



ภาคผนวก

ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่

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ภาคผนวก ก

ผลการทดสอบ Unit Root Test โดยการทดสอบ Augmented Dickey – Fuller

1) ผลการทดสอบ Unit Root Test ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ไทย

1.1) Level without intercept and trend

Null Hypothesis: THAILAND has a unit root
 Exogenous: None
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-33.91261	0.0000
Test critical values:		
1% level	-2.567068	
5% level	-1.941112	
10% level	-1.616505	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(THAILAND)
 Method: Least Squares
 Date: 08/02/07 Time: 21:11
 Sample (adjusted): 2 1100
 Included observations: 1099 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
THAILAND(-1)	-1.022478	0.030150	-33.91261	0.0000
R-squared	0.511580	Mean dependent var		-1.57E-05
Adjusted R-squared	0.511580	S.D. dependent var		0.018782
S.E. of regression	0.013126	Akaike info criterion		-5.827548
Sum squared resid	0.189174	Schwarz criterion		-5.822996
Log likelihood	3203.237	Durbin-Watson stat		1.998936

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

1.2) Level with intercept

Null Hypothesis: THAILAND has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-33.99823	0.0000
Test critical values:		
1% level	-3.436084	
5% level	-2.863960	
10% level	-2.568109	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(THAILAND)

Method: Least Squares

Date: 08/18/07 Time: 10:41

Sample (adjusted): 2 1100

Included observations: 1099 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
THAILAND(-1)	-1.025517	0.030164	-33.99823	0.0000
C	0.000725	0.000396	1.830899	0.0674

R-squared	0.513068	Mean dependent var	-1.57E-05
Adjusted R-squared	0.512624	S.D. dependent var	0.018782
S.E. of regression	0.013112	Akaike info criterion	-5.828779
Sum squared resid	0.188598	Schwarz criterion	-5.819676
Log likelihood	3204.914	F-statistic	1155.879
Durbin-Watson stat	1.998636	Prob(F-statistic)	0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

1.3) Level with intercept and trend

Null Hypothesis: THAILAND has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-34.05303	0.0000
Test critical values:		
1% level	-3.966419	
5% level	-3.413907	
10% level	-3.129037	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(THAILAND)
 Method: Least Squares
 Date: 08/02/07 Time: 21:18
 Sample (adjusted): 2 1100
 Included observations: 1099 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
THAILAND(-1)	-1.027655	0.030178	-34.05303	0.0000
C	0.001774	0.000793	2.237378	0.0255
@TREND(1)	-1.90E-06	1.25E-06	-1.526592	0.1272
R-squared	0.514101	Mean dependent var		-1.57E-05
Adjusted R-squared	0.513214	S.D. dependent var		0.018782
S.E. of regression	0.013104	Akaike info criterion		-5.829083
Sum squared resid	0.188197	Schwarz criterion		-5.815429
Log likelihood	3206.081	F-statistic		579.8059
Durbin-Watson stat	1.998389	Prob(F-statistic)		0.000000

ที่มา: การคำนวณ โดยใช้โปรแกรม EViews 5.1

2) ผลการทดสอบ Unit Root Test ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ สิงคโปร์

2.1) Level without intercept and trend

Null Hypothesis: SINGAPORE has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-32.12173	0.0000
Test critical values: 1% level	-2.567017	
5% level	-1.941105	
10% level	-1.616510	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(SINGAPORE)

Method: Least Squares

Date: 08/02/07 Time: 21:24

Sample (adjusted): 2 1127

Included observations: 1126 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SINGAPORE(-1)	-0.956786	0.029786	-32.12173	0.0000
R-squared	0.478395	Mean dependent var		-1.23E-07
Adjusted R-squared	0.478395	S.D. dependent var		0.012531
S.E. of regression	0.009050	Akaike info criterion		-6.571164
Sum squared resid	0.092145	Schwarz criterion		-6.566700
Log likelihood	3700.565	Durbin-Watson stat		1.997637

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

2.2) Level with intercept

Null Hypothesis: SINGAPORE has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-32.39196	0.0000
Test critical values:		
1% level	-3.435942	
5% level	-2.863897	
10% level	-2.568076	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(SINGAPORE)
 Method: Least Squares
 Date: 08/02/07 Time: 21:25
 Sample (adjusted): 2 1127
 Included observations: 1126 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SINGAPORE(-1)	-0.965596	0.029810	-32.39196	0.0000
C	0.000835	0.000270	3.093869	0.0020
R-squared	0.482800	Mean dependent var		-1.23E-07
Adjusted R-squared	0.482340	S.D. dependent var		0.012531
S.E. of regression	0.009016	Akaike info criterion		-6.577867
Sum squared resid	0.091367	Schwarz criterion		-6.568940
Log likelihood	3705.339	F-statistic		1049.239
Durbin-Watson stat	1.997328	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

2.3) Level with intercept and trend

Null Hypothesis: SINGAPORE has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-32.38160	0.0000
Test critical values:		
1% level	-3.966218	
5% level	-3.413808	
10% level	-3.128978	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(SINGAPORE)
 Method: Least Squares
 Date: 08/02/07 Time: 21:26
 Sample (adjusted): 2 1127
 Included observations: 1126 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SINGAPORE(-1)	-0.965714	0.029823	-32.38160	0.0000
C	0.000663	0.000538	1.232420	0.2181
@TREND(1)	3.05E-07	8.27E-07	0.368540	0.7125
R-squared	0.482862	Mean dependent var		-1.23E-07
Adjusted R-squared	0.481941	S.D. dependent var		0.012531
S.E. of regression	0.009019	Akaike info criterion		-6.576212
Sum squared resid	0.091356	Schwarz criterion		-6.562820
Log likelihood	3705.407	F-statistic		524.2842
Durbin-Watson stat	1.997341	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

3) ผลการทดสอบ Unit Root Test ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์
มาเลเซีย

3.1) Level without intercept and trend

Null Hypothesis: MALAYSIA has a unit root
Exogenous: None
Lag Length: 10 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.196530	0.6154
Test critical values: 1% level	-2.567072	
5% level	-1.941112	
10% level	-1.616505	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(MALAYSIA)
Method: Least Squares
Date: 08/02/07 Time: 21:32
Sample (adjusted): 12 1108
Included observations: 1097 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MALAYSIA(-1)	-6.02E-06	3.06E-05	-0.196530	0.8442
D(MALAYSIA(-1))	-0.756612	0.030229	-25.02926	0.0000
D(MALAYSIA(-2))	-0.681145	0.037414	-18.20583	0.0000
D(MALAYSIA(-3))	-0.578422	0.041842	-13.82382	0.0000
D(MALAYSIA(-4))	-0.476122	0.044199	-10.77232	0.0000
D(MALAYSIA(-5))	-0.454255	0.044441	-10.22143	0.0000
D(MALAYSIA(-6))	-0.442144	0.044246	-9.992800	0.0000
D(MALAYSIA(-7))	-0.333810	0.043822	-7.617460	0.0000
D(MALAYSIA(-8))	-0.283770	0.041432	-6.849109	0.0000
D(MALAYSIA(-9))	-0.205839	0.037078	-5.551468	0.0000
D(MALAYSIA(-10))	-0.085793	0.030064	-2.853724	0.0044
R-squared	0.378645	Mean dependent var		2.61E-07
Adjusted R-squared	0.372923	S.D. dependent var		0.001281
S.E. of regression	0.001014	Akaike info criterion		-10.93983
Sum squared resid	0.001117	Schwarz criterion		-10.88969
Log likelihood	6011.495	Durbin-Watson stat		2.010972

ที่มา: การคำนวณ โดยใช้โปรแกรม EViews 5.1

3.2) Level with intercept

Null Hypothesis: MALAYSIA has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.62215	0.0000
Test critical values:		
1% level	-3.436041	
5% level	-2.863941	
10% level	-2.568099	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(MALAYSIA)

Method: Least Squares

Date: 08/02/07 Time: 21:33

Sample (adjusted): 2 1108

Included observations: 1107 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MALAYSIA(-1)	-0.816928	0.029575	-27.62215	0.0000
C	0.817011	0.029578	27.62214	0.0000
R-squared	0.408453	Mean dependent var		1.02E-07
Adjusted R-squared	0.407918	S.D. dependent var		0.001280
S.E. of regression	0.000985	Akaike info criterion		-11.00677
Sum squared resid	0.001071	Schwarz criterion		-10.99772
Log likelihood	6094.248	F-statistic		762.9830
Durbin-Watson stat	2.001886	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

3.3) Level with intercept and trend

Null Hypothesis: MALAYSIA has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-27.61619	0.0000
Test critical values:		
1% level	-3.966359	
5% level	-3.413877	
10% level	-3.129019	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(MALAYSIA)
 Method: Least Squares
 Date: 08/02/07 Time: 21:35
 Sample (adjusted): 2 1108
 Included observations: 1107 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MALAYSIA(-1)	-0.817146	0.029589	-27.61619	0.0000
C	0.817205	0.029592	27.61610	0.0000
@TREND(1)	4.29E-08	9.27E-08	0.462756	0.6436
R-squared	0.408568	Mean dependent var		1.02E-07
Adjusted R-squared	0.407496	S.D. dependent var		0.001280
S.E. of regression	0.000985	Akaike info criterion		-11.00516
Sum squared resid	0.001071	Schwarz criterion		-10.99158
Log likelihood	6094.355	F-statistic		381.3273
Durbin-Watson stat	2.001833	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

4) ผลการทดสอบ Unit Root Test ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์อินโดนีเซีย

4.1) Level without intercept and trend

Null Hypothesis: INDONESIA has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-28.76007	0.0000
Test critical values:		
1% level	-2.567085	
5% level	-1.941114	
10% level	-1.616504	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INDONESIA)

Method: Least Squares

Date: 08/02/07 Time: 21:43

Sample (adjusted): 2 1091

Included observations: 1090 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INDONESIA(-1)	-0.863747	0.030033	-28.76007	0.0000
R-squared	0.431670	Mean dependent var		1.50E-05
Adjusted R-squared	0.431670	S.D. dependent var		0.016463
S.E. of regression	0.012411	Akaike info criterion		-5.939579
Sum squared resid	0.167737	Schwarz criterion		-5.934998
Log likelihood	3238.071	Durbin-Watson stat		1.977709

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

4.2) Level with intercept

Null Hypothesis: INDONESIA has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.77217	0.0000
Test critical values:		
1% level	-3.436138	
5% level	-2.863984	
10% level	-2.568122	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INDONESIA)

Method: Least Squares

Date: 08/02/07 Time: 21:44

Sample (adjusted): 3 1091

Included observations: 1089 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INDONESIA(-1)	-0.950335	0.039977	-23.77217	0.0000
D(INDONESIA(-1))	0.083297	0.030202	2.757971	0.0059
C	0.001469	0.000377	3.892277	0.0001
R-squared	0.443297	Mean dependent var		3.25E-05
Adjusted R-squared	0.442272	S.D. dependent var		0.016460
S.E. of regression	0.012293	Akaike info criterion		-5.956891
Sum squared resid	0.164103	Schwarz criterion		-5.943136
Log likelihood	3246.527	F-statistic		432.3858
Durbin-Watson stat	1.999170	Prob(F-statistic)		0.000000

ที่มา: การคำนวณ โดยใช้โปรแกรม EVIEWS 5.1

4.3) Level with intercept and trend

Null Hypothesis: INDONESIA has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 1 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.76526	0.0000
Test critical values:		
1% level	-3.966497	
5% level	-3.413944	
10% level	-3.129059	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(INDONESIA)

Method: Least Squares

Date: 08/02/07 Time: 21:46

Sample (adjusted): 3 1091

Included observations: 1089 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INDONESIA(-1)	-0.950506	0.039996	-23.76526	0.0000
D(INDONESIA(-1))	0.083372	0.030215	2.759300	0.0059
C	0.001703	0.000750	2.270841	0.0234
@TREND(1)	-4.28E-07	1.19E-06	-0.361364	0.7179
R-squared	0.443364	Mean dependent var		3.25E-05
Adjusted R-squared	0.441825	S.D. dependent var		0.016460
S.E. of regression	0.012298	Akaike info criterion		-5.955174
Sum squared resid	0.164083	Schwarz criterion		-5.936835
Log likelihood	3246.593	F-statistic		288.0700
Durbin-Watson stat	1.999217	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

5) ผลการทดสอบ Unit Root Test ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์
ฟิลิปปินส์

5.1) Level without intercept and trend

Null Hypothesis: PHILIPPINES has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-29.46254	0.0000
Test critical values:		
1% level	-2.567051	
5% level	-1.941109	
10% level	-1.616507	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(PHILIPPINES)

Method: Least Squares

Date: 08/02/07 Time: 21:50

Sample (adjusted): 2 1109

Included observations: 1108 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PHILIPPINES(-1)	-0.879062	0.029837	-29.46254	0.0000
R-squared	0.439505	Mean dependent var		1.93E-06
Adjusted R-squared	0.439505	S.D. dependent var		0.016045
S.E. of regression	0.012012	Akaike info criterion		-6.004918
Sum squared resid	0.159727	Schwarz criterion		-6.000396
Log likelihood	3327.725	Durbin-Watson stat		2.001542

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

5.2) Level with intercept

Null Hypothesis: PHILIPPINES has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-29.69439	0.0000
Test critical values:		
1% level	-3.436035	
5% level	-2.863939	
10% level	-2.568098	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(PHILIPPINES)

Method: Least Squares

Date: 08/02/07 Time: 21:53

Sample (adjusted): 2 1109

Included observations: 1108 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PHILIPPINES(-1)	-0.887224	0.029879	-29.69439	0.0000
C	0.001030	0.000361	2.850755	0.0044
R-squared	0.443594	Mean dependent var		1.93E-06
Adjusted R-squared	0.443091	S.D. dependent var		0.016045
S.E. of regression	0.011974	Akaike info criterion		-6.010434
Sum squared resid	0.158562	Schwarz criterion		-6.001390
Log likelihood	3331.781	F-statistic		881.7565
Durbin-Watson stat	1.999815	Prob(F-statistic)		0.000000

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

5.3) Level with intercept and trend

Null Hypothesis: PHILIPPINES has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 0 (Automatic based on SIC, MAXLAG=21)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-29.68378	0.0000
Test critical values:		
1% level	-3.966351	
5% level	-3.413873	
10% level	-3.129017	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(PHILIPPINES)
 Method: Least Squares
 Date: 08/02/07 Time: 21:54
 Sample (adjusted): 2 1109
 Included observations: 1108 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PHILIPPINES(-1)	-0.887311	0.029892	-29.68378	0.0000
C	0.000840	0.000721	1.164837	0.2443
@TREND(1)	3.44E-07	1.13E-06	0.305669	0.7599
R-squared	0.443641	Mean dependent var		1.93E-06
Adjusted R-squared	0.442634	S.D. dependent var		0.016045
S.E. of regression	0.011978	Akaike info criterion		-6.008714
Sum squared resid	0.158549	Schwarz criterion		-5.995148
Log likelihood	3331.827	F-statistic		440.5636
Durbin-Watson stat	1.999811	Prob(F-statistic)		0.000000

ที่มา: การคำนวณ โดยใช้โปรแกรม EViews 5.1

ภาคผนวก ข

คอเรลโลแกรม

1) ผลคอเรลโลแกรม ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ ไทย

1.1) รูปแบบคอเรลโลแกรมของการทดสอบ Unit Root ที่ระดับ Level

Correlogram of THAILAND

Date: 08/04/07 Time: 17:21						
Sample: 1 1100						
Included observations: 1100						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
		1	-0.026	-0.026	0.7181	0.397
		2	0.050	0.050	3.5237	0.172
		3	-0.036	-0.034	4.9856	0.173
		4	0.003	-0.001	4.9955	0.288
		5	0.018	0.022	5.3636	0.373
		6	0.001	0.001	5.3654	0.498
		7	0.011	0.009	5.5041	0.599
		8	-0.019	-0.018	5.9219	0.656
		9	0.020	0.018	6.3728	0.702
		10	0.009	0.012	6.4594	0.775
		11	0.035	0.032	7.8227	0.729
		12	-0.020	-0.018	8.2467	0.766
		13	0.057	0.055	11.914	0.535
		14	-0.037	-0.031	13.441	0.492
		15	-0.036	-0.045	14.924	0.457
		16	0.001	0.005	14.926	0.530
		17	-0.006	-0.004	14.970	0.598
		18	0.046	0.041	17.360	0.499
		19	0.026	0.032	18.127	0.514
		20	-0.013	-0.018	18.317	0.567
		21	-0.057	-0.056	21.981	0.401
		22	-0.028	-0.030	22.851	0.410
		23	0.006	0.007	22.893	0.467
		24	0.030	0.028	23.894	0.468
		25	-0.017	-0.013	24.218	0.507
		26	-0.036	-0.039	25.707	0.479
		27	-0.008	-0.003	25.770	0.531
		28	0.015	0.020	26.040	0.571
		29	0.043	0.034	28.138	0.511
		30	0.011	0.012	28.280	0.556
		31	-0.014	-0.016	28.508	0.595
		32	-0.061	-0.058	32.699	0.433
		33	0.035	0.041	34.106	0.414
		34	0.015	0.026	34.346	0.451
		35	0.004	-0.004	34.365	0.499
		36	-0.012	-0.017	34.525	0.539

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

1.2) รูปแบบคอเรลโลแกรมของการทดสอบ Q-statistic จากแบบจำลอง ARIMA-EGARCH

Correlogram of Standardized Residuals

Date: 09/30/07 Time: 22:17
Sample: 2 1100
Included observations: 1099
Q-statistic probabilities adjusted for 1 ARMA term(s)

	Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
1	-0.009	-0.009	0.0892			
2	0.048	0.047	2.5810	0.108		
3	-0.040	-0.039	4.3339	0.115		
4	0.018	0.016	4.7083	0.194		
5	0.010	0.014	4.8155	0.307		
6	0.011	0.008	4.9548	0.421		
7	0.031	0.031	6.0027	0.423		
8	-0.016	-0.016	6.2939	0.506		
9	0.032	0.030	7.4521	0.489		
10	0.026	0.030	8.2185	0.512		
11	0.027	0.022	9.0240	0.530		
12	-0.003	-0.003	9.0352	0.619		
13	0.052	0.051	12.069	0.440		
14	-0.046	-0.045	14.403	0.346		
15	-0.021	-0.028	14.889	0.386		
16	-0.003	0.002	14.901	0.459		
17	-0.005	-0.009	14.925	0.530		
18	0.038	0.035	16.500	0.489		
19	0.043	0.044	18.535	0.421		
20	-0.011	-0.018	18.662	0.479		
21	-0.060	-0.058	22.656	0.306		
22	-0.031	-0.032	23.754	0.305		
23	-0.003	-0.002	23.762	0.360		
24	0.036	0.037	25.242	0.338		
25	-0.014	-0.012	25.451	0.382		
26	-0.033	-0.038	26.692	0.371		
27	-0.005	0.005	26.720	0.424		
28	0.012	0.013	26.890	0.470		
29	0.040	0.032	28.660	0.430		
30	-0.014	-0.012	28.897	0.470		
31	-0.021	-0.024	29.407	0.496		
32	-0.071	-0.064	35.137	0.278		
33	0.040	0.048	36.938	0.251		
34	-0.001	0.009	36.940	0.292		
35	0.003	-0.007	36.947	0.334		
36	-0.005	-0.005	36.981	0.378		
37	0.002	-0.004	36.987	0.423		
38	0.010	0.012	37.111	0.464		
39	-0.055	-0.046	40.617	0.356		
40	0.027	0.026	41.456	0.364		
41	0.010	0.022	41.563	0.403		
42	0.059	0.048	45.523	0.289		
43	-0.024	-0.024	46.187	0.303		
44	0.012	0.012	46.356	0.336		
45	-0.005	0.012	46.385	0.374		
46	0.044	0.032	48.635	0.329		
47	-0.015	-0.026	48.897	0.358		
48	0.060	0.055	53.012	0.253		
49	0.010	0.020	53.134	0.283		
50	-0.042	-0.036	55.176	0.253		
51	-0.001	-0.004	55.178	0.285		
52	0.003	-0.002	55.187	0.319		
53	0.050	0.027	58.047	0.262		
54	-0.017	-0.013	58.381	0.284		

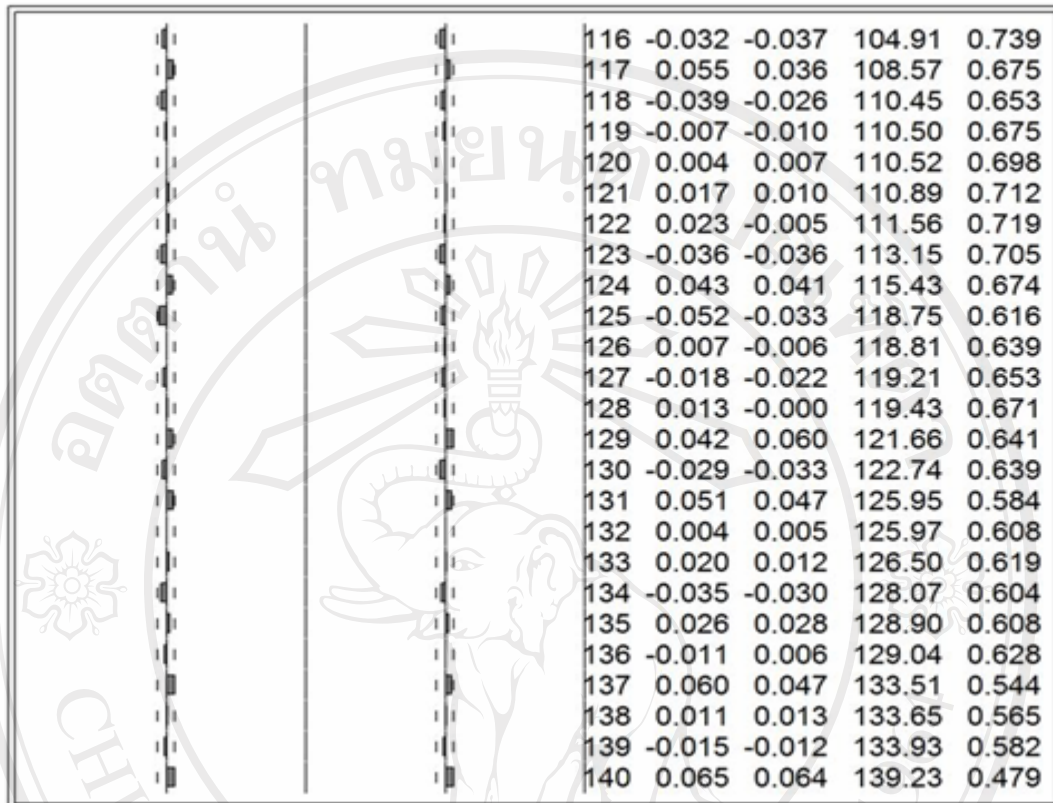
ที่มา: การคำนวณโดยใช้โปรแกรม EIEWS 5.1

Correlogram of Standardized Residuals

55	0.021	0.016	58.911	0.301
56	-0.019	-0.007	59.343	0.320
57	-0.026	-0.038	60.100	0.330
58	0.025	0.022	60.853	0.339
59	0.020	0.021	61.318	0.358
60	-0.007	-0.012	61.382	0.391
61	0.005	0.000	61.407	0.425
62	0.007	0.009	61.466	0.459
63	-0.007	0.007	61.524	0.493
64	0.052	0.045	64.665	0.418
65	0.006	0.003	64.705	0.452
66	-0.027	-0.039	65.544	0.458
67	0.032	0.043	66.742	0.451
68	-0.008	-0.002	66.822	0.483
69	0.027	0.027	67.648	0.489
70	-0.011	-0.004	67.783	0.519
71	0.062	0.040	72.371	0.400
72	-0.028	-0.025	73.291	0.403
73	-0.003	-0.005	73.302	0.435
74	-0.022	-0.012	73.855	0.450
75	-0.007	-0.014	73.911	0.481
76	0.038	0.046	75.659	0.457
77	0.010	-0.003	75.781	0.486
78	-0.003	-0.011	75.795	0.517
79	0.026	0.043	76.617	0.523
80	0.034	0.038	77.961	0.512
81	-0.025	-0.028	78.731	0.519
82	0.021	-0.001	79.239	0.535
83	-0.017	-0.014	79.581	0.555
84	0.028	0.031	80.528	0.556
85	-0.033	-0.007	81.863	0.546
86	0.035	0.016	83.352	0.530
87	-0.021	-0.017	83.872	0.545
88	-0.002	-0.018	83.877	0.575
89	0.006	-0.003	83.927	0.603
90	-0.060	-0.059	88.246	0.503
91	-0.024	-0.021	88.935	0.512
92	0.008	0.021	89.019	0.539
93	0.009	0.002	89.124	0.566
94	0.021	0.028	89.663	0.579
95	-0.015	-0.026	89.928	0.600
96	-0.021	-0.020	90.455	0.613
97	-0.005	-0.003	90.487	0.640
98	-0.027	-0.023	91.370	0.642
99	-0.026	-0.025	92.175	0.647
100	-0.011	-0.004	92.329	0.669
101	-0.041	-0.034	94.386	0.640
102	-0.030	-0.028	95.488	0.636
103	0.005	0.023	95.513	0.662
104	0.055	0.041	99.178	0.588
105	-0.014	-0.019	99.417	0.609
106	-0.031	-0.034	100.60	0.603
107	-0.008	-0.003	100.67	0.628
108	0.030	0.050	101.77	0.625
109	0.003	0.005	101.78	0.650
110	-0.004	-0.003	101.80	0.675
111	-0.002	-0.005	101.80	0.699
112	0.027	0.026	102.67	0.701
113	0.016	-0.011	102.98	0.717
114	-0.008	0.011	103.06	0.738
115	-0.021	-0.018	103.62	0.747

ที่มา: การคำนวณโดยใช้โปรแกรม EIEWS 5.1

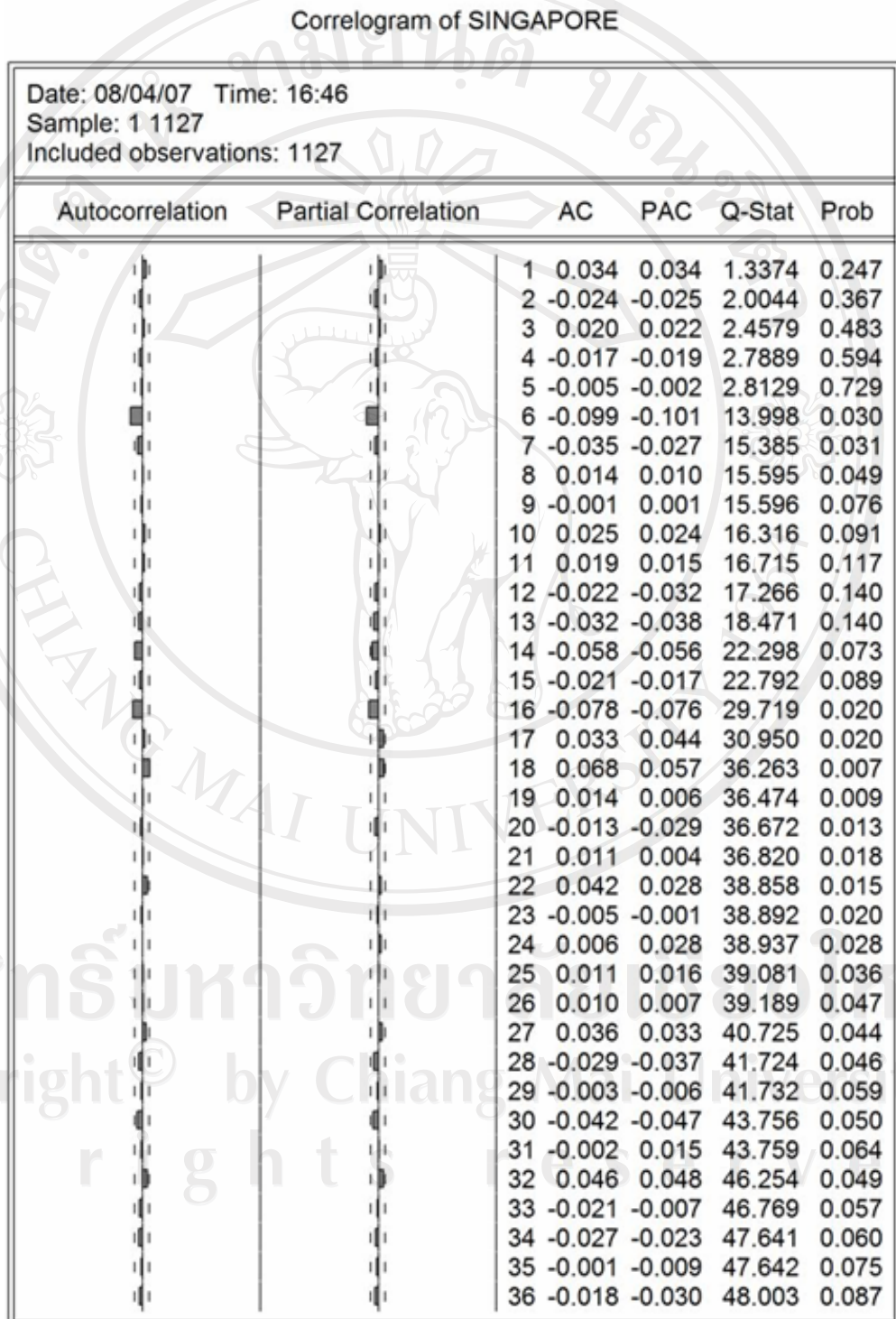
Correlogram of Standardized Residuals



ที่มา: การคำนวณ โดยใช้โปรแกรม EVIEWS 5.1

2) ผลคอเรโลแกรม ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์สิงคโปร์

2.1) รูปแบบคอเรโลแกรมของการทดสอบ Unit Root ที่ระดับ Level



ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

2.2) รูปแบบคอเรลโลแกรมของการทดสอบ Q-statistic จากแบบจำลอง ARIMA-EGARCH

Correlogram of Standardized Residuals

Date: 10/01/07 Time: 00:08
Sample: 7 1127
Included observations: 1121
Q-statistic probabilities adjusted for 2 ARMA term(s)

	Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
1	0.029	0.029	0.9410			
2	-0.021	-0.022	1.4583			
3	0.020	0.021	1.9040	0.168		
4	-0.004	-0.006	1.9228	0.382		
5	-0.005	-0.004	1.9482	0.583		
6	0.000	-0.000	1.9483	0.745		
7	-0.031	-0.032	3.0665	0.690		
8	-0.033	-0.032	4.3351	0.631		
9	0.012	0.013	4.5090	0.720		
10	0.006	0.005	4.5543	0.804		
11	0.009	0.010	4.6457	0.864		
12	-0.032	-0.034	5.8115	0.831		
13	-0.008	-0.006	5.8775	0.881		
14	-0.047	-0.049	8.3700	0.756		
15	-0.024	-0.022	9.0385	0.770		
16	-0.007	-0.008	9.0898	0.825		
17	0.026	0.028	9.8638	0.828		
18	0.037	0.037	11.469	0.780		
19	0.017	0.014	11.791	0.813		
20	-0.008	-0.011	11.856	0.855		
21	0.018	0.015	12.216	0.876		
22	0.025	0.020	12.951	0.879		
23	0.005	0.006	12.983	0.909		
24	0.004	0.006	13.005	0.933		
25	0.003	0.008	13.017	0.952		
26	0.013	0.013	13.197	0.963		
27	0.022	0.019	13.753	0.966		
28	-0.034	-0.039	15.097	0.956		
29	-0.007	-0.004	15.156	0.967		
30	-0.039	-0.039	16.873	0.951		
31	-0.007	0.001	16.927	0.963		
32	0.036	0.039	18.449	0.951		
33	-0.020	-0.016	18.919	0.956		
34	-0.014	-0.009	19.148	0.965		
35	0.006	0.002	19.187	0.974		
36	-0.008	-0.011	19.262	0.980		
37	0.002	0.002	19.265	0.986		
38	-0.008	-0.010	19.335	0.989		
39	-0.004	0.002	19.353	0.993		
40	0.017	0.016	19.697	0.994		
41	0.065	0.064	24.549	0.966		
42	-0.046	-0.056	27.023	0.942		
43	0.052	0.053	30.161	0.894		
44	0.009	-0.005	30.249	0.912		
45	0.025	0.028	31.007	0.914		
46	-0.031	-0.032	32.105	0.909		
47	0.005	0.013	32.132	0.925		
48	-0.021	-0.020	32.645	0.931		
49	0.017	0.022	32.991	0.939		
50	-0.011	-0.020	33.144	0.949		
51	-0.014	-0.006	33.380	0.957		
52	-0.023	-0.022	33.996	0.959		
53	0.019	0.025	34.411	0.964		
54	-0.012	-0.021	34.586	0.970		

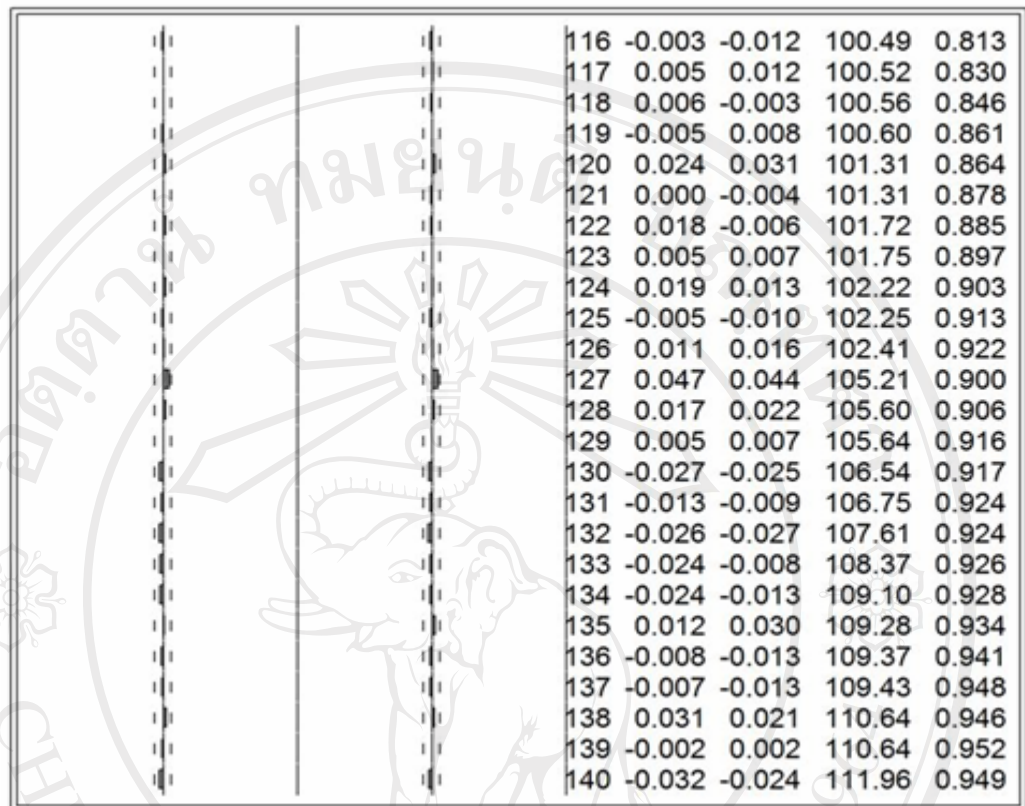
ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

Correlogram of Standardized Residuals

55	-0.026	-0.009	35.373	0.970
56	0.009	0.006	35.479	0.976
57	0.031	0.040	36.580	0.974
58	-0.039	-0.053	38.411	0.965
59	0.008	0.012	38.480	0.972
60	0.009	0.002	38.587	0.977
61	0.040	0.046	40.448	0.969
62	0.012	-0.002	40.628	0.974
63	0.039	0.043	42.461	0.966
64	0.016	0.008	42.759	0.970
65	-0.032	-0.028	43.955	0.967
66	-0.033	-0.045	45.234	0.964
67	-0.042	-0.043	47.348	0.951
68	0.017	0.021	47.708	0.956
69	-0.014	-0.002	47.948	0.962
70	0.004	0.001	47.968	0.969
71	-0.047	-0.036	50.661	0.952
72	0.005	-0.002	50.687	0.960
73	0.013	0.014	50.904	0.966
74	-0.030	-0.034	51.989	0.964
75	0.017	0.026	52.321	0.968
76	-0.053	-0.054	55.708	0.944
77	-0.000	0.019	55.708	0.953
78	0.036	0.025	57.249	0.947
79	-0.037	-0.044	58.861	0.938
80	0.014	0.010	59.112	0.945
81	0.090	0.079	68.810	0.787
82	0.023	0.013	69.444	0.794
83	0.005	0.012	69.472	0.816
84	-0.005	-0.021	69.508	0.836
85	-0.027	-0.018	70.371	0.837
86	-0.033	-0.048	71.732	0.828
87	-0.039	-0.026	73.602	0.806
88	0.012	0.003	73.786	0.823
89	-0.041	-0.023	75.798	0.799
90	-0.033	-0.038	77.141	0.789
91	-0.037	-0.029	78.830	0.771
92	-0.017	-0.020	79.203	0.785
93	-0.021	-0.011	79.747	0.794
94	-0.021	-0.029	80.307	0.803
95	0.032	0.050	81.600	0.795
96	0.047	0.046	84.356	0.752
97	-0.017	-0.014	84.724	0.766
98	-0.003	-0.010	84.739	0.788
99	-0.041	-0.051	86.768	0.762
100	0.027	0.011	87.698	0.763
101	-0.003	-0.007	87.712	0.784
102	-0.051	-0.063	90.874	0.732
103	-0.000	0.018	90.874	0.755
104	-0.004	-0.031	90.895	0.777
105	0.036	0.038	92.484	0.762
106	0.039	0.024	94.356	0.740
107	0.011	0.012	94.514	0.759
108	-0.030	-0.018	95.602	0.756
109	0.010	0.018	95.718	0.775
110	0.003	0.009	95.729	0.795
111	-0.029	-0.008	96.800	0.792
112	-0.022	-0.012	97.415	0.799
113	0.006	-0.009	97.456	0.817
114	-0.032	-0.035	98.704	0.811
115	-0.038	-0.029	100.48	0.794

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

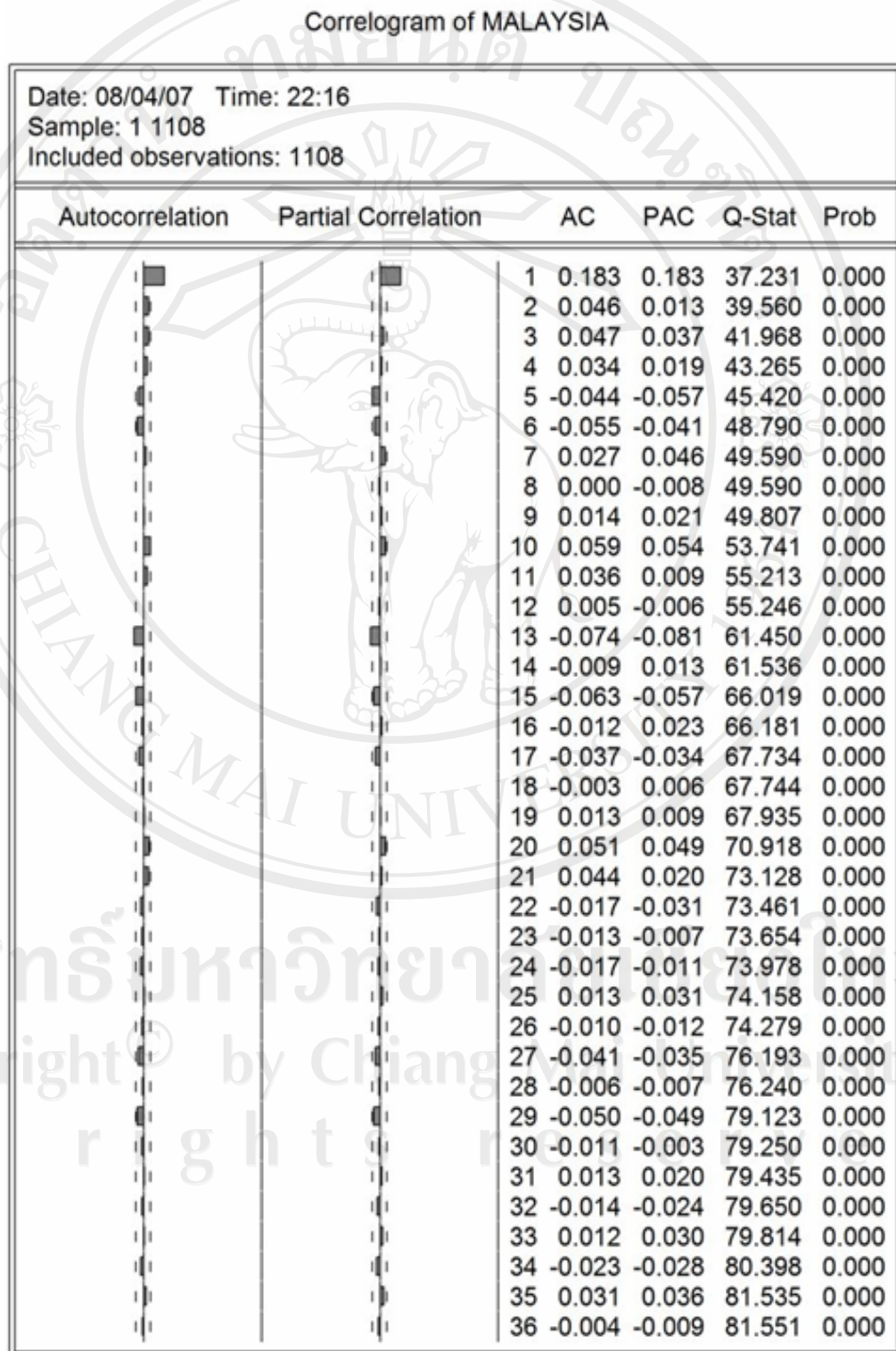
Correlogram of Standardized Residuals



ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

3) ผลคอเรโลแกรม ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์มาเลเซีย

3.1) รูปแบบคอเรโลแกรมของการทดสอบ Unit Root ที่ระดับ Level



ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

3.2) รูปแบบคอเรลโลแกรมของการทดสอบ Q-statistic จากแบบจำลอง ARIMA-EGARCH

Correlogram of Standardized Residuals

Date: 08/04/07 Time: 22:35
Sample: 3 1108
Included observations: 1106
Q-statistic probabilities adjusted for 5 ARMA term(s)

	Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob
1	0.027	0.027	0.7815			
2	0.015	0.014	1.0320			
3	0.018	0.017	1.3855			
4	0.024	0.023	2.0104			
5	-0.036	-0.037	3.4284			
6	-0.031	-0.030	4.5142	0.034		
7	0.018	0.020	4.8689	0.088		
8	-0.008	-0.008	4.9433	0.176		
9	-0.005	-0.002	4.9702	0.290		
10	0.054	0.055	8.2889	0.141		
11	0.027	0.021	9.0930	0.168		
12	0.007	0.005	9.1445	0.242		
13	-0.060	-0.063	13.226	0.104		
14	0.030	0.029	14.248	0.114		
15	-0.020	-0.017	14.692	0.144		
16	0.025	0.033	15.413	0.164		
17	-0.030	-0.029	16.400	0.174		
18	0.005	0.001	16.428	0.227		
19	0.002	0.001	16.433	0.288		
20	0.032	0.032	17.610	0.284		
21	0.021	0.016	18.088	0.319		
22	-0.033	-0.036	19.297	0.312		
23	-0.009	-0.006	19.398	0.368		
24	-0.031	-0.031	20.499	0.365		
25	0.029	0.036	21.480	0.369		
26	-0.003	-0.005	21.488	0.430		
27	-0.033	-0.030	22.759	0.415		
28	0.012	0.009	22.934	0.465		
29	-0.045	-0.042	25.207	0.395		
30	-0.018	-0.023	25.563	0.431		
31	0.026	0.032	26.319	0.446		
32	-0.010	-0.014	26.437	0.494		
33	0.012	0.023	26.613	0.539		
34	-0.017	-0.016	26.939	0.575		
35	0.029	0.018	27.873	0.577		
36	0.023	0.024	28.482	0.596		
37	-0.006	-0.008	28.525	0.643		
38	0.031	0.039	29.601	0.637		
39	-0.026	-0.031	30.367	0.646		
40	0.007	0.010	30.426	0.689		
41	0.011	0.012	30.576	0.724		
42	-0.021	-0.026	31.107	0.741		
43	0.035	0.042	32.500	0.721		
44	-0.012	-0.012	32.660	0.753		
45	0.028	0.022	33.548	0.754		
46	-0.018	-0.022	33.942	0.775		
47	0.009	0.004	34.033	0.804		
48	0.020	0.025	34.510	0.819		
49	0.039	0.043	36.260	0.790		
50	0.024	0.024	36.913	0.799		
51	0.051	0.045	39.916	0.724		
52	-0.003	-0.015	39.926	0.758		
53	-0.003	-0.003	39.934	0.790		
54	-0.038	-0.041	41.607	0.764		

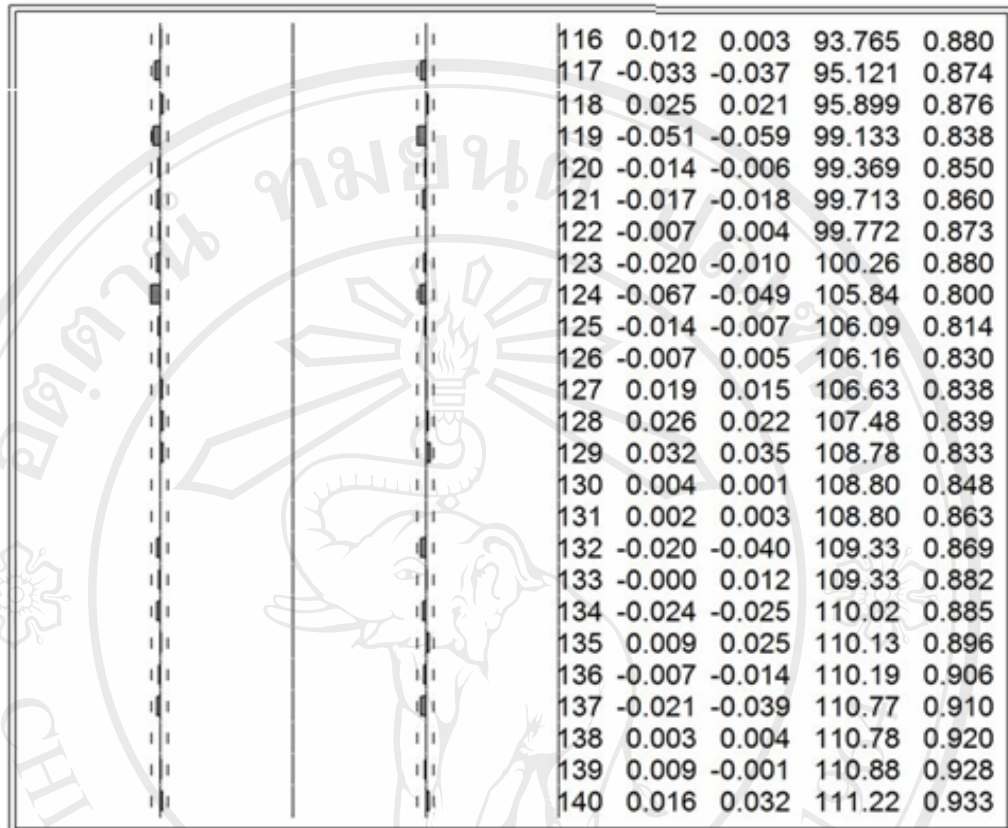
ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

Correlogram of Standardized Residuals

55	-0.041	-0.037	43.573	0.727
56	-0.036	-0.033	45.114	0.705
57	-0.026	-0.022	45.900	0.711
58	0.013	0.022	46.098	0.738
59	0.056	0.046	49.831	0.636
60	-0.005	-0.003	49.865	0.671
61	-0.008	-0.026	49.933	0.703
62	-0.033	-0.029	51.248	0.690
63	-0.006	-0.011	51.285	0.721
64	-0.033	-0.018	52.545	0.711
65	-0.026	-0.011	53.322	0.716
66	0.043	0.048	55.455	0.676
67	0.009	0.016	55.559	0.705
68	0.032	0.026	56.752	0.697
69	0.043	0.025	58.917	0.656
70	0.016	0.006	59.223	0.679
71	-0.022	-0.027	59.789	0.691
72	-0.029	-0.014	60.813	0.689
73	-0.017	-0.015	61.149	0.709
74	-0.015	-0.005	61.401	0.731
75	-0.034	-0.020	62.810	0.717
76	-0.032	-0.037	64.053	0.708
77	-0.007	-0.003	64.115	0.735
78	0.019	0.014	64.532	0.750
79	-0.005	-0.012	64.566	0.775
80	0.008	0.008	64.652	0.797
81	0.017	0.018	65.016	0.811
82	-0.013	-0.009	65.230	0.828
83	0.008	0.013	65.308	0.847
84	-0.013	-0.028	65.500	0.862
85	-0.012	-0.012	65.681	0.876
86	0.017	0.015	66.040	0.886
87	0.001	0.002	66.042	0.901
88	-0.001	-0.003	66.043	0.914
89	-0.058	-0.067	70.056	0.862
90	0.004	0.010	70.080	0.878
91	-0.013	-0.011	70.273	0.891
92	-0.002	0.005	70.279	0.905
93	-0.014	-0.006	70.504	0.914
94	0.037	0.024	72.174	0.903
95	0.026	0.032	72.996	0.904
96	0.056	0.063	76.747	0.857
97	-0.017	-0.027	77.114	0.867
98	-0.047	-0.050	79.855	0.832
99	-0.009	-0.008	79.945	0.849
100	0.019	0.025	80.379	0.858
101	-0.020	-0.018	80.871	0.866
102	0.057	0.051	84.836	0.806
103	0.032	0.035	86.091	0.799
104	0.015	0.003	86.358	0.814
105	-0.036	-0.024	87.906	0.801
106	-0.010	-0.034	88.034	0.818
107	-0.032	-0.025	89.324	0.811
108	-0.036	-0.024	90.901	0.797
109	-0.003	0.011	90.914	0.816
110	-0.006	-0.010	90.953	0.834
111	0.033	0.030	92.322	0.826
112	0.006	0.007	92.366	0.842
113	0.020	0.022	92.885	0.850
114	-0.016	-0.023	93.220	0.860
115	-0.017	-0.014	93.573	0.869

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

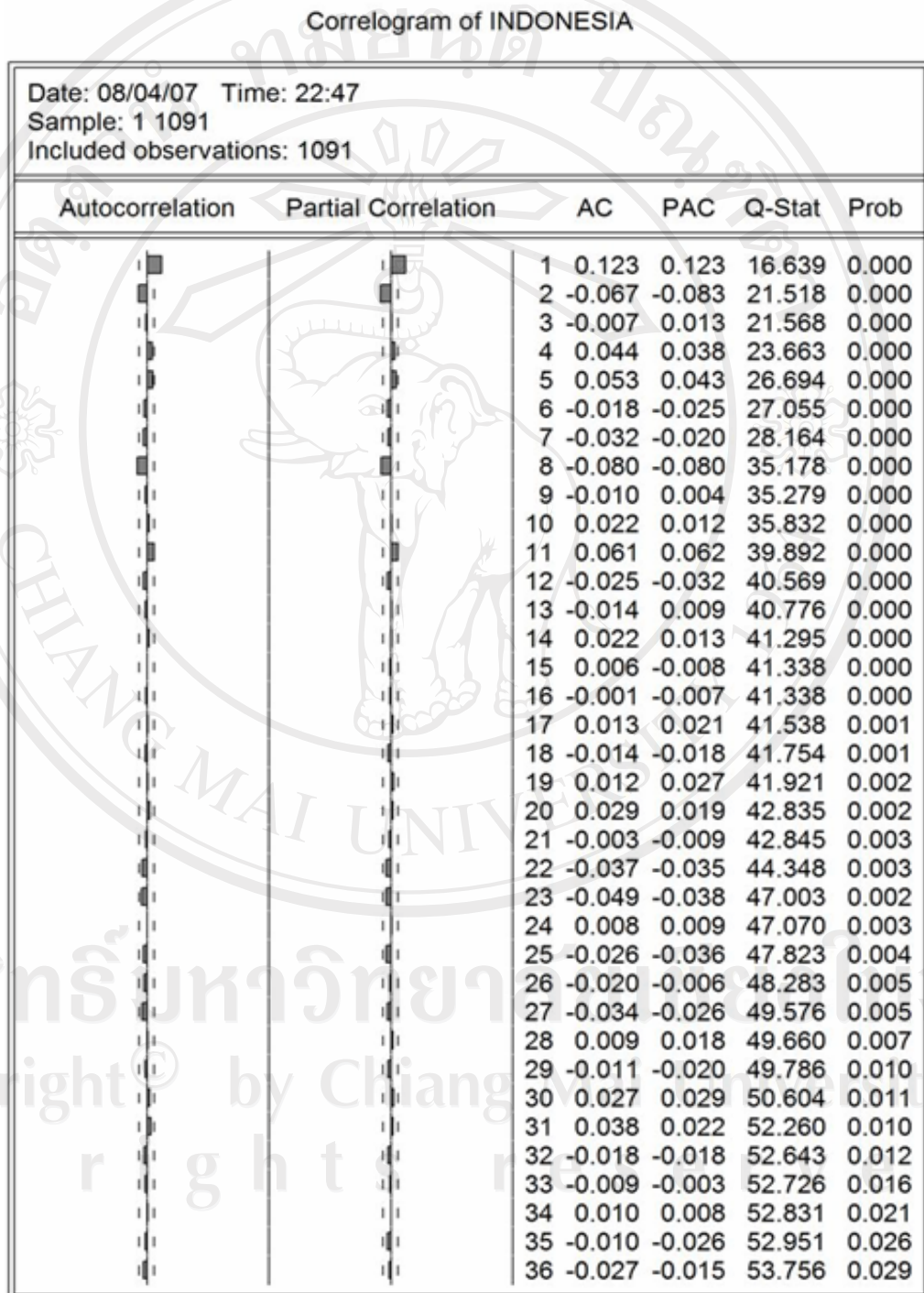
Correlogram of Standardized Residuals



ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

4) ผลคอเรโลแกรม ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์อินโดนีเซีย

4.1) รูปแบบคอเรโลแกรมของการทดสอบ Unit Root ที่ระดับ Level



ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

4.2) รูปแบบคอเรลโลแกรมของการทดสอบ Q-statistic จากแบบจำลอง ARIMA-EGARCH

Correlogram of Standardized Residuals

Date: 08/04/07 Time: 22:58
Sample: 3 1091
Included observations: 1089
Q-statistic probabilities adjusted for 5 ARMA term(s)

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
		1	-0.013	-0.013	0.1759	
		2	-0.021	-0.021	0.6553	
		3	-0.001	-0.001	0.6560	
		4	0.022	0.022	1.1889	
		5	-0.014	-0.013	1.3980	
		6	-0.018	-0.018	1.7558	0.185
		7	0.022	0.021	2.2679	0.322
		8	-0.058	-0.059	6.0018	0.112
		9	0.017	0.017	6.3116	0.177
		10	0.000	-0.001	6.3116	0.277
		11	0.034	0.034	7.6101	0.268
		12	-0.033	-0.030	8.8300	0.265
		13	-0.010	-0.011	8.9335	0.348
		14	0.048	0.045	11.482	0.244
		15	0.008	0.010	11.559	0.316
		16	-0.019	-0.019	11.956	0.367
		17	0.026	0.029	12.679	0.393
		18	-0.035	-0.041	14.066	0.369
		19	0.003	0.009	14.076	0.444
		20	0.021	0.018	14.561	0.484
		21	0.005	0.002	14.588	0.555
		22	-0.029	-0.022	15.503	0.559
		23	-0.046	-0.045	17.866	0.464
		24	0.000	-0.007	17.867	0.531
		25	-0.033	-0.033	19.055	0.518
		26	-0.024	-0.027	19.672	0.542
		27	-0.041	-0.038	21.575	0.485
		28	0.024	0.017	22.209	0.508
		29	-0.009	-0.008	22.306	0.561
		30	0.036	0.035	23.732	0.535
		31	0.041	0.034	25.598	0.485
		32	-0.025	-0.020	26.328	0.500
		33	-0.013	-0.011	26.505	0.545
		34	0.003	-0.002	26.512	0.598
		35	-0.013	-0.021	26.699	0.639
		36	-0.032	-0.023	27.837	0.630
		37	-0.016	-0.016	28.117	0.664
		38	0.009	0.012	28.210	0.705
		39	-0.006	-0.005	28.256	0.745
		40	-0.007	-0.006	28.313	0.781
		41	-0.004	-0.008	28.330	0.815
		42	-0.048	-0.050	30.945	0.748
		43	-0.027	-0.027	31.792	0.751
		44	-0.021	-0.027	32.281	0.768
		45	0.027	0.014	33.116	0.771
		46	-0.065	-0.059	37.919	0.608
		47	0.004	0.003	37.937	0.650
		48	0.017	0.007	38.251	0.677
		49	-0.008	-0.011	38.332	0.712
		50	0.018	0.013	38.705	0.734
		51	-0.001	-0.004	38.706	0.769
		52	0.011	0.003	38.833	0.796
		53	-0.047	-0.034	41.316	0.741
		54	-0.024	-0.034	41.986	0.751

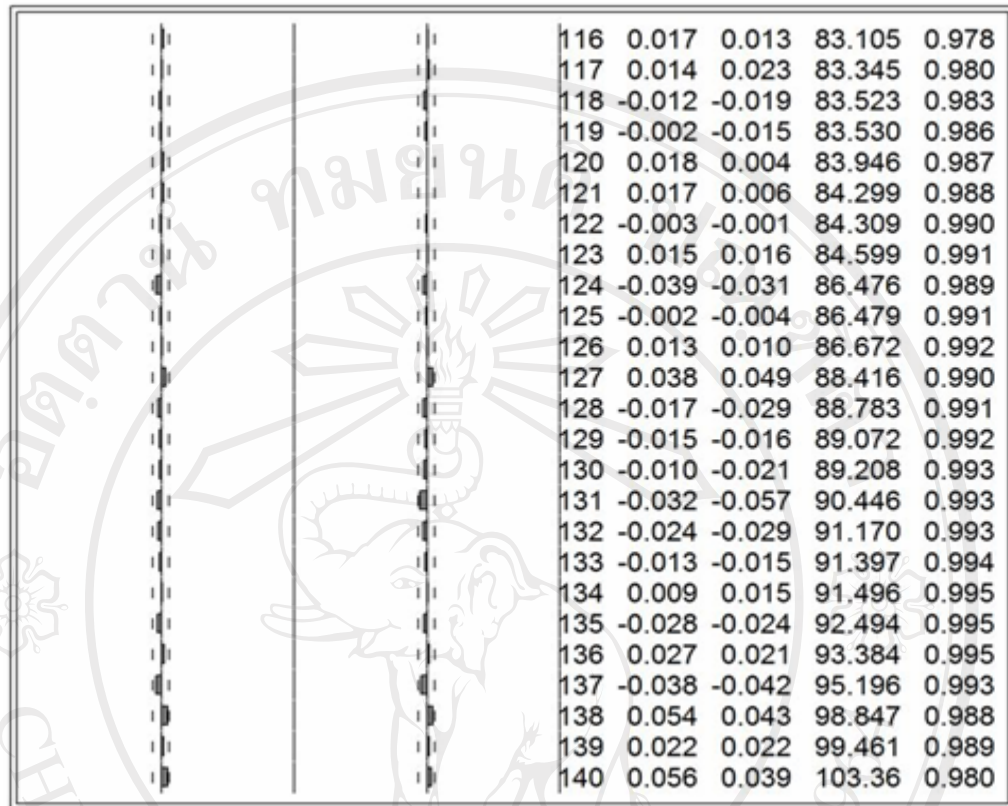
ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.

Correlogram of Standardized Residuals

55	0.030	0.031	43.017	0.747
56	-0.004	0.000	43.039	0.778
57	0.004	0.016	43.059	0.807
58	0.000	-0.003	43.059	0.833
59	0.012	-0.001	43.235	0.853
60	-0.011	-0.009	43.381	0.871
61	0.043	0.036	45.565	0.839
62	0.009	-0.001	45.657	0.860
63	0.000	0.012	45.657	0.880
64	0.034	0.029	47.003	0.870
65	-0.001	-0.006	47.005	0.889
66	-0.043	-0.047	49.144	0.862
67	0.008	0.010	49.222	0.880
68	0.029	0.021	50.195	0.879
69	0.019	0.010	50.630	0.888
70	0.025	0.029	51.367	0.891
71	0.029	0.025	52.332	0.890
72	-0.002	-0.004	52.336	0.906
73	0.007	0.015	52.401	0.919
74	-0.045	-0.045	54.806	0.893
75	0.006	-0.000	54.848	0.908
76	-0.025	-0.030	55.573	0.911
77	-0.014	-0.008	55.807	0.921
78	-0.004	-0.017	55.822	0.933
79	0.005	-0.001	55.847	0.943
80	0.021	0.023	56.350	0.947
81	0.029	0.030	57.341	0.946
82	0.003	-0.003	57.350	0.954
83	-0.011	-0.007	57.498	0.961
84	0.005	0.002	57.523	0.967
85	-0.037	-0.043	59.176	0.961
86	0.007	0.004	59.237	0.967
87	-0.003	0.001	59.249	0.973
88	0.005	0.005	59.275	0.977
89	-0.027	-0.029	60.158	0.977
90	0.049	0.048	63.015	0.965
91	0.036	0.043	64.590	0.959
92	-0.000	-0.003	64.590	0.966
93	-0.018	-0.015	64.959	0.969
94	-0.036	-0.032	66.547	0.964
95	0.016	0.004	66.858	0.968
96	-0.038	-0.029	68.577	0.962
97	-0.007	-0.008	68.630	0.967
98	-0.021	-0.017	69.156	0.970
99	-0.018	-0.024	69.531	0.972
100	0.039	0.035	71.327	0.967
101	-0.027	-0.039	72.192	0.967
102	0.037	0.035	73.854	0.961
103	-0.023	-0.013	74.513	0.963
104	-0.022	-0.019	75.103	0.965
105	-0.015	-0.008	75.363	0.969
106	-0.030	-0.033	76.444	0.967
107	-0.005	-0.001	76.480	0.972
108	-0.017	-0.010	76.813	0.975
109	0.022	0.014	77.379	0.976
110	-0.022	-0.015	77.957	0.978
111	0.000	-0.009	77.957	0.981
112	0.005	-0.001	77.993	0.984
113	-0.045	-0.034	80.491	0.978
114	0.009	0.014	80.593	0.981
115	-0.042	-0.035	82.733	0.976

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.

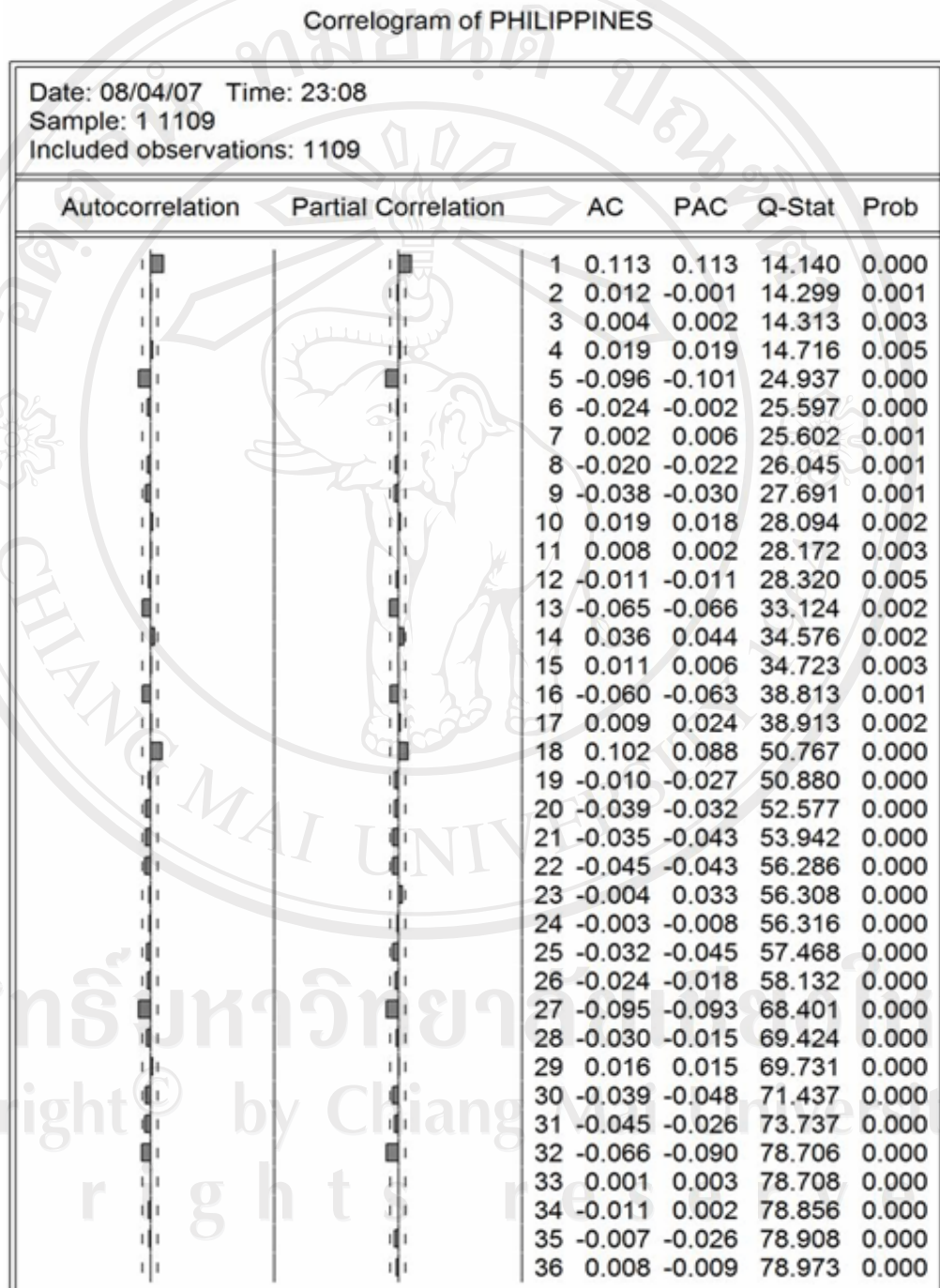
Correlogram of Standardized Residuals



ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

5) ผลคอเรโลแกรม ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ฟิลิปปินส์

5.1) รูปแบบคอเรโลแกรมของการทดสอบ Unit Root ที่ระดับ Level



ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

5.2) รูปแบบคอเรลโลแกรมของการทดสอบ Q-statistic จากแบบจำลอง ARIMA-EGARCH

Correlogram of Standardized Residuals

Date: 08/05/07 Time: 21:07
Sample: 3 1109
Included observations: 1107
Q-statistic probabilities adjusted for 3 ARMA term(s)

Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
		1	0.014	0.014	0.2267	
		2	0.026	0.026	0.9951	
		3	0.009	0.009	1.0936	
		4	0.049	0.048	3.7234	0.054
		5	-0.037	-0.038	5.2157	0.074
		6	-0.011	-0.013	5.3598	0.147
		7	-0.003	-0.001	5.3674	0.252
		8	-0.009	-0.010	5.4603	0.362
		9	0.005	0.009	5.4841	0.483
		10	0.018	0.019	5.8637	0.556
		11	0.014	0.013	6.0912	0.637
		12	0.021	0.020	6.5829	0.680
		13	-0.033	-0.037	7.8400	0.644
		14	0.034	0.033	9.1733	0.606
		15	0.010	0.011	9.2853	0.678
		16	-0.056	-0.059	12.846	0.460
		17	0.011	0.018	12.994	0.527
		18	0.081	0.079	20.335	0.159
		19	-0.013	-0.015	20.540	0.197
		20	-0.008	-0.006	20.615	0.244
		21	-0.026	-0.034	21.391	0.260
		22	-0.044	-0.051	23.596	0.212
		23	-0.006	0.005	23.640	0.258
		24	0.012	0.016	23.813	0.302
		25	-0.045	-0.041	26.080	0.248
		26	-0.014	-0.010	26.293	0.287
		27	-0.087	-0.089	34.866	0.070
		28	-0.005	-0.005	34.894	0.090
		29	0.017	0.021	35.205	0.107
		30	-0.041	-0.042	37.118	0.093
		31	-0.026	-0.011	37.916	0.100
		32	-0.051	-0.063	40.872	0.071
		33	0.012	0.011	41.029	0.086
		34	-0.021	-0.002	41.519	0.098
		35	0.020	0.014	41.959	0.112
		36	0.011	0.013	42.106	0.133
		37	0.009	0.008	42.195	0.158
		38	0.014	0.007	42.435	0.181
		39	0.002	0.011	42.442	0.213
		40	0.026	0.032	43.235	0.222
		41	0.002	0.002	43.242	0.257
		42	0.019	0.022	43.658	0.280
		43	-0.040	-0.050	45.546	0.252
		44	-0.001	0.002	45.548	0.288
		45	-0.010	0.010	45.668	0.322
		46	-0.036	-0.042	47.204	0.305
		47	0.032	0.029	48.363	0.301
		48	0.019	0.013	48.801	0.323
		49	0.005	-0.002	48.832	0.360
		50	-0.063	-0.058	53.408	0.242
		51	0.038	0.032	55.065	0.225
		52	-0.038	-0.051	56.727	0.209
		53	0.031	0.028	57.877	0.207
		54	-0.019	-0.026	58.283	0.225

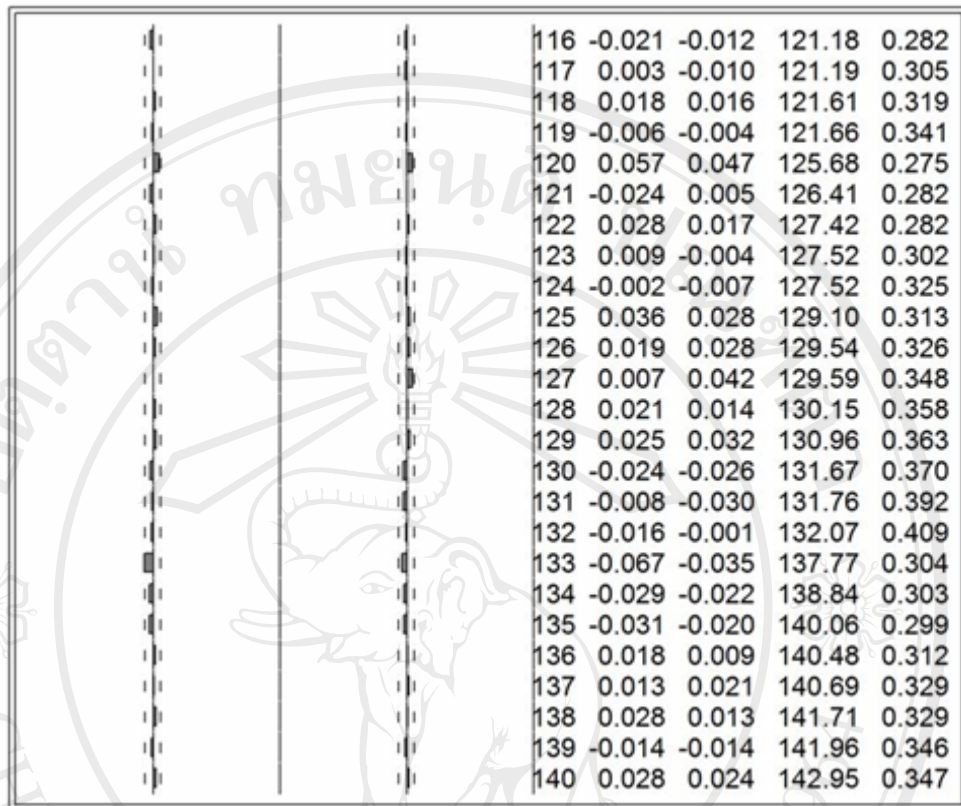
ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

Correlogram of Standardized Residuals

55	0.002	-0.006	58.287	0.255
56	-0.028	-0.022	59.214	0.259
57	0.017	0.002	59.536	0.281
58	-0.017	-0.016	59.857	0.304
59	0.002	-0.015	59.862	0.337
60	-0.020	-0.013	60.348	0.356
61	0.015	0.025	60.629	0.381
62	-0.013	-0.014	60.823	0.410
63	-0.014	-0.014	61.058	0.438
64	0.000	0.015	61.058	0.474
65	0.071	0.063	66.967	0.311
66	0.038	0.036	68.627	0.292
67	-0.006	-0.005	68.667	0.322
68	-0.015	-0.020	68.947	0.345
69	0.028	0.030	69.905	0.348
70	-0.002	0.006	69.911	0.380
71	0.069	0.064	75.485	0.249
72	0.013	0.021	75.683	0.272
73	-0.001	-0.014	75.684	0.300
74	-0.029	-0.022	76.693	0.301
75	0.033	0.017	77.968	0.295
76	-0.005	-0.006	77.997	0.323
77	0.039	0.029	79.817	0.301
78	0.047	0.059	82.437	0.260
79	-0.026	-0.047	83.220	0.267
80	-0.029	-0.037	84.217	0.268
81	-0.008	-0.010	84.294	0.293
82	-0.003	-0.013	84.305	0.321
83	0.038	0.041	86.077	0.301
84	-0.010	-0.022	86.191	0.326
85	-0.002	-0.003	86.195	0.354
86	-0.011	-0.017	86.334	0.379
87	-0.003	-0.004	86.344	0.409
88	-0.024	-0.017	87.064	0.418
89	0.023	0.006	87.716	0.428
90	0.065	0.071	92.789	0.316
91	0.012	0.033	92.972	0.338
92	-0.060	-0.052	97.283	0.257
93	-0.017	-0.019	97.619	0.274
94	0.002	0.018	97.623	0.299
95	0.003	-0.008	97.636	0.324
96	-0.035	-0.014	99.105	0.313
97	-0.012	0.011	99.273	0.335
98	-0.058	-0.047	103.39	0.261
99	0.017	0.036	103.76	0.276
100	0.006	0.003	103.81	0.300
101	-0.006	-0.020	103.85	0.324
102	0.024	0.033	104.54	0.332
103	0.043	0.063	106.81	0.302
104	-0.009	-0.025	106.92	0.324
105	0.062	0.074	111.62	0.242
106	0.017	-0.003	111.96	0.257
107	0.044	0.043	114.34	0.229
108	-0.019	-0.027	114.80	0.241
109	-0.027	-0.040	115.70	0.244
110	-0.001	0.024	115.70	0.266
111	0.010	0.009	115.84	0.286
112	-0.011	-0.013	115.99	0.306
113	0.035	0.032	117.48	0.295
114	0.037	0.018	119.19	0.281
115	-0.034	-0.025	120.63	0.272

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.

Correlogram of Standardized Residuals



ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

ภาคผนวก ค

การประมาณค่าพารามิเตอร์

1) การประมาณค่าพารามิเตอร์ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ ไทยจาก
แบบจำลอง ARIMA-EGARCH

Dependent Variable: THAILAND

Method: ML - ARCH (Marquardt) - Normal distribution

Date: 09/30/07 Time: 22:12

Sample (adjusted): 2 1100

Included observations: 1099 after adjustments

Convergence achieved after 143 iterations

Variance backcast: ON

LOG(GARCH) = C(3) + C(4)*ABS(RESID(-1)/@SQRT(GARCH(-1))) +
C(5)*RESID(-1)/@SQRT(GARCH(-1)) + C(6)*LOG(GARCH(-1))

	Coefficient	Std. Error	z-Statistic	Prob.
C	0.000857	0.000463	1.850933	0.0642
AR(1)	0.107960	0.035539	3.037820	0.0024
Variance Equation				
C(3)	-1.876194	0.330727	-5.672931	0.0000
C(4)	0.186499	0.050121	3.720989	0.0002
C(5)	-0.161948	0.027072	-5.982198	0.0000
C(6)	0.802458	0.034551	23.22509	0.0000
R-squared	-0.017294	Mean dependent var		0.000707
Adjusted R-squared	-0.021948	S.D. dependent var		0.013110
S.E. of regression	0.013253	Akaike info criterion		-5.953803
Sum squared resid	0.191984	Schwarz criterion		-5.926493
Log likelihood	3277.614	Durbin-Watson stat		2.275014
Inverted AR Roots	.11			

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

2) การประมาณค่าพารามิเตอร์ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์สิงคโปร์จาก

แบบจำลอง ARIMA-EGARCH

Dependent Variable: SINGAPORE

Method: ML - ARCH (Marquardt) - Normal distribution

Date: 10/01/07 Time: 00:03

Sample (adjusted): 7 1127

Included observations: 1121 after adjustments

Convergence achieved after 12 iterations

MA backcast: -9 6, Variance backcast: ON

$$\text{LOG}(\text{GARCH}) = \text{C}(4) + \text{C}(5) * \text{ABS}(\text{RESID}(-1) / @\text{SQRT}(\text{GARCH}(-1))) + \text{C}(6) * \text{RESID}(-1) / @\text{SQRT}(\text{GARCH}(-1)) + \text{C}(7) * \text{LOG}(\text{GARCH}(-1))$$

	Coefficient	Std. Error	z-Statistic	Prob.
C	0.000864	0.000204	4.237749	0.0000
AR(6)	-0.085559	0.028342	-3.018847	0.0025
MA(16)	-0.056255	0.028526	-1.972033	0.0486

Variance Equation

C(4)	-0.366597	0.073941	-4.957958	0.0000
C(5)	0.183700	0.023821	7.711685	0.0000
C(6)	-0.015391	0.015639	-0.984143	0.3250
C(7)	0.976564	0.007085	137.8405	0.0000

R-squared	0.014972	Mean dependent var	0.000864
Adjusted R-squared	0.009667	S.D. dependent var	0.009022
S.E. of regression	0.008978	Akaike info criterion	-6.731970
Sum squared resid	0.089793	Schwarz criterion	-6.700611
Log likelihood	3780.269	F-statistic	2.822087
Durbin-Watson stat	1.930647	Prob(F-statistic)	0.009908

Inverted AR Roots	.57-.33i	.57+.33i	.00-.66i	-.00+.66i
	-.57+.33i	-.57-.33i		
Inverted MA Roots	.84	.77+.32i	.77-.32i	.59+.59i
	.59+.59i	.32-.77i	.32+.77i	-.00+.84i
	-.00-.84i	-.32-.77i	-.32+.77i	-.59+.59i
	-.59+.59i	-.77-.32i	-.77+.32i	-.84

ที่มา: การคำนวณ โดยใช้โปรแกรม EVIEWS 5.1

3) การประมาณค่าพารามิเตอร์ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์มาเลเซีย

จากแบบจำลอง ARIMA-EGARCH

Dependent Variable: MALAYSIA
 Method: ML - ARCH (Marquardt) - Normal distribution
 Date: 08/04/07 Time: 22:32
 Sample (adjusted): 3 1108
 Included observations: 1106 after adjustments
 Convergence achieved after 16 iterations
 MA backcast: 0 2, Variance backcast: ON
 $\text{LOG}(\text{GARCH}) = \text{C}(7) + \text{C}(8) * \text{ABS}(\text{RESID}(-1) / @\text{SQRT}(\text{GARCH}(-1))) + \text{C}(9) * \text{RESID}(-1) / @\text{SQRT}(\text{GARCH}(-1)) + \text{C}(10) * \text{LOG}(\text{GARCH}(-1))$

	Coefficient	Std. Error	z-Statistic	Prob.
C	1.000061	3.44E-05	29036.09	0.0000
AR(1)	1.704454	0.117284	14.53266	0.0000
AR(2)	-0.780003	0.102842	-7.584451	0.0000
MA(1)	-1.556422	0.122041	-12.75326	0.0000
MA(2)	0.551002	0.103018	5.348586	0.0000
MA(3)	0.099405	0.033089	3.004152	0.0027

Variance Equation				
C(7)	-0.530446	0.123990	-4.278124	0.0000
C(8)	0.178198	0.024205	7.361885	0.0000
C(9)	-0.010301	0.013564	-0.759441	0.4476
C(10)	0.971835	0.008168	118.9751	0.0000

R-squared	0.041579	Mean dependent var	1.000102
Adjusted R-squared	0.033709	S.D. dependent var	0.001001
S.E. of regression	0.000984	Akaike info criterion	-11.15192
Sum squared resid	0.001060	Schwarz criterion	-11.10664
Log likelihood	6177.012	F-statistic	5.283031
Durbin-Watson stat	1.950105	Prob(F-statistic)	0.000000

Inverted AR Roots	.85-.23i	.85+.23i	
Inverted MA Roots	.84-.24i	.84+.24i	-.13

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

4) การประมาณค่าพารามิเตอร์ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์อินโดนีเซีย
จากแบบจำลอง ARIMA-EGARCH

Dependent Variable: INDONESIA
Method: ML - ARCH (Marquardt) - Normal distribution
Date: 08/04/07 Time: 22:57
Sample (adjusted): 3 1091
Included observations: 1089 after adjustments
Convergence achieved after 35 iterations
MA backcast: 0 2, Variance backcast: ON
LOG(GARCH) = C(7) + C(8)*ABS(RESID(-1)/@SQRT(GARCH(-1))) +
C(9)*RESID(-1)/@SQRT(GARCH(-1)) + C(10)*LOG(GARCH(-1))

	Coefficient	Std. Error	z-Statistic	Prob.
C	0.001412	0.000419	3.370792	0.0007
AR(1)	1.240365	0.023008	53.90946	0.0000
AR(2)	-0.941107	0.022740	-41.38627	0.0000
MA(1)	-1.055028	0.039954	-26.40597	0.0000
MA(2)	0.708703	0.047500	14.92000	0.0000
MA(3)	0.203656	0.033494	6.080441	0.0000

Variance Equation

C(7)	-1.798378	0.259879	-6.920058	0.0000
C(8)	0.250823	0.040224	6.235693	0.0000
C(9)	-0.177599	0.029417	-6.037363	0.0000
C(10)	0.820260	0.028223	29.06348	0.0000

R-squared	0.026463	Mean dependent var	0.001544
Adjusted R-squared	0.018342	S.D. dependent var	0.012418
S.E. of regression	0.012304	Akaike info criterion	-6.084358
Sum squared resid	0.163343	Schwarz criterion	-6.038509
Log likelihood	3322.933	F-statistic	3.258798
Durbin-Watson stat	2.110028	Prob(F-statistic)	0.000640

Inverted AR Roots	.62+.75i	.62-.75i	
Inverted MA Roots	.63+.76i	.63-.76i	-.21

ที่มา: การคำนวณโดยใช้โปรแกรม EViews 5.1

5) การประมาณค่าพารามิเตอร์ของอัตราผลตอบแทนของดัชนีราคาในตลาดหลักทรัพย์ฟิลิปปินส์

จากแบบจำลอง ARIMA-EGARCH

Dependent Variable: PHILIPPINES

Method: ML - ARCH (Marquardt) - Normal distribution

Date: 08/05/07 Time: 21:06

Sample (adjusted): 3 1109

Included observations: 1107 after adjustments

Convergence achieved after 54 iterations

MA backcast: 2, Variance backcast: ON

LOG(GARCH) = C(5) + C(6)*ABS(RESID(-1)/@SQRT(GARCH(-1))) +
C(7)*RESID(-1)/@SQRT(GARCH(-1)) + C(8)*LOG(GARCH(-1))

	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.001077	0.000228	4.729521	0.0000
AR(1)	1.112511	0.036991	30.07524	0.0000
AR(2)	-0.162420	0.032009	-5.074186	0.0000
MA(1)	-0.968383	0.026132	-37.05715	0.0000

Variance Equation

C(5)	-0.678430	0.155596	-4.360190	0.0000
C(6)	0.215686	0.033411	6.455548	0.0000
C(7)	0.021967	0.017234	1.274633	0.2024
C(8)	0.942576	0.016440	57.33593	0.0000

R-squared	0.017483	Mean dependent var	0.001159
Adjusted R-squared	0.011225	S.D. dependent var	0.012050
S.E. of regression	0.011982	Akaike info criterion	-6.084902
Sum squared resid	0.157791	Schwarz criterion	-6.048701
Log likelihood	3375.994	F-statistic	2.793687
Durbin-Watson stat	2.076141	Prob(F-statistic)	0.006948

Inverted AR Roots	.94	.17
Inverted MA Roots	.97	

ที่มา: การคำนวณโดยใช้โปรแกรม EVIEWS 5.1

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