الملاحق

ملحق رقم (1) بيانات الدراسة

OBS	IM	POP	TAX	NI	EX	SO
1980	38652	18362	30.65	3583	0.01	1461
1981	43265	19079	43.47	4450.6	0.01	3335
1982	43652	19829	42.59	6275.3	0.01	1884
1983	51233	20210	67.43	8408.5	0.01	1806
1984	53214	20530	7742	10214.9	0.03	1097
1985	59233	20882	84.96	13561.9	0.03	3589
1986	59027	21085	51.75	17803.3	0.03	3277
1987	44333	21290	195.8	33167.5	0.05	1495
1988	88250	21724	188.16	424631	0.05	4425
1989	57657	22394	210.01	76615.1	0.05	1536
1990	21792	23079	192.09	1017720.7	0.05	1176
1991	74809	23780	400	178336.5	0.05	3581
1992	31195	24495	2025	396304.0	0.10	4042
1993	59632	25222	3646	886656.0	0.13	2386
1994	63251	25961	7426	1736976.0	0.22	3648
1995	89847	26688	6108	3828565.0	0.40	2480
1996	119834	27875.0	27676	956783.8	1.25	4089
1997	138400	28627.0	45021	1497138.9	1.58	2871
1998	131945	29496.0	60960	2027200.9	1.99	4143
1999	123283	30326.0	83175.1	2492202.3	2.52	2347
2000	207942	31081.0	72060	2921803.3	2.57	2491
2001	138096	31913.0	77103.5	3623801.3	2.59	4394
2002	199295	32769.0	97800	4243993.4	2.63	2825
2003	190497	33648.0	117709	4923829.7	2.61	4691
2004	255593	34512.0	1856657	6048014.1	2.58	2619
2005	373912	36198.0	257836.1	7486802.1	2.31	4327
2006	336512	37158.0	266526.3	8718697.7	2.17	4999
2007	359421	38143.0	289645.1	10686196.3	2.02	3869
2008	689140	39154.0	309125	12004251.6	2.09	4192

2009	651653	40522.0	3386454.4	12201509.0	2.31	2630
2010	944945	42247.0	359856.9	14391319.0	2.31	4605
2011	690199	42246.0	4932513	17027970.0	3.57	3604
2012	810826	34300	51369854	20027808	4.75	1882
2013	1027078	35220	61369856	22019850	4.75	6304

المصدر: بنك السودان المركزي ، والجهاز المركزي للإحصاء والادارة العامة للجمارك السودانية

ملحق رقم (2) نتائج اختبار سكون السلسلة :

إستقرار متغير واردات القمح:

Null Hypothesis: IM has a unit root
Exogenous: Constant
Lag Length: 7 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9989	1.519908	Augmented Dickey-Fuller test statistic	
	-3.711457	1% level	Test critical values:
	-2.981038	5% level	
	-2.629906	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IM)
Method: Least Squares
Date: 09/19/14 Time: 22:03
Sample (adjusted): 1988 2013
Included observations: 26 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1469	1.519908	0.567246	0.862162	IM(-1)
0.0677	-1.951528	0.640614	-1.250176	D(IM(-1))
0.3560	-0.948804	0.750022	-0.711624	D(IM(-2))
0.2345	-1.232492	0.922451	-1.136914	D(IM(-3))
0.3019	-1.064758	0.981324	-1.044873	D(IM(-4))
0.4957	-0.696254	0.969073	-0.674721	D(IM(-5))
0.2137	-1.291892	0.921516	-1.190499	D(IM(-6))
0.0065	-3.098254	0.681984	-2.112960	D(IM(-7))
0.6168	-0.509714	35891.08	-18294.19	C

37797.88	Mean dependent var	0.706768	R-squared
115410.3	S.D. dependent var	0.568776	Adjusted R-squared
25.57667	Akaike info criterion	75787.19	S.E. of regression
26.01217	Schwarz criterion	9.76E+10	Sum squared resid
25.70208	Hannan-Quinn criter.	-323.4967	Log likelihood
2.316599	Durbin-Watson stat	5.121816	F-statistic
		0.002281	Prob(F-statistic)

ملحق (3)إستقرار متغير واردات القمح:

Null Hypothesis: D(IM) has a unit root
Exogenous: Constant
Lag Length: 6 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.4126	-1.714373	Augmented Dickey-Fuller test statistic	
	-3.711457	1% level	Test critical values:
	-2.981038	5% level	
	-2.629906	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IM,2)
Method: Least Squares
Date: 09/19/14 Time: 22:10
Sample (adjusted): 1988 2013
Included observations: 26 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1036	-1.714373	0.954940	-1.637123	D(IM(-1))
0.7653	0.303132	1.029787	0.312161	D(IM(-1),2)
0.5665	0.584019	1.163610	0.679570	D(IM(-2),2)
0.5374	0.628689	1.375890	0.865007	D(IM(-3),2)
0.3955	0.870495	1.446876	1.259498	D(IM(-4),2)
0.1330	1.573597	1.267936	1.995220	D(IM(-5),2)
0.0168	2.636323	0.656821	1.731592	D(IM(-6),2)
0.1823	1.387129	19977.02	27710.70	C

8497.923	Mean dependent var	0.878122	R-squared
190790.4	S.D. dependent var	0.830726	Adjusted R-squared
25.62716	Akaike info criterion	78496.81	S.E. of regression
26.01427	Schwarz criterion	1.11E+11	Sum squared resid
25.73864	Hannan-Quinn criter.	-325.1531	Log likelihood
2.052412	Durbin-Watson stat	18.52704	F-statistic
		0.000001	Prob(F-statistic)

ملحق(4)إستقرار متغير واردات القمح:

Null Hypothesis: IM has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 7 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9990	0.596157	Augmented Dickey-Fuller test statistic	
	-4.356068	1% level	Test critical values:
	-3.595026	5% level	
	-3.233456	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IM)
Method: Least Squares
Date: 09/19/14 Time: 22:12
Sample (adjusted): 1988 2013
Included observations: 26 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.5594	0.596157	0.657496	0.391971	IM(-1)
0.2207	-1.274340	0.686808	-0.875227	D(IM(-1))
0.6740	-0.428450	0.785650	-0.336612	D(IM(-2))
0.5155	-0.664980	0.973997	-0.647688	D(IM(-3))
0.6173	-0.509596	1.035271	-0.527570	D(IM(-4))
0.8797	-0.153799	1.024148	-0.157513	D(IM(-5))
0.4209	-0.826097	0.951057	-0.785665	D(IM(-6))
0.0153	-2.713313	0.690657	-1.873968	D(IM(-7))
0.1853	-1.384039	59686.87	-82608.94	C
0.2014	1.332248	4380.755	5836.252	@TREND(1980)

37797.88	Mean dependent var	0.736048	R-squared
115410.3	S.D. dependent var	0.587575	Adjusted R-squared
25.54840	Akaike info criterion	74116.83	S.E. of regression
26.03228	Schwarz criterion	8.79E+10	Sum squared resid
25.68774	Hannan-Quinn criter.	-322.1291	Log likelihood
2.297202	Durbin-Watson stat	4.957455	F-statistic
		0.002711	Prob(F-statistic)

ملحق رقم(5)إستقرار متغير واردات القمح:

Null Hypothesis: IM has a unit root
Exogenous: Constant
Bandwidth: 11 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
1.0000	2.464041	Phillips-Perron test statistic		
	-3.646342		1% level	Test critical values:
	-2.954021		5% level	
	-2.615817		10% level	

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

1.01E+10	Residual variance (no correction)
3.97E+09	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(IM)
Method: Least Squares
Date: 09/19/14 Time: 22:13
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.4060	0.842472	0.072467	0.061051	IM(-1)
0.4956	0.689593	24036.74	16575.58	C

29952.30	Mean dependent var	0.022383	R-squared
103194.8	S.D. dependent var	-0.009153	Adjusted R-squared
25.99443	Akaike info criterion	103666.0	S.E. of regression
26.08513	Schwarz criterion	3.33E+11	Sum squared resid
26.02494	Hannan-Quinn criter.	-426.9081	Log likelihood
2.900719	Durbin-Watson stat	0.709759	F-statistic
		0.405977	Prob(F-statistic)

ملحق رقم(6)إستقرار متغير واردات القمح:

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

Prob.*	Adj. t-Stat		
0.0000	-8.032314	Phillips-Perron test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

8.82E+09	Residual variance (no correction)
9.89E+09	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(IM,2)
Method: Least Squares
Date: 09/19/14 Time: 22:14
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-8.175612	0.175620	-1.435798	D(IM(-1))
0.0264	2.336248	17660.86	41260.15	C

6613.719	Mean dependent var	0.690213	R-squared
171418.5	S.D. dependent var	0.679886	Adjusted R-squared
25.86299	Akaike info criterion	96986.14	S.E. of regression
25.95459	Schwarz criterion	2.82E+11	Sum squared resid
25.89335	Hannan-Quinn criter.	-411.8078	Log likelihood
1.830352	Durbin-Watson stat	66.84063	F-statistic
		0.000000	Prob(F-statistic)

ملحق رقم(7)إستقرار متغير واردات القمح:

Null Hypothesis: IM has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.9869	-0.311905	Phillips-Perron test statistic		
	-4.262735		1% level	Test critical values:
	-3.552973		5% level	
	-3.209642		10% level	

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

9.01E+09	Residual variance (no correction)
5.16E+09	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(IM)
Method: Least Squares
Date: 09/19/14 Time: 22:17
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.3028	-1.048361	0.120930	-0.126778	IM(-1)
0.2705	-1.122648	39536.50	-44385.58	C
0.0672	1.899300	3162.645	6006.814	@TREND(1980)

29952.30	Mean dependent var	0.127318	R-squared
103194.8	S.D. dependent var	0.069140	Adjusted R-squared
25.94149	Akaike info criterion	99563.50	S.E. of regression
26.07753	Schwarz criterion	2.97E+11	Sum squared resid
25.98726	Hannan-Quinn criter.	-425.0345	Log likelihood
2.707636	Durbin-Watson stat	2.188399	F-statistic
		0.129669	Prob(F-statistic)

ملحق رقم (8) استقرار متغير السكان:

Null Hypothesis: POP has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.6988	-1.113242	Augmented Dickey-Fuller test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(POP)
Method: Least Squares
Date: 09/19/14 Time: 22:21
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.2742	-1.113242	0.035818	-0.039875	POP(-1)
0.1249	1.577102	1036.014	1633.899	C

510.8485	Mean dependent var	0.038441	R-squared
1359.905	S.D. dependent var	0.007423	Adjusted R-squared
17.31946	Akaike info criterion	1354.849	S.E. of regression
17.41016	Schwarz criterion	56904053	Sum squared resid
17.34998	Hannan-Quinn criter.	-283.7711	Log likelihood
2.132895	Durbin-Watson stat	1.239308	F-statistic
		0.274162	Prob(F-statistic)

ملحق رقم (9) استقرار متغير السكان:

Null Hypothesis: D(POP) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0000	-5.862752	Augmented Dickey-Fuller test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(POP,2)
Method: Least Squares
Date: 09/19/14 Time: 22:27
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.862752	0.182339	-1.069006	D(POP(-1))
0.0499	2.042900	263.7308	538.7756	C

6.343750	Mean dependent var	0.533958	R-squared
2018.343	S.D. dependent var	0.518423	Adjusted R-squared
17.38771	Akaike info criterion	1400.644	S.E. of regression
17.47932	Schwarz criterion	58854139	Sum squared resid
17.41808	Hannan-Quinn criter.	-276.2034	Log likelihood
2.008125	Durbin-Watson stat	34.37186	F-statistic
		0.000002	Prob(F-statistic)

ملحق رقم (10) استقرار متغير السكان:

Null Hypothesis: POP has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.7146	-1.730886	Augmented Dickey-Fuller test statistic	
	-4.262735	1% level	Test critical values:
	-3.552973	5% level	
	-3.209642	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(POP)
Method: Least Squares
Date: 09/19/14 Time: 22:35
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0937	-1.730886	0.145590	-0.252000	POP(-1)
0.0516	2.027712	2484.948	5038.758	C
0.1437	1.501327	100.6782	151.1509	@TREND(1980)

510.8485	Mean dependent var	0.105637	R-squared
1359.905	S.D. dependent var	0.046013	Adjusted R-squared
17.30762	Akaike info criterion	1328.250	S.E. of regression
17.44367	Schwarz criterion	52927468	Sum squared resid
17.35340	Hannan-Quinn criter.	-282.5757	Log likelihood
1.856365	Durbin-Watson stat	1.771710	F-statistic
		0.187374	Prob(F-statistic)

ملحق رقم (11) استقرار متغير السكان:

Null Hypothesis: POP has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
0.6984	-1.114126	Phillips-Perron test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

1724365.	Residual variance (no correction)
1473951.	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(POP)
Method: Least Squares
Date: 09/19/14 Time: 22:37
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.2742	-1.113242	0.035818	-0.039875	POP(-1)
0.1249	1.577102	1036.014	1633.899	C

510.8485	Mean dependent var	0.038441	R-squared
1359.905	S.D. dependent var	0.007423	Adjusted R-squared
17.31946	Akaike info criterion	1354.849	S.E. of regression
17.41016	Schwarz criterion	56904053	Sum squared resid
17.34998	Hannan-Quinn criter.	-283.7711	Log likelihood
2.132895	Durbin-Watson stat	1.239308	F-statistic
		0.274162	Prob(F-statistic)

ملحق رقم (12) استقرار متغير السكان:

Null Hypothesis: D(POP) has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
0.0000	-5.872341	Phillips-Perron test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

1839192.	Residual variance (no correction)
1727214.	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(POP,2)
Method: Least Squares
Date: 09/19/14 Time: 22:40
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.862752	0.182339	-1.069006	D(POP(-1))
0.0499	2.042900	263.7308	538.7756	C

6.343750	Mean dependent var	0.533958	R-squared
2018.343	S.D. dependent var	0.518423	Adjusted R-squared
17.38771	Akaike info criterion	1400.644	S.E. of regression
17.47932	Schwarz criterion	58854139	Sum squared resid
17.41808	Hannan-Quinn criter.	-276.2034	Log likelihood
2.008125	Durbin-Watson stat	34.37186	F-statistic
		0.000002	Prob(F-statistic)

ملحق رقم (13) استقرار متغير السكان:

Null Hypothesis: POP has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.7146	-1.730886	Phillips-Perron test statistic		
	-4.262735		1% level	Test critical values:
	-3.552973		5% level	
	-3.209642		10% level	

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

1603863.	Residual variance (no correction)
1603863.	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(POP)
Method: Least Squares
Date: 09/19/14 Time: 22:41
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0937	-1.730886	0.145590	-0.252000	POP(-1)
0.0516	2.027712	2484.948	5038.758	C
0.1437	1.501327	100.6782	151.1509	@TREND(1980)

510.8485	Mean dependent var	0.105637	R-squared
1359.905	S.D. dependent var	0.046013	Adjusted R-squared
17.30762	Akaike info criterion	1328.250	S.E. of regression
17.44367	Schwarz criterion	52927468	Sum squared resid
17.35340	Hannan-Quinn criter.	-282.5757	Log likelihood
1.856365	Durbin-Watson stat	1.771710	F-statistic
		0.187374	Prob(F-statistic)

ملحق رقم (14) استقرار متغير الضرائب الجمركية

Null Hypothesis: TAX has a unit root
Exogenous: Constant
Lag Length: 5 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
1.0000	8.171787	Augmented Dickey-Fuller test statistic	
	-3.689194	1% level	Test critical values:
	-2.971853	5% level	
	-2.625121	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TAX)
Method: Least Squares
Date: 09/19/14 Time: 23:03
Sample (adjusted): 1986 2013
Included observations: 28 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	8.171787	20.34978	166.2941	TAX(-1)
0.0000	-8.171625	20.42871	-166.9357	D(TAX(-1))
0.0000	-8.164718	20.43909	-166.8794	D(TAX(-2))
0.0004	-4.213666	72.29238	-304.6160	D(TAX(-3))
0.1053	-1.692882	75.07472	-127.0927	D(TAX(-4))
0.0000	-5.954653	79.95819	-476.1233	D(TAX(-5))
0.7574	-0.313009	1248593.	-390821.4	C

2191778.	Mean dependent var	0.773117	R-squared
9363609.	S.D. dependent var	0.708294	Adjusted R-squared
33.92287	Akaike info criterion	5057269.	S.E. of regression
34.25592	Schwarz criterion	5.37E+14	Sum squared resid
34.02469	Hannan-Quinn criter.	-467.9202	Log likelihood
1.720995	Durbin-Watson stat	11.92649	F-statistic
		0.000008	Prob(F-statistic)

ملحق رقم (15) استقرار متغير الضرائب الجمركية

Null Hypothesis: D(TAX) has a unit root
Exogenous: Constant
Lag Length: 8 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9406	-0.084200	Augmented Dickey-Fuller test statistic	
	-3.737853	1% level	Test critical values:
	-2.991878	5% level	
	-2.635542	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TAX,2)
Method: Least Squares
Date: 09/19/14 Time: 23:03
Sample (adjusted): 1990 2013
Included observations: 24 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.9341	-0.084200	190.2207	-16.01650	D(TAX(-1))
0.9406	0.075811	190.2857	14.42569	D(TAX(-1),2)
0.9358	0.081989	190.6382	15.63032	D(TAX(-2),2)
0.2346	1.242026	284.0238	352.7651	D(TAX(-3),2)
0.2368	1.235976	255.2385	315.4688	D(TAX(-4),2)
0.8350	-0.212177	218.1245	-46.28092	D(TAX(-5),2)
0.5334	0.638573	227.1024	145.0215	D(TAX(-6),2)
0.0192	2.646304	305.7612	809.1371	D(TAX(-7),2)
0.0127	2.856131	271.9105	776.6119	D(TAX(-8),2)
0.1955	-1.359435	1360931.	-1850096.	C

416665.8	Mean dependent var	0.937648	R-squared
14228242	S.D. dependent var	0.897565	Adjusted R-squared
33.79517	Akaike info criterion	4553823.	S.E. of regression
34.28602	Schwarz criterion	2.90E+14	Sum squared resid
33.92539	Hannan-Quinn criter.	-395.5420	Log likelihood
1.641365	Durbin-Watson stat	23.39244	F-statistic
		0.000001	Prob(F-statistic)

ملحق رقم (16) استقرار متغير الضرائب الجمركية

Null Hypothesis: TAX has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 7 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9938	-0.005936	Augmented Dickey-Fuller test statistic	
	-4.356068	1% level	Test critical values:
	-3.595026	5% level	
	-3.233456	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TAX)
Method: Least Squares
Date: 09/19/14 Time: 23:05
Sample (adjusted): 1988 2013
Included observations: 26 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.9953	-0.005936	87.01143	-0.516540	TAX(-1)
0.9987	-0.001594	87.06946	-0.138774	D(TAX(-1))
0.9924	0.009658	87.41447	0.844262	D(TAX(-2))
0.4113	0.843615	217.4038	183.4051	D(TAX(-3))
0.9577	0.053931	104.8432	5.654303	D(TAX(-4))
0.5170	-0.662679	175.4123	-116.2420	D(TAX(-5))
0.2845	1.107325	130.9285	144.9804	D(TAX(-6))
0.0413	2.218645	277.8442	616.4376	D(TAX(-7))
0.1068	1.708777	5026240.	8588721.	C
0.0582	-2.039848	350732.1	-715440.1	@TREND(1980)

2360372.	Mean dependent var	0.840876	R-squared
9709660.	S.D. dependent var	0.751368	Adjusted R-squared
33.90708	Akaike info criterion	4841526.	S.E. of regression
34.39096	Schwarz criterion	3.75E+14	Sum squared resid
34.04642	Hannan-Quinn criter.	-430.7921	Log likelihood
2.082014	Durbin-Watson stat	9.394483	F-statistic
		0.000070	Prob(F-statistic)

ملحق رقم (17) استقرار متغير الضرائب الجمركية

Null Hypothesis: TAX has a unit root
Exogenous: Constant
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
0.9911	0.734007	Phillips-Perron test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

7.11E+13	Residual variance (no correction)
7.11E+13	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(TAX)
Method: Least Squares
Date: 09/19/14 Time: 23:06
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.4685	0.734007	0.126258	0.092674	TAX(-1)
0.3238	1.002700	1565353.	1569580.	C

1859692.	Mean dependent var	0.017083	R-squared
8637968.	S.D. dependent var	-0.014624	Adjusted R-squared
34.85444	Akaike info criterion	8700901.	S.E. of regression
34.94514	Schwarz criterion	2.35E+15	Sum squared resid
34.88496	Hannan-Quinn criter.	-573.0983	Log likelihood
2.174639	Durbin-Watson stat	0.538767	F-statistic
		0.468460	Prob(F-statistic)

ملحق رقم (18) استقرار متغير الضرائب الجمركية

Null Hypothesis: D(TAX) has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
0.0001	-5.374602	Phillips-Perron test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

7.45E+13	Residual variance (no correction)
8.23E+13	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(TAX,2)
Method: Least Squares
Date: 09/19/14 Time: 23:08
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.348768	0.185097	-0.990041	D(TAX(-1))
0.2449	1.185979	1603585.	1901819.	C

312499.6	Mean dependent var	0.488136	R-squared
12256963	S.D. dependent var	0.471074	Adjusted R-squared
34.90464	Akaike info criterion	8914159.	S.E. of regression
34.99625	Schwarz criterion	2.38E+15	Sum squared resid
34.93501	Hannan-Quinn criter.	-556.4743	Log likelihood
1.977457	Durbin-Watson stat	28.60932	F-statistic
		0.000009	Prob(F-statistic)

ملحق رقم (19) استقرار متغير الضرائب الجمركية

Null Hypothesis: TAX has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.9937	-0.049229	Phillips-Perron test statistic		
	-4.262735		1% level	Test critical values:
	-3.552973		5% level	
	-3.209642		10% level	

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

6.45E+13	Residual variance (no correction)
6.45E+13	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(TAX)
Method: Least Squares
Date: 09/19/14 Time: 23:09
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.9611	-0.049229	0.134785	-0.006635	TAX(-1)
0.3151	-1.021635	3104330.	-3171492.	C
0.0903	1.750033	169810.4	297173.8	@TREND(1980)

1859692.	Mean dependent var	0.108131	R-squared
8637968.	S.D. dependent var	0.048673	Adjusted R-squared
34.81784	Akaike info criterion	8425127.	S.E. of regression
34.95389	Schwarz criterion	2.13E+15	Sum squared resid
34.86362	Hannan-Quinn criter.	-571.4944	Log likelihood
2.172771	Durbin-Watson stat	1.818615	F-statistic
		0.179687	Prob(F-statistic)

ملحق رقم (20) اسقرار متغير الدخل القومي:

Null Hypothesis: NI has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
1.0000	3.453155	Augmented Dickey-Fuller test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NI)
Method: Least Squares
Date: 09/19/14 Time: 23:11
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0016	3.453155	0.034708	0.119852	NI(-1)
0.4733	0.725942	237998.8	172773.3	C

667159.6	Mean dependent var	0.277798	R-squared
1264921.	S.D. dependent var	0.254501	Adjusted R-squared
30.70391	Akaike info criterion	1092161.	S.E. of regression
30.79460	Schwarz criterion	3.70E+13	Sum squared resid
30.73442	Hannan-Quinn criter.	-504.6145	Log likelihood
2.618227	Durbin-Watson stat	11.92428	F-statistic
		0.001624	Prob(F-statistic)

ملحق رقم (21) اسقرار متغير الدخل القومي:

Null Hypothesis: D(NI) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0007	-4.675471	Augmented Dickey-Fuller test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NI,2)
Method: Least Squares
Date: 09/19/14 Time: 23:13
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0001	-4.675471	0.183193	-0.856515	D(NI(-1))
0.0257	2.347411	254831.5	598194.3	C

62224.20	Mean dependent var	0.421520	R-squared
1665203.	S.D. dependent var	0.402237	Adjusted R-squared
31.03469	Akaike info criterion	1287454.	S.E. of regression
31.12630	Schwarz criterion	4.97E+13	Sum squared resid
31.06506	Hannan-Quinn criter.	-494.5551	Log likelihood
2.046575	Durbin-Watson stat	21.86003	F-statistic
		0.000058	Prob(F-statistic)

ملحق رقم (22) اسقرار متغير الدخل القومي:

Null Hypothesis: NI has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9994	0.700711	Augmented Dickey-Fuller test statistic	
	-4.262735	1% level	Test critical values:
	-3.552973	5% level	
	-3.209642	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NI)
Method: Least Squares
Date: 09/19/14 Time: 23:17
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.4889	0.700711	0.066077	0.046301	NI(-1)
0.4481	-0.768721	475626.5	-365623.9	C
0.2026	1.302658	38012.51	49517.28	@TREND(1980)

667159.6	Mean dependent var	0.316462	R-squared
1264921.	S.D. dependent var	0.270892	Adjusted R-squared
30.70949	Akaike info criterion	1080088.	S.E. of regression
30.84554	Schwarz criterion	3.50E+13	Sum squared resid
30.75527	Hannan-Quinn criter.	-503.7066	Log likelihood
2.571359	Durbin-Watson stat	6.944634	F-statistic
		0.003322	Prob(F-statistic)

ملحق رقم (23) اسقرار متغير الدخل القومي:

Null Hypothesis: NI has a unit root
Exogenous: Constant
Bandwidth: 12 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
1.0000	8.414168	Phillips-Perron test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

1.12E+12	Residual variance (no correction)
2.39E+11	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(NI)
Method: Least Squares
Date: 09/19/14 Time: 23:20
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0016	3.453155	0.034708	0.119852	NI(-1)
0.4733	0.725942	237998.8	172773.3	C

667159.6	Mean dependent var	0.277798	R-squared
1264921.	S.D. dependent var	0.254501	Adjusted R-squared
30.70391	Akaike info criterion	1092161.	S.E. of regression
30.79460	Schwarz criterion	3.70E+13	Sum squared resid
30.73442	Hannan-Quinn criter.	-504.6145	Log likelihood
2.618227	Durbin-Watson stat	11.92428	F-statistic
		0.001624	Prob(F-statistic)

ملحق رقم (24) اسقرار متغير الدخل القومي:

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

Prob.*	Adj. t-Stat		
0.0005	-4.783929	Phillips-Perron test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

1.55E+12	Residual variance (no correction)
1.86E+12	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(NI,2)
Method: Least Squares
Date: 09/19/14 Time: 23:21
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0001	-4.675471	0.183193	-0.856515	D(NI(-1))
0.0257	2.347411	254831.5	598194.3	C

62224.20	Mean dependent var	0.421520	R-squared
1665203.	S.D. dependent var	0.402237	Adjusted R-squared
31.03469	Akaike info criterion	1287454.	S.E. of regression
31.12630	Schwarz criterion	4.97E+13	Sum squared resid
31.06506	Hannan-Quinn criter.	-494.5551	Log likelihood
2.046575	Durbin-Watson stat	21.86003	F-statistic
		0.000058	Prob(F-statistic)

ملحق رقم (25) اسقرار متغير الدخل القومي:

Null Hypothesis: NI has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 8 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
1.0000	2.196257	Phillips-Perron test statistic	
	-4.262735	1% level	Test critical values:
	-3.552973	5% level	
	-3.209642	10% level	

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

1.06E+12	Residual variance (no correction)
4.00E+11	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(NI)
Method: Least Squares
Date: 09/19/14 Time: 23:22
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.4889	0.700711	0.066077	0.046301	NI(-1)
0.4481	-0.768721	475626.5	-365623.9	C
0.2026	1.302658	38012.51	49517.28	@TREND(1980)

667159.6	Mean dependent var	0.316462	R-squared
1264921.	S.D. dependent var	0.270892	Adjusted R-squared
30.70949	Akaike info criterion	1080088.	S.E. of regression
30.84554	Schwarz criterion	3.50E+13	Sum squared resid
30.75527	Hannan-Quinn criter.	-503.7066	Log likelihood
2.571359	Durbin-Watson stat	6.944634	F-statistic
		0.003322	Prob(F-statistic)

ملحق رقم (26) استقرار متغير الضرائب الجمركية

-3.6576	1%	Critical Value*	-3.096042	ADF Test Statistic
-2.9591	5%	Critical Value		
-2.6181	10%	Critical Value		

*MacKinnon critical values for rejection of hypothesis of a unit root.

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(TAX,2)
Method: Least Squares
Date: 08/27/14 Time: 10:08
Sample(adjusted): 1983 2013
Included observations: 31 after adjusting endpoints

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0044	-3.096042	0.265890	-0.823208	D(TAX(-1))
0.3765	-0.898601	0.188756	-0.169616	D(TAX(-1),2)
0.3233	1.005433	1688724.	1697898.	C

322580.7	Mean dependent var	0.503253	R-squared
12459438	S.D. dependent var	0.467771	Adjusted R-squared
34.97494	Akaike info criterion	9089660.	S.E. of regression
35.11371	Schwarz criterion	2.31E+15	Sum squared resid
14.18337	F-statistic	-539.1116	Log likelihood
0.000056	Prob(F-statistic)	2.001309	Durbin-Watson stat

ملحق رقم (27)استقرار سعر الصرف

Null Hypothesis: EX has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.9870	0.582578	Augmented Dickey-Fuller test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EX)
Method: Least Squares
Date: 09/19/14 Time: 23:25
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.5644	0.582578	0.057767	0.033654	EX(-1)
0.3483	0.952273	0.105771	0.100722	C

0.143636	Mean dependent var	0.010830	R-squared
0.431508	S.D. dependent var	-0.021079	Adjusted R-squared
1.236489	Akaike info criterion	0.436032	S.E. of regression
1.327186	Schwarz criterion	5.893836	Sum squared resid
1.267006	Hannan-Quinn criter.	-18.40206	Log likelihood
1.981653	Durbin-Watson stat	0.339397	F-statistic
		0.564391	Prob(F-statistic)

ملحق رقم (28)استقرار سعر الصرف

Null Hypothesis: D(EX) has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0002	-5.214956	Augmented Dickey-Fuller test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EX,2)
Method: Least Squares
Date: 09/19/14 Time: 23:26
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.214956	0.182355	-0.950971	D(EX(-1))
0.1003	1.695884	0.083061	0.140863	C

0.000000	Mean dependent var	0.475486	R-squared
0.603538	S.D. dependent var	0.458002	Adjusted R-squared
1.275953	Akaike info criterion	0.444328	S.E. of regression
1.367562	Schwarz criterion	5.922816	Sum squared resid
1.306319	Hannan-Quinn criter.	-18.41525	Log likelihood
2.007031	Durbin-Watson stat	27.19577	F-statistic
		0.000013	Prob(F-statistic)

ملحق رقم (29)استقرار سعر الصرف

Null Hypothesis: EX has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.7807	-1.576436	Augmented Dickey-Fuller test statistic	
	-4.262735	1% level	Test critical values:
	-3.552973	5% level	
	-3.209642	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(EX)
Method: Least Squares
Date: 09/19/14 Time: 23:27
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1254	-1.576436	0.119504	-0.188390	EX(-1)
0.2601	-1.147955	0.176360	-0.202453	C
0.0451	2.091438	0.016491	0.034489	@TREND(1980)

0.143636	Mean dependent var	0.136702	R-squared
0.431508	S.D. dependent var	0.079149	Adjusted R-squared
1.160988	Akaike info criterion	0.414079	S.E. of regression
1.297035	Schwarz criterion	5.143844	Sum squared resid
1.206764	Hannan-Quinn criter.	-16.15631	Log likelihood
1.822916	Durbin-Watson stat	2.375226	F-statistic
		0.110258	Prob(F-statistic)

ملحق رقم (30)استقرار سعر الصرف

Null Hypothesis: EX has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.9847	0.515031	Phillips-Perron test statistic		
	-3.646342		1% level	Test critical values:
	-2.954021		5% level	
	-2.615817		10% level	

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

0.178601	Residual variance (no correction)
0.188844	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(EX)
Method: Least Squares
Date: 09/19/14 Time: 23:28
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.5644	0.582578	0.057767	0.033654	EX(-1)
0.3483	0.952273	0.105771	0.100722	C

0.143636	Mean dependent var	0.010830	R-squared
0.431508	S.D. dependent var	-0.021079	Adjusted R-squared
1.236489	Akaike info criterion	0.436032	S.E. of regression
1.327186	Schwarz criterion	5.893836	Sum squared resid
1.267006	Hannan-Quinn criter.	-18.40206	Log likelihood
1.981653	Durbin-Watson stat	0.339397	F-statistic
		0.564391	Prob(F-statistic)

ملحق رقم (31)استقرار سعر الصرف

Null Hypothesis: D(EX) has a unit root
Exogenous: Constant
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.0002	-5.227439	Phillips-Perron test statistic		
	-3.653730		1% level	Test critical values:
	-2.957110		5% level	
	-2.617434		10% level	

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

0.185088	Residual variance (no correction)
0.194560	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(EX,2)
Method: Least Squares
Date: 09/19/14 Time: 23:29
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.214956	0.182355	-0.950971	D(EX(-1))
0.1003	1.695884	0.083061	0.140863	C

0.000000	Mean dependent var	0.475486	R-squared
0.603538	S.D. dependent var	0.458002	Adjusted R-squared
1.275953	Akaike info criterion	0.444328	S.E. of regression
1.367562	Schwarz criterion	5.922816	Sum squared resid
1.306319	Hannan-Quinn criter.	-18.41525	Log likelihood
2.007031	Durbin-Watson stat	27.19577	F-statistic
		0.000013	Prob(F-statistic)

ملحق رقم (32)استقرار سعر الصرف

Null Hypothesis: EX has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 2 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat			
0.6981	-1.766199	Phillips-Perron test statistic		
	-4.262735		1% level	Test critical values:
	-3.552973		5% level	
	-3.209642		10% level	

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

0.155874	Residual variance (no correction)
0.184477	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(EX)
Method: Least Squares
Date: 09/19/14 Time: 23:30
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1254	-1.576436	0.119504	-0.188390	EX(-1)
0.2601	-1.147955	0.176360	-0.202453	C
0.0451	2.091438	0.016491	0.034489	@TREND(1980)

0.143636	Mean dependent var	0.136702	R-squared
0.431508	S.D. dependent var	0.079149	Adjusted R-squared
1.160988	Akaike info criterion	0.414079	S.E. of regression
1.297035	Schwarz criterion	5.143844	Sum squared resid
1.206764	Hannan-Quinn criter.	-16.15631	Log likelihood
1.822916	Durbin-Watson stat	2.375226	F-statistic
		0.110258	Prob(F-statistic)

ملحق رقم(33) نتائج إستقرار متغير البدائل المحلية (الذرة)

Null Hypothesis: SO has a unit root
Exogenous: Constant
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0000	-5.705920	Augmented Dickey-Fuller test statistic	
	-3.646342	1% level	Test critical values:
	-2.954021	5% level	
	-2.615817	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(SO)
Method: Least Squares
Date: 09/19/14 Time: 23:36
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.705920	0.174624	-0.996392	SO(-1)
0.0000	5.452938	571.0941	3114.141	C

64.93939	Mean dependent var	0.512253	R-squared
1630.737	S.D. dependent var	0.496519	Adjusted R-squared
17.00393	Akaike info criterion	1157.112	S.E. of regression
17.09463	Schwarz criterion	41506161	Sum squared resid
17.03445	Hannan-Quinn criter.	-278.5649	Log likelihood
1.977047	Durbin-Watson stat	32.55752	F-statistic
		0.000003	Prob(F-statistic)

ملحق رقم(34) نتائج إستقرار متغير البدائل المحلية (الذرة)

Null Hypothesis: D(SO) has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0000	-7.968054	Augmented Dickey-Fuller test statistic	
	-3.661661	1% level	Test critical values:
	-2.960411	5% level	
	-2.619160	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(SO,2)
Method: Least Squares
Date: 09/19/14 Time: 23:38
Sample (adjusted): 1983 2013
Included observations: 31 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-7.968054	0.290231	-2.312572	D(SO(-1))
0.0059	2.981508	0.164535	0.490563	D(SO(-1),2)
0.8246	0.223693	220.6082	49.34848	C

102.3548	Mean dependent var	0.827931	R-squared
2858.158	S.D. dependent var	0.815640	Adjusted R-squared
17.15464	Akaike info criterion	1227.211	S.E. of regression
17.29341	Schwarz criterion	42169292	Sum squared resid
17.19988	Hannan-Quinn criter.	-262.8969	Log likelihood
2.259163	Durbin-Watson stat	67.36273	F-statistic
		0.000000	Prob(F-statistic)

ملحق رقم(35) نتائج إستقرار متغير البدائل المحلية (الذرة)

Null Hypothesis: SO has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 0 (Automatic - based on SIC, maxlag=8)

Prob.*	t-Statistic		
0.0000	-7.008324	Augmented Dickey-Fuller test statistic	
	-4.262735	1% level	Test critical values:
	-3.552973	5% level	
	-3.209642	10% level	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(SO)
Method: Least Squares
Date: 09/19/14 Time: 23:39
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-7.008324	0.176228	-1.235062	SO(-1)
0.0000	5.299247	524.1710	2777.711	C
0.0063	2.939518	21.34836	62.75390	@TREND(1980)

64.93939	Mean dependent var	0.621322	R-squared
1630.737	S.D. dependent var	0.596077	Adjusted R-squared
16.81143	Akaike info criterion	1036.414	S.E. of regression
16.94748	Schwarz criterion	32224641	Sum squared resid
16.85721	Hannan-Quinn criter.	-274.3886	Log likelihood
2.005230	Durbin-Watson stat	24.61147	F-statistic
		0.000000	Prob(F-statistic)

ملحق رقم(36) نتائج إستقرار متغير البدائل المحلية (الذرة)

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

Prob.*	Adj. t-Stat			
0.0000	-5.721792	Phillips-Perron test statistic		
	-3.646342		1% level	Test critical values:
	-2.954021		5% level	
	-2.615817		10% level	

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

1257762.	Residual variance (no correction)
1532155.	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(SO)
Method: Least Squares
Date: 09/19/14 Time: 23:43
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-5.705920	0.174624	-0.996392	SO(-1)
0.0000	5.452938	571.0941	3114.141	C

64.93939	Mean dependent var	0.512253	R-squared
1630.737	S.D. dependent var	0.496519	Adjusted R-squared
17.00393	Akaike info criterion	1157.112	S.E. of regression
17.09463	Schwarz criterion	41506161	Sum squared resid
17.03445	Hannan-Quinn criter.	-278.5649	Log likelihood
1.977047	Durbin-Watson stat	32.55752	F-statistic
		0.000003	Prob(F-statistic)

ملحق رقم(37) نتائج إستقرار متغير البدائل المحلية (الذرة)

Null Hypothesis: D(SO) has a unit root
Exogenous: Constant
Bandwidth: 13 (Newey-West automatic) using Bartlett kernel

Prob.*	Adj. t-Stat		
0.0001	-22.33919	Phillips-Perron test statistic	
	-3.653730	1% level	Test critical values:
	-2.957110	5% level	
	-2.617434	10% level	

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

1741931.	Residual variance (no correction)
245931.5	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(SO,2)
Method: Least Squares
Date: 09/19/14 Time: 23:44
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-10.39333	0.150286	-1.561975	D(SO(-1))
0.9482	0.065566	240.9736	15.79974	C

-4.750000	Mean dependent var	0.782642	R-squared
2876.219	S.D. dependent var	0.775397	Adjusted R-squared
17.33338	Akaike info criterion	1363.106	S.E. of regression
17.42499	Schwarz criterion	55741777	Sum squared resid
17.36375	Hannan-Quinn criter.	-275.3341	Log likelihood
2.516635	Durbin-Watson stat	108.0213	F-statistic
		0.000000	Prob(F-statistic)

ملحق رقم(38) نتائج إستقرار متغير البدائل المحلية (الذرة)

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

Prob.*	Adj. t-Stat			
0.0000	-7.222332	Phillips-Perron test statistic		
	-4.262735		1% level	Test critical values:
	-3.552973		5% level	
	-3.209642		10% level	

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

976504.3	Residual variance (no correction)
776582.4	HAC corrected variance (Bartlett kernel)

Phillips-Perron Test Equation
Dependent Variable: D(SO)
Method: Least Squares
Date: 09/19/14 Time: 23:45
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-7.008324	0.176228	-1.235062	SO(-1)
0.0000	5.299247	524.1710	2777.711	C
0.0063	2.939518	21.34836	62.75390	@TREND(1980)

64.93939	Mean dependent var	0.621322	R-squared
1630.737	S.D. dependent var	0.596077	Adjusted R-squared
16.81143	Akaike info criterion	1036.414	S.E. of regression
16.94748	Schwarz criterion	32224641	Sum squared resid
16.85721	Hannan-Quinn criter.	-274.3886	Log likelihood
2.005230	Durbin-Watson stat	24.61147	F-statistic
		0.000000	Prob(F-statistic)

ملحق رقم(39) نتائج التكامل المشترك:

Date: 09/19/14 Time: 23:46
Sample (adjusted): 1982 2013
Included observations: 32 after adjustments
Trend assumption: Linear deterministic trend
Series: IM NI POP TAX EX SO
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Prob.**	0.05 Critical Value	Trace Statistic	Eigenvalue	Hypothesized No. of CE(s)
0.0000	95.75366	159.5862	0.855014	None *
0.0001	69.81889	97.79042	0.688701	At most 1 *
0.0021	47.85613	60.44633	0.596698	At most 2 *
0.0325	29.79707	31.38807	0.464099	At most 3 *
0.1866	15.49471	11.42630	0.229117	At most 4
0.0783	3.841466	3.099308	0.092311	At most 5

Trace test indicates 4 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

Unrestricted Cointegration Rank Test (Maximum Eigenvalue)

Prob.**	0.05 Critical Value	Max-Eigen Statistic	Eigenvalue	Hypothesized No. of CE(s)
0.0001	40.07757	61.79575	0.855014	None *
0.0185	33.87687	37.34409	0.688701	At most 1 *
0.0321	27.58434	29.05826	0.596698	At most 2 *
0.0722	21.13162	19.96177	0.464099	At most 3
0.3464	14.26460	8.326989	0.229117	At most 4
0.0783	3.841466	3.099308	0.092311	At most 5

Max-eigenvalue test indicates 3 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

محلق(40) الدالة الخطية المبدئية

Dependent Variable: IM
Method: Fully Modified Least Squares (FMOLS)
Date: 09/21/14 Time: 00:08
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments
Cointegrating equation deterministics: C
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	9.185254	0.006292	0.057789	NI
0.2007	-1.311645	6.501694	-8.527913	POP
0.0386	-2.173988	0.002187	-0.004755	TAX
0.6373	0.476880	21200.66	10110.18	EX
0.2315	1.224048	9.381560	11.48348	SO
0.1752	1.392260	137021.4	190769.3	C

249059.4	Mean dependent var	0.941548	R-squared
287069.2	S.D. dependent var	0.930724	Adjusted R-squared
1.54E+11	Sum squared resid	75557.72	S.E. of regression
2.59E+09	Long-run variance	1.784360	Durbin-Watson stat

ملحق (41) اختبار وايد مشكلة اختلاف التباين

Heteroskedasticity Test: White

0.0233	Prob. F(15,18)	2.708504	F-statistic
0.0729	Prob. Chi-Square(15)	23.56122	Obs*R-squared
1.0000	Prob. Chi-Square(15)	1.27E-18	Scaled explained SS

Test Equation:
Dependent Variable: WGT_RESID^2
Method: Least Squares
Date: 10/23/14 Time: 00:48
Sample: 1980 2013
Included observations: 34

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.5762	-0.569228	2.320742	-1.321031	C
0.2724	1.132222	8.16E-09	9.24E-09	POP^2
0.7700	-0.296833	1.77E-10	-5.24E-11	POP*TAX
0.6369	-0.480137	3.43E-11	-1.65E-11	POP*NI
0.8060	-0.249183	0.000143	-3.57E-05	POP*EX
0.2526	-1.181889	1.06E-07	-1.26E-07	POP*SO
0.1876	1.369840	1.14E-12	1.56E-12	TAX^2
0.2974	-1.073106	5.49E-12	-5.89E-12	TAX*NI
0.5079	0.675635	1.35E-05	9.10E-06	TAX*EX
0.4174	-0.830007	2.78E-09	-2.31E-09	TAX*SO
0.4120	0.839814	1.26E-13	1.06E-13	NI^2
0.9957	0.005484	4.82E-07	2.64E-09	NI*EX
0.0296	2.362101	1.54E-10	3.63E-10	NI*SO
0.9597	0.051259	1.452913	0.074474	EX^2
0.8265	-0.222379	0.000433	-9.63E-05	EX*SO
0.2362	1.225532	4.34E-07	5.32E-07	SO^2

1.055660	Mean dependent var	0.692977	R-squared
1.966486	S.D. dependent var	0.437125	Adjusted R-squared
3.920864	Akaike info criterion	1.475356	S.E. of regression
4.639151	Schwarz criterion	39.18018	Sum squared resid
4.165820	Hannan-Quinn criter.	-50.65469	Log likelihood
2.351253	Durbin-Watson stat	2.708504	F-statistic
		0.023292	Prob(F-statistic)

ملحق رقم (42) نتائج تقدير الدالة النصف لوغارثمية:

Dependent Variable: LOG(IM)
Method: Fully Modified Least Squares (FMOLS)
Date: 09/20/14 Time: 02:20
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments
Cointegrating equation deterministics: C
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	-6.159395	4.22E-09	-2.60E-08	TAX
0.0000	10.42927	1.39E-08	1.45E-07	NI
0.0000	5.789768	0.052179	0.302102	EX
0.0214	2.437561	3.92E-05	9.57E-05	SO
0.0000	88.45554	0.119225	10.54613	C

11.83969	Mean dependent var	0.935796	R-squared
1.090660	S.D. dependent var	0.926625	Adjusted R-squared
2.443923	Sum squared resid	0.295437	S.E. of regression
0.051908	Long-run variance	2.379087	Durbin-Watson stat

ملحق رقم (43) نتائج الدالة اللوغرثميةالمزدوجة:

Dependent Variable: LOG(IM)
Method: Fully Modified Least Squares (FMOLS)
Date: 09/20/14 Time: 02:27
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments
Cointegrating equation deterministics: C
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	7.499345	0.810488	6.078133	LOG(POP)
0.0000	7.874776	0.038044	0.299586	LOG(TAX)
0.0000	-5.019018	0.078082	-0.391893	LOG(NI)
0.0056	-3.009673	0.095202	-0.286527	LOG(EX)
0.3969	0.860820	0.134944	0.116163	LOG(SO)
0.0000	-6.292636	7.802844	-49.10045	C

11.83969	Mean dependent var	0.916787	R-squared
1.090660	S.D. dependent var	0.901377	Adjusted R-squared
3.167519	Sum squared resid	0.342514	S.E. of regression
0.083652	Long-run variance	2.146368	Durbin-Watson stat

ملحق (44) اختبار وايد مشكلة اختلاف التباين

Heteroskedasticity Test: White

0.3029	Prob. F(20,13)	1.330767	F-statistic
0.2966	Prob. Chi-Square(20)	22.84270	Obs*R-squared
0.0000	Prob. Chi-Square(20)	1369.641	Scaled explained SS

Test Equation:
Dependent Variable: WGT_RESID^2
Method: Least Squares
Date: 10/23/14 Time: 00:37
Sample: 1980 2013
Included observations: 34

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.1806	1.414907	29.81823	42.19003	C
0.1866	1.394198	1.28E-05	1.78E-05	NI
0.2120	1.312650	1.94E-13	2.55E-13	NI^2
0.1907	-1.380491	5.29E-10	-7.30E-10	NI*POP
0.0954	1.797884	1.15E-11	2.06E-11	NI*TAX
0.1473	1.541151	9.07E-07	1.40E-06	NI*EX
0.5164	-0.667016	3.94E-10	-2.63E-10	NI*SO
0.1428	-1.560019	0.002761	-0.004307	POP
0.0836	1.874098	6.60E-08	1.24E-07	POP^2
0.2109	-1.316044	9.39E-09	-1.24E-08	POP*TAX
0.8845	0.148119	0.000806	0.000119	POP*EX
0.1005	-1.767788	1.48E-07	-2.62E-07	POP*SO
0.1964	1.361647	0.000245	0.000334	TAX
0.0873	-1.848884	2.52E-12	-4.66E-12	TAX^2
0.4201	-0.832627	2.65E-05	-2.21E-05	TAX*EX
0.2556	1.189307	8.41E-09	1.00E-08	TAX*SO
0.6102	-0.522403	18.65555	-9.745721	EX
0.6630	0.445976	1.609101	0.717620	EX^2
0.4514	0.776452	0.000480	0.000373	EX*SO
0.9691	-0.039550	0.003034	-0.000120	SO
0.0029	3.653380	2.99E-07	1.09E-06	SO^2

0.488148	Mean dependent var	0.671844	R-squared
0.929874	S.D. dependent var	0.166989	Adjusted R-squared
2.783639	Akaike info criterion	0.848691	S.E. of regression
3.726391	Schwarz criterion	9.363584	Sum squared resid
3.105144	Hannan-Quinn criter.	-26.32186	Log likelihood
2.732923	Durbin-Watson stat	1.330767	F-statistic
		0.302879	Prob(F-statistic)

ملحق (45) الدالة اللوغريثمية المذدوجة بعد حذف متغير البدايل المحلية(الذرة)

Dependent Variable: LOG(IM)
Method: ML - ARCH (Marquardt) -
Date: 11/02/14 Time: 05:51
Sample (adjusted): 1981 2013
Included observations: 33 after adjustments
Cointegrating equation deterministics: C
Long-run covariance estimate (Bartlett kernel, Newey-West fixed bandwidth = 4.0000)

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.0000	7.766496	0.792791	6.157209	LOG(POP)
0.0000	4.990799	0.076916	0.383875	LOG(NI)
0.0000	7.890390	0.037124	0.292922	LOG(TAX)
0.0056	-3.001842	0.093493	-0.280652	LOG(EX)
0.0000	-6.372529	7.693322	-49.02592	C

11.83969	Mean dependent var	0.915859	R-squared
1.090660	S.D. dependent var	0.903839	Adjusted R-squared
3.202839	Sum squared resid	0.338212	S.E. of regression
0.081323	Long-run variance	2.172613	Durbin-Watson stat

ملحق (46) نتائج اختبار مشكلة اختلاف التباين(وايد)

Heteroskedasticity Test: White

0.7032	Prob. F(10,23)	0.713866	F-statistic
0.6236	Prob. Chi-Square(10)	8.053256	Obs*R-squared
0.0000	Prob. Chi-Square(10)	163.4472	Scaled explained SS

Test Equation:
Dependent Variable: WGT_RESID^2
Method: Least Squares
Date: 11/02/14 Time: 06:04
Sample: 1980 2013
Included observations: 34

Prob.	t-Statistic	Std. Error	Coefficient	Variable
0.8110	-0.241900	46.32256	-11.20544	C
0.3639	-0.926234	1.515439	-1.403651	(LOG(POP))^2
0.2717	1.126137	1.626048	1.831153	(LOG(POP))*(LOG(NI))
0.7080	0.379255	1.258228	0.477190	(LOG(POP))*(LOG(TAX))
0.2783	-1.110323	2.522429	-2.800711	(LOG(POP))*(LOG(EX))
0.3863	-0.883097	0.628397	-0.554936	(LOG(NI))^2
0.7752	-0.288930	0.959954	-0.277359	(LOG(NI))*(LOG(TAX))
0.3429	0.968489	1.532185	1.483904	(LOG(NI))*(LOG(EX))
0.9107	-0.113398	0.351773	-0.039891	(LOG(TAX))^2
0.6432	0.469390	1.332528	0.625475	(LOG(TAX))*(LOG(EX))
0.2716	-1.126341	1.334081	-1.502631	(LOG(EX))^2

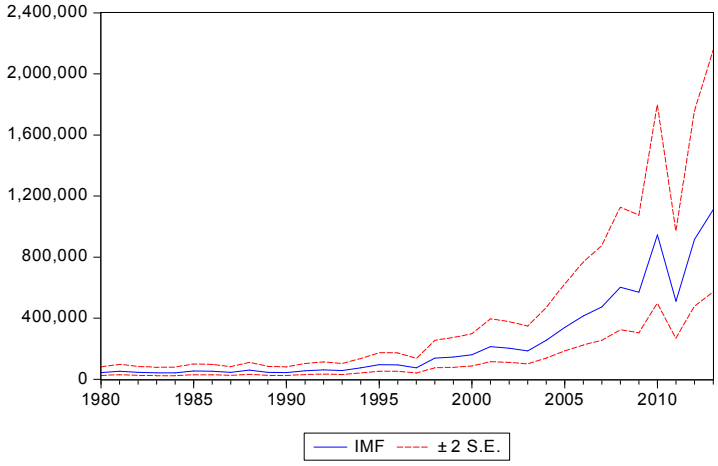
0.998444	Mean dependent var	0.236860	R-squared
1.406179	S.D. dependent var	-0.094939	Adjusted R-squared
3.866521	Akaike info criterion	1.471416	S.E. of regression
4.360343	Schwarz criterion	49.79652	Sum squared resid
4.034928	Hannan-Quinn criter.	-54.73085	Log likelihood
3.080740	Durbin-Watson stat	0.713866	F-statistic
		0.703200	Prob(F-statistic)

ملحق(47) مصفوفة الارتباط

Correlation

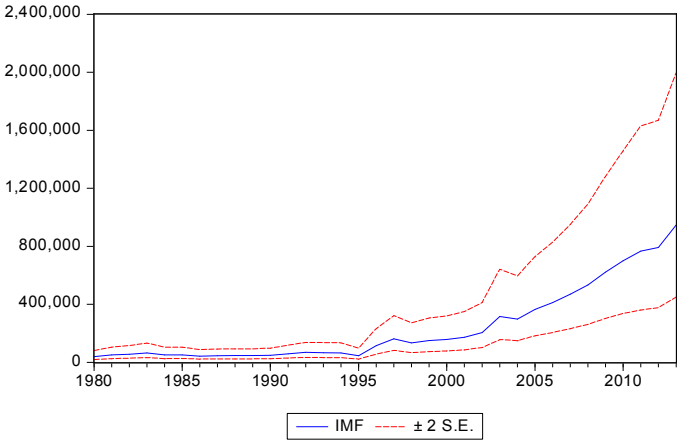
	IM	TAX	NI	EX	SO
IM	1.000000	0.680792	0.965336	0.790567	0.293759
TAX	0.680792	1.000000	0.765913	0.660149	-0.009546
NI	0.965336	0.765913	1.000000	0.841191	0.258507
EX	0.790567	0.660149	0.841191	1.000000	0.312877
SO	0.293759	-0.009546	0.258507	0.312877	1.000000

ملحق رقم (48) نتائج اختبار التنبؤ :



Forecast: IMF	
Actual: IM	
Forecast sample: 1980 2013	
Included observations: 34	
Root Mean Squared Error	54478.73
Mean Absolute Error	35036.85
Mean Abs. Percent Error	20.82924
Theil Inequality Coefficient	0.073132
Bias Proportion	0.000300
Variance Proportion	0.005591
Covariance Proportion	0.994109

ملحق (49) نتائج التنبؤ الدالة اللوغريثمية بعد حذف متغير البدايل المحلية(الذرة)



Forecast: IMF
Actual: IM
Forecast sample: 1980 2013
Included observations: 34

Root Mean Squared Error	65339.88
Mean Absolute Error	39840.42
Mean Abs. Percent Error	23.79801
Theil Inequality Coefficient	0.090381
Bias Proportion	0.002040
Variance Proportion	0.130341
Covariance Proportion	0.867619