

Appendix 1. Research Data

	INF	JUB	SB	NT	PP	BP	ULN
2009Q1	7.92	20.22	7.75	26.47	-11.58	53.65	7.28
2009Q2	3.65	16.09	7	10.86	-1	-17.91	2.14
2009Q3	2.83	13.52	6.5	4.29	-16.83	-24.32	7.09
2009Q4	2.78	12.95	6.5	-14.3	5.26	4.39	6.73
2010Q1	3.43	10.19	6.5	-21.77	9.37	-1.8	13.56
2010Q2	5.05	12.82	6.5	-11.7	23.53	12.09	14.01
2010Q3	5.8	12.7	6.5	-8.44	20.52	13	15.41
2010Q4	6.96	15.4	6.5	-4.77	13.23	15.48	17.62
2011Q1	6.65	16.06	6.5	-4.31	16.93	32.63	15.38
2011Q2	5.54	13.07	6.5	-5.46	13.21	-1.95	17.75
2011Q3	4.61	16.19	6.5	-0.37	28.84	30.93	9.41
2011Q4	3.79	16.43	6.5	0.81	23.81	32.57	5.21
2012Q1	3.97	18.88	5.75	5.03	16.69	17.75	2.55
2012Q2	4.53	21.01	5.75	9.95	18.77	64.12	-1.76
2012Q3	4.31	18.34	5.75	8.07	5.29	2.34	1.84
2012Q4	4.3	14.95	5.75	7.98	9.75	0.29	3.34
2013Q1	5.9	14.01	5.75	6.44	10.98	11	1.46
2013Q2	5.9	11.81	6	6.05	2.62	5.55	1.01
2013Q3	8.4	14.57	7.25	18.92	13.2	22.41	-1.26
2013Q4	8.38	12.79	7.5	24.28	12.88	6.67	-1.63
2014Q1	7.32	9.93	7.5	16.7	11.74	5.38	7.23
2014Q2	6.7	13.02	7.5	18.7	10.67	16.66	7.17
2014Q3	4.53	11.89	7.5	6.86	0.46	14.38	10.41
2014Q4	8.36	11.87	7.75	1.78	4.37	-2.74	8.32
2015Q1	6.38	16.26	7.5	15.08	-4.31	28.23	4.43
2015Q2	7.26	12.98	7.5	12.33	2.14	-18.78	5.94
2015Q3	6.83	12.43	7.5	20.22	-0.72	4.69	2.91
2015Q4	3.35	9	7.5	11.3	29.39	2.78	10.98
2016Q1	4.45	7.43	6.75	1.26	-13.18	6.39	14.35
2016Q2	3.45	8.69	5.25	-0.97	6	23.39	18.4
2016Q3	3.07	5.08	5	-10.99	40.81	-11.45	22.62
2016Q4	3.02	10.03	4.75	-2.28	-11.55	0.23	12.72
2017Q1	3.61	9.99	4.75	0.63	16.2	2.34	11.09
2017Q2	4.37	10.29	4.75	1.04	5.28	3.97	8.49
2017Q3	3.72	10.9	4.25	3.3	-17.94	9.45	8.92
2017Q4	3.61	8.28	4.25	0.61	19.49	13.16	14.49
2018Q1	3.4	7.54	4.25	3.05	10.32	4.88	11.56
2018Q2	3.12	5.91	5.25	7.36	17.07	6.32	6.14
2018Q3	2.88	6.71	5.75	10.62	20.8	18.04	2.18
2018Q4	3.13	6.29	6	6.16	6.42	10.78	3.32
2019Q1	2.48	6.51	6	3.75	6.2	7.75	3.62
2019Q2	3.28	6.76	6	-1.42	4.9	11.06	9.1
2019Q3	3.39	7.08	5.25	-4.75	-5.57	-1.48	10.35
2019Q4	2.72	6.54	5	-3.64	2.37	2.14	9.1
2020Q1	2.96	12.06	4.5	14.51	0.43	0.07	-3.59
2020Q2	1.96	8.21	4.25	0.98	-15.9	5.85	2.07

Appendix 2. Descriptive Statistics

Date: 09/13/20

Time: 15:35

Sample: 2009Q1 2020Q2

	INF	JUB	SB	NT	PP	BP	ULN
Mean	4.653261	11.81913	6.119565	4.135217	7.855652	9.616957	7.814348
Median	4.135000	11.97500	6.250000	3.525000	7.895000	6.355000	7.255000
Maximum	8.400000	21.01000	7.750000	26.47000	40.81000	64.12000	22.62000
Minimum	1.960000	5.080000	4.250000	-21.77000	-17.94000	-24.32000	-3.590000
Std. Dev.	1.804880	4.023127	1.078501	10.00131	12.74448	16.16700	6.016632
Skewness	0.703694	0.297493	-0.188793	-0.027266	-0.032928	1.015308	0.272096
Kurtosis	2.279963	2.384558	1.965403	3.126720	3.027782	5.454806	2.506087
Jarque-Bera Probability	4.790123 0.091167	1.404489 0.495472	2.324843 0.312728	0.036478 0.981927	0.009792 0.995116	19.45315 0.000060	1.035183 0.595954
Sum	214.0500	543.6800	281.5000	190.2200	361.3600	442.3800	359.4600
Sum Sq. Dev.	146.5916	728.3498	52.34239	4501.176	7308.976	11761.73	1628.994
Observations	46	46	46	46	46	46	46

Appendix 3. Stationarity of Inflation Data Level

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.816417	0.0640
Test critical values: 1% level	-3.584743	
5% level	-2.928142	
10% level	-2.602225	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(INF)
 Method: Least Squares
 Date: 10/15/20 Time: 00:59
 Sample (adjusted): 2009Q2 2020Q2
 Included observations: 45 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INF(-1)	-0.298378	0.105942	-2.816417	0.0073
C	1.273843	0.532946	2.390192	0.0213
R-squared	0.155740	Mean dependent var		-0.132444
Adjusted R-squared	0.136107	S.D. dependent var		1.344692
S.E. of regression	1.249836	Akaike info criterion		3.327327
Sum squared resid	67.16982	Schwarz criterion		3.407624
Log likelihood	-72.86487	Hannan-Quinn criter.		3.357261
F-statistic	7.932207	Durbin-Watson stat		1.753125
Prob(F-statistic)	0.007304			

Appendix 4. Stationarity of Data Level on Money Supply

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.636055	0.0934
Test critical values: 1% level	-3.584743	
5% level	-2.928142	
10% level	-2.602225	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(JUB)
 Method: Least Squares
 Date: 10/15/20 Time: 01:01
 Sample (adjusted): 2009Q2 2020Q2
 Included observations: 45 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
JUB(-1)	-0.228047	0.086511	-2.636055	0.0116
C	2.446714	1.085643	2.253700	0.0294
R-squared	0.139118	Mean dependent var		-0.266889
Adjusted R-squared	0.119098	S.D. dependent var		2.464727
S.E. of regression	2.313304	Akaike info criterion		4.558657
Sum squared resid	230.1092	Schwarz criterion		4.638954
Log likelihood	-100.5698	Hannan-Quinn criter.		4.588591
F-statistic	6.948784	Durbin-Watson stat		2.173368
Prob(F-statistic)	0.011621			

Appendix 5. Stationarity of Interest Rate Data Level

Null Hypothesis: SB has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-1.714231	0.4173
Test critical values: 1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(SB)

Method: Least Squares

Date: 10/15/20 Time: 01:02

Sample (adjusted): 2009Q3 2020Q2

Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
SB(-1)	-0.099679	0.058148	-1.714231	0.0940
D(SB(-1))	0.454930	0.136984	3.321036	0.0019
C	0.581636	0.363185	1.601488	0.1169
R-squared	0.227238	Mean dependent var		-0.062500
Adjusted R-squared	0.189542	S.D. dependent var		0.428372
S.E. of regression	0.385644	Akaike info criterion		0.997942
Sum squared resid	6.097574	Schwarz criterion		1.119591
Log likelihood	-18.95473	Hannan-Quinn criter.		1.043056
F-statistic	6.028224	Durbin-Watson stat		2.056921
Prob(F-statistic)	0.005069			

Appendix 6. Stationarity of Exchange Rate Data Levels

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.304219	0.0205
Test critical values: 1% level	-3.584743	
5% level	-2.928142	
10% level	-2.602225	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(NT)
 Method: Least Squares
 Date: 10/15/20 Time: 01:03
 Sample (adjusted): 2009Q2 2020Q2
 Included observations: 45 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NT(-1)	-0.338394	0.102413	-3.304219	0.0019
C	0.856613	1.110054	0.771686	0.4445
R-squared	0.202491	Mean dependent var		-0.566444
Adjusted R-squared	0.183944	S.D. dependent var		7.597397
S.E. of regression	6.863171	Akaike info criterion		6.733643
Sum squared resid	2025.434	Schwarz criterion		6.813939
Log likelihood	-149.5070	Hannan-Quinn criter.		6.763576
F-statistic	10.91786	Durbin-Watson stat		1.598635
Prob(F-statistic)	0.001926			

Appendix 7. Stationarity of Tax Revenue Data Levels

Null Hypothesis: PP has a unit root
 Exogenous: Constant
 Lag Length: 3 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-3.272701	0.0226
Test critical values: 1% level	-3.596616	
5% level	-2.933158	
10% level	-2.604867	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(PP)
 Method: Least Squares
 Date: 10/15/20 Time: 01:04
 Sample (adjusted): 2010Q1 2020Q2
 Included observations: 42 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PP(-1)	-0.835281	0.255227	-3.272701	0.0023
D(PP(-1))	-0.080968	0.233233	-0.347153	0.7304
D(PP(-2))	0.093703	0.202934	0.461741	0.6470
D(PP(-3))	0.412786	0.145157	2.843716	0.0072
C	7.550587	2.922593	2.583524	0.0139
R-squared	0.625056	Mean dependent var		-0.503810
Adjusted R-squared	0.584521	S.D. dependent var		17.04935
S.E. of regression	10.98961	Akaike info criterion		7.743120
Sum squared resid	4468.543	Schwarz criterion		7.949986
Log likelihood	-157.6055	Hannan-Quinn criter.		7.818945
F-statistic	15.42035	Durbin-Watson stat		1.886689
Prob(F-statistic)	0.000000			

Appendix 8. Stationarity of Government Expenditure Data Level

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-7.319974	0.0000
Test critical values: 1% level	-3.584743	
5% level	-2.928142	
10% level	-2.602225	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(BP)
 Method: Least Squares
 Date: 10/15/20 Time: 01:05
 Sample (adjusted): 2009Q2 2020Q2
 Included observations: 45 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BP(-1)	-1.018319	0.139115	-7.319974	0.0000
C	8.816147	2.621691	3.362771	0.0016
R-squared	0.554783	Mean dependent var		-1.062222
Adjusted R-squared	0.544429	S.D. dependent var		22.33899
S.E. of regression	15.07793	Akaike info criterion		8.307768
Sum squared resid	9775.794	Schwarz criterion		8.388064
Log likelihood	-184.9248	Hannan-Quinn criter.		8.337702
F-statistic	53.58202	Durbin-Watson stat		1.691851
Prob(F-statistic)	0.000000			

Appendix 9. Stationarity of External Debt Data Level

Null Hypothesis: ULN has a unit root

Exogenous: Constant

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-2.547511	0.1114
Test critical values: 1% level	-3.584743	
5% level	-2.928142	
10% level	-2.602225	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(ULN)

Method: Least Squares

Date: 10/15/20 Time: 01:06

Sample (adjusted): 2009Q2 2020Q2

Included observations: 45 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
ULN(-1)	-0.272361	0.106913	-2.547511	0.0145
C	2.047313	1.061215	1.929216	0.0603
R-squared	0.131134	Mean dependent var		-0.115778
Adjusted R-squared	0.110928	S.D. dependent var		4.528730
S.E. of regression	4.270167	Akaike info criterion		5.784610
Sum squared resid	784.0761	Schwarz criterion		5.864906
Log likelihood	-128.1537	Hannan-Quinn criter.		5.814543
F-statistic	6.489812	Durbin-Watson stat		1.775545
Prob(F-statistic)	0.014507			

Appendix 10. Stationarity of the First Difference of Inflation Data

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-8.542189	0.0000
Test critical values: 1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(INF,2)
 Method: Least Squares
 Date: 10/15/20 Time: 01:00
 Sample (adjusted): 2009Q3 2020Q2
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INF(-1))	-1.152360	0.134902	-8.542189	0.0000
C	-0.055584	0.181162	-0.306821	0.7605
R-squared	0.634684	Mean dependent var		0.074318
Adjusted R-squared	0.625986	S.D. dependent var		1.958003
S.E. of regression	1.197449	Akaike info criterion		3.242654
Sum squared resid	60.22316	Schwarz criterion		3.323753
Log likelihood	-69.33838	Hannan-Quinn criter.		3.272729
F-statistic	72.96898	Durbin-Watson stat		2.111570
Prob(F-statistic)	0.000000			

Appendix 11. First Difference Data Stationarity of Money Supply

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	-8.369191	0.0000
Test critical values:		
1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(JUB,2)

Method: Least Squares

Date: 10/15/20 Time: 01:01

Sample (adjusted): 2009Q3 2020Q2

Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(JUB(-1))	-1.246081	0.148889	-8.369191	0.0000
C	-0.224728	0.358908	-0.626144	0.5346
R-squared	0.625145	Mean dependent var		0.006364
Adjusted R-squared	0.616220	S.D. dependent var		3.831590
S.E. of regression	2.373669	Akaike info criterion		4.611140
Sum squared resid	236.6408	Schwarz criterion		4.692239
Log likelihood	-99.44508	Hannan-Quinn criter.		4.641215
F-statistic	70.04336	Durbin-Watson stat		2.016272
Prob(F-statistic)	0.000000			

Appendix 12. Stationarity of First Difference Interest Rate Data

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-4.361539	0.0011
Test critical values: 1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(SB,2)
 Method: Least Squares
 Date: 10/15/20 Time: 01:02
 Sample (adjusted): 2009Q3 2020Q2
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SB(-1))	-0.596347	0.136729	-4.361539	0.0001
C	-0.032685	0.060316	-0.541891	0.5908
R-squared	0.311735	Mean dependent var		0.011364
Adjusted R-squared	0.295348	S.D. dependent var		0.469892
S.E. of regression	0.394444	Akaike info criterion		1.021708
Sum squared resid	6.534605	Schwarz criterion		1.102808
Log likelihood	-20.47758	Hannan-Quinn criter.		1.051784
F-statistic	19.02303	Durbin-Watson stat		2.011573
Prob(F-statistic)	0.000082			

Appendix 13. Stationarity of First Difference Exchange Rate Data

Null Hypothesis: D(NT) has a unit root
 Exogenous: Constant
 Lag Length: 3 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.943002	0.0000
Test critical values: 1% level	-3.600987	
5% level	-2.935001	
10% level	-2.605836	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(NT,2)
 Method: Least Squares
 Date: 10/15/20 Time: 01:04
 Sample (adjusted): 2010Q2 2020Q2
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(NT(-1))	-1.885319	0.271542	-6.943002	0.0000
D(NT(-1),2)	0.654123	0.218178	2.998118	0.0049
D(NT(-2),2)	0.564241	0.184165	3.063775	0.0041
D(NT(-3),2)	0.472786	0.135979	3.476900	0.0013
C	0.343521	0.944089	0.363865	0.7181
R-squared	0.690549	Mean dependent var		-0.147805
Adjusted R-squared	0.656166	S.D. dependent var		10.20283
S.E. of regression	5.982668	Akaike info criterion		6.529460
Sum squared resid	1288.523	Schwarz criterion		6.738432
Log likelihood	-128.8539	Hannan-Quinn criter.		6.605556
F-statistic	20.08381	Durbin-Watson stat		1.783466
Prob(F-statistic)	0.000000			

Appendix 14. Stationarity of First Difference Tax Revenue Data

Null Hypothesis: D(PP) has a unit root

Exogenous: Constant

Lag Length: 1 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-9.610992	0.0000
Test critical values: 1% level	-3.592462	
5% level	-2.931404	
10% level	-2.603944	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(PP,2)

Method: Least Squares

Date: 10/15/20 Time: 01:05

Sample (adjusted): 2009Q4 2020Q2

Included observations: 43 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(PP(-1))	-2.351872	0.244706	-9.610992	0.0000
D(PP(-1),2)	0.506387	0.137827	3.674081	0.0007
C	0.214027	1.932399	0.110757	0.9124
R-squared	0.833719	Mean dependent var		-0.011628
Adjusted R-squared	0.825404	S.D. dependent var		30.31680
S.E. of regression	12.66776	Akaike info criterion		7.983212
Sum squared resid	6418.890	Schwarz criterion		8.106087
Log likelihood	-168.6391	Hannan-Quinn criter.		8.028525
F-statistic	100.2780	Durbin-Watson stat		1.639123
Prob(F-statistic)	0.000000			

Appendix 15. Stationarity of First Difference Government Expenditure Data

Null Hypothesis: D(BP) has a unit root
 Exogenous: Constant
 Lag Length: 3 (Automatic - based on SIC, maxlag=9)

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-5.357958	0.0001
Test critical values: 1% level	-3.600987	
5% level	-2.935001	
10% level	-2.605836	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(BP,2)
 Method: Least Squares
 Date: 10/15/20 Time: 01:05
 Sample (adjusted): 2010Q2 2020Q2
 Included observations: 41 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(BP(-1))	-2.626589	0.490222	-5.357958	0.0000
D(BP(-1),2)	0.855553	0.412265	2.075252	0.0452
D(BP(-2),2)	0.443894	0.268372	1.654026	0.1068
D(BP(-3),2)	0.320441	0.120575	2.657607	0.0117
C	0.087619	2.157699	0.040607	0.9678
R-squared	0.867457	Mean dependent var		0.291951
Adjusted R-squared	0.852731	S.D. dependent var		35.90543
S.E. of regression	13.77896	Akaike info criterion		8.198012
Sum squared resid	6834.954	Schwarz criterion		8.406985
Log likelihood	-163.0593	Hannan-Quinn criter.		8.274109
F-statistic	58.90273	Durbin-Watson stat		2.051236
Prob(F-statistic)	0.000000			

Appendix 16. Stationarity of First Difference External Debt Data

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

	t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic	-6.734071	0.0000
Test critical values: 1% level	-3.588509	
5% level	-2.929734	
10% level	-2.603064	

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

Augmented Dickey-Fuller Test Equation
 Dependent Variable: D(ULN,2)
 Method: Least Squares
 Date: 10/15/20 Time: 01:07
 Sample (adjusted): 2009Q3 2020Q2
 Included observations: 44 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(ULN(-1))	-1.043085	0.154897	-6.734071	0.0000
C	-0.012235	0.689160	-0.017753	0.9859
R-squared	0.519163	Mean dependent var		0.245455
Adjusted R-squared	0.507715	S.D. dependent var		6.505299
S.E. of regression	4.564316	Akaike info criterion		5.918803
Sum squared resid	874.9852	Schwarz criterion		5.999903
Log likelihood	-128.2137	Hannan-Quinn criter.		5.948879
F-statistic	45.34771	Durbin-Watson stat		1.884147
Prob(F-statistic)	0.000000			

Appendix 17. ARDL (1, 0, 3, 1, 0, 0, 0)

Dependent Variable: INF
 Method: ARDL
 Date: 10/03/20 Time: 10:17
 Sample (adjusted): 2009Q4 2020Q2
 Included observations: 43 after adjustments
 Maximum dependent lags: 1 (Automatic selection)
 Model selection method: Hannan-Quinn criterion (HQ)
 Dynamic regressors (3 lags, automatic): JUB SB NT PP BP ULN
 Fixed regressors: C
 Number of models evaluated: 4096
 Selected Model: ARDL(1, 0, 3, 1, 0, 0, 0)

Variable	Coefficient	Std. Error	t-Statistic	Prob.*
INF(-1)	0.222951	0.189559	1.176154	0.2485
JUB	0.200892	0.069616	2.885698	0.0070
SB	1.671093	0.474794	3.519619	0.0014
SB(-1)	-1.475898	0.723391	-2.040250	0.0499
SB(-2)	1.257158	0.746679	1.683666	0.1023
SB(-3)	-0.970622	0.460378	-2.108314	0.0432
NT	0.084216	0.036593	2.301433	0.0283
NT(-1)	-0.054559	0.026828	-2.033672	0.0506
PP	-0.029305	0.015290	-1.916590	0.0645
BP	-0.030423	0.014106	-2.156660	0.0389
ULN	0.097703	0.054080	1.806633	0.0805
C	-1.818119	1.093575	-1.662547	0.1065
R-squared	0.786405	Mean dependent var		4.643023
Adjusted R-squared	0.710613	S.D. dependent var		1.770020
S.E. of regression	0.952176	Akaike info criterion		2.970793
Sum squared resid	28.10582	Schwarz criterion		3.462291
Log likelihood	-51.87205	Hannan-Quinn criter.		3.152042
F-statistic	10.37587	Durbin-Watson stat		2.089058
Prob(F-statistic)	0.000000			

*Note: p-values and any subsequent tests do not account for model selection.

Appendix 18. ARDL Error Correction Regression (1, 0, 3, 1, 0, 0, 0)

ARDL Error Correction Regression
 Dependent Variable: D(INF)
 Selected Model: ARDL(1, 0, 3, 1, 0, 0, 0)
 Case 2: Restricted Constant and No Trend
 Date: 10/03/20 Time: 10:19
 Sample: 2009Q1 2020Q2
 Included observations: 43

ECM Regression				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(SB)	1.671093	0.369994	4.516536	0.0001
D(SB(-1))	-0.286536	0.378972	-0.756088	0.4553
D(SB(-2))	0.970622	0.381825	2.542057	0.0162
D(NT)	0.084216	0.021639	3.891889	0.0005
CointEq(-1)*	-0.777049	0.126564	-6.139592	0.0000
R-squared	0.542452	Mean dependent var		-0.020233
Adjusted R-squared	0.494289	S.D. dependent var		1.209359
S.E. of regression	0.860016	Akaike info criterion		2.645212
Sum squared resid	28.10582	Schwarz criterion		2.850003
Log likelihood	-51.87205	Hannan-Quinn criter.		2.720732
Durbin-Watson stat	2.089058			

* p-value incompatible with t-Bounds distribution.

Appendix 19. Long Run Form and Bounds Test ARDL (1, 0, 3, 1, 0, 0, 0)

ARDL Long Run Form and Bounds Test
 Dependent Variable: D(INF)
 Selected Model: ARDL(1, 0, 3, 1, 0, 0, 0)
 Case 2: Restricted Constant and No Trend
 Date: 10/03/20 Time: 10:18
 Sample: 2009Q1 2020Q2
 Included observations: 43

Conditional Error Correction Regression				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1.818119	1.093575	-1.662547	0.1065
INF(-1)*	-0.777049	0.189559	-4.099239	0.0003
JUB**	0.200892	0.069616	2.885698	0.0070
SB(-1)	0.481731	0.227588	2.116683	0.0424
NT(-1)	0.029657	0.035850	0.827231	0.4144
PP**	-0.029305	0.015290	-1.916590	0.0645
BP**	-0.030423	0.014106	-2.156660	0.0389
ULN**	0.097703	0.054080	1.806633	0.0805
D(SB)	1.671093	0.474794	3.519619	0.0014
D(SB(-1))	-0.286536	0.473286	-0.605418	0.5493
D(SB(-2))	0.970622	0.460378	2.108314	0.0432
D(NT)	0.084216	0.036593	2.301433	0.0283

* p-value incompatible with t-Bounds distribution.

** Variable interpreted as $Z = Z(-1) + D(Z)$.

Levels Equation				
Case 2: Restricted Constant and No Trend				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
JUB	0.258532	0.078111	3.309816	0.0024
SB	0.619949	0.266845	2.323250	0.0269
NT	0.038166	0.040012	0.953850	0.3475
PP	-0.037713	0.020478	-1.841642	0.0751
BP	-0.039152	0.019387	-2.019457	0.0522
ULN	0.125736	0.054652	2.300648	0.0283
C	-2.339774	1.289147	-1.814978	0.0792

EC = INF - (0.2585*JUB + 0.6199*SB + 0.0382*NT - 0.0377*PP - 0.0392*BP + 0.1257*ULN - 2.3398)

F-Bounds Test		Null Hypothesis: No levels relationship		
Test Statistic	Value	Signif.	I(0)	I(1)
			Asymptotic: n=1000	
F-statistic	3.843857	10%	1.99	2.94
k	6	5%	2.27	3.28
		2.5%	2.55	3.61
		1%	2.88	3.99
			Finite Sample: n=45	
Actual Sample Size	43	10%	2.188	3.254
		5%	2.591	3.766
		1%	3.54	4.931
			Finite Sample: n=40	
		10%	2.218	3.314
		5%	2.618	3.863
		1%	3.505	5.121

Appendix 20. ARDL Correlation Serial (1, 0, 3, 1, 0, 0, 0)

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	0.074760	Prob. F(2,29)	0.9281
Obs*R-squared	0.220564	Prob. Chi-Square(2)	0.8956

Test Equation:

Dependent Variable: RESID

Method: ARDL

Date: 10/03/20 Time: 10:20

Sample: 2009Q4 2020Q2

Included observations: 43

Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INF(-1)	0.080240	0.285496	0.281053	0.7807
JUB	-0.012443	0.080306	-0.154947	0.8779
SB	-0.001632	0.541749	-0.003012	0.9976
SB(-1)	-0.090492	0.832963	-0.108639	0.9142
SB(-2)	0.023606	0.775132	0.030454	0.9759
SB(-3)	0.022737	0.478569	0.047510	0.9624
NT	-0.003747	0.040933	-0.091546	0.9277
NT(-1)	-0.003267	0.028948	-0.112868	0.9109
PP	-0.000836	0.015920	-0.052486	0.9585
BP	0.000431	0.015960	0.027031	0.9786
ULN	-0.007085	0.061236	-0.115705	0.9087
C	0.128218	1.191804	0.107583	0.9151
RESID(-1)	-0.115516	0.299086	-0.386232	0.7021
RESID(-2)	-0.016510	0.249188	-0.066255	0.9476

R-squared	0.005129	Mean dependent var	2.33E-15
Adjusted R-squared	-0.440847	S.D. dependent var	0.818038
S.E. of regression	0.981934	Akaike info criterion	3.058674
Sum squared resid	27.96166	Schwarz criterion	3.632088
Log likelihood	-51.76149	Hannan-Quinn criter.	3.270131
F-statistic	0.011501	Durbin-Watson stat	1.983116
Prob(F-statistic)	1.000000		

Appendix 21. ARDL Heteroscedasticity (1, 0, 3, 1, 0, 0, 0)

Heteroskedasticity Test: Glejser

F-statistic	0.654665	Prob. F(11,31)	0.7684
Obs*R-squared	8.105912	Prob. Chi-Square(11)	0.7038
Scaled explained SS	6.269363	Prob. Chi-Square(11)	0.8548

Test Equation:

Dependent Variable: ARESID

Method: Least Squares

Date: 10/03/20 Time: 10:20

Sample: 2009Q4 2020Q2

Included observations: 43

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.057661	0.615085	0.093744	0.9259
INF(-1)	0.059591	0.106618	0.558917	0.5802
JUB	-0.007844	0.039156	-0.200333	0.8425
SB	0.109287	0.267049	0.409238	0.6852
SB(-1)	0.085484	0.406874	0.210099	0.8350
SB(-2)	-0.312177	0.419972	-0.743329	0.4629
SB(-3)	0.168382	0.258941	0.650271	0.5203
NT	-0.004819	0.020582	-0.234136	0.8164
NT(-1)	0.014013	0.015090	0.928666	0.3602
PP	0.006391	0.008600	0.743134	0.4630
BP	-0.001224	0.007934	-0.154214	0.8784
ULN	-6.09E-05	0.030417	-0.002001	0.9984

R-squared	0.188510	Mean dependent var	0.631517
Adjusted R-squared	-0.099439	S.D. dependent var	0.510762
S.E. of regression	0.535555	Akaike info criterion	1.819899
Sum squared resid	8.891381	Schwarz criterion	2.311397
Log likelihood	-27.12783	Hannan-Quinn criter.	2.001148
F-statistic	0.654665	Durbin-Watson stat	1.728740
Prob(F-statistic)	0.768364		