ANEXOS

I. ANEXO 1: Pruebas de Raíz Unitaria

PRUEBAS DE RAÍZ UNITARIA NIVEL DEL IPC

Prueba	Augmented Dickey-Fuller test statistic (Ho=Raíz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 1.**	**Intercepto Diagrama 2.**	**Ningún Parámetro Diagrama 3.**
Nivel del IPC	Tendencia(0.0439) e Intercepto(0.0233) significativos, no rechaza la Ho (0.5406)	Intercepto significativo (0.0185), no rechaza la Ho (0.7395)	No rechaza la Ho(1.0000)

Diagrama 1.

Null Hypothesis: NIVELIPC has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 2 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.101356	0.5406
Test critical values:	1% level	-4.017956	
	5% level	-3.438886	
	10% level	-3.143776	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NIVELIPC)
Method: Least Squares
Date: 05/16/13 Time: 16:33
Sample (adjusted): 2000M04 2013M03
Included observations: 156 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPC(-1)	-0.033886	0.016126	-2.101356	0.0373
D(NIVELIPC(-1))	0.840407	0.076519	10.98301	0.0000
D(NIVELIPC(-2))	-0.254619	0.078522	-3.242654	0.0015
C	3.584120	1.564227	2.291305	0.0233
@TREND(2000M01)	0.019286	0.009491	2.032057	0.0439

Diagrama 2.

Null Hypothesis: NIVELIPC has a unit root
Exogenous: Constant
Lag Length: 2 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.036237	0.7395
Test critical values:	1% level	-3.472534	
	5% level	-2.879966	
	10% level	-2.576674	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NIVELIPC)
Method: Least Squares
Date: 05/16/13 Time: 16:38
Sample (adjusted): 2000M04 2013M03
Included observations: 156 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPC(-1)	-0.001200	0.001158	-1.036237	0.3017
D(NIVELIPC(-1))	0.850453	0.077141	11.02467	0.0000
D(NIVELIPC(-2))	-0.305551	0.075176	-4.064474	0.0001
C	0.425945	0.178845	2.381638	0.0185

Diagrama 3.

Null Hypothesis: NIVELIPC has a unit root
Exogenous: None
Lag Length: 2 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		4.790105	1.0000
Test critical values:	1% level	-2.579870	
	5% level	-1.942883	
	10% level	-1.615351	

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

Prueba	Phillips-Perron test statistic (Raiz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 4.**	**Intercepto Diagrama 5.**	**Ningún Parámetro Diagrama 6.**
Nivel del IPC	Tendencia e Intercepto no significativas.	Intercepto significativo (0.0000) no rechaza la Ho (0.2409)	No rechaza la Ho (1.0000)

Diagrama 4.

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-1.800618	0.7000
Test critical values:	1% level	-4.017185	
	5% level	-3.438515	
	10% level	-3.143558	

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

Residual variance (no correction)	0.282500
HAC corrected variance (Bartlett kernel)	0.466808

Phillips-Perron Test Equation
Dependent Variable: D(NIVELIPC)
Method: Least Squares
Date: 05/16/13 Time: 16:55
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPC(-1)	-0.026148	0.021348	-1.224836	0.2225
C	3.279576	2.086727	1.571636	0.1181
@TREND(2000M01)	0.013418	0.012538	1.070186	0.2862

Diagrama 5.

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.110584	0.2409
Test critical values:	1% level	-3.471987	
	5% level	-2.879727	
	10% level	-2.576546	

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

Residual variance (no correction)	0.284588
HAC corrected variance (Bartlett kernel)	0.284588

Phillips-Perron Test Equation
Dependent Variable: D(NIVELIPC)
Method: Least Squares
Date: 05/16/13 Time: 16:56
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPC(-1)	-0.003365	0.001594	-2.110584	0.0364
C	1.060451	0.233896	4.533850	0.0000

Diagrama 6.

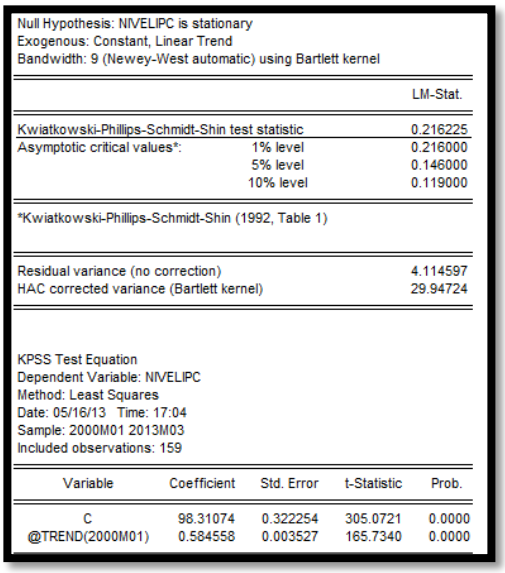
Null Hypothesis: NIVELIPC has a unit root
Exogenous: None
Bandwidth: 4 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		7.768715	1.0000
Test critical values:	1% level	-2.579680	
	5% level	-1.942856	
	10% level	-1.615368	

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

Prueba	Kwiatkowski-Phillips-Schmidt-Shin test statistic (Estacionariedad)	
Serie	**Tendencia e Intercepto Diagrama 7.**	**Intercepto Diagrama 8.**
Nivel del IPC	Tendencia (0.0000) e Intercepto(0.0000) significativas, rechaza la Ho	Intercepto significativo(0.0000), rechaza la Ho

Diagrama 7.



Null Hypothesis: NIVELIPC is stationary
Exogenous: Constant, Linear Trend
Bandwidth: 9 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.216225
Asymptotic critical values*:	1% level	0.216000
	5% level	0.146000
	10% level	0.119000

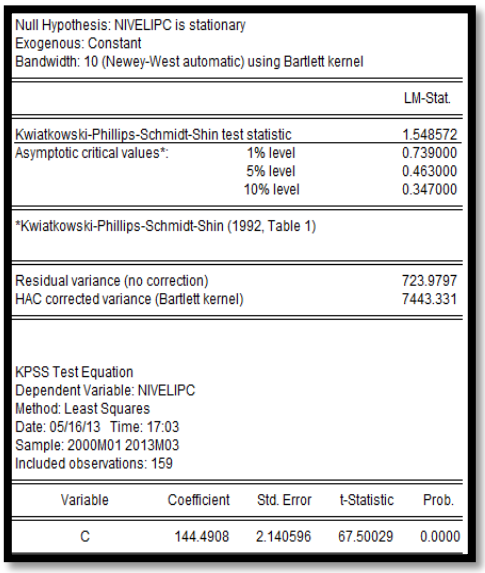
*Kwiatkowski-Phillips-Schmidt-Shin (1992, Table 1)

Residual variance (no correction)	4.114597
HAC corrected variance (Bartlett kernel)	29.94724

KPSS Test Equation
Dependent Variable: NIVELIPC
Method: Least Squares
Date: 05/16/13 Time: 17:04
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	98.31074	0.322254	305.0721	0.0000
@TREND(2000M01)	0.584558	0.003527	165.7340	0.0000

Diagrama 8.



Null Hypothesis: NIVELIPC is stationary
Exogenous: Constant
Bandwidth: 10 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		1.548572
Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

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

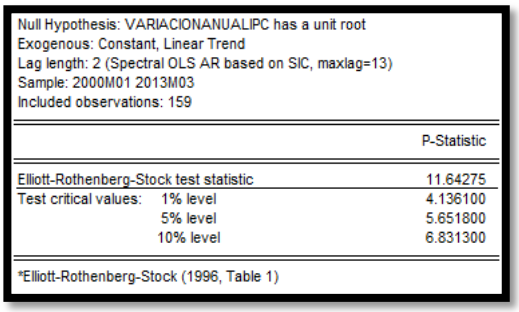
Residual variance (no correction)	723.9797
HAC corrected variance (Bartlett kernel)	7443.331

KPSS Test Equation
Dependent Variable: NIVELIPC
Method: Least Squares
Date: 05/16/13 Time: 17:03
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	144.4908	2.140596	67.50029	0.0000

Prueba	Elliot-Rothenberg-Stock test statistic (Raíz Unitaria)	
Serie	**Tendencia e Intercepto Diagrama 9.**	**Intercepto Diagrama 10.**
Nivel del IPC	No rechaza la Ho	No rechaza la Ho

Diagrama 9.

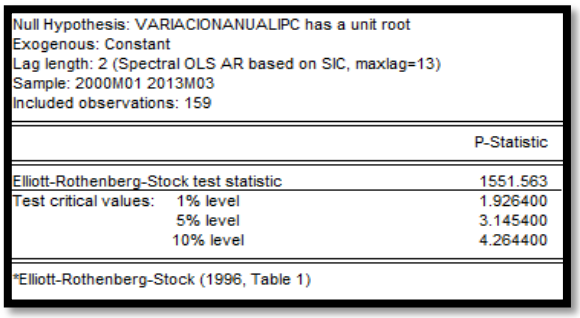


Null Hypothesis: VARIACIONANUALIPC has a unit root
Exogenous: Constant, Linear Trend
Lag length: 2 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		11.64275
Test critical values:	1% level	4.136100
	5% level	5.651800
	10% level	6.831300

*Elliott-Rothenberg-Stock (1996, Table 1)

Diagrama 10.



Null Hypothesis: VARIACIONANUALIPC has a unit root
Exogenous: Constant
Lag length: 2 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		1551.563
Test critical values:	1% level	1.926400
	5% level	3.145400
	10% level	4.264400

*Elliott-Rothenberg-Stock (1996, Table 1)

PRUEBAS DE RAÍZ UNITARIA NIVEL DEL IPP

Prueba	Augmented Dickey-Fuller test statistic (Ho=Raíz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 11.**	**Intercepto Diagrama 12.**	**Ningún Parámetro Diagrama 13.**
Nivel del IPP	Tendencia(0.0260) e Intercepto(0.0069) significativos, no rechaza la Ho (0.3135)	Intercepto significativo (0.0252), no rechaza la Ho (0.3823)	No rechaza la Ho(0.9983)

Diagrama 11.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.529828	0.3135
Test critical values:	1% level	-4.017568	
	5% level	-3.438700	
	10% level	-3.143666	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NIVELIPP)
Method: Least Squares
Date: 05/16/13 Time: 17:24
Sample (adjusted): 2000M03 2013M03
Included observations: 157 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPP(-1)	-0.047692	0.018852	-2.529828	0.0124
D(NIVELIPP(-1))	0.480774	0.071208	6.751651	0.0000
C	5.304211	1.938097	2.736814	0.0069
@TREND(2000M01)	0.020015	0.008903	2.248089	0.0260

Diagrama 12.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.794345	0.3823
Test critical values:	1% level	-3.472259	
	5% level	-2.879846	
	10% level	-2.576610	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(NIVELIPP)
Method: Least Squares
Date: 05/16/13 Time: 17:25
Sample (adjusted): 2000M03 2013M03
Included observations: 157 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPP(-1)	-0.005956	0.003320	-1.794345	0.0747
D(NIVELIPP(-1))	0.451175	0.070896	6.363930	0.0000
C	1.077543	0.476668	2.260573	0.0252

Diagrama 13.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: None
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		2.689424	0.9983
Test critical values:	1% level	-2.579774	
	5% level	-1.942869	
	10% level	-1.615359	

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

Prueba	Phillips-Perron test statistic (Raiz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 14.**	**Intercepto Diagrama 15.**	**Ningún Parámetro Diagrama 16.**
Nivel del IPP	Tendencia(0.3046) e Intercepto(0.0606) no significativas.	Intercepto significativo (0.0003) no rechaza la Ho (0.1631)	No rechaza la Ho (0.9999)

Diagrama 14.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 4 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.119431	0.5306
Test critical values:	1% level	-4.017185	
	5% level	-3.438515	
	10% level	-3.143558	

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

Residual variance (no correction)	0.930782
HAC corrected variance (Bartlett kernel)	1.712054

Phillips-Perron Test Equation
Dependent Variable: D(NIVELIPP)
Method: Least Squares
Date: 05/16/13 Time: 17:57
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPP(-1)	-0.031364	0.020737	-1.512478	0.1324
C	4.038328	2.136120	1.890497	0.0606
@TREND(2000M01)	0.010077	0.009783	1.029997	0.3046

Diagrama 15.

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

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.332438	0.1631
Test critical values:	1% level	-3.471987	
	5% level	-2.879727	
	10% level	-2.576546	

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

Residual variance (no correction)	0.937153
HAC corrected variance (Bartlett kernel)	1.631181

Phillips-Perron Test Equation
Dependent Variable: D(NIVELIPP)
Method: Least Squares
Date: 05/16/13 Time: 17:58
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NIVELIPP(-1)	-0.010330	0.003602	-2.867804	0.0047
C	1.901490	0.509034	3.735485	0.0003

Diagrama 16.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: None
Bandwidth: 5 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		3.561825	0.9999
Test critical values:	1% level	-2.579680	
	5% level	-1.942856	
	10% level	-1.615368	

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

Prueba	Kwiatkowski-Phillips-Schmidt-Shin test statistic (Estacionariedad)	
Serie	**Tendencia e Intercepto Diagrama 17.**	**Intercepto Diagrama 18.**
Nivel del IPP	Tendencia (0.0000) e Intercepto(0.0000) significativas, rechaza la Ho	Intercepto significativo(0.0000), rechaza la Ho

Diagrama 17.

Null Hypothesis: NIVELIPP is stationary
Exogenous: Constant, Linear Trend
Bandwidth: 9 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.270782
Asymptotic critical values*:	1% level	0.216000
	5% level	0.146000
	10% level	0.119000

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

Residual variance (no correction)	14.46809
HAC corrected variance (Bartlett kernel)	102.4601

KPSS Test Equation
Dependent Variable: NIVELIPP
Method: Least Squares
Date: 05/16/13 Time: 18:10
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	103.3213	0.604283	170.9816	0.0000
@TREND(2000M01)	0.462297	0.006614	69.89782	0.0000

Diagrama 18.

Null Hypothesis: NIVELIPP is stationary
Exogenous: Constant
Bandwidth: 10 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		1.511760
Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

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

Residual variance (no correction)	464.7025
HAC corrected variance (Bartlett kernel)	4736.464

KPSS Test Equation
Dependent Variable: NIVELIPP
Method: Least Squares
Date: 05/16/13 Time: 18:11
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	139.8427	1.714980	81.54193	0.0000

Prueba	Elliot-Rothenberg-Stock test statistic (Raíz Unitaria)	
Serie	**Tendencia e Intercepto Diagrama 19.**	**Intercepto Diagrama 20.**
Nivel del IPP	No rechaza la Ho	No rechaza la Ho

Diagrama 19.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: Constant, Linear Trend
Lag length: 1 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		17.06030
Test critical values:	1% level	4.136100
	5% level	5.651800
	10% level	6.831300

*Elliott-Rothenberg-Stock (1996, Table 1)

Diagrama 20.

Null Hypothesis: NIVELIPP has a unit root
Exogenous: Constant
Lag length: 1 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		316.0821
Test critical values:	1% level	1.926400
	5% level	3.145400
	10% level	4.264400

*Elliott-Rothenberg-Stock (1996, Table 1)

PRUEBAS DE RAÍZ UNITARIA VARIACIÓN ANUAL IPC

Prueba	Augmented Dickey-Fuller test statistic (Ho=Raíz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 21.**	**Intercepto Diagrama 22.**	**Ningún Parámetro Diagrama 23.**
Variación Anual IPC	Tendencia(0.0208) e Intercepto(0.0085) significativos, no rechaza la Ho (0.1381)	Intercepto no significativo (0.1884)	No Rechaza la Ho(0.0748)

Diagrama 21.

Null Hypothesis: IPC has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.990869	0.1381
Test critical values:	1% level	-4.017568	
	5% level	-3.438700	
	10% level	-3.143666	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IPC)
Method: Least Squares
Date: 07/23/13 Time: 13:43
Sample (adjusted): 2000M03 2013M03
Included observations: 157 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPC(-1)	-0.055768	0.018646	-2.990869	0.0032
D(IPC(-1))	0.503513	0.067450	7.465027	0.0000
C	0.004365	0.001637	2.666931	0.0085
@TREND(2000M01)	-1.97E-05	8.44E-06	-2.335627	0.0208

Diagrama 22.

Null Hypothesis: IPC has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.858808	0.3511
Test critical values:	1% level	-3.472259	
	5% level	-2.879846	
	10% level	-2.576610	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(IPC)
Method: Least Squares
Date: 07/23/13 Time: 13:46
Sample (adjusted): 2000M03 2013M03
Included observations: 157 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPC(-1)	-0.019681	0.010588	-1.858808	0.0650
D(IPC(-1))	0.488452	0.068105	7.172050	0.0000
C	0.000818	0.000619	1.321275	0.1884

Diagrama 23.

Null Hypothesis: IPC has a unit root
Exogenous: None
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-1.758203	0.0748
Test critical values:	1% level	-2.579774	
	5% level	-1.942869	
	10% level	-1.615359	

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

Prueba	Phillips-Perron test statistic (Raiz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 24.**	**Intercepto Diagrama 25.**	**Ningún Parámetro Diagrama 26.**
Variación Anual IPC	Tendencia (0.0983) e Intercepto(0.1215) no significativas.	Intercepto no significativo (0.9702)	No rechaza la Ho (0.1566)

Diagrama 24.

Null Hypothesis: IPC has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.630613	0.2675
Test critical values:	1% level	-4.017185	
	5% level	-3.438515	
	10% level	-3.143558	

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

Residual variance (no correction)	1.00E-05
HAC corrected variance (Bartlett kernel)	2.34E-05

Phillips-Perron Test Equation
Dependent Variable: D(IPC)
Method: Least Squares
Date: 07/23/13 Time: 13:48
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPC(-1)	-0.037900	0.022003	-1.722454	0.0870
C	0.003001	0.001927	1.557202	0.1215
@TREND(2000M01)	-1.66E-05	9.97E-06	-1.663079	0.0983

Diagrama 25.

Null Hypothesis: IPC has a unit root
Exogenous: Constant
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-1.218301	0.6660
Test critical values:	1% level	-3.471987	
	5% level	-2.879727	
	10% level	-2.576546	

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

Residual variance (no correction)	1.02E-05
HAC corrected variance (Bartlett kernel)	2.30E-05

Phillips-Perron Test Equation
Dependent Variable: D(IPC)
Method: Least Squares
Date: 07/23/13 Time: 13:49
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
IPC(-1)	-0.007569	0.012380	-0.611430	0.5418
C	2.70E-05	0.000722	0.037403	0.9702

Diagrama 26.

Null Hypothesis: IPC has a unit root
Exogenous: None
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-1.375297	0.1566
Test critical values:	1% level	-2.579680	
	5% level	-1.942856	
	10% level	-1.615368	

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

Residual variance (no correction)	1.02E-05
HAC corrected variance (Bartlett kernel)	2.30E-05

Prueba	Kwiatkowski-Phillips-Schmidt-Shin test statistic (Estacionariedad)	
Serie	**Tendencia e Intercepto Diagrama 27.**	**Intercepto Diagrama 28.**
Variación Anual IPC	Tendencia (0.0000) e Intercepto(0.0000) significativas, no rechaza la Ho	Intercepto significativo(0.0000), rechaza la Ho

Diagrama 27.

Null Hypothesis: IPC is stationary
Exogenous: Constant, Linear Trend
Bandwidth: 10 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.074029
Asymptotic critical values*:	1% level	0.216000
	5% level	0.146000
	10% level	0.119000

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

Residual variance (no correction)	0.000133
HAC corrected variance (Bartlett kernel)	0.001068

KPSS Test Equation
Dependent Variable: IPC
Method: Least Squares
Date: 07/23/13 Time: 13:52
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.084131	0.001833	45.90831	0.0000
@TREND(2000M01)	-0.000377	2.01E-05	-18.79297	0.0000

Diagrama 28.

Null Hypothesis: IPC is stationary
Exogenous: Constant
Bandwidth: 10 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		1.145480
Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

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

Residual variance (no correction)	0.000432
HAC corrected variance (Bartlett kernel)	0.004046

KPSS Test Equation
Dependent Variable: IPC
Method: Least Squares
Date: 07/23/13 Time: 13:53
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.054352	0.001654	32.85542	0.0000

Prueba	Elliot-Rothenberg-Stock test statistic (Raíz Unitaria)	
Serie	**Tendencia e Intercepto Diagrama 29.**	**Intercepto Diagrama 30.**
Variación Anual IPC	Rechaza la Ho	No rechaza la Ho

Diagrama 29.

Null Hypothesis: IPC has a unit root
Exogenous: Constant, Linear Trend
Lag length: 1 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		5.614000
Test critical values:	1% level	4.136100
	5% level	5.651800
	10% level	6.831300

*Elliott-Rothenberg-Stock (1996, Table 1)

Diagrama 30.

Null Hypothesis: IPC has a unit root
Exogenous: Constant
Lag length: 1 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		14.73084
Test critical values:	1% level	1.926400
	5% level	3.145400
	10% level	4.264400

*Elliott-Rothenberg-Stock (1996, Table 1)

PRUEBAS DE RAÍZ UNITARIA VARIACIÓN ANUAL IPP

Prueba	Augmented Dickey-Fuller test statistic (Ho=Raíz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 31.**	**Intercepto Diagrama 32.**	**Ningún Parámetro Diagrama 33.**
Variación Anual IPP	Tendencia(0.0054) e Intercepto(0.0004) significativos, rechaza la Ho (0.0009)	Intercepto no significativo (0.0676)	Rechaza la Ho(0.0200)

Diagrama 31.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant, Linear Trend
Lag Length: 4 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-4.739868	0.0009
Test critical values:	1% level	-4.018748	
	5% level	-3.439267	
	10% level	-3.143999	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(VARIACIONANUALIPP)
Method: Least Squares
Date: 07/23/13 Time: 13:22
Sample (adjusted): 2000M06 2013M03
Included observations: 154 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VARIACIONANUALIPP(-1)	-0.108509	0.022893	-4.739868	0.0000
D(VARIACIONANUALIPP(-1))	0.610274	0.076827	7.943480	0.0000
D(VARIACIONANUALIPP(-2))	-0.152402	0.092051	-1.655634	0.0999
D(VARIACIONANUALIPP(-3))	0.094299	0.090649	1.040271	0.2999
D(VARIACIONANUALIPP(-4))	0.201856	0.080046	2.521739	0.0127
C	0.009487	0.002617	3.625671	0.0004
@TREND(2000M01)	-5.55E-05	1.96E-05	-2.826957	0.0054

Diagrama 32.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.911379	0.0463
Test critical values:	1% level	-3.472259	
	5% level	-2.879846	
	10% level	-2.576610	

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

Augmented Dickey-Fuller Test Equation
Dependent Variable: D(VARIACIONANUALIPP)
Method: Least Squares
Date: 07/23/13 Time: 13:25
Sample (adjusted): 2000M03 2013M03
Included observations: 157 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VARIACIONANUALIPP(-1)	-0.046553	0.015990	-2.911379	0.0041
D(VARIACIONANUALIPP(-1))	0.558109	0.066931	8.338527	0.0000
C	0.001954	0.001062	1.840905	0.0676

Diagrama 33.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: None
Lag Length: 1 (Automatic - based on SIC, maxlag=13)

		t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic		-2.321710	0.0200
Test critical values:	1% level	-2.579774	
	5% level	-1.942869	
	10% level	-1.615359	

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

Prueba	Phillips-Perron test statistic (Raiz Unitaria)		
Serie	**Tendencia e Intercepto Diagrama 34.**	**Intercepto Diagrama 35.**	**Ningún Parámetro Diagrama 36.**
Variación Anual IPP	Tendencia(0.1690) e Intercepto(0.1564) no significativas.	Intercepto no significativo (0.6863)	No Rechaza la Ho (0.0507)

Diagrama 34.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant, Linear Trend
Bandwidth: 7 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-3.076620	0.1156
Test critical values:	1% level	-4.017185	
	5% level	-3.438515	
	10% level	-3.143558	

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

Residual variance (no correction)	0.000101
HAC corrected variance (Bartlett kernel)	0.000251

Phillips-Perron Test Equation
Dependent Variable: D(VARIACIONANUALIPP)
Method: Least Squares
Date: 07/23/13 Time: 13:28
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VARIACIONANUALIPP(-1)	-0.048736	0.025017	-1.948088	0.0532
C	0.004247	0.002982	1.424285	0.1564
@TREND(2000M01)	-3.25E-05	2.35E-05	-1.381896	0.1690

Diagrama 35.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-2.238384	0.1937
Test critical values:	1% level	-3.471987	
	5% level	-2.879727	
	10% level	-2.576546	

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

Residual variance (no correction)	0.000102
HAC corrected variance (Bartlett kernel)	0.000248

Phillips-Perron Test Equation
Dependent Variable: D(VARIACIONANUALIPP)
Method: Least Squares
Date: 07/23/13 Time: 13:29
Sample (adjusted): 2000M02 2013M03
Included observations: 158 after adjustments

Variable	Coefficient	Std. Error	t-Statistic	Prob.
VARIACIONANUALIPP(-1)	-0.026036	0.018924	-1.375840	0.1708
C	0.000510	0.001259	0.404651	0.6863

Diagrama 36.

Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: None
Bandwidth: 6 (Newey-West automatic) using Bartlett kernel

		Adj. t-Stat	Prob.*
Phillips-Perron test statistic		-1.936407	0.0507
Test critical values:	1% level	-2.579680	
	5% level	-1.942856	
	10% level	-1.615368	

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

Residual variance (no correction)	0.000103
HAC corrected variance (Bartlett kernel)	0.000246

Prueba	Kwiatkowski-Phillips-Schmidt-Shin test statistic (Estacionariedad)	
Serie	**Tendencia e Intercepto Diagrama 37.**	**Intercepto Diagrama 38.**
Variación Anual IPP	Tendencia (0.0000) e Intercepto(0.0000) significativas, no rechaza la Ho	Intercepto significativo(0.0000), rechaza la Ho

Diagrama 37.

Null Hypothesis: VARIACIONANUALIPP is stationary
Exogenous: Constant, Linear Trend
Bandwidth: 9 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.099202
Asymptotic critical values*:	1% level	0.216000
	5% level	0.146000
	10% level	0.119000

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

Residual variance (no correction)	0.001040
HAC corrected variance (Bartlett kernel)	0.006794

KPSS Test Equation
Dependent Variable: VARIACIONANUALIPP
Method: Least Squares
Date: 07/23/13 Time: 13:31
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.099590	0.005122	19.44212	0.0000
@TREND(2000M01)	-0.000622	5.61E-05	-11.08563	0.0000

Diagrama 38.

Null Hypothesis: VARIACIONANUALIPP is stationary
Exogenous: Constant
Bandwidth: 10 (Newey-West automatic) using Bartlett kernel

		LM-Stat.
Kwiatkowski-Phillips-Schmidt-Shin test statistic		0.865187
Asymptotic critical values*:	1% level	0.739000
	5% level	0.463000
	10% level	0.347000

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

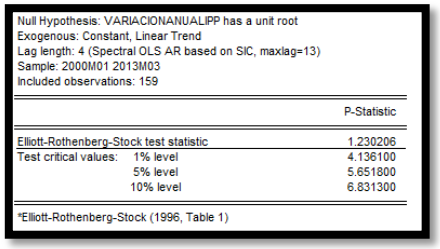
Residual variance (no correction)	0.001853
HAC corrected variance (Bartlett kernel)	0.014571

KPSS Test Equation
Dependent Variable: VARIACIONANUALIPP
Method: Least Squares
Date: 07/23/13 Time: 13:32
Sample: 2000M01 2013M03
Included observations: 159

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.050491	0.003425	14.74200	0.0000

Prueba	Elliot-Rothenberg-Stock test statistic (Raíz Unitaria)	
Serie	**Tendencia e Intercepto Diagrama 39.**	**Intercepto Diagrama 40.**
Variación Anual IPP	Rechaza la Ho	No rechaza la Ho

Diagrama 39.

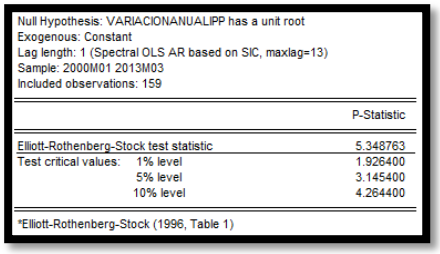


Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant, Linear Trend
Lag length: 4 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		1.230206
Test critical values:	1% level	4.136100
	5% level	5.651800
	10% level	6.831300

*Elliott-Rothenberg-Stock (1996, Table 1)

Diagrama 40.



Null Hypothesis: VARIACIONANUALIPP has a unit root
Exogenous: Constant
Lag length: 1 (Spectral OLS AR based on SIC, maxlag=13)
Sample: 2000M01 2013M03
Included observations: 159

		P-Statistic
Elliott-Rothenberg-Stock test statistic		5.348763
Test critical values:	1% level	1.926400
	5% level	3.145400
	10% level	4.264400

*Elliott-Rothenberg-Stock (1996, Table 1)

RESUMEN DE PRUEBAS DE RAÍZ UNITARIA:

Prueba	**Augmented Dickey-Fuller (Ho=Raiz Unitaria)**			**Phillips-Perron test statistic (Ho=Raiz Unitaria)**		
Serie	**Tendencia e Intercepto**	**Intercepto**	**Ningún Parámetro**	**Tendencia e Intercepto**	**Intercepto**	**Ningún Parámetro**
Nivel del IPC	No rechaza la Ho(0.5406)	No rechaza la Ho(0.7395)	No rechaza la Ho(1.0000)	Tendencia e Intercepto no significativos.	No rechaza la Ho(0.2409)	No rechaza la Ho(1.0000)
Nivel del IPP	No rechaza la Ho(0.3135)	No rechaza la Ho(0.3823)	No rchaza la Ho(0.9983)	Tendencia e Intercepto no significativos.	No rechaza la Ho(0.1631)	No rechaza la Ho(0.9999)
Variación Anual IPC	No rechaza la Ho(0.1381)	Intercepto no significativo	No Rechaza la Ho(0.0748)	Tendencia e Intercepto no significativos.	Intercepto no significativo	No rechaza la Ho(0.1566)
Variación Anual IPP	Rechaza la Ho(0.0009)	Intercepto no significativo	Rechaza la Ho(0.0200)	Tendencia e Intercepto no significativos.	Intercepto no significativo	Rechaza la Ho(0.0507)

Prueba	**Kwiatkowski-Phillips-Schmidt-Shin (Ho=Estacionariedad)**		**Elliot-Rothenberg-Stock (Ho=Raiz Unitaria)**	
Serie	**Tendencia e Intercepto**	**Intercepto**	**Tendencia e Intercepto**	**Intercepto**
Nivel del IPC	Rechaza la Ho	Rechaza la Ho	No rechaza la Ho	No rechaza la Ho
Nivel del IPP	Rechaza la Ho	Rechaza la Ho	No rechaza la Ho	No rechaza la Ho
Variación Anual IPC	No Rechaza la Ho	Rechaza la Ho	Rechaza la Ho	No Rechaza la Ho
Variación Anual IPP	No Rechaza la Ho	Rechaza la Ho	Rechaza la Ho	No Rechaza la Ho

II. ANEXO 2: Criterio de Selección para rezagos

Diagrama 41.

VAR Lag Order Selection Criteria
Endogenous variables: VARIACIONANUALIPC VARIACIONANUALIPP
Exogenous variables: C
Date: 06/12/13 Time: 17:05
Sample: 2003M01 2013M03
Included observations: 109

Lag	LogL	LR	FPE	AIC	SC	HQ
0	544.0505	NA	1.64e-07	-9.945881	-9.896498	-9.925854
1	835.0751	566.0295	8.48e-10	-15.21239	-15.06424	-15.15231
2	871.8007	70.08198	4.65e-10	-15.81286	-15.56594*	-15.71273*
3	873.9630	4.046765	4.81e-10	-15.77914	-15.43346	-15.63895
4	877.1545	5.855936	4.89e-10	-15.76430	-15.31986	-15.58406
5	883.7245	11.81402	4.66e-10	-15.81146	-15.26825	-15.59117
6	886.3817	4.680601	4.79e-10	-15.78682	-15.14485	-15.52648
7	889.7512	5.811636	4.85e-10	-15.77525	-15.03451	-15.47486
8	890.6747	1.558839	5.14e-10	-15.71880	-14.87930	-15.37835
9	895.9879	8.774077	5.02e-10	-15.74290	-14.80463	-15.36239
10	899.5466	5.746236	5.08e-10	-15.73480	-14.69777	-15.31425
11	902.2654	4.290180	5.22e-10	-15.71129	-14.57549	-15.25068
12	904.8676	4.010701	5.37e-10	-15.68564	-14.45108	-15.18498
13	917.3809	18.82735	4.61e-10	-15.84185	-14.50852	-15.30114
14	925.9526	12.58236*	4.27e-10*	-15.92574*	-14.49364	-15.34497

* indicates lag order selected by the criterion
LR: sequential modified LR test statistic (each test at 5% level)
FPE: Final prediction error
AIC: Akaike information criterion
SC: Schwarz information criterion
HQ: Hannan-Quinn information criterion

Demostración es para probar que un VAR (2) corresponde a un VEC (1):

$$Y_t = V + A_1 Y_{t-1} + A_2 Y_{t-2} + \cdots + A_P Y_{t-P} + U_t$$

Se resta a ambos lados Y_{t-1}:

$$\Delta Y_t = V - (I_K - A_1) Y_{t-1} + A_2 Y_{t-2} + \cdots + A_P Y_{t-P} + U_t$$

Se suma y se resta el término $A_2 Y_{t-1}$:

$$\Delta Y_t = V - (I_K - A_1) Y_{t-1} + A_2 Y_{t-1} - A_2 Y_{t-1} + A_2 Y_{t-2} + \cdots + A_P Y_{t-P} + U_t$$

$$\Delta Y_t = V - (I_K - A_1 - A_2) Y_{t-1} - A_2 (Y_{t-1} - Y_{t-2}) + A_3 Y_{t-3} + \cdots + A_P Y_{t-P} + U_t$$

Se suma y se resta el término $A_3 Y_{t-2}$:

$$\Delta Y_t = V - (I_K - A_1 - A_2) Y_{t-1} - A_2 \Delta Y_{t-1} + A_3 Y_{t-2} - A_3 Y_{t-2} + A_3 Y_{t-3} + \cdots + A_P Y_{t-P} + U_t$$

Se suma y se resta el término $A_3 Y_{t-1}$:

$$\Delta Y_t = V - (I_K - A_1 - A_2)Y_{t-1} - A_2\Delta\, Y_{t-1} + A_3 Y_{t-1} - A_3 Y_{t-1} - A_3 Y_{t-1} + A_3 Y_{t-1} - A_3\Delta Y_{t-2} + \cdots + A_P Y_{t-P} + U_t$$

Donde $A_3 Y_{t-1} - A_3\Delta Y_{t-2} = -A_3\Delta Y_{t-1}$

$$\Delta Y_t = V - (I_K - A_1 - A_2 - A_3)Y_{t-1} - (A_2 + A_3)\Delta Y_{t-1} - A_3\Delta Y_{t-2} + \cdots + A_P Y_{t-P} + U_t$$

Sucesivamente se llega a:

$$\Delta Y_t = V + \pi Y_{t-1} + \Gamma_1\Delta Y_{t-1} + \Gamma_2\Delta Y_{t-2} + \cdots + \Gamma_P\Delta Y_{t-P} + U_t$$

Concluyendo:

$$VECM(P-1)$$

III. ANERXO 3: Prueba de Cointegración

Diagrama 42.

Date: 06/12/13 Time: 18:06
Sample: 2003M01 2013M03
Included observations: 121
Series: VARIACIONANUALIPC VARIACIONANUALIPP
Lags interval: 1 to 1

Selected (0.05 level*) Number of Cointegrating Relations by Model

Data Trend:	None	None	Linear	Linear	Quadratic
Test Type	No Intercept No Trend	Intercept No Trend	Intercept No Trend	Intercept Trend	Intercept Trend
Trace	1	0	0	0	0
Max-Eig	1	0	0	0	0

*Critical values based on MacKinnon-Haug-Michelis (1999)

Information Criteria by Rank and Model

Data Trend:	None	None	Linear	Linear	Quadratic
Rank or No. of CEs	No Intercept No Trend	Intercept No Trend	Intercept No Trend	Intercept Trend	Intercept Trend
	Akaike Information Criteria by Rank (rows) and Model (columns)				
0	-15.75752	-15.75752	-15.73389	-15.73389	-15.70173
1	-15.78536*	-15.77087	-15.75988	-15.74388	-15.72737
2	-15.73127	-15.71196	-15.71196	-15.69791	-15.69791

Diagrama 43.

Date: 06/12/13 Time: 17:55
Sample (adjusted): 2003M03 2013M03
Included observations: 121 after adjustments
Trend assumption: No deterministic trend
Series: VARIACIONANUALIPC VARIACIONANUALIPP
Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.089669	12.82299	12.32090	0.0412
At most 1	0.011956	1.455408	4.129906	0.2667

Trace test indicates 1 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)

Hypothesized No. of CE(s)	Eigenvalue	Max-Eigen Statistic	0.05 Critical Value	Prob.**
None *	0.089669	11.36758	11.22480	0.0472
At most 1	0.011956	1.455408	4.129906	0.2667

Max-eigenvalue test indicates 1 cointegrating eqn(s) at the 0.05 level
* denotes rejection of the hypothesis at the 0.05 level
**MacKinnon-Haug-Michelis (1999) p-values

IV. ANEXO 4 : Estimación modelo VEC:

J-Multi:

Diagrama 44.

Estimation results	Model Coefficients
Estimation method	One stage. Johansen approach
Estimation period	[2003 M3, 2013 M3], T = 121

$$\begin{bmatrix} d(IPC)(t) \\ d(IPP)(t) \end{bmatrix} = \begin{bmatrix} 0.002 \\ 0.066 \end{bmatrix} \begin{bmatrix} 1.000 & -1.406 \end{bmatrix} \begin{bmatrix} IPC(t-1) \\ IPP(t-1) \end{bmatrix} + \begin{bmatrix} 0.322 & 0.113 \\ -0.390 & 0.595 \end{bmatrix} \begin{bmatrix} d(IPC)(t-1) \\ d(IPP)(t-1) \end{bmatrix} + \begin{bmatrix} u1(t) \\ u2(t) \end{bmatrix}$$

Eviews:

Diagrama 45.

Vector Error Correction Estimates
Date: 06/12/13 Time: 19:23
Sample (adjusted): 2003M03 2013M03
Included observations: 121 after adjustments
Standard errors in ( ) & t-statistics in [ ]

Cointegrating Eq:	CointEq1	
VARIACIONANUALIPC(...	1.000000	
VARIACIONANUALIPP(-1)	-1.406405 (0.22172) [-6.34313]	
R-squared	0.331693	0.321891
Adj. R-squared	0.320366	0.310397
Sum sq. resids	0.000785	0.008768
S.E. equation	0.002578	0.008620
F-statistic	29.28278	28.00661
Log likelihood	551.0543	405.0218
Akaike AIC	-9.058749	-6.644989
Schwarz SC	-8.989432	-6.575671
Mean dependent	-0.000445	-0.001084
S.D. dependent	0.003128	0.010380

V. ANEXO 5: Prueba supuestos de residuales:

Diagrama 46.

VEC Residual Normality Tests
Orthogonalization: Cholesky (Lutkepohl)
Null Hypothesis: residuals are multivariate normal
Date: 06/12/13 Time: 19:56
Sample: 2003M01 2013M03
Included observations: 121

Component	Skewness	Chi-sq	df	Prob.
1	-0.123171	0.305951	1	0.5802
2	-0.157273	0.498818	1	0.4800
Joint		0.804769	2	0.6687

Component	Kurtosis	Chi-sq	df	Prob.
1	3.072449	0.026463	1	0.8708
2	3.548421	1.516362	1	0.2182
Joint		1.542825	2	0.4624

Component	Jarque-Bera	df	Prob.
1	0.332414	2	0.8469
2	2.015180	2	0.3651
Joint	2.347594	4	0.6721

Diagrama 47.

VEC Residual Serial Correlation LM T...
Null Hypothesis: no serial correlation ...
Date: 06/12/13 Time: 20:28
Sample: 2003M01 2013M03
Included observations: 121

Lags	LM-Stat	Prob
1	4.372009	0.3580
2	9.866214	0.0427
3	1.216816	0.8753
4	6.451667	0.1679
5	11.83389	0.0186
6	3.430442	0.4885
7	8.314959	0.0807
8	0.577511	0.9655
9	7.252593	0.1231
10	3.969285	0.4102
11	3.842105	0.4278
12	46.03132	0.0000
13	0.577199	0.9656
14	3.202973	0.5245
15	9.393697	0.0520
16	5.517362	0.2382
17	5.303131	0.2576
18	1.335376	0.8553
19	5.051946	0.2820
20	4.254012	0.3727
21	16.72609	0.0022
22	7.755196	0.1010
23	4.366480	0.3587
24	13.10253	0.0108
25	4.552324	0.3364
26	1.540292	0.8195
27	4.082235	0.3950
28	8.498075	0.0749
29	14.69934	0.0054
30	1.876854	0.7584

Probs from chi-square with 4 df.

El número de rezagos escogidos en la prueba de auto correlación es el usado generalmente en la literatura (la cuarta parte de la muestra en este caso 30 esto puede ir mejor en el anexo).

VI. ANEXO 6: Causalidad de Granger

Pairwise Granger Causality Tests
Date: 06/13/13 Time: 22:16
Sample: 2003M01 2013M03
Lags: 1

Null Hypothesis:	Obs	F-Statistic	Prob.
VARIACIONANUALIPP does not Granger Cause VARIACIONANUALIPC	122	4.57792	0.0344
VARIACIONANUALIPC does not Granger Cause VARIACIONANUALIPP		0.09708	0.7559

VII. ANEXO 7: Pronóstico del IPC con modelo VEC y modelo ARIMA.

Para poder hacer el modelo ARIMA se deben escoger el numero optimo de rezagos para poderlo estimar:

ARIMA IPC		
Rezagos Óptimos del modelo de selección de Hannan & Rissanen	**p**	**q**
Criterio de Información Akaike	2	0
Criterio de Información Hannan-	2	0
Criterio de Información Shwarz	2	0

En la siguiente tabla se encontraran los pronósticos del IPC por medio del Modelo VEC y el Modelo ARIMA.

IPC					
Fecha Pronóstico	**VEC**	**ARIMA**	**Real Observado**	**Diferencial VEC y Observado**	**Diferencial ARIMA y Observado**
2011 Marzo	3.09	3.1	3.1864438	0.0093014	0.01
2011 Abril	3.24	3.28	2.8359514	0.1632553	0.20
2011 Mayo	2.69	2.74	3.0224407	0.1105168	0.08
2011 Junio	3.18	3.29	3.2325901	0.0027657	0.00
2011 Julio	3.33	3.42	3.4196243	0.0080325	0.00
2011 Agosto	3.54	3.61	3.2716938	0.0719882	0.11
2011 Septiembre	3.37	3.35	3.7313448	0.1305701	0.15
2011 Octubre	3.97	3.93	4.0199492	0.0024949	0.01
2011 Noviembre	4.21	4.13	3.9629737	0.061022	0.03
2011 Diciembre	3.75	3.92	3.7257867	0.0005863	0.04
2012 Enero	3.39	3.59	3.5430958	0.0234383	0.00
2012 Febrero	3.22	3.44	3.5515278	0.1099107	0.01
2012 Marzo	3.44	3.61	3.3992052	0.0016642	0.04
2012 Abril	3.24	3.39	3.42522	0.0343064	0.00
2012 Mayo	3.46	3.5	3.4409279	0.0003637	0.00
2012 Junio	3.42	3.55	3.1984836	0.0490695	0.12
2012 Julio	2.99	3.14	3.0330258	0.0018512	0.01
2012 Agosto	3.06	3.02	3.1072119	0.002229	0.01
2012 Septiembre	3.23	3.24	3.0841605	0.0212692	0.02
2012 Octubre	3.05	3.07	3.0570146	4.921E-05	0.00
2012 Noviembre	2.9	3.07	2.7731114	0.0161007	0.09
2012 Diciembre	2.56	2.65	2.4353447	0.0155389	0.05
2013 Enero	2.22	2.29	1.9952921	0.0504937	0.09
2013 Febrero	1.91	1.83	1.826369	0.0069941	0.00
2013 Marzo	1.81	1.83	1.9114696	0.0102961	0.01
			Error Cuadratico Medio	**0.07**	**0.08**

Se puede observar que el pronóstico del VEC es mejor que el pronóstico del ARIMA para el IPP ya que el error cuadrático medio para el pronóstico de este por medio del Modelo VEC es menor.