APPENDICES

APPENDICES I: VARIABLES DATA

Dependent Variable

Indonesia's GDP (Billion Rp.)				
Year	Q1	Q2	Q3	Q4
2009	493,103.0	505,579.0	525,618.2	512,385.3
2010	523,902.1	538,799.7	558,226.1	550,185.6
2011	1,748,731.2	1,816,268.2	1,881,849.7	1,840,786.2
2012	1,855,580.2	1,929,018.7	1,993,632.3	1,948,852.2
2013	1,958,395.5	2,036,816.6	2,103,598.1	2,057,687.6
2014	2,058,984.7	2,137,771.9	2,208,106.7	2,161,407.9
2015	2,156,469.1	2,237,413.3	2,312,692.5	2,270,356.6

Independent Variables

Total Investment (Billion Rp.)				
Year	Q1	Q2	Q3	Q4
2009	392,435	427,356	462,486	454,816
2010	482,144	513,652	562,692	524,871
2011	577,345	598,954	637,744	629,497
2012	729,076	774,225	762,874	755,490
2013	773,100	847,260	803,840	804,390
2014	873,540	940,150	928,570	910,180
2015	973,990	1,015,320	1,056,810	942,610

Total Financing (Billion Rp.)				
Year	Q1	Q2	Q3	Q4
2009	115992	122636	131241	137858
2010	145825	160675	178878	197118
2011	215426	236961	267935	298887
2012	309641	339203	376213	423404
2013	464825	501893	526343	544239
2014	548134	570711	584625	594197
2015	595348	609314		

Indonesia's Inflation Rate				
Year	Q1	Q2	Q3	Q4
2009	7.92	3.65	2.83	2.78
2010	3.43	5.05	5.8	6.96
2011	6.65	5.54	4.61	3.79
2012	3.97	4.53	4.31	4.30
2013	5.9	5.9	8.40	8.38
2014	7.32	6.7	4.53	8.36
2015	6.38	7.26	6.83	3.35

Indonesia's Export ($ Million)				
Year	Q1	Q2	Q3	Q4
2009	23029.16	27044.21	30070.50	36366.16
2010	35536.69	36984.49	38395.12	46862.81
2011	45387.48	53228.54	53609.71	51270.89
2012	48517.03	48444.20	33395.73	47034.90
2013	31901.70	45653.07	42878.35	48604.69
2014	44298.99	44526.50	43881.50	43586.50
2015	39052.50	39300.00	36781.00	35149.40

Indonesia's Import ($ Million)				
Year	Q1	Q2	Q3	Q4
2009	19093.74	22283.52	26907.54	28544.74
2010	29961.24	32976.14	34451.62	38274.29
2011	38794.79	44786.15	46451.77	47402.85
2012	45747.07	50702.14	45516.89	49724.92
2013	45650.61	48760.05	45938.81	46279.21
2014	43230.63	46747.70	44421.00	43804.10
2015	36731.10	37218.00	33976.70	34705.70

APPENDICES II: REGRESSION RESULTS

Normality Test

Dependent Variable: GDP
Method: Least Squares
Date: 03/05/17   Time: 20:56
Sample: 2009Q1 2015Q2
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1185651.	570208.3	-2.079329	0.0507
INV	1.417484	1.426700	0.993540	0.3323
TF	2.331453	0.497920	4.682385	0.0001
I	3196.782	40711.92	0.078522	0.9382
EX	2.408674	11.91473	0.202159	0.8418
IM	32.64229	13.43844	2.429024	0.0247

R-squared	0.885418	Mean dependent var	1551507.
Adjusted R-squared	0.856773	S.D. dependent var	707396.3
S.E. of regression	267716.9	Akaike info criterion	28.03242
Sum squared resid	1.43E+12	Schwarz criterion	28.32275
Log likelihood	-358.4215	Hannan-Quinn criter.	28.11603
F-statistic	30.90954	Durbin-Watson stat	1.187171
Prob(F-statistic)	0.000000		

Multicollinearity Test

Variance Inflation Factors
Date: 03/05/17   Time: 21:32
Sample: 2009Q1 2015Q2
Included observations: 26

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	3.25E+11	117.9476	NA
INV	2.035472	88.96675	1.305339
TF	0.247924	14.06482	2.810076
I	1.66E+09	20.52882	1.763737
EX	141.9607	91.81815	3.148593
IM	180.5916	109.7439	4.844310

Heteroscedasticity Test

Heteroskedasticity Test: Glejser

F-statistic	9.631395	Prob. F(5,20)	0.0001
Obs*R-squared	18.37055	Prob. Chi-Square(5)	0.0025
Scaled explained SS	16.43313	Prob. Chi-Square(5)	0.0057

The Healing Process of Heteroscedasticity (by changing linear model to log linear)

$$\log(GDP_t) = \beta_0 + \log(INV_t) + \log(TF_t) + \log(I_t) + \log(EX_t) + \log(IM_t) + \varepsilon$$

Dependent Variable: LOG(GDP)
Method: Least Squares
Date: 03/06/17   Time: 22:09
Sample: 2009Q1 2015Q2
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-7.292485	5.587912	-1.305047	0.2067
LOG(INV)	0.309376	0.465229	0.664997	0.5136
LOG(TF)	0.713619	0.178877	3.989444	0.0007
LOG(I)	-0.008378	0.203680	-0.041131	0.9676
LOG(EX)	0.062290	0.481123	0.129468	0.8983
LOG(IM)	0.737117	0.552327	1.334566	0.1970

R-squared	0.866166	Mean dependent var	14.09827
Adjusted R-squared	0.832708	S.D. dependent var	0.632806
S.E. of regression	0.258826	Akaike info criterion	0.333855
Sum squared resid	1.339821	Schwarz criterion	0.624185
Log likelihood	1.659882	Hannan-Quinn criter.	0.417460
F-statistic	25.88779	Durbin-Watson stat	1.019920
Prob(F-statistic)	0.000000		

Heteroskedasticity Test: Glejser

F-statistic	15.52470	Prob. F(5,20)	0.0000
Obs*R-squared	20.67341	Prob. Chi-Square(5)	0.0009
Scaled explained SS	21.14375	Prob. Chi-Square(5)	0.0008

Autocorrelation Test

Method: Least Squares
Date: 03/05/17   Time: 21:45
Sample: 2009Q1 2015Q2
Included observations: 26
White heteroskedasticity-consistent standard errors & covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1185651.	500083.3	-2.370907	0.0279
INV	1.417484	1.096760	1.292428	0.2109
TF	2.331453	0.543476	4.289893	0.0004
I	3196.782	49123.56	0.065076	0.9488
EX	2.408674	9.742256	0.247240	0.8072
IM	32.64229	6.502694	5.019810	0.0001

R-squared	0.885418	Mean dependent var	1551507.
Adjusted R-squared	0.856773	S.D. dependent var	707396.3
S.E. of regression	267716.9	Akaike info criterion	28.03242
Sum squared resid	1.43E+12	Schwarz criterion	28.32275
Log likelihood	-358.4215	Hannan-Quinn criter.	28.11603
F-statistic	30.90954	Durbin-Watson stat	1.187171
Prob(F-statistic)	0.000000	Wald F-statistic	72.00785
Prob(Wald F-statistic)	0.000000		

Breusch-Godfrey Serial Correlation LM Test:

F-statistic	1.872203	Prob. F(2,18)	0.1825
Obs*R-squared	4.477224	Prob. Chi-Square(2)	0.1066

Test Equation:
Dependent Variable: RESID
Method: Least Squares
Date: 03/06/17   Time: 22:42
Sample: 2009Q1 2015Q2
Included observations: 26
Presample missing value lagged residuals set to zero.

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-186240.7	573627.7	-0.324672	0.7492
INV	0.424168	1.388359	0.305517	0.7635
TF	-0.180848	0.489673	-0.369323	0.7162
I	35380.24	46681.54	0.757906	0.4583
EX	-4.460394	12.05698	-0.369943	0.7157
IM	2.329823	13.14701	0.177213	0.8613
RESID(-1)	0.464763	0.248870	1.867490	0.0782
RESID(-2)	0.006463	0.269667	0.023967	0.9811

R-squared	0.172201	Mean dependent var	1.49E-10
Adjusted R-squared	-0.149721	S.D. dependent var	239453.3
S.E. of regression	256753.9	Akaike info criterion	27.99728
Sum squared resid	1.19E+12	Schwarz criterion	28.38439
Log likelihood	-355.9647	Hannan-Quinn criter.	28.10876
F-statistic	0.534915	Durbin-Watson stat	1.999355

Prob(F-statistic)	0.796953	

Unit Root Test

GDP

Level

Null Hypothesis: GDP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.249361	0.6362
Test critical values:	1% level	-3.724070	
	5% level	-2.986225	
	10% level	-2.632604	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP)
Method: Least Squares
Date: 03/06/17   Time: 23:59
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP(-1)	-0.085149	0.068154	-1.249361	0.2241
C	199545.1	114117.0	1.748601	0.0937

R-squared	0.063552	Mean dependent var	69772.41
Adjusted R-squared	0.022837	S.D. dependent var	239043.1
S.E. of regression	236297.8	Akaike info criterion	27.66019
Sum squared resid	1.28E+12	Schwarz criterion	27.75770
Log likelihood	-343.7524	Hannan-Quinn criter.	27.68724
F-statistic	1.560904	Durbin-Watson stat	2.017139
Prob(F-statistic)	0.224098		

1st difference

Null Hypothesis: D(GDP) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.834718	0.0008
Test critical values:	1% level	-3.737853	
	5% level	-2.991878	
	10% level	-2.635542	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(GDP,2)
Method: Least Squares
Date: 03/07/17   Time: 00:01
Sample (adjusted): 2009Q3 2015Q2
Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	-1.029091	0.212854	-4.834718	0.0001
C	74176.00	52974.53	1.400220	0.1754

R-squared	0.515146	Mean dependent var		2852.842
Adjusted R-squared	0.493107	S.D. dependent var		350095.1
S.E. of regression	249255.1	Akaike info criterion		27.77000
Sum squared resid	1.37E+12	Schwarz criterion		27.86817
Log likelihood	-331.2400	Hannan-Quinn criter.		27.79604
F-statistic	23.37450	Durbin-Watson stat		2.004595
Prob(F-statistic)	0.000079			

Total Investment

Level

Null Hypothesis: INV has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.809730	0.0712
Test critical values:	1% level	-3.724070	
	5% level	-2.986225	
	10% level	-2.632604	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(INV)
Method: Least Squares
Date: 03/07/17   Time: 10:21
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
INV(-1)	-0.500151	0.178007	-2.809730	0.0099
C	176283.7	61331.84	2.874260	0.0086

R-squared	0.255533	Mean dependent var	5182.520

Adjusted R-squared	0.223165	S.D. dependent var	41407.94
S.E. of regression	36496.23	Akaike info criterion	23.92442
Sum squared resid	3.06E+10	Schwarz criterion	24.02193
Log likelihood	-297.0553	Hannan-Quinn criter.	23.95147
F-statistic	7.894583	Durbin-Watson stat	1.767305
Prob(F-statistic)	0.009945		

1st difference

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

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-3.247900	0.0327
Test critical values:	1% level	-3.831511	
	5% level	-3.029970	
	10% level	-2.655194	

*MacKinnon (1996) one-sided p-values.
Warning: Probabilities and critical values calculated for 20 observations
   and may not be accurate for a sample size of 19

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(INV,2)
Method: Least Squares
Date: 03/07/17   Time: 10:21
Sample (adjusted): 2010Q4 2015Q2
Included observations: 19 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INV(-1))	-2.333544	0.718478	-3.247900	0.0070
D(INV(-1),2)	1.145181	0.648778	1.765134	0.1030
D(INV(-2),2)	0.978770	0.586316	1.669355	0.1209
D(INV(-3),2)	0.687795	0.469691	1.464355	0.1688
D(INV(-4),2)	0.933074	0.357245	2.611858	0.0227
D(INV(-5),2)	0.633097	0.248328	2.549435	0.0255
C	948.2868	8207.386	0.115541	0.9099

R-squared	0.820269	Mean dependent var	-182.7895
Adjusted R-squared	0.730403	S.D. dependent var	68638.61
S.E. of regression	35639.03	Akaike info criterion	24.07758
Sum squared resid	1.52E+10	Schwarz criterion	24.42553
Log likelihood	-221.7370	Hannan-Quinn criter.	24.13647
F-statistic	9.127725	Durbin-Watson stat	1.823712
Prob(F-statistic)	0.000676		

Inflation

Level

Null Hypothesis: I has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.611837	0.1039
Test critical values:	1% level	-3.724070	
	5% level	-2.986225	
	10% level	-2.632604	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(I)
Method: Least Squares
Date: 03/07/17   Time: 10:29
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
I(-1)	-0.437914	0.167665	-2.611837	0.0156
C	2.390708	0.968985	2.467230	0.0215
R-squared	0.228749	Mean dependent var		-0.026400
Adjusted R-squared	0.195217	S.D. dependent var		1.600734
S.E. of regression	1.436014	Akaike info criterion		3.638238
Sum squared resid	47.42912	Schwarz criterion		3.735748
Log likelihood	-43.47797	Hannan-Quinn criter.		3.665283
F-statistic	6.821693	Durbin-Watson stat		1.493005
Prob(F-statistic)	0.015591			

1st difference

Null Hypothesis: D(I) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-6.312601	0.0000
Test critical values:	1% level	-3.737853	
	5% level	-2.991878	
	10% level	-2.635542	

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

Augmented Dickey-Fuller Test Equation

Dependent Variable: D(I,2)
Method: Least Squares
Date: 03/07/17   Time: 10:33
Sample (adjusted): 2009Q3 2015Q2
Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(I(-1))	-1.118534	0.177191	-6.312601	0.0000
C	0.142811	0.281884	0.506629	0.6175

R-squared	0.644295	Mean dependent var	0.214583
Adjusted R-squared	0.628126	S.D. dependent var	2.262688
S.E. of regression	1.379820	Akaike info criterion	3.561439
Sum squared resid	41.88588	Schwarz criterion	3.659610
Log likelihood	-40.73726	Hannan-Quinn criter.	3.587484
F-statistic	39.84893	Durbin-Watson stat	2.201939
Prob(F-statistic)	0.000002		

Export

Level

Null Hypothesis: EX has a unit root
Exogenous: Constant
Lag Length: 3 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.272552	0.1888
Test critical values:	1% level	-3.769597	
	5% level	-3.004861	
	10% level	-2.642242	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EX)
Method: Least Squares
Date: 03/07/17   Time: 10:36
Sample (adjusted): 2010Q1 2015Q2
Included observations: 22 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
EX(-1)	-0.449294	0.197705	-2.272552	0.0363
D(EX(-1))	-0.329953	0.216708	-1.522565	0.1463
D(EX(-2))	0.449481	0.208398	2.156835	0.0456
D(EX(-3))	0.264826	0.204397	1.295647	0.2124
C	19272.74	8620.951	2.235570	0.0391

R-squared	0.628000	Mean dependent var	133.3564
Adjusted R-squared	0.540471	S.D. dependent var	7117.207
S.E. of regression	4824.655	Akaike info criterion	19.99758

Sum squared resid	3.96E+08	Schwarz criterion	20.24555
Log likelihood	-214.9734	Hannan-Quinn criter.	20.05600
F-statistic	7.174733	Durbin-Watson stat	1.939903
Prob(F-statistic)	0.001418		

1st difference

Null Hypothesis: D(EX) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=5)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-9.618946	0.0000
Test critical values:	1% level	-3.737853	
	5% level	-2.991878	
	10% level	-2.635542	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EX,2)
Method: Least Squares
Date: 03/07/17   Time: 10:37
Sample (adjusted): 2009Q3 2015Q2
Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EX(-1))	-1.610589	0.167439	-9.618946	0.0000
C	918.3112	1148.410	0.799637	0.4325

R-squared	0.807901	Mean dependent var	-156.9813
Adjusted R-squared	0.799169	S.D. dependent var	12494.53
S.E. of regression	5599.320	Akaike info criterion	20.17833
Sum squared resid	6.90E+08	Schwarz criterion	20.27650
Log likelihood	-240.1400	Hannan-Quinn criter.	20.20438
F-statistic	92.52412	Durbin-Watson stat	1.546309
Prob(F-statistic)	0.000000		

Import

Level

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.911456	0.0582
Test critical values:	1% level	-3.724070	

| | | 5% level | -2.986225 |
| | | 10% level | -2.632604 |

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

Residual variance (no correction)	8204502.
HAC corrected variance (Bartlett kernel)	6432401.

Phillips-Perron Test Equation
Dependent Variable: D(IM)
Method: Least Squares
Date: 03/07/17   Time: 18:08
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IM(-1)	-0.188010	0.068251	-2.754674	0.0113
C	8269.300	2803.105	2.950050	0.0072

R-squared	0.248077	Mean dependent var	724.9704
Adjusted R-squared	0.215384	S.D. dependent var	3371.349
S.E. of regression	2986.291	Akaike info criterion	18.91807
Sum squared resid	2.05E+08	Schwarz criterion	19.01558
Log likelihood	-234.4759	Hannan-Quinn criter.	18.94512
F-statistic	7.588230	Durbin-Watson stat	2.727915
Prob(F-statistic)	0.011283		

1st difference

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-5.985644	0.0001
Test critical values:	1% level	-3.737853	
	5% level	-2.991878	
	10% level	-2.635542	

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

Residual variance (no correction)	10359416
HAC corrected variance (Bartlett kernel)	16869440

Phillips-Perron Test Equation
Dependent Variable: D(IM,2)
Method: Least Squares

Date: 03/07/17   Time: 18:09
Sample (adjusted): 2009Q3 2015Q2
Included observations: 24 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(IM(-1))	-1.255686	0.203563	-6.168528	0.0000
C	810.1711	702.3259	1.153554	0.2611

R-squared	0.633643	Mean dependent var		-112.6200
Adjusted R-squared	0.616991	S.D. dependent var		5431.967
S.E. of regression	3361.723	Akaike info criterion		19.15795
Sum squared resid	2.49E+08	Schwarz criterion		19.25612
Log likelihood	-227.8954	Hannan-Quinn criter.		19.18400
F-statistic	38.05073	Durbin-Watson stat		1.705587
Prob(F-statistic)	0.000003			

Total Financing

Level

Null Hypothesis: TF is stationary
Exogenous: Constant
Bandwidth: 3 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.737100
Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

*Kwiatkowski-Phillips-Schmidt-Shin (1992, Table 1)

Residual variance (no correction)	3.12E+10
HAC corrected variance (Bartlett kernel)	1.11E+11

KPSS Test Equation
Dependent Variable: TF
Method: Least Squares
Date: 03/07/17   Time: 18:10
Sample: 2009Q1 2015Q2
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	353750.8	35352.37	10.00642	0.0000

R-squared	0.000000	Mean dependent var		353750.8
Adjusted R-squared	0.000000	S.D. dependent var		180262.4
S.E. of regression	180262.4	Akaike info criterion		27.07992
Sum squared resid	8.12E+11	Schwarz criterion		27.12831

Log likelihood	-351.0389	Hannan-Quinn criter.	27.09385
Durbin-Watson stat	0.016528		

1st difference

Null Hypothesis: D(TF) is stationary
Exogenous: Constant
Bandwidth: 3 (Newey-West automatic) using Bartlett kernel

	LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic	0.176466

Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

*Kwiatkowski-Phillips-Schmidt-Shin (1992, Table 1)

Residual variance (no correction)	1.48E+08
HAC corrected variance (Bartlett kernel)	3.75E+08

KPSS Test Equation
Dependent Variable: D(TF)
Method: Least Squares
Date: 03/07/17   Time: 18:11
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	19732.88	2480.689	7.954597	0.0000

R-squared	0.000000	Mean dependent var	19732.88
Adjusted R-squared	0.000000	S.D. dependent var	12403.44
S.E. of regression	12403.44	Akaike info criterion	21.72851
Sum squared resid	3.69E+09	Schwarz criterion	21.77727
Log likelihood	-270.6064	Hannan-Quinn criter.	21.74204
Durbin-Watson stat	0.600460		

Error Correction Model (ECM)

Estimation of long term equation

Dependent Variable: GDP
Method: Least Squares
Date: 03/07/17   Time: 19:01
Sample: 2009Q1 2015Q2
Included observations: 26

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-1185651.	570208.3	-2.079329	0.0507
INV	1.417484	1.426700	0.993540	0.3323
TF	2.331453	0.497920	4.682385	0.0001
I	3196.782	40711.92	0.078522	0.9382
EX	2.408674	11.91473	0.202159	0.8418
IM	32.64229	13.43844	2.429024	0.0247

R-squared	0.885418	Mean dependent var	1551507.
Adjusted R-squared	0.856773	S.D. dependent var	707396.3
S.E. of regression	267716.9	Akaike info criterion	28.03242
Sum squared resid	1.43E+12	Schwarz criterion	28.32275
Log likelihood	-358.4215	Hannan-Quinn criter.	28.11603
F-statistic	30.90954	Durbin-Watson stat	1.187171
Prob(F-statistic)	0.000000		

Cointegration

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-3.380288	0.0217
Test critical values:	1% level	-3.724070	
	5% level	-2.986225	
	10% level	-2.632604	

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

Residual variance (no correction)	4.54E+10
HAC corrected variance (Bartlett kernel)	4.56E+10

Phillips-Perron Test Equation
Dependent Variable: D(RES)
Method: Least Squares
Date: 03/07/17   Time: 21:57

Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
RES(-1)	-0.629161	0.186231	-3.378387	0.0026
C	-11099.14	44455.34	-0.249669	0.8051

R-squared	0.331658	Mean dependent var		-8727.944
Adjusted R-squared	0.302599	S.D. dependent var		266133.0
S.E. of regression	222249.0	Akaike info criterion		27.53760
Sum squared resid	1.14E+12	Schwarz criterion		27.63511
Log likelihood	-342.2200	Hannan-Quinn criter.		27.56465
F-statistic	11.41350	Durbin-Watson stat		1.985436
Prob(F-statistic)	0.002591			

Short- term

Dependent Variable: D(GDP)
Method: Least Squares
Date: 03/07/17   Time: 22:14
Sample (adjusted): 2009Q2 2015Q2
Included observations: 25 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-41923.11	96975.78	-0.432305	0.6707
D(INV)	1.537387	1.292327	1.189627	0.2496
D(TF)	4.534822	4.267326	1.062685	0.3020
D(I)	-38710.91	31679.56	-1.221952	0.2375
D(EX)	-7.091226	9.833374	-0.721139	0.4801
D(IM)	21.22686	20.42142	1.039440	0.3124
RES(-1)	-0.649351	0.206111	-3.150485	0.0055

R-squared	0.391402	Mean dependent var		69772.41
Adjusted R-squared	0.188535	S.D. dependent var		239043.1
S.E. of regression	215333.2	Akaike info criterion		27.62926
Sum squared resid	8.35E+11	Schwarz criterion		27.97054
Log likelihood	-338.3657	Hannan-Quinn criter.		27.72391
F-statistic	1.929358	Durbin-Watson stat		1.613049
Prob(F-statistic)	0.130770			