APPENDIX 11 Vector Auto Regression (VAR) Analysis

Vector Autoregression Estimates
Date: 01/03/19 Time: 22:50
Sample (adjusted): 3 44
Included observations: 42 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	OIL_PRICE	GDP
OIL_PRICE(-1)	0.915001	0.009633
	(0.16316)	(0.00468)
	[5.60801]	[2.05938]
OIL_PRICE(-2)	-0.304470	-0.009965
	(0.15858)	(0.00455)
	[-1.92002]	[-2.19197]
GDP(-1)	2.500581	0.894340
	(5.46740)	(0.15674)
	[0.45736]	[5.70586]
GDP(-2)	4.820143	-0.136567
	(5.55274)	(0.15919)
	[0.86807]	[-0.85790]
C	-10.32203	1.390938
	(19.9588)	(0.57218)
	[-0.51717]	[2.43093]
R-squared	0.650025	0.697462
Adj. R-squared	0.612189	0.664755
Sum sq. resids	7972.069	6.551980
S.E. equation	14.67860	0.420809
F-statistic	17.18042	21.32467
Log likelihood	-169.7620	-20.57947
Akaike AIC	8.322002	1.218070
Schwarz SC	8.528867	1.424935
Mean dependent	81.83476	5.688571
S.D. dependent	23.57083	0.726782

Determinant resid covariance (dof adj.)	36.67535
Determinant resid covariance	28.46290
Log likelihood	-189.5115
Akaike information criterion	9.500546
Schwarz criterion	9.914277

Vector Autoregression Estimates
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	OIL_PRICE	BOP
OIL_PRICE(-1)	0.986484	-3.037496
	(0.16140)	(4.95122)
	[6.11208]	[-0.61348]
OIL_PRICE(-2)	-0.276693	-0.257622
	(0.16280)	(4.99417)
	[-1.69960]	[-0.05158]
BOP(-1)	-0.001744	0.011637
	(0.00538)	(0.16493)
	[-0.32433]	[0.07055]
BOP(-2)	-0.001764	6.39E-05
	(0.00536)	(0.16457)
	[-0.32878]	[0.00039]
C	23.46453	260.6202
	(9.81895)	(301.215)
	[2.38972]	[0.86523]
R-squared	0.620096	0.027716
Adj. R-squared	0.579026	-0.077396
Sum sq. resids	8653.804	8143851.
S.E. equation	15.29335	469.1525
F-statistic	15.09827	0.263683
Log likelihood	-171.4852	-315.2726
Akaike AIC	8.404057	15.25108
Schwarz SC	8.610922	15.45794
Mean dependent	81.83476	-10.54712
S.D. dependent	23.57083	451.9875

Determinant resid covariance (dof adj.)	51161722
Determinant resid covariance	39705441
Log likelihood	-486.6278
Akaike information criterion	23.64894
Schwarz criterion	24.06267

Vector Autoregression Estimates
Date: 01/03/19 Time: 22:51
Sample (adjusted): 3 44
Included observations: 42 after adjustments
Standard errors in ( ) & t-statistics in [ ]

	OIL_PRICE	INFLATION
OIL_PRICE(-1)	0.931077	0.000362
	(0.16217)	(0.00024)
	[5.74133]	[1.48779]
OIL_PRICE(-2)	-0.260078	-0.000347
	(0.15877)	(0.00024)
	[-1.63804]	[-1.45602]
INFLATION(-1)	-54.59717	0.993660
	(106.962)	(0.16033)
	[-0.51043]	[6.19775]
INFLATION(-2)	-57.18391	-0.233964
	(110.831)	(0.16612)
	[-0.51596]	[-1.40836]
C	34.85536	0.015461
	(12.7249)	(0.01907)
	[2.73915]	[0.81060]
R-squared	0.639390	0.641744
Adj. R-squared	0.600405	0.603014
Sum sq. resids	8214.306	0.018455
S.E. equation	14.89994	0.022334
F-statistic	16.40100	16.56955
Log likelihood	-170.3906	102.7364
Akaike AIC	8.351935	-4.654113
Schwarz SC	8.558801	-4.447247
Mean dependent	81.83476	0.071964
S.D. dependent	23.57083	0.035446

Determinant resid covariance (dof adj.)	0.109873
Determinant resid covariance	0.085270
Log likelihood	-67.49023
Akaike information criterion	3.690011
Schwarz criterion	4.103742