (only levels and squares)
Date: 03/22/17 Time: 22:14
Sample: 2012M11 2016M12
Included observations: 47

Joint test:

Chi-sq	df	Prob.
160.5535	180	0.8482

Individual components:

Dependent	R-squared	F(18,28)	Prob.	Chi-sq(18)	Prob.
res1*res1	0.444404	1.244240	0.2944	20.88698	0.2852
res2*res2	0.273418	0.585368	0.8807	12.85066	0.8004
res3*res3	0.369683	0.912338	0.5716	17.37510	0.4975
res4*res4	0.444608	1.245268	0.2938	20.89657	0.2847
res2*res1	0.190082	0.365078	0.9854	8.933854	0.9613
res3*res1	0.294055	0.647952	0.8300	13.82058	0.7407
res3*res2	0.314825	0.714749	0.7689	14.79678	0.6759
res4*res1	0.336681	0.789553	0.6952	15.82399	0.6048
res4*res2	0.280275	0.605764	0.8650	13.17293	0.7812
res4*res3	0.298015	0.660384	0.8191	14.00672	0.7287

LAMPIRAN 10

VECTOR ERROR CORRECTION MODEL (VECM)
OUTPUT EVIEWS

Vector Error Correction Estimates
Date: 04/08/17 Time: 17:48
Sample (adjusted): 2013M04 2016M12
Included observations: 45 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
LNY(-1)	1.000000
FR(-1)	0.005221 (0.00254) [2.05691]
I(-1)	-0.022835 (0.01344) [-1.69963]
LNK(-1)	0.577376 (0.24418) [2.36456]
C	-13.86885

Error Correction:	D(LNY)	D(FR)	D(I)	D(LNK)
CointEq1	-0.220875 (0.09653) [-2.28822]	24.33216 (7.99291) [3.04422]	5.478334 (2.41579) [2.26772]	-0.064027 (0.05607) [-1.14198]
D(LNY(-1))	0.141280 (0.15883) [0.88953]	-14.13054 (13.1515) [-1.07444]	-4.903474 (3.97493) [-1.23360]	-0.122866 (0.09225) [-1.33187]
D(LNY(-2))	0.469912 (0.17220) [2.72891]	-2.283586 (14.2588) [-0.16015]	-4.906934 (4.30961) [-1.13860]	-0.054510 (0.10002) [-0.54500]
D(LNY(-3))	0.093824 (0.17256) [0.54370]	-45.37408 (14.2891) [-3.17542]	0.301352 (4.31878) [0.06978]	-0.012182 (0.10023) [-0.12154]
D(LNY(-4))	0.038877 (0.18586) [0.20918]	-34.05273 (15.3897) [-2.21269]	-4.004184 (4.65142) [-0.86085]	0.240315 (0.10795) [2.22615]
D(FR(-1))	0.002663 (0.00291) [0.91382]	0.307570 (0.24126) [1.27483]	-0.060785 (0.07292) [-0.83358]	0.000650 (0.00169) [0.38425]

D(FR(-2))	-2.88E-05	-0.109185	-0.043079	0.000281
	(0.00260)	(0.21514)	(0.06503)	(0.00151)
	[-0.01110]	[-0.50750]	[-0.66249]	[0.18592]
D(FR(-3))	-0.000948	-0.310449	0.036464	-0.003132
	(0.00245)	(0.20249)	(0.06120)	(0.00142)
	[-0.38754]	[-1.53316]	[0.59581]	[-2.20518]
D(FR(-4))	-0.002672	0.233455	-0.090390	-0.000644
	(0.00273)	(0.22645)	(0.06844)	(0.00159)
	[-0.97721]	[1.03092]	[-1.32065]	[-0.40529]
D(I(-1))	-0.012958	-0.469563	0.295790	-0.002428
	(0.00696)	(0.57655)	(0.17426)	(0.00404)
	[-1.86100]	[-0.81443]	[1.69742]	[-0.60033]
D(I(-2))	-0.002454	-0.092167	-0.248880	-0.001097
	(0.00749)	(0.62035)	(0.18749)	(0.00435)
	[-0.32759]	[-0.14857]	[-1.32740]	[-0.25219]
D(I(-3))	0.013863	0.177160	-0.023777	0.004540
	(0.00731)	(0.60523)	(0.18293)	(0.00425)
	[1.89671]	[0.29271]	[-0.12998]	[1.06948]
D(I(-4))	-0.025257	-1.115201	0.084763	0.003056
	(0.00722)	(0.59764)	(0.18063)	(0.00419)
	[-3.49949]	[-1.86602]	[0.46926]	[0.72893]
D(LNK(-1))	0.228663	-19.78074	-5.013133	0.172809
	(0.35356)	(29.2767)	(8.84864)	(0.20536)
	[0.64674]	[-0.67565]	[-0.56654]	[0.84149]
D(LNK(-2))	-0.344789	12.46484	-2.088889	-0.152929
	(0.27984)	(23.1720)	(7.00356)	(0.16254)
	[-1.23209]	[0.53793]	[-0.29826]	[-0.94087]
D(LNK(-3))	-0.408542	16.14230	1.680110	0.049753
	(0.26752)	(22.1521)	(6.69528)	(0.15539)
	[-1.52714]	[0.72870]	[0.25094]	[0.32019]
D(LNK(-4))	-0.423782	59.88292	14.27260	-0.146303
	(0.28597)	(23.6798)	(7.15703)	(0.16610)
	[-1.48190]	[2.52886]	[1.99421]	[-0.88081]
C	-0.008657	1.678872	0.146183	-0.006638
	(0.00614)	(0.50879)	(0.15378)	(0.00357)
	[-1.40885]	[3.29970]	[0.95060]	[-1.85994]

R-squared	0.550761	0.584853	0.428726	0.559539
Adj. R-squared	0.267907	0.323465	0.069035	0.282211
Sum sq. resids	0.027394	187.8308	17.15837	0.009242
S.E. equation	0.031853	2.637555	0.797180	0.018501
F-statistic	1.947157	2.237486	1.191929	2.017609
Log likelihood	102.7398	-96.00201	-42.15826	127.1880
Akaike AIC	-3.766214	5.066756	2.673701	-4.852801
Schwarz SC	-3.043549	5.789421	3.396366	-4.130136
Mean dependent	0.001545	0.888889	-0.064000	-0.006953
S.D. dependent	0.037227	3.206685	0.826208	0.021837

Determinant resid covariance (dof adj.)	1.11E-06
Determinant resid covariance	1.44E-07
Log likelihood	99.00024
Akaike information criterion	-1.022233
Schwarz criterion	2.029019

LAMPIRAN 11

GRANGER CAUSALITY TEST
OUTPUT EVIEWS 8

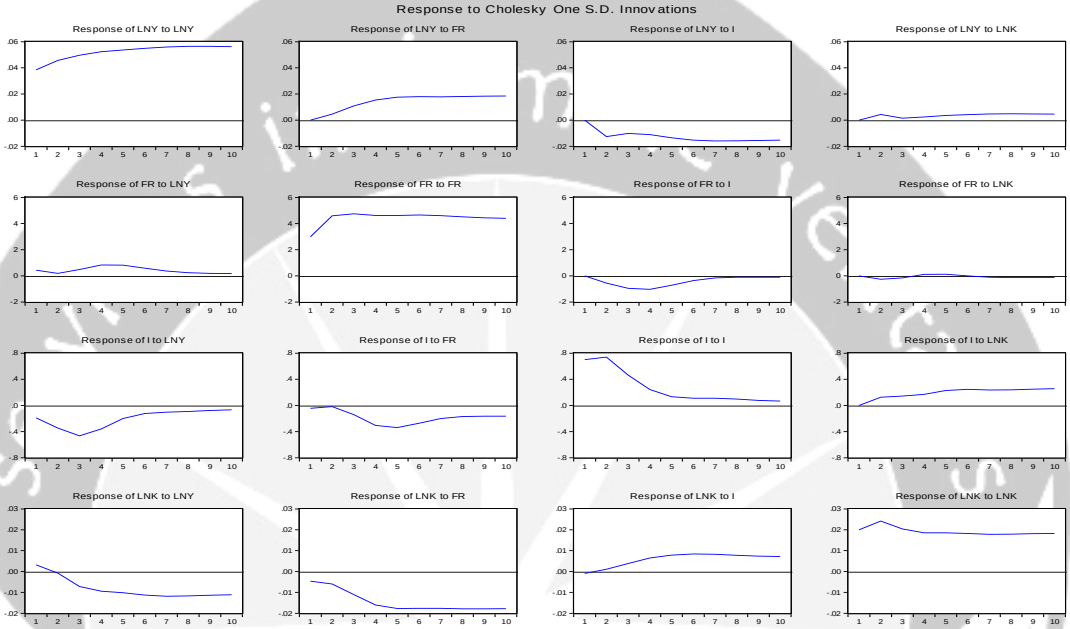
Pairwise Granger Causality Tests
Date: 04/26/17 Time: 13:37
Sample: 2012M11 2016M12
Lags: 5

Null Hypothesis:	Obs	F-Statistic	Prob.
FR does not Granger Cause LNY	45	0.78470	0.5679
LNY does not Granger Cause FR		1.12637	0.3652
I does not Granger Cause LNY	45	3.07659	0.0214
LNY does not Granger Cause I		0.81996	0.5441
LNK does not Granger Cause LNY	45	1.27342	0.2980
LNY does not Granger Cause LNK		2.12072	0.0867
I does not Granger Cause FR	45	0.71943	0.6134
FR does not Granger Cause I		1.65351	0.1726
LNK does not Granger Cause FR	45	2.00916	0.1023
FR does not Granger Cause LNK		2.57363	0.0444
LNK does not Granger Cause I	45	1.78044	0.1433
I does not Granger Cause LNK		1.11349	0.3716

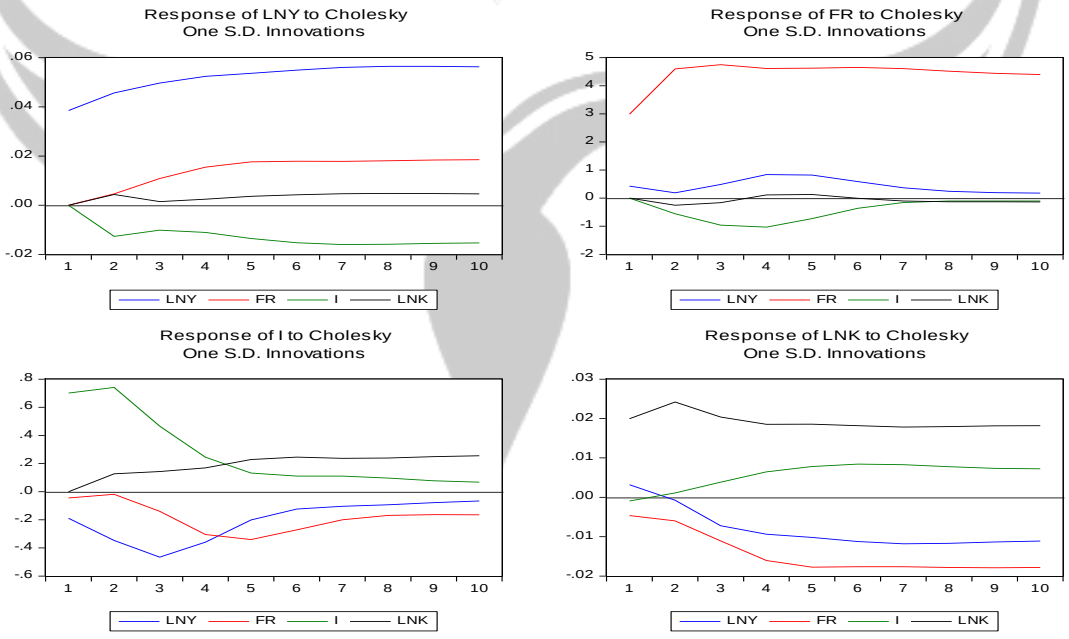
LAMPIRAN 12

IMPULSE RESPONSES

GRAFIK



COMBINATE GRAPH



TABEL

Response of LNY: Period	LNY	FR	I	LNK
1	0.038486	0.000000	0.000000	0.000000
2	0.045622	0.004595	-0.012659	0.004339
3	0.049663	0.010847	-0.010154	0.001445
4	0.052366	0.015438	-0.011073	0.002420
5	0.053615	0.017606	-0.013546	0.003584
6	0.054879	0.017887	-0.015302	0.004208
7	0.055995	0.017798	-0.015994	0.004661
8	0.056475	0.018027	-0.015868	0.004792
9	0.056436	0.018341	-0.015524	0.004695
10	0.056269	0.018469	-0.015349	0.004605

Response of FR: Period	LNY	FR	I	LNK
1	0.427822	2.990144	0.000000	0.000000
2	0.190530	4.599243	-0.555982	-0.253951
3	0.489065	4.746373	-0.958235	-0.159459
4	0.837564	4.614856	-1.031498	0.114853
5	0.820603	4.625869	-0.727866	0.129674
6	0.587424	4.653113	-0.361794	-0.006768
7	0.368180	4.606556	-0.157610	-0.100244
8	0.243366	4.517506	-0.101406	-0.126461
9	0.193291	4.439400	-0.100782	-0.128872
10	0.178493	4.396707	-0.101920	-0.131442

Response of I: Period	LNY	FR	I	LNK
1	-0.189603	-0.044406	0.701206	0.000000
2	-0.347387	-0.018302	0.740796	0.126756
3	-0.465247	-0.140096	0.466070	0.142816
4	-0.358905	-0.304757	0.244676	0.169517
5	-0.201548	-0.340185	0.132466	0.228372
6	-0.123814	-0.271102	0.111116	0.245378
7	-0.103697	-0.200498	0.111126	0.237457
8	-0.092791	-0.169283	0.096533	0.238782
9	-0.078212	-0.163705	0.077012	0.248720
10	-0.066327	-0.163958	0.067358	0.255772

Response of LNK: Period	LNY	FR	I	LNK
1	0.003194	-0.004624	-0.000940	0.019960
2	-0.000748	-0.005999	0.001114	0.024184
3	-0.007204	-0.011067	0.003855	0.020383

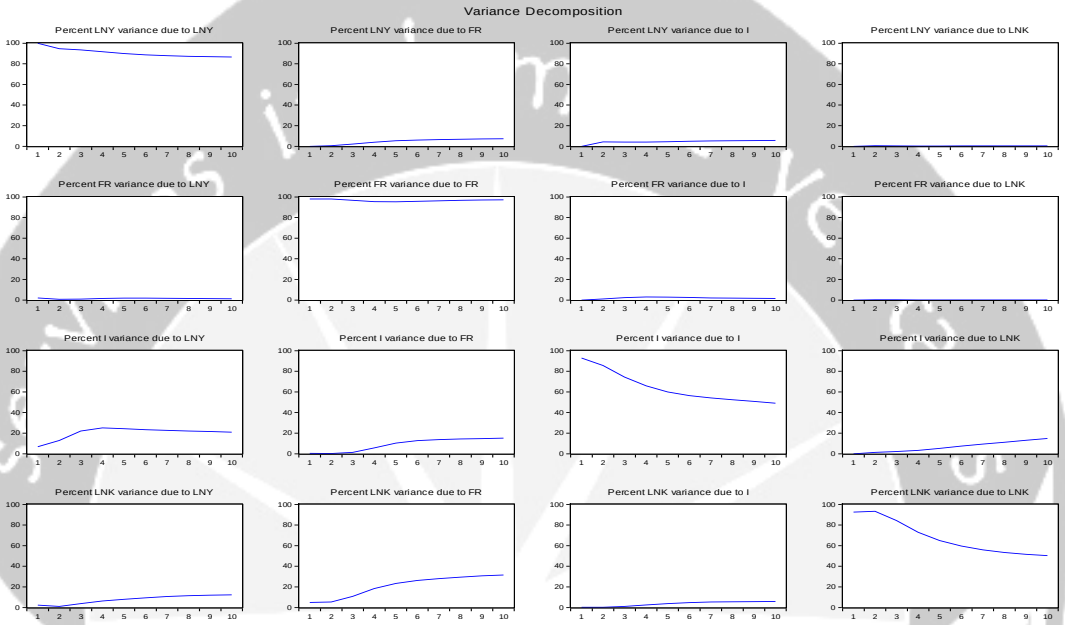
4	-0.009391	-0.016059	0.006456	0.018535
5	-0.010190	-0.017725	0.007832	0.018554
6	-0.011243	-0.017628	0.008429	0.018203
7	-0.011815	-0.017617	0.008294	0.017856
8	-0.011689	-0.017830	0.007765	0.017934
9	-0.011343	-0.017910	0.007361	0.018128
10	-0.011117	-0.017813	0.007235	0.018200

Cholesky Ordering: LNYFR I LNK

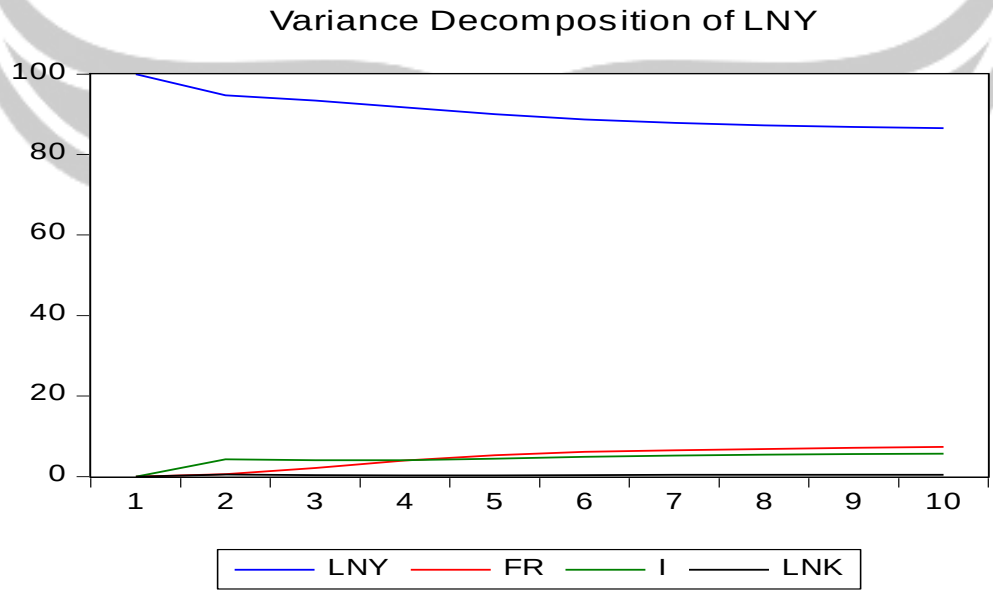
LAMPIRAN 13

VARIANCE DECOMPOSITION
OUTPUT EVIEWS 8

GRAFIK



COMBINATE GRAPH



TABEL

Variance Decomposition of LNY: Period	S.E.	LNY	FR	I	LNK
1	0.038486	100.0000	0.000000	0.000000	0.000000
2	0.061341	94.67995	0.561077	4.258633	0.500335
3	0.080324	93.44339	2.150738	4.081703	0.324165
4	0.097780	91.73928	3.943980	4.036752	0.279993
5	0.113762	89.98505	5.308883	4.399975	0.306090
6	0.128551	88.69666	6.093678	4.862782	0.346885
7	0.142320	87.84395	6.535541	5.230251	0.390254
8	0.155062	87.26539	6.857100	5.453246	0.424264
9	0.166819	86.84322	7.133333	5.577674	0.445770
10	0.177743	86.51822	7.363165	5.658832	0.459786

Variance Decomposition of FR: Period	S.E.	LNY	FR	I	LNK
1	3.020595	2.006052	97.99395	0.000000	0.000000
2	5.539579	0.714746	98.06778	1.007321	0.210158
3	7.375488	0.842899	96.73559	2.256211	0.165297
4	8.801898	1.497329	95.41203	2.957553	0.133090
5	10.00460	1.831735	95.22994	2.818511	0.119814
6	11.05529	1.782439	95.70407	2.415327	0.098160
7	11.98375	1.611336	96.22527	2.072860	0.090536
8	12.81030	1.446203	96.64456	1.820267	0.088975
9	13.56009	1.311010	96.97050	1.630055	0.088440
10	14.25716	1.201620	97.23021	1.479667	0.088503

Variance Decomposition of I: Period	S.E.	LNY	FR	I	LNK
1	0.727744	6.787845	0.372326	92.83983	0.000000
2	1.102483	12.88614	0.189790	85.60219	1.321876
3	1.299680	22.08670	1.298485	74.45616	2.158652
4	1.414023	25.10149	5.742063	65.89561	3.260841
5	1.491814	24.37716	10.35881	59.99095	5.273078
6	1.544957	23.37121	12.73760	56.45210	7.439093
7	1.583218	22.68424	13.73314	54.24921	9.333402
8	1.615605	22.11374	14.28593	52.45299	11.14734
9	1.646478	21.51787	14.74379	50.72315	13.01519
10	1.676940	20.89966	15.16894	49.05843	14.87297

Varian

ce Decomposition of LNK: Period	S.E.	LNY	FR	I	LNK
1	0.020758	2.367208	4.962429	0.205055	92.46531
2	0.032458	1.021249	5.445110	0.201618	93.33202
3	0.040721	3.778762	10.84519	1.024365	84.35168
4	0.048883	6.312880	18.31921	2.455365	72.91255
5	0.056685	7.926194	23.40181	3.734972	64.93702
6	0.063661	9.403038	26.22176	4.714239	59.66096
7	0.069930	10.64709	28.07720	5.313402	55.96231
8	0.075675	11.47783	29.52750	5.590179	53.40450
9	0.080988	11.98328	30.67122	5.707053	51.63845
10	0.085927	12.31910	31.54369	5.778729	50.35848
Cholesky Ordering: LNY FR I LNK					