ภาคผนวก

ข้อมูลที่ใช้ในการศึกษา

โดยที่ GDP = มูลค่าผลิตภัณฑ์มวลรวมภายในประเทศ

C = มูลค่าการบริโภคภายในประเทศ

DDI = มูลค่าเงินลงทุนโดยตรงจากในประเทศ

FDI = มูลค่าเงินลงทุนโดยตรงจากต่างประเทศ

G = มูลค่าการใช้จ่ายของภาครัฐบาล

X = มูลค่าการส่งออก

M = มูลค่าการนำเข้า

ตารางภาคผนวกที่ 1 แสดงข้อมูลที่ใช้ในการศึกษา

ปี		GDP	C	G	FDI	DDI	X	M
2540	Q1	1,158,084	635,237	117,538	16,884	409,689	360,805	452,176
	Q2	1,165,717	664,452	113,471	20,185	404,804	363,258	445,632
	Q3	1,182,021	651,023	130,782	39,903	443,935	481,134	500,663
	Q4	1,226,788	636,244	114,914	40,725	340,205	601,502	525,812
2541	Q1	1,210,828	635,406	116,037	53,645	287,178	647,109	515,943
	Q2	1,117,120	636,461	111,876	55,968	246,624	527,450	429,408
	Q3	1,112,059	615,049	150,137	48,855	272,271	561,084	432,741
	Q4	1,186,440	618,396	133,641	51,421	229,374	512,678	395,974
2542	Q1	1,159,803	628,069	119,749	37,854	219,638	481,196	423,005
	Q2	1,108,838	634,191	129,285	31,931	251,438	519,263	443,915
	Q3	1,152,229	650,082	144,485	27,753	265,148	573,095	477,481
	Q4	1,216,209	682,771	139,522	37,055	229,675	641,625	562,989
2543	Q1	1,231,245	678,211	131,830	23,043	287,579	627,782	526,068
	Q2	1,189,978	686,516	130,009	14,599	252,336	614,932	574,404

ปี		GDP	C	G	FDI	DDI	X	M
	Q3	1,212,115	685,863	156,021	30,700	275,770	737,432	661,963
	Q4	1,289,393	712,335	139,947	46,945	265,735	793,681	731,706
2544	Q1	1,284,700	725,574	136,881	44,411	298,774	705,077	710,865
	Q2	1,257,209	742,639	143,445	65,408	306,084	727,236	683,946
	Q3	1,270,065	727,611	164,660	44,172	305,254	748,029	710,392
	Q4	1,321,528	745,188	136,131	70,851	271,203	704,362	647,143
2545	Q1	1,355,115	756,471	152,036	36,072	303,881	673,047	643,145
	Q2	1,325,184	784,779	145,700	40,198	316,761	717,266	682,552
	Q3	1,343,999	772,628	166,374	15,680	325,289	751,627	720,684
	Q4	1,426,345	806,101	139,781	55,576	297,257	782,002	728,459
2546	Q1	1,471,707	827,280	146,465	43,892	332,837	803,514	750,451
	Q2	1,424,519	850,285	156,390	59,273	355,482	817,743	751,069
	Q3	1,457,881	837,337	179,425	56,033	374,751	832,441	797,723
	Q4	1,563,262	870,700	153,722	54,525	361,124	871,932	839,532
2547	Q1	1,583,692	904,446	161,420	45,723	385,069	874,063	861,808
	Q2	1,568,023	936,819	183,434	50,590	415,881	933,846	941,049
	Q3	1,606,091	917,834	199,173	28,368	438,249	1,011,418	1,003,140
	Q4	1,731,670	952,187	176,568	74,199	442,625	1,054,363	995,070
2548	Q1	1,716,030	973,352	193,301	42,754	484,807	971,529	1,089,550
	Q2	1,691,863	1,019,400	204,321	82,097	528,939	1,046,121	1,246,134
	Q3	1,780,615	1,015,697	239,439	60,505	520,126	1,243,759	1,221,173
	Q4	1,904,385	1,051,965	206,588	77,241	515,951	1,177,282	1,197,169
2549	Q1	1,944,050	1,072,063	220,456	156,934	546,962	1,167,459	1,197,079

ปี		GDP	C	G	FDI	DDI	X	M
	Q2	1,899,533	1,114,505	229,910	91,488	568,662	1,177,802	1,253,216
	Q3	1,944,897	1,076,687	266,388	67,623	547,923	1,321,125	1,272,633
	Q4	2,052,817	1,113,330	210,821	83,336	533,674	1,270,986	1,219,994
2550	Q1	2,096,546	1,116,749	245,272	115,860	544,324	1,230,480	1,118,373
	Q2	2,047,296	1,152,449	255,832	79,013	572,040	1,254,917	1,220,278
	Q3	2,093,735	1,121,512	296,698	90,517	567,317	1,321,668	1,236,123
	Q4	2,255,734	1,170,818	239,769	67,504	563,493	1,434,898	1,295,412
2551	Q1	2,297,102	1,216,073	256,221	89,445	623,226	1,398,589	1,424,309
	Q2	2,283,109	1,271,005	261,617	74,024	631,739	1,464,680	1,435,623
	Q3	2,321,431	1,250,408	300,992	85,517	647,473	1,664,823	1,696,587
	Q4	2,201,143	1,254,988	264,999	77,405	584,178	1,325,535	1,387,489

ที่มา : ธนาคารแห่งประเทศไทย

ตารางภาคผนวกที่ 2 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GC แบบจำลอง intercept (At Level)

Null Hypothesis: GC has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.291911	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 09/16/09 Time: 00:00
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-1.203147	0.145099	-8.291911	0.0000
C	0.001228	0.000303	4.049808	0.0002

R-squared	0.609776	Mean dependent var	-6.75E-05
Adjusted R-squared	0.600907	S.D. dependent var	0.002791
S.E. of regression	0.001763	Akaike info criterion	-9.801114
Sum squared resid	0.000137	Schwarz criterion	-9.721607
Log likelihood	227.4256	Hannan-Quinn criter.	-9.771330
F-statistic	68.75578	Durbin-Watson stat	1.856361
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 3 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GC แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GC has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.755753	0.0000
Test critical values:	1% level	-4.170583	

	5% level	-3.510740
	10% level	-3.185512

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 09/16/09 Time: 00:06
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-1.256951	0.143557	-8.755753	0.0000
C	0.000409	0.000517	0.790303	0.4337
@TREND(1)	3.73E-05	1.94E-05	1.927705	0.0605

R-squared	0.640817	Mean dependent var	-6.75E-05
Adjusted R-squared	0.624110	S.D. dependent var	0.002791
S.E. of regression	0.001711	Akaike info criterion	-9.840523
Sum squared resid	0.000126	Schwarz criterion	-9.721264
Log likelihood	229.3320	Hannan-Quinn criter.	-9.795848
F-statistic	38.35800	Durbin-Watson stat	1.901818
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 4 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GC แบบจำลอง none (At Level)

Null Hypothesis: GC has a unit root
Exogenous: None
Lag Length: 3 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.857826	0.3386
Test critical values:	1% level	-2.619851	
	5% level	-1.948686	
	10% level	-1.612036	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 09/16/09 Time: 00:06
Sample (adjusted): 5 47
Included observations: 43 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-0.141619	0.165090	-0.857826	0.3962
D(GC(-1))	-0.743237	0.161653	-4.597720	0.0000
D(GC(-2))	-0.605686	0.160832	-3.765950	0.0005
D(GC(-3))	-0.693626	0.114000	-6.084439	0.0000

R-squared	0.759992	Mean dependent var	8.35E-06
Adjusted R-squared	0.741530	S.D. dependent var	0.002778
S.E. of regression	0.001412	Akaike info criterion	-10.19876
Sum squared resid	7.78E-05	Schwarz criterion	-10.03492
Log likelihood	223.2733	Hannan-Quinn criter.	-10.13834
Durbin-Watson stat	1.543875		

ตารางภาคผนวกที่ 5 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GDDI แบบจำลอง intercept (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.748846	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 09/16/09 Time: 00:07
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-1.167344	0.150648	-7.748846	0.0000
C	0.000769	0.001129	0.681356	0.4992

R-squared	0.577104	Mean dependent var	-0.000147
Adjusted R-squared	0.567493	S.D. dependent var	0.011576
S.E. of regression	0.007613	Akaike info criterion	-6.875345
Sum squared resid	0.002550	Schwarz criterion	-6.795839
Log likelihood	160.1329	Hannan-Quinn criter.	-6.845562
F-statistic	60.04461	Durbin-Watson stat	1.924758
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 6 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GDDI แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-8.073167	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 09/16/09 Time: 00:07
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-1.230671	0.152440	-8.073167	0.0000
C	-0.002544	0.002269	-1.121197	0.2684
@TREND(1)	0.000143	8.56E-05	1.672450	0.1017

R-squared	0.602933	Mean dependent var	-0.000147
Adjusted R-squared	0.584465	S.D. dependent var	0.011576
S.E. of regression	0.007462	Akaike info criterion	-6.894887
Sum squared resid	0.002395	Schwarz criterion	-6.775628
Log likelihood	161.5824	Hannan-Quinn criter.	-6.850212
F-statistic	32.64705	Durbin-Watson stat	1.921137
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 7 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GDDI แบบจำลอง none (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: None
Lag Length: 5 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.939797	0.0043
Test critical values:	1% level	-2.622585	

	5% level	-1.949097
	10% level	-1.611824

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 09/16/09 Time: 00:07
Sample (adjusted): 7 47
Included observations: 41 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-0.901357	0.306605	-2.939797	0.0058
D(GDDI(-1))	-0.456166	0.265760	-1.716461	0.0949
D(GDDI(-2))	-0.475575	0.264972	-1.794808	0.0813
D(GDDI(-3))	-0.335866	0.250514	-1.340707	0.1887
D(GDDI(-4))	0.089710	0.204784	0.438071	0.6640
D(GDDI(-5))	0.059219	0.132232	0.447843	0.6570
R-squared	0.761937	Mean dependent var		-0.000382
Adjusted R-squared	0.727928	S.D. dependent var		0.010888
S.E. of regression	0.005679	Akaike info criterion		-7.369543
Sum squared resid	0.001129	Schwarz criterion		-7.118776
Log likelihood	157.0756	Hannan-Quinn criter.		-7.278227
Durbin-Watson stat	1.995434			

ตารางภาคผนวกที่ 8 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GFDI แบบจำลอง intercept (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.16866	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 09/16/09 Time: 00:07
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.

GFDI(-1)	-1.478217	0.132354	-11.16866	0.0000
C	0.005696	0.005678	1.003266	0.3212

R-squared	0.739242	Mean dependent var	-0.000590
Adjusted R-squared	0.733316	S.D. dependent var	0.074200
S.E. of regression	0.038318	Akaike info criterion	-3.643282
Sum squared resid	0.064604	Schwarz criterion	-3.563776
Log likelihood	85.79548	Hannan-Quinn criter.	-3.613498
F-statistic	124.7390	Durbin-Watson stat	1.912513
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 9 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GFDI แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.08874	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 09/16/09 Time: 00:07
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GFDI(-1)	-1.481605	0.133613	-11.08874	0.0000
C	0.011009	0.011630	0.946635	0.3491
@TREND(1)	-0.000225	0.000430	-0.524843	0.6024

R-squared	0.740902	Mean dependent var	-0.000590
Adjusted R-squared	0.728851	S.D. dependent var	0.074200
S.E. of regression	0.038638	Akaike info criterion	-3.606189
Sum squared resid	0.064193	Schwarz criterion	-3.486930
Log likelihood	85.94235	Hannan-Quinn criter.	-3.561514
F-statistic	61.48019	Durbin-Watson stat	1.917094
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 10 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GFDI แบบจำลอง none (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: None
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.12319	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 09/16/09 Time: 00:08
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GFDI(-1)	-1.465055	0.131712	-11.12319	0.0000

R-squared	0.733277	Mean dependent var	-0.000590
Adjusted R-squared	0.733277	S.D. dependent var	0.074200
S.E. of regression	0.038321	Akaike info criterion	-3.664142
Sum squared resid	0.066082	Schwarz criterion	-3.624389
Log likelihood	85.27526	Hannan-Quinn criter.	-3.649250
Durbin-Watson stat	1.897511		

ตารางภาคผนวกที่ 11 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GG แบบจำลอง intercept (At Level)

Null Hypothesis: GG has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-11.11293	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GG)
Method: Least Squares

Date: 09/16/09 Time: 00:08
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-1.487197	0.133826	-11.11293	0.0000
C	0.002427	0.001356	1.789679	0.0804

R-squared	0.737309	Mean dependent var	-0.000154
Adjusted R-squared	0.731339	S.D. dependent var	0.017481
S.E. of regression	0.009061	Akaike info criterion	-6.527181
Sum squared resid	0.003612	Schwarz criterion	-6.447675
Log likelihood	152.1252	Hannan-Quinn criter.	-6.497398
F-statistic	123.4972	Durbin-Watson stat	2.278656
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 12 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GG แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GG has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-10.98909	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GG)
Method: Least Squares
Date: 09/16/09 Time: 00:08
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-1.489631	0.135555	-10.98909	0.0000
C	0.001782	0.002746	0.648856	0.5199
@TREND(1)	2.76E-05	0.000102	0.270988	0.7877

R-squared	0.737757	Mean dependent var	-0.000154
Adjusted R-squared	0.725560	S.D. dependent var	0.017481
S.E. of regression	0.009158	Akaike info criterion	-6.485409

Sum squared resid	0.003606	Schwarz criterion	-6.366150
Log likelihood	152.1644	Hannan-Quinn criter.	-6.440734
F-statistic	60.48502	Durbin-Watson stat	2.279858
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 13 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GG แบบจำลอง none (At Level)

Null Hypothesis: GG has a unit root
Exogenous: None
Lag Length: 8 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.536227	0.4780
Test critical values:	1% level	-2.627238	
	5% level	-1.949856	
	10% level	-1.611469	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GG)
Method: Least Squares
Date: 09/16/09 Time: 00:08
Sample (adjusted): 10 47
Included observations: 38 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-0.203283	0.379099	-0.536227	0.5959
D(GG(-1))	-1.491251	0.395412	-3.771383	0.0007
D(GG(-2))	-1.770287	0.448825	-3.944272	0.0005
D(GG(-3))	-1.899572	0.522729	-3.633953	0.0011
D(GG(-4))	-1.408439	0.582304	-2.418737	0.0221
D(GG(-5))	-1.004563	0.562225	-1.786763	0.0844
D(GG(-6))	-0.742700	0.450910	-1.647112	0.1103
D(GG(-7))	-0.586616	0.305673	-1.919093	0.0649
D(GG(-8))	-0.182660	0.159570	-1.144697	0.2617

R-squared	0.950665	Mean dependent var	-0.000438
Adjusted R-squared	0.937055	S.D. dependent var	0.016871
S.E. of regression	0.004233	Akaike info criterion	-7.888520
Sum squared resid	0.000520	Schwarz criterion	-7.500671
Log likelihood	158.8819	Hannan-Quinn criter.	-7.750526
Durbin-Watson stat	1.765358		

ตารางภาคผนวกที่ 14 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GGDP แบบจำลอง intercept (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.038665	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 09/16/09 Time: 00:09
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GGDP(-1)	-0.943743	0.156283	-6.038665	0.0000
C	0.000911	0.000415	2.193543	0.0336

R-squared	0.453182	Mean dependent var	-8.91E-05
Adjusted R-squared	0.440754	S.D. dependent var	0.003456
S.E. of regression	0.002584	Akaike info criterion	-9.036261
Sum squared resid	0.000294	Schwarz criterion	-8.956755
Log likelihood	209.8340	Hannan-Quinn criter.	-9.006478
F-statistic	36.46548	Durbin-Watson stat	1.850391
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 15 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GGDP แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 9 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.184183	0.9911
Test critical values:	1% level	-4.226815	
	5% level	-3.536601	

	10% level	-3.200320

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 09/16/09 Time: 00:09
Sample (adjusted): 11 47
Included observations: 37 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GGDP(-1)	-0.244681	1.328470	-0.184183	0.8554
D(GGDP(-1))	-0.709811	1.230735	-0.576738	0.5693
D(GGDP(-2))	-1.210261	1.060242	-1.141495	0.2645
D(GGDP(-3))	-0.878532	0.897518	-0.978846	0.3370
D(GGDP(-4))	-1.011266	0.726950	-1.391108	0.1765
D(GGDP(-5))	-0.764795	0.671975	-1.138131	0.2659
D(GGDP(-6))	-0.997794	0.613013	-1.627687	0.1161
D(GGDP(-7))	-0.685310	0.549297	-1.247613	0.2237
D(GGDP(-8))	-0.431714	0.376622	-1.146280	0.2625
D(GGDP(-9))	-0.063715	0.253974	-0.250874	0.8040
C	0.002200	0.001000	2.200297	0.0372
@TREND(1)	-6.05E-05	5.82E-05	-1.040852	0.3079

R-squared	0.819459	Mean dependent var	-0.000173
Adjusted R-squared	0.740020	S.D. dependent var	0.003187
S.E. of regression	0.001625	Akaike info criterion	-9.749962
Sum squared resid	6.60E-05	Schwarz criterion	-9.227502
Log likelihood	192.3743	Hannan-Quinn criter.	-9.565770
F-statistic	10.31567	Durbin-Watson stat	1.541548
Prob(F-statistic)	0.000001		

ตารางภาคผนวกที่ 16 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GGDP แบบจำลอง none (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: None
Lag Length: 4 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.036689	0.2654
Test critical values:	1% level	-2.621185	
	5% level	-1.948886	
	10% level	-1.611932	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 09/16/09 Time: 00:09
Sample (adjusted): 6 47
Included observations: 42 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GGDP(-1)	-0.200435	0.193341	-1.036689	0.3066
D(GGDP(-1))	-0.497175	0.247321	-2.010242	0.0517
D(GGDP(-2))	-1.040799	0.228424	-4.556432	0.0001
D(GGDP(-3))	-0.501263	0.200938	-2.494613	0.0172
D(GGDP(-4))	-0.259452	0.185835	-1.396145	0.1710

R-squared	0.807536	Mean dependent var	5.05E-05
Adjusted R-squared	0.786729	S.D. dependent var	0.003487
S.E. of regression	0.001610	Akaike info criterion	-9.913487
Sum squared resid	9.59E-05	Schwarz criterion	-9.706622
Log likelihood	213.1832	Hannan-Quinn criter.	-9.837663
Durbin-Watson stat	1.572519		

ตารางภาคผนวกที่ 17 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GXM แบบจำลอง intercept (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.656009	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

*MacKinnon (1996) one-sided p-values.
Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 09/16/09 Time: 00:09
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.152244	0.150502	-7.656009	0.0000
C	-0.468291	0.292234	-1.602451	0.1162

R-squared	0.571211	Mean dependent var	0.032860
Adjusted R-squared	0.561465	S.D. dependent var	2.916961
S.E. of regression	1.931668	Akaike info criterion	4.197150
Sum squared resid	164.1791	Schwarz criterion	4.276656
Log likelihood	-94.53445	Hannan-Quinn criter.	4.226934
F-statistic	58.61447	Durbin-Watson stat	2.014464
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 18 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GXM แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.638520	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 09/16/09 Time: 00:09
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.158048	0.151606	-7.638520	0.0000
C	-0.826698	0.589898	-1.401424	0.1683
@TREND(1)	0.015144	0.021610	0.700767	0.4872

R-squared	0.576052	Mean dependent var	0.032860
Adjusted R-squared	0.556334	S.D. dependent var	2.916961
S.E. of regression	1.942938	Akaike info criterion	4.229273
Sum squared resid	162.3253	Schwarz criterion	4.348532
Log likelihood	-94.27327	Hannan-Quinn criter.	4.273948
F-statistic	29.21379	Durbin-Watson stat	2.027131
Prob(F-statistic)	0.000000		

ตารางภาคผนวกที่ 19 ผลการทดสอบ Unit root ด้วยวิธี Augmented Dickey-Fuller test ของตัวแปร GXM แบบจำลอง none (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: None
Lag Length: 0 (Automatic based on Modified AIC, MAXLAG=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.360197	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 09/16/09 Time: 00:10
Sample (adjusted): 2 47
Included observations: 46 after adjustments

	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.098223	0.149211	-7.360197	0.0000

R-squared	0.546186	Mean dependent var	0.032860
Adjusted R-squared	0.546186	S.D. dependent var	2.916961
S.E. of regression	1.965031	Akaike info criterion	4.210393
Sum squared resid	173.7606	Schwarz criterion	4.250146
Log likelihood	-95.83903	Hannan-Quinn criter.	4.225284
Durbin-Watson stat	1.997611		

ตารางภาคผนวกที่ 20 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GC แบบจำลอง intercept (At Level)

Null Hypothesis: GC has a unit root
Exogenous: Constant
Bandwidth: 3 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-8.243306	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	2.97E-06
HAC corrected variance (Bartlett kernel)	3.15E-06

Phillips-Perron Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 05/17/09 Time: 23:59
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-1.203147	0.145099	-8.291908	0.0000
C	0.001228	0.000303	4.049806	0.0002

R-squared	0.609776	Mean dependent var	-6.75E-05
Adjusted R-squared	0.600907	S.D. dependent var	0.002791
S.E. of regression	0.001763	Akaike info criterion	-9.801114
Sum squared resid	0.000137	Schwarz criterion	-9.721608
Log likelihood	227.4256	F-statistic	68.75575
Durbin-Watson stat	1.856361	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 21 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GC แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GC has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 7 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-8.706124	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	2.74E-06
HAC corrected variance (Bartlett kernel)	2.86E-06

Phillips-Perron Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 05/18/09 Time: 00:00
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-1.256951	0.143557	-8.755750	0.0000
C	0.000409	0.000517	0.790304	0.4337
@TREND(1)	3.73E-05	1.94E-05	1.927703	0.0605

R-squared	0.640816	Mean dependent var	-6.75E-05
Adjusted R-squared	0.624110	S.D. dependent var	0.002791
S.E. of regression	0.001711	Akaike info criterion	-9.840523
Sum squared resid	0.000126	Schwarz criterion	-9.721264
Log likelihood	229.3320	F-statistic	38.35798
Durbin-Watson stat	1.901818	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 22 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GC แบบจำลอง none (At Level)

Null Hypothesis: GC has a unit root
Exogenous: None
Bandwidth: 3 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-6.367515	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	4.08E-06
HAC corrected variance (Bartlett kernel)	5.52E-06

Phillips-Perron Test Equation
Dependent Variable: D(GC)
Method: Least Squares
Date: 05/18/09 Time: 00:00
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GC(-1)	-0.900379	0.144073	-6.249456	0.0000

R-squared	0.464321	Mean dependent var	-6.75E-05
Adjusted R-squared	0.464321	S.D. dependent var	0.002791
S.E. of regression	0.002043	Akaike info criterion	-9.527777
Sum squared resid	0.000188	Schwarz criterion	-9.488024
Log likelihood	220.1389	Durbin-Watson stat	1.987080

ตารางภาคผนวกที่ 23 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GDDI แบบจำลอง intercept (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.722617	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	5.54E-05
HAC corrected variance (Bartlett kernel)	5.90E-05

Phillips-Perron Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 05/18/09 Time: 00:00
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-1.167344	0.150648	-7.748846	0.0000
C	0.000769	0.001129	0.681356	0.4992

R-squared	0.577104	Mean dependent var	-0.000147
Adjusted R-squared	0.567493	S.D. dependent var	0.011576
S.E. of regression	0.007613	Akaike info criterion	-6.875345
Sum squared resid	0.002550	Schwarz criterion	-6.795839
Log likelihood	160.1329	F-statistic	60.04461
Durbin-Watson stat	1.924758	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 24 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GDDI แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 0 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-8.073167	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	5.21E-05
HAC corrected variance (Bartlett kernel)	5.21E-05

Phillips-Perron Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 05/18/09 Time: 00:01
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-1.230671	0.152440	-8.073167	0.0000
C	-0.002544	0.002269	-1.121197	0.2684
@TREND(1)	0.000143	8.56E-05	1.672449	0.1017

R-squared	0.602933	Mean dependent var	-0.000147
Adjusted R-squared	0.584465	S.D. dependent var	0.011576
S.E. of regression	0.007462	Akaike info criterion	-6.894887
Sum squared resid	0.002395	Schwarz criterion	-6.775628
Log likelihood	161.5824	F-statistic	32.64705
Durbin-Watson stat	1.921138	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 25 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GDDI แบบจำลอง none (At Level)

Null Hypothesis: GDDI has a unit root
Exogenous: None
Bandwidth: 2 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.735891	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	5.60E-05
HAC corrected variance (Bartlett kernel)	6.02E-05

Phillips-Perron Test Equation
Dependent Variable: D(GDDI)
Method: Least Squares
Date: 05/18/09 Time: 00:01
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDDI(-1)	-1.156594	0.148925	-7.766312	0.0000

R-squared	0.572642	Mean dependent var	-0.000147
Adjusted R-squared	0.572642	S.D. dependent var	0.011576
S.E. of regression	0.007568	Akaike info criterion	-6.908328
Sum squared resid	0.002577	Schwarz criterion	-6.868575
Log likelihood	159.8915	Durbin-Watson stat	1.927144

ตารางภาคผนวกที่ 26 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GFDI แบบจำลอง intercept (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: Constant
Bandwidth: 5 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-11.98584	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	0.001404

HAC corrected variance (Bartlett kernel)	0.001069

Phillips-Perron Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 05/18/09 Time: 00:01
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GFDI(-1)	-1.478217	0.132354	-11.16866	0.0000
C	0.005696	0.005678	1.003266	0.3212

R-squared	0.739242	Mean dependent var	-0.000590
Adjusted R-squared	0.733316	S.D. dependent var	0.074200
S.E. of regression	0.038318	Akaike info criterion	-3.643282
Sum squared resid	0.064604	Schwarz criterion	-3.563776
Log likelihood	85.79548	F-statistic	124.7390
Durbin-Watson stat	1.912513	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 27 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GFDI แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 5 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-11.83500	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	0.001396
HAC corrected variance (Bartlett kernel)	0.001082

Phillips-Perron Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 05/18/09 Time: 00:01

Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GFDI(-1)	-1.481605	0.133613	-11.08874	0.0000
C	0.011009	0.011630	0.946635	0.3491
@TREND(1)	-0.000225	0.000430	-0.524842	0.6024

R-squared	0.740902	Mean dependent var	-0.000590
Adjusted R-squared	0.728851	S.D. dependent var	0.074200
S.E. of regression	0.038638	Akaike info criterion	-3.606189
Sum squared resid	0.064193	Schwarz criterion	-3.486930
Log likelihood	85.94235	F-statistic	61.48019
Durbin-Watson stat	1.917094	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 28 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GFDI แบบจำลอง none (At Level)

Null Hypothesis: GFDI has a unit root
Exogenous: None
Bandwidth: 4 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-11.44615	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	0.001437
HAC corrected variance (Bartlett kernel)	0.001276

Phillips-Perron Test Equation
Dependent Variable: D(GFDI)
Method: Least Squares
Date: 05/18/09 Time: 00:02
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GFDI(-1)	-1.465055	0.131712	-11.12319	0.0000

R-squared	0.733277	Mean dependent var	-0.000590

Adjusted R-squared	0.733277	S.D. dependent var	0.074200
S.E. of regression	0.038321	Akaike info criterion	-3.664142
Sum squared resid	0.066082	Schwarz criterion	-3.624389
Log likelihood	85.27526	Durbin-Watson stat	1.897511

ตารางภาคผนวกที่ 29 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GG แบบจำลอง intercept (At Level)

Null Hypothesis: GG has a unit root
Exogenous: Constant
Bandwidth: 11 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-21.74890	0.0001
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	7.85E-05
HAC corrected variance (Bartlett kernel)	1.22E-05

Phillips-Perron Test Equation
Dependent Variable: D(GG)
Method: Least Squares
Date: 05/18/09 Time: 00:02
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-1.487197	0.133826	-11.11293	0.0000
C	0.002427	0.001356	1.789679	0.0804

R-squared	0.737309	Mean dependent var	-0.000154
Adjusted R-squared	0.731339	S.D. dependent var	0.017481
S.E. of regression	0.009061	Akaike info criterion	-6.527181
Sum squared resid	0.003612	Schwarz criterion	-6.447675
Log likelihood	152.1252	F-statistic	123.4972
Durbin-Watson stat	2.278656	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 30 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GG แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GG has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 11 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-23.69238	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	7.84E-05
HAC corrected variance (Bartlett kernel)	9.74E-06

Phillips-Perron Test Equation
Dependent Variable: D(GG)
Method: Least Squares
Date: 05/18/09 Time: 00:02
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-1.489631	0.135555	-10.98909	0.0000
C	0.001782	0.002746	0.648857	0.5199
@TREND(1)	2.76E-05	0.000102	0.270988	0.7877

R-squared	0.737757	Mean dependent var	-0.000154
Adjusted R-squared	0.725560	S.D. dependent var	0.017481
S.E. of regression	0.009158	Akaike info criterion	-6.485409
Sum squared resid	0.003606	Schwarz criterion	-6.366150
Log likelihood	152.1644	F-statistic	60.48501
Durbin-Watson stat	2.279858	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 31 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GG แบบจำลอง none (At Level)

Null Hypothesis: GG has a unit root
Exogenous: None
Bandwidth: 19 (Newey-West using Bartlett kernel)

	Adj. t-Stat	Prob.*

Phillips-Perron test statistic		-10.25359	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	8.42E-05
HAC corrected variance (Bartlett kernel)	0.000106

Phillips-Perron Test Equation
Dependent Variable: D(GG)
Method: Least Squares
Date: 05/18/09 Time: 00:02
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GG(-1)	-1.446179	0.135037	-10.70947	0.0000

R-squared	0.718187	Mean dependent var	-0.000154
Adjusted R-squared	0.718187	S.D. dependent var	0.017481
S.E. of regression	0.009280	Akaike info criterion	-6.500393
Sum squared resid	0.003875	Schwarz criterion	-6.460640
Log likelihood	150.5090	Durbin-Watson stat	2.176158

ตารางภาคผนวกที่ 32 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GGDP แบบจำลอง intercept (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: Constant
Bandwidth: 22 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-6.036234	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	6.39E-06
HAC corrected variance (Bartlett kernel)	3.31E-06

Phillips-Perron Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 05/18/09 Time: 00:03
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GGDP(-1)	-0.943743	0.156283	-6.038664	0.0000
C	0.000911	0.000415	2.193544	0.0336

R-squared	0.453182	Mean dependent var	-8.91E-05
Adjusted R-squared	0.440754	S.D. dependent var	0.003456
S.E. of regression	0.002584	Akaike info criterion	-9.036261
Sum squared resid	0.000294	Schwarz criterion	-8.956755
Log likelihood	209.8340	F-statistic	36.46546
Durbin-Watson stat	1.850391	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 33 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GGDP แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 16 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-6.236739	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	6.32E-06
HAC corrected variance (Bartlett kernel)	2.27E-06

Phillips-Perron Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 05/18/09 Time: 00:03
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.

GGDP(-1)	-0.966334	0.160424	-6.023607	0.0000
C	0.000448	0.000780	0.574119	0.5689
@TREND(1)	2.08E-05	2.95E-05	0.704388	0.4850

R-squared	0.459419	Mean dependent var	-8.91E-05
Adjusted R-squared	0.434276	S.D. dependent var	0.003456
S.E. of regression	0.002599	Akaike info criterion	-9.004256
Sum squared resid	0.000290	Schwarz criterion	-8.884996
Log likelihood	210.0979	F-statistic	18.27203
Durbin-Watson stat	1.862464	Prob(F-statistic)	0.000002

ตารางภาคผนวกที่ 34 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GGDP แบบจำลอง none (At Level)

Null Hypothesis: GGDP has a unit root
Exogenous: None
Bandwidth: 9 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-5.669723	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	7.09E-06
HAC corrected variance (Bartlett kernel)	9.51E-06

Phillips-Perron Test Equation
Dependent Variable: D(GGDP)
Method: Least Squares
Date: 05/18/09 Time: 00:03
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GGDP(-1)	-0.807036	0.149266	-5.406707	0.0000

R-squared	0.393384	Mean dependent var	-8.91E-05
Adjusted R-squared	0.393384	S.D. dependent var	0.003456
S.E. of regression	0.002691	Akaike info criterion	-8.975960
Sum squared resid	0.000326	Schwarz criterion	-8.936207

Log likelihood	207.4471	Durbin-Watson stat	1.756365

ตารางภาคผนวกที่ 35 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GXM แบบจำลอง intercept (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: Constant
Bandwidth: 5 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.945118	0.0000
Test critical values:	1% level	-3.581152	
	5% level	-2.926622	
	10% level	-2.601424	

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

Residual variance (no correction)	3.569111
HAC corrected variance (Bartlett kernel)	2.480184

Phillips-Perron Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 05/18/09 Time: 00:04
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.152244	0.150502	-7.656009	0.0000
C	-0.468291	0.292234	-1.602451	0.1162

R-squared	0.571211	Mean dependent var	0.032860
Adjusted R-squared	0.561465	S.D. dependent var	2.916961
S.E. of regression	1.931668	Akaike info criterion	4.197150
Sum squared resid	164.1791	Schwarz criterion	4.276656
Log likelihood	-94.53445	F-statistic	58.61447
Durbin-Watson stat	2.014464	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 36 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GXM แบบจำลอง intercept and trend (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 5 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.994957	0.0000
Test critical values:	1% level	-4.170583	
	5% level	-3.510740	
	10% level	-3.185512	

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

Residual variance (no correction)	3.528810
HAC corrected variance (Bartlett kernel)	2.322507

Phillips-Perron Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 05/18/09 Time: 00:04
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.158048	0.151606	-7.638520	0.0000
C	-0.826698	0.589898	-1.401424	0.1683
@TREND(1)	0.015144	0.021610	0.700767	0.4872

R-squared	0.576052	Mean dependent var	0.032860
Adjusted R-squared	0.556334	S.D. dependent var	2.916961
S.E. of regression	1.942938	Akaike info criterion	4.229273
Sum squared resid	162.3253	Schwarz criterion	4.348532
Log likelihood	-94.27327	F-statistic	29.21379
Durbin-Watson stat	2.027131	Prob(F-statistic)	0.000000

ตารางภาคผนวกที่ 37 ผลการทดสอบ Unit root ด้วยวิธี Phillips Peron test ของตัวแปร GXM แบบจำลอง none (At Level)

Null Hypothesis: GXM has a unit root
Exogenous: None
Bandwidth: 2 (Newey-West using Bartlett kernel)

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-7.373632	0.0000
Test critical values:	1% level	-2.616203	
	5% level	-1.948140	
	10% level	-1.612320	

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

Residual variance (no correction)	3.777405
HAC corrected variance (Bartlett kernel)	3.623945

Phillips-Perron Test Equation
Dependent Variable: D(GXM)
Method: Least Squares
Date: 05/18/09 Time: 00:05
Sample (adjusted): 2 47
Included observations: 46 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GXM(-1)	-1.098223	0.149211	-7.360197	0.0000

R-squared	0.546186	Mean dependent var	0.032860
Adjusted R-squared	0.546186	S.D. dependent var	2.916961
S.E. of regression	1.965031	Akaike info criterion	4.210393
Sum squared resid	173.7606	Schwarz criterion	4.250146
Log likelihood	-95.83903	Durbin-Watson stat	1.997611

ตารางภาคผนวกที่ 38 Determining Lag Length

VAR Lag Order Selection Criteria
Endogenous variables: GGDP GXM GG GFDI GDDI GC
Exogenous variables: C
Date: 09/15/09 Time: 23:54
Sample: 1 47
Included observations: 42

Lag	LogL	LR	FPE	AIC	SC	HQ
0	698.9685	NA	1.88e-22	-32.99850	-32.75026	-32.90751
1	773.1837	123.6920	3.10e-23	-34.81827	**-33.08060***	-34.18135
2	829.9583	78.40312	1.28e-23	-35.80754	-32.58044	-34.62468
3	881.9863	56.98298*	8.07e-24	-36.57078	-31.85424	-34.84198
4	917.4558	28.71344	1.60e-23	-36.54552	-30.33955	-34.27079
5	1009.491	48.20878	4.57e-24*	-39.21385*	-31.51845	-36.39318*

* indicates lag order selected by the criterion

LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

ตารางภาคผนวกที่ 39 Cointegration Rank Test (Trace)

Sample (adjusted): 3 47
Included observations: 45 after adjustments
Trend assumption: Linear deterministic trend
Series: GGDP GXM GG GFDI GDDI GC
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.884871	263.8947	95.75366	0.0000
At most 1 *	0.725253	166.6182	69.81889	0.0000
At most 2 *	0.669022	108.4825	47.85613	0.0000
At most 3 *	0.472867	58.72578	29.79707	0.0000
At most 4 *	0.366955	29.91218	15.49471	0.0002
At most 5 *	0.187388	9.337545	3.841466	0.0022

Trace test indicates 6 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.884871	97.27649	40.07757	0.0000
At most 1 *	0.725253	58.13577	33.87687	0.0000
At most 2 *	0.669022	49.75668	27.58434	0.0000
At most 3 *	0.472867	28.81360	21.13162	0.0034
At most 4 *	0.366955	20.57463	14.26460	0.0044
At most 5 *	0.187388	9.337545	3.841466	0.0022

Max-eigenvalue test indicates 6 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegrating Coefficients (normalized by b'*S11*b=I):

GGDP	GXM	GG	GFDI	GDDI	GC

345.8537	0.116063	-137.3996	-0.669111	-27.63015	-201.8615
-655.4419	0.303849	-302.2102	13.07968	169.4447	-212.2287
403.9767	-0.527979	46.72740	-14.38869	189.6136	-1175.373
98.55144	-0.102895	26.14526	42.49343	141.6844	-320.7169
-440.2683	-0.589786	-195.6890	5.485233	-94.34431	861.9995
93.68129	-0.009142	-65.66077	-18.65381	71.42831	692.2514

Unrestricted Adjustment Coefficients (alpha):

D(GGDP)	-0.002470	0.001026	-0.000139	-0.000770	-9.93E-05	-0.000153
D(GXM)	-0.398480	-0.605294	1.033007	-0.382416	0.860374	-0.413072
D(GG)	0.001289	0.003724	-0.000410	0.000103	0.001970	0.000324
D(GFDI)	-0.001802	0.003352	0.017043	-0.025989	-0.002003	0.006603
D(GDDI)	0.003095	-0.001071	-0.003585	-0.002511	0.001006	-0.001210
D(GC)	0.001058	0.000285	0.000496	-0.000405	-0.000278	-0.000299

1 Cointegrating Equation(s): Log likelihood 781.1775

Normalized cointegrating coefficients (standard error in parentheses)

GGDP	GXM	GG	GFDI	GDDI	GC
1.000000	0.000336	-0.397277	-0.001935	-0.079890	-0.583662
	(0.00015)	(0.05057)	(0.00828)	(0.05399)	(0.25323)

Adjustment coefficients (standard error in parentheses)

D(GGDP)	-0.854188
	(0.10910)
D(GXM)	-137.8156
	(131.611)
D(GG)	0.445738
	(0.31530)
D(GFDI)	-0.623355
	(2.61923)
D(GDDI)	1.070580
	(0.38542)
D(GC)	0.365831
	(0.07329)

2 Cointegrating Equation(s): Log likelihood 810.2454

Normalized cointegrating coefficients (standard error in parentheses)

GGDP	GXM	GG	GFDI	GDDI	GC
1.000000	0.000000	-0.036836	-0.009502	-0.154900	-0.202602
		(0.03496)	(0.00573)	(0.03736)	(0.17520)
0.000000	1.000000	-1074.066	22.54961	223.5211	-1135.507
		(85.0106)	(13.9234)	(90.8540)	(426.045)

Adjustment coefficients (standard error in parentheses)

D(GGDP)	-1.526975	2.52E-05

	(0.19753)	(8.7E-05)
D(GXM)	258.9197	-0.230167
	(272.201)	(0.11947)
D(GG)	-1.995257	0.001281
	(0.50060)	(0.00022)
D(GFDI)	-2.820575	0.000809
	(5.59760)	(0.00246)
D(GDDI)	1.772848	3.37E-05
	(0.81550)	(0.00036)
D(GC)	0.179065	0.000209
	(0.15316)	(6.7E-05)

3 Cointegrating Equation(s): Log likelihood 835.1238

Normalized cointegrating coefficients (standard error in parentheses)

GGDP	GXM	GG	GFDI	GDDI	GC
1.000000	0.000000	0.000000	-0.009601	-0.181878	-0.079223
			(0.00579)	(0.03631)	(0.17710)
0.000000	1.000000	0.000000	19.66915	-563.1113	2461.990
			(12.7595)	(80.0425)	(390.432)
0.000000	0.000000	1.000000	-0.002682	-0.732387	3.349419
			(0.01787)	(0.11208)	(0.54672)

Adjustment coefficients (standard error in parentheses)

D(GGDP)	-1.583292	9.88E-05	0.022627
	(0.22414)	(0.00016)	(0.08903)
D(GXM)	676.2306	-0.775573	285.9468
	(274.888)	(0.20196)	(109.184)
D(GG)	-2.161002	0.001498	-1.321743
	(0.56729)	(0.00042)	(0.22532)
D(GFDI)	4.064251	-0.008189	0.030911
	(5.92039)	(0.00435)	(2.35155)
D(GDDI)	0.324763	0.001926	-0.269014
	(0.78438)	(0.00058)	(0.31155)
D(GC)	0.379518	-5.26E-05	-0.208264
	(0.16027)	(0.00012)	(0.06366)

4 Cointegrating Equation(s): Log likelihood 849.5306

Normalized cointegrating coefficients (standard error in parentheses)

GGDP	GXM	GG	GFDI	GDDI	GC
1.000000	0.000000	0.000000	0.000000	-0.156404	-0.110250
				(0.03626)	(0.17765)
0.000000	1.000000	0.000000	0.000000	-615.3002	2525.556
				(77.8185)	(381.233)
0.000000	0.000000	1.000000	0.000000	-0.725272	3.340752
				(0.10751)	(0.52669)
0.000000	0.000000	0.000000	1.000000	2.653333	-3.231768
				(1.11020)	(5.43888)

Adjustment coefficients (standard error in parentheses)

D(GGDP)	-1.659222	0.000178	0.002483	-0.015655
	(0.19833)	(0.00015)	(0.07848)	(0.01091)
D(GXM)	638.5430	-0.736224	275.9484	-38.76420
	(271.550)	(0.20087)	(107.456)	(14.9346)
D(GG)	-2.150864	0.001487	-1.319054	0.058124
	(0.57096)	(0.00042)	(0.22594)	(0.03140)
D(GFDI)	1.502971	-0.005515	-0.648585	-1.304542
	(4.72719)	(0.00350)	(1.87061)	(0.25998)
D(GDDI)	0.077265	0.002185	-0.334674	-0.071224
	(0.70749)	(0.00052)	(0.27996)	(0.03891)
D(GC)	0.339556	-1.09E-05	-0.218866	-0.021351
	(0.15109)	(0.00011)	(0.05979)	(0.00831)

5 Cointegrating Equation(s): Log likelihood 859.8179

Normalized cointegrating coefficients (standard error in parentheses)

GGDP	GXM	GG	GFDI	GDDI	GC
1.000000	0.000000	0.000000	0.000000	0.000000	-0.791811
					(0.12632)
0.000000	1.000000	0.000000	0.000000	0.000000	-155.7263
					(223.334)
0.000000	0.000000	1.000000	0.000000	0.000000	0.180249
					(0.34634)
0.000000	0.000000	0.000000	1.000000	0.000000	8.330615
					(4.12073)
0.000000	0.000000	0.000000	0.000000	1.000000	-4.357682
					(0.49602)

Adjustment coefficients (standard error in parentheses)

D(GGDP)	-1.615503	0.000237	0.021915	-0.016200	0.115943
	(0.22283)	(0.00020)	(0.09058)	(0.01096)	(0.07154)
D(GXM)	259.7476	-1.243661	107.5827	-34.04485	-31.03529
	(274.240)	(0.24699)	(111.484)	(13.4838)	(88.0411)
D(GG)	-3.018294	0.000325	-1.704606	0.068931	0.346335
	(0.56339)	(0.00051)	(0.22903)	(0.02770)	(0.18087)
D(GFDI)	2.384961	-0.004333	-0.256561	-1.315530	0.356067
	(5.31463)	(0.00479)	(2.16050)	(0.26131)	(1.70619)
D(GDDI)	-0.365849	0.001591	-0.531628	-0.065704	-1.397537
	(0.78091)	(0.00070)	(0.31746)	(0.03840)	(0.25070)
D(GC)	0.461742	0.000153	-0.164557	-0.022873	0.081874
	(0.16446)	(0.00015)	(0.06686)	(0.00809)	(0.05280)

ตารางภาคผนวกที่ 40 Estimation Vector Regression (VAR)

Vector Autoregression Estimates
Date: 09/15/09 Time: 23:57
Sample (adjusted): 2 47
Included observations: 46 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	GGDP	GXM	GG	GFDI	GDDI	GC
GGDP(-1)	0.220025	37.51421	-2.677287	3.702812	-0.133721	0.477612
	(0.17000)	(130.123)	(0.29751)	(2.63961)	(0.40453)	(0.09348)
	[1.29423]	[0.28830]	[-8.99886]	[1.40279]	[-0.33056]	[5.10926]
GXM(-1)	2.99E-05	-0.074514	1.12E-05	-0.002798	0.000360	9.26E-05
	(0.00021)	(0.15711)	(0.00036)	(0.00319)	(0.00049)	(0.00011)
	[0.14589]	[-0.47428]	[0.03106]	[-0.87803]	[0.73724]	[0.82059]
GG(-1)	0.111193	5.953468	-0.460967	0.522751	-0.036372	0.025737
	(0.05715)	(43.7396)	(0.10001)	(0.88728)	(0.13598)	(0.03142)
	[1.94579]	[0.13611]	[-4.60937]	[0.58916]	[-0.26748]	[0.81906]
GFDI(-1)	-7.63E-05	-9.618802	0.014615	-0.470106	-0.018990	-0.008236
	(0.00955)	(7.31173)	(0.01672)	(0.14832)	(0.02273)	(0.00525)
	[-0.00799]	[-1.31553]	[0.87422]	[-3.16950]	[-0.83544]	[-1.56788]
GDDI(-1)	-0.006238	-59.77785	0.055533	-0.486275	-0.188785	0.052516
	(0.06240)	(47.7608)	(0.10920)	(0.96885)	(0.14848)	(0.03431)
	[-0.09996]	[-1.25161]	[0.50854]	[-0.50191]	[-1.27144]	[1.53059]
GC(-1)	-0.020897	-167.5849	2.866998	-1.630610	2.744552	-0.165523
	(0.27340)	(209.263)	(0.47846)	(4.24501)	(0.65057)	(0.15033)
	[-0.07643]	[-0.80083]	[5.99213]	[-0.38412]	[4.21872]	[-1.10104]
C	0.000586	-0.216290	0.002031	0.001750	-0.001728	0.000671
	(0.00057)	(0.43439)	(0.00099)	(0.00881)	(0.00135)	(0.00031)
	[1.03182]	[-0.49792]	[2.04504]	[0.19855]	[-1.27939]	[2.14973]
R-squared	0.168681	0.145619	0.840371	0.294946	0.470893	0.481438
Adj. R-squared	0.040786	0.014176	0.815813	0.186476	0.389492	0.401660
Sum sq. resids	0.000245	143.5337	0.000750	0.059064	0.001387	7.41E-05
S.E. equation	0.002506	1.918424	0.004386	0.038916	0.005964	0.001378
F-statistic	1.318899	1.107848	34.21952	2.719154	5.784856	6.034675
Log likelihood	214.0154	-91.44352	188.2721	87.85756	174.1378	241.5272
Akaike AIC	-9.000671	4.280153	-7.881397	-3.515546	-7.266861	-10.19683
Schwarz SC	-8.722399	4.558425	-7.603126	-3.237274	-6.988589	-9.918562
Mean dependent	0.000971	-0.402075	0.001581	0.003663	0.000638	0.001010
S.D. dependent	0.002559	1.932168	0.010220	0.043146	0.007633	0.001782

Determinant resid covariance (dof adj.) 3.02E-23

Determinant resid covariance	1.12E-23
Log likelihood	823.8149
Akaike information criterion	-33.99195
Schwarz criterion	-32.32233

ตารางภาคผนวกที่ 41 การทดสอบความเสถียรของข้อมูล

Roots of Characteristic Polynomial
Endogenous variables: GGDP GXM GG GFDI GDDI GC
Exogenous variables: C
Lag specification: 1 1
Date: 09/15/09 Time: 23:57

Root	Modulus
-0.502863 - 0.061083i	0.506560
-0.502863 + 0.061083i	0.506560
-0.259951 - 0.407863i	0.483660
-0.259951 + 0.407863i	0.483660
0.326370	0.326370
0.059390	0.059390

No root lies outside the unit circle.
VAR satisfies the stability condition.

ตารางภาคผนวกที่ 42 ผลการทดสอบ Impulse Response Function

Period	GGDP	GXM	GG	GFDI	GDDI	GC
1	0.002506	0.000000	0.000000	0.000000	0.000000	0.000000
	(0.00026)	(0.00000)	(0.00000)	(0.00000)	(0.00000)	(0.00000)
2	0.000553	9.27E-05	0.000487	-6.87E-06	-4.76E-05	-2.54E-05
	(0.00042)	(0.00039)	(0.00024)	(0.00035)	(0.00033)	(0.00033)
3	-0.000646	5.24E-05	-0.000140	0.000145	0.000179	0.000359
	(0.00033)	(0.00016)	(0.00011)	(0.00015)	(0.00020)	(0.00021)
4	0.000393	1.83E-05	-3.52E-05	-0.000175	1.93E-05	-0.000140
	(0.00025)	(0.00015)	(0.00010)	(0.00012)	(0.00010)	(0.00011)
5	-1.82E-05	2.02E-05	7.50E-05	9.29E-05	-3.49E-05	4.29E-05
	(0.00016)	(7.6E-05)	(9.2E-05)	(9.8E-05)	(8.3E-05)	(8.4E-05)
6	-6.11E-05	-1.11E-05	-3.30E-05	-3.36E-05	2.38E-05	1.33E-05
	(0.00013)	(3.3E-05)	(4.2E-05)	(6.3E-05)	(4.5E-05)	(6.5E-05)
7	4.03E-05	8.34E-06	3.57E-06	7.32E-06	-1.36E-06	-1.11E-05
	(8.2E-05)	(1.8E-05)	(2.2E-05)	(3.9E-05)	(1.9E-05)	(3.8E-05)
8	-5.16E-06	-2.84E-06	5.02E-06	-2.70E-06	-4.65E-06	3.49E-06
	(3.9E-05)	(8.2E-06)	(1.8E-05)	(2.1E-05)	(1.2E-05)	(1.8E-05)
9	-5.70E-06	1.11E-06	-2.78E-06	2.91E-06	3.65E-06	8.93E-07
	(2.4E-05)	(3.8E-06)	(9.2E-06)	(1.0E-05)	(7.0E-06)	(9.7E-06)
10	3.93E-06	-4.55E-07	9.08E-08	-2.58E-06	-1.17E-06	-8.06E-07

	(1.3E-05)	(2.4E-06)	(4.1E-06)	(5.3E-06)	(3.5E-06)	(5.6E-06)
11	-3.38E-07	3.68E-07	7.03E-07	1.48E-06	8.80E-08	-3.63E-08
	(5.6E-06)	(1.4E-06)	(2.7E-06)	(2.9E-06)	(2.3E-06)	(2.5E-06)
12	-9.23E-07	-2.56E-07	-4.12E-07	-5.77E-07	5.42E-08	4.18E-07
	(3.3E-06)	(7.0E-07)	(1.4E-06)	(1.5E-06)	(1.4E-06)	(1.3E-06)
13	6.88E-07	1.46E-07	5.87E-08	1.48E-07	6.32E-08	-3.29E-07
	(2.0E-06)	(3.9E-07)	(5.6E-07)	(9.4E-07)	(6.6E-07)	(8.1E-07)
14	-2.11E-07	-6.29E-08	6.62E-08	-3.48E-08	-1.06E-07	1.50E-07
	(8.7E-07)	(2.2E-07)	(3.9E-07)	(5.5E-07)	(3.5E-07)	(4.1E-07)
15	-1.00E-08	2.31E-08	-4.99E-08	2.63E-08	7.52E-08	-4.39E-08
	(5.4E-07)	(1.1E-07)	(2.2E-07)	(2.9E-07)	(1.9E-07)	(2.4E-07)

ตารางภาคผนวกที่ 43 ผลการทดสอบ Variance Decomposition

Period	S.E.	GGDP	GXM	GG	GFDI	GDDI	GC
1	0.002506	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.002615	96.36559	0.125580	3.465635	0.000690	0.033087	0.009418
3	0.002731	93.92882	0.151925	3.438767	0.283618	0.460452	1.736417
4	0.002768	93.41182	0.152218	3.362377	0.675570	0.452932	1.945084
5	0.002772	93.19679	0.157149	3.427638	0.786224	0.467732	1.964468
6	0.002773	93.16271	0.158617	3.438728	0.800221	0.474708	1.965019
7	0.002773	93.16099	0.159483	3.438049	0.800720	0.474616	1.966143
8	0.002773	93.16011	0.159586	3.438331	0.800804	0.474891	1.966276
9	0.002773	93.15976	0.159601	3.438403	0.800908	0.475060	1.966270
10	0.002773	93.15966	0.159603	3.438392	0.800992	0.475077	1.966272
11	0.002773	93.15963	0.159604	3.438398	0.801020	0.475076	1.966271
12	0.002773	93.15962	0.159605	3.438399	0.801024	0.475076	1.966273
13	0.002773	93.15962	0.159605	3.438399	0.801025	0.475076	1.966274
14	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
15	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
16	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
17	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
18	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
19	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275
20	0.002773	93.15962	0.159606	3.438399	0.801025	0.475077	1.966275

ประวัติผู้เขียน

ชื่อ	นายเจษฎา กาวีวงศ์
วัน เดือน ปี เกิด	25 มกราคม 2523
ประวัติการศึกษา	สำเร็จการศึกษาปริญญาตรี บริหารธุรกิจบัณฑิต คณะวิทยาการจัดการ สาขาการเงิน มหาวิทยาลัยขอนแก่น ปีการศึกษา 2546
ประสบการณ์	เจ้าหน้าที่การตลาดหลักทรัพย์ บมจ.บัวหลวง จำกัด (มหาชน) เจ้าหน้าที่ธุรกิจสัมพันธ์ ธนาคารกรุงเทพ จำกัด (มหาชน) สำนักงานธุรกิจประตูช้างเผือก จังหวัดเชียงใหม่ เจ้าหน้าที่วิเคราะห์ธุรกิจ ธนาคารไทยพาณิชย์ จำกัด (มหาชน) สำนักงานธุรกิจเชียงราย