

ภาคผนวก ก

แสดงผลการเลือกช่วงเวลา (Lag Length) ที่เหมาะสม

กรณีศึกษาประเทศไทยกับประเทศสหรัฐอเมริกา

เมื่อช่วงเวลา = 2

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

117 observations used for estimation from 2000M4 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.051373	.054329	.94561[.346]
DLREX(-1)	.38176	.095138	4.0127[.000]
DLREX(-2)	.011582	.095779	.12092[.904]
DLIRR(-1)	-.5114E-3	.012540	-.040780[.968]
DLIRR(-2)	.0042132	.012299	.34257[.733]
LREX(-1)	-.013711	.014600	-.93913[.350]
LIRR(-1)	-.0025171	.0029322	-.85841[.393]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 1.2500[.535]

Likelihood Ratio Statistic CHSQ( 2)= 1.2567[.533]

F Statistic F( 2, 110)= .59395[.554]

เมื่อช่วงเวลา = 3

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

116 observations used for estimation from 2000M5 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.060768	.056551	1.0746[.285]
DLREX(-1)	.38222	.096160	3.9748[.000]
DLREX(-2)	-.013589	.10336	-.13147[.896]
DLREX(-3)	.074137	.097783	.75818[.450]
DLIRR(-1)	-.0015406	.013104	-.11756[.907]
DLIRR(-2)	.0040047	.012828	.31219[.756]
DLIRR(-3)	.0054646	.012443	.43917[.661]
LREX(-1)	-.016213	.015177	-1.0682[.288]
LIRR(-1)	-.0027759	.0030377	-.91383[.363]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 1.5339[.464]

Likelihood Ratio Statistic CHSQ( 2)= 1.5441[.462]

F Statistic F( 2, 107)= .71690[.491]

\*\*\*\*\*

เมื่อช่วงเวลา = 4

## Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

115 observations used for estimation from 2000M6 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.066242	.057961	1.1429[.256]
DLREX(-1)	.37844	.095727	3.9533[.000]
DLREX(-2)	-.014582	.10282	-.14183[.887]
DLREX(-3)	.063996	.10471	.61115[.542]
DLREX(-4)	.2043E-3	.097694	.0020908[.998]
DLIRR(-1)	.0015541	.013861	.11212[.911]
DLIRR(-2)	-.1164E-3	.013436	-.0086646[.993]
DLIRR(-3)	-.0011039	.012785	-.086340[.931]
DLIRR(-4)	.016301	.012882	1.2654[.209]
LREX(-1)	-.017632	.015531	-1.1353[.259]
LIRR(-1)	-.0034025	.0031348	-1.0854[.280]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 1.8951[.388]

Likelihood Ratio Statistic CHSQ( 2)= 1.9108[.385]

F Statistic F( 2, 104)= .87125[.421]

\*\*\*\*\*

เมื่อช่วงเวลา = 5

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

114 observations used for estimation from 2000M7 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.062870	.060597	1.0375[.302]
DLREX(-1)	.39281	.098547	3.9860[.000]
DLREX(-2)	-.017678	.10416	-.16973[.866]
DLREX(-3)	.064906	.10583	.61329[.541]
DLREX(-4)	.025807	.10600	.24346[.808]
DLREX(-5)	-.052704	.098902	-.53290[.595]
DLIRR(-1)	-.2585E-3	.014125	-.018301[.985]
DLIRR(-2)	-.0028350	.014255	-.19888[.843]
DLIRR(-3)	.0026068	.013636	.19117[.849]
DLIRR(-4)	.018938	.013488	1.4041[.163]
DLIRR(-5)	-.0028296	.013144	-.21528[.830]
LREX(-1)	-.016681	.016210	-1.0291[.306]
LIRR(-1)	-.0034260	.0033057	-1.0364[.302]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 1.6392[.441]

Likelihood Ratio Statistic CHSQ( 2)= 1.6511[.438]

F Statistic F( 2, 101)= .73671[.481]

\*\*\*\*\*



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เมื่อช่วงเวลา = 6

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1)    LIRR(-1)

113 observations used for estimation from 2000M8 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.079489	.061851	1.2852[.202]
DLREX(-1)	.41853	.096710	4.3277[.000]
DLREX(-2)	-.079265	.10425	-.76031[.449]
DLREX(-3)	.086655	.10403	.83298[.407]
DLREX(-4)	.016708	.10348	.16146[.872]
DLREX(-5)	-.066149	.10374	-.63767[.525]
DLREX(-6)	.019537	.097113	.20118[.841]
DLIRR(-1)	-.0022147	.014597	-.15173[.880]
DLIRR(-2)	.0024281	.014079	.17246[.863]
DLIRR(-3)	.0056385	.014156	.39830[.691]
DLIRR(-4)	.014480	.013739	1.0539[.295]
DLIRR(-5)	-.012267	.013317	-.92116[.359]
DLIRR(-6)	.024851	.013096	1.8976[.061]
LREX(-1)	-.021019	.016512	-1.2729[.206]
LIRR(-1)	-.0047082	.0033799	-1.3930[.167]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic    CHSQ( 2)= 2.7110[.258]

Likelihood Ratio Statistic    CHSQ( 2)= 2.7441[.254]

F Statistic

F( 2, 98)= 1.2045[.304]

เมื่อช่วงเวลาดำ = 7

## Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

112 observations used for estimation from 2000M9 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.088354	.065808	1.3426[.183]
DLREX(-1)	.39477	.10121	3.9006[.000]
DLREX(-2)	-.065171	.10723	-.60775[.545]
DLREX(-3)	.068221	.10741	.63513[.527]
DLREX(-4)	.026989	.10540	.25605[.798]
DLREX(-5)	-.069285	.10484	-.66083[.510]
DLREX(-6)	.036508	.10549	.34608[.730]
DLREX(-7)	-.047864	.098342	-.48671[.628]
DLIRR(-1)	-.0025253	.014921	-.16925[.866]
DLIRR(-2)	.0025285	.014962	.16899[.866]
DLIRR(-3)	.0068951	.014523	.47477[.636]
DLIRR(-4)	.014378	.014758	.97421[.332]
DLIRR(-5)	-.011130	.014026	-.79352[.429]
DLIRR(-6)	.021722	.013835	1.5700[.120]
DLIRR(-7)	.011373	.013529	.84068[.403]
LREX(-1)	-.023266	.017530	-1.3272[.188]
LIRR(-1)	-.0056539	.0036141	-1.5644[.121]

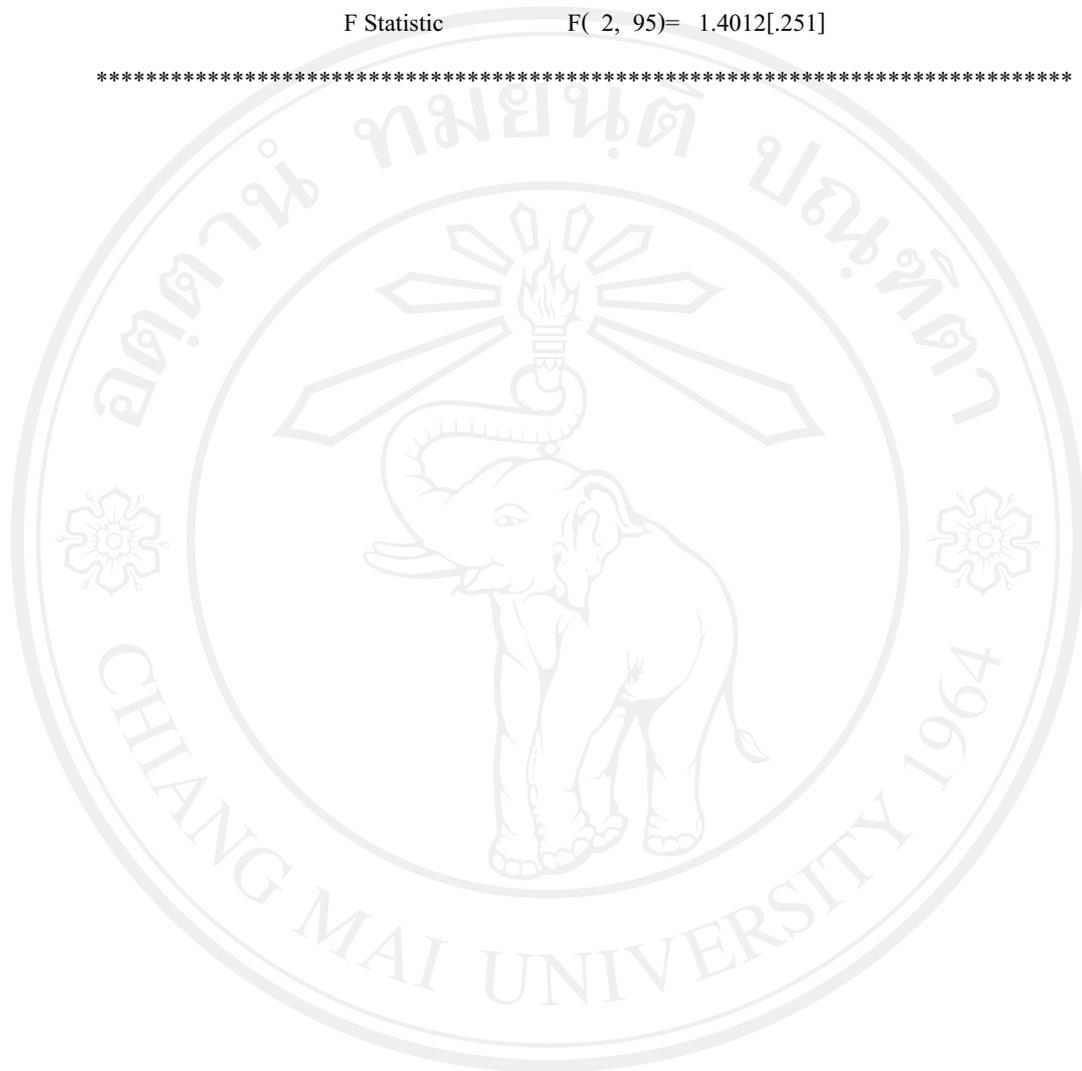
Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 3.2092[.201]

Likelihood Ratio Statistic CHSQ( 2)= 3.2561[.196]

F Statistic F( 2, 95)= 1.4012[.251]

\*\*\*\*\*



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เมื่อช่วงเวลา = 8

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

111 observations used for estimation from 2000M10 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.097842	.069666	1.4045[.164]
DLREX(-1)	.39495	.10258	3.8504[.000]
DLREX(-2)	-.083171	.11008	-.75552[.452]
DLREX(-3)	.085790	.10969	.78208[.436]
DLREX(-4)	.0094373	.10861	.086892[.931]
DLREX(-5)	-.064594	.10715	-.60286[.548]
DLREX(-6)	.038721	.10643	.36383[.717]
DLREX(-7)	-.085715	.10660	-.80410[.423]
DLREX(-8)	.091951	.10122	.90843[.366]
DLIRR(-1)	.0021482	.016161	.13292[.895]
DLIRR(-2)	.0010708	.015502	.069076[.945]
DLIRR(-3)	.0062020	.015811	.39226[.696]
DLIRR(-4)	.015472	.014974	1.0333[.304]
DLIRR(-5)	-.0085913	.015258	-.56306[.575]
DLIRR(-6)	.018612	.014445	1.2885[.201]
DLIRR(-7)	.0082073	.014264	.57537[.566]
DLIRR(-8)	.0058603	.013842	.42336[.673]
LREX(-1)	-.025870	.018513	-1.3974[.166]

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LIRR(-1)      -0.0056969      .0039215      -1.4527[.150]

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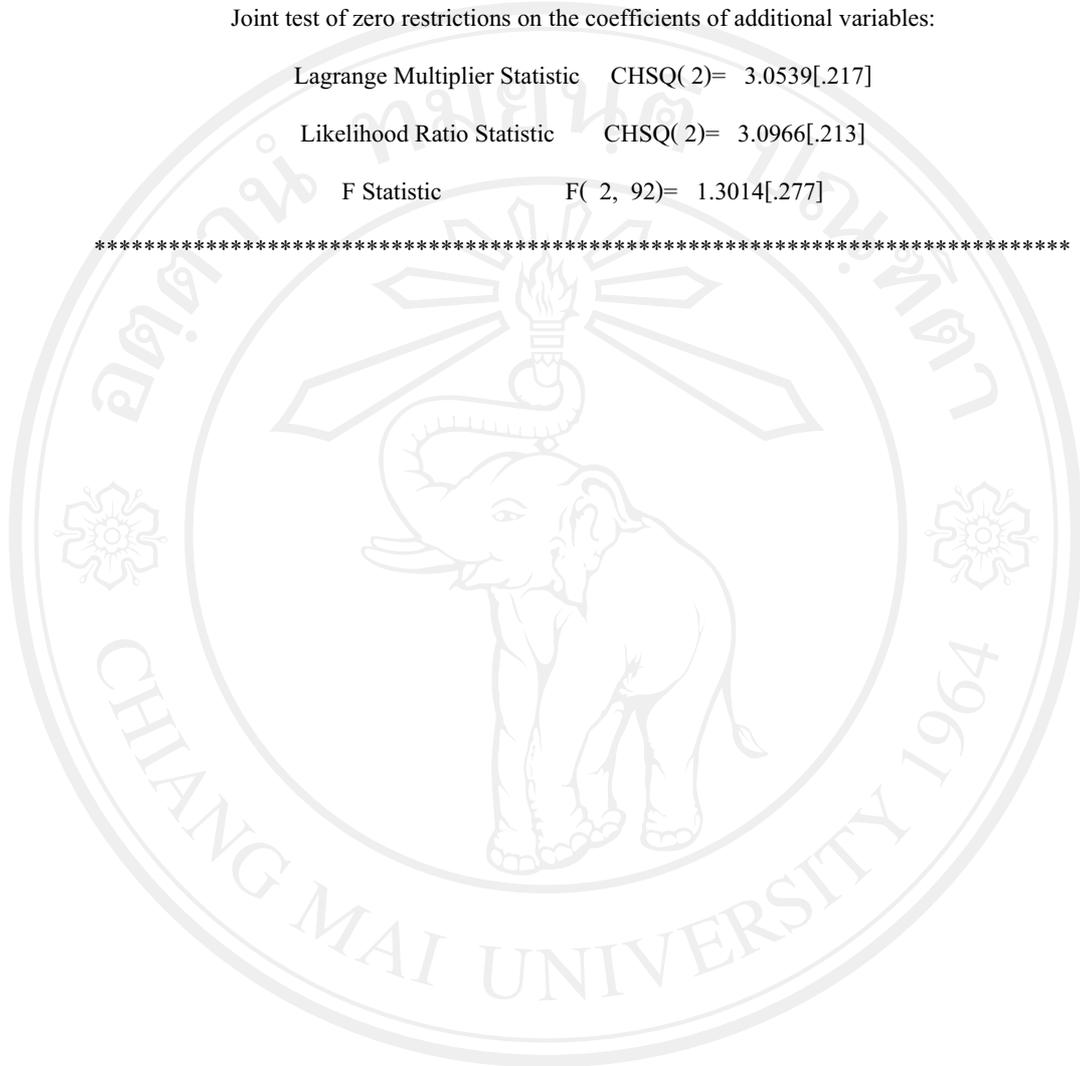
Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic      CHSQ( 2)= 3.0539[.217]

Likelihood Ratio Statistic      CHSQ( 2)= 3.0966[.213]

F Statistic      F( 2, 92)= 1.3014[.277]

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เมื่อช่วงเวลา = 9

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

110 observations used for estimation from 2000M11 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.12121	.070204	1.7265[.088]
DLREX(-1)	.39063	.10005	3.9044[.000]
DLREX(-2)	-.10851	.10726	-1.0117[.314]
DLREX(-3)	.035593	.10802	.32951[.743]
DLREX(-4)	.040569	.10684	.37972[.705]
DLREX(-5)	-.12234	.10625	-1.1515[.253]
DLREX(-6)	.076583	.10447	.73308[.465]
DLREX(-7)	-.092389	.10338	-.89367[.374]
DLREX(-8)	.12131	.10588	1.1458[.255]
DLREX(-9)	-.11966	.098747	-1.2118[.229]
DLIRR(-1)	.0019300	.015761	.12246[.903]
DLIRR(-2)	.010226	.016179	.63205[.529]
DLIRR(-3)	.0038533	.015719	.24514[.807]
DLIRR(-4)	.011206	.015580	.71923[.474]
DLIRR(-5)	-.0045456	.014865	-.30579[.760]
DLIRR(-6)	.022914	.015108	1.5167[.133]
DLIRR(-7)	.010235	.014219	.71977[.474]
DLIRR(-8)	-.0030268	.013954	-.21691[.829]

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DLIRR(-9)	.025317	.013517	1.8730[.064]
LREX(-1)	-.031843	.018624	-1.7098[.091]
LIRR(-1)	-.0081057	.0040244	-2.0141[.047]

\*\*\*\*\*

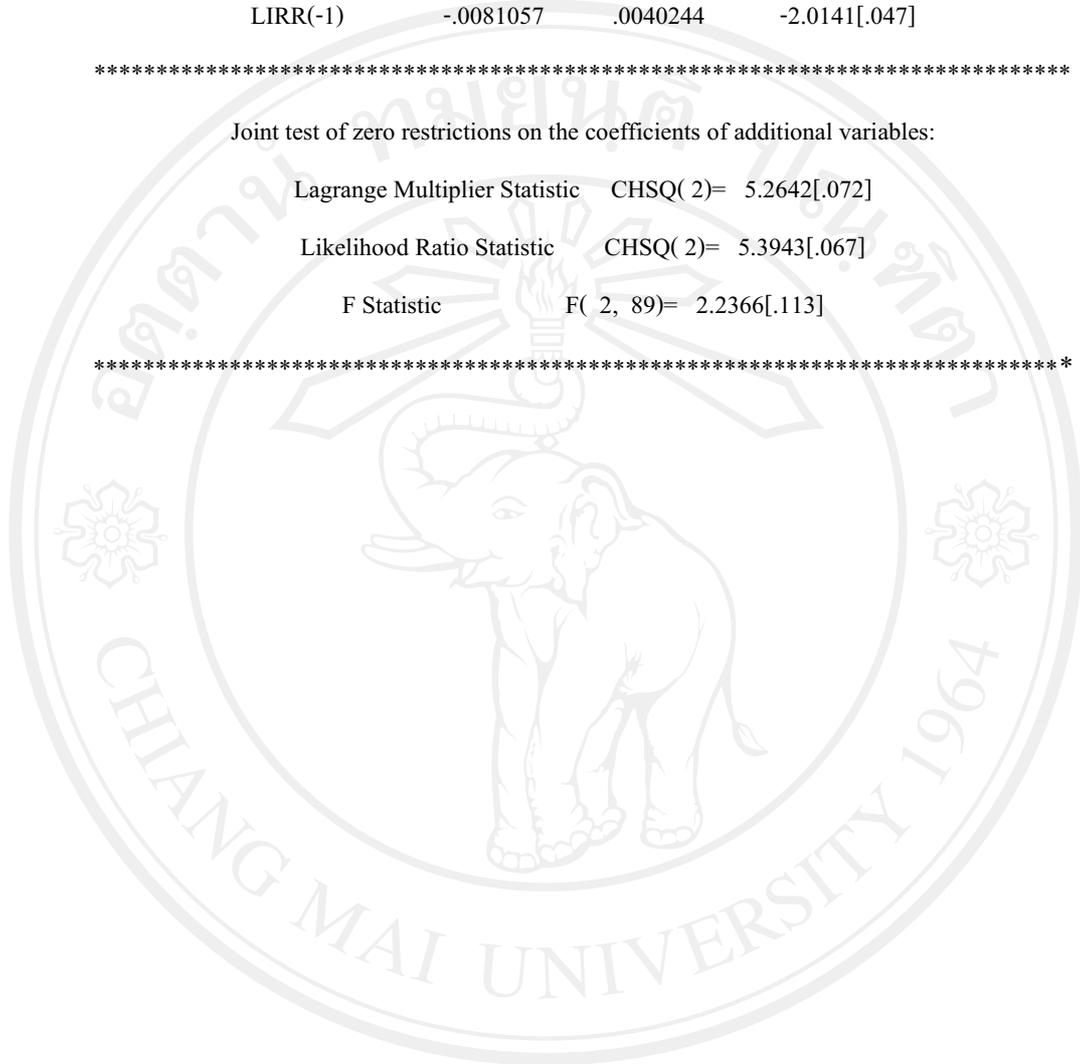
Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic    CHSQ( 2)= 5.2642[.072]

Likelihood Ratio Statistic        CHSQ( 2)= 5.3943[.067]

F Statistic                          F( 2, 89)= 2.2366[.113]

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เมื่อช่วงเวลา = 10

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

109 observations used for estimation from 2000M12 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.10845	.072536	1.4952[.139]
DLREX(-1)	.41983	.10424	4.0274[.000]
DLREX(-2)	-.13616	.10805	-1.2602[.211]
DLREX(-3)	.051067	.10824	.47179[.638]
DLREX(-4)	.040267	.10794	.37305[.710]
DLREX(-5)	-.11839	.10778	-1.0984[.275]
DLREX(-6)	.084730	.10754	.78787[.433]
DLREX(-7)	-.10206	.10503	-.97172[.334]
DLREX(-8)	.12793	.10589	1.2081[.230]
DLREX(-9)	-.19406	.10731	-1.8084[.074]
DLREX(-10)	.15366	.10225	1.5029[.137]
DLIRR(-1)	.0034159	.016273	.20991[.834]
DLIRR(-2)	.0070839	.016287	.43495[.665]
DLIRR(-3)	.0067835	.016993	.39918[.691]
DLIRR(-4)	.0081876	.015839	.51693[.607]
DLIRR(-5)	-.0071833	.016028	-.44816[.655]
DLIRR(-6)	.023902	.015121	1.5808[.118]
DLIRR(-7)	.014640	.015481	.94562[.347]

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DLIRR(-8)	-0.0090966	.014322	-0.63514[.527]
DLIRR(-9)	.024138	.013977	1.7270[.088]
DLIRR(-10)	-0.015342	.013958	-1.0992[.275]
LREX(-1)	-0.028747	.019223	-1.4954[.138]
LIRR(-1)	-0.0062013	.0042179	-1.4702[.145]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic    CHSQ( 2)= 3.3612[.186]

Likelihood Ratio Statistic        CHSQ( 2)= 3.4141[.181]

F Statistic                            F( 2, 86)= 1.3682[.260]

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เมื่อช่วงเวลา = 11

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

108 observations used for estimation from 2001M1 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.099399	.074999	1.3253[.189]
DLREX(-1)	.43286	.10696	4.0469[.000]
DLREX(-2)	-.11642	.11414	-1.0200[.311]
DLREX(-3)	.058667	.11020	.53237[.596]
DLREX(-4)	.041199	.10885	.37849[.706]
DLREX(-5)	-.094978	.10970	-.86582[.389]
DLREX(-6)	.068462	.10946	.62546[.533]
DLREX(-7)	-.069474	.10861	-.63964[.524]
DLREX(-8)	.11675	.10832	1.0778[.284]
DLREX(-9)	-.19434	.10806	-1.7984[.076]
DLREX(-10)	.19572	.11211	1.7459[.085]
DLREX(-11)	-.062701	.10534	-.59522[.553]
DLIRR(-1)	.0048446	.016383	.29570[.768]
DLIRR(-2)	.0070814	.016986	.41690[.678]
DLIRR(-3)	.0086636	.017176	.50441[.615]
DLIRR(-4)	-.0019339	.017300	-.11179[.911]
DLIRR(-5)	-.0036869	.016322	-.22588[.822]
DLIRR(-6)	.028206	.016293	1.7311[.087]
DLIRR(-7)	.011816	.015645	.75528[.452]

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DLIRR(-8)	-0.17011	.015734	-1.0812[.283]
DLIRR(-9)	.027957	.014530	1.9241[.058]
DLIRR(-10)	-0.095420	.014541	-.65622[.513]
DLIRR(-11)	-.0021754	.014234	-.15283[.879]
LREX(-1)	-.026269	.019865	-1.3224[.190]
LIRR(-1)	-.0058538	.0043954	-1.3318[.187]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic    CHSQ( 2)= 2.7585[.252]

Likelihood Ratio Statistic        CHSQ( 2)= 2.7943[.247]

F Statistic                          F( 2, 83)= 1.0878[.342]

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เมื่อช่วงเวลา = 12

Variable Addition Test (OLS case)

\*\*\*\*\*

Dependent variable is DLREX

List of the variables added to the regression:

LREX(-1) LIRR(-1)

107 observations used for estimation from 2001M2 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
INPT	.086777	.077394	1.1212[.266]
DLREX(-1)	.44134	.11002	4.0114[.000]
DLREX(-2)	-.12076	.11815	-1.0221[.310]
DLREX(-3)	.030744	.11734	.26200[.794]
DLREX(-4)	.042591	.11151	.38194[.704]
DLREX(-5)	-.097779	.11114	-.87975[.382]
DLREX(-6)	.067532	.11174	.60437[.547]
DLREX(-7)	-.082040	.11122	-.73763[.463]
DLREX(-8)	.099835	.11159	.89464[.374]
DLREX(-9)	-.17624	.11057	-1.5939[.115]
DLREX(-10)	.19524	.11351	1.7200[.089]
DLREX(-11)	-.052352	.11635	-.44995[.654]
DLREX(-12)	-.070306	.10700	-.65706[.513]
DLIRR(-1)	.0096384	.017080	.56431[.574]
DLIRR(-2)	.0063659	.017239	.36927[.713]
DLIRR(-3)	.0014653	.018373	.079754[.937]
DLIRR(-4)	-.0018847	.017596	-.10711[.915]
DLIRR(-5)	.0037830	.018279	.20696[.837]

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DLIRR(-6)	.025599	.016642	1.5382[.128]
DLIRR(-7)	.0035886	.017223	.20837[.835]
DLIRR(-8)	-.016532	.015952	-1.0364[.303]
DLIRR(-9)	.034657	.016078	2.1555[.034]
DLIRR(-10)	-.010347	.015297	-.67643[.501]
DLIRR(-11)	-.0059213	.014974	-.39545[.694]
DLIRR(-12)	-.0065226	.014535	-.44873[.655]
LREX(-1)	-.022979	.020488	-1.1216[.265]
LIRR(-1)	-.0053270	.0045793	-1.1633[.248]

\*\*\*\*\*

Joint test of zero restrictions on the coefficients of additional variables:

Lagrange Multiplier Statistic CHSQ( 2)= 2.1061[.349]

Likelihood Ratio Statistic CHSQ( 2)= 2.1271[.345]

F Statistic F( 2, 80)= .80312[.452]

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## การประมาณค่าของ Error Correction Model ตามกระบวนการ ARDL โดยใช้ AIC

ระยะสั้น

Error Correction Representation for the Selected ARDL Model

ARDL(2,0) selected based on Akaike Information Criterion

\*\*\*\*\*

Dependent variable is dLREX

116 observations used for estimation from 2000M5 to 2009M12

\*\*\*\*\*

Regressor	Coefficient	Standard Error	T-Ratio[Prob]
dLREX1	.38450	.087998	4.3694[.000]
dLIRR	-.0021696	.0027099	-.80060[.425]
dINPT	.044663	.050379	.88654[.377]
ecm(-1)	-.011960	.013598	-.87953[.381]

\*\*\*\*\*

List of additional temporary variables created:

dLREX = LREX-LREX(-1)

dLREX1 = LREX(-1)-LREX(-2)

dLIRR = LIRR-LIRR(-1)

dINPT = INPT-INPT(-1)

ecm = LREX + .18141\*LIRR -3.7345\*INPT

\*\*\*\*\*

R-Squared .15242 R-Bar-Squared .12972

S.E. of Regression .013929 F-stat. F( 3, 112) 6.7139[.000]

Mean of Dependent Variable -.0011508 S.D. of Dependent Variable .014931

Residual Sum of Squares .021731 Equation Log-likelihood 333.1941

Akaike Info. Criterion 329.1941 Schwarz Bayesian Criterion 323.6869

DW-statistic 1.9835

\*\*\*\*\*

R-Squared and R-Bar-Squared measures refer to the dependent variable  
dLREX and in cases where the error correction model is highly  
restricted, these measures could become negative.

### ระยยะยว

Estimated Long Run Coefficients using the ARDL Approach

ARDL(2,0) selected based on Akaike Information Criterion

\*\*\*\*\*

Dependent variable is LREX

116 observations used for estimation from 2000M5 to 2009M12

\*\*\*\*\*

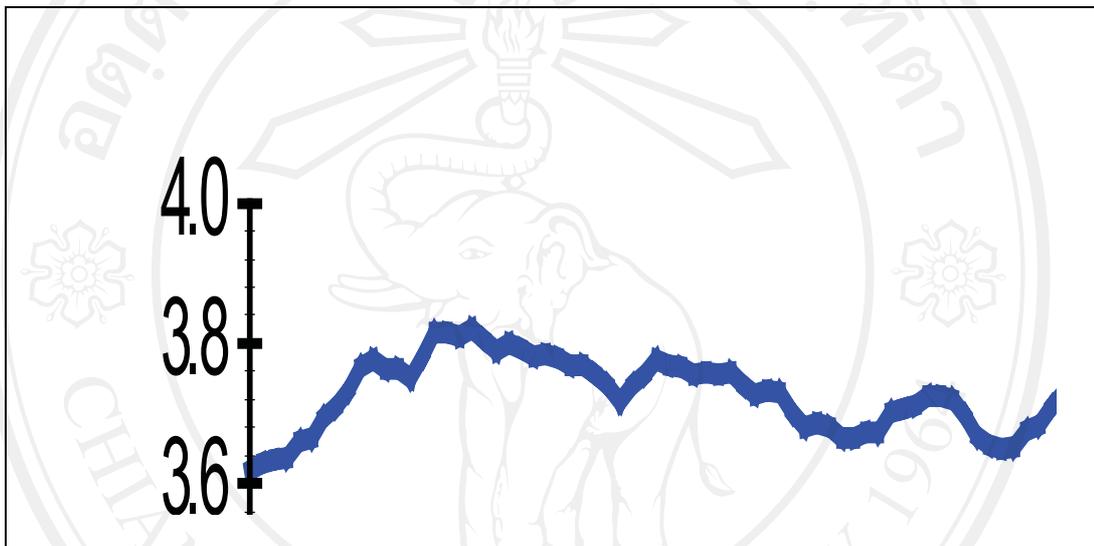
Regressor	Coefficient	Standard Error	T-Ratio[Prob]
LIRR	-.18141	.26127	-.69433[.489]
INPT	3.7345	.19846	18.8169[.000]

\*\*\*\*\*

## แผนภูมิในรูป Log ของตัวแปรที่ศึกษา

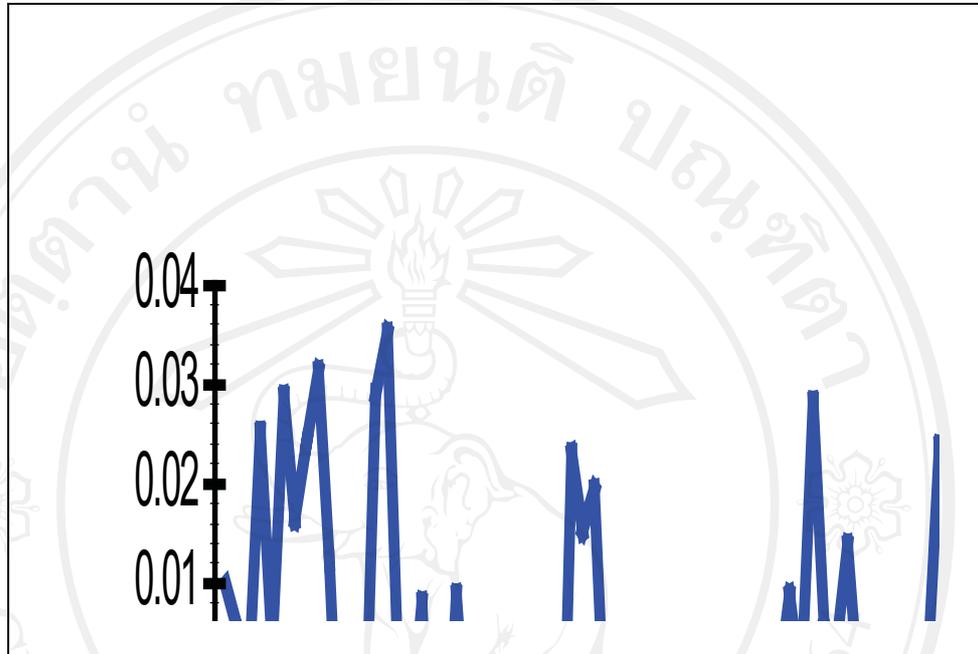
### 1. กรณีประเทศไทยกับประเทศสหรัฐอเมริกา

#### 1.1 แผนภูมิในรูป Log ของอัตราแลกเปลี่ยนที่แท้จริงของเงินบาทต่อสกุลเงินดอลลาร์สหรัฐ



ที่มา : จากการศึกษา

1.2 แผนภูมิในรูปLogของผลต่างลำดับที่ 1 อัตราแลกเปลี่ยนที่แท้จริงของเงินบาทต่อสกุล  
เงิน ดอลลาร์สหรัฐ



ที่มา : จากการศึกษา

1.3 แผนภูมิในรูปอัตราดอกเบี้ยที่แท้จริงของประเทศไทย



ที่มา : จากการศึกษา

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