

BAB V

KESIMPULAN DAN SARAN

5.1. Kesimpulan

Berdasarkan hasil penelitian yang telah diuraikan pada bagian sebelumnya, kesimpulan dalam penelitian ini dapat dituliskan sebagai berikut:

Hasil penelitian ini tidak menerima hipotesis yang menyatakan adanya hubungan kausalitas antara pendapatan pemerintah riil dari pajak dan pengeluaran rutin pemerintah riil untuk pengamatan dari tahun 1969 hingga 2003.

5.2. Saran

Berdasarkan hasil dari kesimpulan yang telah diterangkan, maka saran yang dapat diberikan dituliskan sebagai berikut:

Besarnya anggaran pendapatan yang diperoleh dari pajak masih belum mampu mengimbangi atau menyesuaikan besarnya beban anggaran berdasarkan pos anggaran pengeluaran rutin. Pemerintah hendaknya dapat melakukan pembaharuan kembali kebijakan-kebijakan perpajakan seperti memperluas variasi obyek yang dikenakan pajak secara selektif tanpa menyebabkan beban ekonomi masyarakat yang berlebihan. Metode ini dapat dilakukan melalui bentuk mekanisme perpajakan secara proporsional maupun metode penyerapan pajak lainnya yang secara cepat dapat terserap ke dalam

DAFTAR PUSTAKA

1. Buku

Arief, Sritua, 1993, *Pemikiran Pembangunan dan Kebijakan Ekonomi*, Lembaga Riset Pembangunan, Jakarta.

Dumairy, 1996, *Perekonomian Indonesia*, Erlangga, Jakarta.

Gujarati, Damodar, 2003, *Basic Econometrics*, International Edition, Fourth Edition, mc-Graw Hill, Singapore.

Hill, Hall, 1996, *Transformasi Ekonomi Indonesia Sejak 1996*, PT.Tiara Wacana, Yogyakarta.

Samuelson & Nordhaus, 1986, *Ekonomi*, terjemahan JakaWasana, Edisi Keduabelas, Erlangga, Jakarta.

Sukirno, Sadono, 1994, *Ekonomi Pembangunan*, LPFE-UI, Jakarta.

Soetrisno, 1984, *Dasar-dasar Keuangan Negara*, BPFE, Yogyakarta.

Tambunan, Tulus, 1996, *Perekonomian Indonesia*, Ghalia, Jakarta.

....., 2001, *Transformasi Ekonomi di Indonesia, Teori dan Penemuan Empiris*, Salemba Empat, Jakarta.

2. Jurnal dan Referensi Lainnya

Aliman, 1998, "Model Autoregresif Analisis Kausalitas Antara Jumlah Uang Beredar dan Tingkat Pendapatan Nasional: Studi Kasus Indonesia-Thailand", dalam *Jurnal Ekonomi dan Bisnis Indonesia*, Volume 13, No.4, hal: 12-29.

Badan Pusat Statistik (BPS), 1980-2004, Statistik Ekonomi Indonesia.

Clemens, Christiane, 1999, "Income Taxation, Government Expenditure, and Long-Run Stochastic Growth", *Discussion Paper No. 220, University of Hannover*.
(<http://www.vwl.uni-hannover.de/discussionpaper/220.pdf>)

Hondroyannis, George dan Evangelia Papapetrou, 1999, "Sebuah Pengujian Terhadap Hubungan Kausalitas Antara Belanja Pemerintah dan Pendapatan Pemerintah: Sebuah Analisis Kointegrasi", *Jurnal Ekonomi Pembangunan, Volume 4, No. 2* (183-193).

International Financial Statistic, 2004, "Main Indicator in Development Countries".

Suparmin, 2001, "Efektifitas Bauran Kebijakan Dalam Stabilisasi Ekonomi Indonesia", EPN PO1600001.
<http://www.hayati-ipb.com/user/rudyct/indiv2001/suparmin.htm>

Wantara, I. Agus, 1996, "Hubungan Kausalitas Antara Jumlah Uang Beredar dan Pendapatan Nasional di Indonesia 1972Q1-1992Q2", *Karya Penelitian Universitas Atma Jaya Yogyakarta, LPU, Universitas Atma Jaya Yogyakarta*.

....., 2000, "Pembentukan Model Kausalitas", *Jurnal Bisnis dan Ekonomi Kinerja, Vol.4, No.1, 2000, hal:65-71*.

LAMPIRAN 1.A:**Data Perkembangan Pos Anggaran Pengeluaran Rutin dan Pendapatan Pemerintah
dari Pajak Berdasarkan Nilai Nominal dan Nilai Riil
(Dalam Milyar Rupiah)**

Tahun	Belanja Pemerintah			Pendapatan Pemerintah		
	Nominal	Riil ^{*)}	%Δ	Nominal	Riil ^{*)}	%Δ
1969/1970	195	10.077,76	-	240	12.403	-
1970/1971	259	11.919,26	18,54	331	15.233	24,96
1971/1972	293	12.915,66	16,03	401	17.676	2,47
1972/1973	370	15.314,44	17,83	556	23.013	12,28
1973/1974	612	19.336,57	24,29	918	29.005	24,56
1974/1975	1.590	35.743,27	1,31	1.687	37.924	-10,78
1975/1976	1.981	37.391,24	10,16	2.131	40.222	0,95
1976/1977	2.198	34.601,42	1,99	2.788	43.889	12,84
1977/1978	2.696	38.235,18	18,78	3.392	48.106	7,81
1978/1979	3.197	41.943,07	18,12	4.074	53.449	-66,70
1979/1980	4.062	45.043,90	25,12	6.509	72.179	35,04
1980/1981	5.800	54.505,72	21,01	9.911	93.139	29,04
1981/1982	6.978	58.447,51	7,24	11.876	99.479	6,81
1982/1983	6.996	53.514,89	-8,45	11.983	91.658	-7,86
1983/1984	8.412	57.571,66	7,59	13.914	95.230	3,90
1984/1985	9.429	58.411,96	1,46	15.218	94.274	-1,00
1985/1986	11.952	70.701,54	21,03	17.761	105.069	11,45
1986/1987	13.559	75.786,86	-0,06	13.984	78.161	-25,61
1987/1988	15.474	79.138,40	1,49	18.826	96.280	23,18
1988/1989	17.482	82.742,79	-0,76	21.435	101.455	5,38
1989/1990	20.739	92.247,97	14,75	26.678	118.665	16,96
1990/1991	24.331	96.200,70	12,06	37.431	147.995	24,72
1991/1992	29.998	108.483,85	-9,38	39.098	141.394	-4,46
1992/1993	30.278	101.800,00	4,59	45.423	152.722	8,01
1993/1994	34.031	104.331,58	6,47	49.168	150.737	-1,31
1994/1995	39.422	111.410,85	4,05	57.980	163.858	8,70
1995/1996	47.241	121.957,93	-3,20	72.829	188.017	14,74
1996/1997	56.114	131.647,32	24,11	82.287	193.052	2,68
1997/1998	78.297	115.915,42	49,80	103.782	153.645	18,76
1998/1999	114.581	140.773,74	-7,65	147.171	180.814	-10,51
1999/2000	149.978	168.800,24	8,62	112.905	127.075	-36,33
2000	177.342	177.342,00	-28,33	115.788	115.788	-6,05
2001	218.923	198.966,65	65,76	185.541	168.628	42,37
2002	189.069	163.558,01	-21,51	210.953	182.489	3,33
2003	191.788	155.828,06	-7,81	248.470	201.882	7,05

Sumber: Badan Pusat Statistik (BPS), 1969-2003

Keterangan: *) Berdasarkan tahun 2000 sebagai tahun dasar.

%Δ : pertumbuhan (persen)

LAMPIRAN 1.B**INDEKS HARGA KONSUMEN (IHK) DAN TINGKAT INFLASI
DI INDONESIA, 1969-2003**

Tahun Dasar 2000		
Tahun	IHK 2000	Inflasi
1969/1970	1,93	15,50
1970/1971	2,17	12,30
1971/1972	2,27	4,40
1972/1973	2,42	6,50
1973/1974	3,16	31,00
1974/1975	4,45	40,55
1975/1976	5,30	19,10
1976/1977	6,35	19,90
1977/1978	7,05	11,00
1978/1979	7,62	8,10
1979/1980	9,02	18,31
1980/1981	10,64	18,00
1981/1982	11,94	12,19
1982/1983	13,07	9,51
1983/1984	14,61	11,76
1984/1985	16,14	10,48
1985/1986	16,90	4,72
1986/1987	17,89	5,84
1987/1988	19,55	9,29
1988/1989	21,13	8,05
1989/1990	22,48	6,41
1990/1991	25,29	12,50
1991/1992	27,65	9,33
1992/1993	29,74	7,56
1993/1994	32,62	9,67
1994/1995	35,38	8,48
1995/1996	38,74	9,47
1996/1997	42,62	10,04
1997/1998	67,55	58,47
1998/1999	81,39	20,50
1999/2000	88,85	9,16
2000	100,00	12,55
2001	110,03	10,03
2002	115,60	5,06
2003	123,08	6,47

Sumber: Badan Pusat Statistik (BPS)

LAMPIRAN 2.1

Dependent Variable: GER
 Method: Least Squares
 Date: 10/17/05 Time: 20:48
 Sample: 1969 2003
 Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.052865	9.050066	-0.005841	0.9954
GRR	0.793605	0.076572	10.36416	0.0000
R-squared	0.764984	Mean dependent var		82.35969
Adjusted R-squared	0.757862	S.D. dependent var		51.95472
S.E. of regression	25.56564	Akaike info criterion		9.375821
Sum squared resid	21568.86	Schwarz criterion		9.464698
Log likelihood	-162.0769	F-statistic		107.4157
Durbin-Watson stat	0.504835	Prob(F-statistic)		0.000000

obs	Actual	Fitted	Residual	Residual Plot
1969	10.077	9.79021269448	0.286787305519	. * .
1970	11.919	12.036113742	-0.117113742009	. * .
1971	12.915	13.9748898053	-1.0598898053	. * .
1972	15.314	18.2103576112	-2.89635761118	. * .
1973	19.336	22.9656364369	-3.6296364369	. * .
1974	35.743	30.0437959574	5.69920404264	. * .
1975	37.391	31.8674993521	5.52350064786	. * .
1976	34.601	34.7776474586	-0.176647458598	. * .
1977	38.235	38.1242781008	0.110721899203	. * .
1978	41.943	42.3645075343	-0.421507534344	. * .
1979	45.043	57.2287218878	-12.1857218878	. * .
1980	54.505	73.8626745225	-19.3576745225	. * .
1981	58.447	78.8941277526	-20.4471277526	. * .
1982	53.514	72.6873460944	-19.1733460944	. * .
1983	57.571	75.5221017629	-17.9511017629	. * .
1984	58.411	74.7634157553	-16.3524157553	. * .
1985	70.701	83.3303775249	-12.6293775249	. * .
1986	75.786	61.9760646674	13.8099353326	. * .
1987	79.138	76.3553866038	2.78261339617	. * .
1988	82.742	80.4622904628	2.27970953717	. * .
1989	92.247	94.1202258084	-1.87322580839	. * .
1990	96.2	117.396649032	-21.1966490324	. * .
1991	108.483	112.158064999	-3.67506499894	. * .
1992	101.8	121.148018026	-19.3480180259	. * .
1993	104.331	119.572712874	-15.2417128742	. * .
1994	111.41	129.985598968	-18.5755989677	. * .
1995	121.957	149.158292751	-27.2012927512	. * .
1996	131.647	153.154091965	-21.5070919647	. * .
1997	115.915	121.880515081	-5.96551508136	. * .
1998	140.773	143.441958742	-2.66895874224	. * .
1999	168.8	100.794440582	68.0055594179	. * .
2000	177.342	91.8370253442	85.5049746558	. * .
2001	198.966	133.771092959	65.1949070405	. * .
2002	163.558	144.771246465	18.7867535353	. * .
2003	155.828	160.161620675	-4.33362067485	. * .

LAMPIRAN 2.2

Dependent Variable: LNGER

Method: Least Squares

Date: 10/17/05 Time: 20:48

Sample: 1969 2003

Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.285497	0.223698	-1.276261	0.2108
LNGRR	1.004766	0.049886	20.14110	0.0000
R-squared	0.924772	Mean dependent var		4.154228
Adjusted R-squared	0.922492	S.D. dependent var		0.809463
S.E. of regression	0.225357	Akaike info criterion		-0.086820
Sum squared resid	1.675925	Schwarz criterion		0.002057
Log likelihood	3.519350	F-statistic		405.6640
Durbin-Watson stat	0.575918	Prob(F-statistic)		0.000000

obs	Actual	Fitted	Residual	Residual Plot
1969	2.3102555993	2.2444406935	0.0658149058013	. *
1970	2.4781337655	2.45094590362	0.0271878618817	. *
1971	2.55838942655	2.60039842252	-0.0420089959745	. *
1972	2.72876744269	2.86550733019	-0.1367398875	. *
1973	2.9619686434	3.09801909732	-0.136050453918	. *
1974	3.57635444577	3.36741276954	0.208941676227	. *
1975	3.62143003375	3.4265230845	0.194906949253	. *
1976	3.54388258338	3.51418849435	0.0296940890273	. *
1977	3.6437513265	3.60636889965	0.0373824268436	. *
1978	3.73631155367	3.71219184052	0.0241197131587	. *
1979	3.80761758907	4.01404475663	-0.206427167559	. *
1980	3.99829244058	4.27020358347	-0.271911142887	. *
1981	4.06812036068	4.33637098352	-0.268250622838	. *
1982	3.97994330191	4.25409845435	-0.274155152439	. *
1983	4.05301896869	4.29251140753	-0.239492438837	. *
1984	4.06750422826	4.28237374183	-0.214869513565	. *
1985	4.25845971707	4.39130223504	-0.132842517968	. *
1986	4.32791357902	4.09404586187	0.23386771715	. *
1987	4.37119316397	4.30352926032	0.0676639036463	. *
1988	4.41572733285	4.35613350168	0.0595938311707	. *
1989	4.52446976207	4.51356927204	0.0109004900244	. *
1990	4.56642935767	4.7354959708	-0.169066613127	. *
1991	4.68659347868	4.68965035369	-0.00305687501236	. *
1992	4.62301010412	4.76708659206	-0.144076487943	. *
1993	4.6475685374	4.75394156592	-0.106373028519	. *
1994	4.71321709007	4.83780292614	-0.124585836064	. *
1995	4.80366852359	4.97599054024	-0.172322016655	. *
1996	4.88012409799	5.00254368116	-0.122419583172	. *
1997	4.75285716389	4.77314077865	-0.0202836147654	. *
1998	4.94714866397	4.93674087194	0.0104077920329	. *
1999	5.12871458216	4.58236865624	0.546345925921	. *
2000	5.17808007166	4.4889088424	0.689171229257	. *
2001	5.29313395586	4.86663458197	0.426499373889	. *
2002	5.09716766749	4.94600583464	0.151161832851	. *
2003	5.04875283488	5.04748060427	0.00127223060731	. *

LAMPIRAN 2**HASIL UJI MWD UNTUK MODEL LINEAR**

Dependent Variable: GER
 Method: Least Squares
 Date: 10/17/05 Time: 20:49
 Sample: 1969 2003
 Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	87.56077	307.3862	0.284856	0.7776
GRR	0.687840	0.378947	1.815137	0.0789
Z1	-2385.353	8365.109	-0.285155	0.7774
R-squared	0.765579	Mean dependent var	82.35969	
Adjusted R-squared	0.750928	S.D. dependent var	51.95472	
S.E. of regression	25.92910	Akaike info criterion	9.430426	
Sum squared resid	21514.19	Schwarz criterion	9.563741	
Log likelihood	-162.0324	F-statistic	52.25335	
Durbin-Watson stat	0.479598	Prob(F-statistic)	0.000000	

HASIL UJI MWD UNTUK MODEL LOG-LINEAR

Dependent Variable: LNGER
 Method: Least Squares
 Date: 10/17/05 Time: 20:50
 Sample: 1969 2003
 Included observations: 35

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.202202	0.520557	-0.388433	0.7003
LNGRR	0.975128	0.174193	5.597965	0.0000
Z2	0.019103	0.107428	0.177819	0.8600
R-squared	0.924846	Mean dependent var	4.154228	
Adjusted R-squared	0.920149	S.D. dependent var	0.809463	
S.E. of regression	0.228738	Akaike info criterion	-0.030665	
Sum squared resid	1.674271	Schwarz criterion	0.102651	
Log likelihood	3.536633	F-statistic	196.8958	
Durbin-Watson stat	0.592525	Prob(F-statistic)	0.000000	

LAMPIRAN 3.1**UJI AKAR-AKAR UNIT MODEL LINEAR: LNGER (DF-STAT.)**

Null Hypothesis: LNGER has a unit root
 Exogenous: Constant
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.352075	0.0209
Test critical values: 1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LNGER)
 Method: Least Squares
 Date: 10/17/05 Time: 20:50
 Sample(adjusted): 1973 2003
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGER(-1)	-0.132210	0.039441	-3.352075	0.0025
D(LNGER(-1))	-0.036382	0.172961	-0.210350	0.8350
D(LNGER(-2))	-0.233700	0.178070	-1.312405	0.2009
D(LNGER(-3))	-0.222480	0.184574	-1.205366	0.2389
C	0.686856	0.184731	3.718133	0.0010
R-squared	0.329546	Mean dependent var		0.074838
Adjusted R-squared	0.226399	S.D. dependent var		0.139516
S.E. of regression	0.122711	Akaike info criterion		-1.211281
Sum squared resid	0.391507	Schwarz criterion		-0.979992
Log likelihood	23.77485	F-statistic		3.194918
Durbin-Watson stat	2.134378	Prob(F-statistic)		0.029226

LAMPIRAN 3.2**UJI AKAR-AKAR UNIT MODEL LINEAR: LNGER (ADF-STAT.)**

Null Hypothesis: LNGER has a unit root

Exogenous: Constant, Linear Trend

Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.135387	0.0142
Test critical values: 1% level	-4.284580	
5% level	-3.562882	
10% level	-3.215267	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LNGER)

Method: Least Squares

Date: 10/17/05 Time: 20:50

Sample(adjusted): 1973 2003

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGER(-1)	-0.522526	0.126355	-4.135387	0.0003
D(LNGER(-1))	0.096719	0.154174	0.627338	0.5361
D(LNGER(-2))	-0.125805	0.156526	-0.803734	0.4291
D(LNGER(-3))	-0.162002	0.159568	-1.015254	0.3197
C	1.777268	0.375241	4.736336	0.0001
@TREND(1969)	0.029363	0.009158	3.206306	0.0037
R-squared	0.524910	Mean dependent var		0.074838
Adjusted R-squared	0.429892	S.D. dependent var		0.139516
S.E. of regression	0.105342	Akaike info criterion		-1.491216
Sum squared resid	0.277426	Schwarz criterion		-1.213670
Log likelihood	29.11385	F-statistic		5.524326
Durbin-Watson stat	2.396610	Prob(F-statistic)		0.001466

LAMPIRAN 3.3**UJI AKAR-AKAR UNIT MODEL LINEAR: LNGRR (DF-STAT.)**

Null Hypothesis: LNGRR has a unit root
 Exogenous: Constant
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.450867	0.1369
Test critical values: 1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LNGRR)
 Method: Least Squares
 Sample(adjusted): 1973 2003
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGRR(-1)	-0.141695	0.057814	-2.450867	0.0213
D(LNGRR(-1))	-0.100048	0.177185	-0.564652	0.5772
D(LNGRR(-2))	-0.061382	0.178954	-0.343004	0.7344
D(LNGRR(-3))	-0.104803	0.197695	-0.530124	0.6005
C	0.735446	0.278558	2.640192	0.0138
R-squared	0.198616	Mean dependent var		0.070052
Adjusted R-squared	0.075326	S.D. dependent var		0.162767
S.E. of regression	0.156517	Akaike info criterion		-0.724620
Sum squared resid	0.636933	Schwarz criterion		-0.493332
Log likelihood	16.23161	F-statistic		1.610963
Durbin-Watson stat	2.051209	Prob(F-statistic)		0.201399

LAMPIRAN 3.4**UJI AKAR-AKAR UNIT MODEL LINEAR: LNGRR (ADF-STAT.)**

Null Hypothesis: LNGRR has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.468945	0.3400
Test critical values: 1% level	-4.284580	
5% level	-3.562882	
10% level	-3.215267	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LNGRR)
 Method: Least Squares
 Date: 10/17/05 Time: 20:51
 Sample(adjusted): 1973 2003
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
LNGRR(-1)	-0.282661	0.114487	-2.468945	0.0207
D(LNGRR(-1))	-0.019232	0.182953	-0.105121	0.9171
D(LNGRR(-2))	0.025847	0.186050	0.138927	0.8906
D(LNGRR(-3))	0.027701	0.215316	0.128654	0.8987
C	1.127744	0.388956	2.899412	0.0077
@TREND(1969)	0.011975	0.008448	1.417504	0.1687
R-squared	0.258233	Mean dependent var		0.070052
Adjusted R-squared	0.109880	S.D. dependent var		0.162767
S.E. of regression	0.153564	Akaike info criterion		-0.737410
Sum squared resid	0.589550	Schwarz criterion		-0.459864
Log likelihood	17.42985	F-statistic		1.740664
Durbin-Watson stat	1.997421	Prob(F-statistic)		0.162113

LAMPIRAN 4.1**UJI DERAJAT INTEGRASI I(1) MODEL LINEAR: LNGER (DF-STAT.)**

Null Hypothesis: D(LNGER) has a unit root
 Exogenous: Constant
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.647793	0.0950
Test critical values: 1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LNGER,2)
 Method: Least Squares
 Date: 10/17/05 Time: 20:51
 Sample(adjusted): 1974 2003
 Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNGER(-1))	-1.090009	0.411667	-2.647793	0.0138
D(LNGER(-1),2)	0.216231	0.353652	0.611424	0.5464
D(LNGER(-2),2)	0.077957	0.281253	0.277178	0.7839
D(LNGER(-3),2)	0.024359	0.211270	0.115297	0.9091
C	0.079312	0.045331	1.749597	0.0925
R-squared	0.455429	Mean dependent var	-0.009387	
Adjusted R-squared	0.368297	S.D. dependent var	0.184552	
S.E. of regression	0.146682	Akaike info criterion	-0.850092	
Sum squared resid	0.537888	Schwarz criterion	-0.616560	
Log likelihood	17.75139	F-statistic	5.226918	
Durbin-Watson stat	1.752893	Prob(F-statistic)	0.003360	

LAMPIRAN 4.2**UJI DERAJAT INTEGRASI I(1) MODEL LINEAR: LNGER (ADF-STAT.)**

Null Hypothesis: D(LNGER) has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.592407	0.0476
Test critical values: 1% level	-4.296729	
5% level	-3.568379	
10% level	-3.218382	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LNGER,2)

Method: Least Squares

Date: 10/17/05 Time: 20:51

Sample(adjusted): 1974 2003

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNGER(-1))	-1.686612	0.469494	-3.592407	0.0015
D(LNGER(-1),2)	0.638702	0.381158	1.675690	0.1068
D(LNGER(-2),2)	0.371991	0.293985	1.265342	0.2179
D(LNGER(-3),2)	0.187718	0.210245	0.892855	0.3808
C	0.283604	0.101992	2.780645	0.0104
@TREND(1969)	-0.007781	0.003536	-2.200238	0.0377
R-squared	0.546836	Mean dependent var	-0.009387	
Adjusted R-squared	0.452427	S.D. dependent var	0.184552	
S.E. of regression	0.136565	Akaike info criterion	-0.967172	
Sum squared resid	0.447602	Schwarz criterion	-0.686932	
Log likelihood	20.50757	F-statistic	5.792202	
Durbin-Watson stat	1.629353	Prob(F-statistic)	0.001208	

LAMPIRAN 4.3**UJI DERAJAT INTEGRASI I(1) MODEL LINEAR: LNGRR (DF-STAT.)**

Null Hypothesis: D(LNGRR) has a unit root

Exogenous: Constant

Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.893843	0.0579
Test critical values: 1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(LNGRR,2)

Method: Least Squares

Date: 10/17/05 Time: 20:51

Sample(adjusted): 1974 2003

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNGRR(-1))	-1.033512	0.357142	-2.893843	0.0078
D(LNGRR(-1),2)	0.014323	0.318351	0.044990	0.9645
D(LNGRR(-2),2)	0.081966	0.271437	0.301969	0.7652
D(LNGRR(-3),2)	0.169351	0.203954	0.830341	0.4142
C	0.068140	0.040684	1.674847	0.1064
R-squared	0.539930	Mean dependent var	-0.004347	
Adjusted R-squared	0.466319	S.D. dependent var	0.235600	
S.E. of regression	0.172114	Akaike info criterion	-0.530308	
Sum squared resid	0.740580	Schwarz criterion	-0.296776	
Log likelihood	12.95463	F-statistic	7.334883	
Durbin-Watson stat	2.016273	Prob(F-statistic)	0.000473	

LAMPIRAN 4.4**UJI DERAJAT INTEGRASI I(1) MODEL LINEAR: LNGRR (ADF-STAT.)**

Null Hypothesis: D(LNGRR) has a unit root
 Exogenous: Constant, Linear Trend
 Lag Length: 3 (Fixed)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.476390	0.0603
Test critical values: 1% level	-4.296729	
5% level	-3.568379	
10% level	-3.218382	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(LNGRR,2)
 Method: Least Squares
 Date: 10/17/05 Time: 20:52
 Sample(adjusted): 1974 2003
 Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(LNGRR(-1))	-1.786857	0.513998	-3.476390	0.0020
D(LNGRR(-1),2)	0.651413	0.445031	1.463746	0.1562
D(LNGRR(-2),2)	0.560707	0.355852	1.575676	0.1282
D(LNGRR(-3),2)	0.397323	0.226054	1.757650	0.0916
C	0.324654	0.137183	2.366580	0.0264
@TREND(1969)	-0.010356	0.005315	-1.948528	0.0631
R-squared	0.602771	Mean dependent var	-0.004347	
Adjusted R-squared	0.520015	S.D. dependent var	0.235600	
S.E. of regression	0.163226	Akaike info criterion	-0.610507	
Sum squared resid	0.639424	Schwarz criterion	-0.330268	
Log likelihood	15.15761	F-statistic	7.283704	
Durbin-Watson stat	2.072345	Prob(F-statistic)	0.000282	

LAMPIRAN 5.1: FPE LANGKAH 1 (DLNGER)**DLNGER=f(DLNB1GER)**

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:52

Sample(adjusted): 1971 2003

Included observations: 33 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.065769	0.028226	2.330114	0.0265
DLNGER(-1)	0.143619	0.179180	0.801536	0.4289
R-squared	0.020304	Mean dependent var		0.077898
Adjusted R-squared	-0.011299	S.D. dependent var		0.136106
S.E. of regression	0.136872	Akaike info criterion		-1.080843
Sum squared resid	0.580756	Schwarz criterion		-0.990146
Log likelihood	19.83392	F-statistic		0.642459
Durbin-Watson stat	1.951907	Prob(F-statistic)		0.428923

DLNGER=f(DLNB2GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:52

Sample(adjusted): 1972 2003

Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.088660	0.030793	2.879213	0.0073
DLNGER(-2)	-0.116252	0.197175	-0.589588	0.5599
R-squared	0.011454	Mean dependent var		0.077824
Adjusted R-squared	-0.021497	S.D. dependent var		0.138283
S.E. of regression	0.139761	Akaike info criterion		-1.037301
Sum squared resid	0.585996	Schwarz criterion		-0.945693
Log likelihood	18.59682	F-statistic		0.347615
Durbin-Watson stat	1.662947	Prob(F-statistic)		0.559881

DLNGER=f(DLNB3GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1973 2003

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.080549	0.031458	2.560503	0.0159
DLNGER(-3)	-0.061731	0.199964	-0.308712	0.7597
R-squared	0.003276	Mean dependent var		0.074838
Adjusted R-squared	-0.031094	S.D. dependent var		0.139516
S.E. of regression	0.141669	Akaike info criterion		-1.008310
Sum squared resid	0.582031	Schwarz criterion		-0.915795
Log likelihood	17.62881	F-statistic		0.095303
Durbin-Watson stat	1.706132	Prob(F-statistic)		0.759747

DLNGER=f(D2LNB4GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1974 2003

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.071498	0.031871	2.243375	0.0330
DLNGER(-4)	-0.020632	0.199608	-0.103361	0.9184
R-squared	0.000381	Mean dependent var		0.069559
Adjusted R-squared	-0.035319	S.D. dependent var		0.138717
S.E. of regression	0.141145	Akaike info criterion		-1.013714
Sum squared resid	0.557816	Schwarz criterion		-0.920301
Log likelihood	17.20571	F-statistic		0.010684
Durbin-Watson stat	1.509236	Prob(F-statistic)		0.918413

DLNGER=f(DLNB5GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.035488	0.021220	1.672403	0.1060
DLNGER(-5)	0.168099	0.133576	1.258452	0.2190
R-squared	0.055406	Mean dependent var		0.050772
Adjusted R-squared	0.020421	S.D. dependent var		0.094672
S.E. of regression	0.093700	Akaike info criterion		-1.830961
Sum squared resid	0.237053	Schwarz criterion		-1.736665
Log likelihood	28.54893	F-statistic		1.583701
Durbin-Watson stat	2.118664	Prob(F-statistic)		0.219002

DLNGER=f(DLNB6GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1976 2003

Included observations: 28 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.034588	0.021534	1.606175	0.1203
DLNGER(-6)	0.187862	0.136773	1.373533	0.1813
R-squared	0.067652	Mean dependent var		0.050976
Adjusted R-squared	0.031793	S.D. dependent var		0.096403
S.E. of regression	0.094858	Akaike info criterion		-1.804127
Sum squared resid	0.233948	Schwarz criterion		-1.708970
Log likelihood	27.25778	F-statistic		1.886594
Durbin-Watson stat	2.157828	Prob(F-statistic)		0.181315

DLNGER=f(DLNB7GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1977 2003

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.055728	0.023279	2.393956	0.0245
DLNGER(-7)	8.56E-05	0.146913	0.000582	0.9995
R-squared	0.000000	Mean dependent var		0.055736
Adjusted R-squared	-0.040000	S.D. dependent var		0.094826
S.E. of regression	0.096704	Akaike info criterion		-1.763129
Sum squared resid	0.233793	Schwarz criterion		-1.667141
Log likelihood	25.80224	F-statistic		3.39E-07
Durbin-Watson stat	2.029342	Prob(F-statistic)		0.999540

DLNGER=f(DLNB8GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:53

Sample(adjusted): 1978 2003

Included observations: 26 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.065721	0.023677	2.775754	0.0105
DLNGER(-8)	-0.121823	0.147270	-0.827208	0.4163
R-squared	0.027721	Mean dependent var		0.054039
Adjusted R-squared	-0.012791	S.D. dependent var		0.096285
S.E. of regression	0.096899	Akaike info criterion		-1.756492
Sum squared resid	0.225346	Schwarz criterion		-1.659715
Log likelihood	24.83440	F-statistic		0.684273
Durbin-Watson stat	2.060494	Prob(F-statistic)		0.416269

DLNGER=f(DLNB9GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:54

Sample(adjusted): 1979 2003

Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.056511	0.024739	2.284285	0.0319
DLNGER(-9)	-0.041752	0.151814	-0.275018	0.7858
R-squared	0.003278	Mean dependent var		0.052498
Adjusted R-squared	-0.040058	S.D. dependent var		0.097943
S.E. of regression	0.099885	Akaike info criterion		-1.692969
Sum squared resid	0.229473	Schwarz criterion		-1.595459
Log likelihood	23.16211	F-statistic		0.075635
Durbin-Watson stat	2.060340	Prob(F-statistic)		0.785757

DLNGER=f(DLNB10GER)

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 20:54

Sample(adjusted): 1980 2003

Included observations: 24 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.041689	0.025525	1.633252	0.1166
DLNGER(-10)	0.102940	0.153974	0.668551	0.5107
R-squared	0.019912	Mean dependent var		0.051714
Adjusted R-squared	-0.024638	S.D. dependent var		0.099969
S.E. of regression	0.101193	Akaike info criterion		-1.663912
Sum squared resid	0.225282	Schwarz criterion		-1.565741
Log likelihood	21.96694	F-statistic		0.446960
Durbin-Watson stat	2.064332	Prob(F-statistic)		0.510737

LAMPIRAN 5.2**HASIL PENGHITUNGAN FPE TINGKAT PERTAMA:
VARIABEL DLNGER**

$$FPE_{D2GER}(1,0) = \left(\frac{32+1+1}{32-1-1} \times \frac{1,22 \times 10^{10}}{32} \right) / 10.000.000 = 43,2083$$

$$FPE_{D2GER}(2,0) = \left(\frac{31+2+1}{31-2-1} \times \frac{1,8 \times 10^{10}}{31} \right) / 10.000.000 = 70,5069$$

$$FPE_{D2GER}(3,0) = \left(\frac{30+3+1}{30-3-1} \times \frac{1,71 \times 10^{10}}{30} \right) / 10.000.000 = 74,5385$$

$$FPE_{D2GER}(4,0) = \left(\frac{29+4+1}{29-4-1} \times \frac{1,24 \times 10^{10}}{29} \right) / 10.000.000 = 60,5747$$

$$FPE_{D2GER}(5,0) = \left(\frac{28+5+1}{28-5-1} \times \frac{1,08 \times 10^{10}}{28} \right) / 10.000.000 = 59,6104$$

$$FPE_{D2GER}(6,0) = \left(\frac{27+6+1}{27-6-1} \times \frac{1,09 \times 10^{10}}{27} \right) / 10.000.000 = 68,6296$$

$$FPE_{D2GER}(7,0) = \left(\frac{26+7+1}{26-7-1} \times \frac{1,41 \times 10^{10}}{26} \right) / 10.000.000 = 102,4359$$

$$FPE_{D2GER}(8,0) = \left(\frac{25+8+1}{25-8-1} \times \frac{1,72 \times 10^{10}}{25} \right) / 10.000.000 = 146,2000$$

$$FPE_{D2GER}(9,0) = \left(\frac{24+9+1}{24-9-1} \times \frac{1,63 \times 10^{10}}{24} \right) / 10.000.000 = 164,9405$$

$$FPE_{D2GER}(10,0) = \left(\frac{23+10+1}{23-10-1} \times \frac{1,46 \times 10^{10}}{23} \right) / 10.000.000 = 179,8551$$

LAMPIRAN 5.3: FPE LANGKAH 1 (DLNGRR)**DLNGRR=f(DLNB1GRR)**

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:01

Sample(adjusted): 1971 2003

Included observations: 33 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.075418	0.032038	2.353988	0.0251
DLNGRR(-1)	0.035490	0.177866	0.199529	0.8432
R-squared	0.001283	Mean dependent var		0.078310
Adjusted R-squared	-0.030934	S.D. dependent var		0.161660
S.E. of regression	0.164142	Akaike info criterion		-0.717480
Sum squared resid	0.835219	Schwarz criterion		-0.626782
Log likelihood	13.83842	F-statistic		0.039812
Durbin-Watson stat	2.021076	Prob(F-statistic)		0.843152

DLNGRR=f(DLNB2GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:01

Sample(adjusted): 1972 2003

Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.068340	0.032743	2.087142	0.0455
DLNGRR(-2)	0.095254	0.179529	0.530581	0.5996
R-squared	0.009297	Mean dependent var		0.076109
Adjusted R-squared	-0.023727	S.D. dependent var		0.163744
S.E. of regression	0.165675	Akaike info criterion		-0.697113
Sum squared resid	0.823448	Schwarz criterion		-0.605505
Log likelihood	13.15381	F-statistic		0.281516
Durbin-Watson stat	1.965770	Prob(F-statistic)		0.599615

DLNGRR=f(DLNB3GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:01

Sample(adjusted): 1973 2003

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.063055	0.032575	1.935692	0.0627
DLNGRR(-3)	0.097111	0.188768	0.514445	0.6108
R-squared	0.009043	Mean dependent var		0.070052
Adjusted R-squared	-0.025127	S.D. dependent var		0.162767
S.E. of regression	0.164799	Akaike info criterion		-0.705838
Sum squared resid	0.787604	Schwarz criterion		-0.613323
Log likelihood	12.94049	F-statistic		0.264653
Durbin-Watson stat	2.011363	Prob(F-statistic)		0.610840

DLNGRR=f(DLNB4GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:02

Sample(adjusted): 1974 2003

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.076694	0.033358	2.299098	0.0292
DLNGRR(-4)	-0.154973	0.191062	-0.811114	0.4241
R-squared	0.022957	Mean dependent var		0.064674
Adjusted R-squared	-0.011937	S.D. dependent var		0.162723
S.E. of regression	0.163692	Akaike info criterion		-0.717324
Sum squared resid	0.750259	Schwarz criterion		-0.623911
Log likelihood	12.75986	F-statistic		0.657906
Durbin-Watson stat	2.044218	Prob(F-statistic)		0.424142

DLNGRR=f(DLNB5GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:02

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.049672	0.036621	1.356383	0.1862
DLNGRR(-5)	0.086440	0.221864	0.389607	0.6999
R-squared	0.005591	Mean dependent var		0.057659
Adjusted R-squared	-0.031239	S.D. dependent var		0.160921
S.E. of regression	0.163415	Akaike info criterion		-0.718579
Sum squared resid	0.721018	Schwarz criterion		-0.624283
Log likelihood	12.41940	F-statistic		0.151793
Durbin-Watson stat	2.147756	Prob(F-statistic)		0.699884

DLNGRR=f(DLNB6GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:02

Sample(adjusted): 1976 2003

Included observations: 28 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.045307	0.037357	1.212816	0.2361
DLNGRR(-6)	0.136950	0.226217	0.605390	0.5502
R-squared	0.013900	Mean dependent var		0.057617
Adjusted R-squared	-0.024027	S.D. dependent var		0.163873
S.E. of regression	0.165830	Akaike info criterion		-0.686955
Sum squared resid	0.714992	Schwarz criterion		-0.591797
Log likelihood	11.61737	F-statistic		0.366496
Durbin-Watson stat	2.169840	Prob(F-statistic)		0.550169

DLNGRR=f(DLNB7GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:03

Sample(adjusted): 1977 2003

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.054131	0.042009	1.288569	0.2093
DLNGRR(-7)	0.023492	0.258789	0.090778	0.9284
R-squared	0.000330	Mean dependent var		0.056519
Adjusted R-squared	-0.039657	S.D. dependent var		0.166890
S.E. of regression	0.170167	Akaike info criterion		-0.632885
Sum squared resid	0.723921	Schwarz criterion		-0.536897
Log likelihood	10.54395	F-statistic		0.008241
Durbin-Watson stat	2.168989	Prob(F-statistic)		0.928392

DLNGRR=f(DLNB8GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:03

Sample(adjusted): 1978 2003

Included observations: 26 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.042566	0.043749	0.972944	0.3403
DLNGRR(-8)	0.120491	0.264606	0.455359	0.6529
R-squared	0.008566	Mean dependent var		0.055164
Adjusted R-squared	-0.032744	S.D. dependent var		0.170044
S.E. of regression	0.172805	Akaike info criterion		-0.599500
Sum squared resid	0.716679	Schwarz criterion		-0.502724
Log likelihood	9.793505	F-statistic		0.207351
Durbin-Watson stat	2.169451	Prob(F-statistic)		0.652944

DLNGRR=f(DLNB9GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:03

Sample(adjusted): 1979 2003

Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.052673	0.045137	1.166980	0.2552
DLNGRR(-9)	0.004695	0.271329	0.017305	0.9863
R-squared	0.000013	Mean dependent var		0.053158
Adjusted R-squared	-0.043465	S.D. dependent var		0.173236
S.E. of regression	0.176960	Akaike info criterion		-0.549162
Sum squared resid	0.720245	Schwarz criterion		-0.451652
Log likelihood	8.864527	F-statistic		0.000299
Durbin-Watson stat	2.118586	Prob(F-statistic)		0.986343

DLNGRR=f(DLNB10GRR)

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:03

Sample(adjusted): 1980 2003

Included observations: 24 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.063072	0.044217	1.426425	0.1678
DLNGRR(-10)	-0.194262	0.261750	-0.742166	0.4658
R-squared	0.024425	Mean dependent var		0.042856
Adjusted R-squared	-0.019919	S.D. dependent var		0.168957
S.E. of regression	0.170631	Akaike info criterion		-0.618967
Sum squared resid	0.640531	Schwarz criterion		-0.520796
Log likelihood	9.427608	F-statistic		0.550811
Durbin-Watson stat	2.209180	Prob(F-statistic)		0.465837

LAMPIRAN 5.4**HASIL PENGHITUNGAN FPE TINGKAT PERTAMA:
VARIABEL LNGRR**

$$FPE_{D2GRR}(1,0) = \left(\frac{32+1+1}{32-1-1} \times \frac{3,83 \times 10^{10}}{32} \right) / 10.000.000 = 135,646$$

$$FPE_{D2GRR}(2,0) = \left(\frac{31+2+1}{31-2-1} \times \frac{3,58 \times 10^{10}}{31} \right) / 10.000.000 = 140,230$$

$$FPE_{D2GER}(3,0) = \left(\frac{30+3+1}{30-3-1} \times \frac{4,07 \times 10^{10}}{30} \right) / 10.000.000 = 177,410$$

$$FPE_{D2GRR}(4,0) = \left(\frac{29+4+1}{29-4-1} \times \frac{4,08 \times 10^{10}}{29} \right) / 10.000.000 = 199,310$$

$$FPE_{D2GRR}(5,0) = \left(\frac{28+5+1}{28-5-1} \times \frac{4,05 \times 10^{10}}{28} \right) / 10.000.000 = 223,539$$

$$FPE_{D2GER}(6,0) = \left(\frac{27+6+1}{27-6-1} \times \frac{4,06 \times 10^{10}}{27} \right) / 10.000.000 = 255,630$$

$$FPE_{D2GER}(7,0) = \left(\frac{26+7+1}{26-7-1} \times \frac{3,98 \times 10^{10}}{26} \right) / 10.000.000 = 289,145$$

$$FPE_{D2GER}(8,0) = \left(\frac{25+8+1}{25-8-1} \times \frac{4,06 \times 10^{10}}{25} \right) / 10.000.000 = 345,100$$

$$FPE_{D2GER}(9,0) = \left(\frac{24+9+1}{24-9-1} \times \frac{3,84 \times 10^{10}}{24} \right) / 10.000.000 = 388,571$$

$$FPE_{D2GER}(10,0) = \left(\frac{23+10+1}{23-10-1} \times \frac{4,05 \times 10^{10}}{23} \right) / 10.000.000 = 498,913$$

LAMPIRAN 6: FPE LANGKAH II**DLNGER=f(DLNB5GER, DLNB1GRR)**

Dependent Variable: DLNGER
 Method: Least Squares
 Date: 10/17/05 Time: 21:05
 Sample(adjusted): 1975 2003
 Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.040282	0.022321	1.804695	0.0827
DLNGER(-5)	0.172046	0.134764	1.276647	0.2130
DLNGRR(-1)	-0.081253	0.107975	-0.752515	0.4585
R-squared	0.075540	Mean dependent var		0.050772
Adjusted R-squared	0.004428	S.D. dependent var		0.094672
S.E. of regression	0.094462	Akaike info criterion		-1.783542
Sum squared resid	0.232000	Schwarz criterion		-1.642097
Log likelihood	28.86135	F-statistic		1.062270
Durbin-Watson stat	2.177360	Prob(F-statistic)		0.360199

DLNGRR=f(DLNB1GRR, DLNB5GER)

Dependent Variable: DLNGRR
 Method: Least Squares
 Date: 10/17/05 Time: 21:05
 Sample(adjusted): 1975 2003
 Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.032562	0.037792	0.861608	0.3968
DLNGRR(-1)	-0.086396	0.182820	-0.472576	0.6405
DLNGER(-5)	0.336265	0.228178	1.473698	0.1526
R-squared	0.082713	Mean dependent var		0.057659
Adjusted R-squared	0.012152	S.D. dependent var		0.160921
S.E. of regression	0.159940	Akaike info criterion		-0.730342
Sum squared resid	0.665099	Schwarz criterion		-0.588898
Log likelihood	13.58996	F-statistic		1.172227
Durbin-Watson stat	2.101270	Prob(F-statistic)		0.325513

LAMPIRAN 7.A:**UJI KAUSALITAS GRANGER****Model Restriksi**

$$\text{DLNGER} = f(\text{DLNGERB1}, \text{DLNGERB2}, \text{DLNGERB3}, \text{DLNGERB4}, \text{DLNGERB5})$$

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 21:06

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLNGER(-1)	0.071726	0.131077	0.547208	0.5893
DLNGER(-2)	-0.121804	0.138457	-0.879725	0.3877
DLNGER(-3)	0.112578	0.138250	0.814306	0.4235
DLNGER(-4)	-0.045226	0.138761	-0.325926	0.7473
DLNGER(-5)	0.306425	0.135860	2.255444	0.0335
R-squared	0.009781	Mean dependent var	0.050772	
Adjusted R-squared	-0.155255	S.D. dependent var	0.094672	
S.E. of regression	0.101756	Akaike info criterion	-1.576894	
Sum squared resid	0.248502	Schwarz criterion	-1.341154	
Log likelihood	27.86497	Durbin-Watson stat	2.106350	

$$\text{DLNGER} = f(\text{DLNGERB1})$$

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:06

Sample(adjusted): 1971 2003

Included observations: 33 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.075418	0.032038	2.353988	0.0251
DLNGRR(-1)	0.035490	0.177866	0.199529	0.8432
R-squared	0.001283	Mean dependent var	0.078310	
Adjusted R-squared	-0.030934	S.D. dependent var	0.161660	
S.E. of regression	0.164142	Akaike info criterion	-0.717480	
Sum squared resid	0.835219	Schwarz criterion	-0.626782	
Log likelihood	13.83842	F-statistic	0.039812	
Durbin-Watson stat	2.021076	Prob(F-statistic)	0.843152	

LAMPIRAN 7.B:

UJI KAUSALITAS GRANGER
Model Tanpa Restriksi

**DLNGER=f(DLNGERB1, DLNGERB2, DLNGERB3, DLNGERB4,
DLNGERB5, DLNGRRB1)**

Dependent Variable: DLNGER

Method: Least Squares

Date: 10/17/05 Time: 21:06

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLNGER(-1)	0.117030	0.143925	0.813136	0.4245
DLNGER(-2)	-0.146081	0.142858	-1.022559	0.3172
DLNGER(-3)	0.153177	0.148439	1.031925	0.3128
DLNGER(-4)	-0.041007	0.139947	-0.293018	0.7721
DLNGER(-5)	0.317926	0.137689	2.309023	0.0303
DLNGRR(-1)	-0.104305	0.131522	-0.793057	0.4358
R-squared	0.036138	Mean dependent var		0.050772
Adjusted R-squared	-0.173397	S.D. dependent var		0.094672
S.E. of regression	0.102552	Akaike info criterion		-1.534907
Sum squared resid	0.241888	Schwarz criterion		-1.252018
Log likelihood	28.25615	Durbin-Watson stat		2.183678

**DLNGRR=f(DLNGRRB1, DLNGERB1, DLNGERB2, DLNGERB3,
DLNGERB4, DLNGERB5)**

Dependent Variable: DLNGRR

Method: Least Squares

Date: 10/17/05 Time: 21:06

Sample(adjusted): 1975 2003

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DLNGRR(-1)	0.001197	0.207252	0.005778	0.9954
DLNGER(-1)	-0.233141	0.226796	-1.027979	0.3146
DLNGER(-2)	0.297463	0.225115	1.321379	0.1994
DLNGER(-3)	0.088024	0.233909	0.376317	0.7101
DLNGER(-4)	0.016860	0.220528	0.076451	0.9397
DLNGER(-5)	0.375496	0.216969	1.730644	0.0969
R-squared	0.171614	Mean dependent var		0.057659
Adjusted R-squared	-0.008470	S.D. dependent var		0.160921
S.E. of regression	0.161601	Akaike info criterion		-0.625386
Sum squared resid	0.600639	Schwarz criterion		-0.342498
Log likelihood	15.06810	Durbin-Watson stat		2.171729