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LAMPIRAN

ESTIMASI *OUTPUT GAP*

Tahun	Output Actual (persen)	λ *(trend)* (persen)	Output Potential (persen)	Output Gap (persen)
1993	6.50	0.2215	6.61	-0.11
1994	7.54	0.2215	7.75	-0.21
1995	8.22	0.2215	8.37	-0.15
1996	7.82	0.2215	7.01	0.81
1997	4.70	0.2215	1.52	3.18
1998	-13.13	0.2215	-6.59	-6.53
1999	0.79	0.2215	-1.43	2.22
2000	4.92	0.2215	3.39	1.53
2001	3.64	0.2215	4.27	-0.63
2002	4.50	0.2215	4.58	-0.08
2003	4.78	0.2215	4.81	-0.03
2004	5.03	0.2215	5.11	-0.08
2005	5.69	0.2215	5.54	0.15
2006	5.50	0.2215	5.75	-0.25
2007	6.35	0.2215	6.09	0.26
2008	6.01	0.2215	5.80	0.22
2009	4.63	0.2215	5.27	-0.64
2010	6.22	0.2215	5.89	0.33
2011	6.17	0.2215	6.14	0.03
2012	6.03	0.2215	5.99	0.04
2013	5.56	0.2215	5.55	0.01
2014	5.01	0.2215	5.08	-0.08
2015	4.88	0.2215	4.93	-0.05
2016	5.03	0.2215	5.06	-0.02
2017	5.07	0.2215	5.20	-0.13
2018	5.17	0.2215	5.00	0.17
2019	5.02	0.2215	3.50	1.52
2020	-2.07	0.2215	0.50	-2.56
2021	3.70	0.2215	2.70	1.00
2022	5.31	0.2215	5.23	0.07

DATA VARIABEL DEPENDEN DAN INDEPENDEN YANG DIGUNAKAN DALAM SATUAN PERSEN

Tahun	OG	INF	UN	lnX	lnM	lnJUB	lnGE	lnCONS
1993	-0.11	9.77	2.79	10.51	10.25	11.89	10.72	14.36
1994	-0.21	9.24	4.36	10.60	10.37	12.07	10.78	14.44
1995	-0.15	8.64	4.36	10.72	10.61	12.32	10.82	14.56
1996	0.81	6.47	4.87	10.82	10.67	12.57	11.07	14.65
1997	3.18	11.05	4.69	10.89	10.64	12.78	11.39	14.73
1998	-6.53	77.63	5.46	10.80	10.22	13.27	11.89	14.66
1999	2.22	2.01	6.36	10.79	10.09	13.38	12.22	14.71
2000	1.53	9.35	6.08	11.04	10.42	13.52	12.15	14.72
2001	-0.63	12.55	8.1	10.94	10.34	13.65	12.47	14.76
2002	-0.08	10.03	9.06	10.95	10.35	13.69	12.32	14.80
2003	-0.03	5.06	9.67	11.02	10.39	13.77	12.45	14.83
2004	-0.08	6.40	9.86	11.18	10.75	13.85	12.60	14.88
2005	0.15	17.11	11.24	11.36	10.96	14.00	12.80	14.92
2006	-0.25	6.60	10.28	11.52	11.02	14.14	12.99	14.95
2007	0.26	6.59	9.11	11.64	11.22	14.32	13.13	15.00
2008	0.22	11.06	8.39	11.83	11.77	14.46	13.45	15.05
2009	-0.64	2.78	7.87	11.67	11.48	14.58	13.35	15.10
2010	0.33	6.96	7.14	11.97	11.82	14.72	13.46	15.15
2011	0.03	3.79	7.48	12.22	12.09	14.87	13.69	15.20
2012	0.04	4.30	6.13	12.15	12.16	15.01	13.83	15.25
2013	0.01	8.38	6.17	12.11	12.14	15.13	13.94	15.30
2014	-0.08	8.36	5.94	12.08	12.09	15.24	14.00	15.35
2015	-0.05	3.35	6.18	11.92	11.87	15.33	13.98	15.40
2016	-0.02	3.02	5.61	11.89	11.82	15.43	13.96	15.45
2017	-0.13	3.61	5.5	12.04	11.96	15.51	14.05	15.50
2018	0.17	3.13	5.34	12.10	12.15	15.57	14.19	15.55
2019	1.52	2.72	5.28	12.03	12.05	15.63	14.22	15.60
2020	-2.56	1.68	7.07	12.00	11.86	15.75	14.42	15.57
2021	1.00	1.87	6.49	12.35	12.19	15.88	14.49	15.59
2022	0.07	5.51	5.86	12.58	12.52	15.96	14.48	15.64

UJI STASIONERITAS

Parsial Pada Level

OUTPUT GAP

Null Hypothesis: OG has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.034567	0.0042
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

INFLASI

Null Hypothesis: INF has a unit root
Exogenous: Constant
Lag Length: 6 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.050360	0.0450
Test critical values:	1% level	-3.752946	
	5% level	-2.998064	
	10% level	-2.638752	

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

UNEMPLOYMENT

Null Hypothesis: UN has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.085777	0.2514
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

EKSPOR

Null Hypothesis: X has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.487123	0.8800
	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

[illegible]ed p-values.

IMPOR

Null Hypothesis: M has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-0.474728	0.8825
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

JUMLAH UANG BEREDAR

Null Hypothesis: JUB has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.634817	0.0111
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

PENGELUARAN PEMERINTAH

Null Hypothesis: GE has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.042122	0.2683
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

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

KONSUMSI

Null Hypothesis: CONS has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.406108	0.5655
Test critical values:	1% level	-3.679322	
	5% level	-2.967767	
	10% level	-2.622989	

ed p-values.

Parsial Pada *First Difference*

OUTPUT GAP

Null Hypothesis: D(OG) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic – based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.332111	0.0000
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	

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

INFLASI

Null Hypothesis: D(INF) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic – based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-7.688384	0.0000
Test critical values:	1% level	-3.626784	
	5% level	-2.945842	
	10% level	-2.611531	

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

UNEMPLOYMENT

Null Hypothesis: D(UN) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-5.559719	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

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

EKSPOR

Null Hypothesis: D(X) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.517864	0.0013
Test critical values:	1% level	-3.689194	
	5% level	-2.971853	
	10% level	-2.625121	

ed p-values.

IMPOR

Null Hypothesis: D(M) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=7)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.772365	0.0007
Test critical values:	1% level	-3.689194	
	5% level	-2.971853	
	10% level	-2.625121	

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

JUMLAH UANG BEREDAR

Null Hypothesis: D(JUB) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.602760	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

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

PENGELUARAN PEMERINTAH

Null Hypothesis: D(GE) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.301861	0.0000
Test critical values:	1% level	-3.621023	
	5% level	-2.943427	
	10% level	-2.610263	

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

KONSUMSI

Null Hypothesis: D(CONS) has a unit root
Exogenous: Constant
Lag Length: 5 (Automatic - based on SIC, maxlag=9)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.653898	0.0100
Test critical values:	1% level	-3.653730	
	5% level	-2.957110	
	10% level	-2.617434	

ed p-values.

VAR Lag Order Selection Criteria
Endogenous variables: D(OG) D(INF) D(UN) D(X) D(M) D(JUB) D(GE) D(CONS)
Exogenous variables: C
Date: 01/09/24   Time: 23:27
Sample: 1993 2022
Included observations: 28

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-31.49847	NA	2.32e-09	2.821319	3.201949*	2.937682
1	69.23420	136.7086*	2.03e-10*	0.197557*	3.623226	1.244818*

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

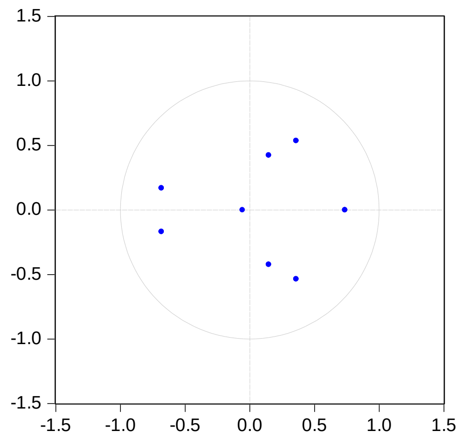
UJI STABILITAS

Roots of Characteristic Polynomial
Endogenous variables: D(OG) D(INF) D(UN) D(X) D(M) D(JUB) D(GE) D(CONS)
Exogenous variables: C
Lag specification: 1 1
Date: 01/09/24   Time: 23:28

Root	Modulus
0.736573	0.736573
-0.681343 - 0.168184i	0.701794
-0.681343 + 0.168184i	0.701794
0.358802 - 0.536460i	0.645390
0.358802 + 0.536460i	0.645390
0.146646 - 0.423870i	0.448521
0.146646 + 0.423870i	0.448521
-0.055838	0.055838

No root lies outside the unit circle.
VAR satisfies the stability condition.

Inverse Roots of AR Characteristic Polynomial



UJI KOINTEGRASI - JOHANSEN

Date: 01/09/24   Time: 23:30
Sample (adjusted): 1996 2022
Included observations: 27 after adjustments
Trend assumption: Linear deterministic trend
Series: D(OG) D(INF) D(UN) D(X) D(M) D(JUB) D(GE) D(CONS)
Lags interval (in first differences): 1 to 1
Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value
None *	0.994973	411.7463	159.5297
At most 1 *	0.939779	268.8391	125.6154
At most 2 *	0.918291	192.9763	95.75366
At most 3 *	0.862986	125.3522	69.81889
[illegible]	0.714772	71.68508	47.85613
[illegible]	0.506665	37.81447	29.79707
[illegible]	0.310304	18.73716	15.49471
[illegible]	0.275639	8.706548	3.841466

...tegrating eqn(s) at the 0.05 level

VECTOR ERROR CORRECTION MODEL

Vector Error Correction Estimates
Date: 01/09/24 Time: 23:31
Sample (adjusted): 1995 2022
Included observations: 28 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1
OG(-1)	1.000000
INF(-1)	0.067028
	(0.00618)
	[10.8546]
UN(-1)	0.192572
	(0.02454)
	[7.84836]
X(-1)	0.437347
	(0.88940)
	[0.49173]
M(-1)	2.048390
	(0.54121)
	[3.78484]
JUB(-1)	6.503532
	(0.73994)
	[8.78930]
GE(-1)	-6.866518
	(0.64445)
	[-10.6549]
CONS(-1)	-3.617445
	(1.10906)
	[-3.26172]
C	20.69956

Error Correction:	D(OG)	D(INF)	D(UN)	D(X)	D(M)	D(JUB)	D(GE)	D(CONS)
CointEq1	-2.200365	12.46913	0.696055	-0.120394	-0.226298	0.051446	0.127091	-0.030294
	(0.61231)	(5.00387)	(0.28884)	(0.04131)	(0.05518)	(0.02422)	(0.03685)	(0.00705)
	[-3.59352]	[2.49190]	[2.40984]	[-2.91475]	[-4.10076]	[2.12367]	[3.44853]	[-4.29589]
D(OG(-1))	0.196292	-4.856517	-0.157488	0.046049	0.065647	-0.022850	-0.062854	0.005046
	(0.44541)	(3.63989)	(0.21011)	(0.03005)	(0.04014)	(0.01762)	(0.02681)	(0.00513)
	[0.44070]	[-1.33425]	[-0.74957]	[1.53264]	[1.63537]	[-1.29672]	[-2.34460]	[0.98363]
D(INF(-1))	0.026479	-0.618741	-0.017487	0.002977	0.003321	-0.002751	-0.005106	0.000541
	(0.05670)	(0.46332)	(0.02674)	(0.00382)	(0.00511)	(0.00224)	(0.00341)	(0.00065)
	[0.46704]	[-1.33544]	[-0.65384]	[0.77826]	[0.64992]	[-1.22630]	[-1.49626]	[0.82850]
	0.164765	-2.143086	0.287501	0.013470	-0.014264	0.001002	-0.027193	0.004225
	(0.41806)	(3.41643)	(0.19721)	(0.02820)	(0.03768)	(0.01654)	(0.02516)	(0.00481)
	[0.39412]	[-0.62729]	[1.45787]	[0.47764]	[-0.37857]	[0.06059]	[-1.08073]	[0.87744]
	3.740374	31.61973	-6.959927	1.184848	1.919539	0.160880	0.444222	0.069306
	(6.23785)	(50.9761)	(2.94249)	(0.42079)	(0.56218)	(0.24679)	(0.37544)	(0.07184)
	[0.59963]	[0.62029]	[-2.36532]	[2.81578]	[3.41444]	[0.65190]	[1.18320]	[0.96473]

Error Correction:	D(OG)	D(INF)	D(UN)	D(X)	D(M)	D(JUB)	D(GE)	D(CONS)
D(M(-1))	0.240220	-32.50681	3.845140	-0.621427	-0.796773	-0.143210	-0.292716	0.039113
	(4.13593)	(33.7990)	(1.95098)	(0.27900)	(0.37275)	(0.16363)	(0.24893)	(0.04763)
	[0.05808]	[-0.96177]	[1.97087]	[-2.22735]	[-2.13756]	[-0.87521]	[-1.17589]	[0.82113]
D(JUB(-1))	23.41760	-175.0290	0.779615	0.522420	0.912159	0.141347	0.093370	0.333161
	(7.16719)	(58.5707)	(3.38088)	(0.48348)	(0.64594)	(0.28355)	(0.43137)	(0.08254)
	[3.26733]	[-2.98834]	[0.23060]	[1.08054]	[1.41214]	[0.49848]	[0.21645]	[4.03623]
D(GE(-1))	-5.692683	48.16917	-1.152229	-0.366954	-0.670311	0.151496	0.005295	-0.138637
	(3.09225)	(25.2700)	(1.45866)	(0.20859)	(0.27869)	(0.12234)	(0.18611)	(0.03561)
	[-1.84095]	[1.90618]	[-0.78992]	[-1.75918]	[-2.40524]	[1.23834]	[0.02845]	[-3.89291]
D(CONS(-1))	23.11314	78.77750	-23.28208	2.143792	3.952077	0.603529	-1.160152	0.893991
	(20.9443)	(171.158)	(9.87976)	(1.41284)	(1.88759)	(0.82862)	(1.26058)	(0.24121)
	[1.10355]	[0.46026]	[-2.35654]	[1.51736]	[2.09371]	[0.72836]	[-0.92033]	[3.70628]
C	-3.858107	15.36085	1.271113	-0.085688	-0.207076	0.071319	0.164700	-0.033044
	(1.23394)	(10.0838)	(0.58207)	(0.08324)	(0.11121)	(0.04882)	(0.07427)	(0.01421)
	[-3.12665]	[1.52331]	[2.18378]	[-1.02944]	[-1.86206]	[1.46090]	[2.21765]	[-2.32525]
R-squared	0.774939	0.693538	0.425657	0.578458	0.711398	0.604378	0.700016	0.765390
Adj. R-squared	0.662409	0.540306	0.138486	0.367686	0.567097	0.406567	0.550024	0.648085
Sum sq. resids	48.97449	3270.643	10.89760	0.222857	0.397792	0.076656	0.177411	0.006496
S.E. equation	1.649486	13.47970	0.778089	0.111270	0.148659	0.065258	0.099278	0.018997
F-statistic	6.886482	4.526085	1.482242	2.744481	4.929958	3.055335	4.667025	6.524777
Log likelihood	-47.55761	-106.3778	-26.51901	27.93772	19.82616	42.87860	31.13055	77.43311
Akaike AIC	4.111258	8.312700	2.608501	-1.281266	-0.701869	-2.348471	-1.509325	-4.816651
Schwarz SC	4.587045	8.788487	3.084288	-0.805479	-0.226081	-1.872684	-1.033538	-4.340864
Mean dependent	0.010134	-0.133214	0.053571	0.070936	0.076633	0.138897	0.132213	0.042798
S.D. dependent	2.838919	19.88136	0.838297	0.139930	0.225942	0.084713	0.147999	0.032023

IMPULSE RESPONSE FUNCTION (IRF)

Response of OG:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	1.649486	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	-0.709642	-0.794543	-0.094179	0.287163	-0.119158	0.683420	0.103165	0.175793
3	0.392575	-0.219263	0.004878	-0.001860	-0.039936	0.214616	0.204760	-0.079721
4	0.727763	-0.167371	-0.019852	0.105465	-0.093079	0.282020	0.189753	-0.036495
5	0.141049	-0.296048	-0.047534	0.183399	-0.193656	0.446763	0.140805	0.024699
6	0.369052	-0.181379	-0.002721	0.117240	-0.180298	0.373377	0.119562	-0.001743
7	0.331105	-0.203475	9.47E-05	0.132161	-0.180659	0.416788	0.089838	0.022963
8	0.215932	-0.232967	0.001280	0.138809	-0.186223	0.449154	0.071783	0.037197
9	0.242286	-0.221758	0.009433	0.127811	-0.178722	0.440898	0.065342	0.035329
10	0.227808	-0.230404	0.009540	0.130569	-0.176609	0.449063	0.061091	0.039806

Response of INF:

Period	OG	INF	UN	X	M	JUB	GE	CONS
		9.978482	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
		10.07862	-0.387101	-0.099900	-0.127414	-4.357274	-2.009732	0.190493
		8.517354	-0.722361	0.939896	-0.680856	-1.004595	-3.331779	1.942761
		5.891196	-0.459165	0.294783	0.481235	-1.730191	-3.154304	1.915821
		7.442771	-0.376793	-0.562108	1.389578	-2.880140	-2.703821	1.284948
		6.070685	-0.738409	0.014500	1.544760	-2.756270	-2.241896	1.407553
		6.485930	-0.879975	-0.102381	1.479436	-3.062646	-1.883767	1.130313

8	-0.860976	6.605157	-0.902436	-0.130198	1.562650	-3.521176	-1.594618	0.959734
9	-1.166866	6.676910	-1.003972	-0.056653	1.462255	-3.474071	-1.496154	0.929577
10	-0.827129	6.698508	-1.011464	-0.055757	1.443204	-3.587242	-1.423994	0.885800

Response of UN:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	-0.063752	-0.083972	0.770913	0.000000	0.000000	0.000000	0.000000	0.000000
2	0.067387	0.104180	1.009006	-0.298903	0.116686	-0.111066	-0.001668	-0.145962
3	0.268307	0.066695	1.066720	-0.294370	0.194169	-0.049226	0.042154	-0.155953
4	-0.036554	0.073149	1.048316	-0.250755	0.130326	0.047692	0.030932	-0.150944
5	0.111093	0.143584	1.070367	-0.251810	0.097430	0.034422	0.013596	-0.155468
6	0.020929	0.149576	1.077409	-0.238756	0.067531	0.084528	-0.023140	-0.133508
7	-0.023502	0.144052	1.089759	-0.241031	0.060681	0.107567	-0.050916	-0.120110
8	-0.048194	0.146920	1.098438	-0.246017	0.062114	0.121791	-0.070851	-0.111919
9	-0.076576	0.135249	1.102221	-0.244844	0.064091	0.135231	-0.082816	-0.104008
10	-0.095546	0.131529	1.104635	-0.246343	0.066152	0.140998	-0.088793	-0.101032

Response of X:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	-0.014915	0.050188	0.017524	0.096605	0.000000	0.000000	0.000000	0.000000
2	-0.058973	0.014834	0.016753	0.136352	-0.056599	0.013129	-0.005767	0.014592
3	-0.081006	0.011844	0.033000	0.115812	-0.051116	0.005536	0.005542	0.007344
4	-0.013094	0.027895	0.038290	0.098649	-0.033734	-0.018072	0.015616	-0.005872
5	-0.013858	0.026940	0.033274	0.106007	-0.035228	-0.013048	0.019257	-0.005339
6	-0.025274	0.024100	0.031170	0.109860	-0.040226	-0.010820	0.020829	-0.005031
7	-0.013575	0.030826	0.032290	0.107712	-0.041106	-0.014665	0.021319	-0.006826
8	-0.013310	0.030191	0.032261	0.108507	-0.041709	-0.013421	0.020636	-0.006074
9	-0.017237	0.029997	0.032327	0.108617	-0.042226	-0.012312	0.019893	-0.005666
10	-0.015987	0.030340	0.032671	0.108317	-0.042073	-0.012476	0.019477	-0.005605

Response of M:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	-0.012112	0.053925	0.018565	0.087697	0.104926	0.000000	0.000000	0.000000
2	-0.103854	-0.028423	-0.011027	0.166306	0.038924	0.023479	-0.009186	0.026990
3	-0.156127	-0.044358	0.001910	0.150589	0.040087	0.012758	0.013957	0.019784
4	-0.046491	-0.026147	0.008025	0.122285	0.068241	-0.034392	0.038199	-0.004214
5	-0.020611	-0.021109	-0.000329	0.128362	0.071437	-0.039153	0.051834	-0.009447
6	-0.030267	-0.027576	-0.006399	0.136004	0.064929	-0.038936	0.059705	-0.010821
7	-0.009501	-0.015851	-0.006369	0.133270	0.062769	-0.047460	0.063967	-0.015411
8	-0.001383	-0.014947	-0.006972	0.134454	0.061463	-0.048260	0.065016	-0.015575
9	-0.006115	-0.014487	-0.007367	0.134970	0.060033	-0.047030	0.064688	-0.015323
10	-0.003112	-0.013571	-0.006968	0.134589	0.059931	-0.047648	0.064361	-0.015422

Response of JUB:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	-0.048988	0.025344	-0.000551	0.007957	-0.017556	0.029063	0.000000	0.000000
2	-0.027705	0.044204	0.002972	0.012053	-0.034169	0.034186	-0.013228	0.002362
3	-0.053974	0.052720	0.007394	0.016406	-0.046798	0.053033	-0.031042	0.011874
4	-0.082330	0.045617	0.012354	0.016972	-0.050200	0.066355	-0.044854	0.019766
5	-0.095190	0.046702	0.016588	0.013790	-0.048777	0.072251	-0.053834	0.023228
6	-0.105071	0.041506	0.018370	0.013925	-0.047044	0.077396	-0.058835	0.026485
[illegible]	[illegible]	0.039291	0.019156	0.013542	-0.046067	0.080205	-0.061220	0.027845
[illegible]	[illegible]	0.038097	0.019713	0.013090	-0.044930	0.080367	-0.061838	0.028155
[illegible]	[illegible]	0.037510	0.019711	0.013058	-0.044490	0.080741	-0.061924	0.028279
[illegible]	[illegible]	0.037111	0.019682	0.013048	-0.044235	0.080567	-0.061697	0.028202

		INF	UN	X	M	JUB	GE	CONS

1	-0.009463	0.029804	0.027511	0.056038	0.033052	0.043668	0.044519	0.000000
2	0.003135	0.086431	0.015356	0.070994	-0.024404	0.032134	0.022380	-0.009164
3	0.022366	0.097519	0.027965	0.084237	-0.048284	0.056076	0.003959	0.007917
4	-0.066463	0.081403	0.033853	0.081913	-0.055440	0.080758	-0.015599	0.018245
5	-0.039413	0.095461	0.043131	0.071401	-0.048452	0.077292	-0.026073	0.018521
6	-0.068894	0.083355	0.043332	0.076190	-0.048483	0.091399	-0.034318	0.025836
7	-0.085835	0.079861	0.044741	0.075478	-0.048019	0.095351	-0.037927	0.027716
8	-0.081366	0.080439	0.046140	0.073831	-0.046019	0.094360	-0.039061	0.027718
9	-0.086068	0.078322	0.045981	0.074401	-0.045551	0.096037	-0.039573	0.028475
10	-0.086969	0.077829	0.046026	0.074231	-0.045218	0.095897	-0.039419	0.028372

Response of CONS:

Period	OG	INF	UN	X	M	JUB	GE	CONS
1	0.011535	-0.000953	-0.003799	-0.006666	0.005704	0.000243	-0.010171	0.005657
2	-0.012818	-0.009543	-0.006461	-0.004982	0.008924	0.007473	-0.017289	0.011335
3	-0.018810	-0.014833	-0.006757	-0.005255	0.011707	0.007621	-0.019345	0.013050
4	-0.020155	-0.017365	-0.006941	-0.006100	0.014261	0.006490	-0.018696	0.013010
5	-0.018797	-0.019091	-0.007464	-0.006463	0.016014	0.004873	-0.016945	0.012303
6	-0.016368	-0.019069	-0.008058	-0.006606	0.016749	0.003280	-0.015211	0.011398
7	-0.014022	-0.018930	-0.008553	-0.006455	0.016867	0.002161	-0.013909	0.010770
8	-0.012626	-0.018519	-0.008872	-0.006365	0.016721	0.001474	-0.013115	0.010345
9	-0.011470	-0.018197	-0.009028	-0.006312	0.016580	0.001042	-0.012690	0.010104
10	-0.011025	-0.017980	-0.009111	-0.006268	0.016447	0.000888	-0.012520	0.010005

Cholesky Ordering: OG INF UN X M JUB GE CONS

VARIANCE DECOMPOSITION (VD)

Variance Decomposition of OG:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	1.649486	100.0000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	2.114198	72.13682	14.12352	0.198433	1.844874	0.317655	10.44921	0.238109	0.691372
3	2.183573	70.85819	14.24865	0.186523	1.729581	0.331241	10.76182	1.102557	0.781434
4	2.337241	71.54252	12.94942	0.170017	1.713240	0.447713	10.84918	1.621470	0.706439
5	2.421501	66.98958	13.55862	0.196925	2.169707	1.056676	13.51126	1.848709	0.668535
6	2.496544	65.20807	13.28358	0.185383	2.261762	1.515666	14.94794	1.968593	0.628997
7	2.572193	63.08588	13.13949	0.174639	2.394677	1.921124	16.70719	1.976488	0.600513
8	2.641837	60.47167	13.23350	0.165576	2.546155	2.318057	18.72847	1.947483	0.589093
9	2.708405	58.33589	13.26137	0.158750	2.645227	2.640949	20.46917	1.911133	0.577506
10	2.774120	56.27917	13.33034	0.152500	2.742916	2.922606	22.13126	1.870156	0.571059

Variance Decomposition of INF:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	13.47970	45.20154	54.79846	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
2	18.63622	35.39293	57.91642	0.043145	0.002874	0.004674	5.466561	1.162950	0.010448
3	21.24445	30.27573	60.64210	0.148817	0.197946	0.106309	4.430282	3.354504	0.844313
4	22.90215	30.11870	58.79794	0.168250	0.186895	0.135629	4.382885	4.783414	1.426283
5	24.57342	26.87394	60.24562	0.169654	0.214662	0.437576	5.180699	5.365553	1.512300
6	25.74431	25.16804	60.45063	0.236840	0.195612	0.758725	5.866420	5.646935	1.676793
[illegible]	[illegible]	23.75022	60.80033	0.321922	0.179488	0.991192	6.627874	5.627265	1.701701
[illegible]	[illegible]	21.93865	61.43404	0.398970	0.167231	1.220133	7.662374	5.497056	1.681544
[illegible]	[illegible]	20.45053	62.03004	0.486778	0.155050	1.378336	8.497156	5.345857	1.656248
[illegible]	[illegible]	19.09499	62.56875	0.563914	0.144547	1.508296	9.301376	5.192425	1.625707

ition of UN:

[illegible]	[illegible]	OG	INF	UN	X	M	JUB	GE	CONS

1	0.778089	0.671327	1.164685	98.16399	0.000000	0.000000	0.000000	0.000000	0.000000
2	1.332484	0.484672	1.008422	90.81323	5.031960	0.766855	0.694766	0.000157	1.199934
3	1.772771	2.564462	0.711259	87.51318	5.600150	1.632892	0.469621	0.056630	1.451811
4	2.086684	1.881611	0.636245	88.40234	5.486018	1.568628	0.391189	0.062847	1.571120
5	2.373043	1.674058	0.858056	88.69912	5.367881	1.381461	0.323515	0.051877	1.644030
6	2.627171	1.372204	1.024237	89.18765	5.205538	1.193203	0.367475	0.050084	1.599607
7	2.863786	1.161554	1.114999	89.53891	5.089253	1.049074	0.450343	0.073761	1.522102
8	3.086828	1.024136	1.186225	89.72964	5.015560	0.943438	0.543286	0.116169	1.441544
9	3.296600	0.951903	1.208381	89.85249	4.949188	0.864987	0.644619	0.164965	1.363463
10	3.495319	0.921465	1.216489	89.91386	4.899151	0.805248	0.736129	0.211275	1.296386

Variance Decomposition of X:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	0.111270	1.796701	20.34428	2.480308	75.37871	0.000000	0.000000	0.000000	0.000000
2	0.196401	9.592855	7.100428	1.523747	72.39312	8.304752	0.446854	0.086215	0.552029
3	0.250010	16.41837	4.606244	2.682613	66.13343	9.305260	0.324796	0.102341	0.426949
4	0.276397	13.65761	4.787322	4.113949	66.84752	9.102990	0.693229	0.402934	0.394451
5	0.302438	11.61694	4.791853	4.646451	68.11740	8.959676	0.765123	0.741941	0.360617
6	0.328517	10.43761	4.599435	4.838266	68.91487	9.092965	0.756945	1.030832	0.329085
7	0.352290	9.224917	4.765276	5.047402	69.27597	9.268602	0.831506	1.262611	0.323714
8	0.374692	8.281020	4.861738	5.203221	69.62621	9.432561	0.863350	1.419459	0.312440
9	0.395974	7.604250	4.927032	5.325409	69.86701	9.582997	0.869721	1.523348	0.300229
10	0.416063	7.035330	4.994511	5.440169	70.06077	9.702529	0.877673	1.598935	0.290085

Variance Decomposition of M:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	0.148659	0.663819	13.15836	1.559621	34.80067	49.81753	0.000000	0.000000	0.000000
2	0.253676	16.98855	5.774246	0.724555	54.93022	19.46268	0.856620	0.131128	1.131999
3	0.340193	30.50861	4.910883	0.406036	50.13804	12.21061	0.616965	0.241228	0.967633
4	0.375381	26.59085	4.518518	0.379188	51.79088	13.33348	1.346097	1.233659	0.807327
5	0.409476	22.60042	4.063137	0.318735	53.35216	14.24915	2.045537	2.639150	0.731706
6	0.444183	19.67087	3.838398	0.291626	54.71545	14.24613	2.506759	4.049598	0.681173
7	0.475356	17.21547	3.462667	0.272585	55.63459	14.18257	3.185565	5.346688	0.699867
8	0.504868	15.26240	3.157337	0.260718	56.41287	14.05503	3.737760	6.398277	0.715608
9	0.532584	13.72841	2.911263	0.253423	57.11660	13.90086	4.138649	7.224947	0.725842
10	0.558788	12.47412	2.703600	0.245760	57.68653	13.77795	4.486683	7.889829	0.735528

Variance Decomposition of JUB:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	0.065258	56.35199	15.08238	0.007125	1.486612	7.237587	19.83430	0.000000	0.000000
2	0.098240	32.81954	26.90130	0.094671	2.161198	15.29074	20.86177	1.812990	0.057787
3	0.147563	27.92529	24.68760	0.293068	2.194028	16.83506	22.16297	5.228866	0.673124
4	0.200998	31.82878	18.45687	0.535704	1.895516	15.31142	22.84378	7.798029	1.329892
5	0.251286	34.71395	15.26283	0.778491	1.513911	13.56412	22.88256	9.578800	1.705339
6	0.298001	37.11491	12.79251	0.933534	1.294819	12.13693	23.01588	10.70893	2.002491
7	0.342263	39.37621	11.01556	1.020933	1.138122	11.01235	22.93930	11.31762	2.179908
8	0.381437	40.80654	9.866733	1.089083	1.034129	10.25406	22.90881	11.74064	2.300003
9	0.417404	41.90197	9.047170	1.132475	0.961452	9.699146	22.87266	12.00541	2.379723
10	0.450348	42.70288	8.450989	1.163858	0.909870	9.296811	22.84910	12.19003	2.436459

Variance Decomposition of GE:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
[illegible]	[illegible]	0.908493	9.012166	7.678765	31.86104	11.08362	19.34691	20.10900	0.000000
[illegible]	[illegible]	0.400287	33.66947	3.998529	32.95208	6.799471	11.84053	10.00132	0.338315
[illegible]	[illegible]	1.242220	37.01966	3.676808	31.64930	8.327234	12.60451	5.176400	0.303875
[illegible]	[illegible]	6.486996	31.67229	3.776536	28.42818	9.171289	16.29938	3.545245	0.620082
[illegible]	[illegible]	6.298973	32.21985	4.583547	25.96558	9.050685	17.81238	3.280359	0.788622
[illegible]	[illegible]	8.306829	29.76922	4.887613	24.14154	8.655059	19.76991	3.376062	1.093758

7	0.413864	10.90848	27.40133	5.056163	22.52769	8.230228	21.03262	3.525041	1.318448
8	0.453067	12.32759	26.01665	5.256141	21.45332	7.899255	21.88791	3.684708	1.474434
9	0.490037	13.62250	24.79367	5.373401	20.64358	7.616363	22.55065	3.801833	1.597999
10	0.524390	14.64666	23.85432	5.462789	20.03122	7.394694	23.03700	3.885100	1.688213

Variance Decomposition of CONS:

Period	S.E.	OG	INF	UN	X	M	JUB	GE	CONS
1	0.018997	36.86980	0.251560	3.998387	12.31430	9.014924	0.016337	28.66548	8.869217
2	0.035294	23.87006	7.383885	4.509665	5.559790	9.004114	4.487623	32.30108	12.88379
3	0.051308	24.73569	11.85167	3.868175	3.680035	9.467296	4.330031	29.50096	12.56615
4	0.064730	25.23656	14.64327	3.580197	3.200178	10.80179	3.725675	26.87778	11.93456
5	0.075657	24.64604	17.08659	3.594110	3.072343	12.38716	3.142075	24.69112	11.38056
6	0.084360	23.58762	18.85217	3.803104	3.084303	13.90517	2.678386	23.11028	10.97896
7	0.091570	22.36450	20.27394	4.100337	3.114733	15.19452	2.328942	21.92145	10.70158
8	0.097813	21.26682	21.35295	4.416350	3.153208	16.23916	2.063827	21.01010	10.49759
9	0.103395	20.26315	22.20705	4.714793	3.194610	17.10435	1.857162	20.30912	10.34975
10	0.108563	19.41142	22.88633	4.980987	3.231118	17.80990	1.691259	19.75170	10.23728

Cholesky Ordering: OG INF UN X M JUB GE CONS

PROYEKSI OUTPUT GAP 5 TAHUN KE DEPAN

Tahun	n	Y	a	1-a
1993	1	-0.11	0.06452	0.06036
1994	2	-0.21	0.06452	0.06036
1995	3	-0.15	0.06452	0.06036
1996	4	0.81	0.06452	0.06036
1997	5	3.18	0.06452	0.06036
1998	6	-6.53	0.06452	0.06036
1999	7	2.22	0.06452	0.06036
2000	8	1.53	0.06452	0.06036
2001	9	-0.63	0.06452	0.06036
2002	10	-0.08	0.06452	0.06036
2003	11	-0.03	0.06452	0.06036
2004	12	-0.08	0.06452	0.06036
2005	13	0.15	0.06452	0.06036
2006	14	-0.25	0.06452	0.06036
2007	15	0.26	0.06452	0.06036
2008	16	0.22	0.06452	0.06036
2009	17	-0.64	0.06452	0.06036
2010	18	0.33	0.06452	0.06036
2011	19	0.03	0.06452	0.06036
2012	20	0.04	0.06452	0.06036
2013	21	0.01	0.06452	0.06036
2014	22	-0.08	0.06452	0.06036
2015	23	-0.05	0.06452	0.06036
2016	24	-0.02	0.06452	0.06036
2017	25	-0.13	0.06452	0.06036
2018	26	0.17	0.06452	0.06036
2019	27	1.52	0.06452	0.06036
2020	28	-2.56	0.06452	0.06036
2021	29	1.00	0.06452	0.06036
2022	30	0.07	0.06452	0.06036

$$a = \frac{2}{n+1} = \frac{2}{31} = 0.06452$$

2023 = a + (1-a) Y_{t-1}

= 0.06452 + (0.06036 x 0.07)

= 0.06452 + 0.00446

= 0.13

2024 = a + (1-a) Y_{t-1}

+ (0.06036 x 0.13)

+ 0.00807

2025 $= a + (1-a)\ Y_{t-1}$

$= 0.06452 + (0.06036 \times 0.19)$

$= 0.06452 + 0.01144$

$= 0.24$

2026 $= a + (1-a)\ Y_{t-1}$

$= 0.06452 + (0.06036 \times 0.24)$

$= 0.06452 + 0.0146$

$= 0.29$

2027 $= a + (1-a)\ Y_{t-1}$

$= 0.06452 + (0.06036 \times 0.29)$

$= 0.06452 + 0.01755$

$= 0.33$