Data

obs	Y	X1	X2	X3	X4	LNY	LNX1	LNX2	LNX3	LNX4	ECT
1990	2215039.	505400.4	546543.0	15729.00	7375242.	14.61078	13.13311	13.21137	9.663261	15.81364	37.34865
1991	2860929.	533789.1	578283.0	13162.00	8607014.	14.86666	13.18776	13.26782	9.485089	15.96809	37.21059
1992	2948722.	609225.1	609325.0	11323.00	9838786.	14.89688	13.31994	13.32011	9.334591	16.10184	37.04209
1993	3433331.	880688.2	719704.0	18399.00	11070558	15.04904	13.68846	13.48660	9.820052	16.21980	37.17960
1994	4120019.	1032644.	608139.0	21915.00	12302330	15.23137	13.84763	13.31816	9.994927	16.32530	38.16586
1995	4899037.	1180209.	700245.0	19364.00	13534101	15.40455	13.98120	13.45919	9.871171	16.42072	38.25465
1996	5762363.	1328322.	678056.0	67017.00	14765873	15.56686	14.09943	13.42699	11.11270	16.50783	38.32773
1997	6917513.	1486764.	685882.0	72051.00	15997645	15.74957	14.21211	13.43846	11.18513	16.58795	39.58008
1998	8316323.	2218343.	725967.0	70277.00	17229417	15.93373	14.61227	13.49526	11.16020	16.66213	39.67409
1999	9738414.	2472101.	729239.0	86555.00	18461189	16.09159	14.72058	13.49976	11.36854	16.73118	39.99613
2000	14026858	3050224.	707172.0	47309.00	19692961	16.45648	14.93073	13.46903	10.76446	16.79577	40.22846
2001	17675167	3667413.	538222.0	59574.00	20875893	16.68767	15.11500	13.19603	10.99497	16.85411	39.50350
2002	24460326	3615241.	687563.0	162900.0	52997924	17.01256	15.10067	13.44091	12.00089	17.78576	39.47243
2003	32781305	4328536.	517546.0	176621.0	1.17E+08	17.30537	15.28074	13.15685	12.08176	18.57955	41.31567
2004	36970682	4531293.	776048.0	193483.0	3.30E+08	17.42564	15.32652	13.56197	12.17294	19.61546	41.79354

ect = log(x1(-1))+log(x2(-1))+log(x3(-1))+log(x4(-1))-log(y(-1))

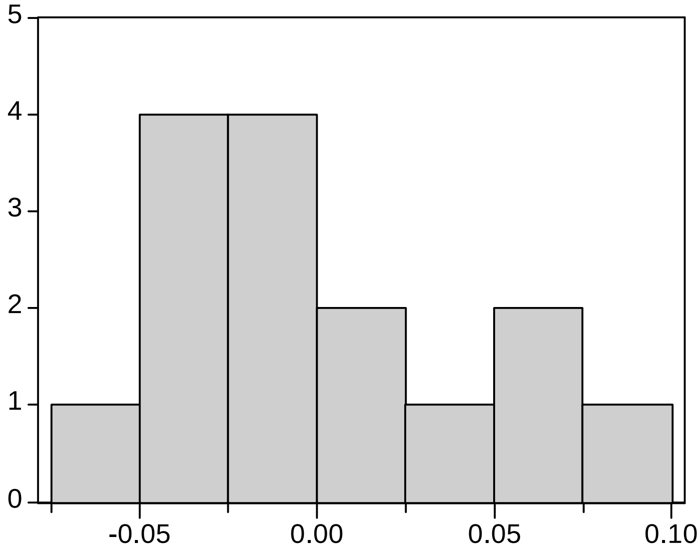
Model Lengkap

Dependent Variable: DLOG(Y)
Method: Least Squares
Date: 10/20/06   Time: 20:23
Sample: 1990 2004
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	8.437308	5.444969	1.549560	0.1819
DLOG(X1)	0.388423	0.237528	1.635274	0.1629
DLOG(X2)	-0.385547	0.183770	-2.097988	0.0900
DLOG(X3)	-0.027391	0.063169	-0.433609	0.6826
DLOG(X4)	0.263783	0.182958	1.441770	0.2089
LOG(X1(-1))	0.032069	0.078094	0.410645	0.6983
LOG(X2(-1))	-1.157813	0.528642	-2.190164	0.0801
LOG(X3(-1))	-0.516613	0.217421	-2.376098	0.0635
LOG(X4(-1))	-0.582515	0.145665	-3.998992	0.0103
ECT	0.559012	0.192330	2.906531	0.0335

R-squared	0.829391	Mean dependent var	0.216245
Adjusted R-squared	0.522295	S.D. dependent var	0.102171
S.E. of regression	0.070617	Akaike info criterion	-2.228374
Sum squared resid	0.024934	Schwarz criterion	-1.756340
Log likelihood	26.71280	F-statistic	2.700752
Durbin-Watson stat	2.788184	Prob(F-statistic)	0.143177

Uji Normalitas



Series: Residuals
Sample 1990 2004
Observations 15

Mean	-7.59E-15
Median	-0.004866
Maximum	0.089766
Minimum	-0.062767
Std. Dev.	0.042202
Skewness	0.523968
Kurtosis	2.553858
Jarque-Bera	0.810757
Probability	0.666724

Uji Otokorelasi

p=1

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.695620	Probability	0.262781
Obs*R-squared	4.465590	Probability	0.034584

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 10/21/06 Time: 04:34
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.486385	5.761522	0.605115	0.5778
DLOG(X1)	-0.061905	0.227572	-0.272024	0.7991
DLOG(X2)	-0.146657	0.205746	-0.712807	0.5153
DLOG(X3)	0.023251	0.061821	0.376113	0.7259
DLOG(X4)	-0.128954	0.197971	-0.651379	0.5503
LOG(X1(-1))	0.008759	0.073479	0.119202	0.9109
LOG(X2(-1))	-0.177822	0.513789	-0.346098	0.7467
LOG(X3(-1))	0.131041	0.227212	0.576734	0.5950
LOG(X4(-1))	0.106331	0.159044	0.668565	0.5404
ECT	-0.111288	0.199442	-0.557996	0.6066
RESID(-1)	-0.752366	0.577783	-1.302160	0.2628

R-squared	0.297706	Mean dependent var	-7.59E-15
Adjusted R-squared	-1.458029	S.D. dependent var	0.042202
S.E. of regression	0.066164	Akaike info criterion	-2.448444
Sum squared resid	0.017511	Schwarz criterion	-1.929207
Log likelihood	29.36333	F-statistic	0.169562
Durbin-Watson stat	2.639837	Prob(F-statistic)	0.989450

p=2

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	7.374972	Probability	0.069484
Obs*R-squared	12.46478	Probability	0.001965

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 10/21/06 Time: 04:35
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	5.401481	3.322522	1.625717	0.2025
DLOG(X1)	0.278954	0.169978	1.641121	0.1993
DLOG(X2)	0.099030	0.141281	0.700943	0.5338
DLOG(X3)	0.042656	0.035583	1.198796	0.3167
DLOG(X4)	0.055246	0.127125	0.434582	0.6932
LOG(X1(-1))	0.058700	0.044676	1.313892	0.2803
LOG(X2(-1))	-0.117832	0.291695	-0.403955	0.7133
LOG(X3(-1))	0.255584	0.134923	1.894289	0.1545
LOG(X4(-1))	0.011211	0.095250	0.117698	0.9137
ECT	-0.195152	0.116218	-1.679186	0.1917
RESID(-1)	-1.033653	0.339823	-3.041738	0.0558
RESID(-2)	-1.860267	0.604644	-3.076634	0.0543

R-squared	0.830985	Mean dependent var	-7.59E-15
Adjusted R-squared	0.211265	S.D. dependent var	0.042202
S.E. of regression	0.037480	Akaike info criterion	-3.739477

Sum squared resid	0.004214	Schwarz criterion	-3.173037
Log likelihood	40.04608	F-statistic	1.340904
Durbin-Watson stat	2.596471	Prob(F-statistic)	0.453002

p=3

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	11.67903	Probability	0.079896
Obs*R-squared	14.19000	Probability	0.002658

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 10/21/06 Time: 04:35
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.494997	2.696960	0.925114	0.4526
DLOG(X1)	0.188955	0.125491	1.505724	0.2711
DLOG(X2)	-0.021582	0.113934	-0.189426	0.8672
DLOG(X3)	0.041438	0.024640	1.681738	0.2346
DLOG(X4)	0.123305	0.093980	1.312024	0.3199
LOG(X1(-1))	-0.010937	0.045770	-0.238946	0.8334
LOG(X2(-1))	0.111603	0.230510	0.484155	0.6761
LOG(X3(-1))	0.255614	0.093404	2.736640	0.1116
LOG(X4(-1))	0.055532	0.069348	0.800774	0.5073
ECT	-0.192849	0.080463	-2.396745	0.1388
RESID(-1)	-1.401813	0.295233	-4.748166	0.0416
RESID(-2)	-1.819926	0.419037	-4.343116	0.0491
RESID(-3)	-0.851164	0.412400	-2.063930	0.1751

R-squared	0.946000	Mean dependent var	-7.59E-15
Adjusted R-squared	0.622001	S.D. dependent var	0.042202
S.E. of regression	0.025946	Akaike info criterion	-4.747146
Sum squared resid	0.001346	Schwarz criterion	-4.133503
Log likelihood	48.60360	F-statistic	2.919757
Durbin-Watson stat	3.127815	Prob(F-statistic)	0.283284

Uji Heteroskedastisitas

Spearman Correlations

		ABSRES	LNX1	LNX2	LNX3	LNX4
ABSRES	Correlation Coefficient	1.000	-.296	.154	-.382	-.314
	Sig. (2-tailed)	.	.283	.585	.160	.254
	N	15	15	15	15	15
LNX1	Correlation Coefficient	-.296	1.000	.383	.913**	.998**
	Sig. (2-tailed)	.283	.	.117	.000	.000
	N	15	18	18	18	18
LNX2	Correlation Coefficient	.154	.383	1.000	.412	.401
	Sig. (2-tailed)	.585	.117	.	.090	.099
	N	15	18	18	18	18
LNX3	Correlation Coefficient	-.382	.913**	.412	1.000	.924**
	Sig. (2-tailed)	.160	.000	.090	.	.000
	N	15	18	18	18	18
LNX4	Correlation Coefficient	-.314	.998**	.401	.924**	1.000
	Sig. (2-tailed)	.254	.000	.099	.000	.
	N	15	18	18	18	18

**. Correlation is significant at the 0.01 level (2-tailed).

Uji Spesifikasi Model

m=1

Ramsey RESET Test:

F-statistic	0.002865	Probability	0.959878
Log likelihood ratio	0.010741	Probability	0.917457

Test Equation:
Dependent Variable: DLOG(Y)
Method: Least Squares
Date: 10/21/06 Time: 04:36
Sample: 1990 2004
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	9.170320	14.98532	0.611953	0.5736
DLOG(X1)	0.417061	0.597250	0.698302	0.5235
DLOG(X2)	-0.415548	0.596917	-0.696157	0.5247
DLOG(X3)	-0.027980	0.071453	-0.391585	0.7153
DLOG(X4)	0.281200	0.384285	0.731747	0.5049
LOG(X1(-1))	0.032360	0.087450	0.370039	0.7301
LOG(X2(-1))	-1.253019	1.874204	-0.668561	0.5404
LOG(X3(-1))	-0.555172	0.760234	-0.730264	0.5057
LOG(X4(-1))	-0.624381	0.798889	-0.781561	0.4781
ECT	0.600976	0.812908	0.739292	0.5008
FITTED^2	-0.144852	2.706103	-0.053528	0.9599

R-squared	0.829513	Mean dependent var	0.216245
Adjusted R-squared	0.403296	S.D. dependent var	0.102171
S.E. of regression	0.078924	Akaike info criterion	-2.095757
Sum squared resid	0.024916	Schwarz criterion	-1.576520
Log likelihood	26.71817	F-statistic	1.946221
Durbin-Watson stat	2.765510	Prob(F-statistic)	0.272456

m=2

Ramsey RESET Test:

F-statistic	0.025578	Probability	0.974956
Log likelihood ratio	0.253625	Probability	0.880899

Test Equation:
Dependent Variable: DLOG(Y)
Method: Least Squares
Date: 10/21/06 Time: 04:36
Sample: 1990 2004
Included observations: 15

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-16.17521	115.8107	-0.139669	0.8978
DLOG(X1)	-0.850681	5.769389	-0.147447	0.8921
DLOG(X2)	0.828832	5.664532	0.146320	0.8929
DLOG(X3)	0.098856	0.578964	0.170747	0.8753
DLOG(X4)	-0.699150	4.451829	-0.157048	0.8852
LOG(X1(-1))	-0.138829	0.780027	-0.177979	0.8701
LOG(X2(-1))	2.254210	15.99324	0.140948	0.8968
LOG(X3(-1))	1.071734	7.403074	0.144769	0.8941
LOG(X4(-1))	1.292038	8.708150	0.148371	0.8915
ECT	-1.148126	7.958522	-0.144264	0.8944
FITTED^2	16.46134	75.10431	0.219180	0.8406
FITTED^3	-23.33205	105.4332	-0.221297	0.8391

R-squared	0.832251	Mean dependent var	0.216245
Adjusted R-squared	0.217173	S.D. dependent var	0.102171
S.E. of regression	0.090399	Akaike info criterion	-1.978616
Sum squared resid	0.024516	Schwarz criterion	-1.412175
Log likelihood	26.83962	F-statistic	1.353082
Durbin-Watson stat	2.739245	Prob(F-statistic)	0.449485