

ملحق رقم ( 1 )  
البيانات الأصلية العملة غير موحدة ( بالجنية والدينار )

Obs	CP	EXCH	GDP	IMP	INF	MP	POP	PT	D
1970	700155	0.003	200.933	76200	1.2	90.64	12687	35.97	1
1971	733940	0.003	212.5	49056	1.2	115.36	13210	35.99	1
1972	691748	0.003	250.667	49056	8.1	115.36	13754	35.99	1
1973	740557	0.003	298.933	11020	15.8	94.33	14071	43.84	1
1974	700092	0.003	415.4	25275	24.1	240.32	14650	83.91	1
1975	758992	0.003	503.6	12000	21.1	115.24	15253	92.54	1
1976	801972	0.003	616.033	93944	2	391.68	15882	92.54	1
1977	856610	0.003	779.867	159516	17.5	424.26	16536	106.5	1
1978	855438	0.004	720.65	201189	20	415.35	16956	106.5	1
1979	907483	0.005	650.78	273026	1	501.79	17172	438.83	1
1980	959755	0.005	794.4	290939	70.8	1148	18362	495.74	1
1981	1025040	0.009	550.078	322645	22	1211.2	19079	569.12	1
1982	1043790	0.013	541.5460	481062	28.4	1113.34	19829	747.49	1
1983	1171832	0.013	737.838	464397	31.7	1066	20210	1455.32	1
1984	911349	0.025	472.296	452997	30.7	929.88	20530	1748.83	1
1985	696162	0.025	614.288	480691	47.2	659.15	20882	2255.45	1
1986	1092310	0.025	808.724	424840	28.4	388.41	21085	2355.18	1
1987	1136301	0.045	810.662	666332	24	367.42	21290	2356.87	1
1988	1215503	0.045	1039.802	623919	46.7	458.87	21724	2361.93	1
1989	1214812	0.045	1834.711	628174	75.3	550.30	22394	2349.63	1
1990	1248862	0.045	2446.904	625094.7	65.3	504.59	23079	3646.24	1
1991	1238949	0.045	41806.44	547662.1	119.1	527.45	23780	7523.1	1
1992	1258413	0.1	19266.05	702632.6	156.7	526.78	24495	54451.17	1
1993	1168310	0.133	31763.4	758282.7	181.5	526.13	25222	60702.25	1
1994	1400582	0.216	43909.63	792861	114.5	525.22	25961	275655.4	1
1995	1342034	0.4	10124.35	667923.2	64.5	438.72	26688	493061	1
1996	1371369	1.246	840.923	551186.9	109.8	715.66	27875	762794.4	1
1997	1507900	1.577	10236.14	732499.1	48.4	683.3	28627	1220715	1
1998	1461711	1.994	10998.37	874196.1	18.7	449.06	29496	1020041	1
1999	1614368	2.516	10754.7	1126927	18.9	603.95	30326	1051155	1
2000	1681874	2.571	13091.2	344924.5	7.8	533.41	31081	2621576	1
2001	2036342	2.587	15716.49	225015.4	4.4	209.06	31913	2481120	1
2002	2250547	2.633	18134.77	182506.3	6.9	212.28	32769	1907281	1
2003	2310803	2.608	21368.68	321601.9	6.2	545.15	33648	1908112	1
2004	2646574	2.583	26609.38	330127.7	9.5	788.61	34512	1909402	1
2005	3066219	2.436	35186.44	623493.4	8.6	1089.54	353982	1932763	1
2006	3622631	2.172	45461.11	555788.6	7.2	1262.37	363072	1933456	1
2007	3873606	2.016	56560.53	481981.3	6.2	1464.49	37270	1934843	1
2008	3991780	20.91	61084.92	946754.9	14.3	3068.91	39154490	1944675	1
2009	4329424	2.033	72880.96	477343.1	11.2	1148.95	31900000	1945846	1
2010	4400432	2.317	68527.2	590435.2	13	1421.03	32920000	62000000	1
2011	4406237	2.66	69692	934174.1	18.1	1978.5	33980000	1.06E+08	0
2012	4417397	3.5637	55321.1	897694.7	42.4	3229.17	35060000	8596008	0
2013	4504174	4.7422	62129.43	1250226	36.4	2090.8	36160000	18741070	0
2014	4621645	5.6857	5155.72	1426564	39.2	1942.78	37290000	23642075	0

المصدر:

- 1- بنك السودان المركزي .
- 2- الجهاز المركزي للإحصاء .
- 3- وزارة الطاقة والتعدين .

حيث أن :-

n = حجم العينة

obs = السنة

$p_t$  = اسعار المواد البترولية الحالية

$p_{t-1}$  = اسعار المواد البترولية فى السنة السابقة

$p_{t-2}$  = اسعار المواد البترولية فى السنة قبل السابقة

$CP_t$  = الاستهلاك الحالي للمواد البترولية

$CP_{t-1}$  = استهلاك المواد البترولية فى السنة السابقة

$CP_{t-2}$  = استهلاك المواد البترولية فى السنة قبل السابقة

POP = السكان

IMP = واردات المواد البترولية

MP = سعر واردات المواد البترولية

EXCH = سعر الصرف

GDP = الناتج المحلى الاجمالى

INF = التضخم

D = متغير صورى

ملحق رقم ( 2 )

البيانات موحدة بالدولار

Obs	CP	EXCH	GDP	IMP	INF	MP	POP	PT	D
1970	700155	0.003	200.933	76200	1.2	90.64	12687	0.10791	1
1971	733940	0.003	212.5	49056	1.2	115.36	13210	0.10797	1
1972	691748	0.003	250.667	49056	8.1	115.36	13754	0.10797	1
1973	740557	0.003	298.933	11020	15.8	94.33	14071	0.13152	1
1974	700092	0.003	415.4	25275	24.1	240.32	14650	0.25173	1
1975	758992	0.003	503.6	12000	21.1	115.24	15253	0.27762	1
1976	801972	0.003	616.033	93944	2	391.68	15882	0.27762	1
1977	856610	0.003	779.867	159516	17.5	424.26	16536	0.3195	1
1978	855438	0.004	720.65	201189	20	415.35	16956	0.426	1
1979	907483	0.005	650.78	273026	1	501.79	17172	2.19415	1
1980	959755	0.005	794.4	290939	70.8	1148	18362	2.4787	1
1981	1025040	0.009	550.078	322645	22	1211.2	19079	5.12208	1
1982	1043790	0.013	541.5460	481062	28.4	1113.34	19829	9.71737	1
1983	1171832	0.013	737.838	464397	31.7	1066	20210	18.91916	1
1984	911349	0.025	472.296	452997	30.7	929.88	20530	43.72075	1
1985	696162	0.025	614.288	480691	47.2	659.15	20882	56.38625	1
1986	1092310	0.025	808.724	424840	28.4	388.41	21085	58.8795	1
1987	1136301	0.045	810.662	666332	24	367.42	21290	106.0592	1
1988	1215503	0.045	1039.802	623919	46.7	458.87	21724	106.2868	1
1989	1214812	0.045	1834.711	628174	75.3	550.30	22394	105.7334	1
1990	1248862	0.045	2446.904	625094.7	65.3	504.59	23079	164.0808	1
1991	1238949	0.045	41806.44	547662.1	119.1	527.45	23780	338.5395	1
1992	1258413	0.1	19266.05	702632.6	156.7	526.78	24495	5445.117	1
1993	1168310	0.133	31763.4	758282.7	181.5	526.13	25222	8073.399	1
1994	1400582	0.216	43909.63	792861	114.5	525.22	25961	59541.57	1
1995	1342034	0.4	10124.35	667923.2	64.5	438.72	26688	197224.4	1
1996	1371369	1.246	840.923	551186.9	109.8	715.66	27875	950441.9	1
1997	1507900	1.577	10236.14	732499.1	48.4	683.3	28627	1925067	1
1998	1461711	1.994	10998.37	874196.1	18.7	449.06	29496	2033962	1
1999	1614368	2.516	10754.7	1126927	18.9	603.95	30326	2644705	1
2000	1681874	2.571	13091.2	344924.5	7.8	533.41	31081	6740071	1
2001	2036342	2.587	15716.49	225015.4	4.4	209.06	31913	6418657	1
2002	2250547	2.633	18134.77	182506.3	6.9	212.28	32769	5021871	1
2003	2310803	2.608	21368.68	321601.9	6.2	545.15	33648	4976356	1
2004	2646574	2.583	26609.38	330127.7	9.5	788.61	34512	4931986	1
2005	3066219	2.436	35186.44	623493.4	8.6	1089.54	353982	4708210	1
2006	3622631	2.172	45461.11	555788.6	7.2	1262.37	363072	4199467	1
2007	3873606	2.016	56560.53	481981.3	6.2	1464.49	37270	3900643	1
2008	3991780	20.91	61084.92	946754.9	14.3	3068.91	39154490	40663156	1
2009	4329424	2.033	72880.96	477343.1	11.2	1148.95	31900000	3955905	1
2010	4400432	2.317	68527.2	590435.2	13	1421.03	32920000	144000000	1
2011	4406237	2.66	69692	934174.1	18.1	1978.5	33980000	282000000	0
2012	4417397	3.5637	55321.1	897694.7	42.4	3229.17	35060000	30633594	0
2013	4504174	4.7422	62129.43	1250226	36.4	2090.8	36160000	88873900	0
2014	4621645	5.6857	5155.72	1426564	39.2	1942.78	37290000	134000000	0

المصدر: إعداد الباحث

ملاحظة :-

• البيانات موحدة بالدولار بضرب الجنية في سعر الصرف .

ملحق رقم ( 3 )

اختبار استقرار السلسلة لـ CP

**Augmented Dickey-Fuller Unit Root Test on D(CP)**

Null Hypothesis: D(CP) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-4.646078	0.0005
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(CP,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:05				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(CP(-1))	-0.688730	0.148239	-4.646078	0.0000
C	62875.09	26890.13	2.338222	0.0243
R-squared	0.344902	Mean dependent var		1946.186
Adjusted R-squared	0.328924	S.D. dependent var		187916.0
S.E. of regression	153939.4	Akaike info criterion		26.77190
Sum squared resid	9.72E+11	Schwarz criterion		26.85382
Log likelihood	-573.5959	Hannan-Quinn criter.		26.80211
F-statistic	21.58604	Durbin-Watson stat		2.081663
Prob(F-statistic)	0.000035			

المصدر: إعداد الباحث

ملحق رقم ( 4 )

اختبار استقرار السلسلة لـ EXCH

**Augmented Dickey-Fuller Unit Root Test on D(EXCH)**

Null Hypothesis: D(EXCH) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-7.764823	0.0000
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(EXCH,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:08				
Sample (adjusted): 1973 2014				
Included observations: 42 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(EXCH(-1))	-2.028939	0.261299	-7.764823	0.0000
D(EXCH(-1),2)	0.347597	0.150575	2.308460	0.0264
C	0.241653	0.536341	0.450558	0.6548
R-squared	0.782177	Mean dependent var		0.022464
Adjusted R-squared	0.771006	S.D. dependent var		7.255153
S.E. of regression	3.471831	Akaike info criterion		5.395990
Sum squared resid	470.0908	Schwarz criterion		5.520110
Log likelihood	-110.3158	Hannan-Quinn criter.		5.441485
F-statistic	70.02203	Durbin-Watson stat		2.193268
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 5 )

اختبار استقرار السلسلة لـGDP

**Augmented Dickey-Fuller Unit Root Test on D(GDP)**

Null Hypothesis: D(GDP) has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
-6.768220				
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(GDP,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:09				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(GDP(-1))	-1.362061	0.201244	-6.768220	0.0000
C	636.3987	2012.899	0.316160	0.7535
R-squared	0.527698	Mean dependent var		-1325.239
Adjusted R-squared	0.516178	S.D. dependent var		18778.65
S.E. of regression	13061.92	Akaike info criterion		21.83819
Sum squared resid	7.00E+09	Schwarz criterion		21.92010
Log likelihood	-467.5210	Hannan-Quinn criter.		21.86839
F-statistic	45.80880	Durbin-Watson stat		1.508369
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 6 )

اختبار استقرار السلسلة لـ INF

Augmented Dickey-Fuller Unit Root Test on D(INF)

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				
-7.412100				
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(INF,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:10				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(INF(-1))	-1.145343	0.154523	-7.412100	0.0000
C	1.002700	4.084589	0.245484	0.8073
R-squared	0.572646	Mean dependent var		0.065116
Adjusted R-squared	0.562223	S.D. dependent var		40.46203
S.E. of regression	26.77159	Akaike info criterion		9.457955
Sum squared resid	29385.45	Schwarz criterion		9.539871
Log likelihood	-201.3460	Hannan-Quinn criter.		9.488163
F-statistic	54.93923	Durbin-Watson stat		2.025926
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 7 )

اختبار استقرار السلسلة لـ POP

Augmented Dickey-Fuller Unit Root Test on D(POP)

Null Hypothesis: D(POP) has a unit root				
Exogenous: Constant				
Bandwidth: 0 (Newey-West automatic) using Bartlett kernel				
			Adj. t-Stat	Prob.*
Phillips-Perron test statistic				
			-7.945414	0.0000
Test critical values:				
	1% level		-3.592462	
	5% level		-2.931404	
	10% level		-2.603944	
*MacKinnon (1996) one-sided p-values.				
Residual variance (no correction)				
				3.46E+13
HAC corrected variance (Bartlett kernel)				
				3.46E+13
Phillips-Perron Test Equation				
Dependent Variable: D(POP,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:12				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(POP(-1))	-1.212310	0.152580	-7.945414	0.0000
C	1045378.	927095.6	1.127584	0.2661
R-squared	0.606260	Mean dependent var		26266.91
Adjusted R-squared	0.596656	S.D. dependent var		9480353.
S.E. of regression	6020909.	Akaike info criterion		34.10477
Sum squared resid	1.49E+15	Schwarz criterion		34.18669
Log likelihood	-731.2526	Hannan-Quinn criter.		34.13498
F-statistic	63.12960	Durbin-Watson stat		2.018415
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث



ملحق رقم ( 8 )

اختبار استقرار السلسلة لـMP

Augmented Dickey-Fuller Unit Root Test on D(MP)

Null Hypothesis: D(MP) has a unit root				
Exogenous: Constant				
Lag Length: 2 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
-6.332663				
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(MP,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:11				
Sample (adjusted): 1974 2014				
Included observations: 41 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(MP(-1))	-2.349033	0.370939	-6.332663	0.0000
D(MP(-1),2)	0.841193	0.280944	2.994169	0.0049
D(MP(-2),2)	0.401840	0.174107	2.308007	0.0267
C	121.4229	74.89286	1.621287	0.1134
R-squared	0.724915	Mean dependent var	-3.097317	
Adjusted R-squared	0.702611	S.D. dependent var	842.1604	
S.E. of regression	459.2585	Akaike info criterion	15.18957	
Sum squared resid	7803981.	Schwarz criterion	15.35675	
Log likelihood	-307.3862	Hannan-Quinn criter.	15.25045	
F-statistic	32.50133	Durbin-Watson stat	1.795510	
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث





ملحق رقم ( 11 )

اختبار استقرار السلسلة لـ V

**Augmented Dickey-Fuller Unit Root Test on D(D)**

Null Hypothesis: D(V) has a unit root				
Exogenous: Constant				
Bandwidth: 1 (Newey-West automatic) using Bartlett kernel				
			Adj. t-Stat	Prob.*
Phillips-Perron test statistic				
			-6.557441	0.0000
Test critical values:				
	1% level		-3.592462	
	5% level		-2.931404	
	10% level		-2.603944	
*Mackinnon (1996) one-sided p-values.				
Residual variance (no correction)				
				0.022702
HAC corrected variance (Bartlett kernel)				
				0.022676
Phillips-Perron Test Equation				
Dependent Variable: D(V,2)				
Method: Least Squares				
Date: 02/18/17 Time: 21:15				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(V(-1))	-1.023810	0.156129	-6.557439	0.0000
C	-0.023810	0.023810	-1.000000	0.3232
R-squared	0.511905	Mean dependent var		0.000000
Adjusted R-squared	0.500000	S.D. dependent var		0.218218
S.E. of regression	0.154303	Akaike info criterion		-0.854397
Sum squared resid	0.976190	Schwarz criterion		-0.772481
Log likelihood	20.36954	Hannan-Quinn criter.		-0.824189
F-statistic	43.00000	Durbin-Watson stat		2.001161
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 12 )

نتيجة معادلة استهلاك المواد البترولية

Dependent Variable: CP				
Method: Least Squares				
Date: 10/04/16 Time: 00:53				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-133196.0	63077.24	-2.111633	0.0419
PT	-0.000977	0.000601	-1.623879	0.1134
PT(-1)	-0.000830	0.000585	-1.418467	0.1649
PT(-2)	-0.000621	0.000571	-1.087301	0.2843
CP(-1)	0.895502	0.165443	5.412751	0.0000
CP(-2)	0.319663	0.200367	1.595390	0.1196
POP	-0.009511	0.004068	-2.338307	0.0252
IMP	-0.093210	0.082606	-1.128367	0.2668
R-squared	0.991279	Mean dependent var	1919812.	
Adjusted R-squared	0.989534	S.D. dependent var	1318039.	
S.E. of regression	134837.8	Akaike info criterion	26.62777	
Sum squared resid	6.36E+11	Schwarz criterion	26.95544	
Log likelihood	-564.4971	Hannan-Quinn criter.	26.74861	
F-statistic	568.3033	Durbin-Watson stat	2.136442	
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 13 )

اختبار Q.Statistics

Correlogram of Residuals

Date: 10/04/16 Time: 02:32						
Sample: 1972 2014						
Included observations: 43						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
.*	.*	1	-0.071	-0.071	0.2299	0.632
**	**	2	-0.325	-0.331	5.2003	0.074
*	*	3	-0.078	-0.149	5.4934	0.139
.	*	4	0.002	-0.152	5.4937	0.240
.	.	5	0.064	-0.038	5.7041	0.336
*	*	6	-0.115	-0.203	6.3992	0.380
*	*	7	0.143	0.116	7.4920	0.380
.	.	8	0.064	-0.003	7.7206	0.461
*	*	9	-0.158	-0.091	9.1437	0.424
*	*	10	-0.104	-0.125	9.7751	0.460
*	*	11	0.145	0.086	11.040	0.440
.	*	12	0.007	-0.116	11.044	0.525
.	.	13	-0.045	0.011	11.172	0.596
.	.	14	0.020	-0.013	11.199	0.670
.	.	15	0.049	0.037	11.365	0.726
*	*	16	-0.123	-0.169	12.441	0.713
*	*	17	-0.181	-0.157	14.865	0.605
*	*	18	0.154	-0.036	16.689	0.545
.	**	19	0.223	0.105	20.697	0.354
.	.	20	-0.032	0.007	20.782	0.410

المصدر: إعداد الباحث

ملحق رقم ( 14 )

النتيجة المعدلة لمعادلة استهلاك المواد البترولية

Dependent Variable: CP				
Method: Least Squares				
Date: 10/04/16 Time: 01:21				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PT	-0.001243	0.000511	-2.430449	0.0194
CP(-1)	1.065326	0.012647	84.23238	0.0000
R-squared	0.988429	Mean dependent var		1892861.
Adjusted R-squared	0.988153	S.D. dependent var		1314834.
S.E. of regression	143110.1	Akaike info criterion		26.62501
Sum squared resid	8.60E+11	Schwarz criterion		26.70611
Log likelihood	-583.7501	Hannan-Quinn criter.		26.65508
Durbin-Watson stat	1.870665			

المصدر: إعداد الباحث

ملحق رقم ( 15 )

اختبار Q.Statistics

### Correlogram of Residuals

Date: 11/05/16 Time: 08:11						
Sample: 1971 2014						
Included observations: 44						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. .	. .	1	0.062	0.062	0.1832	0.669
. .	. .	2	-0.013	-0.017	0.1910	0.909
. .	. .	3	0.065	0.067	0.4017	0.940
. *	. *	4	0.087	0.079	0.7858	0.940
. **	. *	5	0.217	0.212	3.2193	0.666
. *	. *	6	-0.125	-0.157	4.0476	0.670
. .	. .	7	-0.060	-0.048	4.2437	0.751
. .	. .	8	-0.016	-0.054	4.2578	0.833
. *	. *	9	-0.130	-0.154	5.2416	0.813
. .	. .	10	-0.048	-0.056	5.3788	0.864
. .	. .	11	-0.022	0.058	5.4085	0.910
. *	. *	12	-0.098	-0.079	6.0127	0.915
. .	. .	13	-0.033	0.010	6.0845	0.943
. .	. .	14	-0.062	-0.004	6.3454	0.957
. .	. .	15	0.051	0.051	6.5282	0.969
. *	. *	16	-0.091	-0.133	7.1229	0.971
. *	. *	17	-0.112	-0.067	8.0641	0.965
. .	. .	18	0.046	0.016	8.2287	0.975
. *	. *	19	0.113	0.115	9.2700	0.969
. .	. .	20	-0.003	-0.027	9.2706	0.980

المصدر: إعداد الباحث



ملحق رقم ( 16 )

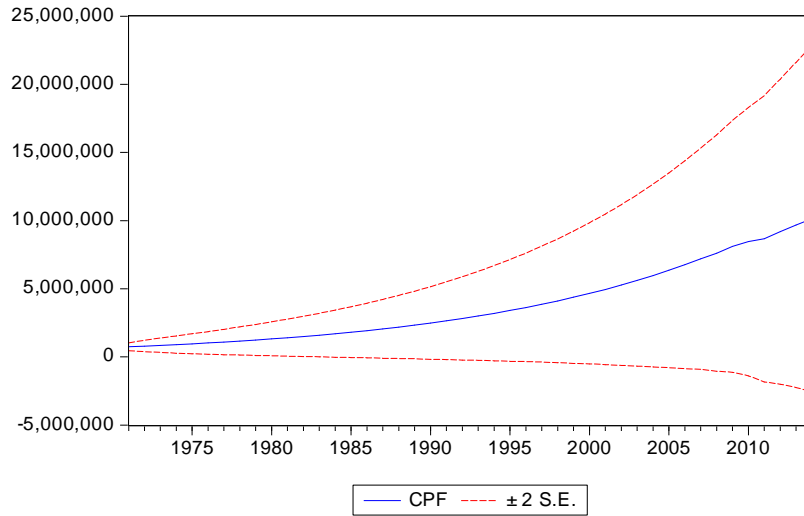
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: RESID04 has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-6.015432	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(RESID04)				
Method: Least Squares				
Date: 11/04/16 Time: 15:48				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID04(-1)	-0.937613	0.155868	-6.015432	0.0000
C	-6322.952	22044.16	-0.286831	0.7757
R-squared	0.468812	Mean dependent var		51.78075
Adjusted R-squared	0.455856	S.D. dependent var		195735.0
S.E. of regression	144386.1	Akaike info criterion		26.64376
Sum squared resid	8.55E+11	Schwarz criterion		26.72568
Log likelihood	-570.8409	Hannan-Quinn criter.		26.67397
F-statistic	36.18542	Durbin-Watson stat		1.990849
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 17 )  
اختبار ثيل للاستشراف



Forecast: CPF	
Actual: CP	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	2479884.
Mean Absolute Error	1941160.
Mean Abs. Percent Error	93.18649
Theil Inequality Coefficient	0.352583
Bias Proportion	0.612717
Variance Proportion	0.357473
Covariance Proportion	0.029810

المصدر: إعداد الباحث

ملحق رقم ( 18 )

نتيجة معادلة الواردات البترولية

Dependent Variable: IMP				
Method: Least Squares				
Date: 10/04/16 Time: 01:25				
Sample: 1970 2014				
Included observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	230572.6	101810.2	2.264730	0.0292
MP	178.7714	111.4787	1.603637	0.1169
POP	0.002107	0.006531	0.322629	0.7487
CP	0.077332	0.078544	0.984570	0.3309
GDP	-1.478949	3.235258	-0.457135	0.6501
EXCH	-82.87872	17235.54	-0.004809	0.9962
R-squared	0.410932	Mean dependent var	505648.3	
Adjusted R-squared	0.335410	S.D. dependent var	335040.9	
S.E. of regression	273133.3	Akaike info criterion	27.99687	
Sum squared resid	2.91E+12	Schwarz criterion	28.23776	
Log likelihood	-623.9297	Hannan-Quinn criter.	28.08667	
F-statistic	5.441253	Durbin-Watson stat	0.513640	
Prob(F-statistic)	0.000684			

المصدر: إعداد الباحث

ملحق رقم ( 19 )

النتيجة المعدلة لمعادلة الواردات البترولية

Dependent Variable: IMP				
Method: Least Squares				
Date: 10/04/16 Time: 01:54				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Convergence achieved after 7 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CP	0.233303	0.049606	4.703082	0.0000
AR(1)	0.778720	0.100659	7.736194	0.0000
R-squared	0.652719	Mean dependent var		515408.5
Adjusted R-squared	0.644451	S.D. dependent var		332380.0
S.E. of regression	198191.4	Akaike info criterion		27.27624
Sum squared resid	1.65E+12	Schwarz criterion		27.35734
Log likelihood	-598.0774	Hannan-Quinn criter.		27.30632
Durbin-Watson stat	2.104128			
Inverted AR Roots	.78			

المصدر: إعداد الباحث

ملحق رقم ( 20 )

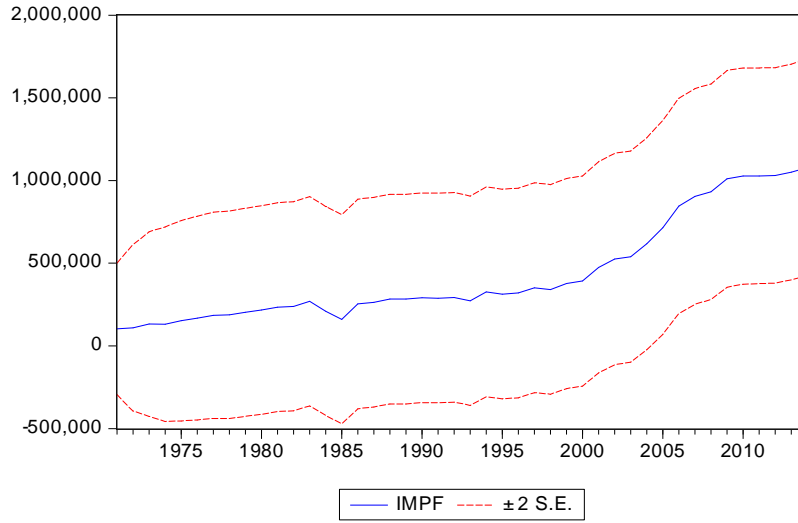
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: D(RESID16) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-8.440357	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(RESID16,2)				
Method: Least Squares				
Date: 02/20/17 Time: 17:55				
Sample (adjusted): 1974 2014				
Included observations: 41 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RESID16(-1))	-2.204477	0.261183	-8.440357	0.0000
D(RESID16(-1),2)	0.429882	0.150037	2.865179	0.0068
C	12509.22	35889.62	0.348547	0.7294
R-squared	0.812425	Mean dependent var		-1286.250
Adjusted R-squared	0.802552	S.D. dependent var		516911.2
S.E. of regression	229690.0	Akaike info criterion		27.59720
Sum squared resid	2.00E+12	Schwarz criterion		27.72259
Log likelihood	-562.7427	Hannan-Quinn criter.		27.64286
F-statistic	82.29255	Durbin-Watson stat		2.099904
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 21 )  
اختبار ثيل للاستشراف



Forecast: IMPF	
Actual: IMP	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	300668.9
Mean Absolute Error	249986.7
Mean Abs. Percent Error	112.4247
Theil Inequality Coefficient	0.262634
Bias Proportion	0.072161
Variance Proportion	0.004021
Covariance Proportion	0.923818

المصدر: إعداد الباحث

ملحق رقم ( 22 )  
نتيجة معادلة سعر الصرف

Dependent Variable: EXCH				
Method: Least Squares				
Date: 01/06/17 Time: 17:45				
Sample: 1970 2014				
Included observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.864964	0.657512	1.315511	0.1955
GDP	6.89E-05	1.84E-05	3.737842	0.0006
INF	-0.015785	0.010424	-1.514248	0.1375
R-squared	0.273449		Mean dependent var	1.557169
Adjusted R-squared	0.238852		S.D. dependent var	3.286416
S.E. of regression	2.867195		Akaike info criterion	5.008886
Sum squared resid	345.2739		Schwarz criterion	5.129330
Log likelihood	-109.6999		Hannan-Quinn criter.	5.053786
F-statistic	7.903695		Durbin-Watson stat	2.298407
Prob(F-statistic)	0.001221			

المصدر: إعداد الباحث

ملحق رقم ( 23 )  
النتيجة المعدلة لمعادلة سعر الصرف

Dependent Variable: EXCH				
Method: Least Squares				
Date: 01/06/17 Time: 17:49				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Convergence achieved after 5 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	7.61E-05	1.32E-05	5.761498	0.0000
AR(1)	-0.129511	0.159594	-0.811500	0.4217
R-squared	0.235894	Mean dependent var		1.592491
Adjusted R-squared	0.217701	S.D. dependent var		3.315759
S.E. of regression	2.932712	Akaike info criterion		5.034121
Sum squared resid	361.2336	Schwarz criterion		5.115221
Log likelihood	-108.7507	Hannan-Quinn criter.		5.064197
Durbin-Watson stat	1.949298			
Inverted AR Roots	-.13			

المصدر: إعداد الباحث



ملحق رقم ( 24 )

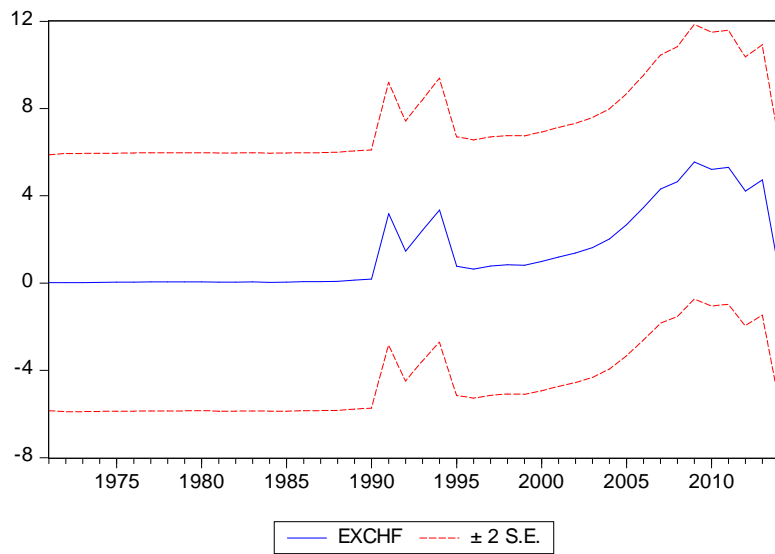
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: RESID05 has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-6.255481	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(RESID05)				
Method: Least Squares				
Date: 01/06/17 Time: 17:50				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID05(-1)	-1.015535	0.162343	-6.255481	0.0000
C	0.167778	0.451908	0.371267	0.7124
R-squared	0.488338	Mean dependent var		0.123486
Adjusted R-squared	0.475859	S.D. dependent var		4.092666
S.E. of regression	2.962993	Akaike info criterion		5.055672
Sum squared resid	359.9524	Schwarz criterion		5.137588
Log likelihood	-106.6969	Hannan-Quinn criter.		5.085880
F-statistic	39.13104	Durbin-Watson stat		1.930799
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 25 )  
اختبار ثيل للاستشراف



Forecast: EXCHF	
Actual: EXCH	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	2.887741
Mean Absolute Error	1.277606
Mean Abs. Percent Error	569.5847
Theil Inequality Coefficient	0.487314
Bias Proportion	0.002996
Variance Proportion	0.271099
Covariance Proportion	0.725905

المصدر: إعداد الباحث

ملحق رقم ( 26 )

نتيجة معادلة استهلاك المواد البترولية

Dependent Variable: CP				
Method: Least Squares				
Date: 01/06/17 Time: 11:35				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-20463.24	264030.7	-0.077503	0.9387
PT	-0.001244	0.000859	-1.447863	0.1568
PT(-1)	-0.001127	0.000899	-1.253661	0.2185
PT(-2)	-0.000881	0.000824	-1.068093	0.2930
CP(-1)	0.907044	0.169386	5.354900	0.0000
CP(-2)	0.310295	0.203798	1.522558	0.1371
POP	-0.009276	0.004149	-2.235520	0.0321
IMP	-0.108083	0.090071	-1.199975	0.2384
D	-108637.8	246948.1	-0.439922	0.6628
R-squared	0.991329	Mean dependent var	1919812.	
Adjusted R-squared	0.989289	S.D. dependent var	1318039.	
S.E. of regression	136410.0	Akaike info criterion	26.66848	
Sum squared resid	6.33E+11	Schwarz criterion	27.03711	
Log likelihood	-564.3724	Hannan-Quinn criter.	26.80442	
F-statistic	485.8934	Durbin-Watson stat	2.152983	
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 27 )

اختبار Q.Statistics

### Correlogram of Residuals

Date: 01/06/17 Time: 17:31						
Sample: 1972 2014						
Included observations: 43						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. *   .	. *   .	1	-0.079	-0.079	0.2901	0.590
**   .	**   .	2	-0.329	-0.337	5.3886	0.068
. *   .	. *   .	3	-0.088	-0.170	5.7671	0.124
.   .	. *   .	4	0.015	-0.152	5.7782	0.216
.   .	.   .	5	0.067	-0.051	6.0077	0.305
. *   .	. *   .	6	-0.109	-0.199	6.6315	0.356
. *   .	. *   .	7	0.153	0.122	7.8934	0.342
.   .	.   .	8	0.050	-0.003	8.0316	0.430
. *   .	. *   .	9	-0.163	-0.091	9.5370	0.389
. *   .	. *   .	10	-0.107	-0.129	10.203	0.423
. *   .	. *   .	11	0.172	0.108	11.998	0.364
.   .	. *   .	12	0.004	-0.117	11.999	0.446
.   .	.   .	13	-0.051	0.022	12.164	0.514
.   .	.   .	14	0.009	-0.021	12.169	0.593
.   .	.   .	15	0.038	0.028	12.268	0.659
. *   .	. *   .	16	-0.105	-0.160	13.060	0.668
. *   .	. *   .	17	-0.188	-0.177	15.704	0.545
. *   .	.   .	18	0.166	-0.041	17.843	0.466
. *   .	. *   .	19	0.224	0.101	21.895	0.290
.   .	.   .	20	-0.044	0.005	22.057	0.337

المصدر: إعداد الباحث

ملحق رقم ( 28 )

النتيجة المعدلة لمعادلة استهلاك المواد البترولية

Dependent Variable: CP				
Method: Least Squares				
Date: 01/06/17 Time: 16:19				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PT	-0.001244	0.000512	-2.431403	0.0194
CP(-1)	1.065340	0.012649	84.22395	0.0000
R-squared	0.988430	Mean dependent var		1892861.
Adjusted R-squared	0.988154	S.D. dependent var		1314834.
S.E. of regression	143103.2	Akaike info criterion		26.62491
Sum squared resid	8.60E+11	Schwarz criterion		26.70601
Log likelihood	-583.7480	Hannan-Quinn criter.		26.65498
Durbin-Watson stat	1.870418			

المصدر: إعداد الباحث

ملحق رقم ( 29 )

اختبار Q.Statistics

Correlogram of Residuals

Date: 01/06/17 Time: 17:32						
Sample: 1971 2014						
Included observations: 44						
Autocorrelation	Partial Correlation	AC	PAC	Q-Stat	Prob	
. .	. .	1	0.063	0.063	0.1839	0.668
. .	. .	2	-0.013	-0.017	0.1919	0.909
. .	. .	3	0.065	0.067	0.4021	0.940
. *	. *	4	0.087	0.079	0.7886	0.940
. **	. *	5	0.217	0.212	3.2251	0.665
. *	. *	6	-0.125	-0.157	4.0513	0.670
. .	. .	7	-0.060	-0.048	4.2476	0.751
. .	. .	8	-0.016	-0.054	4.2618	0.833
. *	. *	9	-0.130	-0.154	5.2441	0.813
. .	. .	10	-0.048	-0.056	5.3820	0.864
. .	. .	11	-0.022	0.058	5.4114	0.910
. *	. *	12	-0.098	-0.080	6.0171	0.915
. .	. .	13	-0.033	0.010	6.0892	0.943
. .	. .	14	-0.062	-0.004	6.3501	0.957
. .	. .	15	0.051	0.051	6.5319	0.969
. *	. *	16	-0.091	-0.133	7.1242	0.971
. *	. *	17	-0.112	-0.067	8.0682	0.965
. .	. .	18	0.046	0.016	8.2327	0.975
. *	. *	19	0.113	0.115	9.2746	0.969
. .	. .	20	-0.003	-0.027	9.2752	0.979

المصدر: إعداد الباحث

ملحق رقم ( 30 )

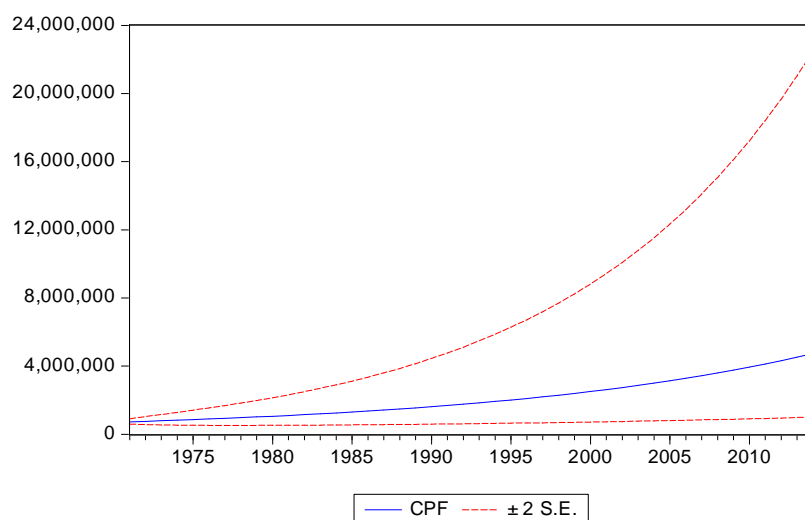
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: RESID03 has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-6.014721	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(RESID03)				
Method: Least Squares				
Date: 01/06/17 Time: 17:32				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID03(-1)	-0.937496	0.155867	-6.014721	0.0000
C	-6330.915	22042.87	-0.287209	0.7754
R-squared	0.468753	Mean dependent var		43.67987
Adjusted R-squared	0.455796	S.D. dependent var		195712.6
S.E. of regression	144377.6	Akaike info criterion		26.64365
Sum squared resid	8.55E+11	Schwarz criterion		26.72556
Log likelihood	-570.8384	Hannan-Quinn criter.		26.67386
F-statistic	36.17687	Durbin-Watson stat		1.990826
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 31 )  
اختبار ثيل للاستشراف



Forecast: CPF	
Actual: CP	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	421410.2
Mean Absolute Error	340526.5
Mean Abs. Percent Error	22.93316
Theil Inequality Coefficient	0.089610
Bias Proportion	0.277651
Variance Proportion	0.129292
Covariance Proportion	0.593056

المصدر: إعداد الباحث



ملحق رقم ( 32 )

نتيجة معادلة الواردات البترولية

Dependent Variable: IMP				
Method: Least Squares				
Date: 10/04/16 Time: 01:25				
Sample: 1970 2014				
Included observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	230572.6	101810.2	2.264730	0.0292
MP	178.7714	111.4787	1.603637	0.1169
POP	0.002107	0.006531	0.322629	0.7487
CP	0.077332	0.078544	0.984570	0.3309
GDP	-1.478949	3.235258	-0.457135	0.6501
EXCH	-82.87872	17235.54	-0.004809	0.9962
R-squared	0.410932	Mean dependent var	505648.3	
Adjusted R-squared	0.335410	S.D. dependent var	335040.9	
S.E. of regression	273133.3	Akaike info criterion	27.99687	
Sum squared resid	2.91E+12	Schwarz criterion	28.23776	
Log likelihood	-623.9297	Hannan-Quinn criter.	28.08667	
F-statistic	5.441253	Durbin-Watson stat	0.513640	
Prob(F-statistic)	0.000684			

المصدر: إعداد الباحث

ملحق رقم ( 33 )

النتيجة المعدلة لمعادلة الواردات البترولية

Dependent Variable: IMP				
Method: Least Squares				
Date: 10/04/16 Time: 01:54				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Convergence achieved after 7 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
CP	0.233303	0.049606	4.703082	0.0000
AR(1)	0.778720	0.100659	7.736194	0.0000
R-squared	0.652719	Mean dependent var		515408.5
Adjusted R-squared	0.644451	S.D. dependent var		332380.0
S.E. of regression	198191.4	Akaike info criterion		27.27624
Sum squared resid	1.65E+12	Schwarz criterion		27.35734
Log likelihood	-598.0774	Hannan-Quinn criter.		27.30632
Durbin-Watson stat	2.104128			
Inverted AR Roots	.78			

المصدر: إعداد الباحث

ملحق رقم ( 34 )

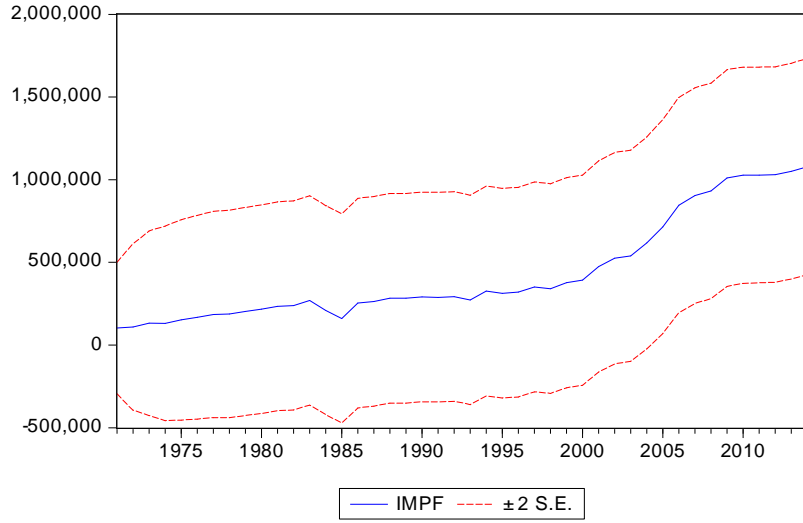
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: D(RESID16) has a unit root				
Exogenous: Constant				
Lag Length: 1 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-8.440357	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(RESID16,2)				
Method: Least Squares				
Date: 02/20/17 Time: 17:55				
Sample (adjusted): 1974 2014				
Included observations: 41 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
D(RESID16(-1))	-2.204477	0.261183	-8.440357	0.0000
D(RESID16(-1),2)	0.429882	0.150037	2.865179	0.0068
C	12509.22	35889.62	0.348547	0.7294
R-squared	0.812425	Mean dependent var		-1286.250
Adjusted R-squared	0.802552	S.D. dependent var		516911.2
S.E. of regression	229690.0	Akaike info criterion		27.59720
Sum squared resid	2.00E+12	Schwarz criterion		27.72259
Log likelihood	-562.7427	Hannan-Quinn criter.		27.64286
F-statistic	82.29255	Durbin-Watson stat		2.099904
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 35 )  
اختبار ثيل للاستشراف



Forecast: IMPF	
Actual: IMP	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	300668.9
Mean Absolute Error	249986.7
Mean Abs. Percent Error	112.4247
Theil Inequality Coefficient	0.262634
Bias Proportion	0.072161
Variance Proportion	0.004021
Covariance Proportion	0.923818

المصدر: إعداد الباحث

**ملحق رقم ( 36 )**  
**نتيجة معادلة سعر الصرف**

Dependent Variable: EXCH				
Method: Least Squares				
Date: 01/06/17 Time: 17:45				
Sample: 1970 2014				
Included observations: 45				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.864964	0.657512	1.315511	0.1955
GDP	6.89E-05	1.84E-05	3.737842	0.0006
INF	-0.015785	0.010424	-1.514248	0.1375
R-squared	0.273449	Mean dependent var		1.557169
Adjusted R-squared	0.238852	S.D. dependent var		3.286416
S.E. of regression	2.867195	Akaike info criterion		5.008886
Sum squared resid	345.2739	Schwarz criterion		5.129330
Log likelihood	-109.6999	Hannan-Quinn criter.		5.053786
F-statistic	7.903695	Durbin-Watson stat		2.298407
Prob(F-statistic)	0.001221			

المصدر: إعداد الباحث

**ملحق رقم ( 37 )**  
**النتيجة المعدلة لمعادلة سعر الصرف**

Dependent Variable: EXCH				
Method: Least Squares				
Date: 01/06/17 Time: 17:49				
Sample (adjusted): 1971 2014				
Included observations: 44 after adjustments				
Convergence achieved after 5 iterations				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
GDP	7.61E-05	1.32E-05	5.761498	0.0000
AR(1)	-0.129511	0.159594	-0.811500	0.4217
R-squared	0.235894	Mean dependent var	1.592491	
Adjusted R-squared	0.217701	S.D. dependent var	3.315759	
S.E. of regression	2.932712	Akaike info criterion	5.034121	
Sum squared resid	361.2336	Schwarz criterion	5.115221	
Log likelihood	-108.7507	Hannan-Quinn criter.	5.064197	
Durbin-Watson stat	1.949298			
Inverted AR Roots	-.13			

المصدر: إعداد الباحث

ملحق رقم ( 38 )

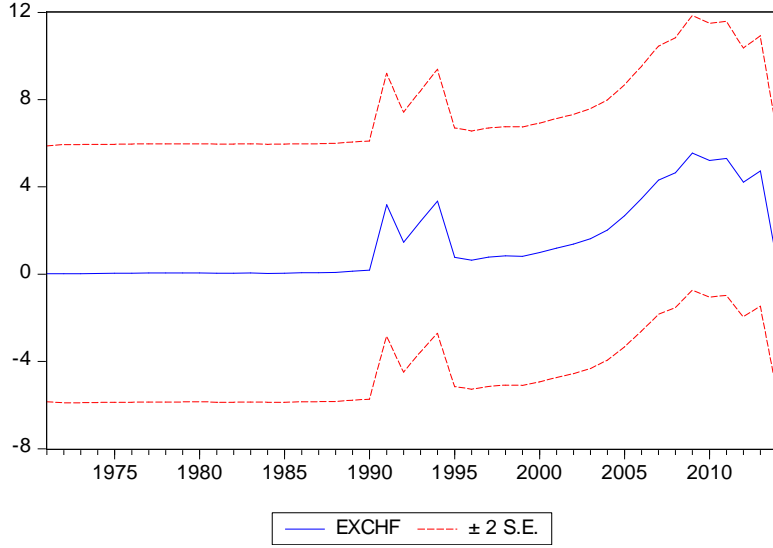
اختبار التكامل المشترك

**Augmented Dickey-Fuller Unit Root Test on RESID01**

Null Hypothesis: RESID05 has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=9)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic				
			-6.255481	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(RESID05)				
Method: Least Squares				
Date: 01/06/17 Time: 17:50				
Sample (adjusted): 1972 2014				
Included observations: 43 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
RESID05(-1)	-1.015535	0.162343	-6.255481	0.0000
C	0.167778	0.451908	0.371267	0.7124
R-squared	0.488338	Mean dependent var		0.123486
Adjusted R-squared	0.475859	S.D. dependent var		4.092666
S.E. of regression	2.962993	Akaike info criterion		5.055672
Sum squared resid	359.9524	Schwarz criterion		5.137588
Log likelihood	-106.6969	Hannan-Quinn criter.		5.085880
F-statistic	39.13104	Durbin-Watson stat		1.930799
Prob(F-statistic)	0.000000			

المصدر: إعداد الباحث

ملحق رقم ( 39 )  
اختبار ثيل للاستشراف



Forecast: EXCHF	
Actual: EXCH	
Forecast sample: 1970 2014	
Adjusted sample: 1971 2014	
Included observations: 44	
Root Mean Squared Error	2.887741
Mean Absolute Error	1.277606
Mean Abs. Percent Error	569.5847
Theil Inequality Coefficient	0.487314
Bias Proportion	0.002996
Variance Proportion	0.271099
Covariance Proportion	0.725905

المصدر: إعداد الباحث