

Appendix:

DATE	INF (Percent)	M2 (Billions of Rp.)	ER (USD/Rp.)	BIR (Percent Per Annum)	GDP (Billions of Rp.)
2010Q1	-0.14	2112082.7	9115	6.5	1642356.3
2010Q2	0.97	2231144.33	9083	6.5	1709132
2010Q3	0.44	2274954.57	8924	6.5	1775109.9
2010Q4	0.92	2471205.79	8991	6.5	1737534.9
2011Q1	-0.32	2451356.92	8709	6.5	1748731.2
2011Q2	0.55	2522783.81	8597	6.5	1816268.2
2011Q3	0.27	2643331.45	8823	6.5	1881849.7
2011Q4	0.57	2877219.57	9068	6.5	1840786.2
2012Q1	0.07	2914194.47	9180	5.75	1855580.2
2012Q2	0.62	3052786.1	9480	5.75	1929018.7
2012Q3	0.01	3128179.27	9588	5.75	1993632.3
2012Q4	0.54	3307507.55	9670	5.75	1948852.2
2013Q1	0.63	3322528.96	9719	5.75	1958395.5
2013Q2	1.03	3413378.66	9929	6	2036816.6
2013Q3	-0.35	3584080.54	11613	7.25	2103598.1
2013Q4	0.55	3730409.35	12189	7.5	2057687.6
2014Q1	0.08	3652530.55	11404	7.5	2058584.9
2014Q2	0.43	3857961.77	11969	7.5	2137385.6
2014Q3	0.27	4010146.66	12212	7.5	2207343.6
2014Q4	2.46	4173326.5	12440	7.75	2161552.5
2015Q1	0.17	4246361.19	13084	7.5	2158040
2015Q2	0.54	4358801.51	13332	7.5	2238704.4
2015Q3	-0.05	4508603.17	14657	7.5	2312843.5
2015Q4	0.96	4548800.27	13795	7.5	2272929.2
2016Q1	0.19	4561872.52	13276	6.75	2264680
2016Q2	0.66	4737451.23	13180	6.5	2355422.1
2016Q3	0.22	4737630.76	12998	5	2429286.2
2016Q4	0.42	5004976.79	13436	4.75	2385244
2017Q1	-0.02	5017643.55	13321	4.75	2378176.3
2017Q2	0.69	5225165.76	13319	4.75	2473425
2017Q3	0.13	5254138.51	13492	4.25	2552216.5
2017Q4	0.71	5419165.05	13548	4.25	2508931.5

APPENDIX 1

Descriptive statistics

	INF	LOG_M2	LOG_ER	BIR	LOG_GDP
Mean	0.444375	15.09452	9.318436	6.335938	14.54602
Median	0.435	15.12148	9.374978	6.5	14.54834
Maximum	2.46	15.50545	9.592673	7.75	14.75247
Minimum	-0.35	14.56319	9.059169	4.25	14.31164
Std. Dev.	0.517512	0.282661	0.180636	1.046518	0.123981
Skewness	1.702536	-0.312576	-0.128825	-0.492594	-0.115491
Kurtosis	8.307412	1.89358	1.329902	2.222355	1.929872
Jarque-Bera	53.01751	2.153308	3.807483	2.100437	1.598036
Probability	0	0.340734	0.14901	0.349861	0.44977
Sum	14.22	483.0246	298.19	202.75	465.4727
Sum Sq. Dev.	8.302388	2.476814	1.01151	33.95117	0.476508
Observations	32	32	32	32	32

APPENDIX 2

Unit Root Test - On Level (Augmented Dickey-Fuller Test with Intercept and Trend)

1. INF

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.286140	0.0000
Test critical values:		
1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

2. LOG_M2

Null Hypothesis: LOG_M2 has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.565694	0.1111
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

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

3. LOG_ER

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.657782	0.8429
Test critical values:		
1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

4. BIR

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.199860	0.9284
Test critical values:		
1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

5. LOG_GDP

Null Hypothesis: LOG_GDP has a unit root
 Exogenous: Constant
 Lag Length: 4 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-0.409794	0.8939
Test critical values:		
1% level	-3.699871	
5% level	-2.976263	
10% level	-2.627420	

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

Unit Root Test – 1ST DIFFERENCE
(Augmented Dickey-Fuller Test with Intercept and Trend)

1. INF

Null Hypothesis: D(INF) has a unit root
 Exogenous: Constant
 Lag Length: 4 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.939303	0.0005
Test critical values:		
1% level	-3.711457	
5% level	-2.981038	
10% level	-2.629906	

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

2. LOG_M2

Null Hypothesis: D(LOG_M2) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.216332	0.0000
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	

10% level -2.621007

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

3. LOG_ER

Null Hypothesis: D(LOG_ER) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.069467	0.0003
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

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

4. BIR

Null Hypothesis: D(BIR) has a unit root

Exogenous: Constant

Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.112724	0.0033
Test critical values:		
1% level	-3.670170	
5% level	-2.963972	
10% level	-2.621007	

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

5. LOG_GDP

Null Hypothesis: D(LOG_GDP) has a unit root

Exogenous: Constant

Lag Length: 3 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.246901	0.1955
Test critical values:		
1% level	-3.699871	
5% level	-2.976263	

10% level

-2.627420

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

Unit Root Test – 2nd DIFFERENCE **(Augmented Dickey-Fuller Test with Intercept and Trend)**

1. INF

Null Hypothesis: D(INF,2) has a unit root

Exogenous: Constant

Lag Length: 5 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.014597	0.0005
Test critical values:		
1% level	-3.737853	
5% level	-2.991878	
10% level	-2.635542	

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

2. LOG_M2

Null Hypothesis: D(LOG_M2,2) has a unit root

Exogenous: Constant

Lag Length: 2 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.918942	0.0000
Test critical values:		
1% level	-3.699871	
5% level	-2.976263	
10% level	-2.627420	

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

3. LOG_ER

Null Hypothesis: D(LOG_ER,2) has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.797523	0.0000

Test critical values:	1% level	-3.689194
	5% level	-2.971853
	10% level	-2.625121

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

4. BIR

Null Hypothesis: D(BIR,2) has a unit root
 Exogenous: Constant
 Lag Length: 0 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.635970	0.0000
Test critical values:		
	1% level	-3.679322
	5% level	-2.967767
	10% level	-2.622989

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

5. LOG_GDP

Null Hypothesis: D(LOG_GDP,2) has a unit root
 Exogenous: Constant
 Lag Length: 2 (Automatic - based on SIC, maxlag=7)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-96.38622	0.0001
Test critical values:		
	1% level	-3.699871
	5% level	-2.976263
	10% level	-2.627420

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

APPENDIX 3

Long-run Estimation.

Dependent Variable: INF
 Method: Least Squares
 Date: 12/19/18 Time: 11:54
 Sample: 2010Q1 2017Q4
 Included observations: 32

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	23.17607	41.57091	0.557507	0.5818
LOG_M2	2.979706	2.188045	1.361812	0.1845
LOG_ER	-2.130555	2.041301	-1.043724	0.3059
BIR	0.131634	0.132679	0.992125	0.3299
LOG_GDP	-3.347274	5.013626	-0.667635	0.5100
R-squared	0.097419	Mean dependent var		0.444375
Adjusted R-squared	-0.036297	S.D. dependent var		0.517512
S.E. of regression	0.526821	Akaike info criterion		1.698688
Sum squared resid	7.493578	Schwarz criterion		1.927709
Log likelihood	-22.17900	Hannan-Quinn criter.		1.774602
F-statistic	0.728552	Durbin-Watson stat		2.604005
Prob(F-statistic)	0.580289			

APPENDIX 4

ECT Generating and Testing.

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.458587	0.0000
Test critical values: 1% level	-3.661661	
5% level	-2.960411	
10% level	-2.619160	

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

APPENDIX 5

Short-run Estimation

Dependent Variable: D(INF)
Method: Least Squares
Date: 12/19/18 Time: 11:55
Sample (adjusted): 2010Q2 2017Q4
Included observations: 31 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.221456	0.159706	-1.386647	0.1778
D(LOG_M2)	12.95818	4.265355	3.038008	0.0055
D(LOG_ER)	-7.532157	2.705584	-2.783930	0.0101
D(BIR)	0.229182	0.231186	0.991329	0.3310
D(LOG_GDP)	-3.328303	3.546982	-0.938348	0.3570
ECT(-1)	-1.136458	0.184933	-6.145252	0.0000
R-squared	0.769591	Mean dependent var	0.027419	
Adjusted R-squared	0.723509	S.D. dependent var	0.867571	
S.E. of regression	0.456190	Akaike info criterion	1.440170	
Sum squared resid	5.202731	Schwarz criterion	1.717716	
Log likelihood	-16.32264	Hannan-Quinn criter.	1.530643	
F-statistic	16.70052	Durbin-Watson stat	1.759600	
Prob(F-statistic)	0.000000			

APPENDIX 6

Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.067906	Prob. F(2,23)	0.3602
Obs*R-squared	2.634096	Prob. Chi-Square(2)	0.2679

APPENDIX 7

Linearity Test

Ramsey RESET Test

Equation: DEQ01

Specification: D(INF) C D(LOG_M2) D(LOG_ER) D(BIR)

D(LOG_GDP)

ECT(-1)

Omitted Variables: Squares of fitted values

	Value	df	Probability
t-statistic	0.263015	24	0.7948
F-statistic	0.069177	(1, 24)	0.7948
Likelihood ratio	0.089225	1	0.7652

APPENDIX 8

Multicollinearity Test.

Covariance				
	LOG_M2	LOG_ER	BIR	LOG_GDP
LOG_M2	0.077400	0.046470	-0.068175	0.033458
LOG_ER	0.046470	0.031610	-0.002877	0.020073
BIR	-0.068175	-0.002877	1.060974	-0.036721
LOG_GDP	0.033458	0.020073	-0.036721	0.014891

APPENDIX 9

Heteroskedasticity Test.

Heteroskedasticity Test: White

F-statistic	1.024053	Prob. F(20,10)	0.5075
Obs*R-squared	20.82975	Prob. Chi-Square(20)	0.4072
Scaled explained SS	50.13741	Prob. Chi-Square(20)	0.0002

APPENDIX 10

T-table.

t-Table				
Cum. Prob one-tail two- tails	t.95	t.975	t.99	t.995
	0.05	0.025	0.01	0.005
	0.1	0.05	0.02	0.01
df				
29	1.699	2.045	2.462	2.756
20	1.697	2.042	2.457	2.75
40	1.684	2.021	2.423	2.704
	90%	95%	98%	99%
	Confidence Level			

APPENDIX 11

F-Table.

F-table			
Probability = 0.05			
dfd	dfn		
	3	4	5
30	2.92	2.69	2.53
31	2.91	2.68	2.52
32	2.9	2.67	2.51