

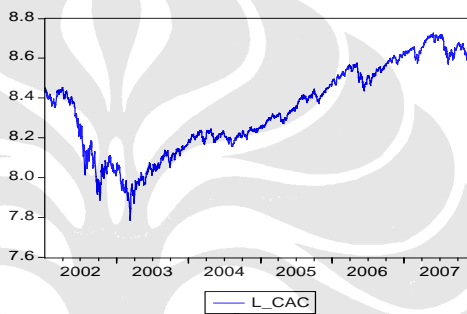
## LAMPIRAN

### Lampiran I: Uji Stationarity

#### A. Data Level

##### ▪ CAC

##### 1. Grafik



##### 2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.835515	0.8082
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

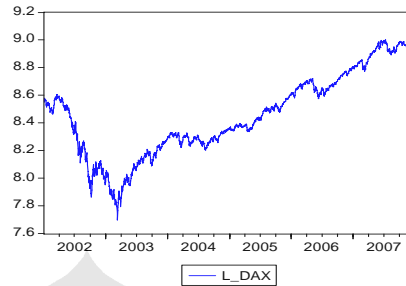
\*MacKinnon (1996) one-sided p-values.

##### 3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.554910	0.8778
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

- DAX

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.172519	0.9394
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

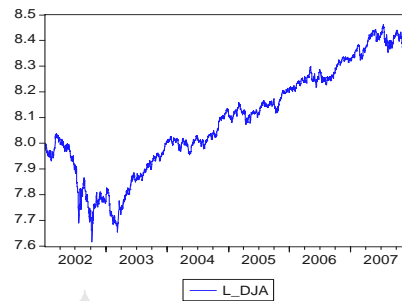
\*MacKinnon (1996) one-sided n-values

3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.010478	0.9565
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

- DJA

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.474226	0.8936
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

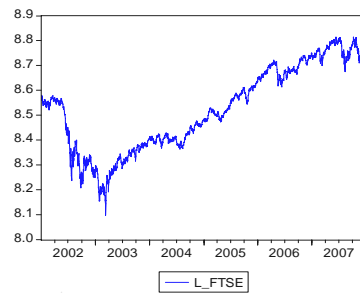
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.285421	0.9246
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

- FTSE

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.532396	0.8823
Test critical values: 1% level	-3.434336	
5% level	-2.863187	
10% level	-2.567695	

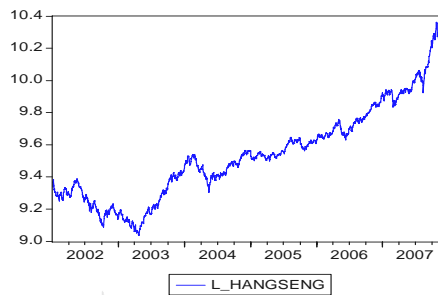
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.483679	0.8918
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

- Hangseng

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.899591	0.9956
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

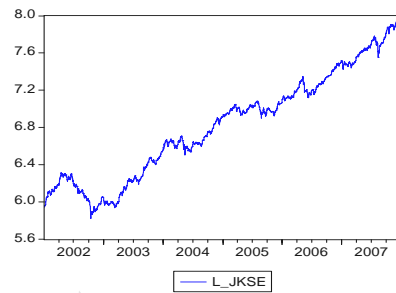
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	0.910764	0.9957
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

- JKSE

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.148908	0.9692
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

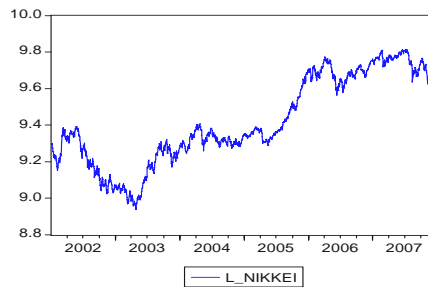
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	0.209817	0.9732
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

- Nikkei

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.879468	0.7951
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

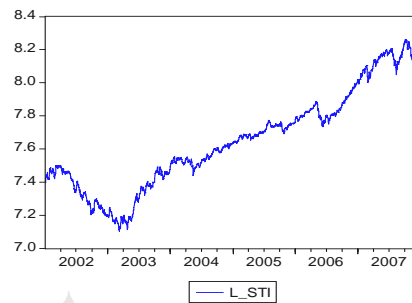
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.881206	0.7945
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

- STI

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	0.159955	0.9700
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

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

3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	0.180851	0.9714
Test critical values: 1% level	-3.434328	
5% level	-2.863184	
10% level	-2.567693	

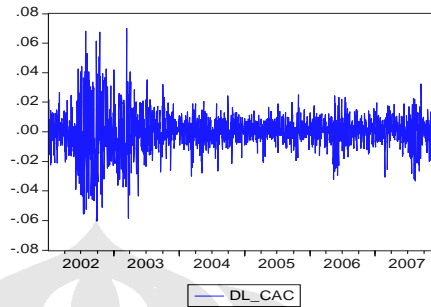
\*MacKinnon (1996) one-sided p-values.



## B. Data *First Differences*

### ▪ CAC

#### 1. Grafik



#### 2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-40.59937	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

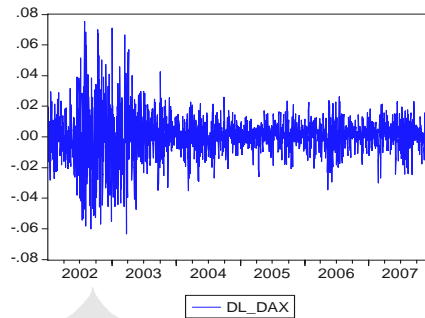
#### 3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-41.48770	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- DAX

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-41.93885	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

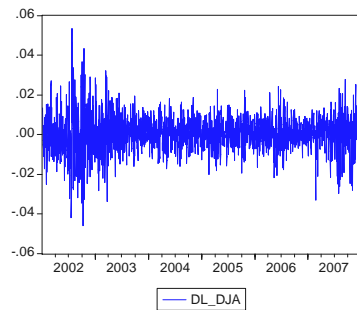
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-42.06962	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- DJA

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-41.79618	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

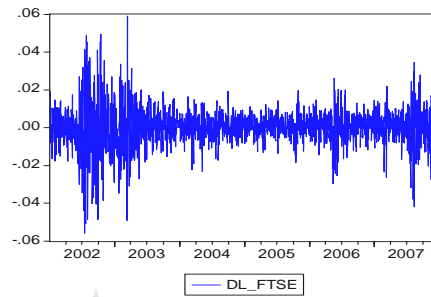
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-42.14444	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- FTSE

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-25.79247	0.0000
Test critical values: 1% level	-3.434336	
5% level	-2.863187	
10% level	-2.567695	

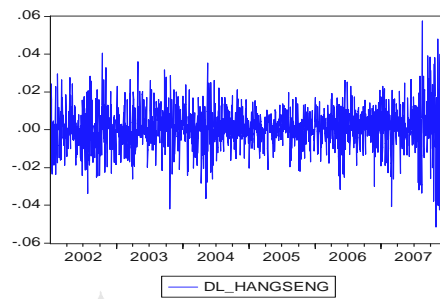
\*MacKinnon (1996) one-sided p-values.

3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-43.89428	0.0001
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

- Hangseng

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-38.45184	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

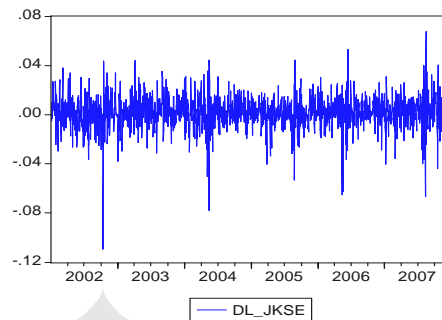
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-38.43852	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- JKSE

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-35.36891	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

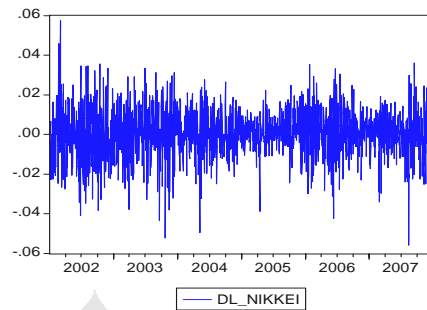
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-35.31893	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- Nikkei

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-39.58189	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

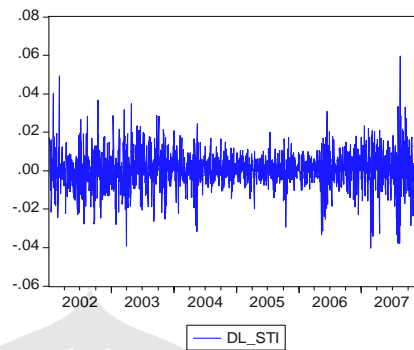
3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-39.58192	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

- STI

1. Grafik



2. Uji ADF

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-39.27523	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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

3. Uji PP

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-39.28129	0.0000
Test critical values: 1% level	-3.434330	
5% level	-2.863185	
10% level	-2.567694	

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



## Lampiran II: Pemilihan Lag Optimal

### A. Uji stabilitas model

Roots of Characteristic Polynomial

Endogenous variables: DL\_CAC DL\_DAX DL\_DJA DL\_FTSE DL\_HANGSENG

DL\_JKSE DL\_NIKKEI DL\_STI

Exogenous variables: C

Lag specification: 1 5

Date: 04/08/08 Time: 18:23

Root	Modulus
-0.716626 - 0.122893i	0.727087
-0.716626 + 0.122893i	0.727087
0.293897 + 0.657058i	0.719793
0.293897 - 0.657058i	0.719793
-0.382288 + 0.565377i	0.682492
-0.382288 - 0.565377i	0.682492
0.309757 + 0.607495i	0.681909
0.309757 - 0.607495i	0.681909
-0.292009 - 0.607414i	0.673959
-0.292009 + 0.607414i	0.673959
-0.667144	0.667144
-0.234642 + 0.608184i	0.651878
-0.234642 - 0.608184i	0.651878
-0.113792 + 0.639717i	0.649759
-0.113792 - 0.639717i	0.649759
0.524778 - 0.367838i	0.640856
0.524778 + 0.367838i	0.640856
0.562182 + 0.274202i	0.625488
0.562182 - 0.274202i	0.625488
-0.440068 - 0.434054i	0.618112
-0.440068 + 0.434054i	0.618112
0.419206 + 0.453340i	0.617455
0.419206 - 0.453340i	0.617455
-0.494971 - 0.349362i	0.605847
-0.494971 + 0.349362i	0.605847
-0.604815	0.604815
0.103190 - 0.519612i	0.529759
0.103190 + 0.519612i	0.529759
0.499498 - 0.128266i	0.515703
0.499498 + 0.128266i	0.515703
0.400316 - 0.314143i	0.508860
0.400316 + 0.314143i	0.508860
-0.096759 + 0.488196i	0.497693
-0.096759 - 0.488196i	0.497693
-0.283422 + 0.354481i	0.453856
-0.283422 - 0.354481i	0.453856
0.175089 + 0.405862i	0.442018
0.175089 - 0.405862i	0.442018
-0.429140 + 0.103930i	0.441545
-0.429140 - 0.103930i	0.441545

No root lies outside the unit circle.

VAR satisfies the stability condition.

B. Kriteria Informasi

VAR Lag Order Selection Criteria

Endogenous variables: DL\_CAC DL\_DAX DL\_DJA DL\_FTSE DL\_HANGSENG

DL\_JKSE DL\_NIKKEI DL\_STI

Exogenous variables: C

Date: 04/08/08 Time: 18:21

Sample: 1/02/2002 12/31/2007

Included observations: 1539

Lag	LogL	LR	FPE	AIC	SC	HQ
0	35359.81	NA	1.54E-30	-45.94127	-45.91352	-45.93095
1	36029.85	1332.237	7.02E-31	-46.72885	-46.47907*	-46.63592
2	36187.89	312.5956	6.21E-31	-46.85106	-46.37927	-46.67553*
3	36313.14	246.4275	5.73E-31	-46.93066	-46.23684	-46.67252
4	36382.81	136.3521	5.69E-31	-46.93802	-46.02219	-46.59728
5	36465.77	161.5015	5.55E-31*	-46.96266*	-45.82481	-46.53932
6	36515.89	97.05041	5.66E-31	-46.94463	-45.58476	-46.43868
7	36557.77	80.65753	5.82E-31	-46.91588	-45.33399	-46.32733
8	36624.47	127.7554	5.80E-31	-46.91938	-45.11547	-46.24822
9	36673.05	92.56340	5.92E-31	-46.89935	-44.87342	-46.14559
10	36713.08	75.83615	6.11E-31	-46.86820	-44.62024	-46.03183
11	36766.52	100.7127	6.19E-31	-46.85448	-44.38451	-45.93551
12	36812.64	86.42685	6.34E-31	-46.83125	-44.13925	-45.82967
13	36875.45	117.0346	6.35E-31	-46.82969	-43.91568	-45.74551
14	36933.73	108.0004	6.40E-31	-46.82226	-43.68622	-45.65547
15	36971.01	68.70315	6.63E-31	-46.78754	-43.42948	-45.53815
16	37006.92	65.80303	6.88E-31	-46.75103	-43.17096	-45.41904
17	37053.00	83.95344	7.05E-31	-46.72774	-42.92565	-45.31315
18	37108.69	100.8884	7.13E-31	-46.71695	-42.69283	-45.21974
19	37155.88	85.00210*	7.30E-31	-46.69510	-42.44897	-45.11530
20	37202.56	83.59315	7.47E-31	-46.67260	-42.20444	-45.01018
21	37243.65	73.15195	7.70E-31	-46.64282	-41.95265	-44.89781
22	37277.96	60.72221	8.01E-31	-46.60423	-41.69204	-44.77661
23	37320.47	74.80226	8.25E-31	-46.57631	-41.44209	-44.66608
24	37365.20	78.25015	8.47E-31	-46.55127	-41.19504	-44.55844

\* 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 III: Uji *Granger Causality*

Pairwise Granger Causality Tests

Date: 04/16/08 Time: 23:05

Sample: 1/02/2002 12/31/2007

Lags: 5

Null Hypothesis:	Obs	F-Statistic	Probability
DL_DAX does not Granger Cause DL_CAC	1558	10.8630	2.7E-10
DL_CAC does not Granger Cause DL_DAX		4.79452	0.00024
DL_DJA does not Granger Cause DL_CAC	1558	41.0746	0.00000
DL_CAC does not Granger Cause DL_DJA		3.92390	0.00154
DL_FTSE does not Granger Cause DL_CAC	1558	2.09547	0.06339
DL_CAC does not Granger Cause DL_FTSE		2.42208	0.03378
DL_HANGSENG does not Granger Cause DL_CAC	1558	0.51715	0.76348
DL_CAC does not Granger Cause DL_HANGSENG		19.7582	0.00000
DL_JKSE does not Granger Cause DL_CAC	1558	2.07343	0.06609
DL_CAC does not Granger Cause DL_JKSE		6.40258	6.8E-06
DL_NIKKEI does not Granger Cause DL_CAC	1558	0.24679	0.94151
DL_CAC does not Granger Cause DL_NIKKEI		40.2011	0.00000
DL_STI does not Granger Cause DL_CAC	1558	2.07514	0.06588
DL_CAC does not Granger Cause DL_STI		16.2975	1.1E-15
DL_DJA does not Granger Cause DL_DAX	1558	13.4630	7.1E-13
DL_DAX does not Granger Cause DL_DJA		5.88710	2.1E-05
DL_FTSE does not Granger Cause DL_DAX	1558	3.63722	0.00283
DL_DAX does not Granger Cause DL_FTSE		10.0002	2.0E-09
DL_HANGSENG does not Granger Cause DL_DAX	1558	0.57178	0.72171
DL_DAX does not Granger Cause DL_HANGSENG		21.9544	0.00000
DL_JKSE does not Granger Cause DL_DAX	1558	1.84384	0.10132
DL_DAX does not Granger Cause DL_JKSE		6.81015	2.7E-06
DL_NIKKEI does not Granger Cause DL_DAX	1558	0.24482	0.94248
DL_DAX does not Granger Cause DL_NIKKEI		41.5236	0.00000
DL_STI does not Granger Cause DL_DAX	1558	2.11384	0.06122
DL_DAX does not Granger Cause DL_STI		18.6701	0.00000
DL_FTSE does not Granger Cause DL_DJA	1558	4.40936	0.00054
DL_DJA does not Granger Cause DL_FTSE		47.7925	0.00000
DL_HANGSENG does not Granger Cause DL_DJA	1558	2.36756	0.03757

DL_DJA does not Granger Cause		69.1239	0.00000
<hr/>			
DL_HANGSENG			
DL_JKSE does not Granger Cause	1558	2.87015	0.01382
DL_DJA			
DL_DJA does not Granger Cause DL_JKSE		22.0314	0.00000
<hr/>			
DL_NIKKEI does not Granger Cause	1558	2.50006	0.02898
DL_DJA			
DL_DJA does not Granger Cause DL_NIKKEI		56.8173	0.00000
<hr/>			
DL_STI does not Granger Cause DL_DJA	1558	2.11717	0.06084
DL_DJA does not Granger Cause DL_STI		47.5075	0.00000
<hr/>			
DL_HANGSENG does not Granger Cause	1558	1.23051	0.29224
DL_FTSE			
DL_FTSE does not Granger Cause		22.8523	0.00000
DL_HANGSENG			
<hr/>			
DL_JKSE does not Granger Cause	1558	1.69403	0.13287
DL_FTSE			
DL_FTSE does not Granger Cause DL_JKSE		5.97372	1.8E-05
<hr/>			
DL_NIKKEI does not Granger Cause	1558	0.66543	0.64974
DL_FTSE			
DL_FTSE does not Granger Cause DL_NIKKEI		32.4129	0.00000
<hr/>			
DL_STI does not Granger Cause DL_FTSE	1558	2.72113	0.01866
DL_FTSE does not Granger Cause DL_STI		17.3253	1.0E-16
<hr/>			
DL_JKSE does not Granger Cause	1558	3.68278	0.00257
DL_HANGSENG			
DL_HANGSENG does not Granger Cause		2.94792	0.01180
DL_JKSE			
<hr/>			
DL_NIKKEI does not Granger Cause	1558	0.94047	0.45361
DL_HANGSENG			
DL_HANGSENG does not Granger Cause		3.84866	0.00181
DL_NIKKEI			
<hr/>			
DL_STI does not Granger Cause	1558	2.93423	0.01213
DL_HANGSENG			
DL_HANGSENG does not Granger Cause DL_STI		1.41259	0.21668
<hr/>			
DL_NIKKEI does not Granger Cause	1558	2.34986	0.03889
DL_JKSE			
DL_JKSE does not Granger Cause DL_NIKKEI		5.79919	2.6E-05
<hr/>			
DL_STI does not Granger Cause DL_JKSE	1558	1.31932	0.25305
DL_JKSE does not Granger Cause DL_STI		3.00293	0.01055
<hr/>			
DL_STI does not Granger Cause	1558	6.32897	8.0E-06
DL_NIKKEI			
DL_NIKKEI does not Granger Cause DL_STI		1.96707	0.08069
<hr/>			

## Lampiran IV: Uji Kointegrasi

### A. Jumlah *Cointegrating Relations* (Asumsi adanya trend linier dalam data)

Sample(adjusted): 1/10/2002 12/31/2007

Included observations: 1558 after adjusting endpoints

Trend assumption: Linear deterministic trend

Series: L\_DJA L\_CAC L\_FTSE L\_DAX L\_HANGSENG L\_JKSE L\_STI L\_NIKKEI

Lags interval (in first differences): 1 to 5

#### Unrestricted Cointegration Rank Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.041302	183.9408	156.00	168.36
At most 1	0.033807	118.2259	124.24	133.57
At most 2	0.013754	64.64355	94.15	103.18
At most 3	0.010809	43.06582	68.52	76.07
At most 4	0.007115	26.13380	47.21	54.46
At most 5	0.006327	15.00944	29.68	35.65
At most 6	0.003278	5.120120	15.41	20.04
At most 7	3.30E-06	0.005136	3.76	6.65

\*(\*\*) denotes rejection of the hypothesis at the 5%(1%) level

**Trace test indicates 1 cointegrating equation(s) at both 5% and 1% levels**

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.041302	65.71494	51.42	57.69
At most 1 **	0.033807	53.58234	45.28	51.57
At most 2	0.013754	21.57773	39.37	45.10
At most 3	0.010809	16.93202	33.46	38.77
At most 4	0.007115	11.12436	27.07	32.24

At most 5	0.006327	9.889322	20.97	25.52
At most 6	0.003278	5.114984	14.07	18.63
At most 7	3.30E-06	0.005136	3.76	6.65

\*(\*\*) denotes rejection of the hypothesis at the 5%(1%) level

**Max-eigenvalue test indicates 2 cointegrating equation(s) at both 5% and 1% levels**

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

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
-30.25236	27.23639	-38.53467	10.65593	-9.342145	12.29836	-4.290562	2.614021
25.93694	30.02751	-41.14598	-0.720672	8.813538	-4.553346	-15.12100	-1.667476
-18.65156	22.67911	2.404523	-19.60615	13.97875	-5.984737	8.846128	3.143085
8.201163	-28.90306	-7.555175	16.83176	-2.218552	-6.042569	10.88634	8.262774
4.797681	-23.31779	17.16373	4.986537	6.824964	0.092219	-17.48160	11.21362
12.32877	22.87218	-27.04736	-14.26323	7.155185	-1.989927	-0.218463	2.507459
-12.77001	8.926292	3.090138	0.503274	5.115101	4.150502	-10.17415	0.478223
-2.833264	-11.60824	2.931814	10.43255	7.654252	2.739485	-9.898750	-6.114828

Unrestricted Adjustment Coefficients (alpha):

D(L_DJA)	-0.000358	-0.001000	-7.73E-05	-0.000336	-4.61E-05	2.08E-06	-0.000122
D(L_CAC)	-0.000885	-0.001115	-0.000590	-8.65E-05	1.65E-05	0.000395	-0.000361
D(L_FTSE)	-4.90E-05	-0.000594	-0.000463	-8.94E-06	-0.000166	0.000489	-0.000254
D(L_DAX)	-0.001520	-0.001396	-0.000585	-0.000284	-0.000194	0.000537	-0.000109
D(L_HANGSENG)	-0.000130	-0.000116	-0.000994	0.000236	-0.000189	-0.000230	3.74E-05
D(L_JKSE)	-0.001453	0.001066	-0.000262	0.000472	-7.89E-05	2.58E-05	-0.000114
D(L_STI)	-0.000171	0.000380	-0.000860	-0.000197	0.000277	7.42E-05	3.44E-05
D(L_NIKKEI)	-0.000390	0.000622	-0.000676	-0.000639	-0.000379	-0.000150	-0.000203

**1 Cointegrating Equation(s): Log likelihood 42117.20**

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	-0.900306	1.273774	-0.352235	0.308807	-0.406526	0.141826	-0.086407
	(0.26231)	(0.26649)	(0.13682)	(0.09306)	(0.05190)	(0.12411)	(0.06561)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	0.010834
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	(0.00736)
D(L_CAC)	0.026788
	(0.00939)
D(L_FTSE)	0.001481
	(0.00752)
D(L_DAX)	0.045970
	(0.01102)
D(L_HANGSE NG)	0.003943
	(0.00757)
D(L_JKSE)	0.043969
	(0.00955)
D(L_STI)	0.005161
	(0.00703)
D(L_NIKKEI)	0.011811
	(0.00860)

2 Cointegrating Equation(s):      Log likelihood      42143.99

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.022561	-0.210300	0.322368	-0.305484	-0.175254	-0.076732
		(0.14159)	(0.08953)	(0.07109)	(0.04131)	(0.09764)	(0.05039)
0.000000	1.000000	-1.389764	0.157651	0.015063	0.112230	-0.352191	0.010747
		(0.14098)	(0.08914)	(0.07079)	(0.04113)	(0.09722)	(0.05017)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.015092	-0.039768
	(0.00965)	(0.00981)
D(L_CAC)	-0.002120	-0.057584
	(0.01232)	(0.01254)
D(L_FTSE)	-0.013934	-0.019180
	(0.00988)	(0.01005)
D(L_DAX)	0.009774	-0.083292
	(0.01445)	(0.01470)
D(L_HANGSE NG)	0.000940	-0.007026
	(0.00996)	(0.01014)
D(L_JKSE)	0.071630	-0.007561

	(0.01253)	(0.01275)
D(L_STI)	0.015007	0.006752
	(0.00925)	(0.00941)
D(L_NIKKEI)	0.027933	0.008030
	(0.01131)	(0.01150)

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3 Cointegrating Equation(s):      Log likelihood      42154.78

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Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.000000	-0.192495	0.309460	-0.296138	-0.184165	-0.077696
			(0.04958)	(0.06497)	(0.03810)	(0.09651)	(0.04780)
0.000000	1.000000	0.000000	-0.939140	0.810214	-0.463512	0.196721	0.070159
			(0.14030)	(0.18385)	(0.10782)	(0.27310)	(0.13526)
0.000000	0.000000	1.000000	-0.789193	0.572148	-0.414273	0.394968	0.042750
			(0.10494)	(0.13751)	(0.08064)	(0.20426)	(0.10117)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.013651	-0.041520	0.054742
	(0.01065)	(0.01124)	(0.01366)
D(L_CAC)	0.008893	-0.070975	0.078561
	(0.01359)	(0.01435)	(0.01743)
D(L_FTSE)	-0.005292	-0.029688	0.025227
	(0.01090)	(0.01151)	(0.01398)
D(L_DAX)	0.020694	-0.096569	0.114569
	(0.01594)	(0.01683)	(0.02044)
D(L_HANGSENG)	0.019476	-0.029565	0.007397
	(0.01094)	(0.01156)	(0.01404)
D(L_JKSE)	0.076521	-0.013508	0.011494
	(0.01384)	(0.01461)	(0.01774)
D(L_STI)	0.031051	-0.012755	-0.011114
	(0.01016)	(0.01073)	(0.01303)
D(L_NIKKEI)	0.040549	-0.007310	-0.012156
	(0.01246)	(0.01316)	(0.01598)

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4 Cointegrating Equation(s):      Log likelihood      42163.24

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Normalized cointegrating coefficients (std.err. in parentheses)



L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.000000	0.000000	0.008408 (0.11200)	-0.032326 (0.05199)	-0.460104 (0.13884)	-0.225063 (0.07210)
0.000000	1.000000	0.000000	0.000000	-0.658550 (0.36746)	0.823564 (0.17056)	-1.149522 (0.45551)	-0.648811 (0.23654)
0.000000	0.000000	1.000000	0.000000	-0.662106 (0.32292)	0.667302 (0.14989)	-0.736327 (0.40030)	-0.561427 (0.20787)
0.000000	0.000000	0.000000	1.000000	-1.563945 (0.51962)	1.370484 (0.24119)	-1.433484 (0.64414)	-0.765562 (0.33449)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.016409 (0.01083)	-0.031801 (0.01324)	0.057282 (0.01377)	-0.007241 (0.00676)
D(L_CAC)	0.008184 (0.01382)	-0.068476 (0.01690)	0.079214 (0.01758)	0.001489 (0.00864)
D(L_FTSE)	-0.005366 (0.01109)	-0.029429 (0.01355)	0.025294 (0.01410)	0.008840 (0.00693)
D(L_DAX)	0.018361 (0.01621)	-0.088349 (0.01982)	0.116718 (0.02062)	-0.008495 (0.01013)
D(L_HANGSENG)	0.021414 (0.01113)	-0.036394 (0.01361)	0.005612 (0.01416)	0.022156 (0.00695)
D(L_JKSE)	0.080395 (0.01406)	-0.027159 (0.01719)	0.007925 (0.01789)	-0.003165 (0.00879)
D(L_STI)	0.029433 (0.01034)	-0.007054 (0.01264)	-0.009624 (0.01315)	0.011453 (0.00646)
D(L_NIKKEI)	0.035308 (0.01266)	0.011161 (0.01547)	-0.007328 (0.01610)	-0.002104 (0.00791)

5 Cointegrating Equation(s): Log likelihood 42168.81

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.000000	0.000000	0.000000	-0.033250 (0.04833)	-0.442408 (0.10830)	-0.233492 (0.06981)
0.000000	1.000000	0.000000	0.000000	0.000000	0.895916 (0.22988)	-2.535583 (0.51517)	0.011397 (0.33204)
0.000000	0.000000	1.000000	0.000000	0.000000	0.740044 (0.21406)	-2.129871 (0.47972)	0.102346 (0.30919)

0.000000	0.000000	0.000000	1.000000	0.000000	1.542306	-4.725144	0.802320
					(0.43876)	(0.98328)	(0.63376)
0.000000	0.000000	0.000000	0.000000	1.000000	0.109865	-2.104715	1.002517
					(0.24622)	(0.55180)	(0.35565)
Adjustment coefficients (std.err. in parentheses)							
D(L_DJA)	-0.016630	-0.030726	0.056491	-0.007471	-0.006113		
	(0.01089)	(0.01439)	(0.01438)	(0.00687)	(0.00491)		
D(L_CAC)	0.008263	-0.068861	0.079498	0.001571	-0.009500		
	(0.01390)	(0.01837)	(0.01836)	(0.00877)	(0.00627)		
D(L_FTSE)	-0.006160	-0.025568	0.022452	0.008015	-0.012368		
	(0.01115)	(0.01473)	(0.01473)	(0.00703)	(0.00503)		
D(L_DAX)	0.017429	-0.083817	0.113381	-0.009465	-0.006983		
	(0.01630)	(0.02154)	(0.02154)	(0.01029)	(0.00735)		
D(L_HANGSE NG)	0.020507	-0.031987	0.002367	0.021213	-0.015509		
	(0.01119)	(0.01479)	(0.01478)	(0.00706)	(0.00505)		
D(L_JKSE)	0.080016	-0.025319	0.006571	-0.003558	0.017725		
	(0.01414)	(0.01869)	(0.01868)	(0.00892)	(0.00638)		
D(L_STI)	0.030762	-0.013514	-0.004868	0.012834	-0.004756		
	(0.01039)	(0.01373)	(0.01373)	(0.00656)	(0.00468)		
D(L_NIKKEI)	0.033490	0.019993	-0.013829	-0.003992	-0.001497		
	(0.01272)	(0.01681)	(0.01680)	(0.00803)	(0.00574)		

6 Cointegrating Equation(s):      Log likelihood      42173.75

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.523487	-0.212379
						(0.06196)	(0.07572)
0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	-0.350923	-0.557487
						(0.17344)	(0.21194)
0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	-0.325298	-0.367564
						(0.13620)	(0.16644)
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	-0.964282	-0.177006
						(0.26725)	(0.32657)
0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	-1.836813	0.932756
						(0.26351)	(0.32200)
0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	-2.438466	0.634975

(0.35912) (0.43883)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.016604 (0.01129)	-0.030678 (0.01541)	0.056434 (0.01580)	-0.007500 (0.00769)	-0.006098 (0.00521)	0.002633 (0.00381)
D(L_CAC)	0.013128 (0.01441)	-0.059836 (0.01967)	0.068825 (0.02016)	-0.004057 (0.00981)	-0.006676 (0.00664)	-0.002543 (0.00486)
D(L_FTSE)	-0.000135 (0.01155)	-0.014390 (0.01576)	0.009233 (0.01616)	0.001044 (0.00786)	-0.008871 (0.00532)	0.003943 (0.00390)
D(L_DAX)	0.024044 (0.01689)	-0.071544 (0.02306)	0.098868 (0.02364)	-0.017118 (0.01150)	-0.003144 (0.00779)	-0.008197 (0.00570)
D(L_HANGSE NG)	0.017667 (0.01160)	-0.037255 (0.01584)	0.008598 (0.01624)	0.024499 (0.00790)	-0.017157 (0.00535)	0.003885 (0.00392)
D(L_JKSE)	0.080335 (0.01467)	-0.024728 (0.02002)	0.005872 (0.02053)	-0.003927 (0.00999)	0.017910 (0.00676)	-0.024074 (0.00495)
D(L_STI)	0.031676 (0.01077)	-0.011818 (0.01471)	-0.006874 (0.01508)	0.011777 (0.00734)	-0.004225 (0.00497)	0.002391 (0.00364)
D(L_NIKKEI)	0.031636 (0.01319)	0.016553 (0.01801)	-0.009761 (0.01846)	-0.001847 (0.00898)	-0.002573 (0.00608)	0.000542 (0.00445)

7 Cointegrating Equation(s): Log likelihood 42176.31

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.459682 (0.15711)
0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.723268 (0.11596)
0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	-0.521239 (0.09812)
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	-0.632545 (0.27295)
0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.065021 (0.51088)
0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	-0.516989 (0.71351)
0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	-0.472413 (0.29789)

Adjustment coefficients (std.err. in parentheses)							
D(L_DJA)	-0.015044 (0.01170)	-0.031769 (0.01556)	0.056057 (0.01582)	-0.007562 (0.00769)	-0.006723 (0.00535)	0.002126 (0.00394)	0.014356 (0.00706)
D(L_CAC)	0.017734 (0.01493)	-0.063056 (0.01985)	0.067710 (0.02018)	-0.004239 (0.00981)	-0.008521 (0.00682)	-0.004040 (0.00503)	0.017782 (0.00901)
D(L_FTSE)	0.003109 (0.01197)	-0.016657 (0.01591)	0.008448 (0.01617)	0.000916 (0.00786)	-0.010171 (0.00547)	0.002889 (0.00403)	0.010374 (0.00722)
D(L_DAX)	0.025441 (0.01751)	-0.072520 (0.02329)	0.098531 (0.02367)	-0.017173 (0.01150)	-0.003703 (0.00801)	-0.008651 (0.00590)	0.023741 (0.01057)
D(L_HANGSE NG)	0.017190 (0.01203)	-0.036921 (0.01599)	0.008713 (0.01625)	0.024518 (0.00790)	-0.016966 (0.00550)	0.004040 (0.00405)	-0.000935 (0.00726)
D(L_JKSE)	0.081788 (0.01520)	-0.025745 (0.02022)	0.005520 (0.02055)	-0.003984 (0.00999)	0.017328 (0.00695)	-0.024546 (0.00512)	-0.004537 (0.00918)
D(L_STI)	0.031237 (0.01117)	-0.011511 (0.01485)	-0.006767 (0.01510)	0.011794 (0.00734)	-0.004049 (0.00511)	0.002534 (0.00376)	-0.019975 (0.00674)
D(L_NIKKEI)	0.034223 (0.01367)	0.014745 (0.01818)	-0.010387 (0.01848)	-0.001949 (0.00898)	-0.003609 (0.00625)	-0.000299 (0.00460)	-0.011949 (0.00825)

## B. Estimasi VEC

### Vector Error Correction Estimates

Date: 04/17/08 Time: 12:51

Sample(adjusted): 1/10/2002 12/31/2007

Included observations: 1558 after adjusting endpoints

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

cc	CointEq1
L_DJA(-1)	1.000000
L_CAC(-1)	-0.900306 (0.26231) [-3.43218]

L_FTSE(-1)	1.273774 (0.26649) [ 4.77981]
L_DAX(-1)	-0.352235 (0.13682) [-2.57447]
L_HANGSENG(-1)	0.308807 (0.09306) [ 3.31840]
L_JKSE(-1)	-0.406526 (0.05190) [-7.83269]
L_STI(-1)	0.141826 (0.12411) [ 1.14275]
L_NIKKEI(-1)	-0.086407 (0.06561) [-1.31701]
C	-8.911670

Error Correction:	D(L_DJA)	D(L_CAC)	D(L_FTSE)	D(L_DAX)	D(L_HANGS ENG)	D(L_JKSE)	D(L_STI)	D(L_NIKKEI )
CointEq1	0.010834 (0.00736) [ 1.47107]	0.026788 (0.00939) [ 2.85138]	0.001481 (0.00752) [ 0.19700]	0.045970 (0.01102) [ 4.17009]	0.003943 (0.00757) [ 0.52119]	0.043969 (0.00955) [ 4.60309]	0.005161 (0.00703) [ 0.73449]	0.011811 (0.00860) [ 1.37366]

D(L_DJA(-1))	-0.076402 (0.03307) [-2.31051]	0.508165 (0.04218) [ 12.0467]	0.451612 (0.03375) [ 13.3797]	0.360288 (0.04950) [ 7.27883]	0.476503 (0.03397) [ 14.0271]	0.301422 (0.04289) [ 7.02792]	0.357369 (0.03155) [ 11.3271]	0.347898 (0.03861) [ 9.01095]
D(L_DJA(-2))	-0.027259 (0.03750) [-0.72696]	0.210037 (0.04783) [ 4.39096]	0.185819 (0.03828) [ 4.85479]	0.117683 (0.05613) [ 2.09665]	0.050519 (0.03852) [ 1.31148]	0.078488 (0.04863) [ 1.61382]	0.071544 (0.03578) [ 1.99975]	-0.027823 (0.04378) [-0.63550]
D(L_DJA(-3))	0.001328 (0.03791) [ 0.03503]	0.106908 (0.04836) [ 2.21048]	0.106182 (0.03870) [ 2.74376]	0.085901 (0.05675) [ 1.51365]	0.074403 (0.03895) [ 1.91032]	0.208396 (0.04917) [ 4.23796]	0.044092 (0.03617) [ 1.21893]	0.004049 (0.04427) [ 0.09148]
D(L_DJA(-4))	-0.067751 (0.03778) [-1.79335]	-0.029334 (0.04819) [-0.60867]	-0.009293 (0.03856) [-0.24097]	-0.021683 (0.05655) [-0.38343]	0.017489 (0.03881) [ 0.45063]	0.053144 (0.04900) [ 1.08456]	0.017042 (0.03605) [ 0.47281]	0.000816 (0.04411) [ 0.01850]
D(L_DJA(-5))	0.002120 (0.03629) [ 0.05841]	7.69E-05 (0.04630) [ 0.00166]	-0.000151 (0.03705) [-0.00409]	-0.026899 (0.05433) [-0.49510]	-0.041379 (0.03729) [-1.10976]	-0.010797 (0.04708) [-0.22935]	0.028451 (0.03463) [ 0.82160]	0.047274 (0.04238) [ 1.11555]
D(L_CAC(-1))	0.001237 (0.05438) [ 0.02275]	-0.242522 (0.06937) [-3.49598]	-0.070296 (0.05551) [-1.26638]	0.051916 (0.08140) [ 0.63778]	-0.067524 (0.05587) [-1.20869]	0.048994 (0.07053) [ 0.69463]	-0.017027 (0.05188) [-0.32817]	0.118380 (0.06349) [ 1.86446]
D(L_CAC(-2))	0.155045 (0.05550) [ 2.79371]	0.071703 (0.07080) [ 1.01279]	0.080098 (0.05665) [ 1.41392]	0.288591 (0.08307) [ 3.47390]	0.069729 (0.05701) [ 1.22303]	0.090243 (0.07198) [ 1.25369]	0.109197 (0.05295) [ 2.06222]	0.121646 (0.06480) [ 1.87733]
D(L_CAC(-3))	0.066992 (0.05565) [ 1.20378]	0.011046 (0.07099) [ 0.15560]	0.014060 (0.05681) [ 0.24752]	0.081966 (0.08330) [ 0.98394]	-0.073712 (0.05717) [-1.28933]	0.028660 (0.07218) [ 0.39705]	-0.050647 (0.05310) [-0.95386]	0.053839 (0.06498) [ 0.82859]
D(L_CAC(-4))	0.010176	0.018086	0.037033	0.140584	-0.019605	0.080758	-0.045581	-0.072413

	(0.05483)	(0.06995)	(0.05597)	(0.08208)	(0.05633)	(0.07112)	(0.05232)	(0.06402)
	[ 0.18558]	[ 0.25856]	[ 0.66164]	[ 1.71277]	[-0.34802]	[ 1.13550]	[-0.87124]	[-1.13106]
D(L_CAC(-5))	0.135050 (0.05282) [ 2.55687]	-0.111019 (0.06738) [-1.64768]	-0.038571 (0.05391) [-0.71541]	-0.009093 (0.07906) [-0.11501]	0.020909 (0.05426) [ 0.38534]	-0.012128 (0.06851) [-0.17703]	0.002620 (0.05039) [ 0.05199]	0.058719 (0.06167) [ 0.95215]
D(L_FTSE(-1))	-0.028600 (0.04961) [-0.57647]	-0.154013 (0.06329) [-2.43351]	-0.263881 (0.05064) [-5.21078]	-0.204881 (0.07426) [-2.75885]	0.168779 (0.05097) [ 3.31157]	-0.001769 (0.06435) [-0.02750]	0.082620 (0.04734) [ 1.74544]	0.026222 (0.05793) [ 0.45270]
D(L_FTSE(-2))	-0.106585 (0.05067) [-2.10362]	-0.079643 (0.06463) [-1.23219]	-0.066622 (0.05172) [-1.28815]	-0.142418 (0.07584) [-1.87778]	0.027352 (0.05205) [ 0.52548]	-0.089793 (0.06572) [-1.36636]	-0.009000 (0.04834) [-0.18617]	0.001048 (0.05916) [ 0.01771]
D(L_FTSE(-3))	-0.031831 (0.05063) [-0.62869]	-0.116640 (0.06459) [-1.80589]	-0.114917 (0.05168) [-2.22355]	-0.069092 (0.07579) [-0.91164]	0.108987 (0.05201) [ 2.09536]	0.001235 (0.06567) [ 0.01880]	0.095514 (0.04831) [ 1.97721]	0.039743 (0.05911) [ 0.67230]
D(L_FTSE(-4))	0.122316 (0.05085) [ 2.40534]	0.066630 (0.06487) [ 1.02713]	0.041855 (0.05191) [ 0.80634]	0.033624 (0.07612) [ 0.44173]	0.067833 (0.05224) [ 1.29848]	0.038253 (0.06596) [ 0.57997]	0.126183 (0.04852) [ 2.60072]	0.102519 (0.05937) [ 1.72669]
D(L_FTSE(-5))	-0.054422 (0.04993) [-1.09002]	-0.055324 (0.06369) [-0.86863]	-0.086374 (0.05096) [-1.69483]	-0.061617 (0.07474) [-0.82447]	-0.105359 (0.05129) [-2.05416]	-0.023286 (0.06476) [-0.35959]	-0.016642 (0.04764) [-0.34936]	-0.002912 (0.05829) [-0.04995]
D(L_DAX(-1))	0.056470 (0.03775) [ 1.49587]	0.107894 (0.04816) [ 2.24044]	0.047437 (0.03853) [ 1.23104]	-0.152856 (0.05651) [-2.70501]	-0.030043 (0.03878) [-0.77467]	-0.060153 (0.04896) [-1.22853]	-0.020061 (0.03602) [-0.55697]	0.033105 (0.04408) [ 0.75108]
D(L_DAX(-2))	-0.027569 (0.03877)	-0.114379 (0.04946)	-0.098465 (0.03957)	-0.202516 (0.05803)	-0.032336 (0.03983)	-0.076744 (0.05028)	-0.071676 (0.03699)	-0.050398 (0.04526)

	[-0.71113]	[-2.31279]	[-2.48822]	[-3.48976]	[-0.81191]	[-1.52622]	[-1.93777]	[-1.11341]
D(L_DAX(-3))	-0.085018 (0.03861) [-2.20215]	-0.091206 (0.04925) [-1.85189]	-0.070479 (0.03941) [-1.78844]	-0.141827 (0.05779) [-2.45416]	0.006447 (0.03966) [ 0.16254]	-0.047673 (0.05007) [-0.95204]	0.026478 (0.03684) [ 0.71881]	-0.034739 (0.04508) [-0.77067]
D(L_DAX(-4))	-0.032459 (0.03817) [-0.85035]	-0.097643 (0.04869) [-2.00521]	-0.073351 (0.03896) [-1.88253]	-0.158259 (0.05714) [-2.76973]	0.004957 (0.03921) [ 0.12640]	-0.066339 (0.04951) [-1.33992]	0.008784 (0.03642) [ 0.24117]	-0.000375 (0.04457) [-0.00840]
D(L_DAX(-5))	-0.129174 (0.03644) [-3.54453]	0.054073 (0.04649) [ 1.16312]	0.057341 (0.03720) [ 1.54144]	-0.046880 (0.05455) [-0.85937]	0.057786 (0.03744) [ 1.54348]	0.023156 (0.04727) [ 0.48988]	0.032886 (0.03477) [ 0.94579]	-0.041628 (0.04255) [-0.97833]
D(L_HANGSENG(-1))	0.020559 (0.03233) [ 0.63587]	-0.012824 (0.04125) [-0.31093]	-0.016260 (0.03300) [-0.49268]	0.050121 (0.04840) [ 1.03559]	-0.071082 (0.03322) [-2.14005]	-0.081416 (0.04194) [-1.94143]	-0.074984 (0.03085) [-2.43070]	0.002452 (0.03775) [ 0.06495]
D(L_HANGSENG(-2))	0.043799 (0.03244) [ 1.35005]	0.030266 (0.04139) [ 0.73131]	0.018564 (0.03312) [ 0.56059]	0.004141 (0.04856) [ 0.08528]	-0.030775 (0.03333) [-0.92340]	-0.073394 (0.04208) [-1.74421]	-0.001073 (0.03095) [-0.03467]	-0.000167 (0.03788) [-0.00441]
D(L_HANGSENG(-3))	-0.058576 (0.03247) [-1.80387]	-0.030978 (0.04142) [-0.74781]	0.006615 (0.03315) [ 0.19958]	-0.055021 (0.04861) [-1.13193]	0.046254 (0.03336) [ 1.38653]	0.033171 (0.04212) [ 0.78758]	-0.013433 (0.03098) [-0.43357]	0.024604 (0.03791) [ 0.64893]
D(L_HANGSENG(-4))	0.009402 (0.03242) [ 0.28998]	0.056668 (0.04136) [ 1.37013]	0.027197 (0.03309) [ 0.82179]	-0.004057 (0.04853) [-0.08359]	0.073332 (0.03331) [ 2.20170]	0.058697 (0.04205) [ 1.39583]	0.060096 (0.03093) [ 1.94274]	0.003283 (0.03785) [ 0.08672]



D(L_HANGSENG(-5))	0.005647 (0.03176) [ 0.17777]	0.011744 (0.04052) [ 0.28983]	0.008109 (0.03242) [ 0.25011]	-0.042341 (0.04755) [-0.89052]	-0.053012 (0.03263) [-1.62459]	-0.029578 (0.04120) [-0.71793]	-0.015717 (0.03031) [-0.51862]	-0.008284 (0.03709) [-0.22336]
D(L_JKSE(-1))	0.003684 (0.02130) [ 0.17296]	-0.000555 (0.02717) [-0.02044]	-0.003587 (0.02174) [-0.16497]	0.010692 (0.03188) [ 0.33536]	0.053487 (0.02188) [ 2.44437]	0.121254 (0.02763) [ 4.38902]	0.068193 (0.02032) [ 3.35555]	0.070804 (0.02487) [ 2.84706]
D(L_JKSE(-2))	0.000240 (0.02143) [ 0.01122]	0.042916 (0.02734) [ 1.56987]	0.031407 (0.02187) [ 1.43580]	0.007054 (0.03208) [ 0.21991]	-0.000578 (0.02201) [-0.02626]	-0.051398 (0.02779) [-1.84918]	-0.014437 (0.02045) [-0.70608]	0.006121 (0.02502) [ 0.24463]
D(L_JKSE(-3))	-0.032142 (0.02137) [-1.50378]	-0.073467 (0.02727) [-2.69439]	-0.049515 (0.02182) [-2.26949]	-0.094376 (0.03199) [-2.94972]	0.001925 (0.02196) [ 0.08768]	0.023325 (0.02772) [ 0.84136]	-0.005951 (0.02039) [-0.29182]	0.008038 (0.02496) [ 0.32208]
D(L_JKSE(-4))	-0.014030 (0.02137) [-0.65652]	-0.009938 (0.02726) [-0.36453]	-0.007051 (0.02181) [-0.32323]	-0.008650 (0.03199) [-0.27041]	-0.042429 (0.02195) [-1.93261]	-0.021859 (0.02772) [-0.78862]	-0.038320 (0.02039) [-1.87937]	-0.024056 (0.02495) [-0.96410]
D(L_JKSE(-5))	-0.055925 (0.02128) [-2.62848]	-0.030111 (0.02714) [-1.10941]	-0.018624 (0.02172) [-0.85755]	-0.038539 (0.03185) [-1.21007]	-0.015762 (0.02186) [-0.72111]	0.001001 (0.02760) [ 0.03628]	-0.002487 (0.02030) [-0.12249]	-0.016287 (0.02484) [-0.65562]
D(L_STI(-1))	-0.062675 (0.03538) [-1.77134]	-0.021243 (0.04514) [-0.47063]	-0.025065 (0.03612) [-0.69400]	-0.005983 (0.05296) [-0.11296]	0.056874 (0.03635) [ 1.56467]	-0.032798 (0.04589) [-0.71468]	-0.034120 (0.03376) [-1.01070]	0.045046 (0.04131) [ 1.09038]
D(L_STI(-2))	-0.032096 (0.03533) [-0.90841]	-0.060256 (0.04507) [-1.33687]	-0.034616 (0.03607) [-0.95982]	-0.023176 (0.05289) [-0.43820]	-0.034195 (0.03630) [-0.94210]	0.044725 (0.04583) [ 0.97595]	-0.053841 (0.03371) [-1.59715]	-0.032809 (0.04125) [-0.79531]

D(L_STI(-3))	0.089214 (0.03532) [ 2.52604]	0.166931 (0.04505) [ 3.70513]	0.101703 (0.03605) [ 2.82110]	0.203512 (0.05287) [ 3.84952]	-0.009978 (0.03628) [-0.27500]	-0.058431 (0.04581) [-1.27555]	0.008093 (0.03370) [ 0.24018]	-0.057508 (0.04124) [-1.39461]
D(L_STI(-4))	-0.009981 (0.03543) [-0.28175]	-0.021011 (0.04519) [-0.46492]	-0.000572 (0.03616) [-0.01581]	0.059909 (0.05303) [ 1.12972]	-0.025387 (0.03639) [-0.69755]	-0.017253 (0.04595) [-0.37549]	-0.015407 (0.03380) [-0.45582]	-0.022639 (0.04136) [-0.54733]
D(L_STI(-5))	-0.013234 (0.03539) [-0.37395]	-0.046633 (0.04515) [-1.03291]	-0.051184 (0.03613) [-1.41683]	-0.002533 (0.05298) [-0.04781]	0.036644 (0.03636) [ 1.00789]	-0.032400 (0.04590) [-0.70584]	-0.013460 (0.03377) [-0.39861]	-0.028761 (0.04132) [-0.69602]
D(L_NIKKEI(-1))	-0.041476 (0.02516) [-1.64854]	-0.025777 (0.03210) [-0.80314]	-0.026198 (0.02568) [-1.02009]	-0.040957 (0.03766) [-1.08751]	-0.109260 (0.02585) [-4.22725]	-0.030239 (0.03263) [-0.92665]	-0.077498 (0.02401) [-3.22842]	-0.138224 (0.02938) [-4.70541]
D(L_NIKKEI(-2))	0.046338 (0.02536) [ 1.82729]	-0.004197 (0.03235) [-0.12974]	-0.010317 (0.02589) [-0.39857]	0.018766 (0.03796) [ 0.49436]	-0.041697 (0.02605) [-1.60056]	-0.018247 (0.03289) [-0.55476]	0.019717 (0.02420) [ 0.81491]	-0.020891 (0.02961) [-0.70559]
D(L_NIKKEI(-3))	-0.026559 (0.02543) [-1.04450]	-0.045532 (0.03244) [-1.40370]	-0.033108 (0.02596) [-1.27558]	-0.029412 (0.03806) [-0.77272]	-0.031432 (0.02612) [-1.20328]	-0.003950 (0.03298) [-0.11978]	-0.014222 (0.02426) [-0.58621]	0.008649 (0.02969) [ 0.29134]
D(L_NIKKEI(-4))	-0.007439 (0.02540) [-0.29285]	0.005336 (0.03240) [ 0.16467]	-0.005382 (0.02593) [-0.20759]	0.022522 (0.03802) [ 0.59232]	-0.005148 (0.02609) [-0.19729]	0.032872 (0.03295) [ 0.99777]	-0.012137 (0.02424) [-0.50080]	-0.007740 (0.02966) [-0.26096]
D(L_NIKKEI(-5))	0.008882 (0.02445) [ 0.36325]	0.017973 (0.03119) [ 0.57624]	0.009478 (0.02496) [ 0.37976]	0.055566 (0.03660) [ 1.51821]	0.007556 (0.02512) [ 0.30084]	0.063273 (0.03171) [ 1.99518]	0.010479 (0.02333) [ 0.44920]	0.044849 (0.02855) [ 1.57102]

C	0.000460 (0.00025) [ 1.84024]	0.000101 (0.00032) [ 0.31583]	9.83E-05 (0.00025) [ 0.38560]	0.000389 (0.00037) [ 1.04116]	0.000445 (0.00026) [ 1.73294]	0.001122 (0.00032) [ 3.46364]	0.000382 (0.00024) [ 1.60213]	0.000105 (0.00029) [ 0.36146]
R-squared	0.066548	0.167410	0.179438	0.098239	0.225704	0.117232	0.170551	0.195287
Adj. R-squared	0.041303	0.144892	0.157246	0.073851	0.204764	0.093358	0.148118	0.173524
Sum sq. resids	0.139969	0.227778	0.145839	0.313627	0.147718	0.235469	0.127418	0.190809
S.E. equation	0.009609	0.012258	0.009808	0.014383	0.009871	0.012463	0.009168	0.011219
F-statistic	2.636075	7.434712	8.085707	4.028157	10.77826	4.910396	7.602890	8.973208
Log likelihood	5047.622	4668.286	5015.615	4419.137	5005.646	4642.417	5120.808	4806.246
Akaike AIC	-6.425702	-5.938750	-6.384615	-5.618918	-6.371817	-5.905542	-6.519651	-6.115849
Schwarz SC	-6.281447	-5.794495	-6.240360	-5.474663	-6.227563	-5.761287	-6.375396	-5.971594
Mean dependent	0.000260	0.000130	0.000135	0.000271	0.000570	0.001250	0.000465	0.000232
S.D. dependent	0.009814	0.013255	0.010684	0.014946	0.011069	0.013089	0.009933	0.012341
Determinant Residual Covariance		5.68E-34						
Log Likelihood		42117.20						
Log Likelihood (d.f. adjusted)		41946.89						
Akaike Information Criteria		-53.40551						
Schwarz Criteria		-52.22400						

### C. Representations Model VEC

Estimation Proc:

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EC(C,1) 1 5 L\_DJA L\_CAC L\_FTSE L\_DAX L\_HANGSENG L\_JKSE L\_STI L\_NIKKEI

VAR Model:

=====

$$D(L\_DJA) = A(1,1)*(B(1,1)*L\_DJA(-1) + B(1,2)*L\_CAC(-1) + B(1,3)*L\_FTSE(-1) + B(1,4)*L\_DAX(-1) + B(1,5)*L\_HANGSENG(-1) + B(1,6)*L\_JKSE(-1) + B(1,7)*L\_STI(-1) + B(1,8)*L\_NIKKEI(-1) + B(1,9)) + C(1,1)*D(L\_DJA(-1)) + C(1,2)*D(L\_DJA(-2)) + C(1,3)*D(L\_DJA(-3)) + C(1,4)*D(L\_DJA(-4)) + C(1,5)*D(L\_DJA(-5)) + C(1,6)*D(L\_CAC(-1)) + C(1,7)*D(L\_CAC(-2)) + C(1,8)*D(L\_CAC(-3)) + C(1,9)*D(L\_CAC(-4)) + C(1,10)*D(L\_CAC(-5)) + C(1,11)*D(L\_FTSE(-1)) + C(1,12)*D(L\_FTSE(-2)) + C(1,13)*D(L\_FTSE(-3)) + C(1,14)*D(L\_FTSE(-4)) + C(1,15)*D(L\_FTSE(-5)) + C(1,16)*D(L\_DAX(-1)) + C(1,17)*D(L\_DAX(-2)) + C(1,18)*D(L\_DAX(-3)) + C(1,19)*D(L\_DAX(-4)) + C(1,20)*D(L\_DAX(-5)) + C(1,21)*D(L\_HANGSENG(-1)) + C(1,22)*D(L\_HANGSENG(-2)) + C(1,23)*D(L\_HANGSENG(-3)) + C(1,24)*D(L\_HANGSENG(-4)) + C(1,25)*D(L\_HANGSENG(-5)) + C(1,26)*D(L\_JKSE(-1)) + C(1,27)*D(L\_JKSE(-2)) + C(1,28)*D(L\_JKSE(-3)) + C(1,29)*D(L\_JKSE(-4)) + C(1,30)*D(L\_JKSE(-5)) + C(1,31)*D(L\_STI(-1)) + C(1,32)*D(L\_STI(-2)) + C(1,33)*D(L\_STI(-3)) + C(1,34)*D(L\_STI(-4)) + C(1,35)*D(L\_STI(-5)) + C(1,36)*D(L\_NIKKEI(-1)) + C(1,37)*D(L\_NIKKEI(-2)) + C(1,38)*D(L\_NIKKEI(-3)) + C(1,39)*D(L\_NIKKEI(-4)) + C(1,40)*D(L\_NIKKEI(-5)) + C(1,41)$$

$$D(L\_CAC) = A(2,1)*(B(1,1)*L\_DJA(-1) + B(1,2)*L\_CAC(-1) + B(1,3)*L\_FTSE(-1) + B(1,4)*L\_DAX(-1) + B(1,5)*L\_HANGSENG(-1) + B(1,6)*L\_JKSE(-1) + B(1,7)*L\_STI(-1) + B(1,8)*L\_NIKKEI(-1) + B(1,9)) + C(2,1)*D(L\_DJA(-1)) + C(2,2)*D(L\_DJA(-2)) + C(2,3)*D(L\_DJA(-3)) + C(2,4)*D(L\_DJA(-4)) + C(2,5)*D(L\_DJA(-5)) + C(2,6)*D(L\_CAC(-1)) + C(2,7)*D(L\_CAC(-2)) + C(2,8)*D(L\_CAC(-3)) + C(2,9)*D(L\_CAC(-4)) + C(2,10)*D(L\_CAC(-5)) + C(2,11)*D(L\_FTSE(-1)) + C(2,12)*D(L\_FTSE(-2)) + C(2,13)*D(L\_FTSE(-3)) + C(2,14)*D(L\_FTSE(-4)) + C(2,15)*D(L\_FTSE(-5)) + C(2,16)*D(L\_DAX(-1)) + C(2,17)*D(L\_DAX(-2)) + C(2,18)*D(L\_DAX(-3)) + C(2,19)*D(L\_DAX(-4)) + C(2,20)*D(L\_DAX(-5)) + C(2,21)*D(L\_HANGSENG(-1)) + C(2,22)*D(L\_HANGSENG(-2)) + C(2,23)*D(L\_HANGSENG(-3)) + C(2,24)*D(L\_HANGSENG(-4)) + C(2,25)*D(L\_HANGSENG(-5)) + C(2,26)*D(L\_JKSE(-1)) + C(2,27)*D(L\_JKSE(-2)) + C(2,28)*D(L\_JKSE(-3)) + C(2,29)*D(L\_JKSE(-4)) + C(2,30)*D(L\_JKSE(-5)) + C(2,31)*D(L\_STI(-1)) + C(2,32)*D(L\_STI(-2)) + C(2,33)*D(L\_STI(-3)) + C(2,34)*D(L\_STI(-4)) + C(2,35)*D(L\_STI(-5)) + C(2,36)*D(L\_NIKKEI(-1)) + C(2,37)*D(L\_NIKKEI(-2)) + C(2,38)*D(L\_NIKKEI(-3)) + C(2,39)*D(L\_NIKKEI(-4)) + C(2,40)*D(L\_NIKKEI(-5)) + C(2,41)$$

$$D(L\_FTSE) = A(3,1)*(B(1,1)*L\_DJA(-1) + B(1,2)*L\_CAC(-1) + B(1,3)*L\_FTSE(-1) + B(1,4)*L\_DAX(-1) + B(1,5)*L\_HANGSENG(-1) + B(1,6)*L\_JKSE(-1) + B(1,7)*L\_STI(-1) + B(1,8)*L\_NIKKEI(-1) + B(1,9)) + C(3,1)*D(L\_DJA(-1)) + C(3,2)*D(L\_DJA(-2)) + C(3,3)*D(L\_DJA(-3)) + C(3,4)*D(L\_DJA(-4)) + C(3,5)*D(L\_DJA(-5)) + C(3,6)*D(L\_CAC(-1)) + C(3,7)*D(L\_CAC(-2)) + C(3,8)*D(L\_CAC(-3)) + C(3,9)*D(L\_CAC(-4)) + C(3,10)*D(L\_CAC(-5)) + C(3,11)*D(L\_FTSE(-1)) + C(3,12)*D(L\_FTSE(-2)) + C(3,13)*D(L\_FTSE(-3)) + C(3,14)*D(L\_FTSE(-4)) + C(3,15)*D(L\_FTSE(-5)) + C(3,16)*D(L\_DAX(-1)) + C(3,17)*D(L\_DAX(-2)) + C(3,18)*D(L\_DAX(-3)) + C(3,19)*D(L\_DAX(-4)) + C(3,20)*D(L\_DAX(-5)) + C(3,21)*D(L\_HANGSENG(-1)) + C(3,22)*D(L\_HANGSENG(-2)) + C(3,23)*D(L\_HANGSENG(-3)) + C(3,24)*D(L\_HANGSENG(-4)) + C(3,25)*D(L\_HANGSENG(-5)) + C(3,26)*D(L\_JKSE(-1)) + C(3,27)*D(L\_JKSE(-2)) + C(3,28)*D(L\_JKSE(-3)) + C(3,29)*D(L\_JKSE(-4)) + C(3,30)*D(L\_JKSE(-5)) + C(3,31)*D(L\_STI(-1)) +$$

D. *Cointegrating Relations* (Asumsi tidak terdapat trend linier dalam data)

Unrestricted Cointegration Rank Test

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.043685	200.2424	165.58	177.20
At most 1	0.034095	130.6493	131.70	143.09
At most 2	0.014448	76.60231	102.14	111.01
At most 3	0.011489	53.92816	76.07	84.45
At most 4	0.007732	35.92404	53.12	60.16
At most 5	0.006684	23.83114	34.91	41.07
At most 6	0.005675	13.38254	19.96	24.60
At most 7	0.002894	4.515876	9.24	12.97

(\*\*) denotes rejection of the hypothesis at the 5%(1%) level  
Trace test indicates 1 cointegrating equation(s) at both 5% and 1% levels

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	5 Percent Critical Value	1 Percent Critical Value
None **	0.043685	69.59309	52.00	57.95
At most 1 **	0.034095	54.04697	46.45	51.91
At most 2	0.014448	22.67415	40.30	46.82
At most 3	0.011489	18.00412	34.40	39.79
At most 4	0.007732	12.09290	28.14	33.24
At most 5	0.006684	10.44860	22.00	26.81
At most 6	0.005675	8.866664	15.67	20.20
At most 7	0.002894	4.515876	9.24	12.97

(\*\*) denotes rejection of the hypothesis at the 5%(1%) level  
Max-eigenvalue test indicates 2 cointegrating equation(s) at both 5% and 1% levels

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

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
-31.43826	24.43591	-33.50709	9.621713	-9.377798	12.12206	-2.900564	2.660534	258.5748
-22.44419	-32.34457	45.03670	-0.804746	-7.521411	3.109818	15.42528	1.365762	-6.174415
13.21900	-24.12196	-5.052851	22.40062	-14.99918	6.240076	-5.778520	-1.673854	108.8656
3.434760	17.49795	7.451574	-10.94886	-0.238550	5.477016	-13.12510	-7.793053	-6.268404
-20.07352	25.94295	-3.773686	-6.561179	-4.742071	3.894325	9.327276	-10.25804	78.22817
-13.10497	-21.96274	29.33944	9.673250	0.462287	3.374544	-12.47013	4.595121	-17.70722
3.786110	-20.78588	12.22201	12.24432	-9.096935	-2.254764	9.496928	-4.570633	7.122402
-8.618010	4.087624	4.392610	2.580694	3.753425	2.915697	-8.227934	-0.117219	-15.57431

Unrestricted Adjustment Coefficients (alpha):

D(L_DJA)	-0.000371	0.000991	0.000161	0.000181	0.000337	0.000138	-0.000257	-0.000266
D(L_CAC)	-0.000776	0.001194	0.000489	0.000299	-0.000271	-0.000355	-7.93E-05	-0.000330
D(L_FTSE)	-2.73E-05	0.000582	0.000465	0.000114	-5.72E-05	-0.000461	-0.000217	-0.000280
D(L_DAX)	-0.001427	0.001520	0.000490	0.000426	-7.37E-06	-0.000490	-0.000281	-0.000142
D(L_HANGSENG)	-0.000253	7.74E-05	0.001101	-7.94E-05	0.000161	4.61E-05	0.000171	1.56E-05
D(L_JKSE)	-0.001766	-0.000994	0.000434	-0.000483	8.94E-05	-1.22E-05	-0.000115	-0.000223
D(L_STI)	-0.000302	-0.000396	0.000829	0.000360	-0.000161	0.000161	-0.000221	-3.95E-05
D(L_NIKKEI)	-0.000452	-0.000581	0.000486	0.000782	0.000321	-0.000150	0.000288	-0.000145

1 Cointegrating Equation(s): Log likelihood 42110.99

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	-0.777267 (0.24505)	1.065806 (0.24895)	-0.306051 (0.12781)	0.298292 (0.08693)	-0.385583 (0.04849)	0.092262 (0.11594)	-0.084627 (0.06129)	-8.224844 (0.94628)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	0.011676 (0.00766)
D(L_CAC)	0.024392 (0.00977)
D(L_FTSE)	0.000859 (0.00781)
D(L_DAX)	0.044858 (0.01146)

D(L_HANGSE NG)	0.007967 (0.00787)
D(L_JKSE)	0.055519 (0.00992)
D(L_STI)	0.009509 (0.00730)
D(L_NIKKEI)	0.014205 (0.00893)

2 Cointegrating Equation(s):      Log likelihood      42138.01

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	-0.010695 (0.14196)	-0.186255 (0.08976)	0.311195 (0.07128)	-0.299031 (0.04142)	-0.180868 (0.09789)	-0.076297 (0.05052)	-5.246666 (0.79214)
0.000000	1.000000	-1.384983 (0.14054)	0.154125 (0.08886)	0.016599 (0.07057)	0.111354 (0.04100)	-0.351399 (0.09691)	0.010718 (0.05002)	3.831604 (0.78424)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.010571 (0.00936)	-0.041136 (0.00982)
D(L_CAC)	-0.002405 (0.01194)	-0.057576 (0.01253)
D(L_FTSE)	-0.012212 (0.00958)	-0.019504 (0.01005)
D(L_DAX)	0.010746 (0.01400)	-0.084026 (0.01470)
D(L_HANGSE NG)	0.006229 (0.00966)	-0.008697 (0.01014)
D(L_JKSE)	0.077819 (0.01215)	-0.011016 (0.01275)
D(L_STI)	0.018391 (0.00896)	0.005409 (0.00941)
D(L_NIKKEI)	0.027253 (0.01096)	0.007764 (0.01150)

3 Cointegrating Equation(s):      Log likelihood      42149.35

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Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	0.000000	-0.194232 (0.05032)	0.316417 (0.06594)	-0.302626 (0.03867)	-0.177557 (0.09794)	-0.076183 (0.04851)	-5.322200 (0.44797)
0.000000	1.000000	0.000000	-0.878849 (0.12027)	0.692916 (0.15760)	-0.354128 (0.09242)	0.077399 (0.23410)	0.025419 (0.11595)	-5.950280 (1.07070)
0.000000	0.000000	1.000000	-0.745839 (0.09117)	0.488321 (0.11947)	-0.336092 (0.07006)	0.309605 (0.17746)	0.010615 (0.08790)	-7.062822 (0.81167)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.008439 (0.00989)	-0.045026 (0.01143)	0.056271 (0.01365)
D(L_CAC)	0.004063 (0.01261)	-0.069379 (0.01457)	0.077295 (0.01741)
D(L_FTSE)	-0.006070 (0.01011)	-0.030713 (0.01168)	0.024796 (0.01396)
D(L_DAX)	0.017226 (0.01479)	-0.095851 (0.01709)	0.113782 (0.02042)
D(L_HANGSENG)	0.020784 (0.01015)	-0.035257 (0.01173)	0.006415 (0.01401)
D(L_JKSE)	0.083560 (0.01284)	-0.021491 (0.01483)	0.012230 (0.01772)
D(L_STI)	0.029355 (0.00943)	-0.014597 (0.01090)	-0.011879 (0.01302)
D(L_NIKKEI)	0.033673 (0.01157)	-0.003951 (0.01337)	-0.013498 (0.01597)

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4 Cointegrating Equation(s):      Log likelihood      42158.35

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Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	0.000000	0.000000	0.004875 (0.11401)	-0.025200 (0.05292)	-0.472470 (0.14133)	-0.223037 (0.07339)	-2.245581 (0.64880)
0.000000	1.000000	0.000000	0.000000	-0.716734 (0.40506)	0.901155 (0.18802)	-1.257009 (0.50213)	-0.639059 (0.26075)	7.970645 (2.30509)
0.000000	0.000000	1.000000	0.000000	-0.707984 (0.35228)	0.729209 (0.16351)	-0.822845 (0.43669)	-0.553297 (0.22677)	4.751227 (2.00469)



0.000000	0.000000	0.000000	1.000000	-1.603973 (0.54397)	1.428326 (0.25249)	-1.518358 (0.67432)	-0.756078 (0.35017)	15.83995 (3.09556)
Adjustment coefficients (std.err. in parentheses)								
D(L_DJA)	-0.007819 (0.00992)	-0.041867 (0.01218)	0.057617 (0.01377)	-0.002736 (0.00648)				
D(L_CAC)	0.005092 (0.01265)	-0.064139 (0.01553)	0.079526 (0.01755)	-0.000744 (0.00826)				
D(L_FTSE)	-0.005678 (0.01015)	-0.028716 (0.01246)	0.025646 (0.01408)	0.008428 (0.00662)				
D(L_DAX)	0.018691 (0.01484)	-0.088391 (0.01822)	0.116959 (0.02059)	-0.008638 (0.00968)				
D(L_HANGSE NG)	0.020511 (0.01018)	-0.036647 (0.01251)	0.005824 (0.01413)	0.023034 (0.00665)				
D(L_JKSE)	0.081902 (0.01287)	-0.029937 (0.01581)	0.008634 (0.01786)	-0.001179 (0.00840)				
D(L_STI)	0.030591 (0.00946)	-0.008298 (0.01162)	-0.009196 (0.01313)	0.012045 (0.00617)				
D(L_NIKKEI)	0.036359 (0.01158)	0.009730 (0.01422)	-0.007671 (0.01607)	-0.001561 (0.00756)				

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5 Cointegrating Equation(s):      Log likelihood      42164.40

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Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	0.000000	0.000000	0.000000	0.025640 (0.05859)	-0.597754 (0.13131)	-0.189401 (0.08463)	-1.911003 (0.55402)
0.000000	1.000000	0.000000	0.000000	0.000000	-6.573671 (2.82441)	17.16325 (6.32963)	-5.584539 (4.07966)	-41.22175 (26.7067)
0.000000	0.000000	1.000000	0.000000	0.000000	-6.654359 (2.80342)	17.37252 (6.28259)	-5.438399 (4.04934)	-43.84059 (26.5082)
0.000000	0.000000	0.000000	1.000000	0.000000	-15.29952 (6.42210)	39.70417 (14.3922)	-11.82352 (9.27628)	-94.24727 (60.7253)
0.000000	0.000000	0.000000	0.000000	1.000000	-10.42901 (4.06871)	25.70026 (9.11818)	-6.900020 (5.87698)	-68.63409 (38.4725)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.014587	-0.033120	0.056344	-0.004948	-0.008033
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	(0.01104)	(0.01370)	(0.01379)	(0.00666)	(0.00479)
D(L_CAC)	0.010536	-0.071175	0.080550	0.001036	-0.007829
	(0.01408)	(0.01747)	(0.01759)	(0.00850)	(0.00611)
D(L_FTSE)	-0.004530	-0.030200	0.025862	0.008803	-0.010850
	(0.01130)	(0.01402)	(0.01411)	(0.00682)	(0.00490)
D(L_DAX)	0.018839	-0.088583	0.116987	-0.008590	-0.005471
	(0.01652)	(0.02050)	(0.02063)	(0.00997)	(0.00717)
D(L_HANGSE NG)	0.017272	-0.032461	0.005215	0.021975	-0.015467
	(0.01134)	(0.01407)	(0.01416)	(0.00684)	(0.00492)
D(L_JKSE)	0.080108	-0.027618	0.008296	-0.001766	0.017211
	(0.01433)	(0.01779)	(0.01790)	(0.00865)	(0.00622)
D(L_STI)	0.033824	-0.012476	-0.008589	0.013102	-0.005949
	(0.01053)	(0.01307)	(0.01315)	(0.00636)	(0.00457)
D(L_NIKKEI)	0.029924	0.018046	-0.008881	-0.003665	-0.000381
	(0.01289)	(0.01600)	(0.01610)	(0.00778)	(0.00560)

6 Cointegrating Equation(s): Log likelihood 42169.62

Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.529879	-0.208760	-2.069447
						(0.06266)	(0.07657)	(0.31938)
0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	-0.238756	-0.621253	-0.599055
						(0.21820)	(0.26663)	(1.11219)
0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	-0.243081	-0.414191	-2.719275
						(0.16189)	(0.19782)	(0.82518)
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	-0.797144	-0.272003	0.297733
						(0.31893)	(0.38972)	(1.62563)
0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	-1.907695	0.974142	-4.186932
						(0.30150)	(0.36842)	(1.53679)
0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	-2.647228	0.755025	6.179607
						(0.48263)	(0.58976)	(2.46005)

Adjustment coefficients (std.err. in parentheses)

D(L_DJA)	-0.016396	-0.036151	0.060393	-0.003613	-0.007969	0.002354
	(0.01149)	(0.01469)	(0.01551)	(0.00706)	(0.00479)	(0.00384)
D(L_CAC)	0.015189	-0.063377	0.070133	-0.002399	-0.007993	-0.003253
	(0.01465)	(0.01874)	(0.01977)	(0.00900)	(0.00611)	(0.00490)

D(L_FTSE)	0.001507 (0.01174)	-0.020084 (0.01502)	0.012348 (0.01585)	0.004348 (0.00722)	-0.011063 (0.00490)	0.003228 (0.00393)
D(L_DAX)	0.025266 (0.01718)	-0.077810 (0.02197)	0.102596 (0.02319)	-0.013334 (0.01056)	-0.005697 (0.00717)	-0.008860 (0.00575)
D(L_HANGSE NG)	0.016668 (0.01180)	-0.033474 (0.01509)	0.006568 (0.01593)	0.022421 (0.00725)	-0.015446 (0.00492)	0.004389 (0.00395)
D(L_JKSE)	0.080267 (0.01491)	-0.027351 (0.01908)	0.007939 (0.02014)	-0.001884 (0.00917)	0.017206 (0.00622)	-0.024124 (0.00499)
D(L_STI)	0.031719 (0.01096)	-0.016003 (0.01402)	-0.003877 (0.01479)	0.014655 (0.00674)	-0.005875 (0.00457)	0.002164 (0.00367)
D(L_NIKKEI)	0.031888 (0.01341)	0.021337 (0.01716)	-0.013278 (0.01811)	-0.005114 (0.00825)	-0.000450 (0.00560)	0.000770 (0.00449)

7 Cointegrating Equation(s):      Log likelihood      42174.05

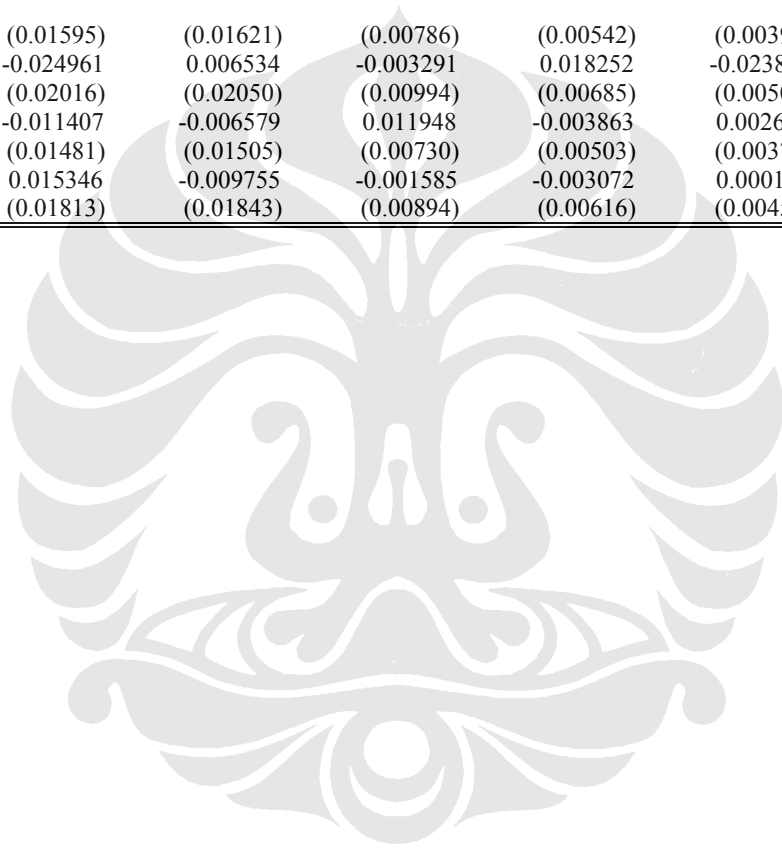
Normalized cointegrating coefficients (std.err. in parentheses)

L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI	C
1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.504785 (0.27318)	-3.108004 (2.57309)
0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	0.000000	-0.754638 (0.19512)	-1.067015 (1.83782)
0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	0.000000	-0.549992 (0.17400)	-3.195710 (1.63888)
0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	0.000000	-0.717340 (0.50283)	-1.264660 (4.73618)
0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	0.000000	-0.091622 (0.92945)	-7.925990 (8.75450)
0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	0.000000	-0.723890 (1.24815)	0.991074 (11.7563)
0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	1.000000	-0.558666 (0.52087)	-1.959987 (4.90605)

Adjustment coefficients (std.err. in parentheses)

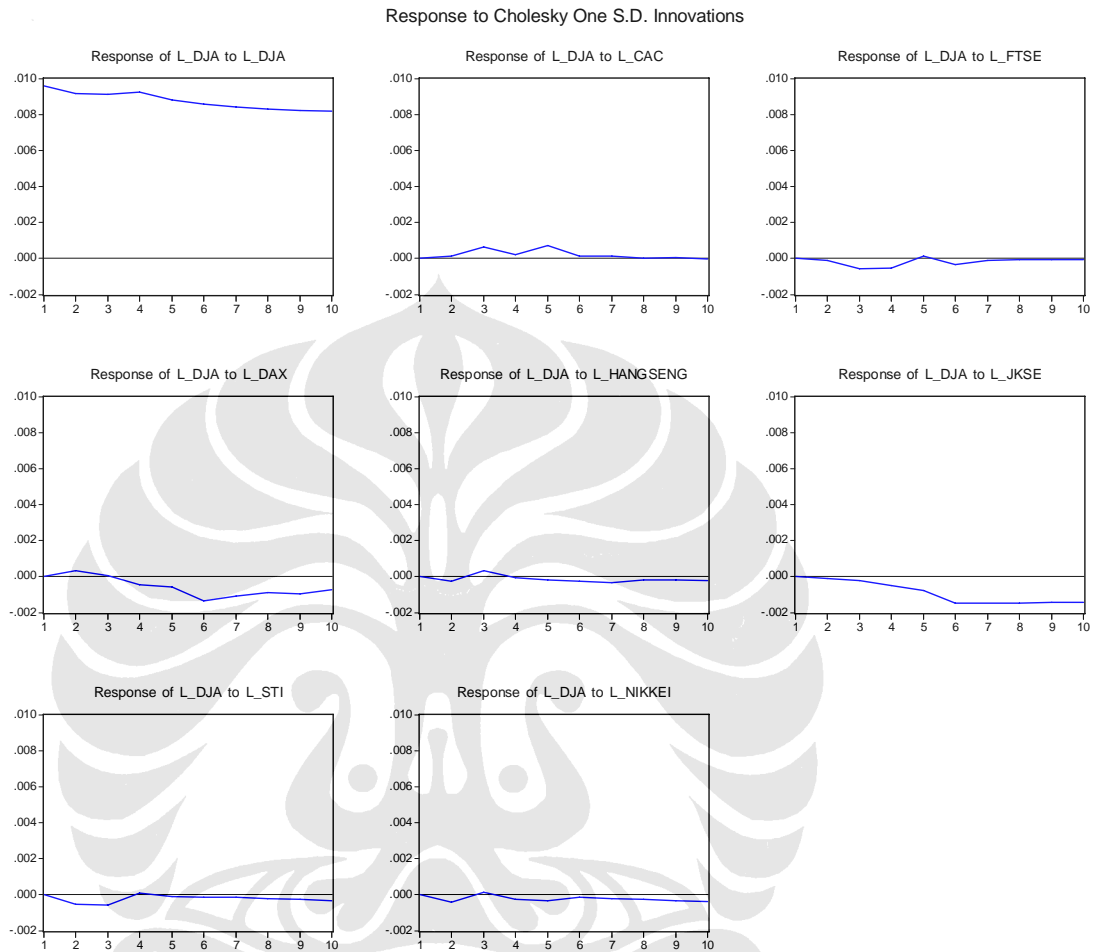
D(L_DJA)	-0.017367 (0.01152)	-0.030819 (0.01553)	0.057258 (0.01578)	-0.006754 (0.00766)	-0.005636 (0.00527)	0.002933 (0.00388)	0.012054 (0.00678)
D(L_CAC)	0.014889 (0.01469)	-0.061728 (0.01980)	0.069163 (0.02013)	-0.003370 (0.00976)	-0.007271 (0.00672)	-0.003074 (0.00495)	0.015054 (0.00864)
D(L_FTSE)	0.000683	-0.015565	0.009691	0.001686	-0.009085	0.003718	0.008025

	(0.01178)	(0.01587)	(0.01614)	(0.00783)	(0.00539)	(0.00397)	(0.00693)
D(L_DAX)	0.024204	-0.071976	0.099166	-0.016771	-0.003144	-0.008227	0.022536
	(0.01723)	(0.02322)	(0.02361)	(0.01145)	(0.00789)	(0.00580)	(0.01014)
D(L_HANGSE NG)	0.017314	-0.037022	0.008654	0.024511	-0.016999	0.004004	-0.000839
	(0.01183)	(0.01595)	(0.01621)	(0.00786)	(0.00542)	(0.00398)	(0.00696)
D(L_JKSE)	0.079832	-0.024961	0.006534	-0.003291	0.018252	-0.023864	-0.006485
	(0.01496)	(0.02016)	(0.02050)	(0.00994)	(0.00685)	(0.00504)	(0.00880)
D(L_STI)	0.030882	-0.011407	-0.006579	0.011948	-0.003863	0.002663	-0.020349
	(0.01099)	(0.01481)	(0.01505)	(0.00730)	(0.00503)	(0.00370)	(0.00646)
D(L_NIKKEI)	0.032980	0.015346	-0.009755	-0.001585	-0.003072	0.000120	-0.013130
	(0.01345)	(0.01813)	(0.01843)	(0.00894)	(0.00616)	(0.00453)	(0.00791)



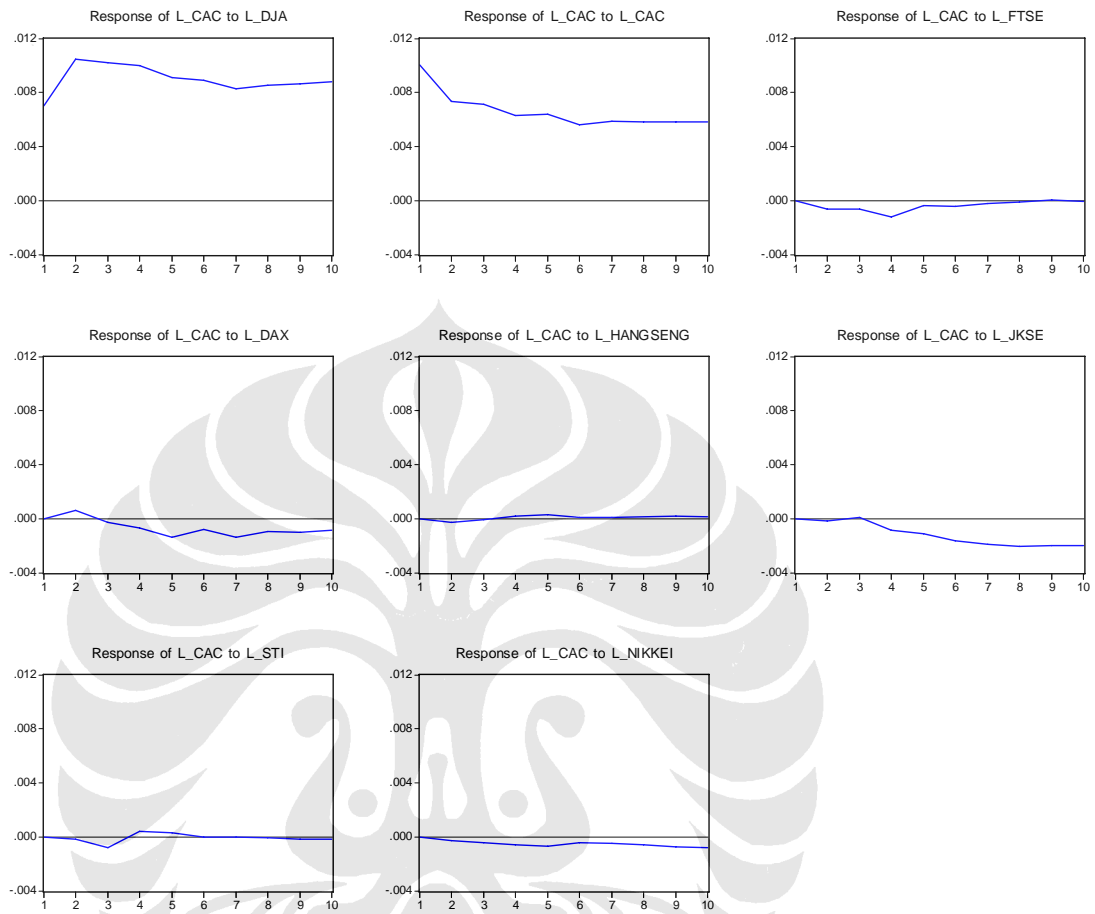
## Lampiran V: Impulse Response Function (IRF)

### a. IRF DJA



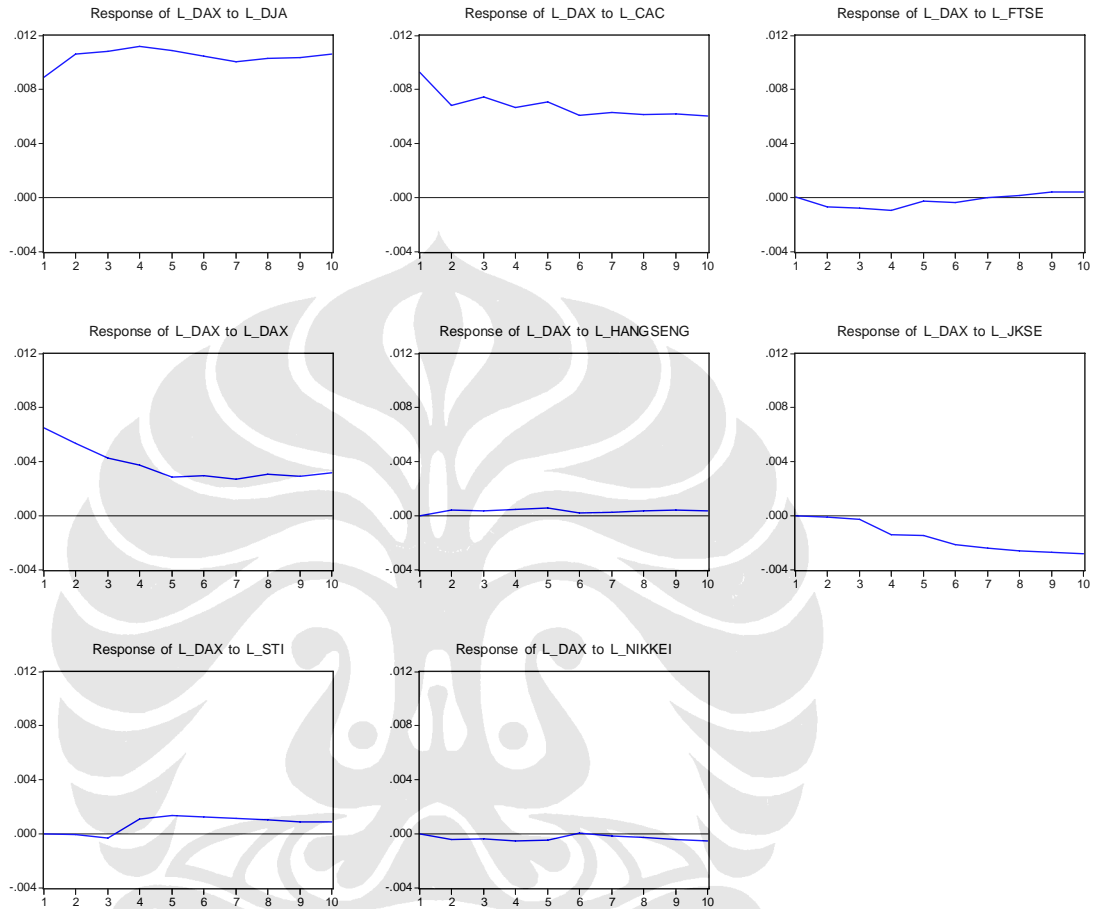
b. IRF CAC

Response to Cholesky One S.D. Innovations



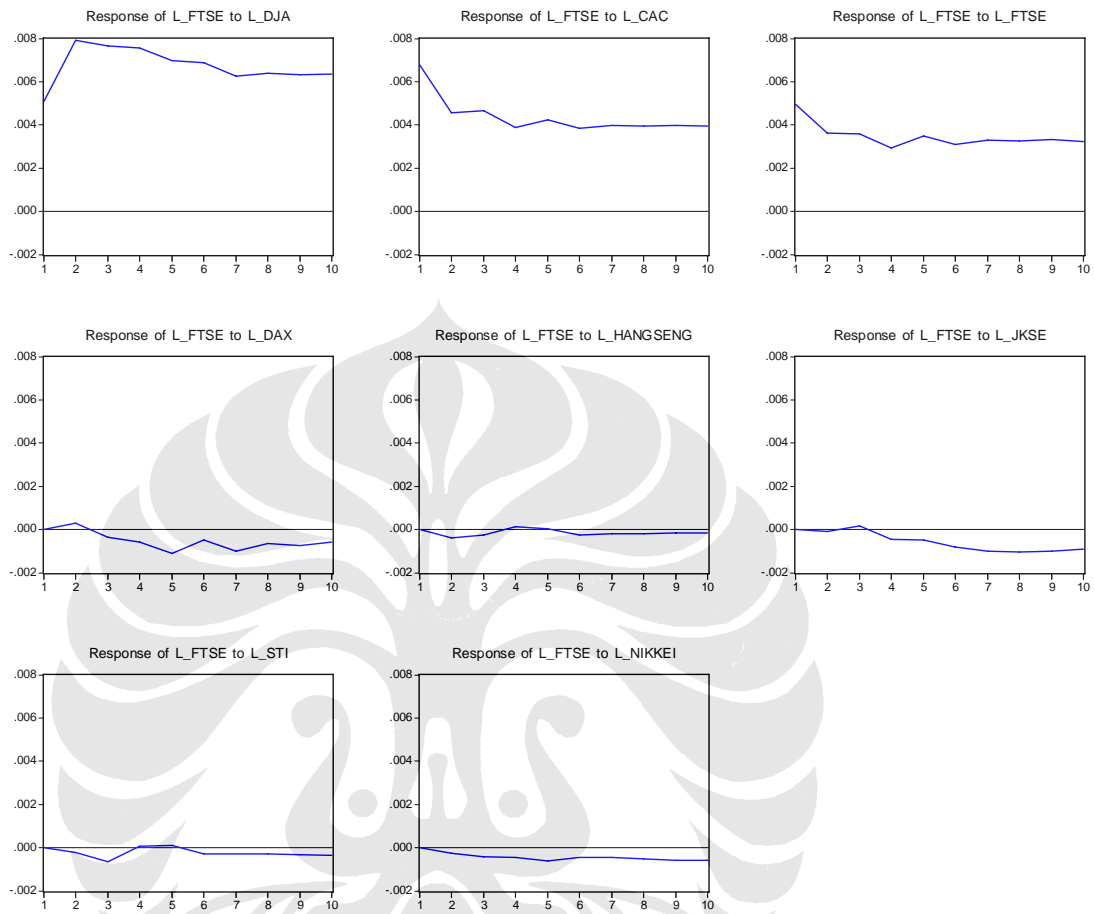
c. IRF DAX

Response to Cholesky One S.D. Innovations



d. IRF FTSE

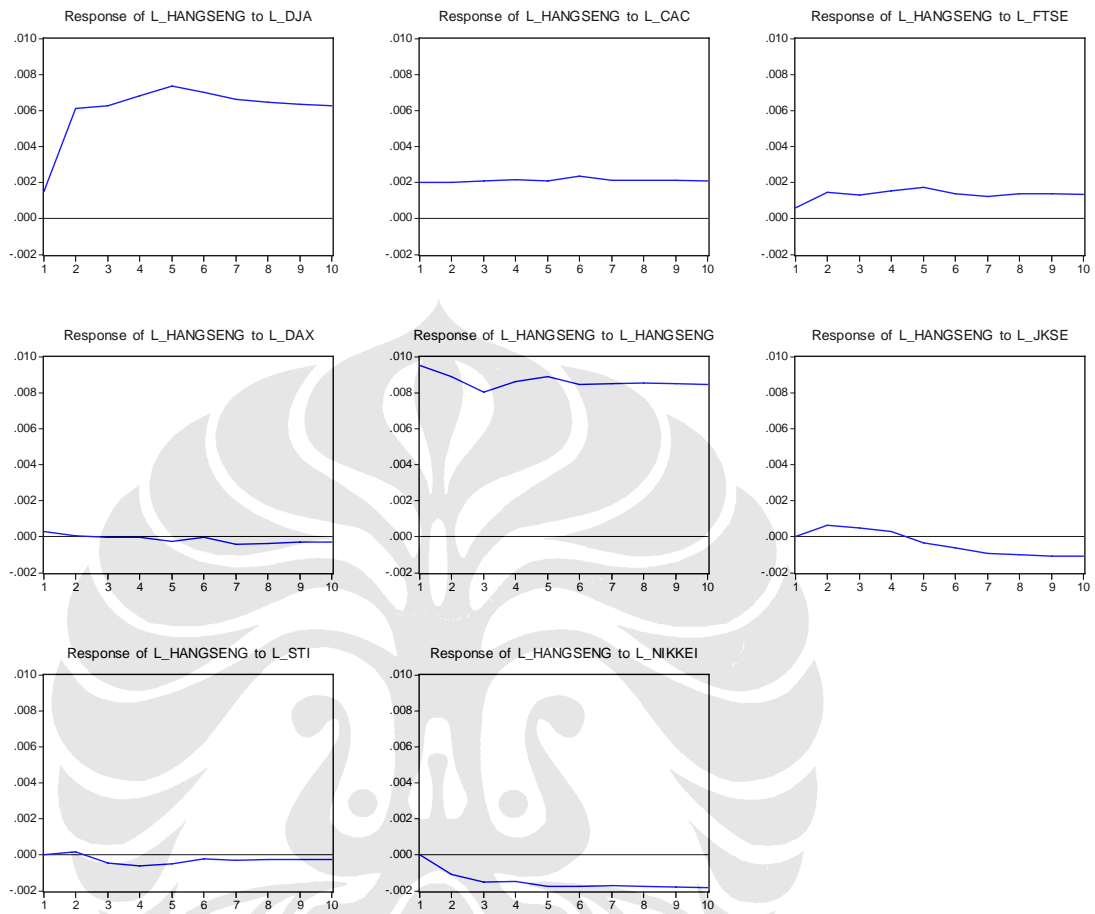
Response to Cholesky One S.D. Innovations





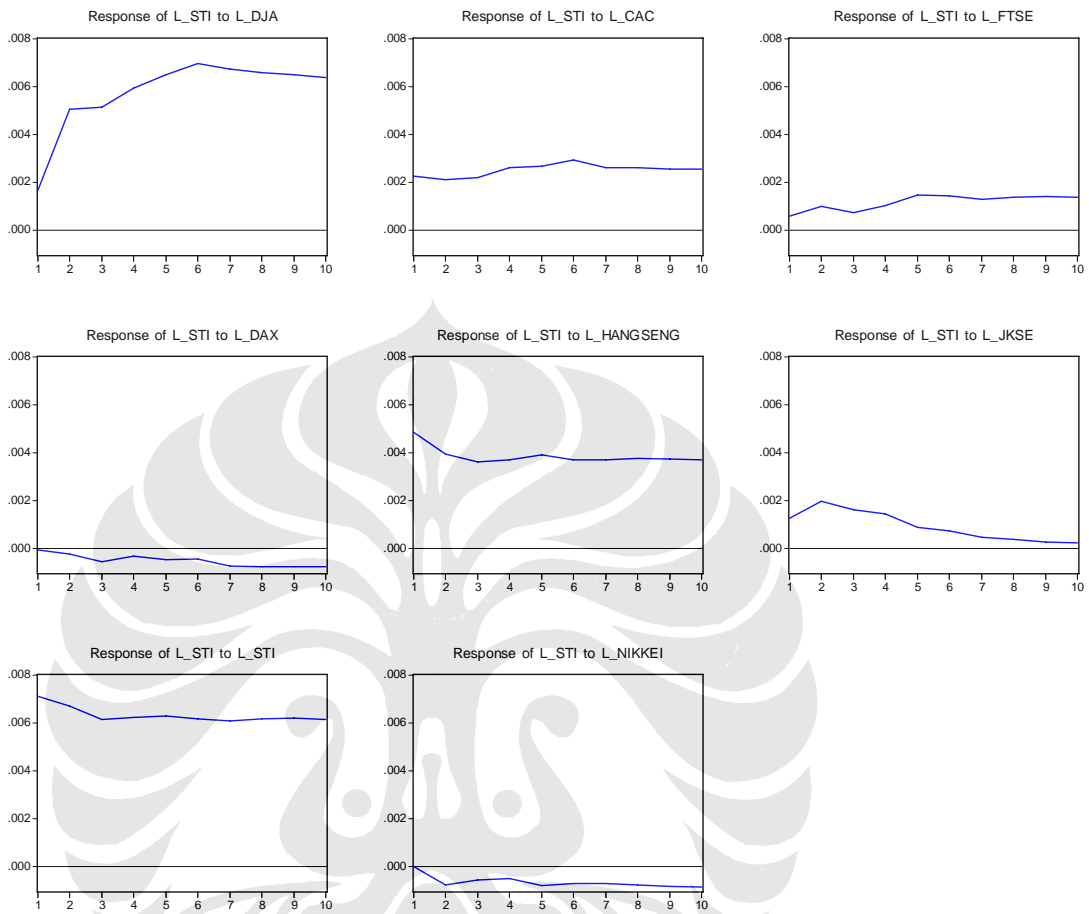
e. IRF Hangseng

Response to Cholesky One S.D. Innovations



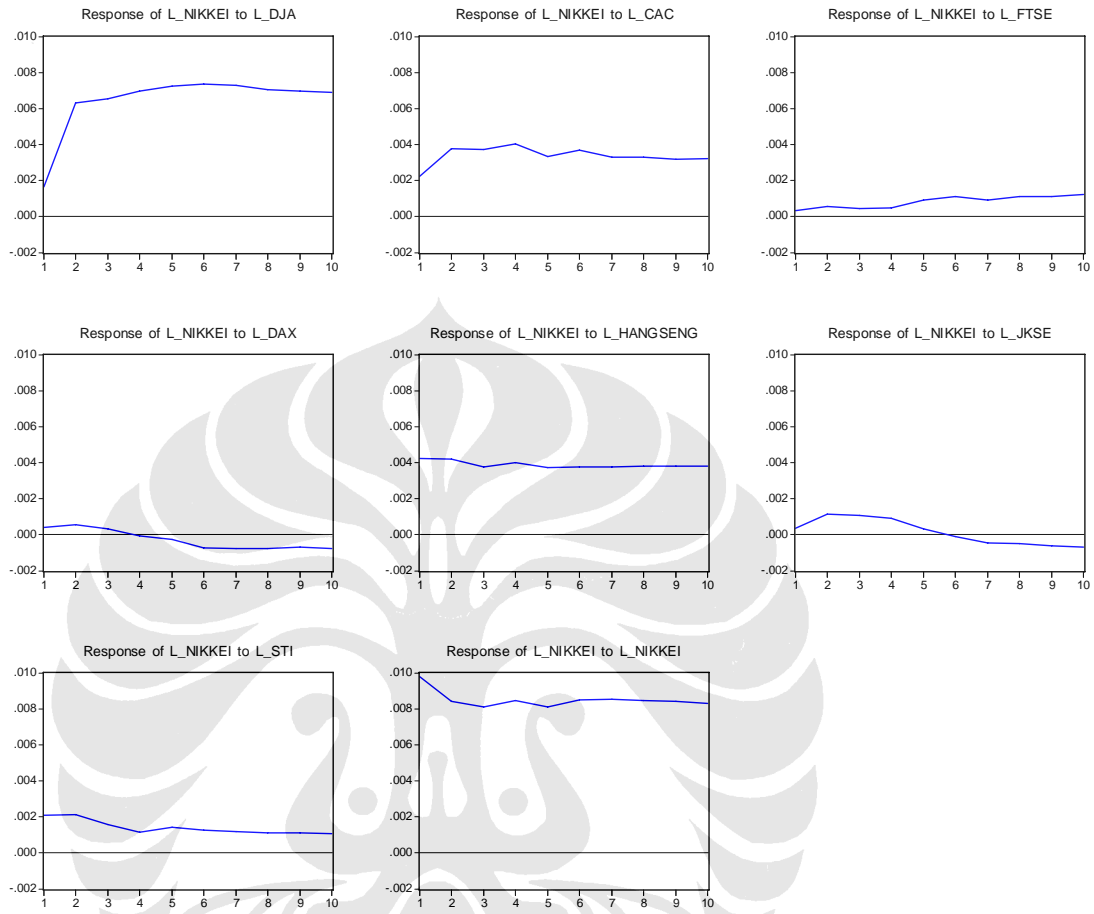
f. IRF STI

Response to Cholesky One S.D. Innovations



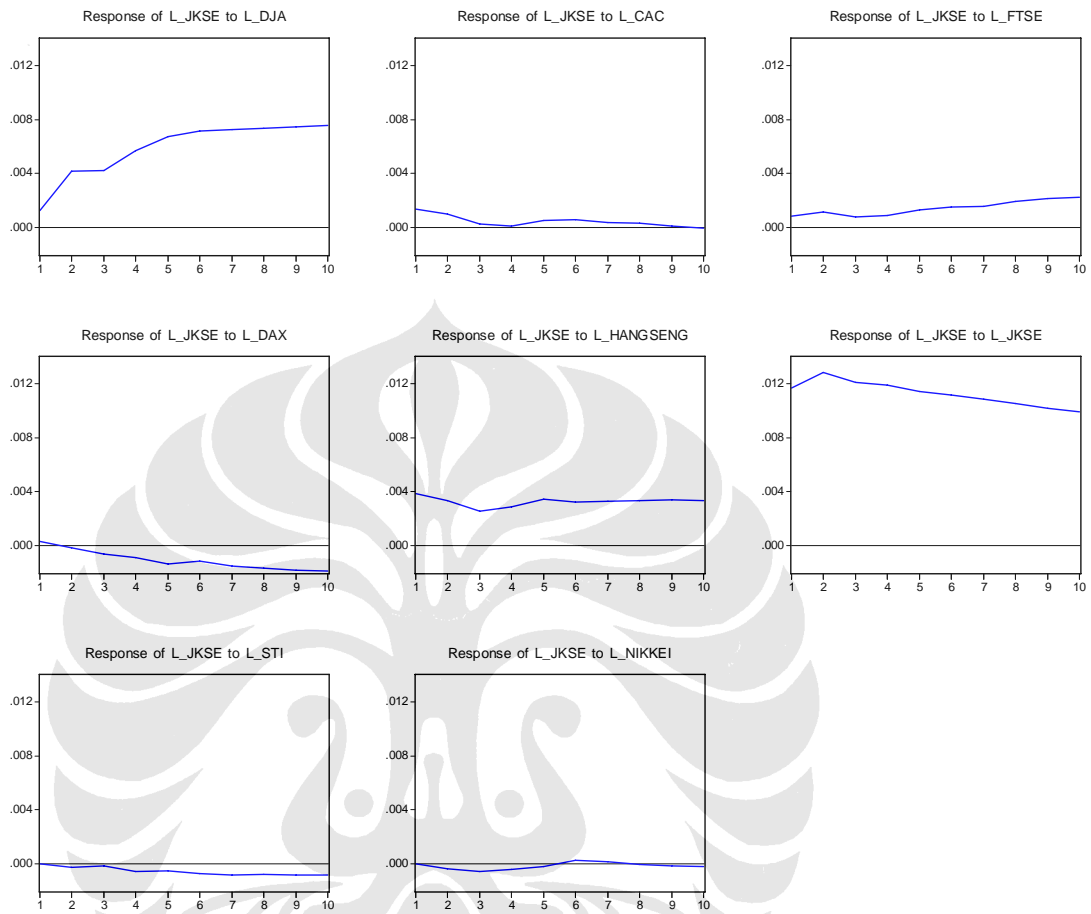
g. IRF Nikkei

Response to Cholesky One S.D. Innovations



## h. IRF JKSE

Response to Cholesky One S.D. Innovations



## Lampiran VI: Variance Decomposition

### Variance Decomposition of L\_DJA:

Period	S.E.	L DJA	L CAC	L FTSE	L DAX	L HANGSENG	L JKSE	L STI	L NIKKEI
1	0.009609	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.013309	99.63047	0.007679	0.006749	0.062424	0.035849	0.005926	0.153979	0.096923
3	0.016179	99.27412	0.162277	0.127755	0.044171	0.061959	0.024329	0.234459	0.070933
4	0.018662	99.20160	0.134705	0.180010	0.090972	0.047983	0.092148	0.177980	0.074600
5	0.020676	98.97154	0.234673	0.151034	0.148189	0.047007	0.210715	0.147421	0.089422
6	0.022480	98.28740	0.202635	0.150696	0.495159	0.053581	0.601972	0.127996	0.080561
7	0.024072	97.89235	0.180582	0.133660	0.628931	0.065082	0.905095	0.115444	0.078856
8	0.025522	97.64434	0.160661	0.119967	0.680949	0.062641	1.143011	0.109105	0.079329
9	0.026868	97.43420	0.145482	0.108813	0.738369	0.060830	1.317774	0.107444	0.087092
10	0.028138	97.29112	0.132698	0.099627	0.738741	0.061908	1.465198	0.112944	0.097764

### Variance Decomposition of L\_CAC:

Period	S.E.	L DJA	L CAC	L FTSE	L DAX	L HANGSENG	L JKSE	L STI	L NIKKEI
1	0.012258	32.98512	67.01488	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.017738	50.59328	49.08985	0.123749	0.122886	0.026969	0.008797	0.010538	0.023937
3	0.021685	55.91095	43.58819	0.175560	0.099420	0.018508	0.006992	0.143434	0.056953
4	0.024751	59.18914	39.90283	0.366070	0.155643	0.020186	0.128601	0.137458	0.100080
5	0.027213	60.18483	38.54604	0.321947	0.376209	0.029456	0.270929	0.127349	0.143236
6	0.029239	61.41508	37.06578	0.302136	0.396051	0.026022	0.537514	0.110359	0.147057
7	0.031049	61.58882	36.46600	0.272520	0.543550	0.023758	0.850578	0.097891	0.156878
8	0.032810	61.93106	35.82912	0.245502	0.567758	0.022600	1.143632	0.088224	0.172110
9	0.034506	62.25639	35.24480	0.222024	0.599338	0.023326	1.372175	0.081918	0.200032
10	0.036153	62.62810	34.69448	0.202448	0.597940	0.023182	1.547310	0.076507	0.230039

### Variance Decomposition of L\_FTSE:

Period	S.E.	L DJA	L CAC	L FTSE	L DAX	L HANGSENG	L JKSE	L STI	L NIKKEI
1	0.009808	26.95420	47.58056	25.46525	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.013892	45.85846	34.47654	19.47335	0.042975	0.082472	0.004246	0.027678	0.034275
3	0.016937	51.28420	30.71846	17.58708	0.072921	0.076164	0.010940	0.169307	0.080931
4	0.019192	55.40539	28.01542	16.05137	0.148703	0.064468	0.062148	0.133303	0.119193
5	0.021194	56.28814	26.98004	15.88394	0.390922	0.053367	0.106776	0.112145	0.184671
6	0.022852	57.46492	26.04350	15.51716	0.381421	0.059033	0.221964	0.112762	0.199249
7	0.024302	57.46225	25.72616	15.54730	0.513995	0.058019	0.366149	0.113516	0.212615

8	0.025685	57.64146	25.39829	15.53608	0.526036	0.057364	0.496092	0.115551	0.229136
9	0.026991	57.68012	25.15510	15.59394	0.554770	0.055076	0.587362	0.118603	0.255031
10	0.028224	57.82898	24.96552	15.56146	0.549686	0.054169	0.639551	0.123121	0.277521

Variance Decomposition of L\_DAX:

Period	S.E.	L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1	0.014383	38.21350	41.49908	0.000150	20.28726	0.000000	0.000000	0.000000	0.000000
2	0.019911	48.46050	33.43719	0.121024	17.88853	0.039133	0.003023	0.002005	0.048595
3	0.024235	52.58102	31.95568	0.193179	15.13249	0.047942	0.014951	0.019957	0.054780
4	0.027854	55.97398	29.92192	0.258109	13.27398	0.061199	0.272903	0.161874	0.076046
5	0.030941	57.77391	29.47499	0.216889	11.60619	0.082632	0.446960	0.313423	0.085002
6	0.033451	59.25308	28.50872	0.198348	10.70231	0.074381	0.785769	0.404487	0.072896
7	0.035701	59.96294	28.15320	0.174243	9.968939	0.070866	1.146455	0.457680	0.065670
8	0.037886	60.60993	27.60942	0.156485	9.505990	0.070875	1.499572	0.483636	0.064096
9	0.039974	61.15448	27.17958	0.150047	9.076902	0.073330	1.812282	0.483622	0.069760
10	0.042021	61.70149	26.66274	0.144633	8.772247	0.073885	2.087607	0.478636	0.078758

Variance Decomposition of L\_HANGSENG:

Period	S.E.	L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1	0.009871	2.320823	4.188968	0.369754	0.086870	93.03359	0.000000	0.000000	0.000000
2	0.014869	17.84894	3.665150	1.127687	0.038854	76.60211	0.183831	0.014880	0.518553
3	0.018271	23.63286	3.737403	1.253161	0.026272	70.04038	0.189102	0.077102	1.043714
4	0.021547	27.01565	3.681366	1.406882	0.019266	66.37744	0.154300	0.138376	1.206722
5	0.024662	29.54118	3.525986	1.572364	0.025631	63.63966	0.137192	0.144010	1.413977
6	0.027201	30.90746	3.642877	1.556043	0.021143	62.00087	0.166601	0.124394	1.580608
7	0.029427	31.48189	3.637794	1.501141	0.039980	61.30310	0.237832	0.117157	1.681102
8	0.031481	31.74035	3.626280	1.503231	0.048558	60.88674	0.310065	0.109374	1.775397
9	0.033382	31.85887	3.627865	1.512606	0.051305	60.60258	0.381136	0.102634	1.863001
10	0.035155	31.89925	3.618400	1.507517	0.053807	60.43842	0.438458	0.097574	1.946575

Variance Decomposition of L\_JKSE:

Period	S.E.	L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1	0.012463	1.021141	1.191546	0.472833	0.065555	9.618750	87.63018	0.000000	0.000000
2	0.018734	5.418441	0.805686	0.582663	0.037332	7.446679	85.65854	0.019144	0.031509
3	0.022858	7.068911	0.553782	0.511946	0.101903	6.234963	85.42745	0.017792	0.083249
4	0.026582	9.800373	0.412138	0.497916	0.189992	5.786854	83.17006	0.058065	0.084607

5	0.029958	12.73409	0.353090	0.582420	0.355318	5.877108	79.94974	0.076187	0.072053
6	0.032996	15.20426	0.324455	0.691554	0.412216	5.802406	77.39095	0.107921	0.066241
7	0.035706	17.10951	0.286918	0.785351	0.530493	5.790907	75.29592	0.142684	0.058220
8	0.038191	18.67804	0.257167	0.943040	0.650713	5.834754	73.41844	0.166836	0.051014
9	0.040462	20.03190	0.229886	1.115358	0.779145	5.896788	71.71005	0.190481	0.046390
10	0.042581	21.23321	0.207615	1.286881	0.892230	5.947453	70.17737	0.210956	0.044283

Variance Decomposition of L\_STI:

Period	S.E.	L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1	0.009168	3.346356	6.061448	0.427608	0.001859	28.13002	1.942549	60.09016	0.000000
2	0.013420	15.74612	5.352526	0.762846	0.026008	21.68851	3.076431	53.02562	0.321934
3	0.016312	20.61877	5.449299	0.726760	0.129915	19.57884	3.080940	50.08687	0.328610
4	0.019074	24.71356	5.858570	0.829889	0.121450	18.06623	2.821974	47.28476	0.303568
5	0.021720	28.01202	6.026623	1.108290	0.140819	17.18184	2.340635	44.82920	0.360578
6	0.024162	30.91786	6.344893	1.251392	0.144216	16.23735	1.988363	42.73960	0.376325
7	0.026258	32.71075	6.376836	1.300811	0.198502	15.73252	1.716146	41.57359	0.390853
8	0.028192	33.80400	6.403915	1.372881	0.241435	15.42859	1.506871	40.83150	0.410805
9	0.029981	34.57077	6.388890	1.434523	0.277307	15.19316	1.340584	40.36107	0.433692
10	0.031633	35.09759	6.393589	1.485199	0.306130	15.01501	1.209860	40.03285	0.459778

Variance Decomposition of L\_NIKKEI:

Period	S.E.	L_DJA	L_CAC	L_FTSE	L_DAX	L_HANGSENG	L_JKSE	L_STI	L_NIKKEI
1	0.011219	2.210728	3.984387	0.087742	0.138845	14.23559	0.112110	3.401652	75.82894
2	0.016560	15.43560	6.993774	0.162526	0.181498	12.91606	0.536244	3.189275	60.58502
3	0.020372	20.52401	7.950359	0.158784	0.143412	11.96955	0.626888	2.713578	55.91342
4	0.023866	23.49750	8.639054	0.153311	0.105107	11.54254	0.604068	2.206483	53.25193
5	0.026762	26.04755	8.423030	0.235878	0.091920	11.13512	0.494741	2.036104	51.53566
6	0.029562	27.52633	8.470642	0.335474	0.136595	10.75795	0.406381	1.847653	50.51898
7	0.032069	28.57597	8.263440	0.366863	0.175490	10.50966	0.365620	1.710252	50.03270
8	0.034323	29.15588	8.126929	0.424200	0.200907	10.40261	0.341311	1.598477	49.74969
9	0.036408	29.58437	7.994583	0.471545	0.214937	10.34573	0.331860	1.515971	49.54100
10	0.038347	29.91598	7.903572	0.526889	0.232858	10.30498	0.331182	1.444292	49.34025

Cholesky Ordering: L\_DJA L\_CAC L\_FTSE L\_DAX L\_HANGSENG L\_JKSE L\_STI L\_NIKKEI