ภาคผนวก

ภาคผนวก ก

ค่าสถิติการทดสอบ Unit Root

ของหลักทรัพย์กลุ่มขนส่งทั้ง 8 หลักทรัพย์ ข้อมูลรายวัน

หลักทรัพย์กลุ่มขนส่ง 4 หลักทรัพย์

ระดับ _0 แบบมีจุดตัดแกน ปราศจากแนวโน้ม

BECL

ADF Test Statistic	-15.96639	1% Critical Value*	-3.4393
		5% Critical Value	-2.8647
		10% Critical Value	-2.5685

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(BECL)
Method: Least Squares
Date: 05/08/06 Time: 22:48
Sample(adjusted): 5 1065
Included observations: 1061 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BECL(-1)	-0.810659	0.050773	-15.96639	0.0000
D(BECL(-1))	0.044688	0.045759	0.976594	0.3290
D(BECL(-2))	0.016819	0.038709	0.434504	0.6640
D(BECL(-3))	0.071175	0.030705	2.318001	0.0206
C	0.159457	0.072723	2.192656	0.0285

R-squared	0.390733	Mean dependent var	0.002773
Adjusted R-squared	0.388425	S.D. dependent var	3.001597
S.E. of regression	2.347347	Akaike info criterion	4.549150
Sum squared resid	5818.598	Schwarz criterion	4.572557

PSL

ADF Test Statistic	-34.98929	1% Critical Value*	-3.4393
		5% Critical Value	-2.8647
		10% Critical Value	-2.5685

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(PSL1)
Method: Least Squares
Date: 05/08/06 Time: 23:05
Sample(adjusted): 3 1065
Included observations: 1063 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PSL1(-1)	-1.071641	0.030628	-34.98929	0.0000
C	0.442999	0.118108	3.750787	0.0002

R-squared	0.535718	Mean dependent var	0.002800
Adjusted R-squared	0.535281	S.D. dependent var	5.616600
S.E. of regression	3.828855	Akaike info criterion	5.524888
Sum squared resid	15554.40	Schwarz criterion	5.534237
Log likelihood	-2934.478	F-statistic	1224.250
Durbin-Watson stat	1.991396	Prob(F-statistic)	0.000000

RCL

ADF Test Statistic	-31.86673	1% Critical Value*	-3.4393
		5% Critical Value	-2.8647
		10% Critical Value	-2.5685

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(MEAN)
Method: Least Squares
Date: 05/08/06 Time: 23:20
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
MEAN(-1)	-0.978495	0.030706	-31.86673	0.0000
C	0.265609	0.082293	3.227619	0.0013

R-squared	0.488806	Mean dependent var	0.003700
Adjusted R-squared	0.488324	S.D. dependent var	3.733856
S.E. of regression	2.670883	Akaike info criterion	4.804573
Sum squared resid	7575.902	Schwarz criterion	4.813915
Log likelihood	-2554.033	F-statistic	1015.488
Durbin-Watson stat	1.997417	Prob(F-statistic)	0.000000

TTA

ADF Test Statistic	-32.94491	1% Critical Value*	-3.4393
		5% Critical Value	-2.8647
		10% Critical Value	-2.5685

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TTA_UNITROOT)
Method: Least Squares
Date: 05/08/06 Time: 23:56
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
TTA_UNITROOT(-1)	-1.011228	0.030695	-32.94491	0.0000
C	0.376482	0.098244	3.832123	0.0001

R-squared	0.505441	Mean dependent var	0.002937
Adjusted R-squared	0.504975	S.D. dependent var	4.524285
S.E. of regression	3.183197	Akaike info criterion	5.155527
Sum squared resid	10760.97	Schwarz criterion	5.164869
Log likelihood	-2740.740	F-statistic	1085.367
Durbin-Watson stat	1.998218	Prob(F-statistic)	0.000000

หลักทรัพย์กลุ่มขนส่ง 4 หลักทรัพย์

ระดับ _0 ปราศจากแนวโน้ม และจุดตัดแกน

AOT

ADF Test Statistic	-11.98942	1% Critical Value*	-2.5714
		5% Critical Value	-1.9404
		10% Critical Value	-1.6161

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(AOT)
Method: Least Squares
Date: 05/10/06 Time: 11:52
Sample(adjusted): 5 361
Included observations: 357 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
AOT(-1)	-1.372373	0.114465	-11.98942	0.0000
D(AOT(-1))	0.305966	0.094783	3.228079	0.0014
D(AOT(-2))	0.256072	0.075744	3.380761	0.0008
D(AOT(-3))	0.114441	0.052450	2.181891	0.0298

R-squared	0.537941	Mean dependent var	-0.004643
Adjusted R-squared	0.534015	S.D. dependent var	2.492178
S.E. of regression	1.701239	Akaike info criterion	3.911732
Sum squared resid	1021.657	Schwarz criterion	3.955180
Log likelihood	-694.2441	Durbin-Watson stat	1.981831

ASIMAR

ADF Test Statistic	-36.15481	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(ASIMAR)
Method: Least Squares
Date: 05/10/06 Time: 10:41
Sample(adjusted): 3 1065
Included observations: 1063 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ASIMAR(-1)	-1.083304	0.029963	-36.15481	0.0000

R-squared	0.551733	Mean dependent var	-0.028477
Adjusted R-squared	0.551733	S.D. dependent var	6.632112
S.E. of regression	4.440379	Akaike info criterion	5.820297
Sum squared resid	20939.41	Schwarz criterion	5.824971
Log likelihood	-3092.488	Durbin-Watson stat	2.012878

JUTHA

ADF Test Statistic	-32.39535	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(JUTHA)
Method: Least Squares
Date: 05/15/06 Time: 12:23
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
JUTHA(-1)	-0.993392	0.030665	-32.39535	0.0000

R-squared	0.496795	Mean dependent var	-0.002006
Adjusted R-squared	0.496795	S.D. dependent var	6.148317
S.E. of regression	4.361429	Akaike info criterion	5.784416
Sum squared resid	20220.45	Schwarz criterion	5.789087
Log likelihood	-3076.309	Durbin-Watson stat	1.999229

THAI

ADF Test Statistic	-30.43187	1% Critical Value*	-3.4393
		5% Critical Value	-2.8647
		10% Critical Value	-2.5685

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(THAI1)
Method: Least Squares
Date: 05/09/06 Time: 00:03
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
THAI1(-1)	-0.930975	0.030592	-30.43187	0.0000
C	0.072862	0.088660	0.821819	0.4114

R-squared	0.465821	Mean dependent var	-0.003971
Adjusted R-squared	0.465318	S.D. dependent var	3.953426
S.E. of regression	2.890821	Akaike info criterion	4.962836
Sum squared resid	8874.973	Schwarz criterion	4.972178
Log likelihood	-2638.229	F-statistic	926.0990
Durbin-Watson stat	2.000341	Prob(F-statistic)	0.000000

SET 4 ปี

ADF Test Statistic	-13.19707	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RM1)
Method: Least Squares
Date: 05/09/06 Time: 04:32
Sample(adjusted): 6 1065
Included observations: 1060 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM1(-1)	-0.830203	0.062908	-13.19707	0.0000
D(RM1(-1))	-0.096833	0.056499	-1.713905	0.0868
D(RM1(-2))	-0.039022	0.049758	-0.784229	0.4331
D(RM1(-3))	-0.042458	0.041908	-1.013128	0.3112
D(RM1(-4))	-0.082616	0.030711	-2.690130	0.0073

R-squared	0.468777	Mean dependent var	0.000786
Adjusted R-squared	0.466763	S.D. dependent var	1.803770
S.E. of regression	1.317168	Akaike info criterion	3.393551
Sum squared resid	1830.352	Schwarz criterion	3.416975
Log likelihood	-1793.582	Durbin-Watson stat	1.993791

SET 1 ปี

ADF Test Statistic	-18.19023	1% Critical Value*	-2.5713
		5% Critical Value	-1.9404
		10% Critical Value	-1.6161

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RM)
Method: Least Squares
Date: 05/17/06 Time: 11:27
Sample(adjusted): 2 361
Included observations: 360 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM(-1)	-0.956815	0.052600	-18.19023	0.0000

R-squared	0.479613	Mean dependent var	0.007282
Adjusted R-squared	0.479613	S.D. dependent var	1.657489
S.E. of regression	1.195677	Akaike info criterion	3.198077
Sum squared resid	513.2424	Schwarz criterion	3.208872
Log likelihood	-574.6538	Durbin-Watson stat	2.008213

ภาคผนวก ช

แสดงผลการวิเคราะห์การถดถอยอย่างง่ายโดยวิธีกำลังสองน้อยที่สุด (OSL)

ASIMAR ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: ASIMAR
Method: Least Squares
Date: 05/10/06 Time: 11:04
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.126229	0.135531	0.931367	0.3519
RM	0.817210	0.102438	7.977569	0.0000

R-squared	0.056538	Mean dependent var	0.189549
Adjusted R-squared	0.055650	S.D. dependent var	4.541470
S.E. of regression	4.413296	Akaike info criterion	5.808999
Sum squared resid	20684.77	Schwarz criterion	5.818340
Log likelihood	-3088.387	F-statistic	63.64161
Durbin-Watson stat	2.133290	Prob(F-statistic)	0.000000

ASIMAR หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: ASIMAR
Method: Least Squares
Date: 05/10/06 Time: 11:11
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.170777	0.137032	1.246257	0.2129
RM	0.610660	0.091027	6.708585	0.0000

Weighted Statistics

R-squared	0.051750	Mean dependent var	0.399396
Adjusted R-squared	0.050857	S.D. dependent var	4.200513
S.E. of regression	4.092307	Akaike info criterion	5.657973
Sum squared resid	17785.29	Schwarz criterion	5.667314
Log likelihood	-3008.041	F-statistic	45.00512
Durbin-Watson stat	2.120061	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.052887	Mean dependent var	0.189549
Adjusted R-squared	0.051995	S.D. dependent var	4.541470
S.E. of regression	4.421828	Sum squared resid	20764.82
Durbin-Watson stat	2.135589		

BECL ก่อนการแก้ปัญหา Heteroskedasticity และ Autocorrelation

Dependent Variable: BECL
Method: Least Squares
Date: 04/27/06 Time: 21:32
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.129959	0.066023	1.968400	0.0493
RM	0.823716	0.049916	16.50201	0.0000

R-squared	0.203934	Mean dependent var	0.194367
Adjusted R-squared	0.203185	S.D. dependent var	2.409508
S.E. of regression	2.150835	Akaike info criterion	4.371465
Sum squared resid	4917.535	Schwarz criterion	4.380800
Log likelihood	-2325.805	F-statistic	272.3164
Durbin-Watson stat	1.748717	Prob(F-statistic)	0.000000

BECL หลังการแก้ปัญหา Heteroskedasticity และ Autocorrelation

Dependent Variable: BECL
Method: Least Squares
Date: 05/16/06 Time: 12:38
Sample: 1 1065
Included observations: 1065
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.132621	0.062323	2.127959	0.0336
RM	0.780220	0.058510	13.33472	0.0000

Weighted Statistics

R-squared	0.141416	Mean dependent var	0.142652
Adjusted R-squared	0.140608	S.D. dependent var	2.210139
S.E. of regression	2.048874	Akaike info criterion	4.274334
Sum squared resid	4462.351	Schwarz criterion	4.283669
Log likelihood	-2274.083	F-statistic	175.0846
Durbin-Watson stat	1.817622	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.203365	Mean dependent var	0.194367
Adjusted R-squared	0.202616	S.D. dependent var	2.409508
S.E. of regression	2.151603	Sum squared resid	4921.048
Durbin-Watson stat	1.733890		

JUTHA ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: JUTHA
Method: Least Squares
Date: 05/15/06 Time: 12:40
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.044658	0.122173	0.365530	0.7148
RM	1.346697	0.092368	14.57967	0.0000

R-squared	0.166645	Mean dependent var	0.149959
Adjusted R-squared	0.165861	S.D. dependent var	4.357824
S.E. of regression	3.980054	Akaike info criterion	5.602344
Sum squared resid	16838.80	Schwarz criterion	5.611679
Log likelihood	-2981.248	F-statistic	212.5668
Durbin-Watson stat	1.995927	Prob(F-statistic)	0.000000

JUTHA หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: JUTHA
Method: Least Squares
Date: 05/15/06 Time: 12:42
Sample: 1 1065
Included observations: 1065
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.111388	0.117274	0.949812	0.3424
RM	1.281441	0.109989	11.65059	0.0000

Weighted Statistics

R-squared	0.113113	Mean dependent var	0.149058
Adjusted R-squared	0.112279	S.D. dependent var	4.088525
S.E. of regression	3.852166	Akaike info criterion	5.537024
Sum squared resid	15774.05	Schwarz criterion	5.546359
Log likelihood	-2946.465	F-statistic	135.7361
Durbin-Watson stat	2.003710	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.166054	Mean dependent var	0.149959
Adjusted R-squared	0.165269	S.D. dependent var	4.357824
S.E. of regression	3.981466	Sum squared resid	16850.75
Durbin-Watson stat	1.996296		

PSL ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: PSL
Method: Least Squares
Date: 05/16/06 Time: 11:51
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.329888	0.109585	3.010340	0.0027
RM	1.060288	0.082851	12.79749	0.0000

R-squared	0.133501	Mean dependent var	0.412794
Adjusted R-squared	0.132686	S.D. dependent var	3.833341
S.E. of regression	3.569979	Akaike info criterion	5.384873
Sum squared resid	13547.67	Schwarz criterion	5.394207
Log likelihood	-2865.445	F-statistic	163.7756
Durbin-Watson stat	2.155636	Prob(F-statistic)	0.000000

PSL หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: PSL
Method: Least Squares
Date: 05/16/06 Time: 11:53
Sample: 1 1065
Included observations: 1065
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.353632	0.106506	3.320295	0.0009
RM	1.078842	0.095149	11.33842	0.0000

Weighted Statistics

R-squared	0.105912	Mean dependent var	0.352009
Adjusted R-squared	0.105071	S.D. dependent var	3.691060
S.E. of regression	3.491769	Akaike info criterion	5.340570
Sum squared resid	12960.57	Schwarz criterion	5.349905
Log likelihood	-2841.853	F-statistic	125.9211
Durbin-Watson stat	2.156370	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.133417	Mean dependent var	0.412794
Adjusted R-squared	0.132602	S.D. dependent var	3.833341
S.E. of regression	3.570152	Sum squared resid	13548.98
Durbin-Watson stat	2.154972		

RCL ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: RCL
Method: Least Squares
Date: 04/28/06 Time: 09:41
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.199787	0.073138	2.731632	0.0064
RM_TEST	0.912157	0.055296	16.49591	0.0000

R-squared	0.203814	Mean dependent var	0.271111
Adjusted R-squared	0.203065	S.D. dependent var	2.669001
S.E. of regression	2.382650	Akaike info criterion	4.576180
Sum squared resid	6034.672	Schwarz criterion	4.585514
Log likelihood	-2434.816	F-statistic	272.1149
Durbin-Watson stat	2.055272	Prob(F-statistic)	0.000000

RCL หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: RCL
Method: Least Squares
Date: 05/16/06 Time: 11:59
Sample: 1 1065
Included observations: 1065
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.249466	0.070258	3.550702	0.0004
RM	0.940094	0.064557	14.56231	0.0000

Weighted Statistics

R-squared	0.163331	Mean dependent var	0.173934
Adjusted R-squared	0.162544	S.D. dependent var	2.505583
S.E. of regression	2.292925	Akaike info criterion	4.499410
Sum squared resid	5588.730	Schwarz criterion	4.508745
Log likelihood	-2393.936	F-statistic	207.5140
Durbin-Watson stat	2.037017	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.203245	Mean dependent var	0.271111
Adjusted R-squared	0.202495	S.D. dependent var	2.669001
S.E. of regression	2.383501	Sum squared resid	6038.986
Durbin-Watson stat	2.056549		

THAI ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: THAI
Method: Least Squares
Date: 04/28/06 Time: 09:50
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.007750	0.075853	-0.102174	0.9186
RM	1.146140	0.057348	19.98559	0.0000

R-squared	0.273125	Mean dependent var	0.081869
Adjusted R-squared	0.272441	S.D. dependent var	2.897032
S.E. of regression	2.471083	Akaike info criterion	4.649067
Sum squared resid	6490.947	Schwarz criterion	4.658401
Log likelihood	-2473.628	F-statistic	399.4240
Durbin-Watson stat	1.944805	Prob(F-statistic)	0.000000

THAI หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: THAI
Method: Least Squares
Date: 05/16/06 Time: 12:03
Sample: 1 1065
Included observations: 1065
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.022817	0.070250	0.324805	0.7454
RM	1.088168	0.068806	15.81498	0.0000

Weighted Statistics

R-squared	0.190788	Mean dependent var	0.010740
Adjusted R-squared	0.190027	S.D. dependent var	2.572664
S.E. of regression	2.315359	Akaike info criterion	4.518883
Sum squared resid	5698.625	Schwarz criterion	4.528218
Log likelihood	-2404.305	F-statistic	250.6241
Durbin-Watson stat	1.978002	Prob(F-statistic)	0.000000

Unweighted Statistics

R-squared	0.272345	Mean dependent var	0.081869
Adjusted R-squared	0.271660	S.D. dependent var	2.897032
S.E. of regression	2.472408	Sum squared resid	6497.909
Durbin-Watson stat	1.940292		

TTA

Dependent Variable: TTA
Method: Least Squares
Date: 04/28/06 Time: 09:58
Sample: 1 1065
Included observations: 1065

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.286427	0.087003	3.292139	0.0010
RM	1.094194	0.065779	16.63451	0.0000

R-squared	0.206543	Mean dependent var	0.371985
Adjusted R-squared	0.205797	S.D. dependent var	3.180425
S.E. of regression	2.834334	Akaike info criterion	4.923367
Sum squared resid	8539.555	Schwarz criterion	4.932702
Log likelihood	-2619.693	F-statistic	276.7071
Durbin-Watson stat	2.117140	Prob(F-statistic)	0.000000

AOT ก่อนการแก้ปัญหา Heteroskedasticity

Dependent Variable: AOT
Method: Least Squares
Date: 04/26/06 Time: 23:03
Sample: 1 361
Included observations: 361

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.003278	0.072697	0.045085	0.9641
RM	0.874172	0.060723	14.39598	0.0000

R-squared	0.365998	Mean dependent var	-0.001680
Adjusted R-squared	0.364232	S.D. dependent var	1.732275
S.E. of regression	1.381231	Akaike info criterion	3.489352
Sum squared resid	684.8996	Schwarz criterion	3.510897
Log likelihood	-627.8280	F-statistic	207.2442
Durbin-Watson stat	2.150022	Prob(F-statistic)	0.000000

AOT หลังการแก้ปัญหา Heteroskedasticity

Dependent Variable: AOT
Method: Least Squares
Date: 05/10/06 Time: 14:28
Sample: 1 361
Included observations: 361
Weighting series: 1/FF^.5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.026534	0.071176	-0.372801	0.7095
RM	0.797863	0.063165	12.63132	0.0000

Weighted Statistics			
R-squared	0.341210	Mean dependent var	-0.218838
Adjusted R-squared	0.339375	S.D. dependent var	1.561533
S.E. of regression	1.269195	Akaike info criterion	3.320168
Sum squared resid	578.2976	Schwarz criterion	3.341713
Log likelihood	-597.2903	F-statistic	185.9388
Durbin-Watson stat	2.161066	Prob(F-statistic)	0.000000

Unweighted Statistics			
R-squared	0.362921	Mean dependent var	-0.001680
Adjusted R-squared	0.361146	S.D. dependent var	1.732275
S.E. of regression	1.384579	Sum squared resid	688.2240
Durbin-Watson stat	2.147919		

ภาคผนวก ค

แสดงผลการมีดุลยภาพในระยะยาว(Cointegration)

ASIMAR

ADF Test Statistic	-36.38316	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:27
Sample(adjusted): 3 1065
Included observations: 1063 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.088596	0.029920	-36.38316	0.0000

R-squared	0.554845	Mean dependent var	-0.028872
Adjusted R-squared	0.554845	S.D. dependent var	6.461842
S.E. of regression	4.311336	Akaike info criterion	5.761313
Sum squared resid	19740.05	Schwarz criterion	5.765987
Log likelihood	-3061.138	Durbin-Watson stat	2.014227

BECL

ADF Test Statistic	-28.51819	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID02)
Method: Least Squares
Date: 05/16/06 Time: 12:40
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID02(-1)	-0.867047	0.030403	-28.51819	0.0000

R-squared	0.433455	Mean dependent var	0.001192
Adjusted R-squared	0.433455	S.D. dependent var	2.833172
S.E. of regression	2.132504	Akaike info criterion	4.353411
Sum squared resid	4834.073	Schwarz criterion	4.358081
Log likelihood	-2315.014	Durbin-Watson stat	1.993581

JUTHA

ADF Test Statistic	-32.55926	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:42
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.998396	0.030664	-32.55926	0.0000

R-squared	0.499318	Mean dependent var	-0.003047
Adjusted R-squared	0.499318	S.D. dependent var	5.625426
S.E. of regression	3.980488	Akaike info criterion	5.601625
Sum squared resid	16842.47	Schwarz criterion	5.606296
Log likelihood	-2979.065	Durbin-Watson stat	1.997217

PSL

ADF Test Statistic	-35.23683	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:44
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.077617	0.030582	-35.23683	0.0000

R-squared	0.538755	Mean dependent var	0.001921
Adjusted R-squared	0.538755	S.D. dependent var	5.240920
S.E. of regression	3.559371	Akaike info criterion	5.377984
Sum squared resid	13467.28	Schwarz criterion	5.382655
Log likelihood	-2860.088	Durbin-Watson stat	1.999506

RCL

ADF Test Statistic	-33.54055	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:46
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.029018	0.030680	-33.54055	0.0000

R-squared	0.514161	Mean dependent var	0.002937
Adjusted R-squared	0.514161	S.D. dependent var	3.418100
S.E. of regression	2.382489	Akaike info criterion	4.575108
Sum squared resid	6033.860	Schwarz criterion	4.579779
Log likelihood	-2432.958	Durbin-Watson stat	2.002412

THAI

ADF Test Statistic	-31.70787	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:19
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.971325	0.030634	-31.70787	0.0000

R-squared	0.486072	Mean dependent var	-0.004854
Adjusted R-squared	0.486072	S.D. dependent var	3.443922
S.E. of regression	2.468904	Akaike info criterion	4.646365
Sum squared resid	6479.503	Schwarz criterion	4.651036
Log likelihood	-2470.866	Durbin-Watson stat	1.999639

TTA

ADF Test Statistic	-34.57378	1% Critical Value*	-2.5677
		5% Critical Value	-1.9397
		10% Critical Value	-1.6158

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:48
Sample(adjusted): 2 1065
Included observations: 1064 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.058817	0.030625	-34.57378	0.0000

R-squared	0.529301	Mean dependent var	0.002049
Adjusted R-squared	0.529301	S.D. dependent var	4.124068
S.E. of regression	2.829418	Akaike info criterion	4.918959
Sum squared resid	8509.962	Schwarz criterion	4.923630
Log likelihood	-2615.886	Durbin-Watson stat	1.999532

AOT

ADF Test Statistic	-20.62682	1% Critical Value*	-2.5713
		5% Critical Value	-1.9404
		10% Critical Value	-1.6161

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(RESID01)
Method: Least Squares
Date: 05/16/06 Time: 12:52
Sample(adjusted): 2 361
Included observations: 360 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.079649	0.052342	-20.62682	0.0000

R-squared	0.542360	Mean dependent var	0.005764
Adjusted R-squared	0.542360	S.D. dependent var	2.029200
S.E. of regression	1.372735	Akaike info criterion	3.474262
Sum squared resid	676.5006	Schwarz criterion	3.485057
Log likelihood	-624.3671	Durbin-Watson stat	2.002770

ประวัติผู้เขียน

ชื่อ	นางสาววิรัญญา ก่อเกษมสุข
วัน เดือน ปี เกิด	4 พฤศจิกายน 2525
ประวัติการศึกษา	สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนเตรียมอุดมศึกษา กรุงเทพฯ ปีการศึกษา 2543 สำเร็จการศึกษาปริญญาศิลปศาสตรบัณฑิต มหาวิทยาลัยธรรมศาสตร์ ปีการศึกษา 2547
ประสบการณ์ทำงาน	2547 เจ้าหน้าที่ฝ่ายพัฒนาการตลาด (ฝ่ายประเทศรัสเซีย) บริษัท อินเตอร์ คอมฟอร์ต จำกัด กรุงเทพฯ 2548 ผู้ช่วยผู้จัดการและผู้จัดการฝ่ายการตลาด บริษัท พี แอนด์ เจ อีควิปเมนท์เซอร์วิส เชียงใหม่ 2549 ผู้จัดการแผนกต้อนรับส่วนหน้า บ้านเทวะมนตรารีสอร์ท เชียงใหม่