

LAMPIRAN

Lampiran 1

Data Setiap Variabel

Tahun	NPL	Inflasi	PDB	BI Rate	Kurs	Oil Price
	(%)	%	(%)	(%)	(Rp/USD)	USD/Barrel
2005Q1	4,37	1,91	5,96	7,75	9180	49,72
2005Q2	6,99	0,5	5,92	8,5	9170	60,57
2005Q3	7,87	0,69	5,89	10	10310	59,76
2005Q4	7,56	-0,04	5,69	12,75	9830	67,92
2006Q1	8,19	0,03	5,13	12,75	9080	71,88
2006Q2	8,33	0,45	5,03	12,5	9300	74,4
2006Q3	7,95	0,38	5,31	11,25	9240	62,91
2006Q4	6,07	1,21	5,5	9,75	9020	58,14
2007Q1	6,04	0,24	6,06	9	9120	65,71
2007Q2	5,78	0,23	6,39	8,5	9050	78,21
2007Q3	5,17	0,8	6,51	8,25	9140	94,53
2007Q4	4,07	1,1	6,35	8	9420	91,75
2008Q1	3,75	0,95	6,22	8	9220	113,46
2008Q2	3,54	2,46	6,26	8,5	9230	124,08
2008Q3	3,32	0,97	6,26	9,25	9380	67,81
2008Q4	3,2	-0,04	6,01	9,25	10950	41,68
2009Q1	3,93	0,22	4,32	7,75	11575	51,12
2009Q2	3,94	0,11	4,33	7	10230	69,45
2009Q3	3,8	1,05	4,31	6,5	9680	77
2009Q4	3,31	0,33	4,63	6,5	9400	72,89
2010Q1	3,36	-0,14	5,99	6,5	9120	86,15
2010Q2	2,98	0,97	6,14	6,5	9080	78,95
2010Q3	2,96	0,44	6,03	6,5	8930	81,43
2010Q4	2,56	0,92	6,22	6,5	8990	92,19
2011Q1	2,81	-0,32	6,44	6,75	8710	113,93
2011Q2	2,74	0,55	6,51	6,75	8600	95,7
2011Q3	2,67	0,27	6,5	6,75	8820	93,19
2011Q4	2,17	0,57	6,49	6	9070	98,48
2012Q1	2,28	0,07	6,33	5,75	9180	104,87
2012Q2	2,17	0,62	6,33	5,75	9480	88,06
2012Q3	2,07	0,01	6,29	5,75	9590	86,24
2012Q4	1,86	0,54	6,26	5,75	9670	97,49

2013Q1	1,96	0,63	5,99	5,75	9720	93,46
2013Q2	1,87	1,03	5,85	6	9930	105,03
2013Q3	1,85	-0,35	5,76	7,25	11610	96,38
2013Q4	1,76	0,55	5,73	7,5	12190	92,49
2014Q1	1,99	0,08	5,16	7,5	11400	99,74
2014Q2	2,15	0,43	5,11	7,5	11970	98,17
2014Q3	2,29	0,27	5,07	7,5	12210	80,54
2014Q4	2,16	2,46	5,06	7,75	12440	48,24
2015Q1	2,4	0,17	4,82	7,5	13080	59,63
2015Q2	2,55	0,54	4,74	7,5	13330	47,12
2015Q3	2,71	-0,05	4,77	7,5	14660	46,59
2015Q4	2,48	0,96	5,17	7,5	13800	33,62
2016Q1	2,82	0,19	4,92	6,75	13280	45,92
2016Q2	3,05	0,66	5,18	6,5	13180	41,6
2016Q3	3,1	0,22	5,01	5	13000	46,84
2016Q4	3,12	0,42	4,94	4,75	13440	52,81

Lampiran 2

Hasil Analisis Data

1. Analisis Deskriptif

	NPL	INFLASI	PDB	BIRATE	KURS	OILPRICE
Mean	3.668125	0.547083	5.643542	7.640625	10416.77	76.20521
Median	3.015000	0.445000	5.870000	7.500000	9535.000	77.60500
Maximum	8.330000	2.460000	6.510000	12.75000	14660.00	124.0800
Minimum	1.760000	-0.350000	4.310000	4.750000	8600.000	33.62000
Std. Dev.	1.902986	0.593837	0.674983	1.847156	1711.865	22.40691
Skewness	1.289336	1.478109	-0.414627	1.246563	0.932585	-0.002904
Kurtosis	3.459729	5.759918	1.876723	4.425752	2.426585	2.049376
Jarque-Bera	13.72180	32.71274	3.898827	16.49688	7.615326	1.807438
Probability	0.001048	0.000000	0.142358	0.000262	0.022200	0.405060
Sum	176.0700	26.26000	270.8900	366.7500	500005.0	3657.850
Sum Sq. Dev.	170.2037	16.57419	21.41330	160.3633	1.38E+08	23597.27
Observations	48	48	48	48	48	48

2. Uji Stasioneritas

ADF (Level)

Null Hypothesis: **NPL** has a unit root

Exogenous: Constant

Lag Length: 5 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.302954	0.0210
Test critical values: 1% level	-3.596616	
5% level	-2.933158	
10% level	-2.604867	

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

Null Hypothesis: **INFLASI** has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.572641	0.0000
Test critical values: 1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.864899	0.3456
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Null Hypothesis: **BIRATE** has a unit root
 Exogenous: Constant
 Lag Length: 1 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.258793	0.1893
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.537826	0.8742
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.350628	0.1611
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

ADF (First Difference)

Null Hypothesis: D(NPL) has a unit root

Exogenous: Constant

Lag Length: 4 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.711333	0.0806
Test critical values: 1% level	-3.596616	
5% level	-2.933158	
10% level	-2.604867	

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

Null Hypothesis: D(INFLASI) has a unit root

Exogenous: Constant

Lag Length: 2 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.752273	0.0000
Test critical values: 1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Null Hypothesis: D(PDB) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.287365	0.0001
Test critical values: 1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Null Hypothesis: D(BIRATE) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.830305	0.0051
Test critical values: 1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.820547	0.0000
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.192249	0.0000
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

PP Test (Level)

Null Hypothesis: **NPL** has a unit root
 Exogenous: Constant
 Bandwidth: 3 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-1.263330	0.6388
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	0.324692
HAC corrected variance (Bartlett kernel)	0.481405

Null Hypothesis: **INFLASI** has a unit root
 Exogenous: Constant
 Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-7.685854	0.0000
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	0.310985
HAC corrected variance (Bartlett kernel)	0.265506

Null Hypothesis: **PDB** has a unit root
 Exogenous: Constant
 Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-2.228070	0.1994
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	0.133951
HAC corrected variance (Bartlett kernel)	0.190230

Null Hypothesis: **BIRATE** has a unit root
 Exogenous: Constant
 Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-1.483411	0.5332
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	0.508471
HAC corrected variance (Bartlett kernel)	0.929811

Null Hypothesis: **KURS** has a unit root
 Exogenous: Constant
 Bandwidth: 3 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-0.544641	0.8728
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	307751.2
HAC corrected variance (Bartlett kernel)	310126.0

Null Hypothesis: **OILPRICE** has a unit root
 Exogenous: Constant
 Bandwidth: 3 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-2.415944	0.1429
Test critical values:		
1% level	-3.577723	
5% level	-2.925169	
10% level	-2.600658	

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

Residual variance (no correction)	184.9593
HAC corrected variance (Bartlett kernel)	198.1134

PP Test (First Difference)

Null Hypothesis: D(**NPL**) has a unit root
 Exogenous: Constant
 Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-7.234711	0.0000
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Residual variance (no correction)	0.165029
HAC corrected variance (Bartlett kernel)	0.168052

Null Hypothesis: D(**INFLASI**) has a unit root
 Exogenous: Constant
 Bandwidth: 27 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-37.84200	0.0001
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Residual variance (no correction)	0.464359
HAC corrected variance (Bartlett kernel)	0.034222

Null Hypothesis: D(**PDB**) has a unit root
 Exogenous: Constant
 Bandwidth: 1 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-5.290583	0.0001
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Residual variance (no correction)	0.140116
HAC corrected variance (Bartlett kernel)	0.140794

Null Hypothesis: D(**BIRATE**) has a unit root
 Exogenous: Constant
 Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-3.461206	0.0137
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Residual variance (no correction)	0.374616
HAC corrected variance (Bartlett kernel)	0.220898

Null Hypothesis: D(**KURS**) has a unit root
 Exogenous: Constant
 Bandwidth: 4 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-5.752958	0.0000
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

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

Residual variance (no correction)	306668.1
HAC corrected variance (Bartlett kernel)	223802.3

Null Hypothesis: D(**OILPRICE**) has a unit root
 Exogenous: Constant
 Bandwidth: 14 (Newey-West automatic) using Bartlett kernel

	Adj. t-Stat	Prob.*
Phillips-Perron test statistic	-6.805850	0.0000
Test critical values:		
1% level	-3.581152	
5% level	-2.926622	
10% level	-2.601424	

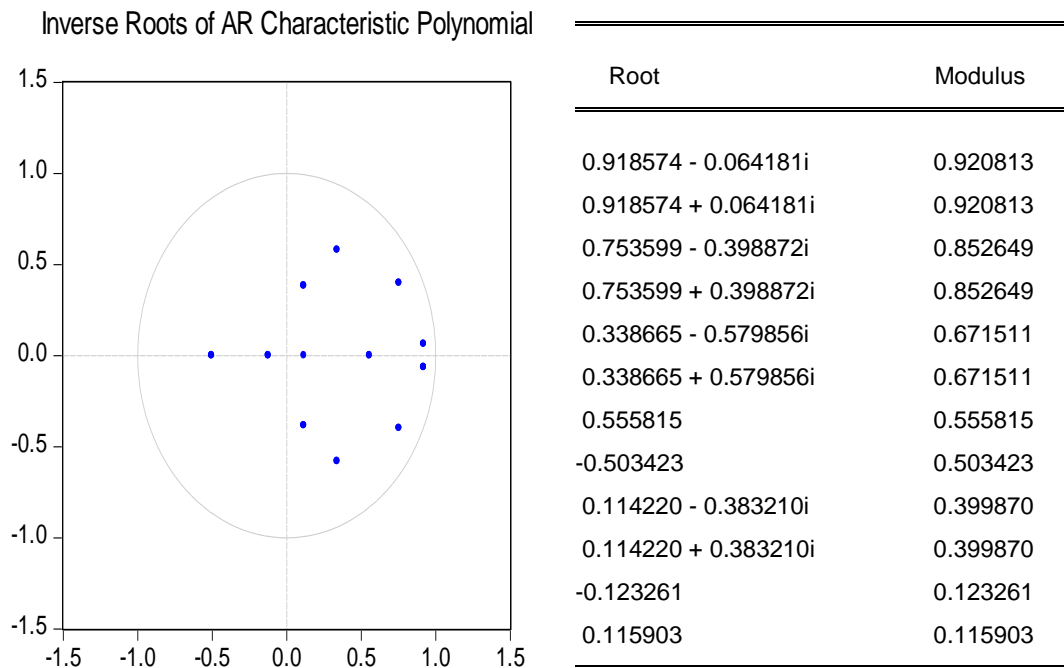
*MacKinnon (1996) one-sided p-values.

Residual variance (no correction)	208.4752
HAC corrected variance (Bartlett kernel)	70.98410

3. Panjang *Lag* Optimal

Lag	LogL	LR	FPE	AIC	SC	HQ
0	-352.8914	NA	3.939860	15.56050	15.75926	15.63495
1	-168.9672	319.8682	0.003961	8.650747	9.843340*	9.097500
2	-131.1786	57.50431*	0.002364*	8.094724*	10.28114	8.913769*

4. Uji Akar Unit



5. Impulse Response Function (IRF)

a. Guncangan Shocks Variabel Makroekonomi

Period	INFLASI	PDB	BIRATE	LOG(KURS)	LOG(OILPRICE)
1	0	0	0	0	0
	0	0	0	0	0
2	0.072096	0.008828	0.178736	-0.07949	-0.05089
	-0.06195	-0.06152	-0.05001	-0.04722	-0.05472
3	0.124665	0.022132	0.28513	-0.04855	-0.12118
	-0.08836	-0.08675	-0.07833	-0.05953	-0.07293
4	0.184238	0.037787	0.276227	-0.01141	-0.12553
	-0.10077	-0.10381	-0.09987	-0.07317	-0.09347
5	0.240977	0.04546	0.225363	0.003467	-0.07138
	-0.10617	-0.1132	-0.11348	-0.08489	-0.11004
6	0.234889	0.052189	0.170672	0.015314	-0.02206
	-0.1046	-0.11941	-0.12304	-0.09749	-0.12193
7	0.193095	0.06369	0.128675	0.034331	-0.00682
	-0.09752	-0.12093	-0.12611	-0.10836	-0.12716
8	0.150692	0.077728	0.096012	0.054467	-0.01427
	-0.08911	-0.11749	-0.12291	-0.11712	-0.12535

9	0.126824	0.086967	0.069569	0.069326	-0.02186
	-0.08189	-0.111	-0.11499	-0.12505	-0.11712
10	0.114876	0.08776	0.04808	0.078426	-0.01919
	-0.07689	-0.10333	-0.10511	-0.13245	-0.10562
11	0.104836	0.08181	0.032592	0.084816	-0.00842
	-0.07293	-0.09602	-0.09548	-0.13908	-0.09533
12	0.092172	0.07337	0.022944	0.090905	0.004424
	-0.069	-0.08979	-0.0875	-0.14458	-0.08894
13	0.078619	0.065769	0.017302	0.097096	0.015971
	-0.06527	-0.0848	-0.08175	-0.14865	-0.08649
14	0.066691	0.060321	0.012981	0.102571	0.025897
	-0.06208	-0.08122	-0.07851	-0.15108	-0.08633
15	0.057053	0.056931	0.007975	0.106509	0.034745
	-0.05967	-0.07909	-0.07774	-0.15189	-0.08649
16	0.048679	0.055046	0.001542	0.108613	0.042384
	-0.05812	-0.07807	-0.07895	-0.15122	-0.08591
17	0.04047	0.054109	-0.00602	0.108993	0.048098
	-0.05722	-0.07749	-0.08115	-0.14932	-0.08447
18	0.032112	0.053598	-0.01393	0.107879	0.051365
	-0.05662	-0.07665	-0.0832	-0.14649	-0.08248
19	0.023972	0.052982	-0.02141	0.105483	0.052311
	-0.05602	-0.0751	-0.08422	-0.14301	-0.08032
20	0.016549	0.051793	-0.02781	0.102014	0.051574
	-0.05521	-0.07275	-0.08383	-0.13913	-0.0783
21	0.010129	0.049757	-0.03274	0.097724	0.049919
	-0.05409	-0.0698	-0.08215	-0.13501	-0.07654
22	0.004748	0.046854	-0.03604	0.092896	0.047944
	-0.05269	-0.06657	-0.07958	-0.13076	-0.07501
23	0.000323	0.043282	-0.03776	0.087794	0.045994
	-0.05111	-0.06334	-0.07661	-0.12643	-0.0736
24	-0.00325	0.039355	-0.03818	0.082612	0.044213
	-0.04947	-0.06028	-0.0736	-0.12205	-0.07216
25	-0.00609	0.035389	-0.03766	0.077467	0.042614
	-0.04786	-0.05744	-0.07077	-0.11762	-0.07052
26	-0.00831	0.031634	-0.03659	0.072406	0.041132
	-0.04631	-0.05477	-0.0682	-0.11315	-0.06857
27	-0.01003	0.028245	-0.03527	0.06744	0.039658
	-0.04485	-0.05223	-0.06585	-0.10866	-0.06626
28	-0.01139	0.025278	-0.03393	0.062565	0.038078
	-0.04346	-0.04978	-0.06366	-0.10418	-0.06362
29	-0.01248	0.022711	-0.03267	0.057775	0.036306

	-0.04211	-0.04739	-0.06155	-0.09973	-0.06075
30	-0.01334	0.020472	-0.03149	0.053074	0.034305
	-0.04076	-0.04504	-0.05944	-0.09537	-0.05779

b. Guncangan *Shocks* Skenario

A	B	C		A	B	C
0	0	0		0	0	0
-0.01479	0.375128	-0.11657		-0.03697	0.93782	-0.29142
0.152222	0.614524	-0.09013		0.380555	1.53631	-0.22532
0.34566	0.628028	0.094598		0.86415	1.57007	0.236495
0.488888	0.541646	0.346128		1.22222	1.354115	0.86532
0.500406	0.445722	0.456278		1.251015	1.114305	1.140695
0.454852	0.38473	0.441204		1.13713	0.961825	1.10301
0.410318	0.34748	0.381776		1.025795	0.8687	0.95444
0.3923	0.313072	0.34858		0.98075	0.78268	0.87145
0.386604	0.27168	0.34823		0.96651	0.6792	0.870575
0.379304	0.228804	0.362456		0.94826	0.57201	0.90614
0.366154	0.192628	0.375002		0.915385	0.48157	0.937505
0.35143	0.166142	0.383372		0.878575	0.415355	0.95843
0.338524	0.146604	0.390318		0.84631	0.36651	0.975795
0.327124	0.129812	0.396614		0.81781	0.32453	0.991535
0.314584	0.113176	0.399352		0.78646	0.28294	0.99838
0.298926	0.096184	0.395122		0.747315	0.24046	0.987805

0.279982	0.079328	0.382712
0.25891	0.063148	0.363532
0.237126	0.047962	0.340274
0.215706	0.03403	0.315544
0.195288	0.021634	0.291176
0.176234	0.011036	0.268222
0.158716	0.002344	0.247142
0.142754	-0.00455	0.227982
0.128198	-0.0099	0.210462
0.114814	-0.01405	0.19413
0.102344	-0.01731	0.1785
0.090594	-0.01992	0.163206
0.079464	-0.02204	0.148074
2x Standar Deviasi		
inflasi	pdb	inflasi
kurs	birate	kurs
		oil

0.699955	0.19832	0.95678
0.647275	0.15787	0.90883
0.592815	0.119905	0.850685
0.539265	0.085075	0.78886
0.48822	0.054085	0.72794
0.440585	0.02759	0.670555
0.39679	0.00586	0.617855
0.356885	-0.01137	0.569955
0.320495	-0.02476	0.526155
0.287035	-0.03514	0.485325
0.25586	-0.04328	0.44625
0.226485	-0.0498	0.408015
0.19866	-0.05511	0.370185
5x Standar Deviasi		
inflasi	pdb	inflasi
kurs	birate	kurs
		oil