APPENDIX

APPENDIX 1

Period	Debt	ER	Growth	Govrev	Govexp
2005-Q1	80241	9480	875083	11928165625	124286
Q2	78681	9713	894588	13065671875	136448
Q3	78470	10310	920179	14071903125	147349
Q4	79558	9830	901486	14946859375	156987
2006-Q1	83399	9075	919949	15690540625	165364
Q2	78839	9300	938722	16302946875	172479
Q3	77483	9235	974141	16784078125	178332
Q4	74126	9020	956084	17133934375	182924
2007-Q1	78190	9118	975655	16376164060	175917
Q2	79389	9054	1001868	16854010940	182120
Q3	81235	9137	1039840	17591123440	191194
Q4	80609	9419	1011939	18587501560	203142
2008-Q1	87519	9217	1036324	21369805470	233963
Q2	88131	9225	1065013	22274050780	245255
Q3	86363	9378	1104881	22826897660	253020
Q4	86576	10950	1065397	23028346090	257257
2009-Q1	83465	11575	1083171	21431962500	244696
Q2	85499	10225	1109059	21509187500	247186
Q3	89408	9681	1152051	21813587500	251456
Q4	90853	9400	1125061	22345162500	257507
2010-Q1	95083	9115	1148043	23452650780	267082
Q2	97571	9083	1178873	24299080470	275997
Q3	103250	8924	1218950	25233189840	285994
Q4	106860	8991	1201640	26254978910	297074
2011-Q1	109705	8709	1222097	27541553130	310656
Q2	114887	8597	1255768	28667859380	323334
Q3	112962	8823	1298081	29811003130	336527
Q4	112427	9068	1279693	30970984380	350234
2012-Q1	112502	9180	1299285	32363689480	367684
Q2	112869	9480	1336049	33470991410	381131
Q3	115037	9590	1378682	34508775780	393801
Q4	116187	9670	1358049	35477042970	405694
2013-Q1	114147	9719	1377597	36242726560	415934
Q2	114010	9929	1465667	37125185940	426626

Period	Debt	ER	Growth	Govrev	Govexp
Q3	113590	11613	1556674	37991354690	436894
Q4	114294	12189	1651989	38841232810	446737
2014-Q1	122405	11404	1751560	39661867190	456787
Q2	122189	11969	1852473	40484345310	465527
Q3	125409	12212	1956830	41295714060	473588
Q4	123806	12440	2068672	42095973440	480971
2015-Q1	127823	13084	2157848	43254545310	486311
Q2	129444	13332	2238761	43884817190	492884
Q3	129063	14657	2312640	44356210940	499324
Q4	137396	13759	2273261	44668726560	505631
2016-Q1	146163	13276	2264089	44661184380	515427
Q2	153264	13180	2354797	44720415630	520021
Q3	158259	12998	2428569	44685240630	523034
Q4	154875	13436	2385577	44555659830	524466
2017-Q1	162367	13321	2378176	44331671880	524318
Q2	166278	13326	2473425	44013278130	522588
Q3	172377	13492	2552216	43600478130	519277
Q4	177318	13548	2508931	43093271870	514386
Debt (in Million US$)					
Exchange Rate (in IDR)					
Growth (GDP in Billion IDR)					
Govrev (in Billion IDR)					
Govexp (Billion IDR)					

APPENDIX 2

ORDINARY LEAST SQUARE (OLS) TEST

Dependent Variable: DEBT
Method: Least Squares
Date: 04/04/18 Time: 09:40
Sample (adjusted): 1 52
Included observations: 52 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	88681.58	6864.295	12.91926	0.0000
ER	-5.871107	1.078781	-5.442354	0.0000
GOVEXP	0.726138	0.122206	5.941941	0.0000
GROWTH	0.054239	0.006148	8.821872	0.0000
GOVREV	-8.15E-06	1.41E-06	-5.775660	0.0000

R-squared	0.969667	Mean dependent var	110035.6
Adjusted R-squared	0.967085	S.D. dependent var	28230.41
S.E. of regression	5121.676	Akaike info criterion	20.01156
Sum squared resid	1.23E+09	Schwarz criterion	20.19918
Log likelihood	-515.3006	Hannan-Quinn criter.	20.08349
F-statistic	375.6149	Durbin-Watson stat	0.542263
Prob(F-statistic)	0.000000		

APPENDIX 3

CLASSICAL ASSUMPTION TEST

APPENDIX 3.1 Autocorrelation Test

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	22.63215	Prob. F(2,45)	0.0000
Obs*R-squared	26.07613	Prob. Chi-Square(2)	0.0000

Test Equation:

Dependent Variable: RESID
Method: Least Squares
Date: 04/04/18 Time: 09:47
Sample: 1 52
Included observations: 52
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1590.742	4978.149	-0.319545	0.7508
ER	0.097506	0.779170	0.125141	0.9010
GOVEXP	-0.023233	0.088622	-0.262164	0.7944
GROWTH	0.001592	0.004449	0.357840	0.7221
GOVREV	2.08E-07	1.02E-06	0.203560	0.8396
RESID(-1)	0.786278	0.155138	5.068242	0.0000
RESID(-2)	-0.064111	0.157480	-0.407107	0.6859

R-squared	0.501464	Mean dependent var	-9.65E-12
Adjusted R-squared	0.434993	S.D. dependent var	4916.725
S.E. of regression	3695.754	Akaike info criterion	19.39241
Sum squared resid	6.15E+08	Schwarz criterion	19.65507
Log likelihood	-497.2026	Hannan-Quinn criter.	19.49311
F-statistic	7.544051	Durbin-Watson stat	1.855976
Prob(F-statistic)	0.000012		

APPENDIX 3.2 Autocorrelation Test with AR(1)

Dependent Variable: DEBT
Method: ARMA Maximum Likelihood (OPG - BHHH)
Date: 04/04/18 Time: 09:49
Sample: 1 52
Included observations: 52
Convergence achieved after 15 iterations
Coefficient covariance computed using outer product of gradients

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	71820.25	23024.14	3.119346	0.0032
ER	-2.863864	0.886967	-3.228830	0.0023
GOVEXP	0.516873	0.170614	3.029490	0.0040
GROWTH	0.027951	0.009324	2.997744	0.0044
GOVREV	-4.77E-06	1.90E-06	-2.509845	0.0157
AR(1)	0.948104	0.067071	14.13586	0.0000

SIGMASQ	8519876.	2161316.	3.941985	0.0003

R-squared	0.989100	Mean dependent var	110035.6
Adjusted R-squared	0.987647	S.D. dependent var	28230.41
S.E. of regression	3137.705	Akaike info criterion	19.10909
Sum squared resid	4.43E+08	Schwarz criterion	19.37176
Log likelihood	-489.8364	Hannan-Quinn criter.	19.20979
F-statistic	680.5645	Durbin-Watson stat	1.745912
Prob(F-statistic)	0.000000		
Inverted AR Roots	.95		

APPENDIX 3.3 Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey

F-statistic	1.887332	Prob. F(4,47)	0.1283
Obs*R-squared	7.196514	Prob. Chi-Square(4)	0.1259
Scaled explained SS	3.560225	Prob. Chi-Square(4)	0.4688

Test Equation:
Dependent Variable: RESID^2
Method: Least Squares
Date: 04/04/18 Time: 09:50
Sample: 1 52
Included observations: 52

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	61345425	34143468	1.796696	0.0788
ER	-727.0172	5365.929	-0.135488	0.8928
GOVEXP	740.6523	607.8585	1.218462	0.2291
GROWTH	18.81740	30.58181	0.615314	0.5413
GOVREV	-0.010347	0.007015	-1.474994	0.1469

R-squared	0.138395	Mean dependent var	23709301
Adjusted R-squared	0.065066	S.D. dependent var	26347137
S.E. of regression	25475565	Akaike info criterion	37.03555
Sum squared resid	3.05E+16	Schwarz criterion	37.22317
Log likelihood	-957.9243	Hannan-Quinn criter.	37.10748
F-statistic	1.887332	Durbin-Watson stat	1.397452
Prob(F-statistic)	0.128342		

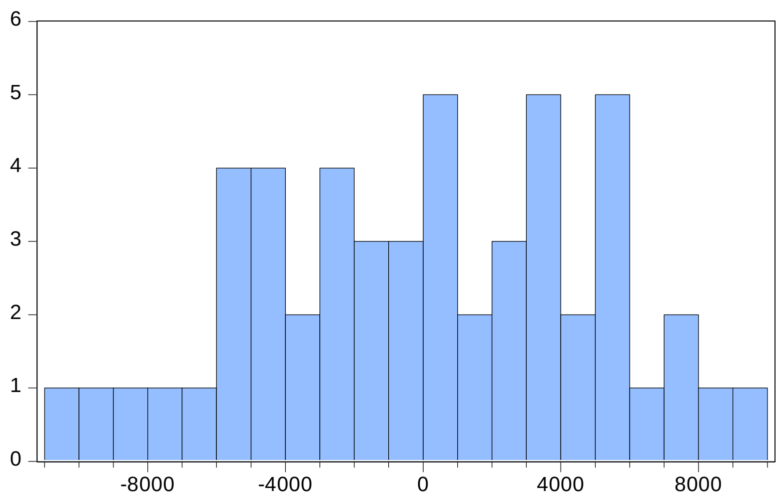
APPENDIX 3.4 Multicollinearity Test

	C	ER	GOVEXP	GROWTH	GOVREV
C	47118543	-6536.56	67.41887	25.64718	-0.001267977
ER	-6536.56	1.163768	0.03896	-0.00527	0.0000378
GOVEXP	67.41887	0.03896	0.014934	-0.0003	-0.000000171
GROWTH	25.64718	-0.00527	-0.0003	0.0000378	0.0000000026
GOVREV	-0.00127	-0.000000378	-0.000000171	0.0000000026	0.0000000000012

APPENDIX 3.5 Multicollinearity Test in 1st Difference Form

	C	D(ER)	D(GOVEXP)	D(GROWTH)	D(GOVREV)
C	652918.9	-57.319	-116.505	-3.72491	0.000878598
D(ER)	-57.319	0.648738	0.021486	-0.0013	-0.000000192
D(GOVEXP)	-116.505	0.021486	0.053292	0.00052	-0.000000506
D(GROWTH)	-3.72491	-0.0013	0.00052	0.000101	-0.00000000555
D(GOVREV)	0.000879	-0.000000192	-0.000000506	-0.00000000555	0.00000000000522

APPENDIX 3.6 Normality Test



Series: Residuals
Sample 1 52
Observations 52

Mean	-9.65e-12
Median	802.7292
Maximum	9606.415
Minimum	-10391.39
Std. Dev.	4916.725
Skewness	-0.145809
Kurtosis	2.211145
Jarque-Bera	1.532554
Probability	0.464740