ภาคผนวก

ภาคผนวก ก

ผลการทดสอบยูนิทรูท ด้วยวิธีการ Augmented Dickey-Fuller

หลักทรัพย์บริษัท เซ็นทรัลพัฒนา จำกัด (มหาชน)

แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-11.40985	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RCPN)

Method: Least Squares

Date: 05/30/03 Time: 07:52

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RCPN(-1)	-0.984329	0.086270	-11.40985	0.0000
D(RCPN(-1))	-0.068546	0.060064	-1.141222	0.2548
C	1.521493	0.724246	2.100795	0.0366

R-squared	0.546673	Mean dependent var	0.199021
Adjusted R-squared	0.543118	S.D. dependent var	16.99561
S.E. of regression	11.48785	Akaike info criterion	7.732017
Sum squared resid	33652.55	Schwarz criterion	7.773331
Log likelihood	-994.4302	F-statistic	153.7541
Durbin-Watson stat	2.013923	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-11.38531	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RCPN)

Method: Least Squares

Date: 05/30/03 Time: 07:53

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RCPN(-1)	-0.983837	0.086413	-11.38531	0.0000
D(RCPN(-1))	-0.069011	0.060167	-1.146998	0.2525
C	2.082097	1.448604	1.437313	0.1519
@TREND(1/02/1998)	-0.004301	0.009619	-0.447088	0.6552

R-squared	0.547030	Mean dependent var	0.199021
Adjusted R-squared	0.541680	S.D. dependent var	16.99561
S.E. of regression	11.50592	Akaike info criterion	7.738983
Sum squared resid	33626.08	Schwarz criterion	7.794067
Log likelihood	-994.3287	F-statistic	102.2478
Durbin-Watson stat	2.015523	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-11.14494	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RCPN)

Method: Least Squares

Date: 05/30/03 Time: 07:53

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RCPN(-1)	-0.955781	0.085759	-11.14494	0.0000
D(RCPN(-1))	-0.082576	0.060088	-1.374252	0.1706

R-squared	0.538828	Mean dependent var	0.199021
Adjusted R-squared	0.537026	S.D. dependent var	16.99561
S.E. of regression	11.56419	Akaike info criterion	7.741424
Sum squared resid	34234.98	Schwarz criterion	7.768967
Log likelihood	-996.6438	F-statistic	299.1068
Durbin-Watson stat	2.007543	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท แผ่นดินทอง พร็อพเพอร์ตี้ ดีเวลล๊อปเม้นท์ จำกัด (มหาชน) แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-12.22842	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RGOLD)

Method: Least Squares

Date: 05/30/03 Time: 08:10

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGOLD(-1)	-1.051282	0.085970	-12.22842	0.0000
D(RGOLD(-1))	0.073824	0.059675	1.237100	0.2172
C	1.620083	0.785561	2.062326	0.0402

R-squared	0.492575	Mean dependent var	0.045231
Adjusted R-squared	0.488595	S.D. dependent var	17.36783
S.E. of regression	12.42018	Akaike info criterion	7.888082
Sum squared resid	39336.52	Schwarz criterion	7.929395
Log likelihood	-1014.563	F-statistic	123.7686
Durbin-Watson stat	1.973337	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-12.48423	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RGOLD)

Method: Least Squares

Date: 05/30/03 Time: 08:10

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGOLD(-1)	-1.083667	0.086803	-12.48423	0.0000
D(RGOLD(-1))	0.091131	0.059860	1.522395	0.1292
C	4.532001	1.597070	2.837697	0.0049
@TREND(1/02/1998)	-0.021911	0.010485	-2.089790	0.0376

R-squared	0.501152	Mean dependent var	0.045231
Adjusted R-squared	0.495260	S.D. dependent var	17.36783
S.E. of regression	12.33898	Akaike info criterion	7.878786
Sum squared resid	38671.61	Schwarz criterion	7.933871
Log likelihood	-1012.363	F-statistic	85.05770
Durbin-Watson stat	1.970279	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-11.97772	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RGOLD)

Method: Least Squares

Date: 05/30/03 Time: 08:10

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RGOLD(-1)	-1.020119	0.085168	-11.97772	0.0000
D(RGOLD(-1))	0.057630	0.059531	0.968066	0.3339

R-squared	0.484111	Mean dependent var	0.045231
Adjusted R-squared	0.482096	S.D. dependent var	17.36783
S.E. of regression	12.49885	Akaike info criterion	7.896872
Sum squared resid	39992.62	Schwarz criterion	7.924414
Log likelihood	-1016.696	F-statistic	240.2312
Durbin-Watson stat	1.977284	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท อิตาเลียนไทย ดีเวลเวล๊อปเม้นท์ จำกัด (มหาชน)

แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-9.724094	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RITD)

Method: Least Squares

Date: 05/30/03 Time: 08:15

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RITD(-1)	-0.789109	0.081150	-9.724094	0.0000
D(RITD(-1))	-0.064433	0.062423	-1.032202	0.3030
C	0.711966	0.766003	0.929455	0.3535

R-squared	0.424462	Mean dependent var	-0.028108
Adjusted R-squared	0.419948	S.D. dependent var	16.07600
S.E. of regression	12.24367	Akaike info criterion	7.859455
Sum squared resid	38226.39	Schwarz criterion	7.900768
Log likelihood	-1010.870	F-statistic	94.03176
Durbin-Watson stat	1.997475	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-9.752543	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RITD)

Method: Least Squares

Date: 05/30/03 Time: 08:15

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RITD(-1)	-0.794842	0.081501	-9.752543	0.0000
D(RITD(-1))	-0.061736	0.062549	-0.987010	0.3246
C	1.819275	1.550622	1.173255	0.2418
@TREND(1/02/1998)	-0.008444	0.010279	-0.821488	0.4121

R-squared	0.425987	Mean dependent var	-0.028108
Adjusted R-squared	0.419207	S.D. dependent var	16.07600
S.E. of regression	12.25148	Akaike info criterion	7.864553
Sum squared resid	38125.09	Schwarz criterion	7.919638
Log likelihood	-1010.527	F-statistic	62.83285
Durbin-Watson stat	1.996425	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-9.682197	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RITD)

Method: Least Squares

Date: 05/30/03 Time: 08:16

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RITD(-1)	-0.781659	0.080732	-9.682197	0.0000
D(RITD(-1))	-0.068131	0.062279	-1.093950	0.2750

R-squared	0.422512	Mean dependent var	-0.028108
Adjusted R-squared	0.420256	S.D. dependent var	16.07600
S.E. of regression	12.24041	Akaike info criterion	7.855085
Sum squared resid	38355.89	Schwarz criterion	7.882627
Log likelihood	-1011.306	F-statistic	187.2992
Durbin-Watson stat	1.998599	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-9.147345	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RLH)

Method: Least Squares

Date: 05/30/03 Time: 08:21

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RLH(-1)	-0.757168	0.082775	-9.147345	0.0000
D(RLH(-1))	-0.156498	0.061811	-2.531887	0.0119
C	1.072283	0.652223	1.644043	0.1014

R-squared	0.462735	Mean dependent var	0.036075
Adjusted R-squared	0.458521	S.D. dependent var	14.01830
S.E. of regression	10.31540	Akaike info criterion	7.516712
Sum squared resid	27133.89	Schwarz criterion	7.558026
Log likelihood	-966.6559	F-statistic	109.8132
Durbin-Watson stat	1.998149	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-9.136506	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RLH)

Method: Least Squares

Date: 05/30/03 Time: 08:21

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RLH(-1)	-0.757853	0.082948	-9.136506	0.0000
D(RLH(-1))	-0.156193	0.061927	-2.522217	0.0123
C	1.436272	1.305780	1.099934	0.2724
@TREND(1/02/1998)	-0.002782	0.008641	-0.321955	0.7478

R-squared	0.462954	Mean dependent var	0.036075
Adjusted R-squared	0.456611	S.D. dependent var	14.01830
S.E. of regression	10.33357	Akaike info criterion	7.524056
Sum squared resid	27122.82	Schwarz criterion	7.579141
Log likelihood	-966.6032	F-statistic	72.98601
Durbin-Watson stat	1.998175	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-8.968739	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RLH)

Method: Least Squares

Date: 05/30/03 Time: 08:21

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RLH(-1)	-0.733413	0.081774	-8.968739	0.0000
D(RLH(-1))	-0.168431	0.061587	-2.734845	0.0067

R-squared	0.457041	Mean dependent var	0.036075
Adjusted R-squared	0.454920	S.D. dependent var	14.01830
S.E. of regression	10.34965	Akaike info criterion	7.519504
Sum squared resid	27421.50	Schwarz criterion	7.547046
Log likelihood	-968.0160	F-statistic	215.4901
Durbin-Watson stat	2.001912	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท เอ็ม บี เค พร็อพเพอร์ตี้ส์ แอนด์ ดีเวลล็อปเม้นท์ จำกัด (มหาชน)
แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-12.47352	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RMBK)

Method: Least Squares

Date: 05/30/03 Time: 08:25

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RMBK(-1)	-1.190891	0.095474	-12.47352	0.0000
D(RMBK(-1))	0.013098	0.062181	0.210637	0.8333
C	0.742541	0.441702	1.681091	0.0940

R-squared	0.587948	Mean dependent var	0.004245
Adjusted R-squared	0.584716	S.D. dependent var	10.91686
S.E. of regression	7.035096	Akaike info criterion	6.751260
Sum squared resid	12620.61	Schwarz criterion	6.792573
Log likelihood	-867.9125	F-statistic	181.9270
Durbin-Watson stat	1.990615	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-12.44813	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RMBK)

Method: Least Squares

Date: 05/30/03 Time: 08:26

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RMBK(-1)	-1.190812	0.095662	-12.44813	0.0000
D(RMBK(-1))	0.013020	0.062306	0.208974	0.8346
C	0.826116	0.886873	0.931493	0.3525
@TREND(1/02/1998)	-0.000641	0.005893	-0.108743	0.9135

R-squared	0.587967	Mean dependent var	0.004245
Adjusted R-squared	0.583101	S.D. dependent var	10.91686
S.E. of regression	7.048767	Akaike info criterion	6.758965
Sum squared resid	12620.02	Schwarz criterion	6.814050
Log likelihood	-867.9065	F-statistic	120.8186
Durbin-Watson stat	1.990711	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-12.31606	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RMBK)

Method: Least Squares

Date: 05/30/03 Time: 08:26

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RMBK(-1)	-1.170127	0.095008	-12.31606	0.0000
D(RMBK(-1))	0.003039	0.062112	0.048930	0.9610

R-squared	0.583381	Mean dependent var	0.004245
Adjusted R-squared	0.581754	S.D. dependent var	10.91686
S.E. of regression	7.060143	Akaike info criterion	6.754529
Sum squared resid	12760.48	Schwarz criterion	6.782072
Log likelihood	-869.3343	F-statistic	358.4710
Durbin-Watson stat	1.990205	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท ควอลิตี้เฮาส์ จำกัด (มหาชน)

แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-9.431363	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RQH)

Method: Least Squares

Date: 05/30/03 Time: 08:29

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RQH(-1)	-0.747061	0.079210	-9.431363	0.0000
D(RQH(-1))	-0.166859	0.058598	-2.847529	0.0048
C	0.847988	0.840360	1.009077	0.3139

R-squared	0.490498	Mean dependent var	-0.278845
Adjusted R-squared	0.486502	S.D. dependent var	18.64561
S.E. of regression	13.36121	Akaike info criterion	8.034149
Sum squared resid	45523.12	Schwarz criterion	8.075462
Log likelihood	-1033.405	F-statistic	122.7445
Durbin-Watson stat	2.142392	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-9.421593	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RQH)

Method: Least Squares

Date: 05/30/03 Time: 08:30

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RQH(-1)	-0.751446	0.079758	-9.421593	0.0000
D(RQH(-1))	-0.164827	0.058807	-2.802845	0.0055
C	1.628121	1.702702	0.956199	0.3399
@TREND(1/02/1998)	-0.005927	0.011246	-0.527047	0.5986

R-squared	0.491055	Mean dependent var	-0.278845
Adjusted R-squared	0.485044	S.D. dependent var	18.64561
S.E. of regression	13.38018	Akaike info criterion	8.040808
Sum squared resid	45473.39	Schwarz criterion	8.095892
Log likelihood	-1033.264	F-statistic	81.69048
Durbin-Watson stat	2.138936	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-9.382855	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RQH)

Method: Least Squares

Date: 05/30/03 Time: 08:30

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RQH(-1)	-0.735704	0.078409	-9.382855	0.0000
D(RQH(-1))	-0.172534	0.058329	-2.957940	0.0034

R-squared	0.488464	Mean dependent var	-0.278845
Adjusted R-squared	0.486466	S.D. dependent var	18.64561
S.E. of regression	13.36169	Akaike info criterion	8.030382
Sum squared resid	45704.90	Schwarz criterion	8.057924
Log likelihood	-1033.919	F-statistic	244.4533
Durbin-Watson stat	2.148182	Prob(F-statistic)	0.000000

หลักทรัพย์บริษัท แสนสิริ จำกัด (มหาชน)

แบบจำลองแนวเดินเชิงสุ่ม และจุดตัดแกน

ADF Test Statistic	-12.89445	1% Critical Value*	-3.4573
		5% Critical Value	-2.8728
		10% Critical Value	-2.5727

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RSIRI)

Method: Least Squares

Date: 05/30/03 Time: 08:33

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RSIRI(-1)	-1.052485	0.081623	-12.89445	0.0000
D(RSIRI(-1))	0.171490	0.061058	2.808636	0.0054
C	0.842373	0.930541	0.905251	0.3662

R-squared	0.469518	Mean dependent var	-0.103445
Adjusted R-squared	0.465357	S.D. dependent var	20.37104
S.E. of regression	14.89516	Akaike info criterion	8.251509
Sum squared resid	56575.77	Schwarz criterion	8.292823
Log likelihood	-1061.445	F-statistic	112.8473
Durbin-Watson stat	2.032900	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม จุดตัดแกน และแนวโน้ม

ADF Test Statistic	-12.88471	1% Critical Value*	-3.9969
		5% Critical Value	-3.4285
		10% Critical Value	-3.1374

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RSIRI)

Method: Least Squares

Date: 05/30/03 Time: 08:33

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RSIRI(-1)	-1.055055	0.081884	-12.88471	0.0000
D(RSIRI(-1))	0.172911	0.061204	2.825143	0.0051
C	1.703947	1.881682	0.905544	0.3660
@TREND(1/02/1998)	-0.006583	0.012491	-0.527042	0.5986

R-squared	0.470097	Mean dependent var	-0.103445
Adjusted R-squared	0.463838	S.D. dependent var	20.37104
S.E. of regression	14.91630	Akaike info criterion	8.258168
Sum squared resid	56513.97	Schwarz criterion	8.313253
Log likelihood	-1061.304	F-statistic	75.11102
Durbin-Watson stat	2.032996	Prob(F-statistic)	0.000000

แบบจำลองแนวเดินเชิงสุ่ม

ADF Test Statistic	-12.86819	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		10% Critical Value	-1.6163

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RSIRI)

Method: Least Squares

Date: 05/30/03 Time: 08:33

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RSIRI(-1)	-1.046374	0.081315	-12.86819	0.0000
D(RSIRI(-1))	0.168183	0.060927	2.760391	0.0062

R-squared	0.467813	Mean dependent var	-0.103445
Adjusted R-squared	0.465734	S.D. dependent var	20.37104
S.E. of regression	14.88991	Akaike info criterion	8.246966
Sum squared resid	56757.59	Schwarz criterion	8.274508
Log likelihood	-1061.859	F-statistic	225.0337
Durbin-Watson stat	2.031600	Prob(F-statistic)	0.000000

ภาคผนวก ข

ผลการทดสอบการร่วมกันไปด้วยกัน

หลักทรัพย์ของบริษัท เซ็นทรัลพัฒนา จำกัด (มหาชน)

Dependent Variable: RCPN

Method: Least Squares

Date: 05/30/03 Time: 08:01

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.209870	0.712769	1.697423	0.0908
RM	0.663733	0.148121	4.481012	0.0000

R-squared	0.072208	Mean dependent var	1.274772
Adjusted R-squared	0.068612	S.D. dependent var	11.90639
S.E. of regression	11.49068	Akaike info criterion	7.728612
Sum squared resid	34065.20	Schwarz criterion	7.756001
Log likelihood	-1002.720	F-statistic	20.07947
Durbin-Watson stat	2.126237	Prob(F-statistic)	0.000011

หลักทรัพย์ของบริษัท แผ่นดินทอง พร็อพเพอร์ตี้ ดีเวลล๊อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: RGOLD

Method: Least Squares

Date: 05/30/03 Time: 08:10

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.623836	0.743889	2.182899	0.0299
RM	1.021490	0.154589	6.607801	0.0000

R-squared	0.144741	Mean dependent var	1.723720
Adjusted R-squared	0.141426	S.D. dependent var	12.94245
S.E. of regression	11.99238	Akaike info criterion	7.814083
Sum squared resid	37104.83	Schwarz criterion	7.841472
Log likelihood	-1013.831	F-statistic	43.66304
Durbin-Watson stat	1.867594	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท อิตาเลียนไทย ดีเวลเวล๊อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: RITD

Method: Least Squares

Date: 05/30/03 Time: 08:17

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.760252	0.613162	1.239888	0.2161
RM	1.537581	0.127422	12.06685	0.0000

R-squared	0.360767	Mean dependent var	0.910601
Adjusted R-squared	0.358290	S.D. dependent var	12.33964
S.E. of regression	9.884896	Akaike info criterion	7.427556
Sum squared resid	25209.48	Schwarz criterion	7.454945
Log likelihood	-963.5822	F-statistic	145.6089
Durbin-Watson stat	1.988057	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

Dependent Variable: RLH

Method: Least Squares

Date: 05/30/03 Time: 08:22

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.233446	0.488462	2.525163	0.0122
RM	1.422105	0.101508	14.00980	0.0000

R-squared	0.432061	Mean dependent var	1.372503
Adjusted R-squared	0.429860	S.D. dependent var	10.42886
S.E. of regression	7.874585	Akaike info criterion	6.972820
Sum squared resid	15998.34	Schwarz criterion	7.000210
Log likelihood	-904.4667	F-statistic	196.2745
Durbin-Watson stat	1.988391	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท เอ็ม บี เค พร็อพเพอร์ตี้ส์ แอนด์ ดีเวลล็อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: RMBK

Method: Least Squares

Date: 05/30/03 Time: 08:26

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.524735	0.427300	1.228023	0.2206
RM	0.397732	0.088798	4.479078	0.0000

R-squared	0.072150	Mean dependent var	0.563626
Adjusted R-squared	0.068554	S.D. dependent var	7.137583
S.E. of regression	6.888586	Akaike info criterion	6.705271
Sum squared resid	12242.78	Schwarz criterion	6.732661
Log likelihood	-869.6853	F-statistic	20.06214
Durbin-Watson stat	2.435415	Prob(F-statistic)	0.000011

หลักทรัพย์ของบริษัท ควอลิตี้เฮาส์ จำกัด (มหาชน)

Dependent Variable: RQH

Method: Least Squares

Date: 05/30/03 Time: 08:30

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.270147	0.666369	1.906071	0.0578
RM	1.942650	0.138479	14.02848	0.0000

R-squared	0.432715	Mean dependent var	1.460105
Adjusted R-squared	0.430517	S.D. dependent var	14.23546
S.E. of regression	10.74266	Akaike info criterion	7.593986
Sum squared resid	29774.45	Schwarz criterion	7.621376
Log likelihood	-985.2182	F-statistic	196.7982
Durbin-Watson stat	1.904364	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แสนสิริ จำกัด (มหาชน)

Dependent Variable: RSIRI

Method: Least Squares

Date: 05/30/03 Time: 08:33

Sample(adjusted): 1/02/1998 12/20/2002

Included observations: 260 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.857410	0.873610	0.981456	0.3273
RM	1.232922	0.181546	6.791239	0.0000

R-squared	0.151653	Mean dependent var	0.977968
Adjusted R-squared	0.148365	S.D. dependent var	15.26117
S.E. of regression	14.08363	Akaike info criterion	8.135566
Sum squared resid	51173.94	Schwarz criterion	8.162956
Log likelihood	-1055.624	F-statistic	46.12093
Durbin-Watson stat	1.775263	Prob(F-statistic)	0.000000

ภาคผนวก ค

ผลการทดสอบความนิ่งของส่วนที่เหลือจากสมการถดถอยในการทดสอบการร่วมกันไปด้วยกัน โดยการทดสอบยูนิทรูท ด้วยวิธีการ Augmented Dickey-Fuller

หลักทรัพย์ของบริษัท เซ็นทรัลพัฒนา จำกัด (มหาชน)

ADF Test Statistic	-11.69805	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:03

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.012017	0.086512	-11.69805	0.0000
D(RESID01(-1))	-0.075281	0.059161	-1.272470	0.2044

R-squared	0.572126	Mean dependent var	0.218795
Adjusted R-squared	0.570454	S.D. dependent var	16.60401
S.E. of regression	10.88222	Akaike info criterion	7.619860
Sum squared resid	30316.24	Schwarz criterion	7.647402
Log likelihood	-980.9619	F-statistic	342.3067
Durbin-Watson stat	2.041983	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แผ่นดินทอง พร็อพเพอร์ตี้ ดีเวลล๊อปเม้นท์ จำกัด (มหาชน)

ADF Test Statistic	-12.53743	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:11

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.057381	0.084338	-12.53743	0.0000
D(RESID01(-1))	0.103424	0.057854	1.787666	0.0750

R-squared	0.486497	Mean dependent var	0.075663
Adjusted R-squared	0.484491	S.D. dependent var	15.51424
S.E. of regression	11.13905	Akaike info criterion	7.666513
Sum squared resid	31764.10	Schwarz criterion	7.694056
Log likelihood	-986.9802	F-statistic	242.5368
Durbin-Watson stat	1.980006	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท อิตาเลียนไทย ดีเวลเวล๊อปเม้นท์ จำกัด (มหาชน)

ADF Test Statistic	-10.87952	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:18

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.957333	0.087994	-10.87952	0.0000
D(RESID01(-1))	-0.036293	0.062385	-0.581754	0.5612

R-squared	0.497871	Mean dependent var	0.017699
Adjusted R-squared	0.495910	S.D. dependent var	13.94774
S.E. of regression	9.902796	Akaike info criterion	7.431233
Sum squared resid	25104.73	Schwarz criterion	7.458775
Log likelihood	-956.6290	F-statistic	253.8295
Durbin-Watson stat	1.985744	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

ADF Test Statistic	-11.43863	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:22

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.994202	0.086916	-11.43863	0.0000
D(RESID01(-1))	0.008136	0.061528	0.132241	0.8949

R-squared	0.499967	Mean dependent var	0.078442
Adjusted R-squared	0.498013	S.D. dependent var	10.98329
S.E. of regression	7.781772	Akaike info criterion	6.949167
Sum squared resid	15502.33	Schwarz criterion	6.976709
Log likelihood	-894.4425	F-statistic	255.9659
Durbin-Watson stat	1.999812	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท เอ็ม บี เค พร็อพเพอร์ตี้ส์ แอนด์ ดีเวลล็อปเม้นท์ จำกัด (มหาชน)

ADF Test Statistic	-12.37120	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:27

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.202644	0.097213	-12.37120	0.0000
D(RESID01(-1))	-0.022322	0.062016	-0.359939	0.7192

R-squared	0.616001	Mean dependent var	0.016094
Adjusted R-squared	0.614501	S.D. dependent var	10.76913
S.E. of regression	6.686404	Akaike info criterion	6.645751
Sum squared resid	11445.25	Schwarz criterion	6.673294
Log likelihood	-855.3019	F-statistic	410.6676
Durbin-Watson stat	1.993259	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท ควอลิตี้เฮาส์ จำกัด (มหาชน)

ADF Test Statistic	-11.52265	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:31

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-0.950240	0.082467	-11.52265	0.0000
D(RESID01(-1))	-0.006181	0.059725	-0.103498	0.9176

R-squared	0.501016	Mean dependent var	-0.220971
Adjusted R-squared	0.499067	S.D. dependent var	14.52790
S.E. of regression	10.28236	Akaike info criterion	7.506458
Sum squared resid	27066.09	Schwarz criterion	7.534001
Log likelihood	-966.3331	F-statistic	257.0424
Durbin-Watson stat	2.034737	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แสนสิริ จำกัด (มหาชน)

ADF Test Statistic	-13.52079	1% Critical Value*	-2.5735
		5% Critical Value	-1.9408
		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)

Method: Least Squares

Date: 05/30/03 Time: 08:34

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID01(-1)	-1.098148	0.081219	-13.52079	0.0000
D(RESID01(-1))	0.213516	0.060276	3.542327	0.0005

R-squared	0.479932	Mean dependent var	-0.066714
Adjusted R-squared	0.477901	S.D. dependent var	18.76487
S.E. of regression	13.55883	Akaike info criterion	8.059675
Sum squared resid	47063.51	Schwarz criterion	8.087217
Log likelihood	-1037.698	F-statistic	236.2434
Durbin-Watson stat	2.089487	Prob(F-statistic)	0.000000

ภาคผนวก ง

ผลการประมาณค่าสัมประสิทธิ์ โดยใช้ Error Correction Model

หลักทรัพย์ของบริษัท เซ็นทรัลพัฒนา จำกัด (มหาชน)

Dependent Variable: D(RCPN)

Method: Least Squares

Date: 05/30/03 Time: 08:04

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.264385	0.697517	0.379037	0.7050
D(RM(-1))	-0.275033	0.116530	-2.360193	0.0190
D(RCPN(-1))	-0.040645	0.060992	-0.666396	0.5058
RESID01(-1)	-1.084247	0.089813	-12.07234	0.0000

R-squared	0.570525	Mean dependent var	0.199021
Adjusted R-squared	0.565452	S.D. dependent var	16.99561
S.E. of regression	11.20355	Akaike info criterion	7.685721
Sum squared resid	31881.96	Schwarz criterion	7.740805
Log likelihood	-987.4580	F-statistic	112.4730
Durbin-Watson stat	2.057843	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แผ่นดินทอง พร็อพเพอร์ตี้ ดีเวลล๊อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: D(RGOLD)

Method: Least Squares

Date: 05/30/03 Time: 08:12

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.201734	0.791358	-0.254921	0.7990
D(RM(-1))	-0.690053	0.138739	-4.973743	0.0000
D(RGOLD(-1))	0.111528	0.066006	1.689651	0.0923
RESID01(-1)	-1.099863	0.096229	-11.42962	0.0000

R-squared	0.470905	Mean dependent var	0.045231
Adjusted R-squared	0.464656	S.D. dependent var	17.36783
S.E. of regression	12.70755	Akaike info criterion	7.937652
Sum squared resid	41016.40	Schwarz criterion	7.992737
Log likelihood	-1019.957	F-statistic	75.35505
Durbin-Watson stat	2.089962	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท อิตาเลียนไทย ดีเวลเวล๊อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: D(RITD)

Method: Least Squares

Date: 05/30/03 Time: 08:19

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.015664	0.763206	-0.020524	0.9836
D(RM(-1))	-0.776211	0.162981	-4.762599	0.0000
D(RITD(-1))	0.042778	0.077320	0.553262	0.5806
RESID01(-1)	-1.058898	0.109189	-9.697827	0.0000

R-squared	0.425296	Mean dependent var	-0.028108
Adjusted R-squared	0.418508	S.D. dependent var	16.07600
S.E. of regression	12.25885	Akaike info criterion	7.865756
Sum squared resid	38170.97	Schwarz criterion	7.920840
Log likelihood	-1010.682	F-statistic	62.65558
Durbin-Watson stat	2.081206	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

Dependent Variable: D(RLH)

Method: Least Squares

Date: 05/30/03 Time: 08:24

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.015938	0.628840	0.025346	0.9798
D(RM(-1))	-0.593794	0.155031	-3.830154	0.0002
D(RLH(-1))	-0.091419	0.080068	-1.141765	0.2546
RESID01(-1)	-1.095831	0.114543	-9.566970	0.0000

R-squared	0.486900	Mean dependent var	0.036075
Adjusted R-squared	0.480840	S.D. dependent var	14.01830
S.E. of regression	10.10057	Akaike info criterion	7.478443
Sum squared resid	25913.47	Schwarz criterion	7.533528
Log likelihood	-960.7192	F-statistic	80.34347
Durbin-Watson stat	2.152194	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท เอ็ม บี เค พร็อพเพอร์ตี้ส์ แอนด์ ดีเวลล็อปเม้นท์ จำกัด (มหาชน)

Dependent Variable: D(RMBK)

Method: Least Squares

Date: 05/30/03 Time: 08:28

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.068738	0.433495	0.158568	0.8741
D(RM(-1))	-0.140340	0.071301	-1.968285	0.0501
D(RMBK(-1))	0.038158	0.064585	0.590821	0.5552
RESID01(-1)	-1.279363	0.101440	-12.61206	0.0000

R-squared	0.597969	Mean dependent var	0.004245
Adjusted R-squared	0.593220	S.D. dependent var	10.91686
S.E. of regression	6.962692	Akaike info criterion	6.734392
Sum squared resid	12313.69	Schwarz criterion	6.789477
Log likelihood	-864.7366	F-statistic	125.9306
Durbin-Watson stat	2.034181	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท ควอลิตี้เฮาส์ จำกัด (มหาชน)

Dependent Variable: D(RQH)

Method: Least Squares

Date: 05/30/03 Time: 08:32

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.247764	0.834133	-0.297032	0.7667
D(RM(-1))	-0.985158	0.201396	-4.891651	0.0000
D(RQH(-1))	-0.057659	0.077876	-0.740398	0.4597
RESID01(-1)	-1.010218	0.107864	-9.365691	0.0000

R-squared	0.489701	Mean dependent var	-0.278845
Adjusted R-squared	0.483673	S.D. dependent var	18.64561
S.E. of regression	13.39797	Akaike info criterion	8.043465
Sum squared resid	45594.39	Schwarz criterion	8.098550
Log likelihood	-1033.607	F-statistic	81.24901
Durbin-Watson stat	2.319693	Prob(F-statistic)	0.000000

หลักทรัพย์ของบริษัท แสนสิริ จำกัด (มหาชน)

Dependent Variable: D(RSIRI)

Method: Least Squares

Date: 05/30/03 Time: 08:35

Sample(adjusted): 1/16/1998 12/20/2002

Included observations: 258 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.191618	0.964153	-0.198742	0.8426
D(RM(-1))	-0.842257	0.165821	-5.079306	0.0000
D(RSIRI(-1))	0.213594	0.068939	3.098314	0.0022
RESID01(-1)	-1.068952	0.092943	-11.50112	0.0000

R-squared	0.428857	Mean dependent var	-0.103445
Adjusted R-squared	0.422111	S.D. dependent var	20.37104
S.E. of regression	15.48586	Akaike info criterion	8.333114
Sum squared resid	60912.20	Schwarz criterion	8.388199
Log likelihood	-1070.972	F-statistic	63.57409
Durbin-Watson stat	2.183249	Prob(F-statistic)	0.000000

ภาคผนวก จ

ผลการประมาณค่าสัมประสิทธิ์โดยแบบจำลองถดถอยแบบสลับเปลี่ยน

หลักทรัพย์ของบริษัท เซ็นทรัลพัฒนา จำกัด (มหาชน)

```
+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary    least squares regression    Weighting variable = none     |
| Dep. var. = RCPN     Mean=   7.291405911    , S.D.=   11.15788615     |
| Model size: Observations =      150, Parameters =   2, Deg.Fr.=   148 |
| Residuals:  Sum of squares= 16943.09192    , Std.Dev.=      10.69955 |
| Fit:        R-squared=  .086639, Adjusted R-squared =          .08047 |
| Model test: F[  1,     148] =   14.04,     Prob value =         .00026 |
| Diagnostic: Log-L =   -567.3643, Restricted(b=0) Log-L =    -574.1611 |
|             LogAmemiyaPrCrt.=    4.754, Akaike Info. Crt.=      7.592 |
| OLS estimates of equation 1                                           |
+-----------------------------------------------------------------------+
+---------+--------------+----------------+--------+---------+----------+
|Variable | Coefficient  | Standard Error |b/St.Er.|P[|Z|>z] | Mean of X|
+---------+--------------+----------------+--------+---------+----------+
 Constant  6.855302867      .88133390        7.778   .0000
 RM         .6373996133     .17011630        3.747   .0002   .68419095


+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary    least squares regression    Weighting variable = none     |
| Dep. var. = RCPN     Mean=  -6.929729415    , S.D.=    6.993861176    |
| Model size: Observations =      110, Parameters =   2, Deg.Fr.=   108 |
| Residuals:  Sum of squares= 5455.856578    , Std.Dev.=        7.10754 |
| Fit:        R-squared= -.023299, Adjusted R-squared =         -.03277 |
| Diagnostic: Log-L =   -370.8013, Restricted(b=0) Log-L =    -369.5346 |
|             LogAmemiyaPrCrt.=    3.940, Akaike Info. Crt.=      6.778 |
| OLS estimates of equation 0                                           |
+-----------------------------------------------------------------------+
+---------+--------------+----------------+--------+---------+----------+
|Variable | Coefficient  | Standard Error |b/St.Er.|P[|Z|>z] | Mean of X|
+---------+--------------+----------------+--------+---------+----------+
 Constant -6.654511954      .68093338       -9.773   .0000
 RM         .3921230533     .94756532E-01    4.138   .0000 -.70186504

Normal exit from iterations. Exit status=0.

              +--------------------------------------------+
              | Switching Regressions                      |
              | Maximum Likelihood Estimates               |
              | Dependent variable                RCPN     |
              | Weighting variable                 ONE     |
              | Number of observations             260     |
              | Iterations completed                13     |
              | Log likelihood function      -1155.054     |
              | Sample separation variable is I            |
              | RCPN      is the minimum  of y*(1) and y*(0) |
              +--------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	12.01761383	1.6306771	7.370	.0000	
RM	1.100927216	.35358688	3.114	.0018	.68419095
	RHS for Regime 2				
Constant	8.275513023	1.2721811	6.505	.0000	
RM	.5335046579	.13450805	3.966	.0001	-.70186504
Sigma(1)	20.08332422	1.8605293	10.794	.0000	
Sigma(0)	9.975126295	.53966302	18.484	.0000	

หลักทรัพย์ของบริษัท แผ่นดินทอง พร็อพเพอร์ตี้ ดีเวลล๊อปเม้นท์ จำกัด (มหาชน)

```
+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary     least squares regression    Weighting variable = none   |
| Dep. var. = RGOLD     Mean=    9.498284093     , S.D.=    11.35036895 |
| Model size: Observations =      143, Parameters =    2, Deg.Fr.=   141 |
| Residuals:  Sum of squares= 17757.37582     , Std.Dev.=      11.22225 |
| Fit:        R-squared=  .029333, Adjusted R-squared =          .02245 |
| Model test: F[  1,     141] =    4.26,     Prob value =         .04083 |
| Diagnostic: Log-L =     -547.6606, Restricted(b=0) Log-L =  -549.7892 |
|             LogAmemiyaPrCrt.=    4.850, Akaike Info. Crt.=       7.688 |
| OLS estimates of equation 1                                           |
+-----------------------------------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	9.038422515	.95571107	9.457	.0000	
RM	.2992650869	.11766654	2.543	.0110	1.5366362

```
+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary     least squares regression    Weighting variable = none   |
| Dep. var. = RGOLD     Mean=  -7.778525186     , S.D.=    7.121260599 |
| Model size: Observations =      117, Parameters =    2, Deg.Fr.=   115 |
| Residuals:  Sum of squares= 5196.567849     , Std.Dev.=       6.72217 |
| Fit:        R-squared=  .116626, Adjusted R-squared =          .10894 |
| Model test: F[  1,     115] =   15.18,     Prob value =         .00016 |
| Diagnostic: Log-L =     -387.9402, Restricted(b=0) Log-L =  -395.1946 |
|             LogAmemiyaPrCrt.=    3.828, Akaike Info. Crt.=       6.666 |
| OLS estimates of equation 0                                           |
+-----------------------------------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-6.949006369	.64098389	-10.841	.0000	
RM	.4994645532	.94518414E-01	5.284	.0000	-1.6608162

Normal exit from iterations. Exit status=0.

```
+---------------------------------------------+
| Switching Regressions                       |
| Maximum Likelihood Estimates                |
| Dependent variable                   RGOLD  |
| Weighting variable                     ONE  |
| Number of observations                 260  |
| Iterations completed                    13  |
| Log likelihood function          -1157.574  |
| Sample separation variable is I             |
| RGOLD    is the minimum  of y*(1) and y*(0) |
+---------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	12.16464074	1.5524560	7.836	.0000	
RM	2.113860333	.43259966	4.886	.0000	1.5366362
	RHS for Regime 2				
Constant	10.24858236	1.3608799	7.531	.0000	
RM	.2774604893	.14307414	1.939	.0052	-1.6608162
Sigma(1)	20.01062142	2.2065596	9.069	.0000	
Sigma(0)	10.44370792	.59147912	17.657	.0000	

หลักทรัพย์ของบริษัท อิตาเลียนไทย ดีเวลเวล็อปเม้นท์ จำกัด (มหาชน)

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RITD     Mean=   9.211365723     , S.D.=    12.02530582
Model size: Observations =      127, Parameters =   2, Deg.Fr.=     125
Residuals:  Sum of squares= 13702.60507     , Std.Dev.=        10.47000
Fit:        R-squared=  .247961, Adjusted R-squared =            .24194
Model test: F[  1,    125] =   41.21,    Prob value =            .00000
Diagnostic: Log-L =    -477.4585, Restricted(b=0) Log-L =     -495.5539
            LogAmemiyaPrCrt.=    4.713, Akaike Info. Crt.=        7.551
OLS estimates of equation 1
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	7.099285894	.98721116	7.191	.0000	
RM	.9299959765	.14698436	6.327	.0000	2.2710634

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RITD     Mean=  -7.015693580     , S.D.=     5.579982211
Model size: Observations =      133, Parameters =   2, Deg.Fr.=     131
Residuals:  Sum of squares= 3792.303543     , Std.Dev.=         5.38042
Fit:        R-squared=  .077294, Adjusted R-squared =            .07025
Model test: F[  1,    131] =   10.97,    Prob value =            .00119
Diagnostic: Log-L =    -411.5191, Restricted(b=0) Log-L =     -416.8686
            LogAmemiyaPrCrt.=    3.380, Akaike Info. Crt.=        6.218
OLS estimates of equation 0
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-5.369947531	.49271725	-10.899	.0000	
RM	.8322544580	.80133203E-01	10.386	.0000	-1.9774554

Normal exit from iterations. Exit status=0.

```
Switching Regressions
Maximum Likelihood Estimates
Dependent variable                    RITD
Weighting variable                     ONE
Number of observations                 260
Iterations completed                    12
Log likelihood function          -1116.232
Sample separation variable is I
RITD     is the minimum  of y*(1) and y*(0)
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	7.697337961	1.0787904	7.135	.0000	
RM	2.464188848	.32016652	7.697	.0000	2.2710634
	RHS for Regime 2				
Constant	8.954606943	1.1183242	8.007	.0000	
RM	.9052894691	.15759887	5.744	.0000	-1.9774554
Sigma(1)	14.73283205	1.2851587	11.464	.0000	
Sigma(0)	9.574856813	.63339822	15.117	.0000	

หลักทรัพย์ของบริษัท แลนด์ แอนด์ เฮ้าส์ จำกัด (มหาชน)

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RLH      Mean=   7.236633573    , S.D.=   9.498520037
Model size: Observations =      149, Parameters =   2, Deg.Fr.=    147
Residuals:  Sum of squares= 9301.353808     , Std.Dev.=         7.95453
Fit:        R-squared=  .303417, Adjusted R-squared =          .29868
Model test: F[  1,     147] =    64.03,     Prob value =        .00000
Diagnostic: Log-L =    -519.4025, Restricted(b=0) Log-L =    -546.3394
            LogAmemiyaPrCrt.=    4.161, Akaike Info. Crt.=       6.999
OLS estimates of equation 1
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	5.142537554	.69834575	7.364	.0000	
RM	.9484434971	.11370338	8.341	.0000	2.2079291

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RLH      Mean=  -6.499167607    , S.D.=   5.058367782
Model size: Observations =      111, Parameters =   2, Deg.Fr.=    109
Residuals:  Sum of squares= 2872.840159     , Std.Dev.=         5.13384
Fit:        R-squared= -.020700, Adjusted R-squared =         -.03006
Diagnostic: Log-L =    -338.0729, Restricted(b=0) Log-L =    -336.9358
            LogAmemiyaPrCrt.=    3.290, Akaike Info. Crt.=       6.127
OLS estimates of equation 0
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-3.851674671	.53428334	-7.209	.0000	
RM	.9680909843	.80124710E-01	12.082	.0000	-2.7347563

Normal exit from iterations. Exit status=0.

```
Switching Regressions
Maximum Likelihood Estimates
Dependent variable                     RLH
Weighting variable                     ONE
Number of observations                 260
Iterations completed                    13
Log likelihood function          -1047.192
Sample separation variable is I
RLH       is the minimum  of y*(1) and y*(0)
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	9.350776394	1.1431103	8.180	.0000	
RM	2.515950596	.31475358	7.993	.0000	2.2079291
	RHS for Regime 2				
Constant	6.447406918	.89235737	7.225	.0000	
RM	.8824199923	.13507929	6.533	.0000	-2.7347563
Sigma(1)	12.68764106	1.1139392	11.390	.0000	
Sigma(0)	7.463853604	.31531196	23.671	.0000	

หลักทรัพย์ของบริษัท เอ็ม บี เค พร็อพเพอร์ตี้ส์ แอนด์ ดีเวลล็อปเม้นท์ จำกัด (มหาชน)

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RMBK      Mean=   4.081551457    , S.D.=    6.188789659
Model size: Observations =      156, Parameters =   2, Deg.Fr.=     154
Residuals:  Sum of squares= 6184.757855     , Std.Dev.=          6.33725
Fit:        R-squared= -.041788, Adjusted R-squared =           -.04855
Diagnostic: Log-L =    -508.3934, Restricted(b=0) Log-L =     -505.2002
            LogAmemiyaPrCrt.=    3.706, Akaike Info. Crt.=       6.544
OLS estimates of equation 1
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	3.725204965	.51896727	7.178	.0000	
RM	.3069852833	.93921943E-01	3.269	.0011	1.1607934

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RMBK      Mean=  -4.713262669    , S.D.=    4.858724935
Model size: Observations =      104, Parameters =   2, Deg.Fr.=     102
Residuals:  Sum of squares= 2206.769637     , Std.Dev.=          4.65134
Fit:        R-squared=  .092440, Adjusted R-squared =            .08354
Model test: F[  1,     102] =    10.39,    Prob value =          .00170
Diagnostic: Log-L =    -306.4241, Restricted(b=0) Log-L =     -311.4679
            LogAmemiyaPrCrt.=    3.093, Akaike Info. Crt.=       5.931
OLS estimates of equation 0
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-4.466880626	.46567417	-9.592	.0000	
RM	.1646131689	.62759427E-01	2.623	.0087	-1.4967335

Normal exit from iterations. Exit status=0.

```
Switching Regressions
Maximum Likelihood Estimates
Dependent variable                       RMBK
Weighting variable                        ONE
Number of observations                    260
Iterations completed                       13
Log likelihood function         -1009.794
Sample separation variable is I
RMBK     is the minimum  of y*(1) and y*(0)
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	7.879423025	1.0320349	7.635	.0000	
RM	1.0013447482	.18393234	5.172	.0000	1.1607934
	RHS for Regime 2				
Constant	4.779037742	.73941666	6.463	.0000	
RM	-.4705202027E-01	.10037772	-.469	.6392	-1.4967335
Sigma(1)	12.37718656	1.3439009	9.210	.0000	
Sigma(0)	5.830798306	.21854798	26.680	.0000	

หลักทรัพย์ของบริษัท ควอลิตี้เฮาส์ จำกัด (มหาชน)

```
+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary    least squares regression    Weighting variable = none     |
| Dep. var. = RQH      Mean=   10.47542829    , S.D.=   13.99056257     |
| Model size: Observations =     132, Parameters =   2, Deg.Fr.=    130 |
| Residuals:  Sum of squares= 20460.08050     , Std.Dev.=     12.54533 |
| Fit:        R-squared=  .202068, Adjusted R-squared =          .19593 |
| Model test: F[  1,    130] =   32.92,    Prob value =          .00000 |
| Diagnostic: Log-L =   -520.1662, Restricted(b=0) Log-L =    -535.0645 |
|             LogAmemiyaPrCrt.=    5.074, Akaike Info. Crt.=      7.912 |
| OLS estimates of equation 1                                           |
+-----------------------------------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	7.985846868	1.1955352	6.680	.0000	
RM	.9354433827	.18291870	5.114	.0000	2.6613919

```
+-----------------------------------------------------------------------+
| Switching Regressions                                                 |
| Ordinary    least squares regression    Weighting variable = none     |
| Dep. var. = RQH      Mean=  -7.836947351    , S.D.=   6.307337547     |
| Model size: Observations =     128, Parameters =   2, Deg.Fr.=    126 |
| Residuals:  Sum of squares= 3974.636577     , Std.Dev.=      5.61647 |
| Fit:        R-squared=  .213314, Adjusted R-squared =          .20707 |
| Model test: F[  1,    126] =   34.17,    Prob value =          .00000 |
| Diagnostic: Log-L =   -401.5063, Restricted(b=0) Log-L =    -416.8615 |
|             LogAmemiyaPrCrt.=    3.467, Akaike Info. Crt.=      6.305 |
| OLS estimates of equation 0                                           |
+-----------------------------------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-4.580584252	.54618114	-8.387	.0000	
RM	1.279041886	.89456638E-01	14.298	.0000	-2.5459394

Normal exit from iterations. Exit status=0.

```
+--------------------------------------------+
| Switching Regressions                      |
| Maximum Likelihood Estimates               |
| Dependent variable                  RQH    |
| Weighting variable                  ONE    |
| Number of observations              260    |
| Iterations completed                 13    |
| Log likelihood function       -1136.865    |
| Sample separation variable is I            |
| RQH      is the minimum  of y*(1) and y*(0) |
+--------------------------------------------+
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
RHS for Regime 1					
Constant	9.928517581	1.2790787	7.762	.0000	
RM	3.320211909	.39973098	8.306	.0000	2.6613919
RHS for Regime 2					
Constant	10.15585765	1.4919555	6.807	.0000	
RM	.9528171076	.17908688	5.320	.0000	-2.5459394
Sigma(1)	15.48514142	1.2770172	12.126	.0000	
Sigma(0)	11.43003117	.76057206	15.028	.0000	

หลักทรัพย์ของบริษัท แสนสิริ จำกัด (มหาชน)

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RSIRI    Mean=   9.140342767    , S.D.=   14.55627458
Model size: Observations =    140, Parameters =   2, Deg.Fr.=    138
Residuals:  Sum of squares= 27593.38515    , Std.Dev.=      14.14044
Fit:        R-squared=  .063108, Adjusted R-squared =         .05632
Model test: F[  1,    138] =    9.30,    Prob value =         .00275
Diagnostic: Log-L =   -568.5096, Restricted(b=0) Log-L =    -573.0727
            LogAmemiyaPrCrt.=    5.312, Akaike Info. Crt.=      8.150
OLS estimates of equation 1
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	7.533473198	1.2326528	6.112	.0000	
RM	1.113894319	.20934869	5.321	.0000	1.4425691

```
Switching Regressions
Ordinary    least squares regression    Weighting variable = none
Dep. var. = RSIRI    Mean=  -8.544801693    , S.D.=   9.464902216
Model size: Observations =    120, Parameters =   2, Deg.Fr.=    118
Residuals:  Sum of squares= 9589.868694    , Std.Dev.=       9.01499
Fit:        R-squared=  .100433, Adjusted R-squared =         .09281
Model test: F[  1,    118] =   13.17,    Prob value =         .00042
Diagnostic: Log-L =   -433.1309, Restricted(b=0) Log-L =    -439.4814
            LogAmemiyaPrCrt.=    4.414, Akaike Info. Crt.=      7.252
OLS estimates of equation 0
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
Constant	-7.417848185	.84299535	-8.799	.0000	
RM	.7660436078	.12421076	6.167	.0000	-1.4711349

Normal exit from iterations. Exit status=0.

```
Switching Regressions
Maximum Likelihood Estimates
Dependent variable                    RSIRI
Weighting variable                      ONE
Number of observations                  260
Iterations completed                     13
Log likelihood function           -1212.134
Sample separation variable is I
RSIRI    is the minimum  of y*(1) and y*(0)
```

Variable	Coefficient	Standard Error	b/St.Er.	P[|Z|>z]	Mean of X
	RHS for Regime 1				
Constant	12.47230695	1.9577677	6.371	.0000	
RM	2.211111285	.31731687	6.968	.0000	1.4425691
	RHS for Regime 2				
Constant	10.65401563	1.9202869	5.548	.0000	
RM	.5173110146	.26169628	1.977	.0048	-1.4711349
Sigma(1)	22.70350576	1.9013172	11.941	.0000	
Sigma(0)	13.05030684	.85654156	15.236	.0000	

ประวัติผู้เขียน

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วัน เดือน ปี เกิด	11 มีนาคม 2523
ประวัติการศึกษา	สำเร็จการศึกษามัธยมศึกษาตอนปลาย โรงเรียนปรินส์รอยแยลส์วิทยาลัย ปีการศึกษา 2540 สำเร็จการศึกษาปริญญาวิศวกรรมศาสตรบัณฑิต สาขาวิชาอุตสาหการ มหาวิทยาลัยเชียงใหม่ ปีการศึกษา 2544