



ลิขสิทธิ์มหาวิทยาลัยเชียงใหม่
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ภาคผนวก ก

ผลการทดสอบ Unit Root Test โดยวิธี Augmented Dickey-Fuller

1) ผลการทดสอบ Unit Root Test ของอัตราแลกเปลี่ยน เบนต์บำบัด

1.1) Level with intercept

Null Hypothesis: D(EJAP) has a unit root

Exogenous: Constant

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-12.02442	0.0000
Test critical values:		
1% level	-3.486064	
5% level	-2.885863	
10% level	-2.579818	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(EJAP,2)

Method: Least Squares

Date: 10/27/09 Time: 22:40

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EJAP(-1))	-1.076689	0.089542	-12.02442	0.0000
C	-0.002061	0.010180	-0.202479	0.8399
R-squared	0.552729	Mean dependent var		0.002101
Adjusted R-squared	0.548907	S.D. dependent var		0.165242
S.E. of regression	0.110982	Akaike info criterion		-1.542230
Sum squared resid	1.441095	Schwarz criterion		-1.495522
Log likelihood	93.76269	Hannan-Quinn criter.		-1.523263
F-statistic	144.5866	Durbin-Watson stat		2.052114
Prob(F-statistic)	0.000000			

1.2) Level with intercept and Trend

Null Hypothesis: D(EJAP) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-11.96441	0.0000
Test critical values:		
1% level	-4.036983	
5% level	-3.448021	
10% level	-3.149135	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(EJAP,2)

Method: Least Squares

Date: 10/27/09 Time: 22:41

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EJAP(-1))	-1.076340	0.089962	-11.96441	0.0000
C	0.000272	0.020841	0.013045	0.9896
@TREND(1999M06)	-3.82E-05	0.000298	-0.128460	0.8980
R-squared	0.552793	Mean dependent var	0.002101	
Adjusted R-squared	0.545083	S.D. dependent var	0.165242	
S.E. of regression	0.111452	Akaike info criterion	-1.525566	
Sum squared resid	1.440890	Schwarz criterion	-1.455504	
Log likelihood	93.77115	Hannan-Quinn criter.	-1.497116	
F-statistic	71.69387	Durbin-Watson stat	2.053198	
Prob(F-statistic)	0.000000			

1.3) Level without intercept and Trend

Null Hypothesis: D(EJAP) has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-12.07365	0.0000
Test critical values:		
1% level	-2.584539	
5% level	-1.943540	
10% level	-1.614941	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(EJAP,2)

Method: Least Squares

Date: 10/27/09 Time: 22:41

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EJAP(-1))	-1.076073	0.089126	-12.07365	0.0000
R-squared	0.552573	Mean dependent var		0.002101
Adjusted R-squared	0.552573	S.D. dependent var		0.165242
S.E. of regression	0.110530	Akaike info criterion		-1.558686
Sum squared resid	1.441599	Schwarz criterion		-1.535332
Log likelihood	93.74184	Hannan-Quinn criter.		-1.549203
Durbin-Watson stat	2.052761			

2) ผลการทดสอบ Unit Root Test ของอัตราแลกเปลี่ยน ที่วนต่อบาท

2.1) Level with intercept

Null Hypothesis: D(ECHI) has a unit root

Exogenous: Constant

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-9.224732	0.0000
Test critical values:		
1% level	-3.486064	
5% level	-2.885863	
10% level	-2.579818	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ECHI,2)

Method: Least Squares

Date: 10/27/09 Time: 22:42

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ECHI)(-1)	-0.844201	0.091515	-9.224732	0.0000
C	-0.000162	0.000333	-0.485994	0.6279
R-squared	0.421066	Mean dependent var	3.69E-05	
Adjusted R-squared	0.416118	S.D. dependent var	0.004743	
S.E. of regression	0.003625	Akaike info criterion	-8.385500	
Sum squared resid	0.001537	Schwarz criterion	-8.338793	
Log likelihood	500.9373	Hannan-Quinn criter.	-8.366534	
F-statistic	85.09568	Durbin-Watson stat	1.986774	
Prob(F-statistic)	0.000000			

2.2) Level with intercept an trend

Null Hypothesis: D(ECHI) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-9.209727	0.0000
Test critical values:		
1% level	-4.036983	
5% level	-3.448021	
10% level	-3.149135	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ECHI,2)

Method: Least Squares

Date: 10/27/09 Time: 22:42

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ECHI(-1))	-0.846498	0.091914	-9.209727	0.0000
C	-0.000466	0.000681	-0.684801	0.4948
@TREND(1999M06)	4.99E-06	9.71E-06	0.513174	0.6088
R-squared	0.422378	Mean dependent var	3.69E-05	
Adjusted R-squared	0.412419	S.D. dependent var	0.004743	
S.E. of regression	0.003636	Akaike info criterion	-8.370961	
Sum squared resid	0.001534	Schwarz criterion	-8.300899	
Log likelihood	501.0722	Hannan-Quinn criter.	-8.342511	
F-statistic	42.41162	Durbin-Watson stat	1.986494	
Prob(F-statistic)	0.000000			

2.3) Level without intercept an trend

Null Hypothesis: D(ECHI) has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-9.242553	0.0000
Test critical values:		
1% level	-2.584539	
5% level	-1.943540	
10% level	-1.614941	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ECHI,2)

Method: Least Squares

Date: 10/27/09 Time: 22:43

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ECHI(-1))	-0.841323	0.091027	-9.242553	0.0000
R-squared	0.419898	Mean dependent var		3.69E-05
Adjusted R-squared	0.419898	S.D. dependent var		0.004743
S.E. of regression	0.003613	Akaike info criterion		-8.400291
Sum squared resid	0.001540	Schwarz criterion		-8.376937
Log likelihood	500.8173	Hannan-Quinn criter.		-8.390807
Durbin-Watson stat	1.988702			

3) ผลการทดสอบ Unit Root Test ของอัตราแลกเปลี่ยน ดอลลาร์สิงคโปร์ต่อบาท

3.1) Level with intercept

Null Hypothesis: D(ESNG) has a unit root

Exogenous: Constant

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-11.51523	0.0000
Test critical values:		
1% level	-3.486064	
5% level	-2.885863	
10% level	-2.579818	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ESNG,2)

Method: Least Squares

Date: 10/27/09 Time: 22:43

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ESNG(-1))	-1.061623	0.092193	-11.51523	0.0000
C	-2.89E-05	8.28E-05	-0.349226	0.7275
R-squared	0.531251	Mean dependent var	5.88E-06	
Adjusted R-squared	0.527245	S.D. dependent var	0.001313	
S.E. of regression	0.000902	Akaike info criterion	-11.16622	
Sum squared resid	9.53E-05	Schwarz criterion	-11.11951	
Log likelihood	666.3900	Hannan-Quinn criter.	-11.14725	
F-statistic	132.6005	Durbin-Watson stat	1.971672	
Prob(F-statistic)	0.000000			

3.2) Level with intercept and trend

Null Hypothesis: D(ESNG) has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-11.50547	0.0000
Test critical values:		
1% level	-4.036983	
5% level	-3.448021	
10% level	-3.149135	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ESNG,2)

Method: Least Squares

Date: 10/27/09 Time: 22:43

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ESNG(-1))	-1.065279	0.092589	-11.50547	0.0000
C	-0.000125	0.000169	-0.740180	0.4607
@TREND(1999M06)	1.58E-06	2.42E-06	0.653276	0.5149
R-squared	0.532969	Mean dependent var	5.88E-06	
Adjusted R-squared	0.524917	S.D. dependent var	0.001313	
S.E. of regression	0.000905	Akaike info criterion	-11.15308	
Sum squared resid	9.49E-05	Schwarz criterion	-11.08302	
Log likelihood	666.6085	Hannan-Quinn criter.	-11.12463	
F-statistic	66.18880	Durbin-Watson stat	1.971333	
Prob(F-statistic)	0.000000			

3.3) Level without intercept and trend

Null Hypothesis: D(ESNG) has a unit root

Exogenous: None

Lag Length: 0 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-11.55322	0.0000
Test critical values:		
1% level	-2.584539	
5% level	-1.943540	
10% level	-1.614941	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ESNG,2)

Method: Least Squares

Date: 10/27/09 Time: 22:43

Sample (adjusted): 1999M08 2009M06

Included observations: 119 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ESNG(-1))	-1.060448	0.091788	-11.55322	0.0000
R-squared	0.530762	Mean dependent var	5.88E-06	
Adjusted R-squared	0.530762	S.D. dependent var	0.001313	
S.E. of regression	0.000899	Akaike info criterion	-11.18198	
Sum squared resid	9.54E-05	Schwarz criterion	-11.15863	
Log likelihood	666.3280	Hannan-Quinn criter.	-11.17250	
Durbin-Watson stat	1.972036			

ภาคผนวก ข

การประมาณค่าพารามิเตอร์จากแบบจำลอง ARIMA-GARCH (1,1)

- 1) ผลการทดสอบ Univariate GARCH ของอัตราแลกเปลี่ยน: สมการค่าเฉลี่ย
 - 1.1) อัตราแลกเปลี่ยน yen ต่อบาท

Dependent Variable: D(EJAP)

Method: Least Squares

Date: 10/27/09 Time: 22:47

Sample (adjusted): 1999M12 2009M06

Included observations: 115 after adjustments

Convergence achieved after 9 iterations

MA Backcast: 1999M07 1999M11

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000888	0.010214	-0.086947	0.9309
AR(5)	-0.415637	0.184605	-2.251495	0.0263
MA(5)	0.459797	0.199438	2.305461	0.0230
R-squared	0.036025	Mean dependent var		0.000435
Adjusted R-squared	0.018812	S.D. dependent var		0.107918
S.E. of regression	0.106898	Akaike info criterion		-1.608140
Sum squared resid	1.279848	Schwarz criterion		-1.536533
Log likelihood	95.46803	Hannan-Quinn criter.		-1.579075
F-statistic	2.092814	Durbin-Watson stat		2.283599
Prob(F-statistic)	0.128137			
Inverted AR Roots	.68-.49i -.84	.68+.49i	-.26+.80i	-.26-.80i
Inverted MA Roots	.69-.50i -.86	.69+.50i	-.26+.81i	-.26-.81i

1.2) อัตราแลกเปลี่ยนหยวนต่อบาท

Dependent Variable: D(ECHI)

Method: Least Squares

Date: 10/27/09 Time: 22:57

Sample (adjusted): 1999M11 2009M06

Included observations: 116 after adjustments

Convergence achieved after 7 iterations

MA Backcast: 1999M07 1999M10

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.000144	0.000316	-0.456893	0.6486
AR(4)	-0.505666	0.186889	-2.705704	0.0079
MA(4)	0.491451	0.203675	2.412919	0.0174
R-squared	0.040399	Mean dependent var	-0.000105	
Adjusted R-squared	0.023415	S.D. dependent var	0.003499	
S.E. of regression	0.003458	Akaike info criterion	-8.470664	
Sum squared resid	0.001351	Schwarz criterion	-8.399450	
Log likelihood	494.2985	Hannan-Quinn criter.	-8.441755	
F-statistic	2.378647	Durbin-Watson stat	1.661378	
Prob(F-statistic)	0.097302			
Inverted AR Roots	.60+.60i	.60+.60i	-.60-.60i	-.60-.60i
Inverted MA Roots	.59+.59i	.59+.59i	-.59-.59i	-.59-.59i

1.3) อัตราแลกเปลี่ยนดอลลาร์สิงคโปร์ต่อบาท

Dependent Variable: D(ESNG)

Method: Least Squares

Date: 10/27/09 Time: 23:01

Sample (adjusted): 1999M10 2009M06

Included observations: 117 after adjustments

Convergence achieved after 11 iterations

MA Backcast: 1999M07 1999M09

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-8.08E-06	8.88E-05	-0.090968	0.9277
AR(3)	-0.605565	0.149361	-4.054369	0.0001
MA(3)	0.807792	0.116116	6.956770	0.0000
R-squared	0.065135	Mean dependent var	2.56E-06	
Adjusted R-squared	0.048734	S.D. dependent var	0.000878	
S.E. of regression	0.000856	Akaike info criterion	-11.26310	
Sum squared resid	8.35E-05	Schwarz criterion	-11.19228	
Log likelihood	661.8915	Hannan-Quinn criter.	-11.23435	
F-statistic	3.971402	Durbin-Watson stat	2.232242	
Prob(F-statistic)	0.021512			
Inverted AR Roots	.42+.73i	.42-.73i	-.85	
Inverted MA Roots	.47+.81i	.47-.81i	-.93	

2) ผลการทดสอบ Univariate GARCH ของอัตราแลกเปลี่ยน: สมการความแปรปรวน
 2.1) อัตราแลกเปลี่ยน yen ต่อบาท

Dependent Variable: D(EJAP)

Method: ML - ARCH (Marquardt) - Normal distribution

Date: 10/27/09 Time: 22:49

Sample (adjusted): 1999M12 2009M06

Included observations: 115 after adjustments

Convergence achieved after 49 iterations

MA Backcast: 1999M07 1999M11

Presample variance: backcast (parameter = 0.7)

GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.006703	0.007469	-0.897382	0.3695
AR(5)	-0.437556	0.121947	-3.588091	0.0003
MA(5)	0.438330	0.156163	2.806870	0.0050
Variance Equation				
C	0.001536	0.000703	2.184498	0.0289
RESID(-1)^2	0.605217	0.195743	3.091895	0.0020
GARCH(-1)	0.345046	0.153532	2.247387	0.0246
R-squared	0.030798	Mean dependent var	0.000435	
Adjusted R-squared	-0.013661	S.D. dependent var	0.107918	
S.E. of regression	0.108653	Akaike info criterion	-1.974056	
Sum squared resid	1.286789	Schwarz criterion	-1.830843	
Log likelihood	119.5082	Hannan-Quinn criter.	-1.915927	
F-statistic	0.692722	Durbin-Watson stat	2.289424	
Prob(F-statistic)	0.630015			
Inverted AR Roots	.69-.50i .85	.69+.50i	-.26+.81i	-.26-.81i
Inverted MA Roots	.69+.50i .85	.69-.50i	-.26-.81i	-.26+.81i

2.2) อัตราแลกเปลี่ยนเยนต่อบาท

Dependent Variable: D(ECHI)
 Method: ML - ARCH (Marquardt) - Normal distribution
 Date: 10/27/09 Time: 22:58
 Sample (adjusted): 1999M11 2009M06
 Included observations: 116 after adjustments
 Convergence achieved after 32 iterations
 MA Backcast: 1999M07 1999M10
 Presample variance: backcast (parameter = 0.7)
 $GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.000125	0.000111	-1.122696	0.2616
AR(4)	-0.880423	0.037891	-23.23554	0.0000
MA(4)	0.933721	0.017416	53.61361	0.0000
Variance Equation				
C	2.09E-05	2.32E-06	9.003799	0.0000
RESID(-1)^2	0.161126	0.046797	3.443099	0.0006
GARCH(-1)	-1.031014	0.020004	-51.53977	0.0000
R-squared	0.054003	Mean dependent var	-0.000105	
Adjusted R-squared	0.011004	S.D. dependent var	0.003499	
S.E. of regression	0.003480	Akaike info criterion	-8.586710	
Sum squared resid	0.001332	Schwarz criterion	-8.444283	
Log likelihood	504.0292	Hannan-Quinn criter.	-8.528893	
F-statistic	1.255898	Durbin-Watson stat	1.568696	
Prob(F-statistic)	0.288237			
Inverted AR Roots	.68-.68i	.68+.68i	-.68+.68i	-.68-.68i
Inverted MA Roots	.70+.70i	.70+.70i	-.70-.70i	-.70-.70i

2.3) อัตราแลกเปลี่ยนดอลลาร์สิงค์โปร์ต่อบาท

Dependent Variable: D(ESNG)
 Method: ML - ARCH (Marquardt) - Normal distribution
 Date: 10/27/09 Time: 23:02
 Sample (adjusted): 1999M10 2009M06
 Included observations: 117 after adjustments
 Convergence achieved after 124 iterations
 MA Backcast: 1999M07 1999M09
 Presample variance: backcast (parameter = 0.7)
 $GARCH = C(4) + C(5)*RESID(-1)^2 + C(6)*GARCH(-1)$

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-2.31E-05	6.09E-05	-0.379357	0.7044
AR(3)	-0.292740	0.215336	-1.359456	0.1740
MA(3)	0.459539	0.208875	2.200070	0.0278
Variance Equation				
C	8.72E-08	5.69E-08	1.533243	0.1252
RESID(-1)^2	0.450085	0.161775	2.782162	0.0054
GARCH(-1)	0.480295	0.170881	2.810691	0.0049
R-squared	0.052029	Mean dependent var	2.56E-06	
Adjusted R-squared	0.009327	S.D. dependent var	0.000878	
S.E. of regression	0.000874	Akaike info criterion	-11.55913	
Sum squared resid	8.47E-05	Schwarz criterion	-11.41748	
Log likelihood	682.2093	Hannan-Quinn criter.	-11.50163	
F-statistic	1.218433	Durbin-Watson stat	2.196474	
Prob(F-statistic)	0.305224			
Inverted AR Roots	.33-.58i	.33+.58i	-.66	
Inverted MA Roots	.39-.67i	.39+.67i	-.77	

ภาคผนวก ค

ผลการทดสอบ ARCH Effect

1) อัตราแลกเปลี่ยน xen ต่อมาท

Heteroskedasticity Test: ARCH

F-statistic	0.048264	Prob. F(1,112)	0.8265
Obs*R-squared	0.049104	Prob. Chi-Square(1)	0.8246

Test Equation:

Dependent Variable: WGT_RESID^2

Method: Least Squares

Date: 10/27/09 Time: 22:51

Sample (adjusted): 2000M01 2009M06

Included observations: 114 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.027114	0.174677	5.880091	0.0000
WGT_RESID^2(-1)	-0.020745	0.094427	-0.219690	0.8265
R-squared	0.000431	Mean dependent var	1.006267	
Adjusted R-squared	-0.008494	S.D. dependent var	1.559218	
S.E. of regression	1.565826	Akaike info criterion	3.752092	
Sum squared resid	274.6028	Schwarz criterion	3.800096	
Log likelihood	-211.8693	Hannan-Quinn criter.	3.771574	
F-statistic	0.048264	Durbin-Watson stat	2.001317	
Prob(F-statistic)	0.826512			

2) อัตราแลกเปลี่ยนหยวนต่อนาท

Heteroskedasticity Test: ARCH

F-statistic	0.371182	Prob. F(1,113)	0.5436
Obs*R-squared	0.376515	Prob. Chi-Square(1)	0.5395

Test Equation:

Dependent Variable: WGT_RESID^2

Method: Least Squares

Date: 10/27/09 Time: 22:59

Sample (adjusted): 1999M12 2009M06

Included observations: 115 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.958757	0.164168	5.840093	0.0000
WGT_RESID^2(-1)	0.057221	0.093920	0.609247	0.5436
R-squared	0.003274	Mean dependent var	1.016919	
Adjusted R-squared	-0.005547	S.D. dependent var	1.428295	
S.E. of regression	1.432251	Akaike info criterion	3.573609	
Sum squared resid	231.8016	Schwarz criterion	3.621347	
Log likelihood	-203.4825	Hannan-Quinn criter.	3.592986	
F-statistic	0.371182	Durbin-Watson stat	1.987759	
Prob(F-statistic)	0.543584			

3) อัตราแลกเปลี่ยนดอลลาร์สิงคโปร์ต่อบาท

Heteroskedasticity Test: ARCH

F-statistic	0.061389	Prob. F(1,114)	0.8048
Obs*R-squared	0.062432	Prob. Chi-Square(1)	0.8027

Test Equation:

Dependent Variable: WGT_RESID^2
 Method: Least Squares
 Date: 10/27/09 Time: 23:02
 Sample (adjusted): 1999M11 2009M06
 Included observations: 116 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.981352	0.184847	5.309010	0.0000
WGT_RESID^2(-1)	0.023188	0.093586	0.247767	0.8048
R-squared	0.000538	Mean dependent var	1.004609	
Adjusted R-squared	-0.008229	S.D. dependent var	1.708061	
S.E. of regression	1.715074	Akaike info criterion	3.933880	
Sum squared resid	335.3286	Schwarz criterion	3.981356	
Log likelihood	-226.1651	Hannan-Quinn criter.	3.953153	
F-statistic	0.061389	Durbin-Watson stat	2.001689	
Prob(F-statistic)	0.804760			

ภาคผนวก ค

ผลการทดสอบความสัมพันธ์ของความผันผวนของอัตราแลกเปลี่ยนกับการส่งออกในแต่ละประเทศ วิธีกำลังสองน้อยที่สุด (OLS)

1) ความผันผวนของอัตราแลกเปลี่ยน yen เยนต่อบาทกับการส่งออกของไทยไปยังญี่ปุ่น

Dependent Variable: GJAP

Method: Least Squares

Date: 10/28/09 Time: 00:34

Sample (adjusted): 9 121

Included observations: 113 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VJAP	14.19237	0.910516	3.819080	0.0002
C	0.310193	0.023349	2.878740	0.0000
R-squared	0.115756	Mean dependent var	0.490979	
Adjusted R-squared	0.107861	S.D. dependent var	9.898724	
S.E. of regression	0.381179	Akaike info criterion	7.448173	
Sum squared resid	5.279337	Schwarz criterion	7.496445	
Log likelihood	13.36768	Hannan-Quinn criter.	7.467761	
F-statistic	14.66186	Durbin-Watson stat	2.095080	
Prob(F-statistic)	0.000212			

2) ความผันผวนของอัตราแลกเปลี่ยนหยวนต่อบาทกับการส่งออกของไทยไปยังจีน

Dependent Variable: GCHI

Method: Least Squares

Date: 10/28/09 Time: 01:09

Sample (adjusted): 8 121

Included observations: 114 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VCHI	2.38E-07	7.67E-07	0.310589	0.7567
C	0.708897	3.093230	0.229177	0.8191
R-squared	0.008670	Mean dependent var	1.594784	
Adjusted R-squared	0.008054	S.D. dependent var	13.00603	
S.E. of regression	5.43E-06	Akaike info criterion	7.994113	
Sum squared resid	3.30E-09	Schwarz criterion	8.042117	
Log likelihood	1221.413	Hannan-Quinn criter.	8.013595	
F-statistic	0.097221	Durbin-Watson stat	2.094307	
Prob(F-statistic)	0.755770			

3) ความผันผวนของอัตราแลกเปลี่ยนดอลลาร์สิงคโปร์ต่อบาทกับการส่งออกของไทยไปยังสิงคโปร์

Dependent Variable: GSNG
 Method: Least Squares
 Date: 10/28/09 Time: 00:54
 Sample (adjusted): 7 121
 Included observations: 115 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VSNG	-34.35340	15.12714	2.270978	0.0251
C	3.813472	0.023501	10.13299	0.0000
R-squared	0.084021	Mean dependent var	0.210273	
Adjusted R-squared	0.055485	S.D. dependent var	16.68011	
S.E. of regression	0.248536	Akaike info criterion	8.491737	
Sum squared resid	5.162823	Schwarz criterion	8.539475	
Log likelihood	14.63976	Hannan-Quinn criter.	8.511113	
F-statistic	5.157341	Durbin-Watson stat	1.829094	
Prob(F-statistic)	0.025060			

จัดทำโดย ศูนย์เชี่ยวชาญ
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ประวัติผู้เขียน

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