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APPENDICES

APPENDIX A:
Definition of Notations

Description of Notations

QRW	=	World Rice Export Quantity
QRT	=	Thai Rice Export Quantity
QRV	=	Vietnam's Rice Export Quantity
QRUS	=	US Rice Export Quantity
QRUW	=	World Rubber Export Quantity
QRUT	=	Thai Rubber Export Quantity
QRUIN	=	Indonesia's Rubber Export Quantity
QRUMA	=	Malaysia's Rubber Export Quantity
TRW	=	World Production of Rice
TRT	=	Thai Production of Rice
TRV	=	Vietnam's Production of Rice
TRUS	=	US Production of Rice
TRUW	=	World Production of Rubber
TRUT	=	Thai Production of Rubber
TRUIN	=	Indonesia's Production of Rubber
TRUMA	=	Malaysia's Production of Rubber
VRW	=	World Export Value of Rice
VRT	=	Thai Export Value of Rice
VRV	=	Vietnam's Export Value of Rice

VRUS	=	US Export Value of Rice
VRUW	=	World Export Value of Rubber
VRUT	=	Thai Export Value of Rubber
VRUIN	=	Indonesia's Export Value of Rubber
VRUMA	=	Malaysia's Export Value of Rubber
UVRW	=	World Unit Value of Rice Export
UVRT	=	Thai Unit Value of Rice Export
UVRUS	=	Vietnam's Unit Value of Rice Export
UVRV	=	US Unit Value of Rice Export
UVRUW	=	World Unit Value of Rubber Export
UVRUT	=	Thai Unit Value of Rubber Export
UVRUIN	=	Indonesia's Unit Value of Rubber Export
UVRUMA	=	Malaysia's Unit Value of Rubber Export
CRRT1	=	The Competitiveness Residual of Thai Rice Export During 1986-1990
CRRT2	=	The Competitiveness Residual of Thai Rice Export During 1991-1995
CRRUT1	=	The Competitiveness Residual of Thai Rubber Export During 1986-1990
CRRUT2	=	The Competitiveness Residual of Thai Rubber Export During 1990-1995

- PSTRTUS1 = Price Stability Index of Thai Rice Export Compare to USA
During 1986-1990
- PSTRTUS2 = Price Stability Index of Thai Rice Export Compare to USA
During 1991-1995
- PSTRTV1 = Price Stability Index of Thai Rice Export Compare to
Vietnam During 1986-1990
- PSTRTV2 = Price Stability Index of Thai Rice Export Compare to
Vietnam During 1991-1995
- PSTRUMA1 = Price Stability Index of Thai Rubber Export Compare
to Malaysia During 1986-1990
- PSTRUMA2 = Price Stability Index of Thai Rubber Export Compare
to Malaysia During 1991-1995
- PSTRUIN1 = Price Stability Index of Thai Rubber Export Compare
to Indonesia During 1986-1990
- PSTRUIN2 = Price Stability Index of Thai Rubber Export Compare
to Indonesia During 1991-1995
- RPCRTUS1 = Relative Price Change of Rice Export of Thailand
Compare to USA During 1986-1990
- RPCRTUS2 = Relative Price Change of Rice Export of Thailand
Compare to USA During 1991-1995
- RPCRTV1 = Relative Price Change of Rice Export of Thailand
Compare to Vietnam During 1986-1990

RPCRTV2	=	Relative Price Change of Rice Export of Thailand Compare to Vietnam During 1991-1995
RPCRUTIN1=		Relative Price Change of Rubber Export of Thailand Compare to Indonesia During 1986-1990
RPCRUTIN2=		Relative Price Change of Rubber Export of Thailand Compare to Indonesia During 1991-1995
RPCRUTMA1=		Relative Price Change of Rubber Export of Thailand Compare to Malaysia During 1986-1990
RPCRUTMA2=		Relative Price Change of Rubber Export of Thailand Compare to Malaysia During 1991-1995
SUPRTUS1	=	Supply Availability of Thai Rice Export Compare to USA During 1986-1990
SUPRTUS2	=	Supply Availability of Thai Rice Export Compare to USA During 1991-1995
SUPRTV1	=	Supply Availability of Thai Rice Export Compare to Vietnam During 1986-1990
SUPRTV2	=	Supply Availability of Thai Rice Export Compare to Vietnam During 1991-1995
SUPRUTIN1	=	Supply Availability of Thai Rubber Export Compare to Indonesia During 1986-1990
SUPRUTIN2	=	Supply Availability of Thai Rubber Export Compare to Indonesia During 1986-1990

Rubber Smoked Sheet (RSS) Production

Unsmoked Sheets Rubber (USS) is initially produced by smallholder. After delivery of USS to a factory the sheet rubber has to undergo the processing steps such as cleaning, smoking, grading and packing before it is shipped out to consumers. The rubber to be sold in the international markets has to conform to the International Standards of Quality and Packing for Natural Rubber Grades (The Green Book) over which the Rubber Control Act of the Department of Agriculture enforces control.

Technically Specified Rubber (TSR) or (TTR) (Thai Tested Rubber)

TSR (Block Rubber) can be produced into different grades from different types of raw material: fresh latex, field coagulum, USS, RSS, and Scrap rubber.

The processing consists of three stages: breaking of rubber into small size called comminuted rubber, continuous drying in a tunnel with hot air, and weighting, processing and packing into pallet.

All the stages of processing are under constant controls with modern machinery and rubber technology to maintain its quality under the technical specifications.

Air Dried Sheet (ADS) Production

Air dried sheet rubber is the sheet rubber which has the same production process as RSS but is under strict control and dried with hot air without smoke. Breaching agents are not normally used in the process.

Latex Concentrate

Latex concentrate has a dry rubber content of 60% and has been found to be uniform in its standard quality and suitable for many important latex processes into manufactured products

APPENDIX B:

Empirical Data

obs	PSTRTUS1	PSTRTUS2	PSTRTV1	PSTRTV2	PSTRUMA1	PSTRUMA2	PSTRUTIN1
1986	1.859517	NA	1.845471	NA	1.452462	NA	1.098368
1987	0.524576	NA	0.655096	NA	-20.48146	NA	-2.776603
1988	0.447872	NA	0.239679	NA	5.232299	NA	10.08544
1989	2.387447	NA	8.764233	NA	-28.24634	NA	-3.600784
1990	0.992342	NA	-2.982386	NA	9.128487	NA	-22.46804
1991	NA	-1.180498	NA	-0.535138	NA	1.059773	NA
1992	NA	-1.771823	NA	-0.904935	NA	2.556115	NA
1993	NA	0.738401	NA	1.450470	NA	2.703318	NA
1994	NA	0.977241	NA	-1.699308	NA	-2.425997	NA
1995	NA	-1.933739	NA	-8.592435	NA	2.558624	NA

obs	PSTRUTIN2
1986	NA
1987	NA
1988	NA
1989	NA
1990	NA
1991	0.600625
1992	1.681004
1993	2.319966
1994	-0.827439
1995	1.919222

obs	UVRW	UVRT	UVRUS	UVRV	UVRUW	UVRUT	UVRUIN
1986	0.233620	0.170557	0.274466	0.163811	0.792472	3.876388	0.599734
1987	0.245499	0.198421	0.238268	0.142085	0.928746	4.311265	0.730328
1988	0.312366	0.259545	0.362534	0.298158	1.182842	5.553538	0.949419
1989	0.311203	0.280195	0.328149	0.204238	0.948379	3.788069	0.892843
1990	0.310235	0.270389	0.344398	0.187584	0.832573	2.982921	0.855365
1991	0.319930	0.275691	0.354343	0.226991	0.823344	2.789622	0.801549
1992	0.312632	0.276856	0.349608	0.214689	0.837161	2.555811	0.898225
1993	0.288011	0.261088	0.302812	0.180023	0.844618	2.500922	0.948973
1994	0.326078	0.321884	0.374632	0.181341	1.035007	2.871335	1.335914
1995	0.310546	0.315062	0.329224	0.197133	1.506458	4.332079	1.857273

obs	UVRUMA
1986	0.813659
1987	0.959094
1988	1.246625
1989	0.980419
1990	0.846650
1991	0.864222
1992	0.894458
1993	0.883828
1994	1.129266
1995	1.588860

obs	VRW	VRT	VRV	VRUS	VRUW	VRUT	VRUIN
1986	2784186.	751682.0	21623.00	513092.0	2946326.	2946326.	574961.0
1987	2961159.	871320.0	17107.00	517021.0	3790757.	3790757.	798152.0
1988	3521384.	1346050.	27192.00	728800.0	5004354.	5004354.	1074934.
1989	4370747.	1759635.	290018.0	826892.0	4147784.	4147784.	1028458.
1990	3481634.	1066688.	304637.0	654149.0	3379497.	3379497.	921560.0
1991	3804174.	1171195.	234482.0	581456.0	3395877.	3395877.	977976.0
1992	4632411.	1406729.	417742.0	630322.0	3622954.	3622954.	1138795.
1993	4338802.	1279283.	310000.0	621491.0	3490517.	3490517.	1152366.
1994	5096104.	1524023.	359600.0	782775.0	4700195.	4700195.	1663005.
1995	6479456.	1922916.	391900.0	770629.0	7071301.	7071301.	2458714.

obs	VRUMA
1986	1233615.
1987	1553974.
1988	2007760.
1989	1457972.
1990	1118977.
1991	978183.0
1992	925728.0
1993	828230.0
1994	1116102.
1995	1610057.

obs	TRW	TRT	TRV	TRUS	TRUW	TRUT	TRUIN
1986	3.10E+08	373117.1	10561914	3992340.	4556310.	811100.0	1113130.
1987	3.05E+08	409796.0	9967716.	3880140.	4732580.	891400.0	1130350.
1988	3.22E+08	408285.2	11220000	4777740.	4906740.	862000.0	1173300.
1989	3.40E+08	392262.4	12537558	4624884.	4973110.	1047860.	1209040.
1990	3.43E+08	378075.7	12688566	4672800.	5004580.	1097030.	1275300.
1991	3.41E+08	383030.3	12950454	4771800.	5148690.	1152210.	1328170.
1992	3.47E+08	375414.6	14249598	5379660.	5526450.	1520000.	1398450.
1993	3.48E+08	384449.3	15072156	4673460.	5695100.	1603000.	1475440.
1994	3.54E+08	388080.0	15528678	5920926.	6039310.	1767000.	1499420.
1995	3.63E+08	401940.0	16476042	5205420.	6534330.	2082990.	1573300.

obs	TRUMA
1986	1538640.
1987	1578700.
1988	1661600.
1989	1415300.
1990	1271500.
1991	1257200.
1992	1173200.
1993	1074300.
1994	1100600.
1995	1089400.

obs	QRW	QRT	QRV	QRUS	QRUW	QRUT	QRUIN
1986	11917605	4407218.	132000.0	1869421.	3717895.	760070.0	958693.0
1987	12061821	4391261.	120400.0	2169913.	4081586.	879268.0	1092868.
1988	11273269	5186188.	91200.00	2010295.	4230789.	901111.0	1132202.
1989	14044689	6280047.	1420000.	2519866.	4373551.	1094960.	1151891.
1990	11222556	3945016.	1624000.	1899401.	4059101.	1132949.	1077388.
1991	11890663	4248213.	1033000.	1640940.	4124495.	1217325.	1220107.
1992	14817444	5081087.	1945800.	1802940.	4327668.	1417536.	1267828.
1993	15064729	4899814.	1722000.	2052398.	4132659.	1395692.	1214329.
1994	15628481	4734698.	1983000.	2089452.	4541220.	1636937.	1244844.
1995	20864710	6103302.	1988000.	2340745.	4693991.	1632311.	1323830.

obs	QRUMA
1986	1516133.
1987	1620252.
1988	1610556.
1989	1487090.
1990	1321652.
1991	1131865.
1992	1034960.
1993	937094.0
1994	988343.0
1995	1013341.

obs	RPCRTUS1	RPCRTUS2	RPCRTV1	RPCRTV2	RPCRUTIN1	RPCRUTIN2	RPCRUTMA1
1986	0.054870	NA	0.231915	NA	-4.474617	NA	-2.303147
1987	0.211351	NA	0.355316	NA	-0.560319	NA	-0.269001
1988	-0.116845	NA	-0.526005	NA	-0.053783	NA	-0.040286
1989	0.137944	NA	0.501406	NA	-1.606703	NA	-0.591134
1990	-0.068757	NA	0.069523	NA	-0.755396	NA	-0.340520
1991	NA	-0.007072	NA	-0.226880	NA	-0.007020	NA
1992	NA	0.013870	NA	0.075022	NA	-0.634886	NA
1993	NA	0.070307	NA	0.160735	NA	-0.210004	NA
1994	NA	-0.003011	NA	0.324714	NA	-0.486056	NA
1995	NA	0.097782	NA	-0.176796	NA	0.183154	NA

obs	RPCRUTMA2
1986	NA
1987	NA
1988	NA
1989	NA
1990	NA
1991	-0.295304
1992	-0.370513
1993	-0.027738
1994	-0.286991
1995	0.183877

obs	SUPRTUS1	SUPRTUS2	SUPRTV1	SUPRTV2	SUPRUTIN1	SUPRUTIN2	SUPRUTMA1
1986	22.49955	NA	266.4940	NA	-0.512452	NA	-1.333785
1987	-12.04790	NA	2617.773	NA	0.466980	NA	1.204069
1988	-14.34677	NA	-502.8636	NA	-31.57419	NA	-1.034051
1989	26.65429	NA	31.46013	NA	0.034610	NA	-0.005202
1990	40.29327	NA	-378.5146	NA	0.113108	NA	1.082055
1991	NA	-10.48926	NA	-13.61574	NA	0.321987	NA
1992	NA	-279.4958	NA	43.03092	NA	10.29051	NA
1993	NA	-7.590673	NA	35.40602	NA	0.740898	NA
1994	NA	6.314130	NA	-40.50205	NA	7.750895	NA
1995	NA	30.83530	NA	-423.9556	NA	-12.72531	NA

obs	SUPRUTMA2
1986	NA
1987	NA
1988	NA
1989	NA
1990	NA
1991	-0.170847
1992	6.832340
1993	6.263428
1994	2.166303
1995	-4.436295

APPENDIX C:

Regression Results of Competitiveness Residual

Standard Regression Output

Regression Coefficients

Each coefficient multiplies the corresponding variable in forming the best prediction of the dependent variable. The coefficient measures the contribution of its independent variable to the prediction. The coefficient of the series called C is the constant or intercept in the regression--it is the base level of the prediction when all of the other independent variables are zero. The other coefficients are interpreted as the slope of the relation between the corresponding independent variable and the dependent variable.

Standard Errors

These measure the statistical reliability of the regression coefficients--the larger the standard error, the more statistical noise infects the coefficient. According to regression theory, there are about 2 chances in 3 that the true regression coefficient lies within one standard error of the reported coefficient, and 95 chances out of 100 that it lies within two standard errors.

t-Statistic

This is a test statistic for the hypothesis that a coefficient has a particular value. The t-statistic to test if a coefficient is zero (that is, if the variable does not

belong in the regression) is the ratio of the coefficient to its standard error. If the t-statistic exceeds one in magnitude it is at least two-thirds likely that the true value of the coefficient is not zero, and if the t-statistic exceeds two in magnitude it is at least 95 percent likely that the coefficient is not zero.

Probability

The last column shows the probability of drawing a t-statistic of the magnitude of the one just to the left from a t distribution. With this information, you can tell at a glance if you reject or accept the hypothesis that the true coefficient is zero. Normally, a probability lower than .05 is taken as strong evidence of rejection of that hypothesis.

R²

This measures the success of the regression in predicting the values of the dependent variable within the sample. R² is one if the regression fits perfectly, and zero if it fits no better than the simple mean of the dependent variable. R² is the fraction of the variance of the dependent variable explained by the independent variables. It can be negative if the regression does not have an intercept or constant, or if two-stage least squares is used.

R² adjusted for degrees of freedom

This is a close relative of R² in which slightly different measures of the variances are used. It is less than R² (provided there is more than one independent variable) and can be negative.

Standard Error of the Regression

This is a summary measure of the size of the prediction errors. It has the same units as the dependent variable. About two-thirds of all the errors have magnitudes of less than one standard error. The standard error of the regression is a measure of the magnitude of the residuals. About two-thirds of the residuals will lie in a range from minus one standard error to plus one standard error, and 95 percent of the residuals will lie in a range from minus two to plus two standard errors.

Sum of Squared Residuals

This is just what it says. You may want to use this number as an input to certain types of tests.

Log Likelihood

This is the value of the log likelihood function evaluated at the estimated values of the coefficients. Likelihood ratio tests may be conducted by looking at the difference between the log likelihoods of restricted and unrestricted versions of an equation.

Durbin-Watson Statistic

This is a test statistic for serial correlation. If it is less than 2, there is evidence of positive serial correlation.

Akaike Information Criterion

The Akaike Information Criterion, or AIC, is a guide to the selection of the number of terms in an equation. It is based on the sum of squared residuals but places a penalty on extra coefficients. Under certain conditions, you can choose the length of a lag distribution, for example, by choosing the specification with the lowest value of the AIC.

Schwarz Criterion

The Schwarz criterion is an alternative to the AIC with basically the same interpretation but a larger penalty for extra coefficients.

F-Statistic

This is a test of the hypothesis that all of the coefficients in a regression are zero (except the intercept or constant). If the F-statistic exceeds a critical level, at least one of the coefficients is probably non-zero. For example, if there are three independent variables and 100 observations, an F-statistic above 2.7 indicates that the probability is at least 95 percent that one or more of the three coefficients is non-zero. The probability given just below the F-statistic enables you to carry out this test at a glance.

Table 22 : Determination Factors of Rice Competitiveness Residual

Commodity		Rice			
Competitor		USA		Vietnam	
		Period1	Period2	Period1	Period2
Relative Price Change [RPC]	Period1				
	Period2				✗
Price Stability [PST]	Period1			✗	
	Period2		✗		✗
Supply Availability [SA]	Period1				
	Period2				✗
RPC&PST&SA	Period1			✗	
	Period2				
RPC&PST	Period1			✗	
	Period2				
RPC&SA	Period1				
	Period2				
PST&SA	Period1	✗			
	Period2		✗		

Source : Author's calculation

✗ = Regression results with high signification.

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.15E+08	26736360	4.307893	0.1452
RPCRTV	4.07E+08	86923735	4.680554	0.1340
PSTRTV	-1.09E+08	16924226	-6.419111	0.0984
SUPRTV	-50263.34	19785.62	-2.540397	0.2387
R-squared	0.976478	Mean dependent var		-929214.0
Adjusted R-squared	0.905913	S.D. dependent var		1.36E+08
S.E. of regression	41691930	Akaike info criterion		35.08220
Sum squared resid	1.74E+15	Schwarz criterion		34.76975
Log likelihood	-90.80019	F-statistic		13.83788
Durbin-Watson stat	1.285927	Prob(F-statistic)		0.194506

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-16426067	43116403	-0.380970	0.7683
RPCRTV	2.77E+08	3.11E+08	0.891516	0.5365
PSTRTV	37189323	58859100	0.631836	0.6413
SUPRTV	-1685220.	2959758.	-0.569378	0.6705
R-squared	0.738625	Mean dependent var		-42734063
Adjusted R-squared	-0.045500	S.D. dependent var		66174075
S.E. of regression	67662800	Akaike info criterion		36.05066
Sum squared resid	4.58E+15	Schwarz criterion		35.73821
Log likelihood	-93.22133	F-statistic		0.941973
Durbin-Watson stat	3.258310	Prob(F-statistic)		0.621354

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	543186.0	74445193	0.007296	0.9946
RPCRTV	-11645858	1.97E+08	-0.059072	0.9566
R-squared	0.001162	Mean dependent var		-929214.0
Adjusted R-squared	-0.331784	S.D. dependent var		1.36E+08
S.E. of regression	1.57E+08	Akaike info criterion		38.03086
Sum squared resid	7.38E+16	Schwarz criterion		37.87464
Log likelihood	-100.1718	F-statistic		0.003489
Durbin-Watson stat	1.669185	Prob(F-statistic)		0.956610

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-48498817	26451058	-1.833530	0.1641
RPCRTV	1.84E+08	1.26E+08	1.456600	0.2413
R-squared	0.414255	Mean dependent var		-42734063
Adjusted R-squared	0.219007	S.D. dependent var		66174075
S.E. of regression	58480563	Akaike info criterion		36.05758
Sum squared resid	1.03E+16	Schwarz criterion		35.90136
Log likelihood	-95.23865	F-statistic		2.121683
Durbin-Watson stat	2.278782	Prob(F-statistic)		0.241264

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	68488117	67319417	1.017361	0.3839
PSTRTV	-51268987	31998624	-1.602225	0.2074
R-squared	0.461122	Mean dependent var		-929214.0
Adjusted R-squared	0.281496	S.D. dependent var		1.36E+08
S.E. of regression	1.15E+08	Akaike info criterion		37.41376
Sum squared resid	3.98E+16	Schwarz criterion		37.25753
Log likelihood	-98.62908	F-statistic		2.567124
Durbin-Watson stat	1.512936	Prob(F-statistic)		0.207429

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20148248	27746134	-0.726164	0.5203
PSTRTV	4949579.	2907055.	1.702609	0.1872
R-squared	0.491429	Mean dependent var		-42734063
Adjusted R-squared	0.321905	S.D. dependent var		66174075
S.E. of regression	54492052	Akaike info criterion		35.91631
Sum squared resid	8.91E+15	Schwarz criterion		35.76008
Log likelihood	-94.88546	F-statistic		2.898878
Durbin-Watson stat	2.038800	Prob(F-statistic)		0.187194

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2751487.	74260318	0.037052	0.9728
SUPRTV	-9046.388	61370.54	-0.147406	0.8922
R-squared	0.007191	Mean dependent var		-929214.0
Adjusted R-squared	-0.323746	S.D. dependent var		1.36E+08
S.E. of regression	1.56E+08	Akaike info criterion		38.02481
Sum squared resid	7.34E+16	Schwarz criterion		37.86858
Log likelihood	-100.1567	F-statistic		0.021729
Durbin-Watson stat	1.778498	Prob(F-statistic)		0.892161

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-23266956	26108116	-0.891177	0.4385
SUPRTV	243560.2	135851.1	1.792847	0.1709
R-squared	0.517243	Mean dependent var		-42734063
Adjusted R-squared	0.356323	S.D. dependent var		66174075
S.E. of regression	53091102	Akaike info criterion		35.86421
Sum squared resid	8.46E+15	Schwarz criterion		35.70799
Log likelihood	-94.75523	F-statistic		3.214301
Durbin-Watson stat	2.193077	Prob(F-statistic)		0.170900

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	91441954	48360248	1.890850	0.1992
RPCRTV	2.85E+08	1.40E+08	2.036482	0.1786
PSTRTV	-94853612	30947283	-3.065006	0.0920
R-squared	0.824677	Mean dependent var		-929214.0
Adjusted R-squared	0.649354	S.D. dependent var		1.36E+08
S.E. of regression	80486046	Akaike info criterion		36.69090
Sum squared resid	1.30E+16	Schwarz criterion		36.45656
Log likelihood	-95.82194	F-statistic		4.703758
Durbin-Watson stat	1.722699	Prob(F-statistic)		0.175323

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-29537063	29661148	-0.995817	0.4243
RPCRTV	1.25E+08	1.29E+08	0.968906	0.4348
PSTRTV	3750556.	3187230.	1.176745	0.3604
R-squared	0.653889	Mean dependent var		-42734063
Adjusted R-squared	0.307779	S.D. dependent var		66174075
S.E. of regression	55056714	Akaike info criterion		35.93146
Sum squared resid	6.06E+15	Schwarz criterion		35.69712
Log likelihood	-93.92334	F-statistic		1.889250
Durbin-Watson stat	2.909041	Prob(F-statistic)		0.346111

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2541412.	92668116	0.027425	0.9806
RPCRTV	3258099.	2.76E+08	0.011816	0.9916
SUPRTV	-9542.492	86091.78	-0.110841	0.9219
R-squared	0.007260	Mean dependent var		-929214.0
Adjusted R-squared	-0.985480	S.D. dependent var		1.36E+08
S.E. of regression	1.92E+08	Akaike info criterion		38.42474
Sum squared resid	7.34E+16	Schwarz criterion		38.19040
Log likelihood	-100.1565	F-statistic		0.007313
Durbin-Watson stat	1.789514	Prob(F-statistic)		0.992740

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-31775723	29794145	-1.066509	0.3979
RPCRTV	1.11E+08	1.39E+08	0.800022	0.5076
SUPRTV	180717.0	164749.2	1.096922	0.3871
R-squared	0.634279	Mean dependent var		-42734063
Adjusted R-squared	0.268559	S.D. dependent var		66174075
S.E. of regression	56594933	Akaike info criterion		35.98657
Sum squared resid	6.41E+15	Schwarz criterion		35.75223
Log likelihood	-94.06112	F-statistic		1.734328
Durbin-Watson stat	2.892061	Prob(F-statistic)		0.365721

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	68279492	83890675	0.813910	0.5012
PSTRTV	-51340866	39550801	-1.298099	0.3238
SUPRTV	751.9532	55885.12	0.013455	0.9905
R-squared	0.461171	Mean dependent var		-929214.0
Adjusted R-squared	-0.077658	S.D. dependent var		1.36E+08
S.E. of regression	1.41E+08	Akaike info criterion		37.81367
Sum squared resid	3.98E+16	Schwarz criterion		37.57933
Log likelihood	-98.62886	F-statistic		0.855876
Durbin-Watson stat	1.498470	Prob(F-statistic)		0.538829

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-28686402	38711348	-0.741033	0.5359
PSTRTV	-7179315.	29769938	-0.241160	0.8319
SUPRTV	585634.2	1427904.	0.410135	0.7215
R-squared	0.530884	Mean dependent var		-42734063
Adjusted R-squared	0.061768	S.D. dependent var		66174075
S.E. of regression	64097782	Akaike info criterion		36.23555
Sum squared resid	8.22E+15	Schwarz criterion		36.00121
Log likelihood	-94.68357	F-statistic		1.131669
Durbin-Watson stat	2.433901	Prob(F-statistic)		0.469116

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	11414578	74721368	0.152762	0.9035
RPCRTUS	2.06E+08	5.77E+08	0.356355	0.7821
PSTRTUS	-39532110	27598257	-1.432413	0.3880
SUPRTUS	4773083.	3087565.	1.545905	0.3655
R-squared	0.773055	Mean dependent var		-929214.0
Adjusted R-squared	0.092219	S.D. dependent var		1.36E+08
S.E. of regression	1.30E+08	Akaike info criterion		37.34898
Sum squared resid	1.68E+16	Schwarz criterion		37.03653
Log likelihood	-96.46714	F-statistic		1.135449
Durbin-Watson stat	1.396391	Prob(F-statistic)		0.582761

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4267047.	23202108	0.183908	0.8842
RPCRTUS	2.39E+08	5.33E+08	0.448929	0.7314
PSTRTUS	-11116820	3845736.	-2.890687	0.2120
SUPRTUS	303669.1	145027.1	2.093879	0.2836
R-squared	0.931972	Mean dependent var		-42734063
Adjusted R-squared	0.727888	S.D. dependent var		66174075
S.E. of regression	34519274	Akaike info criterion		34.70462
Sum squared resid	1.19E+15	Schwarz criterion		34.39217
Log likelihood	-89.85624	F-statistic		4.566612
Durbin-Watson stat	1.600290	Prob(F-statistic)		0.328284

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	12882035	70592931	0.182483	0.8668
RPCRTUS	-3.16E+08	5.41E+08	-0.583873	0.6003
R-squared	0.102040	Mean dependent var		-929214.0
Adjusted R-squared	-0.197280	S.D. dependent var		1.36E+08
S.E. of regression	1.49E+08	Akaike info criterion		37.92439
Sum squared resid	6.64E+16	Schwarz criterion		37.76817
Log likelihood	-99.90568	F-statistic		0.340907
Durbin-Watson stat	1.836783	Prob(F-statistic)		0.600306

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20889105	39373368	-0.530539	0.6325
RPCRTUS	-6.35E+08	7.25E+08	-0.876800	0.4451
R-squared	0.203986	Mean dependent var		-42734063
Adjusted R-squared	-0.061352	S.D. dependent var		66174075
S.E. of regression	68173816	Akaike info criterion		36.36432
Sum squared resid	1.39E+16	Schwarz criterion		36.20809
Log likelihood	-96.00548	F-statistic		0.768778
Durbin-Watson stat	2.160820	Prob(F-statistic)		0.445141

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	41366006	77296383	0.535161	0.6297
PSTRTUS	-20508606	22362622	-0.917093	0.4267
R-squared	0.218966	Mean dependent var		-929214.0
Adjusted R-squared	-0.041379	S.D. dependent var		1.36E+08
S.E. of regression	1.39E+08	Akaike info criterion		37.78489
Sum squared resid	5.77E+16	Schwarz criterion		37.62866
Log likelihood	-99.55691	F-statistic		0.841060
Durbin-Watson stat	1.108064	Prob(F-statistic)		0.426723

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-15212884	24936303	-0.610070	0.5849
PSTRTUS	-7761957.	3603595.	-2.153948	0.1203
R-squared	0.607304	Mean dependent var		-42734063
Adjusted R-squared	0.476405	S.D. dependent var		66174075
S.E. of regression	47883469	Akaike info criterion		35.65774
Sum squared resid	6.88E+15	Schwarz criterion		35.50151
Log likelihood	-94.23903	F-statistic		4.639493
Durbin-Watson stat	1.996546	Prob(F-statistic)		0.120259

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-34941633	70807472	-0.493474	0.6555
SUPRTUS	2697153.	2802763.	0.962319	0.4069
R-squared	0.235875	Mean dependent var		-929214.0
Adjusted R-squared	-0.018834	S.D. dependent var		1.36E+08
S.E. of regression	1.37E+08	Akaike info criterion		37.76300
Sum squared resid	5.65E+16	Schwarz criterion		37.60677
Log likelihood	-99.50219	F-statistic		0.926058
Durbin-Watson stat	2.440738	Prob(F-statistic)		0.406878

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-36376739	36469800	-0.997448	0.3921
SUPRTUS	122056.1	289632.2	0.421417	0.7018
R-squared	0.055889	Mean dependent var		-42734063
Adjusted R-squared	-0.258815	S.D. dependent var		66174075
S.E. of regression	74245265	Akaike info criterion		36.53494
Sum squared resid	1.65E+16	Schwarz criterion		36.37872
Log likelihood	-96.43205	F-statistic		0.177593
Durbin-Watson stat	1.746710	Prob(F-statistic)		0.701823

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	41352620	93954804	0.440133	0.7028
RPCRTUS	-1.22E+08	6.99E+08	-0.174628	0.8775
PSTRTUS	-17914589	30976147	-0.578335	0.6215
R-squared	0.230696	Mean dependent var		-929214.0
Adjusted R-squared	-0.538609	S.D. dependent var		1.36E+08
S.E. of regression	1.69E+08	Akaike info criterion		38.16975
Sum squared resid	5.69E+16	Schwarz criterion		37.93542
Log likelihood	-99.51908	F-statistic		0.299875
Durbin-Watson stat	1.318353	Prob(F-statistic)		0.769304

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20584327	32711871	-0.629262	0.5935
RPCRTUS	3.31E+08	8.72E+08	0.379752	0.7407
PSTRTUS	-9458515.	6174760.	-1.531803	0.2653
R-squared	0.633715	Mean dependent var		-42734063
Adjusted R-squared	0.267430	S.D. dependent var		66174075
S.E. of regression	56638584	Akaike info criterion		35.98811
Sum squared resid	6.42E+15	Schwarz criterion		35.75377
Log likelihood	-94.06497	F-statistic		1.730115
Durbin-Watson stat	2.025691	Prob(F-statistic)		0.366285

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-21226260	87904552	-0.241469	0.8317
RPCRTUS	-2.66E+08	5.86E+08	-0.454490	0.6940
SUPRTUS	2532166.	3288153.	0.770088	0.5218
R-squared	0.307406	Mean dependent var		-929214.0
Adjusted R-squared	-0.385187	S.D. dependent var		1.36E+08
S.E. of regression	1.60E+08	Akaike info criterion		38.06471
Sum squared resid	5.12E+16	Schwarz criterion		37.83037
Log likelihood	-99.25647	F-statistic		0.443848
Durbin-Watson stat	2.456798	Prob(F-statistic)		0.692594

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-3141319.	49876220	-0.062982	0.9555
RPCRTUS	-8.22E+08	8.37E+08	-0.983203	0.4292
SUPRTUS	217334.7	306952.1	0.708041	0.5523
R-squared	0.363525	Mean dependent var		-42734063
Adjusted R-squared	-0.272949	S.D. dependent var		66174075
S.E. of regression	74660931	Akaike info criterion		36.54064
Sum squared resid	1.11E+16	Schwarz criterion		36.30631
Log likelihood	-95.44630	F-statistic		0.571155
Durbin-Watson stat	1.611608	Prob(F-statistic)		0.636475

LS // Dependent Variable is CRRT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	13929856	55839720	0.249461	0.8263
PSTRTUS	-33919995	17012781	-1.993795	0.1844
SUPRTUS	4368956.	2155718.	2.026683	0.1799
R-squared	0.744235	Mean dependent var		-929214.0
Adjusted R-squared	0.488470	S.D. dependent var		1.36E+08
S.E. of regression	97212368	Akaike info criterion		37.06853
Sum squared resid	1.89E+16	Schwarz criterion		36.83419
Log likelihood	-96.76601	F-statistic		2.909842
Durbin-Watson stat	2.192120	Prob(F-statistic)		0.255765

LS // Dependent Variable is CRRT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8561834.	16383915	0.522576	0.6534
PSTRTUS	-9927819.	2161244.	-4.593567	0.0443
SUPRTUS	309018.9	112029.3	2.758376	0.1101
R-squared	0.918262	Mean dependent var		-42734063
Adjusted R-squared	0.836524	S.D. dependent var		66174075
S.E. of regression	26755637	Akaike info criterion		34.48822
Sum squared resid	1.43E+15	Schwarz criterion		34.25388
Log likelihood	-90.31524	F-statistic		11.23419
Durbin-Watson stat	1.065252	Prob(F-statistic)		0.081738

Table 23 : Determination Factors of Rubber Competitiveness Residual

Commodity		Rubber			
Competitor		Indonesia		Malaysia	
		Period1	Period2	Period1	Period2
Relative Price Change [RPC]	Period1				
	Period2				
Price Stability [PST]	Period1				
	Period2				
Supply Availability [SA]	Period1			×	
	Period2		×		×
RPC&PST&SA	Period1	×		×	
	Period2				
RPC&PST	Period1				
	Period2				
RPC&SA	Period1				
	Period2				
PST&SA	Period1	×		×	
	Period2				

Source : Author's calculation.

× = Regression results with high signification.

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.10E+08	62842833	1.755909	0.3296
RPCRUTIN	39509135	25699101	1.537374	0.3671
PSTRUTIN	36214250	13474624	2.687589	0.2268
SUPRUTIN	-55064758	22618112	-2.434543	0.2481
R-squared	0.912240	Mean dependent var		-849951.2
Adjusted R-squared	0.648959	S.D. dependent var		1.37E+08
S.E. of regression	81326424	Akaike info criterion		36.41853
1Sum squared resid	6.61E+15	Schwarz criterion		36.10608
Log likelihood	-94.14101	F-statistic		3.464894
Durbin-Watson stat	1.745999	Prob(F-statistic)		0.371597

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-16846799	91207059	-0.184709	0.8837
RPCRUTIN	2.40E+08	4.07E+08	0.590812	0.6603
PSTRUTIN	1622109.	3884544.	0.417580	0.7482
SUPRUTIN	12234444	15243006	0.802627	0.5694
R-squared	0.531747	Mean dependent var		-43065848
Adjusted R-squared	-0.873014	S.D. dependent var		66867070
S.E. of regression	91513001	Akaike info criterion		36.65455
Sum squared resid	8.37E+15	Schwarz criterion		36.34210
Log likelihood	-94.73106	F-statistic		0.378532
Durbin-Watson stat	1.750870	Prob(F-statistic)		0.797444

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26035279	94960679	0.274169	0.8017
RPCRUTIN	18041796	43810330	0.411816	0.7081
R-squared	0.053506	Mean dependent var		-849951.2
Adjusted R-squared	-0.261992	S.D. dependent var		1.37E+08
S.E. of regression	1.54E+08	Akaike info criterion		37.99668
Sum squared resid	7.13E+16	Schwarz criterion		37.84046
Log likelihood	-100.0864	F-statistic		0.169592
Durbin-Watson stat	1.621456	Prob(F-statistic)		0.708130

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-60392659	40367134	-1.496085	0.2315
RPCRUTIN	-75019998	1.07E+08	-0.703772	0.5323
R-squared	0.141703	Mean dependent var		-43065848
Adjusted R-squared	-0.144395	S.D. dependent var		66867070
S.E. of regression	71531997	Akaike info criterion		36.46049
Sum squared resid	1.54E+16	Schwarz criterion		36.30426
Log likelihood	-96.24591	F-statistic		0.495295
Durbin-Watson stat	2.532750	Prob(F-statistic)		0.532281

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	26002919	72383175	0.359240	0.7432
PSTRUTIN	2437722.	3023971.	0.806133	0.4791
R-squared	0.178048	Mean dependent var		-849951.2
Adjusted R-squared	-0.095935	S.D. dependent var		1.37E+08
S.E. of regression	1.44E+08	Akaike info criterion		37.85560
Sum squared resid	6.19E+16	Schwarz criterion		37.69937
Log likelihood	-99.73369	F-statistic		0.649850
Durbin-Watson stat	2.178018	Prob(F-statistic)		0.479145

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-59444695	41327004	-1.438398	0.2459
PSTRUTIN	1944510.	3045854.	0.638412	0.5686
R-squared	0.119607	Mean dependent var		-43065848
Adjusted R-squared	-0.173857	S.D. dependent var		66867070
S.E. of regression	72446916	Akaike info criterion		36.48590
Sum squared resid	1.57E+16	Schwarz criterion		36.32968
Log likelihood	-96.30945	F-statistic		0.407570
Durbin-Watson stat	2.397633	Prob(F-statistic)		0.568602

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19088313	74848177	0.255027	0.8152
SUPRUTIN	3167625.	5299395.	0.597733	0.5921
R-squared	0.106421	Mean dependent var		-849951.2
Adjusted R-squared	-0.191439	S.D. dependent var		1.37E+08
S.E. of regression	1.50E+08	Akaike info criterion		37.93915
Sum squared resid	6.73E+16	Schwarz criterion		37.78293
Log likelihood	-99.94257	F-statistic		0.357285
Durbin-Watson stat	2.034539	Prob(F-statistic)		0.592131

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-48221626	29408889	-1.639696	0.1996
SUPRUTIN	4041225.	3627923.	1.113922	0.3465
R-squared	0.292590	Mean dependent var		-43065848
Adjusted R-squared	0.056787	S.D. dependent var		66867070
S.E. of regression	64940735	Akaike info criterion		36.26715
Sum squared resid	1.27E+16	Schwarz criterion		36.11092
Log likelihood	-95.76256	F-statistic		1.240823
Durbin-Watson stat	2.696645	Prob(F-statistic)		0.346524

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.00E+08	1.17E+08	0.858122	0.4812
RPCRUTIN	40132071	47824884	0.839146	0.4897
PSTRUTIN	3738647.	3542345.	1.055416	0.4019
R-squared	0.392085	Mean dependent var		-849951.2
Adjusted R-squared	-0.215830	S.D. dependent var		1.37E+08
S.E. of regression	1.51E+08	Akaike info criterion		37.95395
Sum squared resid	4.58E+16	Schwarz criterion		37.71961
Log likelihood	-98.97957	F-statistic		0.644967
Durbin-Watson stat	2.654261	Prob(F-statistic)		0.607915

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-72722432	53428753	-1.361110	0.3065
RPCRUTIN	-66867219	1.25E+08	-0.535734	0.6457
PSTRUTIN	1687350.	3521344.	0.479178	0.6791
R-squared	0.230093	Mean dependent var		-43065848
Adjusted R-squared	-0.539814	S.D. dependent var		66867070
S.E. of regression	82974835	Akaike info criterion		36.75181
Sum squared resid	1.38E+16	Schwarz criterion		36.51747
Log likelihood	-95.97421	F-statistic		0.298858
Durbin-Watson stat	2.587168	Prob(F-statistic)		0.769907

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	84865816	1.26E+08	0.673710	0.5699
RPCRUTIN	35920202	52039669	0.690247	0.5614
SUPRUTIN	5113886.	6478534.	0.789359	0.5126
R-squared	0.278336	Mean dependent var		-849951.2
Adjusted R-squared	-0.443328	S.D. dependent var		1.37E+08
S.E. of regression	1.65E+08	Akaike info criterion		38.12548
Sum squared resid	5.44E+16	Schwarz criterion		37.89114
Log likelihood	-99.40838	F-statistic		0.385686
Durbin-Watson stat	2.360616	Prob(F-statistic)		0.721664

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-4390647.	66046748	-0.066478	0.9530
RPCRUTIN	2.36E+08	3.12E+08	0.756866	0.5281
SUPRUTIN	12367635	11677869	1.059066	0.4006
R-squared	0.450096	Mean dependent var		-43065848
Adjusted R-squared	-0.099809	S.D. dependent var		66867070
S.E. of regression	70124680	Akaike info criterion		36.41528
Sum squared resid	9.83E+15	Schwarz criterion		36.18094
Log likelihood	-95.13289	F-statistic		0.818498
Durbin-Watson stat	1.920711	Prob(F-statistic)		0.549904

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	37434685	53469367	0.700115	0.5563
PSTRUTIN	35137832	17450647	2.013555	0.1817
SUPRUTIN	-55410971	29330320	-1.889204	0.1995
R-squared	0.704817	Mean dependent var		-849951.2
Adjusted R-squared	0.409633	S.D. dependent var		1.37E+08
S.E. of regression	1.05E+08	Akaike info criterion		37.23151
Sum squared resid	2.22E+16	Schwarz criterion		36.99718
Log likelihood	-97.17348	F-statistic		2.387726
Durbin-Watson stat	2.530886	Prob(F-statistic)		0.295183

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-61015329	42910843	-1.421909	0.2910
PSTRUTIN	1561419.	3189250.	0.489588	0.6729
SUPRUTIN	3760362.	4237798.	0.887339	0.4685
R-squared	0.368299	Mean dependent var		-43065848
Adjusted R-squared	-0.263403	S.D. dependent var		66867070
S.E. of regression	75159388	Akaike info criterion		36.55395
Sum squared resid	1.13E+16	Schwarz criterion		36.31962
Log likelihood	-95.47957	F-statistic		0.583026
Durbin-Watson stat	2.621537	Prob(F-statistic)		0.631701

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-54759606	20049886	-2.731168	0.2234
RPCRUTMA	-1.16E+08	23491594	-4.945188	0.1270
PSTRUMA	17029215	2512747.	6.777130	0.0933
SUPRUTMA	1.82E+08	20805539	8.725646	0.0726
R-squared	0.987841	Mean dependent var		-849951.2
Adjusted R-squared	0.951366	S.D. dependent var		1.37E+08
S.E. of regression	30270739	Akaike info criterion		34.44195
Sum squared resid	9.16E+14	Schwarz criterion		34.12950
Log likelihood	-89.19956	F-statistic		27.08230
Durbin-Watson stat	1.747643	Prob(F-statistic)		0.140110

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-47562355	60638299	-0.784362	0.5766
RPCRUTMA	1443276.	2.62E+08	0.005506	0.9965
PSTRUMA	-5813419.	9551141.	-0.608662	0.6519
SUPRUTMA	10723407	14446284	0.742295	0.5935
R-squared	0.483294	Mean dependent var		-43065848
Adjusted R-squared	-1.066824	S.D. dependent var		66867070
S.E. of regression	96131136	Akaike info criterion		36.75301
Sum squared resid	9.24E+15	Schwarz criterion		36.44056
Log likelihood	-94.97722	F-statistic		0.311779
Durbin-Watson stat	2.845337	Prob(F-statistic)		0.828770

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	20817884	91915695	0.226489	0.8354
RPCRUTMA	30568990	85020703	0.359548	0.7430
R-squared	0.041311	Mean dependent var		-849951.2
Adjusted R-squared	-0.278252	S.D. dependent var		1.37E+08
S.E. of regression	1.55E+08	Akaike info criterion		38.00948
Sum squared resid	7.23E+16	Schwarz criterion		37.85326
Log likelihood	-100.1184	F-statistic		0.129274
Durbin-Watson stat	1.665130	Prob(F-statistic)		0.743005

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-61690552	39836316	-1.548601	0.2192
RPCRUTMA	-1.17E+08	1.52E+08	-0.766773	0.4990
R-squared	0.163866	Mean dependent var		-43065848
Adjusted R-squared	-0.114846	S.D. dependent var		66867070
S.E. of regression	70602437	Akaike info criterion		36.43432
Sum squared resid	1.50E+16	Schwarz criterion		36.27810
Log likelihood	-96.18050	F-statistic		0.587940
Durbin-Watson stat	2.305317	Prob(F-statistic)		0.499033

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3351346.	71326719	0.046986	0.9655
PSTRUMA	2830294.	9622801.	0.294124	0.7878
R-squared	0.028028	Mean dependent var		-849951.2
Adjusted R-squared	-0.295963	S.D. dependent var		1.37E+08
S.E. of regression	1.56E+08	Akaike info criterion		38.02324
Sum squared resid	7.33E+16	Schwarz criterion		37.86702
Log likelihood	-100.1528	F-statistic		0.086509
Durbin-Watson stat	1.739453	Prob(F-statistic)		0.787840

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-36615849	39430653	-0.928614	0.4216
PSTRUMA	-2068780.	6432403.	-0.321619	0.7688
R-squared	0.033330	Mean dependent var		-43065848
Adjusted R-squared	-0.288893	S.D. dependent var		66867070
S.E. of regression	75913798	Akaike info criterion		36.57939
Sum squared resid	1.73E+16	Schwarz criterion		36.42317
Log likelihood	-96.54317	F-statistic		0.103438
Durbin-Watson stat	1.863375	Prob(F-statistic)		0.768848

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	438495.1	54977940	0.007976	0.9941
SUPRUTMA	74122006	52568269	1.410014	0.2533
R-squared	0.398573	Mean dependent var		-849951.2
Adjusted R-squared	0.198098	S.D. dependent var		1.37E+08
S.E. of regression	1.23E+08	Akaike info criterion		37.54322
Sum squared resid	4.53E+16	Schwarz criterion		37.38700
Log likelihood	-98.95275	F-statistic		1.988140
Durbin-Watson stat	2.327610	Prob(F-statistic)		0.253329

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-58954639	33052804	-1.783650	0.1725
SUPRUTMA	7456076.	7036840.	1.059577	0.3671
R-squared	0.272322	Mean dependent var		-43065848
Adjusted R-squared	0.029763	S.D. dependent var		66867070
S.E. of regression	65864471	Akaike info criterion		36.29539
Sum squared resid	1.30E+16	Schwarz criterion		36.13917
Log likelihood	-95.83318	F-statistic		1.122704
Durbin-Watson stat	2.605201	Prob(F-statistic)		0.367093

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	22623876	1.12E+08	0.202589	0.8582
RPCRUTMA	27972086	1.04E+08	0.269671	0.8127
PSTRUMA	2456693.	11659480	0.210703	0.8526
R-squared	0.062130	Mean dependent var		-849951.2
Adjusted R-squared	-0.875740	S.D. dependent var		1.37E+08
S.E. of regression	1.88E+08	Akaike info criterion		38.38753
Sum squared resid	7.07E+16	Schwarz criterion		38.15319
Log likelihood	-100.0635	F-statistic		0.066246
Durbin-Watson stat	1.678779	Prob(F-statistic)		0.937870

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-55186712	52627981	-1.048619	0.4044
RPCRUTMA	-1.17E+08	1.83E+08	-0.642196	0.5865
PSTRUMA	-2111624.	7173425.	-0.294368	0.7962
R-squared	0.198588	Mean dependent var		-43065848
Adjusted R-squared	-0.602824	S.D. dependent var		66867070
S.E. of regression	84655518	Akaike info criterion		36.79191
Sum squared resid	1.43E+16	Schwarz criterion		36.55757
Log likelihood	-96.07447	F-statistic		0.247797
Durbin-Watson stat	2.333565	Prob(F-statistic)		0.801412

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-21801109	94222200	-0.231380	0.8385
RPCRUTMA	-31711710	96461661	-0.328749	0.7736
SUPRUTMA	87825886	75301081	1.166330	0.3637
R-squared	0.429407	Mean dependent var		-849951.2
Adjusted R-squared	-0.141186	S.D. dependent var		1.37E+08
S.E. of regression	1.47E+08	Akaike info criterion		37.89059
Sum squared resid	4.30E+16	Schwarz criterion		37.65626
Log likelihood	-98.82117	F-statistic		0.752563
Durbin-Watson stat	2.564512	Prob(F-statistic)		0.570593

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-63850622	45043176	-1.417543	0.2921
RPCRUTMA	-48431799	2.06E+08	-0.234967	0.8361
SUPRUTMA	6132347.	10198962	0.601272	0.6087
R-squared	0.291870	Mean dependent var		-43065848
Adjusted R-squared	-0.416260	S.D. dependent var		66867070
S.E. of regression	79576310	Akaike info criterion		36.66816
Sum squared resid	1.27E+16	Schwarz criterion		36.43383
Log likelihood	-95.76510	F-statistic		0.412170
Durbin-Watson stat	2.596334	Prob(F-statistic)		0.708130

LS // Dependent Variable is CRRUT

Sample: 1986 1990

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	16541121	49704791	0.332787	0.7709
PSTRUMA	10437212	7598952.	1.373507	0.3033
SUPRUTMA	1.09E+08	52772956	2.069070	0.1744
R-squared	0.690506	Mean dependent var		-849951.2
Adjusted R-squared	0.381013	S.D. dependent var		1.37E+08
S.E. of regression	1.08E+08	Akaike info criterion		37.27885
Sum squared resid	2.33E+16	Schwarz criterion		37.04452
Log likelihood	-97.29183	F-statistic		2.231085
Durbin-Watson stat	1.408898	Prob(F-statistic)		0.309494

LS // Dependent Variable is CRRUT

Sample: 1991 1995

Included observations: 5

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-47740056	36299958	-1.315155	0.3190
PSTRUMA	-5796981.	6415335.	-0.903613	0.4616
SUPRUTMA	10674832	8088971.	1.319677	0.3178
R-squared	0.483278	Mean dependent var		-43065848
Adjusted R-squared	-0.033443	S.D. dependent var		66867070
S.E. of regression	67976008	Akaike info criterion		36.35304
Sum squared resid	9.24E+15	Schwarz criterion		36.11870
Log likelihood	-94.97729	F-statistic		0.935278
Durbin-Watson stat	2.852607	Prob(F-statistic)		0.516722

Biography

Natjareekorn Sorapark born on the 7th January, 1975 in Bangkok, Thailand. Accepted B.A in Economics at Chulalongkorn University in 1995.

