



อิชสิทธิ์มหาวิทยาลัยเชียงใหม่

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## ภาคผนวก ก

ตารางภาคผนวก ก ผลการทดสอบ Unit Root ของตัวแปรทั้งหมดที่ทำการศึกษาด้วยวิธีการ

Augmented Dickey - Fuller test

### 1) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหลักทรัพย์ SET INDEX

#### 1.1) Level without trend and intercept

Null Hypothesis: RM has a unit root

Exogenous: None

Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.68698	0.0000
Test critical values:		
1% level	-2.566739	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RM)

Method: Least Squares

Date: 06/24/10 Time: 11:23

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM(-1)	-0.940136	0.039690	-23.68698	0.0000
D(RM(-1))	-0.080594	0.027728	-2.906568	0.0037
R-squared	0.513744	Mean dependent var	-0.002510	
Adjusted R-squared	0.513370	S.D. dependent var	2.177322	
S.E. of regression	1.518876	Akaike info criterion	3.675353	
Sum squared resid	2999.079	Schwarz criterion	3.683297	
Log likelihood	-2390.655	Hannan-Quinn criter.	3.678333	
Durbin-Watson stat	2.002570			

ที่มา : จากการคำนวณ

### 1.2) Level with trend and intercept

Null Hypothesis: RM has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.66887	0.0000
Test critical values:		
1% level	-3.965109	
5% level	-3.413266	
10% level	-3.128657	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RM)

Method: Least Squares

Date: 06/24/10 Time: 11:22

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM(-1)	-0.940211	0.039724	-23.66887	0.0000
D(RM(-1))	-0.080552	0.027751	-2.902657	0.0038
C	0.000642	0.084397	0.007609	0.9939
@TREND(1)	7.73E-06	0.000112	0.068963	0.9450
R-squared	0.513752	Mean dependent var	-0.002510	
Adjusted R-squared	0.512629	S.D. dependent var	2.177322	
S.E. of regression	1.520032	Akaike info criterion	3.678407	
Sum squared resid	2999.026	Schwarz criterion	3.694296	
Log likelihood	-2390.643	Hannan-Quinn criter.	3.684368	
F-statistic	457.1406	Durbin-Watson stat	2.002538	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 1.3) Level with intercept

Null Hypothesis: RM has a unit root  
 Exogenous: Constant  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.67825	0.0000
Test critical values:		
1% level	-3.435161	
5% level	-2.863552	
10% level	-2.567891	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(RM)

Method: Least Squares

Date: 06/24/10 Time: 11:20

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM(-1)	-0.940187	0.039707	-23.67825	0.0000
D(RM(-1))	-0.080566	0.027740	-2.904353	0.0037
C	0.005686	0.042112	0.135011	0.8926
R-squared	0.513751	Mean dependent var	-0.002510	
Adjusted R-squared	0.513002	S.D. dependent var	2.177322	
S.E. of regression	1.519450	Akaike info criterion	3.676875	
Sum squared resid	2999.037	Schwarz criterion	3.688791	
Log likelihood	-2390.646	Hannan-Quinn criter.	3.681346	
F-statistic	686.2343	Durbin-Watson stat	2.002551	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

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## 2) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหักทรัพย์BANPU

### 2.1) Level without trend and intercept

Null Hypothesis: R1 has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-33.68188	0.0000
Test critical values:		
1% level	-2.566738	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R1)

Method: Least Squares

Date: 06/24/10 Time: 11:27

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R1(-1)	-0.933167	0.027705	-33.68188	0.0000
R-squared	0.465619	Mean dependent var	-0.004571	
Adjusted R-squared	0.465619	S.D. dependent var	3.632728	
S.E. of regression	2.655573	Akaike info criterion	4.791965	
Sum squared resid	9181.792	Schwarz criterion	4.795935	
Log likelihood	-3120.965	Hannan-Quinn criter.	4.793454	
Durbin-Watson stat	2.004059			

ที่มา : จากการคำนวณ

## 2.2) Level with trend and intercept

Null Hypothesis: R1 has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-33.70423	0.0000
Test critical values:		
1% level	-3.965104	
5% level	-3.413264	
10% level	-3.128656	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R1)

Method: Least Squares

Date: 06/24/10 Time: 11:26

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R1(-1)	-0.934701	0.027732	-33.70423	0.0000
C	0.046457	0.147238	0.315522	0.7524
@TREND(1)	7.20E-05	0.000196	0.368243	0.7128
R-squared	0.466336	Mean dependent var	-0.004571	
Adjusted R-squared	0.465515	S.D. dependent var	3.632728	
S.E. of regression	2.655833	Akaike info criterion	4.793694	
Sum squared resid	9169.485	Schwarz criterion	4.805602	
Log likelihood	-3120.091	Hannan-Quinn criter.	4.798161	
F-statistic	567.9938	Durbin-Watson stat	2.003510	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 2.3) Level with intercept

Null Hypothesis: R1 has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-33.71361	0.0000
Test critical values:		
1% level	-3.435157	
5% level	-2.863550	
10% level	-2.567890	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R1)

Method: Least Squares

Date: 06/24/10 Time: 11:25

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R1(-1)	-0.934556	0.027720	-33.71361	0.0000
C	0.093410	0.073608	1.269020	0.2047
R-squared	0.466280	Mean dependent var	-0.004571	
Adjusted R-squared	0.465870	S.D. dependent var	3.632728	
S.E. of regression	2.654951	Akaike info criterion	4.792263	
Sum squared resid	9170.441	Schwarz criterion	4.800202	
Log likelihood	-3120.159	Hannan-Quinn criter.	4.795241	
F-statistic	1136.607	Durbin-Watson stat	2.003607	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 3) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหลักทรัพย์IRPC

#### 3.1) Level without trend and intercept

Null Hypothesis: R2 has a unit root

Exogenous: None

Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-24.11414	0.0000
Test critical values:		
1% level	-2.566739	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R2)

Method: Least Squares

Date: 06/24/10 Time: 11:29

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R2(-1)	-0.967037	0.040102	-24.11414	0.0000
D(R2(-1))	-0.076700	0.027654	-2.773588	0.0056
R-squared	0.525506	Mean dependent var	-0.005475	
Adjusted R-squared	0.525141	S.D. dependent var	3.915781	
S.E. of regression	2.698364	Akaike info criterion	4.824703	
Sum squared resid	9465.519	Schwarz criterion	4.832648	
Log likelihood	-3138.882	Hannan-Quinn criter.	4.827684	
Durbin-Watson stat	1.996861			

ที่มา : จากการคำนวณ

### 3.2) Level with trend and intercept

Null Hypothesis: R2 has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-24.10392	0.0000
Test critical values:		
1% level	-3.965109	
5% level	-3.413266	
10% level	-3.128657	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R2)

Method: Least Squares

Date: 06/24/10 Time: 11:29

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R2(-1)	-0.967439	0.040136	-24.10392	0.0000
D(R2(-1))	-0.076525	0.027674	-2.765245	0.0058
C	-0.067302	0.149945	-0.448841	0.6536
@TREND(1)	4.74E-05	0.000199	0.238254	0.8117
R-squared	0.525613	Mean dependent var	-0.005475	
Adjusted R-squared	0.524517	S.D. dependent var	3.915781	
S.E. of regression	2.700138	Akaike info criterion	4.827550	
Sum squared resid	9463.386	Schwarz criterion	4.843438	
Log likelihood	-3138.735	Hannan-Quinn criter.	4.833511	
F-statistic	479.3881	Durbin-Watson stat	1.996854	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

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### 3.3) Level with intercept

Null Hypothesis: R2 has a unit root  
 Exogenous: Constant  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-24.11157	0.0000
Test critical values:		
1% level	-3.435161	
5% level	-2.863552	
10% level	-2.567891	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R2)

Method: Least Squares

Date: 06/24/10 Time: 11:28

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R2(-1)	-0.967320	0.040119	-24.11157	0.0000
D(R2(-1))	-0.076579	0.027663	-2.768259	0.0057
C	-0.036344	0.074812	-0.485812	0.6272
R-squared	0.525593	Mean dependent var	-0.005475	
Adjusted R-squared	0.524862	S.D. dependent var	3.915781	
S.E. of regression	2.699157	Akaike info criterion	4.826058	
Sum squared resid	9463.800	Schwarz criterion	4.837974	
Log likelihood	-3138.764	Hannan-Quinn criter.	4.830528	
F-statistic	719.5763	Durbin-Watson stat	1.996899	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

#### 4) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหลักทรัพย์PTT

##### 4.1) Level without trend and intercept

Null Hypothesis: R3 has a unit root

Exogenous: None

Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.74871	0.0000
Test critical values:		
1% level	-2.566739	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R3)

Method: Least Squares

Date: 06/24/10 Time: 11:32

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R3(-1)	-0.940462	0.039601	-23.74871	0.0000
D(R3(-1))	-0.078437	0.027701	-2.831506	0.0047
R-squared	0.512856	Mean dependent var	-0.003300	
Adjusted R-squared	0.512482	S.D. dependent var	3.376503	
S.E. of regression	2.357559	Akaike info criterion	4.554665	
Sum squared resid	7225.509	Schwarz criterion	4.562610	
Log likelihood	-2963.087	Hannan-Quinn criter.	4.557646	
Durbin-Watson stat	1.995206			

ที่มา : จากการคำนวณ

#### 4.2) Level with trend and intercept

Null Hypothesis: R3 has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.73710	0.0000
Test critical values:		
1% level	-3.965109	
5% level	-3.413266	
10% level	-3.128657	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R3)

Method: Least Squares

Date: 06/24/10 Time: 11:31

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R3(-1)	-0.940782	0.039633	-23.73710	0.0000
D(R3(-1))	-0.078291	0.027722	-2.824121	0.0048
C	0.062639	0.131008	0.478131	0.6326
@TREND(1)	-7.85E-05	0.000174	-0.451319	0.6518
R-squared	0.512944	Mean dependent var	-0.003300	
Adjusted R-squared	0.511819	S.D. dependent var	3.376503	
S.E. of regression	2.359162	Akaike info criterion	4.557557	
Sum squared resid	7224.206	Schwarz criterion	4.573446	
Log likelihood	-2962.970	Hannan-Quinn criter.	4.563518	
F-statistic	455.6642	Durbin-Watson stat	1.995224	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 4.3) Level with intercept

Null Hypothesis: R3 has a unit root  
 Exogenous: Constant  
 Lag Length: 1 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-23.74039	0.0000
Test critical values:		
1% level	-3.435161	
5% level	-2.863552	
10% level	-2.567891	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R3)

Method: Least Squares

Date: 06/24/10 Time: 11:30

Sample (adjusted): 3 1304

Included observations: 1302 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R3(-1)	-0.940533	0.039617	-23.74039	0.0000
D(R3(-1))	-0.078400	0.027713	-2.829020	0.0047
C	0.011403	0.065364	0.174451	0.8615
R-squared	0.512868	Mean dependent var	-0.003300	
Adjusted R-squared	0.512118	S.D. dependent var	3.376503	
S.E. of regression	2.358439	Akaike info criterion	4.556178	
Sum squared resid	7225.340	Schwarz criterion	4.568094	
Log likelihood	-2963.072	Hannan-Quinn criter.	4.560649	
F-statistic	683.8137	Durbin-Watson stat	1.995188	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

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## 5) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหลักทรัพย์ PTTEP

### 5.1) Level without trend and intercept

Null Hypothesis: R4 has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-38.28888	0.0000
Test critical values:		
1% level	-2.566738	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R4)

Method: Least Squares

Date: 06/24/10 Time: 11:35

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R4(-1)	-1.059987	0.027684	-38.28888	0.0000
R-squared	0.529630	Mean dependent var	-0.003207	
Adjusted R-squared	0.529630	S.D. dependent var	3.711768	
S.E. of regression	2.545660	Akaike info criterion	4.707424	
Sum squared resid	8437.464	Schwarz criterion	4.711394	
Log likelihood	-3065.887	Hannan-Quinn criter.	4.708914	
Durbin-Watson stat	1.993340			

ที่มา : จากการคำนวณ

### 5.2) Level with trend and intercept

Null Hypothesis: R4 has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-38.30125	0.0000
Test critical values:		
1% level	-3.965104	
5% level	-3.413264	
10% level	-3.128656	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R4)

Method: Least Squares

Date: 06/24/10 Time: 11:34

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R4(-1)	-1.061071	0.027703	-38.30125	0.0000
C	0.167099	0.141217	1.183273	0.2369
@TREND(1)	-0.000162	0.000188	-0.861409	0.3892
R-squared	0.530175	Mean dependent var	-0.003207	
Adjusted R-squared	0.529452	S.D. dependent var	3.711768	
S.E. of regression	2.546142	Akaike info criterion	4.709335	
Sum squared resid	8427.692	Schwarz criterion	4.721244	
Log likelihood	-3065.132	Hannan-Quinn criter.	4.713803	
F-statistic	733.4944	Durbin-Watson stat	1.993394	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 5.3) Level with intercept

Null Hypothesis: R4 has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-38.29540	0.0000
Test critical values:		
1% level	-3.435157	
5% level	-2.863550	
10% level	-2.567890	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R4)

Method: Least Squares

Date: 06/24/10 Time: 11:33

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R4(-1)	-1.060570	0.027694	-38.29540	0.0000
C	0.061724	0.070549	0.874909	0.3818
R-squared	0.529907	Mean dependent var	-0.003207	
Adjusted R-squared	0.529546	S.D. dependent var	3.711768	
S.E. of regression	2.545890	Akaike info criterion	4.708371	
Sum squared resid	8432.503	Schwarz criterion	4.716310	
Log likelihood	-3065.504	Hannan-Quinn criter.	4.711350	
F-statistic	1466.538	Durbin-Watson stat	1.993299	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

## ๖) ผลการทดสอบ Unit Root อัตราผลตอบแทนของหลักทรัพย์TOP

### 6.1) Level without trend and intercept

Null Hypothesis: R5 has a unit root

Exogenous: None

Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-36.15507	0.0000
Test critical values:		
1% level	-2.566738	
5% level	-1.941067	
10% level	-1.616536	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R5)

Method: Least Squares

Date: 06/24/10 Time: 11:37

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R5(-1)	-1.003834	0.027765	-36.15507	0.0000
R-squared	0.500993	Mean dependent var	-0.005045	
Adjusted R-squared	0.500993	S.D. dependent var	3.652934	
S.E. of regression	2.580447	Akaike info criterion	4.734570	
Sum squared resid	8669.636	Schwarz criterion	4.738539	
Log likelihood	-3083.572	Hannan-Quinn criter.	4.736059	
Durbin-Watson stat	1.995907			

ที่มา : จากการคำนวณ

### 6.2) Level with trend and intercept

Null Hypothesis: R5 has a unit root  
 Exogenous: Constant, Linear Trend  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-36.13200	0.0000
Test critical values:		
1% level	-3.965104	
5% level	-3.413264	
10% level	-3.128656	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R5)

Method: Least Squares

Date: 06/24/10 Time: 11:36

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R5(-1)	-1.003934	0.027785	-36.13200	0.0000
C	0.005284	0.143155	0.036911	0.9706
@TREND(1)	-4.58E-05	0.000190	-0.240988	0.8096
R-squared	0.501061	Mean dependent var	-0.005045	
Adjusted R-squared	0.500293	S.D. dependent var	3.652934	
S.E. of regression	2.582256	Akaike info criterion	4.737504	
Sum squared resid	8668.461	Schwarz criterion	4.749413	
Log likelihood	-3083.484	Hannan-Quinn criter.	4.741972	
F-statistic	652.7646	Durbin-Watson stat	1.995969	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

### 6.3) Level with intercept

Null Hypothesis: R5 has a unit root  
 Exogenous: Constant  
 Lag Length: 0 (Automatic based on SIC, MAXLAG=22)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-36.14439	0.0000
Test critical values:		
1% level	-3.435157	
5% level	-2.863550	
10% level	-2.567890	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(R5)

Method: Least Squares

Date: 06/24/10 Time: 11:36

Sample (adjusted): 2 1304

Included observations: 1303 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
R5(-1)	-1.003906	0.027775	-36.14439	0.0000
C	-0.024598	0.071513	-0.343970	0.7309
R-squared	0.501039	Mean dependent var	-0.005045	
Adjusted R-squared	0.500655	S.D. dependent var	3.652934	
S.E. of regression	2.581321	Akaike info criterion	4.736014	
Sum squared resid	8668.848	Schwarz criterion	4.743953	
Log likelihood	-3083.513	Hannan-Quinn criter.	4.738992	
F-statistic	1306.417	Durbin-Watson stat	1.995938	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

## ภาคผนวก ข

ตารางภาคผนวก ข ผลการทดสอบ Quantile Regression ของตัวแปรทั้งหมดที่ทำการศึกษาด้วย  
วิธีการ Quantile Regression

### 1) ผลการทดสอบ Quantile Regression ของหลักทรัพย์BANPU

Dependent Variable: R1  
Method: Quantile Regression (tau = 0.1)  
Date: 06/24/10 Time: 15:24  
Sample (adjusted): 1 1304  
Included observations: 1304 after adjustments  
Huber Sandwich Standard Errors & Covariance  
Sparsity method: Kernel (Epanechnikov) using residuals  
Bandwidth method: Hall-Sheather, bw=0.03167  
Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.337091	0.036632	36.50111	0.0000
C	-1.911512	0.081896	-23.34079	0.0000
Pseudo R-squared	0.347911	Mean dependent var		0.100194
Adjusted R-squared	0.347410	S.D. dependent var		2.658590
S.E. of regression	2.726096	Objective		411.6140
Quantile dependent var	-2.715099	Restr. objective		631.2236
Sparsity	9.805497	Quasi-LR statistic		497.7019
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

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Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.2)  
 Date: 06/24/10 Time: 15:26  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.225678	0.055042	22.26824	0.0000
C	-1.165106	0.064690	-18.01052	0.0000
Pseudo R-squared	0.314299	Mean dependent var	0.100194	
Adjusted R-squared	0.313773	S.D. dependent var	2.658590	
S.E. of regression	2.232807	Objective	616.5056	
Quantile dependent var	-1.418463	Restr. objective	899.0883	
Sparsity	5.693794	Quasi-LR statistic	620.3744	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.3)  
 Date: 06/25/10 Time: 16:56  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.176755	0.051564	22.82143	0.0000
C	-0.624538	0.055366	-11.28025	0.0000
Pseudo R-squared	0.290866	Mean dependent var	0.100194	
Adjusted R-squared	0.290321	S.D. dependent var	2.658590	
S.E. of regression	1.982543	Objective	742.4858	
Quantile dependent var	-0.711747	Restr. objective	1047.031	
Sparsity	4.311714	Quasi-LR statistic	672.6872	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.4)  
 Date: 06/24/10 Time: 15:27  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.172181	0.051374	22.81664	0.0000
C	-0.246706	0.039929	-6.178582	0.0000
Pseudo R-squared	0.275876	Mean dependent var	0.100194	
Adjusted R-squared	0.275320	S.D. dependent var	2.658590	
S.E. of regression	1.879576	Objective	810.9534	
Quantile dependent var	0.000000	Restr. objective	1119.910	
Sparsity	2.943232	Quasi-LR statistic	874.7667	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.6)  
 Date: 06/24/10 Time: 15:31  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.180193	0.045966	25.67535	0.0000
C	0.241003	0.042762	5.635851	0.0000
Pseudo R-squared	0.262752	Mean dependent var	0.100194	
Adjusted R-squared	0.262186	S.D. dependent var	2.658590	
S.E. of regression	1.853882	Objective	836.8409	
Quantile dependent var	0.508907	Restr. objective	1135.087	
Sparsity	3.142264	Quasi-LR statistic	790.9542	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.7)  
 Date: 06/24/10 Time: 15:31  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.219481	0.049778	24.49854	0.0000
C	0.697499	0.061510	11.33969	0.0000
Pseudo R-squared	0.253535	Mean dependent var	0.100194	
Adjusted R-squared	0.252961	S.D. dependent var	2.658590	
S.E. of regression	1.941991	Objective	787.8644	
Quantile dependent var	0.896867	Restr. objective	1055.460	
Sparsity	4.801391	Quasi-LR statistic	530.7898	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.8)  
 Date: 06/24/10 Time: 15:32  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.235251	0.060607	20.38140	0.0000
C	1.237912	0.081546	15.18050	0.0000
Pseudo R-squared	0.251427	Mean dependent var	0.100194	
Adjusted R-squared	0.250852	S.D. dependent var	2.658590	
S.E. of regression	2.171944	Objective	677.6413	
Quantile dependent var	1.709443	Restr. objective	905.2436	
Sparsity	7.324781	Quasi-LR statistic	388.4114	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R1  
 Method: Quantile Regression (tau = 0.9)  
 Date: 06/25/10 Time: 14:21  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.03167  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.157110	0.084131	13.75362	0.0000
C	2.207938	0.105325	20.96309	0.0000
Pseudo R-squared	0.251301	Mean dependent var		0.100194
Adjusted R-squared	0.250726	S.D. dependent var		2.658590
S.E. of regression	2.811928	Objective		466.0779
Quantile dependent var	3.053672	Restr. objective		622.5173
Sparsity	12.67641	Quasi-LR statistic		274.2443
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

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## 2) ผลการทดสอบ Quantile Regression ของหลักทรัพย์IRPC

Dependent Variable: R2

Method: Quantile Regression (tau = 0.1)

Date: 06/24/10 Time: 15:33

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.03167

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.185029	0.047118	25.15024	0.0000
C	-1.927961	0.086474	-22.29537	0.0000
Pseudo R-squared	0.303703	Mean dependent var	-0.030489	
Adjusted R-squared	0.303168	S.D. dependent var	2.713778	
S.E. of regression	2.745409	Objective	421.4344	
Quantile dependent var	-2.652675	Restr. objective	605.2507	
Sparsity	9.381646	Quasi-LR statistic	435.4040	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2

Method: Quantile Regression (tau = 0.2)

Date: 06/24/10 Time: 15:34

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.052332

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.105601	0.023320	47.40956	0.0000
C	-1.268875	0.057064	-22.23595	0.0000
Pseudo R-squared	0.292875	Mean dependent var	-0.030489	
Adjusted R-squared	0.292332	S.D. dependent var	2.713778	
S.E. of regression	2.346059	Objective	617.9737	
Quantile dependent var	-1.652930	Restr. objective	873.9241	
Sparsity	5.029234	Quasi-LR statistic	636.1564	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.3)  
 Date: 06/24/10 Time: 15:34  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.080358	0.040823	26.46417	0.0000
C	-0.792003	0.058404	-13.56079	0.0000
Pseudo R-squared	0.281932	Mean dependent var	-0.030489	
Adjusted R-squared	0.281380	S.D. dependent var	2.713778	
S.E. of regression	2.137815	Objective	746.5932	
Quantile dependent var	-0.865806	Restr. objective	1039.724	
Sparsity	4.375641	Quasi-LR statistic	638.0152	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.4)  
 Date: 06/24/10 Time: 15:35  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.035348	0.038610	26.81562	0.0000
C	-0.385834	0.043057	-8.960950	0.0000
Pseudo R-squared	0.277455	Mean dependent var	-0.030489	
Adjusted R-squared	0.276900	S.D. dependent var	2.713778	
S.E. of regression	2.038233	Objective	816.2052	
Quantile dependent var	-0.498754	Restr. objective	1129.626	
Sparsity	3.118965	Quasi-LR statistic	837.4055	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.6)  
 Date: 06/24/10 Time: 15:36  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.002673	0.051737	19.38005	0.0000
C	0.090231	0.037123	2.430577	0.0152
Pseudo R-squared	0.261810	Mean dependent var	-0.030489	
Adjusted R-squared	0.261243	S.D. dependent var	2.713778	
S.E. of regression	2.019529	Objective	834.5535	
Quantile dependent var	0.000000	Restr. objective	1130.540	
Sparsity	2.731925	Quasi-LR statistic	902.8639	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.7)  
 Date: 06/24/10 Time: 15:37  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.034095	0.055338	18.68705	0.0000
C	0.436422	0.047393	9.208658	0.0000
Pseudo R-squared	0.255411	Mean dependent var	-0.030489	
Adjusted R-squared	0.254840	S.D. dependent var	2.713778	
S.E. of regression	2.063703	Objective	795.7750	
Quantile dependent var	0.744605	Restr. objective	1068.745	
Sparsity	3.730699	Quasi-LR statistic	696.8430	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.8)  
 Date: 06/24/10 Time: 16:10  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.043005	0.061980	16.82804	0.0000
C	0.947254	0.070458	13.44420	0.0000
Pseudo R-squared	0.240018	Mean dependent var	-0.030489	
Adjusted R-squared	0.239434	S.D. dependent var	2.713778	
S.E. of regression	2.235641	Objective	702.5002	
Quantile dependent var	1.515181	Restr. objective	924.3642	
Sparsity	6.234882	Quasi-LR statistic	444.8038	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R2  
 Method: Quantile Regression (tau = 0.9)  
 Date: 06/24/10 Time: 16:11  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.03167  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.256016	0.079952	15.70955	0.0000
C	2.055187	0.142433	14.42912	0.0000
Pseudo R-squared	0.208520	Mean dependent var	-0.030489	
Adjusted R-squared	0.207912	S.D. dependent var	2.713778	
S.E. of regression	2.890835	Objective	514.0476	
Quantile dependent var	2.765153	Restr. objective	649.4766	
Sparsity	16.04398	Quasi-LR statistic	187.5801	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

### 3) ผลการทดสอบ Quantile Regression ของหลักทรัพย์ PTT

Dependent Variable: R3

Method: Quantile Regression (tau = 0.1)

Date: 06/24/10 Time: 16:11

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.03167

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.383409	0.035425	39.05124	0.0000
C	-1.315473	0.050868	-25.86065	0.0000
Pseudo R-squared	0.556447	Mean dependent var		0.012096
Adjusted R-squared	0.556106	S.D. dependent var		2.362774
S.E. of regression	1.710513	Objective		244.3687
Quantile dependent var	-2.553330	Restr. objective		550.9340
Sparsity	5.962544	Quasi-LR statistic		1142.560
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3

Method: Quantile Regression (tau = 0.2)

Date: 06/24/10 Time: 16:12

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.052332

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.352261	0.037301	36.25275	0.0000
C	-0.821328	0.042515	-19.31870	0.0000
Pseudo R-squared	0.529792	Mean dependent var		0.012096
Adjusted R-squared	0.529430	S.D. dependent var		2.362774
S.E. of regression	1.366532	Objective		379.8421
Quantile dependent var	-1.587335	Restr. objective		807.8164
Sparsity	3.838124	Quasi-LR statistic		1393.827
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3  
 Method: Quantile Regression (tau = 0.3)  
 Date: 06/24/10 Time: 16:13  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.375948	0.041780	32.93342	0.0000
C	-0.464510	0.039354	-11.80337	0.0000
Pseudo R-squared	0.512654	Mean dependent var		0.012096
Adjusted R-squared	0.512280	S.D. dependent var		2.362774
S.E. of regression	1.184985	Objective		464.0830
Quantile dependent var	-0.865806	Restr. objective		952.2669
Sparsity	3.043091	Quasi-LR statistic		1527.845
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3  
 Method: Quantile Regression (tau = 0.4)  
 Date: 06/24/10 Time: 16:13  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.402026	0.039378	35.60467	0.0000
C	-0.198001	0.028563	-6.931978	0.0000
Pseudo R-squared	0.513258	Mean dependent var		0.012096
Adjusted R-squared	0.512884	S.D. dependent var		2.362774
S.E. of regression	1.107792	Objective		507.1457
Quantile dependent var	0.000000	Restr. objective		1041.918
Sparsity	2.105397	Quasi-LR statistic		2116.673
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3

Method: Quantile Regression (tau = 0.6)

Date: 06/24/10 Time: 16:14

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.083612

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.375928	0.030768	44.71878	0.0000
C	0.157555	0.028597	5.509423	0.0000
Pseudo R-squared	0.509373	Mean dependent var		0.012096
Adjusted R-squared	0.508996	S.D. dependent var		2.362774
S.E. of regression	1.099781	Objective		512.3259
Quantile dependent var	0.371058	Restr. objective		1044.226
Sparsity	2.107271	Quasi-LR statistic		2103.433
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3

Method: Quantile Regression (tau = 0.7)

Date: 06/24/10 Time: 16:15

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.070112

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.388926	0.023371	59.42869	0.0000
C	0.428401	0.037747	11.34928	0.0000
Pseudo R-squared	0.504006	Mean dependent var		0.012096
Adjusted R-squared	0.503625	S.D. dependent var		2.362774
S.E. of regression	1.169335	Objective		475.2717
Quantile dependent var	0.851069	Restr. objective		958.2206
Sparsity	2.974078	Quasi-LR statistic		1546.535
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3  
 Method: Quantile Regression (tau = 0.8)  
 Date: 06/24/10 Time: 16:15  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.353593	0.022823	59.30838	0.0000
C	0.765925	0.044645	17.15584	0.0000
Pseudo R-squared	0.509794	Mean dependent var		0.012096
Adjusted R-squared	0.509418	S.D. dependent var		2.362774
S.E. of regression	1.330386	Objective		399.3686
Quantile dependent var	1.612938	Restr. objective		814.6957
Sparsity	3.865760	Quasi-LR statistic		1342.967
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R3  
 Method: Quantile Regression (tau = 0.9)  
 Date: 06/24/10 Time: 16:17  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.03167  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.336691	0.029036	46.03626	0.0000
C	1.298410	0.065815	19.72822	0.0000
Pseudo R-squared	0.513565	Mean dependent var		0.012096
Adjusted R-squared	0.513192	S.D. dependent var		2.362774
S.E. of regression	1.694102	Objective		270.3593
Quantile dependent var	2.649162	Restr. objective		555.7978
Sparsity	7.903926	Quasi-LR statistic		802.5222
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

#### 4) ผลการทดสอบ Quantile Regression ของหลักทรัพย์ PTTEP

Dependent Variable: R4

Method: Quantile Regression (tau = 0.1)

Date: 06/24/10 Time: 16:18

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.03167

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.402682	0.033123	42.34717	0.0000
C	-1.630237	0.068672	-23.73964	0.0000
Pseudo R-squared	0.472275	Mean dependent var		0.058446
Adjusted R-squared	0.471869	S.D. dependent var		2.548655
S.E. of regression	2.225492	Objective		311.0268
Quantile dependent var	-2.702867	Restr. objective		589.3724
Sparsity	7.714193	Quasi-LR statistic		801.8282
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4

Method: Quantile Regression (tau = 0.2)

Date: 06/24/10 Time: 16:19

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.052332

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.347435	0.029982	44.94121	0.0000
C	-1.045887	0.048264	-21.67005	0.0000
Pseudo R-squared	0.436789	Mean dependent var		0.058446
Adjusted R-squared	0.436356	S.D. dependent var		2.548655
S.E. of regression	1.824742	Objective		489.7345
Quantile dependent var	-1.680712	Restr. objective		869.5392
Sparsity	4.357012	Quasi-LR statistic		1089.636
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.3)  
 Date: 06/24/10 Time: 16:19  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.372745	0.046557	29.48537	0.0000
C	-0.700584	0.049086	-14.27255	0.0000
Pseudo R-squared	0.410357	Mean dependent var		0.058446
Adjusted R-squared	0.409904	S.D. dependent var		2.548655
S.E. of regression	1.640064	Objective		608.4619
Quantile dependent var	-0.888895	Restr. objective		1031.916
Sparsity	3.867063	Quasi-LR statistic		1042.882
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.4)  
 Date: 06/24/10 Time: 16:20  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.356448	0.048076	28.21438	0.0000
C	-0.298001	0.039042	-7.632743	0.0000
Pseudo R-squared	0.396067	Mean dependent var		0.058446
Adjusted R-squared	0.395604	S.D. dependent var		2.548655
S.E. of regression	1.499428	Objective		676.7058
Quantile dependent var	-0.322061	Restr. objective		1120.499
Sparsity	2.860680	Quasi-LR statistic		1292.796
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.6)  
 Date: 06/24/10 Time: 16:21  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.324544	0.053030	24.97703	0.0000
C	0.128856	0.037126	3.470765	0.0005
Pseudo R-squared	0.377333	Mean dependent var		0.058446
Adjusted R-squared	0.376854	S.D. dependent var		2.548655
S.E. of regression	1.462419	Objective		702.8878
Quantile dependent var	0.503779	Restr. objective		1128.833
Sparsity	2.732709	Quasi-LR statistic		1298.911
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.7)  
 Date: 06/24/10 Time: 16:21  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.322997	0.067349	19.64379	0.0000
C	0.539528	0.060206	8.961381	0.0000
Pseudo R-squared	0.359872	Mean dependent var		0.058446
Adjusted R-squared	0.359381	S.D. dependent var		2.548655
S.E. of regression	1.540533	Objective		666.7766
Quantile dependent var	0.921666	Restr. objective		1041.631
Sparsity	4.737454	Quasi-LR statistic		753.5776
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.8)  
 Date: 06/24/10 Time: 16:22  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.335209	0.063096	21.16162	0.0000
C	1.076959	0.064804	16.61866	0.0000
Pseudo R-squared	0.359896	Mean dependent var		0.058446
Adjusted R-squared	0.359404	S.D. dependent var		2.548655
S.E. of regression	1.785428	Objective		565.7856
Quantile dependent var	1.724181	Restr. objective		883.8964
Sparsity	5.768011	Quasi-LR statistic		689.3857
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R4  
 Method: Quantile Regression (tau = 0.9)  
 Date: 06/24/10 Time: 16:22  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.03167  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.333718	0.066584	20.03073	0.0000
C	1.996927	0.115887	17.23167	0.0000
Pseudo R-squared	0.364591	Mean dependent var		0.058446
Adjusted R-squared	0.364103	S.D. dependent var		2.548655
S.E. of regression	2.434995	Objective		383.1916
Quantile dependent var	2.915658	Restr. objective		603.0628
Sparsity	13.63367	Quasi-LR statistic		358.3794
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

### 5) ผลการทดสอบ Quantile Regression ของหลักทรัพย์TOP

Dependent Variable: R5

Method: Quantile Regression (tau = 0.1)

Date: 06/24/10 Time: 16:23

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.03167

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.362392	0.031515	43.22973	0.0000
C	-1.710095	0.065916	-25.94360	0.0000
Pseudo R-squared	0.438888	Mean dependent var	-0.023845	
Adjusted R-squared	0.438457	S.D. dependent var	2.579475	
S.E. of regression	2.287594	Objective	339.6637	
Quantile dependent var	-2.695581	Restr. objective	605.3406	
Sparsity	7.648728	Quasi-LR statistic	771.8841	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5

Method: Quantile Regression (tau = 0.2)

Date: 06/24/10 Time: 16:24

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.052332

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.299720	0.034241	37.95795	0.0000
C	-1.050741	0.052776	-19.90945	0.0000
Pseudo R-squared	0.411981	Mean dependent var	-0.023845	
Adjusted R-squared	0.411529	S.D. dependent var	2.579475	
S.E. of regression	1.860296	Objective	512.8609	
Quantile dependent var	-1.634914	Restr. objective	872.1844	
Sparsity	4.723376	Quasi-LR statistic	950.9180	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5  
 Method: Quantile Regression (tau = 0.3)  
 Date: 06/24/10 Time: 16:26  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.070112  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.294222	0.035443	36.51539	0.0000
C	-0.678261	0.044269	-15.32153	0.0000
Pseudo R-squared	0.394214	Mean dependent var	-0.023845	
Adjusted R-squared	0.393748	S.D. dependent var	2.579475	
S.E. of regression	1.685684	Objective	618.7436	
Quantile dependent var	-0.823050	Restr. objective	1021.389	
Sparsity	3.480379	Quasi-LR statistic	1101.810	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5  
 Method: Quantile Regression (tau = 0.4)  
 Date: 06/24/10 Time: 16:26  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.083612  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.321139	0.043047	30.69096	0.0000
C	-0.334608	0.036118	-9.264413	0.0000
Pseudo R-squared	0.387580	Mean dependent var	-0.023845	
Adjusted R-squared	0.387109	S.D. dependent var	2.579475	
S.E. of regression	1.584200	Objective	680.2433	
Quantile dependent var	-0.547947	Restr. objective	1110.746	
Sparsity	2.660182	Quasi-LR statistic	1348.600	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5

Method: Quantile Regression (tau = 0.6)

Date: 06/24/10 Time: 16:27

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.083612

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.307813	0.051573	25.35843	0.0000
C	0.061647	0.034394	1.792369	0.0733
Pseudo R-squared	0.371049	Mean dependent var	-0.023845	
Adjusted R-squared	0.370566	S.D. dependent var	2.579475	
S.E. of regression	1.558760	Objective	697.4266	
Quantile dependent var	0.000000	Restr. objective	1108.873	
Sparsity	2.535061	Quasi-LR statistic	1352.519	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5

Method: Quantile Regression (tau = 0.7)

Date: 06/24/10 Time: 16:28

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Huber Sandwich Standard Errors & Covariance

Sparsity method: Kernel (Epanechnikov) using residuals

Bandwidth method: Hall-Sheather, bw=0.070112

Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.325841	0.049611	26.72457	0.0000
C	0.432992	0.052557	8.238543	0.0000
Pseudo R-squared	0.360426	Mean dependent var	-0.023845	
Adjusted R-squared	0.359935	S.D. dependent var	2.579475	
S.E. of regression	1.623323	Objective	661.9059	
Quantile dependent var	0.809721	Restr. objective	1034.918	
Sparsity	4.120038	Quasi-LR statistic	862.2474	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5  
 Method: Quantile Regression (tau = 0.8)  
 Date: 06/24/10 Time: 16:29  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.052332  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.355002	0.062172	21.79441	0.0000
C	0.990104	0.069970	14.15045	0.0000
Pseudo R-squared	0.361285	Mean dependent var	-0.023845	
Adjusted R-squared	0.360795	S.D. dependent var	2.579475	
S.E. of regression	1.861360	Objective	567.0986	
Quantile dependent var	1.574836	Restr. objective	887.8744	
Sparsity	6.244062	Quasi-LR statistic	642.1617	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

Dependent Variable: R5  
 Method: Quantile Regression (tau = 0.9)  
 Date: 06/24/10 Time: 16:29  
 Sample (adjusted): 1 1304  
 Included observations: 1304 after adjustments  
 Huber Sandwich Standard Errors & Covariance  
 Sparsity method: Kernel (Epanechnikov) using residuals  
 Bandwidth method: Hall-Sheather, bw=0.03167  
 Estimation successfully identifies unique optimal solution

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RM	1.346854	0.064135	21.00036	0.0000
C	1.765656	0.088229	20.01210	0.0000
Pseudo R-squared	0.371634	Mean dependent var	-0.023845	
Adjusted R-squared	0.371151	S.D. dependent var	2.579475	
S.E. of regression	2.378312	Objective	387.9132	
Quantile dependent var	2.739897	Restr. objective	617.3362	
Sparsity	10.44453	Quasi-LR statistic	488.1298	
Prob(Quasi-LR stat)	0.000000			

ที่มา : จากการคำนวณ

## ภาควิชานวัตกรรมและนวัตกรรม

ตารางภาคนวัต ค ผลการทดสอบ Quantile Slope Equality Test Result

ของตัวแปรทั้งหมดที่ทำการศึกษา

### 1) ผลการทดสอบ Quantile Slope Equality Test Result ของหลักทรัพย์BANPU

Quantile Slope Equality Test

Equation: UNTITLED

Specification: R1 C RM

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Wald Test	17.73937	8	0.0233

Restriction Detail:  $b(\tau_h) - b(\tau_k) = 0$

Quantiles	Variable	Restr. Value	Std. Error	Prob.
0.1, 0.2	RM	0.111413	0.041042	0.0066
0.2, 0.3		0.048923	0.036828	0.1840
0.3, 0.4		0.004575	0.032561	0.8883
0.4, 0.5		-0.006041	0.030377	0.8424
0.5, 0.6		-0.001972	0.028655	0.9451
0.6, 0.7		-0.039288	0.030397	0.1962
0.7, 0.8		-0.015770	0.039711	0.6913
0.8, 0.9		0.078141	0.062972	0.2146

ที่มา : จากการคำนวณ

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2) ผลการทดสอบ Quantile Slope Equality Test Result ของหลักทรัพย์IRPC

Quantile Slope Equality Test

Equation: UNTITLED

Specification: R2 C RM

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Wald Test	23.96932	8	0.0023	
Restriction Detail: $b(\tau_h) - b(\tau_k) = 0$				
Quantiles	Variable	Restr. Value	Std. Error	Prob.
0.1, 0.2	RM	0.079428	0.036182	0.0281
0.2, 0.3		0.025243	0.027499	0.3586
0.3, 0.4		0.045010	0.025285	0.0751
0.4, 0.5		0.006676	0.030626	0.8275
0.5, 0.6		0.026000	0.031542	0.4098
0.6, 0.7		-0.031422	0.033927	0.3544
0.7, 0.8		-0.008910	0.040986	0.8279
0.8, 0.9		-0.213011	0.060717	0.0005

ที่มา : จากการคำนวณ

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3) ผลการทดสอบ Quantile Slope Equality Test Result ของหลักทรัพย์ PTT

Quantile Slope Equality Test

Equation: UNTITLED

Specification: R3 C RM

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Wald Test	10.90802	8	0.2070	
Restriction Detail: $b(\tau_h) - b(\tau_k) = 0$				
Quantiles	Variable	Restr. Value	Std. Error	Prob.
0.1, 0.2	RM	0.031149	0.029976	0.2988
0.2, 0.3		-0.023687	0.027642	0.3915
0.3, 0.4		-0.026078	0.025824	0.3126
0.4, 0.5		0.000344	0.022784	0.9879
0.5, 0.6		0.025753	0.018656	0.1675
0.6, 0.7		-0.012998	0.018440	0.4809
0.7, 0.8		0.035333	0.016313	0.0303
0.8, 0.9		0.016902	0.022124	0.4449

ที่มา : จากการคำนวณ

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4) ผลการทดสอบ Quantile Slope Equality Test Result ของหลักทรัพย์ PTTEP

Quantile Slope Equality Test

Equation: UNTITLED

Specification: R4 C RM

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Wald Test	7.138660	8	0.5217	
Restriction Detail: $b(\tau_h) - b(\tau_k) = 0$				
Quantiles	Variable	Restr. Value	Std. Error	Prob.
0.1, 0.2	RM	0.055247	0.026718	0.0387
0.2, 0.3		-0.025310	0.030569	0.4077
0.3, 0.4		0.016297	0.029903	0.5857
0.4, 0.5		0.038044	0.030302	0.2093
0.5, 0.6		-0.006140	0.031671	0.8463
0.6, 0.7		0.001547	0.040315	0.9694
0.7, 0.8		-0.012212	0.045335	0.7876
0.8, 0.9		0.001491	0.054160	0.9780

ที่มา : จากการคำนวณ

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5) ผลการทดสอบ Quantile Slope Equality Test Result ของหลักทรัพย์TOP

Quantile Slope Equality Test

Equation: UNTITLED

Specification: R5 C RM

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.	
Wald Test	7.622638	8	0.4712	
Restriction Detail: $b(\tau_h) - b(\tau_k) = 0$				
Quantiles	Variable	Restr. Value	Std. Error	Prob.
0.1, 0.2	RM	0.062672	0.027132	0.0209
0.2, 0.3		0.005498	0.024212	0.8204
0.3, 0.4		-0.026916	0.025751	0.2959
0.4, 0.5		0.015214	0.029266	0.6032
0.5, 0.6		-0.001889	0.030955	0.9513
0.6, 0.7		-0.018028	0.031988	0.5730
0.7, 0.8		-0.029161	0.040207	0.4683
0.8, 0.9		0.008148	0.052328	0.8763

ที่มา : จากการคำนวณ

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## ภาคผนวก ง

ตารางภาคผนวก ง ตารางแสดงผลการวิเคราะห์การคัดออย่างง่ายโดยวิธีกำลังสองน้อยที่สุด  
(OLS)

- 1) ตารางแสดงผลการทดสอบโดยวิธีกำลังสองน้อยที่สุด (OLS) ของอัตราผลตอบแทนของ  
หลักทรัพย์BANPU

Dependent Variable: R1

Method: Least Squares

Date: 07/28/10 Time: 17:27

Sample (adjusted): 1 1304

Included observations: 1304 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.091651	0.051067	1.794732	0.0729
RM	1.258335	0.033555	37.50099	0.0000
R-squared	0.519260	Mean dependent var	0.100194	
Adjusted R-squared	0.518891	S.D. dependent var	2.658590	
S.E. of regression	1.844053	Akaike info criterion	4.063341	
Sum squared resid	4427.491	Schwarz criterion	4.071275	
Log likelihood	-2647.298	Hannan-Quinn criter.	4.066318	
F-statistic	1406.324	Durbin-Watson stat	1.835235	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

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2) ตารางแสดงผลการทดสอบโดยวิธีกำลังสองน้อยที่สุด (OLS) ของอัตราผลตอบแทนของ  
หลักทรัพย์IRPC

Dependent Variable: R2

Method: Least Squares

Date: 07/28/10 Time: 17:28

Sample: 1 1304

Included observations: 1304

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.038720	0.055109	-0.702617	0.4824
RM	1.212473	0.036210	33.48409	0.0000
R-squared	0.462691	Mean dependent var	-0.030489	
Adjusted R-squared	0.462278	S.D. dependent var	2.713778	
S.E. of regression	1.990001	Akaike info criterion	4.215680	
Sum squared resid	5156.057	Schwarz criterion	4.223615	
Log likelihood	-2746.624	Hannan-Quinn criter.	4.218657	
F-statistic	1121.184	Durbin-Watson stat	2.178915	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

3) ตารางแสดงผลการทดสอบโดยวิธีกำลังสองน้อยที่สุด (OLS) ของอัตราผลตอบแทนของ  
หลักทรัพย์PTT

Dependent Variable: R3

Method: Least Squares

Date: 07/05/10 Time: 15:14

Sample: 1 1304

Included observations: 1304

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.002744	0.030152	0.091019	0.9275
RM	1.377479	0.019812	69.52671	0.0000
R-squared	0.787808	Mean dependent var	0.012096	
Adjusted R-squared	0.787645	S.D. dependent var	2.362774	
S.E. of regression	1.088812	Akaike info criterion	3.009585	
Sum squared resid	1543.537	Schwarz criterion	3.017519	
Log likelihood	-1960.249	Hannan-Quinn criter.	3.012561	
F-statistic	4833.963	Durbin-Watson stat	1.942668	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

4) ตารางแสดงผลการทดสอบโดยวิธีกำลังสองน้อยที่สุด (OLS) ของอัตราผลตอบแทนของ  
หลักทรัพย์PTTEP

Dependent Variable: R4

Method: Least Squares

Date: 07/05/10 Time: 15:12

Sample: 1 1304

Included observations: 1304

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.049124	0.040387	1.216348	0.2241
RM	1.373133	0.026537	51.74415	0.0000
R-squared	0.672820	Mean dependent var	0.058446	
Adjusted R-squared	0.672568	S.D. dependent var	2.548655	
S.E. of regression	1.458382	Akaike info criterion	3.594065	
Sum squared resid	2769.196	Schwarz criterion	3.601999	
Log likelihood	-2341.330	Hannan-Quinn criter.	3.597042	
F-statistic	2677.457	Durbin-Watson stat	1.973026	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ

5) ตารางแสดงผลการทดสอบโดยวิธีกำลังสองน้อยที่สุด (OLS) ของอัตราผลตอบแทนของ  
หลักทรัพย์TOP

Dependent Variable: R5

Method: Least Squares

Date: 07/05/10 Time: 14:53

Sample: 1 1304

Included observations: 1304

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.033026	0.043046	-0.767236	0.4431
RM	1.352389	0.028284	47.81394	0.0000
R-squared	0.637141	Mean dependent var	-0.023845	
Adjusted R-squared	0.636863	S.D. dependent var	2.579475	
S.E. of regression	1.554415	Akaike info criterion	3.721608	
Sum squared resid	3145.898	Schwarz criterion	3.729542	
Log likelihood	-2424.488	Hannan-Quinn criter.	3.724584	
F-statistic	2286.173	Durbin-Watson stat	2.073227	
Prob(F-statistic)	0.000000			

ที่มา : จากการคำนวณ



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