

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 dalam penelitian ini dinyatakan untuk menolak hipotesis yang menerangkan adanya hubungan dua arah antara pertumbuhan ekonomi dan investasi asing langsung di Indonesia untuk periode pengamatan dari tahun 1969 hingga 2004. Berdasarkan hasil uji kausalitas Granger, tidak terdapat adanya bentuk hubungan satu arah maupun dua arah antara pertumbuhan ekonomi di Indonesia dan investasi asing langsung.

5.2. Saran

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

Hasil penelitian menjelaskan bahwa pada periode pengamatan dari tahun 1969 hingga 2004, tidak terdapat adanya hubungan dua arah di mana pertumbuhan ekonomi tidak berpengaruh terhadap investasi asing langsung dan aktivitas investasi asing langsung tidak berpengaruh pada pertumbuhan ekonomi. Implikasi dari kesimpulan ini menunjukkan bahwa kebijakan pemerintah dalam mendorong pertumbuhan ekonomi tidak efektif terutama dalam menyerap peran dari investor

asing. Pihak pemerintah hendaknya dapat lebih konsisten dalam menjalankan kebijakan ekonomi terutama dalam menciptakan iklim usaha yang kondusif dan mendukung tercapainya stabilitas perekonomian. Stabilitas keamanan nasional di dalam negeri yang cukup kondusif dan didukung dengan stabilitas politik yang tinggi akan mendorong tercapainya upaya untuk meningkatkan pendapatan masyarakat yang selanjutnya akan mendorong kinerja perekonomian yang ditunjukkan melalui indikator pertumbuhan ekonomi. Kondisi usaha yang kondusif seperti ini diharapkan bagi investor asing untuk memasukkan modalnya dan merealisasikannya ke dalam bentuk investasi fisik. Iklim investasi yang kondusif semestinya juga harus didukung dengan penyederhanaan birokrasi sehingga mempermudah investor asing dalam melakukan survey kelayakan proyek dan realisasi proyek investasi. Langkah-langkah kebijakan seperti itu dilakukan karena berdasarkan hasil pengamatan dalam penelitian ini, investasi asing langsung tidak memiliki peran yang cukup nyata dalam mempengaruhi pertumbuhan ekonomi di Indonesia.

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LAMPIRAN 1**PRODUK DOMESTIK BRUTO DAN INVESTASI ASING LANGSUNG
DI INDONESIA, 1980-2004**

Tahun	Produk Domestik Bruto (Milyar Rupiah)			Penanaman Modal Asing ²⁾ (Juta Dolar)			Indeks Harga	
	Nominal	Riil ¹⁾	%Δ	Jumlah	Nilai	%Δ	IHK 2000	Inflasi (%)
1969	9.264,8	56.051,2	13,70	37	128	-	16,53	5,93
1970	10.871,8	60.255,1	7,50	83	167	30,82	18,04	6,66
1971	7.393,8	64.472,9	7,00	62	287	72,18	11,47	6,95
1972	8.983,7	70.546,3	9,42	47	163	-43,25	12,73	7,41
1973	10.809,1	78.525,1	11,31	69	324	98,65	13,77	9,7
1974	13.764,5	84.516,5	7,63	53	542	67,51	16,29	13,64
1975	17.047,3	88.725,4	4,98	24	1.145	111,10	19,21	16,24
1976	20.443,2	94.829,6	6,88	22	221	-80,70	21,56	19,48
1977	13.145,9	103.231,5	8,86	20	167	-24,43	12,73	11,04
1978	15.305,6	111.190,6	7,71	23	207	24,01	13,77	8,09
1979	19.245,9	118.173,4	6,28	13	249	20,04	16,29	18,31
1980	24.957,7	129.896,2	9,92	18	875,0	-56,58	19,21	17,97
1981	30.224,2	140.200,5	7,93	28	1.115,1	27,44	21,56	12,20
1982	33.839,2	143.340,6	2,24	36	1.396,6	25,24	23,61	9,51
1983	39.829,9	150.974,6	5,33	67	2.882,2	106,37	26,38	11,75
1984	47.078,9	161.504,7	6,97	48	1.107,1	-61,59	29,15	10,49
1985	50.509,4	165.482,1	2,46	34	859,0	-22,41	30,52	4,71
1986	56.604,0	175.205,1	5,88	26	826,2	-3,82	32,31	5,85
1987	64.914,4	183.834,9	4,93	51	1.239,7	50,05	35,31	9,30
1988	75.077,9	196.795,3	7,05	129	4.425,9	257,01	38,15	8,04
1989	87.146,0	214.673,4	9,08	295	5.920,2	33,76	40,59	6,41
1990	106.871,3	233.997,6	9,00	59	8.751,1	47,82	45,67	12,51
1991	127.266,9	254.888,0	8,93	60	8.770,0	0,22	49,93	9,32
1992	146.776,0	273.295,0	7,22	305	10.323,2	17,71	53,71	7,56
1993	172.649,8	293.117,9	7,25	329	8.144,2	-21,11	58,90	9,67
1994	203.621,6	315.218,9	7,54	449	23.724,3	191,30	64,60	9,67
1995	239.045,5	341.129,5	8,22	799	39.914,7	68,24	70,07	8,48
1996	282.149,9	367.800,0	7,82	959	29.931,4	-25,01	76,71	9,47
1997	325.056,0	385.086,1	4,70	790	33.832,5	13,03	84,41	10,04
1998	299.646,8	334.249,8	-13,20	1.035	13.563,1	-59,91	89,65	6,20
1999	308.352,1	337.183,0	0,88	1.164	10.890,6	-19,70	91,45	2,01
2000	353.773,2	353.773,2	4,92	1.542	16.075,6	47,61	100,00	9,35
2001	411.912,1	365.981,4	3,45	1.334	15.056,3	-6,34	112,55	12,55
2002	469.948,0	379.483,8	3,69	1.151	9.795,4	-34,94	123,84	10,03
2003	503.634,4	387.098,4	2,01	1.060	13.596,4	38,80	130,11	5,06
2004	571.502,1	412.840,4	6,65	1.179	10.277,1	-24,41	138,43	6,40

Sumber: Badan Pusat Statistik (BPS), 1980-2004

Keterangan:

- 1) Berdasarkan harga konstan tahun 2000
Rumus: Nilai Riil, = $(100/IHK_t) \times$ Nilai Nominal,
- 2) Nilai dan jumlah yang telah disetujui
- 3) %Δ - pertumbuhan (persen)

LAMPIRAN 2.1**UJI AKAR-AKAR UNIT (DF): GROWTH**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.101179	0.2455
Test critical values:		
1% level	-3.653730	
5% level	-2.957110	
10% level	-2.617434	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(GROWTH)
 Method: Least Squares
 Sample(adjusted): 1973 2004
 Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GROWTH(-1)	-0.561307	0.267139	-2.101179	0.0451
D(GROWTH(-1))	-0.045181	0.261228	-0.172956	0.8640
D(GROWTH(-2))	-0.174669	0.219357	-0.796277	0.4328
D(GROWTH(-3))	-0.068964	0.186418	-0.369942	0.7143
C	3.148731	1.792030	1.757075	0.0902
R-squared	0.343783	Mean dependent var		-0.086562
Adjusted R-squared	0.246565	S.D. dependent var		4.796163
S.E. of regression	4.163099	Akaike info criterion		5.832997
Sum squared resid	467.9476	Schwarz criterion		6.062019
Log likelihood	-88.32796	F-statistic		3.536228
Durbin-Watson stat	2.002586	Prob(F-statistic)		0.019121

LAMPIRAN 2.2**UJI AKAR-AKAR UNIT (ADF): GROWTH**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.580893	0.2907
Test critical values:		
1% level	-4.273277	
5% level	-3.557759	
10% level	-3.212361	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(GROWTH)
 Method: Least Squares
 Sample(adjusted): 1973 2004
 Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GROWTH(-1)	-0.888181	0.344137	-2.580893	0.0158
D(GROWTH(-1))	0.183492	0.299878	0.611891	0.5459
D(GROWTH(-2))	-0.013805	0.241389	-0.057190	0.9548
D(GROWTH(-3))	0.030281	0.194809	0.155438	0.8777
C	8.081219	3.802164	2.125426	0.0432
@TREND(1969)	-0.150398	0.102838	-1.462478	0.1556
R-squared	0.393662	Mean dependent var		-0.086562
Adjusted R-squared	0.277059	S.D. dependent var		4.796163
S.E. of regression	4.077984	Akaike info criterion		5.816443
Sum squared resid	432.3787	Schwarz criterion		6.091269
Log likelihood	-87.06309	F-statistic		3.376075
Durbin-Watson stat	1.962497	Prob(F-statistic)		0.017549

LAMPIRAN 3.1**UJI AKAR-AKAR UNIT (DF): FDI**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.591986	0.4750
Test critical values:		
1% level	-3.653730	
5% level	-2.957110	
10% level	-2.617434	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(FDI)
 Method: Least Squares
 Sample(adjusted): 1973 2004
 Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI(-1)	-0.190172	0.119456	-1.591986	0.1230
D(FDI(-1))	0.043516	0.194006	0.224304	0.8242
D(FDI(-2))	0.072657	0.193024	0.376415	0.7096
D(FDI(-3))	-0.028057	0.195766	-0.143321	0.8871
C	1865.233	1438.542	1.296613	0.2057
R-squared	0.100547	Mean dependent var		316.0625
Adjusted R-squared	-0.032705	S.D. dependent var		6107.859
S.E. of regression	6206.934	Akaike info criterion		20.44732
Sum squared resid	1.04E+09	Schwarz criterion		20.67634
Log likelihood	-322.1572	F-statistic		0.754565
Durbin-Watson stat	2.010135	Prob(F-statistic)		0.563817

LAMPIRAN 3.2**UJI AKAR-AKAR UNIT (ADF): FDI**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.311726	0.4161
Test critical values:		
1% level	-4.273277	
5% level	-3.557759	
10% level	-3.212361	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(FDI)
 Method: Least Squares
 Sample(adjusted): 1973 2004
 Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
FDI(-1)	-0.450928	0.195061	-2.311726	0.0290
D(FDI(-1))	0.190216	0.207701	0.915814	0.3682
D(FDI(-2))	0.220203	0.207058	1.063483	0.2973
D(FDI(-3))	0.094659	0.203571	0.464995	0.6458
C	-2430.327	2938.150	-0.827162	0.4157
@TREND(1969)	322.7648	194.3453	1.660780	0.1088
R-squared	0.186814	Mean dependent var		316.0625
Adjusted R-squared	0.030432	S.D. dependent var		6107.859
S.E. of regression	6014.205	Akaike info criterion		20.40900
Sum squared resid	9.40E+08	Schwarz criterion		20.68382
Log likelihood	-320.5439	F-statistic		1.194598
Durbin-Watson stat	1.946967	Prob(F-statistic)		0.339144

LAMPIRAN 4.1**UJI DERAJAT INTEGRASI 1 (DF): GROWTH**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.158369	0.0029
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(GROWTH,2)

Method: Least Squares

Sample(adjusted): 1974 2004

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GROWTH(-1))	-2.469714	0.593914	-4.158369	0.0003
D(GROWTH(-1),2)	0.982816	0.480829	2.044005	0.0512
D(GROWTH(-2),2)	0.450891	0.333926	1.350272	0.1886
D(GROWTH(-3),2)	0.173454	0.190894	0.908641	0.3719
C	-0.408875	0.814339	-0.502095	0.6198
R-squared	0.705179	Mean dependent var		0.088710
Adjusted R-squared	0.659822	S.D. dependent var		7.702345
S.E. of regression	4.492374	Akaike info criterion		5.989330
Sum squared resid	524.7171	Schwarz criterion		6.220618
Log likelihood	-87.83461	F-statistic		15.54729
Durbin-Watson stat	1.922220	Prob(F-statistic)		0.000001

LAMPIRAN 4.2**UJI DERAJAT INTEGRASI 1 (ADF): GROWTH**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.101229	0.0153
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(GROWTH,2)
 Method: Least Squares
 Sample(adjusted): 1974 2004
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GROWTH(-1))	-2.475000	0.603478	-4.101229	0.0004
D(GROWTH(-1),2)	0.988422	0.488641	2.022798	0.0539
D(GROWTH(-2),2)	0.456173	0.339449	1.343863	0.1911
D(GROWTH(-3),2)	0.178646	0.194290	0.919481	0.3666
C	-1.216381	2.017843	-0.602812	0.5521
@TREND(1969)	0.040303	0.091859	0.438752	0.6646
R-squared	0.707432	Mean dependent var		0.088710
Adjusted R-squared	0.648918	S.D. dependent var		7.702345
S.E. of regression	4.563803	Akaike info criterion		6.046175
Sum squared resid	520.7076	Schwarz criterion		6.323721
Log likelihood	-87.71572	F-statistic		12.09005
Durbin-Watson stat	1.935527	Prob(F-statistic)		0.000005

LAMPIRAN 5.1**UJI DERAJAT INTEGRASI 1 (DF): FDI**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.762127	0.0078
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(FDI,2)
 Method: Least Squares
 Sample(adjusted): 1974 2004
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FDI(-1))	-1.536949	0.408532	-3.762127	0.0009
D(FDI(-1),2)	0.446718	0.341257	1.309037	0.2020
D(FDI(-2),2)	0.421297	0.276821	1.521909	0.1401
D(FDI(-3),2)	0.292093	0.193044	1.513095	0.1423
C	580.2836	1153.274	0.503162	0.6191
R-squared	0.567241	Mean dependent var	-112.2581	
Adjusted R-squared	0.500663	S.D. dependent var	8974.719	
S.E. of regression	6341.877	Akaike info criterion	20.49443	
Sum squared resid	1.05E+09	Schwarz criterion	20.72572	
Log likelihood	-312.6636	F-statistic	8.519912	
Durbin-Watson stat	1.974895	Prob(F-statistic)	0.000156	

LAMPIRAN 5.2**UJI DERAJAT INTEGRASI 1 (ADF): FDI**

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.704817	0.0370
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(FDI,2)
 Method: Least Squares
 Sample(adjusted): 1974 2004
 Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(FDI(-1))	-1.541122	0.415978	-3.704817	0.0011
D(FDI(-1),2)	0.449225	0.347394	1.293128	0.2078
D(FDI(-2),2)	0.420434	0.281741	1.492271	0.1481
D(FDI(-3),2)	0.291177	0.196486	1.481920	0.1509
C	1412.071	2853.898	0.494787	0.6251
@TREND(1969)	-41.52388	129.8637	-0.319750	0.7518
R-squared	0.569004	Mean dependent var	-112.2581	
Adjusted R-squared	0.482804	S.D. dependent var	8974.719	
S.E. of regression	6454.287	Akaike info criterion	20.55486	
Sum squared resid	1.04E+09	Schwarz criterion	20.83241	
Log likelihood	-312.6004	F-statistic	6.601028	
Durbin-Watson stat	1.979491	Prob(F-statistic)	0.000482	

LAMPIRAN 6.1**FPE-GRANGER LANGKAH I: DGROWTH**

DGROWTH=f(DGROWTH_{t-1})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1971 2004

Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.110942	0.789036	-0.140605	0.8891
DGROWTH(-1)	-0.249960	0.169548	-1.474273	0.1502
R-squared	0.063601	Mean dependent var	-0.025000	
Adjusted R-squared	0.034339	S.D. dependent var	4.669123	
S.E. of regression	4.588256	Akaike info criterion	5.941900	
Sum squared resid	673.6671	Schwarz criterion	6.031686	
Log likelihood	-99.01229	F-statistic	2.173481	
Durbin-Watson stat	2.191850	Prob(F-statistic)	0.150179	

DGROWTH=f(DGROWTH_{t-2})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1972 2004

Included observations: 33 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.098471	0.803605	-0.122536	0.9033
DGROWTH(-2)	-0.289664	0.170447	-1.699436	0.0993
R-squared	0.085224	Mean dependent var	-0.010606	
Adjusted R-squared	0.055715	S.D. dependent var	4.740751	
S.E. of regression	4.606792	Akaike info criterion	5.951632	
Sum squared resid	657.8985	Schwarz criterion	6.042330	
Log likelihood	-96.20193	F-statistic	2.888084	
Durbin-Watson stat	2.713447	Prob(F-statistic)	0.099252	

DGROWTH=f(DGROWTH_{t-3})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1973 2004

Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.079037	0.863556	-0.091525	0.9277
DGROWTH(-3)	0.023495	0.180374	0.130257	0.8972
R-squared	0.000565	Mean dependent var	-0.086562	
Adjusted R-squared	-0.032749	S.D. dependent var	4.796163	
S.E. of regression	4.874066	Akaike info criterion	6.066195	
Sum squared resid	712.6955	Schwarz criterion	6.157804	
Log likelihood	-95.05913	F-statistic	0.016967	
Durbin-Watson stat	2.484148	Prob(F-statistic)	0.897233	

DGROWTH=f(DGROWTH_{t-4})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1974 2004

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.140199	0.889033	-0.157698	0.8758
DGROWTH(-4)	0.035744	0.183040	0.195281	0.8465
R-squared	0.001313	Mean dependent var	-0.150323	
Adjusted R-squared	-0.033124	S.D. dependent var	4.861638	
S.E. of regression	4.941501	Akaike info criterion	6.095556	
Sum squared resid	708.1345	Schwarz criterion	6.188071	
Log likelihood	-92.48112	F-statistic	0.038135	
Durbin-Watson stat	2.484880	Prob(F-statistic)	0.846535	

DGROWTH=f(DGROWTH_{t-5})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1975 2004

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.023741	0.905742	0.026212	0.9793
DGROWTH(-5)	0.132000	0.185530	0.711475	0.4827
R-squared	0.017757	Mean dependent var	-0.032667	
Adjusted R-squared	-0.017323	S.D. dependent var	4.899654	
S.E. of regression	4.941910	Akaike info criterion	6.097721	
Sum squared resid	683.8292	Schwarz criterion	6.191134	
Log likelihood	-89.46582	F-statistic	0.506197	
Durbin-Watson stat	2.525142	Prob(F-statistic)	0.482676	

DGROWTH=f(DGROWTH_{t-6})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1976 2004

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.067959	0.955325	-0.071137	0.9438
DGROWTH(-6)	-0.135346	0.226314	-0.598044	0.5548
R-squared	0.013073	Mean dependent var	0.057586	
Adjusted R-squared	-0.023479	S.D. dependent var	4.960937	
S.E. of regression	5.018839	Akaike info criterion	6.130747	
Sum squared resid	680.0962	Schwarz criterion	6.225043	
Log likelihood	-86.89583	F-statistic	0.357656	
Durbin-Watson stat	2.544763	Prob(F-statistic)	0.554795	

DGROWTH=f(DGROWTH_{t-7})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1977 2004

Included observations: 28 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.048894	0.975452	-0.050124	0.9604
DGROWTH(-7)	-0.126558	0.368371	-0.343561	0.7339
R-squared	0.004519	Mean dependent var		-0.008214
Adjusted R-squared	-0.033768	S.D. dependent var		5.039067
S.E. of regression	5.123442	Akaike info criterion		6.174279
Sum squared resid	682.4911	Schwarz criterion		6.269437
Log likelihood	-84.43991	F-statistic		0.118034
Durbin-Watson stat	2.521400	Prob(F-statistic)		0.733940

DGROWTH=f(DGROWTH_{t-8})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1978 2004

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.080113	1.008253	-0.079458	0.9373
DGROWTH(-8)	0.007983	0.383525	0.020815	0.9836
R-squared	0.000017	Mean dependent var		-0.081852
Adjusted R-squared	-0.039982	S.D. dependent var		5.119683
S.E. of regression	5.221027	Akaike info criterion		6.214453
Sum squared resid	681.4782	Schwarz criterion		6.310441
Log likelihood	-81.89511	F-statistic		0.000433
Durbin-Watson stat	2.518809	Prob(F-statistic)		0.983559

DGROWTH=f(DGROWTH_{t-9})

Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1979 2004

Included observations: 26 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.112733	1.030630	-0.109382	0.9138
DGROWTH(-9)	-0.341433	0.384873	-0.887131	0.3838
R-squared	0.031751	Mean dependent var		-0.040769
Adjusted R-squared	-0.008593	S.D. dependent var		5.216532
S.E. of regression	5.238897	Akaike info criterion		6.223903
Sum squared resid	658.7051	Schwarz criterion		6.320679
Log likelihood	-78.91073	F-statistic		0.787001
Durbin-Watson stat	2.562377	Prob(F-statistic)		0.383812

DGROWTH=f(DGROWTH_{t-10})

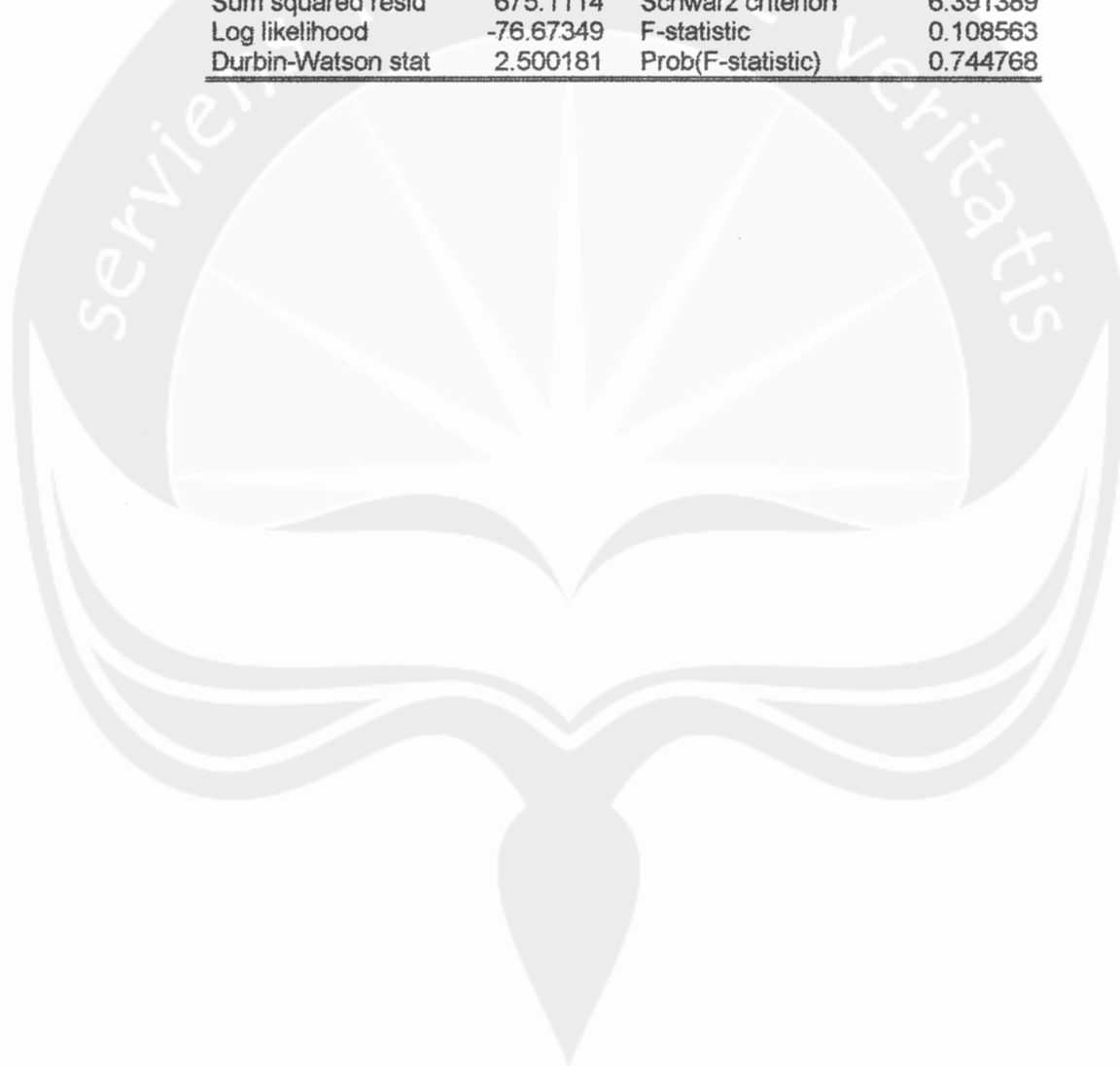
Dependent Variable: DGROWTH

Method: Least Squares

Sample(adjusted): 1980 2004

Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.017586	1.088011	-0.016163	0.9872
DGROWTH(-10)	-0.131435	0.398906	-0.329489	0.7448
R-squared	0.004698	Mean dependent var		0.014800
Adjusted R-squared	-0.038576	S.D. dependent var		5.316241
S.E. of regression	5.417810	Akaike info criterion		6.293879
Sum squared resid	675.1114	Schwarz criterion		6.391389
Log likelihood	-76.67349	F-statistic		0.108563
Durbin-Watson stat	2.500181	Prob(F-statistic)		0.744768



LAMPIRAN 6.2**FPE-GRANGER LANGKAH I: DFDI**

DFDI=f(DFDI_{t-1})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1971 2004

Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	317.5351	1032.166	0.307639	0.7604
DFDI(-1)	-0.050950	0.177577	-0.286917	0.7760
R-squared	0.002566	Mean dependent var		297.3529
Adjusted R-squared	-0.028604	S.D. dependent var		5920.443
S.E. of regression	6004.520	Akaike info criterion		20.29544
Sum squared resid	1.15E+09	Schwarz criterion		20.38522
Log likelihood	-343.0224	F-statistic		0.082321
Durbin-Watson stat	1.991120	Prob(F-statistic)		0.776026

DFDI=f(DFDI_{t-2})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1972 2004

Included observations: 33 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	306.0463	1064.591	0.287478	0.7757
DFDI(-2)	-0.011330	0.181587	-0.062395	0.9506
R-squared	0.000126	Mean dependent var		302.7273
Adjusted R-squared	-0.032128	S.D. dependent var		6012.154
S.E. of regression	6107.971	Akaike info criterion		20.33127
Sum squared resid	1.16E+09	Schwarz criterion		20.42197
Log likelihood	-333.4659	F-statistic		0.003893
Durbin-Watson stat	2.092497	Prob(F-statistic)		0.950649

DFDI=f(DFDI_{t-3})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1973 2004

Included observations: 32 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	370.4246	1093.914	0.338623	0.7373
DFDI(-3)	-0.116532	0.186024	-0.626435	0.5358
R-squared	0.012912	Mean dependent var		316.0625
Adjusted R-squared	-0.019991	S.D. dependent var		6107.859
S.E. of regression	6168.608	Akaike info criterion		20.35280
Sum squared resid	1.14E+09	Schwarz criterion		20.44440
Log likelihood	-323.6447	F-statistic		0.392421
Durbin-Watson stat	2.159402	Prob(F-statistic)		0.535768

DFDI=f(DFDI_{t-4})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1974 2004

Included observations: 31 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	463.2381	1096.395	0.422510	0.6758
DFDI(-4)	-0.276359	0.183596	-1.505261	0.1431
R-squared	0.072469	Mean dependent var		321.0645
Adjusted R-squared	0.040485	S.D. dependent var		6208.756
S.E. of regression	6081.775	Akaike info criterion		20.32632
Sum squared resid	1.07E+09	Schwarz criterion		20.41884
Log likelihood	-313.0580	F-statistic		2.265811
Durbin-Watson stat	2.138810	Prob(F-statistic)		0.143072

DFDI=f(DFDI_{t-5})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1975 2004

Included observations: 30 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	299.8680	1172.867	0.255671	0.8001
DFDI(-5)	0.068658	0.195601	0.351009	0.7282
R-squared	0.004381	Mean dependent var		324.5000
Adjusted R-squared	-0.031177	S.D. dependent var		6314.866
S.E. of regression	6412.549	Akaike info criterion		20.43424
Sum squared resid	1.15E+09	Schwarz criterion		20.52766
Log likelihood	-304.5136	F-statistic		0.123207
Durbin-Watson stat	2.078877	Prob(F-statistic)		0.728209

DFDI=f(DFDI_{t-6})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1976 2004

Included observations: 29 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	236.4636	1202.600	0.196627	0.8456
DFDI(-6)	0.169301	0.197844	0.855729	0.3997
R-squared	0.026405	Mean dependent var		314.8966
Adjusted R-squared	-0.009654	S.D. dependent var		6426.419
S.E. of regression	6457.365	Akaike info criterion		20.45030
Sum squared resid	1.13E+09	Schwarz criterion		20.54460
Log likelihood	-294.5294	F-statistic		0.732272
Durbin-Watson stat	2.092576	Prob(F-statistic)		0.399678

DFDI=f(DFDI_{t-7})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1977 2004

Included observations: 28 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	569.0300	1289.355	0.441329	0.6626
DFDI(-7)	-0.174361	0.265443	-0.656868	0.5170
R-squared	0.016324	Mean dependent var		359.1429
Adjusted R-squared	-0.021509	S.D. dependent var		6539.845
S.E. of regression	6609.805	Akaike info criterion		20.49925
Sum squared resid	1.14E+09	Schwarz criterion		20.59440
Log likelihood	-284.9894	F-statistic		0.431476
Durbin-Watson stat	2.090427	Prob(F-statistic)		0.517038

DFDI=f(DFDI_{t-8})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1978 2004

Included observations: 27 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	527.6366	1335.655	0.395040	0.6962
DFDI(-8)	-0.138784	0.273186	-0.508021	0.6159
R-squared	0.010218	Mean dependent var		374.4444
Adjusted R-squared	-0.029373	S.D. dependent var		6663.914
S.E. of regression	6761.076	Akaike info criterion		20.54694
Sum squared resid	1.14E+09	Schwarz criterion		20.64293
Log likelihood	-275.3837	F-statistic		0.258085
Durbin-Watson stat	2.105369	Prob(F-statistic)		0.615892

DFDI=f(DFDI_{t-9})

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1979 2004

Included observations: 26 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	423.0921	1442.911	0.293221	0.7719
DFDI(-9)	-0.023384	0.314948	-0.074248	0.9414
R-squared	0.000230	Mean dependent var		387.3077
Adjusted R-squared	-0.041427	S.D. dependent var		6795.544
S.E. of regression	6934.876	Akaike info criterion		20.60032
Sum squared resid	1.15E+09	Schwarz criterion		20.69709
Log likelihood	-265.8041	F-statistic		0.005513
Durbin-Watson stat	2.103343	Prob(F-statistic)		0.941428

$$\text{DFDI} = f(\text{DFDI}_{t-10})$$

Dependent Variable: DFDI

Method: Least Squares

Sample(adjusted): 1980 2004

Included observations: 25 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	906.2644	1427.382	0.634914	0.5318
DFDI(-10)	-0.535201	0.423812	-1.262828	0.2193
R-squared	0.064840	Mean dependent var		401.1200
Adjusted R-squared	0.024181	S.D. dependent var		6935.300
S.E. of regression	6850.935	Akaike info criterion		20.57878
Sum squared resid	1.08E+09	Schwarz criterion		20.67629
Log likelihood	-255.2347	F-statistic		1.594733
Durbin-Watson stat	2.105692	Prob(F-statistic)		0.219304

LAMPIRAN 7**FPE-GRANGER LANGKAH II: DGROWTH**

Dependent Variable: DGROWTH
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.008229	0.778663	0.010569	0.9916
DGROWTH(-1)	-0.149559	0.179610	-0.832690	0.4114
DFDI(-1)	-0.000214	0.000144	-1.486678	0.1472
R-squared	0.125921	Mean dependent var		-0.025000
Adjusted R-squared	0.069529	S.D. dependent var		4.669123
S.E. of regression	4.503880	Akaike info criterion		5.931853
Sum squared resid	628.8331	Schwarz criterion		6.066532
Log likelihood	-97.84150	F-statistic		2.232945
Durbin-Watson stat	2.069648	Prob(F-statistic)		0.124176

FPE-GRANGER LANGKAH II: DFDI

Dependent Variable: DFDI
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	474.0357	1021.352	0.464126	0.6458
DFDI(-1)	-0.152660	0.188547	-0.809666	0.4243
DGROWTH(-1)	337.9971	235.5898	1.434685	0.1614
R-squared	0.064670	Mean dependent var		297.3529
Adjusted R-squared	0.004326	S.D. dependent var		5920.443
S.E. of regression	5907.625	Akaike info criterion		20.28997
Sum squared resid	1.08E+09	Schwarz criterion		20.42465
Log likelihood	-341.9295	F-statistic		1.071682
Durbin-Watson stat	1.954949	Prob(F-statistic)		0.354780

LAMPIRAN 8.A**HASIL ESTIMASI MODEL UJI KAUSALITAS GRANGER:
MODEL UJI DENGAN RESTRIKSI**

Dependent Variable: DGROWTH
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DGROWTH(-1)	-0.248199	0.166554	-1.490196	0.1457
R-squared	0.063023	Mean dependent var		-0.025000
Adjusted R-squared	0.063023	S.D. dependent var		4.669123
S.E. of regression	4.519598	Akaike info criterion		5.883694
Sum squared resid	674.0833	Schwarz criterion		5.928587
Log likelihood	-99.02279	Durbin-Watson stat		2.192605

Dependent Variable: DFDI
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DFDI(-1)	-0.047227	0.174717	-0.270305	0.7886
R-squared	-0.000384	Mean dependent var		297.3529
Adjusted R-squared	-0.000384	S.D. dependent var		5920.443
S.E. of regression	5921.580	Akaike info criterion		20.23956
Sum squared resid	1.16E+09	Schwarz criterion		20.28446
Log likelihood	-343.0726	Durbin-Watson stat		1.992446

LAMPIRAN 8.B**HASIL ESTIMASI MODEL UJI KAUSALITAS GRANGER:
MODEL TANPA RESTRIKSI**

Dependent Variable: DGROWTH
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DGROWTH(-1)	-0.149762	0.175770	-0.852033	0.4005
DFDI(-1)	-0.000214	0.000141	-1.517420	0.1390
R-squared	0.125918	Mean dependent var		-0.025000
Adjusted R-squared	0.098603	S.D. dependent var		4.669123
S.E. of regression	4.432957	Akaike info criterion		5.873033
Sum squared resid	628.8354	Schwarz criterion		5.962819
Log likelihood	-97.84156	Durbin-Watson stat		2.069572

Dependent Variable: DFDI
 Method: Least Squares
 Sample(adjusted): 1971 2004
 Included observations: 34 after adjusting endpoints

Variable	Coefficient	Std. Error	t-Statistic	Prob.
DFDI(-1)	-0.143651	0.185232	-0.775522	0.4437
DGROWTH(-1)	326.3189	231.3528	1.410482	0.1680
R-squared	0.058170	Mean dependent var		297.3529
Adjusted R-squared	0.028738	S.D. dependent var		5920.443
S.E. of regression	5834.753	Akaike info criterion		20.23807
Sum squared resid	1.09E+09	Schwarz criterion		20.32786
Log likelihood	-342.0473	Durbin-Watson stat		1.953604