ภาคผนวก

ภาคผนวก ก

ตารางที่1 แสดงค่า Mackinnon Critical Value of Unit Root test ที่ level

Lag(4)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4529	-3.9907
5% Critical Value	-1.9406	-2.8708	-3.4256
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(3)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4528	-3.9906
5% Critical Value	-1.9406	-2.8708	-3.4255
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(2)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4528	-3.9905
5% Critical Value	-1.9406	-2.8708	-3.4255
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(1)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5720	-3.4527	-3.9905
5% Critical Value	-1.9405	-2.8708	-3.4254
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(0)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5720	-3.4526	-3.9904
5% Critical Value	-1.9405	-2.8707	-3.4254
10% Critical Value	-1.6162	-2.5716	-3.1355

ที่มา: จากการคำนวณ

ตารางที่2 แสดงค่า Mackinnon Critical Value of Unit Root test ที่ ระดับผลต่างลำดับที่1 (first difference)

Lag(4)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4529	-3.9908
5% Critical Value	-1.9406	-2.8709	-3.4256
10% Critical Value	-1.6162	-2.5717	-3.1357

Lag(3)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4529	-3.9907
5% Critical Value	-1.9406	-2.8708	-3.4256
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(2)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4528	-3.9906
5% Critical Value	-1.9406	-2.8708	-3.4255
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(1)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5721	-3.4528	-3.9905
5% Critical Value	-1.9406	-2.8708	-3.4255
10% Critical Value	-1.6162	-2.5717	-3.1356

Lag(0)

Critical Value	Without intercept & Without trend	With intercept but Without trend	With intercept & With trend
1% Critical Value	-2.5720	-3.4527	-3.9905
5% Critical Value	-1.9405	-2.8708	-3.4254
10% Critical Value	-1.6162	-2.5717	-3.1356

ที่มา: จากการคำนวณของ โปรแกรม

ภาคผนวก ข

ผลการทดสอบการร่วมกันไปด้วยกัน (Cointegration)

ในกรณีราคาเป็นตัวแปรอิสระและปริมาณเป็นตัวแปรตาม

หลักทรัพย์ TPC

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.028619	0.197544	5.207028	0.0000
P	2.822668	0.204860	13.77854	0.0000

R-squared	0.373094	Mean dependent var	3.665299
Adjusted R-squared	0.371129	S.D. dependent var	1.107871
S.E. of regression	0.878557	Akaike info criterion	2.585140
Sum squared resid	246.2243	Schwarz criterion	2.608638
Log likelihood	-412.9150	F-statistic	189.8480
Durbin-Watson stat	0.530015	Prob(F-statistic)	0.000000

หลักทรัพย์ ATC

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.991076	0.048715	102.4547	0.0000
P	-0.090066	0.033789	-2.665495	0.0078

R-squared	0.008902	Mean dependent var	4.868733
Adjusted R-squared	0.007649	S.D. dependent var	0.461436
S.E. of regression	0.459667	Akaike info criterion	1.285892
Sum squared resid	167.1337	Schwarz criterion	1.297685
Log likelihood	-507.8562	F-statistic	7.104861
Durbin-Watson stat	0.478870	Prob(F-statistic)	0.007844

หลักทรัพย์ TCB

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.310788	0.233994	-1.328191	0.1854
P	3.335304	0.227553	14.65724	0.0000

R-squared	0.478650	Mean dependent var	3.039989
Adjusted R-squared	0.476422	S.D. dependent var	1.059621
S.E. of regression	0.766728	Akaike info criterion	2.315069
Sum squared resid	137.5620	Schwarz criterion	2.344423
Log likelihood	-271.1781	F-statistic	214.8347
Durbin-Watson stat	0.965213	Prob(F-statistic)	0.000000

หลักทรัพย์ TCCC

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.686482	0.323969	5.205690	0.0000
P	0.846907	0.411153	2.059836	0.0404

R-squared	0.015140	Mean dependent var	2.344676
Adjusted R-squared	0.011572	S.D. dependent var	0.895576
S.E. of regression	0.890379	Akaike info criterion	2.612830
Sum squared resid	218.8060	Schwarz criterion	2.638928
Log likelihood	-361.1834	F-statistic	4.242923
Durbin-Watson stat	1.013234	Prob(F-statistic)	0.040352

หลักทรัพย์ NPC

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.327004	0.184831	23.41063	0.0000
P	-0.050782	0.110579	-0.459237	0.6464

R-squared	0.000678	Mean dependent var	4.242880
Adjusted R-squared	-0.002536	S.D. dependent var	0.435245
S.E. of regression	0.435797	Akaike info criterion	1.183087
Sum squared resid	59.06469	Schwarz criterion	1.207024
Log likelihood	-183.1531	F-statistic	0.210899
Durbin-Watson stat	0.708866	Prob(F-statistic)	0.646385

หลักทรัพย์ TOC

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	6.831329	1.438828	4.747842	0.0000
P	-0.830006	0.809228	-1.025676	0.3093

R-squared	0.017815	Mean dependent var	5.356268
Adjusted R-squared	0.000881	S.D. dependent var	0.345942
S.E. of regression	0.345790	Akaike info criterion	0.746793
Sum squared resid	6.935088	Schwarz criterion	0.816604
Log likelihood	-20.40379	F-statistic	1.052012
Durbin-Watson stat	0.578670	Prob(F-statistic)	0.309303

หลักทรัพย์ VNT

Dependent Variable: V

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.196446	0.102600	40.90101	0.0000
P	1.006470	0.112038	8.983311	0.0000

R-squared	0.206025	Mean dependent var	5.093863
Adjusted R-squared	0.203472	S.D. dependent var	0.463673
S.E. of regression	0.413821	Akaike info criterion	1.079602
Sum squared resid	53.25802	Schwarz criterion	1.103539
Log likelihood	-166.9577	F-statistic	80.69987
Durbin-Watson stat	0.858881	Prob(F-statistic)	0.000000

ในกรณีปริมาณเป็นตัวแปรอิสระและราคาเป็นตัวแปรตาม

หลักทรัพย์ TPC

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.449638	0.036728	12.24253	0.0000
V	0.132178	0.009593	13.77854	0.0000
R-squared	0.373094	Mean dependent var		0.934109
Adjusted R-squared	0.371129	S.D. dependent var		0.239739
S.E. of regression	0.190116	Akaike info criterion		-0.476150
Sum squared resid	11.53000	Schwarz criterion		-0.452652
Log likelihood	78.42214	F-statistic		189.8480
Durbin-Watson stat	0.209188	Prob(F-statistic)		0.000000

หลักทรัพย์ ATC

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.839604	0.181348	10.14403	0.0000
V	-0.098841	0.037082	-2.665495	0.0078
R-squared	0.008902	Mean dependent var		1.358375
Adjusted R-squared	0.007649	S.D. dependent var		0.483392
S.E. of regression	0.481540	Akaike info criterion		1.378863
Sum squared resid	183.4175	Schwarz criterion		1.390655
Log likelihood	-544.7190	F-statistic		7.104861
Durbin-Watson stat	0.011453	Prob(F-statistic)		0.007844

หลักทรัพย์ TCB

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.568370	0.031514	18.03557	0.0000
V	0.143510	0.009791	14.65724	0.0000

R-squared	0.478650	Mean dependent var	1.004639
Adjusted R-squared	0.476422	S.D. dependent var	0.219798
S.E. of regression	0.159043	Akaike info criterion	-0.830844
Sum squared resid	5.918963	Schwarz criterion	-0.801490
Log likelihood	100.0396	F-statistic	214.8347
Durbin-Watson stat	0.479899	Prob(F-statistic)	0.000000

หลักทรัพย์ TCCC

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.735258	0.021778	33.76154	0.0000
V	0.017877	0.008679	2.059836	0.0404

R-squared	0.015140	Mean dependent var	0.777174
Adjusted R-squared	0.011572	S.D. dependent var	0.130116
S.E. of regression	0.129361	Akaike info criterion	-1.245247
Sum squared resid	4.618679	Schwarz criterion	-1.219149
Log likelihood	175.0893	F-statistic	4.242923
Durbin-Watson stat	0.093163	Prob(F-statistic)	0.040352

หลักทรัพย์ NPC

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.713198	0.123937	13.82314	0.0000
V	-0.013345	0.029059	-0.459237	0.6464

R-squared	0.000678	Mean dependent var	1.656578
Adjusted R-squared	-0.002536	S.D. dependent var	0.223119
S.E. of regression	0.223401	Akaike info criterion	-0.153326
Sum squared resid	15.52142	Schwarz criterion	-0.129388
Log likelihood	25.99548	F-statistic	0.210899
Durbin-Watson stat	0.017231	Prob(F-statistic)	0.646385

หลักทรัพย์ TOC

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.892136	0.112317	16.84638	0.0000
V	-0.021464	0.020926	-1.025676	0.3093

R-squared	0.017815	Mean dependent var	1.777171
Adjusted R-squared	0.000881	S.D. dependent var	0.055631
S.E. of regression	0.055606	Akaike info criterion	-2.908275
Sum squared resid	0.179340	Schwarz criterion	-2.838464
Log likelihood	89.24826	F-statistic	1.052012
Durbin-Watson stat	0.356548	Prob(F-statistic)	0.309303

หลักทรัพย์ VNT

Dependent Variable: P

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.151068	0.116551	-1.296153	0.1959
V	0.204700	0.022787	8.983311	0.0000

R-squared	0.206025	Mean dependent var	0.891648
Adjusted R-squared	0.203472	S.D. dependent var	0.209108
S.E. of regression	0.186626	Akaike info criterion	-0.513055
Sum squared resid	10.83185	Schwarz criterion	-0.489118
Log likelihood	82.29318	F-statistic	80.69987
Durbin-Watson stat	0.175955	Prob(F-statistic)	0.000000

ภาคผนวก ค

ผลการทดสอบของส่วนที่เหลือ (Residual) จากสมการถดถอยในการทดสอบการร่วมกันไปด้วยกัน โดยการทดสอบยูนิทรูท (Unit Root) ด้วยวิธีการ Augmented Dicky Fuller Residual

ในกรณีราคาเป็นตัวแปรอิสระและปริมาณเป็นตัวแปรตาม

หลักทรัพย์ TPC

ADF Test Statistic	-7.050195	1% Critical Value*	-2.5720
		5% Critical Value	-1.9405
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.267360	0.037922	-7.050195	0.0000

R-squared	0.134768	Mean dependent var	-0.004439
Adjusted R-squared	0.134768	S.D. dependent var	0.639593
S.E. of regression	0.594935	Akaike info criterion	1.802392
Sum squared resid	112.9094	Schwarz criterion	1.814168
Log likelihood	-287.3827	Durbin-Watson stat	2.424772

หลักทรัพย์ ATC

ADF Test Statistic	-10.35100	1% Critical Value*	-2.5683
		5% Critical Value	-1.9398
		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)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.239154	0.023104	-10.35100	0.0000

R-squared	0.119292	Mean dependent var	-0.000438
Adjusted R-squared	0.119292	S.D. dependent var	0.318091
S.E. of regression	0.298516	Akaike info criterion	0.421276
Sum squared resid	70.48752	Schwarz criterion	0.427179
Log likelihood	-165.8255	Durbin-Watson stat	2.279079

หลักทรัพย์ TCB

ADF Test Statistic	-8.613805	1% Critical Value*	-2.5743
		5% Critical Value	-1.9410
		10% Critical Value	-1.6164

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.482594	0.056026	-8.613805	0.0000

R-squared	0.240737	Mean dependent var	0.002734
Adjusted R-squared	0.240737	S.D. dependent var	0.753269
S.E. of regression	0.656366	Akaike info criterion	2.000050
Sum squared resid	100.8111	Schwarz criterion	2.014772
Log likelihood	-234.0059	Durbin-Watson stat	2.158390

หลักทรัพย์ TCCC

ADF Test Statistic	-9.676885	1% Critical Value*	-2.5730
		5% Critical Value	-1.9407
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.506666	0.052358	-9.676885	0.0000

R-squared	0.253332	Mean dependent var	-1.08E-05
Adjusted R-squared	0.253332	S.D. dependent var	0.896252
S.E. of regression	0.774451	Akaike info criterion	2.330278
Sum squared resid	165.5376	Schwarz criterion	2.343361
Log likelihood	-321.7435	Durbin-Watson stat	2.082623

หลักทรัพย์ NPC

ADF Test Statistic	-8.222280	1% Critical Value*	-2.5722
		5% Critical Value	-1.9406
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.355779	0.043270	-8.222280	0.0000

R-squared	0.178555	Mean dependent var	0.001282
Adjusted R-squared	0.178555	S.D. dependent var	0.366913
S.E. of regression	0.332546	Akaike info criterion	0.639126
Sum squared resid	34.39261	Schwarz criterion	0.651122
Log likelihood	-98.70360	Durbin-Watson stat	2.218812

หลักทรัพย์ TOC

ADF Test Statistic	-3.475687	1% Critical Value*	-2.6019
		5% Critical Value	-1.9460
		10% Critical Value	-1.6187

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.320688	0.092266	-3.475687	0.0010

R-squared	0.167564	Mean dependent var	-0.019836
Adjusted R-squared	0.167564	S.D. dependent var	0.262282
S.E. of regression	0.239300	Akaike info criterion	-0.005391
Sum squared resid	3.321348	Schwarz criterion	0.029821
Log likelihood	1.159042	Durbin-Watson stat	2.134364

หลักทรัพย์ VNT

ADF Test Statistic	-9.253146	1% Critical Value*	-2.5722
		5% Critical Value	-1.9406
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.430651	0.046541	-9.253146	0.0000

R-squared	0.215872	Mean dependent var	0.000780
Adjusted R-squared	0.215872	S.D. dependent var	0.383511
S.E. of regression	0.339603	Akaike info criterion	0.681120
Sum squared resid	35.86765	Schwarz criterion	0.693117
Log likelihood	-105.2547	Durbin-Watson stat	2.025516

ในกรณีปริมาณเป็นตัวแปรอิสระและราคาเป็นตัวแปรตาม

หลักทรัพย์ TPC

ADF Test Statistic	-4.336738	1% Critical Value*	-2.5720
		5% Critical Value	-1.9405
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.108300	0.024973	-4.336738	0.0000

R-squared	0.055124	Mean dependent var	0.002095
Adjusted R-squared	0.055124	S.D. dependent var	0.086928
S.E. of regression	0.084498	Akaike info criterion	-2.101047
Sum squared resid	2.277656	Schwarz criterion	-2.089271
Log likelihood	337.1676	Durbin-Watson stat	2.583118

หลักทรัพย์ ATC

ADF Test Statistic	-1.796527	1% Critical Value*	-2.5683
		5% Critical Value	-1.9398
		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)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.006825	0.003799	-1.796527	0.0728

R-squared	0.003274	Mean dependent var	0.001450
Adjusted R-squared	0.003274	S.D. dependent var	0.051513
S.E. of regression	0.051429	Akaike info criterion	-3.095979
Sum squared resid	2.092124	Schwarz criterion	-3.090077
Log likelihood	1227.008	Durbin-Watson stat	2.107847

หลักทรัพย์ TCB

ADF Test Statistic	-5.705745	1% Critical Value*	-2.5743
		5% Critical Value	-1.9410
		10% Critical Value	-1.6164

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.242113	0.042433	-5.705745	0.0000

R-squared	0.122088	Mean dependent var	0.000794
Adjusted R-squared	0.122088	S.D. dependent var	0.110174
S.E. of regression	0.103230	Akaike info criterion	-1.699477
Sum squared resid	2.493582	Schwarz criterion	-1.684756
Log likelihood	200.6886	Durbin-Watson stat	2.423646

หลักทรัพย์ TCCC

ADF Test Statistic	-2.652295	1% Critical Value*	-2.5730
		5% Critical Value	-1.9407
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.048133	0.018148	-2.652295	0.0085

R-squared	0.024590	Mean dependent var	0.000649
Adjusted R-squared	0.024590	S.D. dependent var	0.039479
S.E. of regression	0.038991	Akaike info criterion	-3.647388
Sum squared resid	0.419594	Schwarz criterion	-3.634305
Log likelihood	506.1633	Durbin-Watson stat	2.132094

หลักทรัพย์ NPC

ADF Test Statistic	-1.448362	1% Critical Value*	-2.5722
		5% Critical Value	-1.9406
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.010789	0.007449	-1.448362	0.1485

R-squared	-0.000854	Mean dependent var	0.002544
Adjusted R-squared	-0.000854	S.D. dependent var	0.029215
S.E. of regression	0.029227	Akaike info criterion	-4.224234
Sum squared resid	0.265665	Schwarz criterion	-4.212237
Log likelihood	659.9805	Durbin-Watson stat	1.846555

หลักทรัพย์ TOC

ADF Test Statistic	-2.689980	1% Critical Value*	-2.6019
		5% Critical Value	-1.9460
		10% Critical Value	-1.6187

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.199978	0.074342	-2.689980	0.0093

R-squared	0.106324	Mean dependent var	0.002361
Adjusted R-squared	0.106324	S.D. dependent var	0.033118
S.E. of regression	0.031308	Akaike info criterion	-4.073091
Sum squared resid	0.056851	Schwarz criterion	-4.037878
Log likelihood	121.1562	Durbin-Watson stat	1.875515

หลักทรัพย์ VNT

ADF Test Statistic	-3.848783	1% Critical Value*	-2.5722
		5% Critical Value	-1.9406
		10% Critical Value	-1.6162

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RESID01)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.089542	0.023265	-3.848783	0.0001

R-squared	0.045224	Mean dependent var	0.001241
Adjusted R-squared	0.045224	S.D. dependent var	0.078274
S.E. of regression	0.076484	Akaike info criterion	-2.300282
Sum squared resid	1.819267	Schwarz criterion	-2.288285
Log likelihood	359.8440	Durbin-Watson stat	2.366265

ภาคผนวก ง

ผลการทดสอบความสัมพันธ์เชิงดุลยภาพในระยะสั้น

ในกรณีราคาเป็นตัวแปรอิสระและปริมาณการซื้อขายเป็นตัวแปรตาม

หลักทรัพย์ TPC

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.003783	0.031992	-0.118232	0.9060
RESID01(-1)	-0.188370	0.039689	-4.746138	0.0000
D(P)	3.948839	1.008058	3.917272	0.0001
D(V(-1))	-0.295471	0.053398	-5.533396	0.0000

R-squared	0.226636	Mean dependent var	0.005187
Adjusted R-squared	0.219271	S.D. dependent var	0.644773
S.E. of regression	0.569714	Akaike info criterion	1.725095
Sum squared resid	102.2408	Schwarz criterion	1.772308
Log likelihood	-271.1527	F-statistic	30.77052
Durbin-Watson stat	2.055748	Prob(F-statistic)	0.000000

หลักทรัพย์ATC

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.003319	0.010196	-0.325494	0.7449
RESID01(-1)	-0.204456	0.023675	-8.636079	0.0000
D(P)	1.735192	0.283132	6.128553	0.0000
D(V(-1))	-0.196227	0.034225	-5.733384	0.0000

R-squared	0.189518	Mean dependent var	-0.000847
Adjusted R-squared	0.186428	S.D. dependent var	0.317666
S.E. of regression	0.286529	Akaike info criterion	0.343092
Sum squared resid	64.61196	Schwarz criterion	0.366725
Log likelihood	-131.6930	F-statistic	61.34224
Durbin-Watson stat	2.118467	Prob(F-statistic)	0.000000

หลักทรัพย์ TCB

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.009959	0.041868	-0.237880	0.8122
RESID01(-1)	-0.393091	0.062972	-6.242306	0.0000
D(P)	2.660496	1.417810	1.876483	0.0619
D(P(-1))	3.191959	1.403165	2.274829	0.0238
D(V(-1))	-0.183231	0.064303	-2.849498	0.0048

R-squared	0.285591	Mean dependent var	0.002588
Adjusted R-squared	0.273113	S.D. dependent var	0.746219
S.E. of regression	0.636209	Akaike info criterion	1.954557
Sum squared resid	92.69053	Schwarz criterion	2.028389
Log likelihood	-223.6832	F-statistic	22.88621
Durbin-Watson stat	1.991694	Prob(F-statistic)	0.000000

หลักทรัพย์ TCCC

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000785	0.045253	-0.017340	0.9862
RESID01(-1)	-0.340321	0.069247	-4.914584	0.0000
D(P)	3.814328	1.158489	3.292502	0.0011
D(V(-1))	-0.211754	0.073983	-2.862217	0.0045
D(V(-2))	-0.183700	0.067275	-2.730578	0.0067
D(V(-3))	-0.161441	0.058937	-2.739222	0.0066

R-squared	0.319113	Mean dependent var	-0.000995
Adjusted R-squared	0.306410	S.D. dependent var	0.899049
S.E. of regression	0.748746	Akaike info criterion	2.280821
Sum squared resid	150.2464	Schwarz criterion	2.359940
Log likelihood	-306.4725	F-statistic	25.12090
Durbin-Watson stat	2.076268	Prob(F-statistic)	0.000000

หลักทรัพย์ NPC

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.007219	0.018075	-0.399391	0.6899
D(P)	2.501688	0.647634	3.862814	0.0001
RESID01(-1)	-0.287154	0.045597	-6.297627	0.0000
D(V(-1))	-0.196264	0.054124	-3.626184	0.0003

R-squared	0.244301	Mean dependent var	-0.001780
Adjusted R-squared	0.236916	S.D. dependent var	0.363557
S.E. of regression	0.317584	Akaike info criterion	0.556631
Sum squared resid	30.96395	Schwarz criterion	0.604731
Log likelihood	-82.55613	F-statistic	33.08212
Durbin-Watson stat	2.106090	Prob(F-statistic)	0.000000

หลักทรัพย์ TOC

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.038925	0.028657	-1.358277	0.1809
RESID01(-1)	-0.371321	0.097006	-3.827806	0.0004
D(P)	3.025950	1.076839	2.810030	0.0072
D(V(-2))	-0.045393	0.121286	-0.374266	0.7099
D(V(-4))	0.145829	0.127142	1.146976	0.2572
D(V(-6))	0.032088	0.126396	0.253870	0.8007

R-squared	0.352005	Mean dependent var	-0.020533
Adjusted R-squared	0.283069	S.D. dependent var	0.240562
S.E. of regression	0.203688	Akaike info criterion	-0.238184
Sum squared resid	1.949973	Schwarz criterion	-0.015132
Log likelihood	12.31188	F-statistic	5.106276
Durbin-Watson stat	2.114046	Prob(F-statistic)	0.000806

หลักทรัพย์ VNT

Dependent Variable: D(V)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
V	0.003381	0.003655	0.925001	0.3557
RESID01(-1)	-0.420428	0.057914	-7.259505	0.0000
D(P)	3.626867	0.496427	7.305950	0.0000
D(V(-1))	-0.065979	0.059685	-1.105452	0.2699
D(V(-2))	-0.074478	0.054313	-1.371264	0.1713
D(V(-5))	0.067151	0.049456	1.357778	0.1756
D(V(-6))	0.020757	0.049382	0.420334	0.6745

R-squared	0.328395	Mean dependent var	0.002652
Adjusted R-squared	0.314918	S.D. dependent var	0.394422
S.E. of regression	0.326462	Akaike info criterion	0.621601
Sum squared resid	31.86658	Schwarz criterion	0.706781
Log likelihood	-88.10501	F-statistic	24.36702
Durbin-Watson stat	2.041313	Prob(F-statistic)	0.000000

ในกรณีปริมาณการซื้อขายเป็นตัวแปรอิสระและราคาเป็นตัวแปรตาม

หลักทรัพย์ TPC

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002235	0.001745	1.281100	0.2011
RESID01(-1)	-0.028845	0.009455	-3.050934	0.0025
D(V)	0.010315	0.002762	3.734770	0.0002
D(P(-1))	0.072657	0.054593	1.330881	0.1842
D(P(-3))	-0.066176	0.054353	-1.217523	0.2243
D(P(-5))	0.068896	0.053668	1.283749	0.2002
D(P(-6))	0.019172	0.054029	0.354836	0.7230

R-squared	0.076043	Mean dependent var	0.002340
Adjusted R-squared	0.057985	S.D. dependent var	0.031507
S.E. of regression	0.030580	Akaike info criterion	-4.114919
Sum squared resid	0.287081	Schwarz criterion	-4.031334
Log likelihood	653.0423	F-statistic	4.211081
Durbin-Watson stat	2.021424	Prob(F-statistic)	0.000434

หลักทรัพย์ ATC

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001494	0.001262	1.184210	0.2367
RESID01(-1)	-0.002464	0.002630	-0.937146	0.3490
D(V)	0.021962	0.004150	5.291531	0.0000
D(V(-1))	0.014666	0.004145	3.538193	0.0004

R-squared	0.041268	Mean dependent var	0.001470
Adjusted R-squared	0.037613	S.D. dependent var	0.036176
S.E. of regression	0.035489	Akaike info criterion	-3.834150
Sum squared resid	0.991197	Schwarz criterion	-3.810517
Log likelihood	1520.406	F-statistic	11.29198
Durbin-Watson stat	1.956790	Prob(F-statistic)	0.000000

หลักทรัพย์ TCB

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002614	0.001931	1.353407	0.1773
D(V)	0.005599	0.002759	2.029700	0.0435
RESID01(-1)	-0.030135	0.012897	-2.336663	0.0203
D(P(-1))	-0.198827	0.063945	-3.109343	0.0021

R-squared	0.065343	Mean dependent var	0.002170
Adjusted R-squared	0.053152	S.D. dependent var	0.030277
S.E. of regression	0.029462	Akaike info criterion	-4.194507
Sum squared resid	0.199638	Schwarz criterion	-4.135442
Log likelihood	494.7574	F-statistic	5.359835
Durbin-Watson stat	1.956594	Prob(F-statistic)	0.001385

หลักทรัพย์ TCCC

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001238	0.002279	0.543180	0.5875
RESID01(-1)	-0.041765	0.017951	-2.326634	0.0207
D(V)	0.011200	0.002543	4.403602	0.0000
D(P(-1))	-0.101108	0.057955	-1.744609	0.0822
D(P(-2))	-0.150501	0.056844	-2.647614	0.0086

R-squared	0.115336	Mean dependent var	0.000981
Adjusted R-squared	0.102230	S.D. dependent var	0.039863
S.E. of regression	0.037771	Akaike info criterion	-3.696540
Sum squared resid	0.385194	Schwarz criterion	-3.630780
Log likelihood	513.2742	F-statistic	8.800138
Durbin-Watson stat	1.971794	Prob(F-statistic)	0.000001

หลักทรัพย์ NPC

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002238	0.001582	1.414506	0.1582
RESID01	0.007333	0.007171	1.022588	0.3073
D(V)	0.013424	0.004330	3.100076	0.0021
D(P(-1))	0.092804	0.056536	1.641507	0.1017
D(P(-2))	-0.037228	0.056833	-0.655044	0.5129
D(P(-3))	-0.012569	0.056208	-0.223613	0.8232

R-squared	0.044076	Mean dependent var	0.002376
Adjusted R-squared	0.028301	S.D. dependent var	0.027901
S.E. of regression	0.027503	Akaike info criterion	-4.329783
Sum squared resid	0.229201	Schwarz criterion	-4.257291
Log likelihood	674.9515	F-statistic	2.794148
Durbin-Watson stat	2.018969	Prob(F-statistic)	0.017451

หลักทรัพย์ TOC

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002280	0.003704	0.615559	0.5414
RESID01(-1)	-0.114639	0.079910	-1.434598	0.1585
D(V)	0.034538	0.015909	2.171038	0.0354
D(P(-1))	0.175934	0.141848	1.240302	0.2214
D(V(-2))	0.009042	0.016017	0.564572	0.5752
D(V(-3))	-0.000935	0.016750	-0.055825	0.9557
D(V(-4))	0.003240	0.017110	0.189336	0.8507
D(V(-5))	0.011767	0.016334	0.720395	0.4751
D(V(-6))	-0.015712	0.016151	-0.972838	0.3360

R-squared	0.213091	Mean dependent var	0.000823
Adjusted R-squared	0.070017	S.D. dependent var	0.026732
S.E. of regression	0.025779	Akaike info criterion	-4.325008
Sum squared resid	0.029240	Schwarz criterion	-3.990430
Log likelihood	123.6127	F-statistic	1.489375
Durbin-Watson stat	2.023104	Prob(F-statistic)	0.188676

หลักทรัพย์ VNT

Dependent Variable: D(P)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.001915	0.002066	0.926591	0.3549
RESID01(-1)	-0.043738	0.011292	-3.873313	0.0001
D(V)	0.030864	0.005302	5.821259	0.0000
D(P(-1))	-0.001060	0.054383	-0.019498	0.9845
D(P(-3))	0.027755	0.053903	0.514913	0.6070
D(P(-6))	0.020117	0.053667	0.374850	0.7080

R-squared	0.128837	Mean dependent var	0.001885
Adjusted R-squared	0.114318	S.D. dependent var	0.038272
S.E. of regression	0.036018	Akaike info criterion	-3.790156
Sum squared resid	0.389199	Schwarz criterion	-3.717145
Log likelihood	585.8939	F-statistic	8.873486
Durbin-Watson stat	2.071623	Prob(F-statistic)	0.000000

ประวัติผู้เขียน

ชื่อ	นางสาวเพ็ญศรี จิตต์วัฒนนุกูล
วัน เดือน ปี เกิด	6 กุมภาพันธ์ 2525
ประวัติการศึกษา	สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนเรยีนาเชลีวิทยาลัย ปีการศึกษา 2542 สำเร็จการศึกษาปริญญาเศรษฐศาสตรบัณฑิต มหาวิทยาลัยเชียงใหม่ ปีการศึกษา 2546