

FACULTAD DE ESTUDIOS ESTADÍSTICOS

**MÁSTER EN MINERÍA DE DATOS E INTELIGENCIA
DE NEGOCIOS**

Curso 2021/2022

Trabajo de Fin de Máster

***TÍTULO: Estudio del efecto contagio de la crisis
financiera de 2008 sobre países africanos***

Alumno: Antonio José Fernández Sobaberas

Tutora: Alicia Pérez Alonso

Julio de 2022



UNIVERSIDAD COMPLUTENSE
MADRID

RESUMEN

El efecto contagio es un ámbito muy estudiado. La globalización ha establecido relaciones de dependencia entre mercados. Esto implica que un cierto evento puede afectar a todos aquellos con los que se encuentra conectado. Por lo tanto, ¿pueden sucesos en países altamente globalizados determinar a aquellos que lo están menos?

Para ello, se estudia la existencia del efecto contagio sobre países africanos por parte de Estados Unidos (EE.UU.) durante la crisis financiera iniciada en los años 2007/08. En particular, se estudiará si existe sobre el tipo de cambio de los siguientes países: Marruecos, Sudáfrica, Egipto, Argelia, Ghana, Kenia, Nigeria, Túnez y Tanzania.

Este estudio combina la minería de datos con las ciencias económicas. Consiste en el estudio de los rendimientos de las tasas de cambio, primero contrastando la Hipótesis de Mercados Eficientes, luego aplicando modelos univariantes de la familia GARCH y, por último, con modelos multivariantes DCC basados en el proceso previo.

Se determina el efecto contagio a través de un contraste de hipótesis sobre la diferencia de medias donde la correlación dinámica observada antes de la crisis sea diferente a la observada tras ella. Se concluye la no existencia de contagio para Egipto, Ghana, Marruecos y Túnez, encontrándose el efecto contrario para Kenia y Nigeria; siendo indeterminado para el resto de países.

ABSTRACT

The contagion effect is a widely studied issue. Globalization established relationships of dependence among markets. This implies that a certain event can affect all the ones it is connected to. So, ¿can events in highly globalized countries determine those which are less globalized?

So as to achieve, the contagion effect over African countries by The United States of America (USA) is studied during the financial crisis that started in 2007/08. In particular, it will be studied through the exchange rate on the following countries: Morocco, Southafrica, Egypt, Argel, Ghana, Kenia, Nigeria, Tunisia and Tanzania.

The study combines data mining with economic sciences. It consists in the study of the returns of their exchange rates, first testing the Efficient Market Hypothesis, afterwards applying univariate GARCH's family models and, lastly, with multivariate DCC models based on the previous process.

Contagion effect will be determined through a hypothesis test for difference between means where the dynamic correlation observed before the crisis is different to the one observed after it. It can be concluded the non existence of contagion effect for Egypt, Ghana, Morocco and Tunisia, finding the opposite for Kenia and Nigeria; being indeterminate for the rest of them.

Palabras Clave: Efecto contagio, países africanos, crisis subprime, GARCH, DCC-.

ÍNDICE DE CONTENIDO

1. INTRODUCCIÓN	1
2. OBJETIVO.....	3
3. CREACIÓN, ANÁLISIS & DEPURACIÓN DE LA BASE DE DATOS	4
3.1 Creación de la base de datos.....	4
3.2 Análisis exploratorio & Depuración.....	5
3.2.1 Tratamiento de ausentes.....	6
3.2.2 Tratamiento de atípicos.....	7
3.2.3 Análisis exploratorio tras depuración	8
4. METODOLOGÍA	10
4.1 Hipótesis de Mercados Eficientes.....	10
4.1.1 Estacionariedad	11
4.1.2 Dependencia temporal.....	11
4.1.3 Exponente Hurst.....	11
4.1.4 Test Brock, Dechert y Scheinkman (BDS)	12
4.1.5 Dependencia temporal de los rendimientos al cuadrado.....	12
4.1.6 Distribución de los datos.....	13
4.2 Modelización Univariante	13
4.2.1 Modelos GARCH.....	15
• SGARCH(p,q).....	15
• APARCH(p,q).....	15
• TGARCH(p,q).....	16
• EGARCH(p,q).....	16
• NAGARCH(p,q)	16
4.2.2 Selección de modelos GARCH aplicados.....	17
• Selección Básica de modelos univariantes.....	19
• Selección Vertical de modelos univariantes.....	19
• Selección Horizontal de modelos univariantes	20
• Selección Diagonal de modelos univariantes	20
4.3 Modelización Multivariante	21
4.4 Contraste de hipótesis: Existencia del Efecto Contagio	25
5. RESULTADOS.....	26
5.1 Hipótesis de Mercados Eficientes.....	26
5.1.1 Estacionariedad	26
5.1.2 Dependencia temporal.....	26
5.1.3 Exponente de Hurst.....	27
5.1.4 Test BDS	27
5.1.5 Dependencia temporal de los rendimientos al cuadrado.....	28

5.1.6 Distribución de los datos.....	28
5.2 Modelización Univariante	30
5.2.1 Selección Básica y diagnóstico univariante	30
5.2.2 Selección Vertical y diagnóstico univariante.....	30
• Selección de modelo Vertical para USA_Index.....	32
• Selección del modelo Vertical para ARG_Price	33
• Selección del modelo Vertical para EGPT_Price.....	34
• Selección del modelo Vertical para GHA_Price	36
• Selección del modelo Vertical para KEN_Price	37
• Selección del modelo Vertical para MOR_Price.....	38
• Selección del modelo Vertical para NIG_Price.....	39
• Selección del modelo Vertical para SOUTHAFR_Price.....	40
• Selección del modelo Vertical para TAN_Price	41
• Selección del modelo Vertical para TUN_Price	42
5.2.3 Selección Horizontal y diagnóstico univariante.....	43
• Selección Horizontal para USA_Index	44
• Selección Horizontal para ARG_Price.....	46
• Selección Horizontal para EGPT_Price	46
• Selección Horizontal para GHA_Price.....	46
• Selección Horizontal para KEN_Price	48
• Selección Horizontal para MOR_Price	49
• Selección Horizontal para NIG_Price	49
• Selección Horizontal para SOUTHAFR_Price	51
• Selección Horizontal para TAN_Price	51
• Selección Horizontal para TUN_Price	53
5.2.4 Selección Diagonal y diagnóstico univariante	54
• Selección diagonal para USA_Index.....	54
• Selección Diagonal para ARG_Price	55
• Selección Diagonal para EGPT_Price.....	56
• Selección Diagonal para GHA_Price	56
• Selección Diagonal para KEN_Price	58
• Selección Diagonal para MOR_Price.....	59
• Selección Diagonal para NIG_Price.....	60
• Selección Diagonal para SOUTHAFR_Price.....	61
• Selección Diagonal para TAN_Price	61
• Selección Diagonal para TUN_Price	61
5.3 Modelización Multivariante	63
5.4 Contraste de hipótesis: Existencia del Efecto Contagio	69

6. DISCUSIÓN DE RESULTADOS	71
7. BIBLIOGRAFÍA.....	74
8. ANEXOS.....	a
ANEXO A. TABLAS.....	a
ANEXO A.1 Observaciones iniciales de la base de datos	a
ANEXO A.2 Estadísticos principales tras tratamiento de ausentes	b
ANEXO A.3 Primeros valores de la serie de rendimientos para cada país	b
ANEXO A.4 Resumen selección univariante	c
ANEXO B. FIGURAS	d
ANEXO B.1 Mapeado de las observaciones iniciales de la base de datos	d
ANEXO B.2 Correlogramas para el estudio de la dependencia temporal	d
ANEXO B.3 Correlogramas para el estudio de la dependencia temporal al cuadrado y en términos absolutos.....	e
ANEXO B.4 Correlación dinámica condicionada del modelo MEQMA frente el índice estadounidense	g
ANEXO B.5 Correlación dinámica condicionada del modelo MEWMA frente el índice estadounidense	h
ANEXO B.6 Gráficos ACF, PACF y CCF del modelo DCC-Básico.....	i
ANEXO B.7 Gráficos ACF, PACF y CCF del modelo DCC-Vertical.....	o
ANEXO B.8 Gráficos ACF, PACF y CCF del modelo DCC-Horizontal.....	u
ANEXO B.9 Gráficos ACF, PACF y CCF del modelo DCC-Diagonal	aa
ANEXO C. METODOLOGÍA DE LAS DISTRIBUCIONES	hh
ANEXO D. MODELIZACIÓN UNIVARIANTE	jj
ANEXO D.1 Modelos (1,1) por país ordenados de mayor a menor BIC	jj
ANEXO D.2 Modelos por tipo GARCH y país ordenados de mayor a menor por BIC.....	rr

ÍNDICE DE FIGURAS

Figura 1. Representación del tipo de cambio para cada país.....	5
Figura 2. Detección de atípicos en la series sin transformar	7
Figura 3. Detección de atípicos en la series de rendimientos.....	8
Figura 4. Observación de las fechas de corte para la serie sin transformar.....	9
Figura 5. Observación de las fechas de corte para los rendimientos.....	9
Figura 6. Gráficos QQ-plot de las series de rendimientos	29
Figura 7. Histogramas distribución fat-tails	29
Figura 8. Autocorrelación de los residuos estandarizados al cuadrado para la combinación (1,2) y (2,1)	37
Figura 9. Representación por criterios de información de los modelos para USA_Index	54
Figura 10. Representación por criterios de información de los modelos para ARG_Price	55
Figura 11. Representación por criterios de información de los modelos para EGPT_Price	57
Figura 12. Representación por criterios de información de los modelos para GHA_Price.....	57
Figura 13. Representación de los resultados de la selección diagonal para KEN_Price	58
Figura 14. Representación de los resultados de la selección diagonal para MOR_Price	59
Figura 15. Representación de los resultados de la selección diagonal para NIG_Price	60
Figura 16. Representación de los resultados de la selección diagonal para SOUTHAFR_price	61
Figura 17. Representación de los resultados de la selección diagonal para TAN_Price	62
Figura 18. Representación de los resultados de la selección diagonal para TUN_Price	62
Figura 19. Los rendimientos frente al índice estadounidense para los cuatro modelos DCC	63
Figura 20. Varianza condicional del modelo DCC-Básico en los residuos estandarizados absolutos.....	64
Figura 21. Varianza condicional del modelo DCC-Vertical en los residuos estandarizados absolutos.....	64
Figura 22. Varianza condicional del modelo DCC-Horizontal en los residuos estandarizados absolutos.....	65
Figura 23. Varianza condicional del modelo DCC-Diagonal en los residuos estandarizados absolutos.....	65

ÍNDICE DE TABLAS

Tabla 1. Base de datos conjunta	5
Tabla 2. Principales estadísticos.....	5
Tabla 3. Correlaciones del tipo de cambio por país frente al dólar estadounidense.....	8
Tabla 4. P-valores de los test Dickey-Fuller y Phillips Perron	26
Tabla 5. Resultados Ljung Box Test con siete restrasos para la hipótesis de mercados eficientes	26
Tabla 6. Resultados exponente de Hurst	27
Tabla 7. Resultados Test BDS.....	28
Tabla 8. Resultados Ljung Box Test modificado para los rendimientos cuadrados y absolutos	28
Tabla 9. Resultados del Test Kolmogorov-Smirnov	29
Tabla 10. Resultados de la aplicación de la selección por defecto.....	31
Tabla 11. Resultados del primer paso de la selección vertical para el USA_Index	32
Tabla 12. Resultados del segundo paso de la selección vertical para USA_Index	33
Tabla 13. Resultados del primer paso de la selección vertical para ARG_Price.....	34
Tabla 14. Resultados del primer paso para la selección vertical para EGPT_Price	35
Tabla 15. Resultados segundo paso para EGPT_Price.....	35
Tabla 16. Resultados del primer paso de la selección vertical para GHA_Price	36
Tabla 17. Resultados del segundo paso de la selección vertical para GHA_Price.....	36
Tabla 18. Resultados del primer paso de la selección vertical para KEN_Price	38
Tabla 19. Resultados de la selección vertical para MOR_Price.....	38
Tabla 20. Resultados del primer paso de la selección vertical para NIG_Price	39
Tabla 21. Resultados el segundo paso de la selección vertical para NIG_Price	40
Tabla 22. Resultados del primer paso de la selección vertical para SOUTHAFR_Price	41
Tabla 23. Resultados del primer paso de la selección vertical para TAN_Price.....	41
Tabla 24. Resultados del segundo paso de la selección vertical para TAN_Price	42
Tabla 25. Resultados del primer paso de la selección vertical para TUN_Price.....	43
Tabla 26. Tabla de estadísticos de los rendimientos para la selección horizontal.....	43
Tabla 27. Resultados de la selección horizontal para USA_Index.....	45
Tabla 28. Resultados de la selección horizontal para EGPT_Price.....	47
Tabla 29. Resultados de la selección horizontal para GHA_Price	48
Tabla 30. Resultados de la selección horizontal para KEN_Price	48
Tabla 31. Resultados de la selección horizontal para MOR_Price	50
Tabla 32. Resultados selección horizontal para NIG_Price	51
Tabla 33. Resultados de la selección horizontal para TAN_Price	52
Tabla 34. Resultados de la selección horizontal para TUN_Price	53
Tabla 35. Resultados de la selección diagonal para USA_Index	54
Tabla 36. Resultados para la selección diagonal de ARG_Price.....	55
Tabla 37. Resultados de la selección diagonal para GHA_Price	57

Tabla 38. Resultados de la selección diagonal para KEN_Price.....	59
Tabla 39. Resultados de la selección diagonal para NIG_Price	60
Tabla 40. Resultados de la selección diagonal para TUN_Price.....	62
Tabla 41. Resultados de las pruebas de normalidad multivariante de Henze-Zirkler y Mardia..	63
Tabla 42. Resultados de las estimaciones para los cuatro modelos DCC	66
Tabla 43. Prueba Portmanteau de Ljung-Box y ARCH LM Multivariante para los cuatro modelos DCC	67
Tabla 44. Resultados del efecto contagio	70

1. INTRODUCCIÓN

La crisis financiera de 2008, conocida como la crisis de las hipotecas *subprime*, se origina en Estados Unidos, aproximadamente en Octubre de 2007. Consistió en la desconfianza crediticia debido a la creación de paquetes inmobiliarios que combinaban hipotecas de alto rendimiento con hipotecas basuras, llamadas *subprime*; obteniendo alta valoración. Este tipo de hipotecas eran utilizadas por individuos con baja solvencia y los paquetes eran comprados sin los inversores saber realmente el riesgo asumido. Cuando empezaron los impagos de las hipotecas, se desató la desconfianza crediticia, la subida de los tipos de interés y el contagio de forma mundial.

Debido a que vivimos en un mundo globalizado, apuntado por Calvo & Mendoza (2000), eventos como estos pueden afectar de forma impredecible al resto de países. La globalización, aparte de permitirnos poseer información de manera instantánea, también es el medio de canalización de todo suceso, donde una noticia puede determinar el curso económico; comentado por Wang, Salin, Hooker, & Leatham (2002). Estos últimos estudian el efecto de noticias alimenticias sobre la actividad bursátil de empresas del sector desde 1996 hasta el 2000.

El efecto contagio es un concepto bastante debatido en la literatura. Wang et al. (2002) lo definen como una decisión financiera por parte de los inversores, los cuales en la búsqueda de la maximización de la utilidad de su cartera o *portfolio* deciden no pagar por información y volverse susceptibles a los rumores bursátiles. Por otro lado, Forbes & Rigobon (2002) definen de forma técnica el efecto contagio como un incremento significativo de las correlaciones estudiadas para uno o varios países tras recibir un *shock* exógeno. Como bien matiza, mercados altamente correlacionados desde antes de un suceso no implica que estén contagiados, ya que se requiere de un cambio, tanto positivo como negativo, de la correlación. Esto quiere decir que correlaciones significativas mantenidas en el tiempo no son indicadoras de contagio.

Por último, Mary Aderajo & Olaniran (2021) definen el contagio igual que el anterior, pero a diferentes niveles. El menos restrictivo de ellos considera como contagio a cualquier *shock* entre mercados, siendo el más restrictivo el que requiere la necesidad de una conexión previa para poder ser considerado como tal.

En este estudio se observa el efecto contagio para el tipo de cambio. Trabajos como Celik (2012), Dominguez, Hashimoto & Ito (2012), Hartman & Sedlak (2013), etc., estudian su efecto para el tipo de cambio, mientras que Wang et al. (2002), Thi Dieu & Luong Minh (2021), Chiang, Jeon & Li (2007), etc., lo hacen para los índices bursátiles. A su vez, el campo de estudio es muy heterogéneo, ya que por ejemplo Celik (2012) lo estudia para la crisis *subprime* en países como Canadá, Brasil, China, etc.; mientras que Thi Dieu & Luong Minh (2021) lo hace para los mercados vietnamitas y filipinos.

En la literatura es más generalizado la utilización del índice bursátil para estudiar el efecto contagio. Pese a ello, el tipo de cambio es un claro reflejo del comportamiento económico y por tanto, un medio muy útil para medir problemas financieros a nivel mundial. A su vez, Czech & Waszkowski (2012) establecen que el tipo de cambio, de forma generalizada, rechaza la Hipótesis de Mercados Eficientes y, por tanto, no actúa como un paseo aleatorio; reafirmando la utilidad de este tipo de datos. A su vez, Dominguez, Hashimoto & Ito (2012) establecen que debido a que los

países tratan con monedas internacionales, se ven afectados por *shocks* exógenos, viéndose esto reflejado en las entradas y salidas de capital.

Cuando hablamos que una serie sigue un paseo aleatorio, conocido como *random walk*, estamos diciendo que se explica a sí misma y no depende de ningún suceso pasado. Esto quiere decir que su comportamiento en el mercado es eficiente y, que por lo tanto, no hay posibilidad de arbitraje. Se estudia esta propiedad ya que su rechazo implica que su dependencia temporal puede ser explicada a través de modelos de series temporales. Por ello, que no lo sea es beneficioso para nuestro estudio.

Sin embargo, no se trabaja con el tipo de cambio P_t sino con su rendimiento compuesto continuo r_t , que definido a partir del rendimiento simple R_t , se calcula como la diferencia logarítmica del tipo de cambio, tal que:

$$r_t = \log(1 + R_t) = \log\left(\frac{P_t}{P_{t-1}}\right) = \log(P_t) - \log(P_{t-1}); \quad (1)$$

$$r_t = \mu_t + \delta_t * z_t; \quad (2)$$

donde z_t es el error idiosincrásico.

Al trabajar con los rendimientos, suponemos media cero, por lo que $\mu_t = 0$:

$$r_t = \delta_t * z_t; \quad (3)$$

El efecto a estudiar consiste en el contagio del índice estadounidense medido sobre las principales divisas nominales, únicamente para bienes, sobre el tipo de cambio de países africanos respecto al dólar durante la crisis financiera de 2008. A la hora de determinar cuáles estudiar, la literatura respecto a la zona geográfica africana es escasa, como comentan Aawaar, Domeher & Nsiah (2018), donde estudian la evolución y co-movimientos de los índices bursátiles africanos. Lo destacable según este estudio era la relación de los países africanos emergentes y los llamados *frontier markets* o fronteras de mercado. Estos países presentan un mayor potencial que aquellos en vías de desarrollo pero aún no son considerados emergentes. Aawaar, Domeher & Nsiah (2018) califican como emergentes a Marruecos, Sudrfrica y Egipto, mientras que Botswana, Ghana, Kenia, Nigeria, Tunez, etc; los consideran fronteras de mercado. A su vez, tanto en *World Economic Situation and Prospects* (2014) como en Radelet (2010) y Signé (2019) se comentan algunas zonas como Tanzania, Uganda e incluso Sudán; aparte de los ya comentados. Por ende, priorizando la variedad, relevancia y peso literario, estudiaremos el tipo de cambio de los siguientes países: Marruecos, Sudáfrica, Egipto, Argelia, Ghana, Kenia, Nigeria, Túnez y Tanzania.

Por último, este estudio se ha realizado con R Studio, utilizando principalmente los paquetes *rugarch* (Ghalanos, 2022) y *rmgarch* (Galanos, 2022), siendo el primero para modelización univariante y el segundo para modelización multivariante, ambos con modelos GARCH (acrónimo inglés de, *Generalized AutoRegressive Conditional Heterocedasticity*). El código totalmente reproducible se encuentra disponible en:

<https://github.com/Antoniojfsob/AntonioFernandezTFMcontagioneffect.git>

2. OBJETIVO

El objetivo principal de este estudio es determinar la existencia del efecto contagio del mercado estadounidense a los países africanos estudiados durante la crisis *subprime* acontecida en 2008. Principalmente cuestionaremos el procedimiento llevado a cabo en Celik (2012), aunque también se pueda encontrar en otros trabajos, y compararemos nuestros procedimientos y resultados con la literatura. Esto también ayudará a determinar cuán globalizados están los países estudiados en términos de divisas. Respecto a la literatura económica, es una gran aportación debido a la escasez que hay en estudios del campo, ya que la mayoría tratan los mercados asiáticos.

Por otro lado, el estudio del efecto contagio a través de modelos multivariantes DCC (acrónimo inglés de, *Dynamic Conditional Correlation*) está bastante generalizado pero la metodología aplicada es bastante similar. Como se verá, los procesos DCC llevados a cabo en la literatura no son muy densos y generalmente constan en la aplicación del mismo modelo univariante para todas las series para la posterior aplicación del modelo multivariante; lo que da lugar a ciertas aportaciones.

La primera de ellas está relacionada con la selección de modelos *in-sample* o dentro de la muestra. A través de este estudio hemos sido capaces de aportar tres tipos de procesos distintos en la selección de modelos GARCH, cada uno sustentando y ofreciendo resultados distintos. Se buscaba consensuar la aplicación de modelos GARCH a un único método generalizado, pero hemos encontrado el caso contrario; lo cuál es una aportación a considerar.

La segunda viene unida con lo comentado, ya que la aplicación de los modelos DCC necesita de una base de modelos individuales. La literatura suele aplicar el modelo DCC-GARCH, que consta de la aplicación del mismo modelo GARCH univariante a cada serie, sin considerar quizás si la combinación de diferentes modelos individuales puede mejorar su comportamiento. Adelantamos que influye, lo que consideramos una aportación bastante útil.

Por último, en el estudio del efecto contagio se suele establecer una fecha de corte para dividir la muestra en dos o tres submuestras. Que se sepa, en la literatura no se ha contrastado el cambio de dicha fecha en los resultados, cosa que en este estudio se realiza. Con esto, aportamos a la literatura que la fecha de corte determinada como el inicio de la crisis es arbitraria y que el uso de diferentes valores da lugar a resultados distintos.

3. CREACIÓN, ANÁLISIS & DEPURACIÓN DE LA BASE DE DATOS

3.1 Creación de la base de datos

Nuestra base de datos contiene información desde 2004 hasta 2010, compuesta por el índice del dólar estadounidense sobre las principales divisas nominales, únicamente para bienes, y los tipos de cambio frente al dólar estadounidense de Marruecos, Sudáfrica, Egipto, Ghana, Kenia, Nigeria, Túnez, Argelia y Tanzania. Todos los datos utilizados han sido extraídos de Investing (2022), página que posee el histórico de distintos indicadores económicos, a excepción de la serie estadounidense, la cuál ha sido extraída de Federal Reserve Economic Data (2022).

Sin embargo, no se estudiará todo el periodo comentado. Existe gran dicotomía en la literatura acerca de la ventana temporal a contemplar, ya que esta puede condicionar los resultados del estudio. Viene altamente relacionado con lo estipulado en la literatura acerca de la longitud del efecto contagio o el efecto residual de la crisis sobre las series temporales, donde Celik (2012) establece un periodo de estudio desde 2005 hasta 2009, estableciendo el inicio de la crisis el 17 de Julio de 2007, o como Thi Dieu & Minh Tran (2021) pero considerando su inicio el 1 de Octubre de 2007.

La literatura de forma generalizada coincide en la ventana entre 2005 y 2009, ya que considerar un rango superior o inferior puede perder o incluir efectos que empeoren los resultados del análisis. Por otro lado, junto a Guillén (2011) y *National Bureau of Economic Research* (2021), donde se detalla la evolución de forma cronológica del evento económico, consideraremos como el inicio de la crisis las siguientes fechas: 17 de Julio, 10 de Octubre, 6 de Diciembre, 1 de Diciembre, 9 de Agosto, 3 de Septiembre y 30 de Octubre de 2007.

Por lo tanto, encontramos en el Anexo A.1 los dos primeros y últimos valores de las bases de datos extraídas para los distintos países. Como se ve, no solo se presenta el precio, sino el valor de apertura, el más alto, el más bajo y su cambio respecto al día anterior. A la hora de escoger el tipo de cambio, Hartman & Sedlak (2013) plantean una aclaración, donde clasifican el tipo de cambio en función de su perspectiva temporal, pudiéndose encontrar los tipos *spot* o *forward*, y su comportamiento, dividido en tres regímenes: *floating*, *fixed* y *pegged*.

Según su perspectiva temporal, el tipo *spot* representa el valor actual mientras que el *forward* refleja el valor, que, siendo negociado a día de hoy, puede tener en una fecha futura. Este último, pese a no aparecer, no se necesita en nuestro análisis.

Según su comportamiento, la característica *floating* implica que los valores fluctúan con los acontecimientos económicos, siendo el más interesante para nuestro análisis. Los otros dos no lo son tanto, ya que el aspecto *fixed* determina que el tipo de cambio está fijo a otro país y respaldado por otras divisas, como el oro, mientras que la faceta *pegged* es bastante parecida pero permitiendo devaluaciones sobre la moneda.

Finalmente, si consideramos ambos conceptos podríamos decir que escoger el precio medio es la mejor opción ya que es el tipo *spot* el que luego se usa para comercios en términos *forward*, siendo considerado del tipo *floating*.

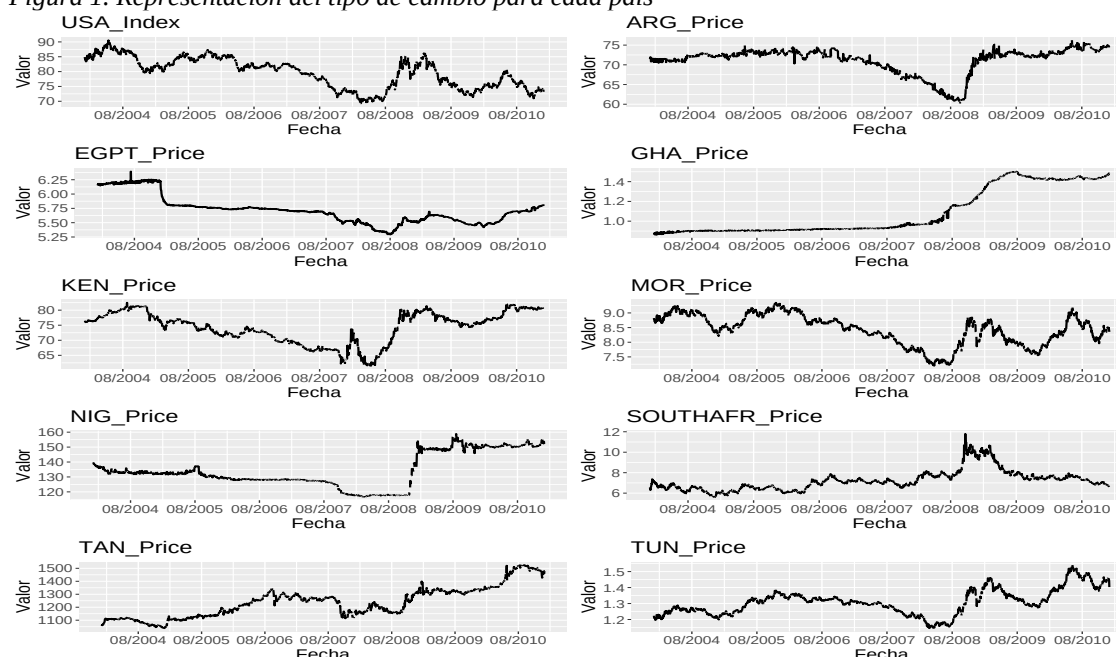
Tras esta elección, se procede a eliminar el resto de variables, se ordena, de más tardío a más reciente, y se agrupa por fecha. Hay que tener en cuenta que puede que haya observaciones ausentes debido a que el tipo de cambio sigue el calendario de la bolsa de valores, conocido como *trading days*, y varía en función de cada nación.

A continuación, presentamos en la Tabla 1 las dos primeras y las dos últimas observaciones de la base de datos creada y en la Figura 1 su representación visual:

Tabla 1. Base de datos conjunta

Date	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
01/01/2004	84.8883	NA	6.175	NA	NA
02/01/2004	84.7871	71.45	6.175	0.865	76.1
26/12/2010	NA	NA	5.806	NA	NA
27/12/2010	73.9341	74.504	5.807	1.4712	80.75
Date	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
01/01/2004	8.825	NA	NA	NA	1.2234
02/01/2004	8.7766	139.05	6.5388	1057.13	1.2133
26/12/2010	NA	NA	NA	NA	NA
27/12/2010	8.4492	153.78	6.738	1459.5	1.4524

Figura 1. Representación del tipo de cambio para cada país



3.2 Análisis exploratorio & Depuración

La representación previa muestra las series con valores ausentes y para el período temporal desde 2004 hasta 2010, donde cabe destacar la anomalía de las series egipcia, nigeriana y ghanesa. Se procederá a la reducción de la ventana temporal entre 2005 y 2009, y tras ello, se presentan en la Tabla 2 los principales estadísticos:

Tabla 2. Principales estadísticos

	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
Mínimo	69.28	60.2	5.291	0.9	61.5
Primer cuartil	74.86	69.16	5.525	0.9138	68.55
Mediana	80.91	72.06	5.687	0.9296	72.8
Media	79.32	70.47	5.635	1.0552	72.28

Tercer cuartil	82.88	72.86	5.747	1.1636	76.15
Máximo	87.35	75.31	6.07	1.5035	81.4
NA's	535	522	-	522	522
	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
Mínimo	7.194	116.5	5.658	1045	1.145
Primer cuartil	7.912	126.2	6.639	1160	1.254
Mediana	8.412	128.3	7.176	1245	1.307
Media	8.337	131	7.373	1228	1.297
Tercer cuartil	8.717	133.2	7.778	1297	1.336
Máximo	9.351	158.9	11.795	1400	1.461
NA's	522	522	522	522	522

Se puede observar que Egipto es la única serie que no posee valores ausentes, además de que todas, a excepción de la estadounidense, presentan la misma cuantía. En el Anexo B.1 se presenta un mapa de ausentes, donde en el eje de ordenas se encuentra la fila observada y en el de abscisas cada serie observada. El color morado sombreado representa los valores ausentes y las zonas grisáceas las observadas, indicando que Egipto presenta valores para todas sus observaciones. Se confirma que los ausentes se ubican en las mismas fechas para todas las series y coinciden con los días del fin de semana. A su vez, la estadounidense presenta ausentes aislados, es decir, que pese a coincidir con el resto, presenta trece observaciones ausentes extra.

Otro aspecto a comentar es que series como la nigeriana, sudafricana y tanzana presentan unos máximos altos respecto a su mediana y media. Lo mismo ocurre para el mínimo en las series estadounidense, argelina, nigeriana y tanzana. Sin embargo, pese a ser atípicos, puede que no sean perjudiciales. Es cierto que valores distorsionantes pueden afectar negativamente a los resultados pero aquellos atípicos no distorsionantes pueden aportarnos información valiosa. Por lo tanto, para determinar su magnitud, serán observados en la serie normal y en la de rendimientos.

3.2.1 Tratamiento de ausentes

El tratamiento de ausentes se divide en dos: primero la eliminación de observaciones y luego la imputación de valores aislados. Como se comentó, los valores ausentes se muestran los sábados y domingos para todas las series; excepto la egipcia. Recordamos que el mercado se rige por los *trading days* y la bolsa solo opera en días hábiles¹, por lo que dudamos de la información observada para esos dos días. Varios son los motivos por los que aparecen observados, como por ejemplo, una posible duplicación de su valor de cierre en bolsa. Independientemente, no deberían observarse en ninguna serie, por lo que la mejor opción es eliminarlos.

Para los ausentes restantes, se aplica una interpolación segmentaria lineal o también conocida como imputación *spline*. Consiste en una curva diferenciable definida en porciones a través de polinomios que llegan a los mismos resultados que si fueran de bajo grado, evitando incluir oscilaciones innecesarias. Usa los datos y estima dichos valores, manteniendo la lógica entre puntos, utilizando las derivadas de la función; siendo la imputación lineal su versión más simple.

¹ Incluye festivos pero hay excepciones según el país. Sin embargo, en nuestras series no se detectaron ninguna.

Por lo tanto, encontramos en el Anexo A.2 la misma tabla de estadísticos vista anteriormente. Encontramos la inexistencia de valores nulos y, de forma muy insignificante (cambios en centésimas respecto a la Tabla 2), variaciones en valores para la media, mediana y cuartiles.

3.2.2 Tratamiento de atípicos

Para la evaluación de atípicos, es necesario el análisis gráfico de la serie temporal sin transformar (en niveles) así como sus rendimientos. Para ambos, hay que determinar el rango a considerar para poder denominarlos como tal, ya que difieren.

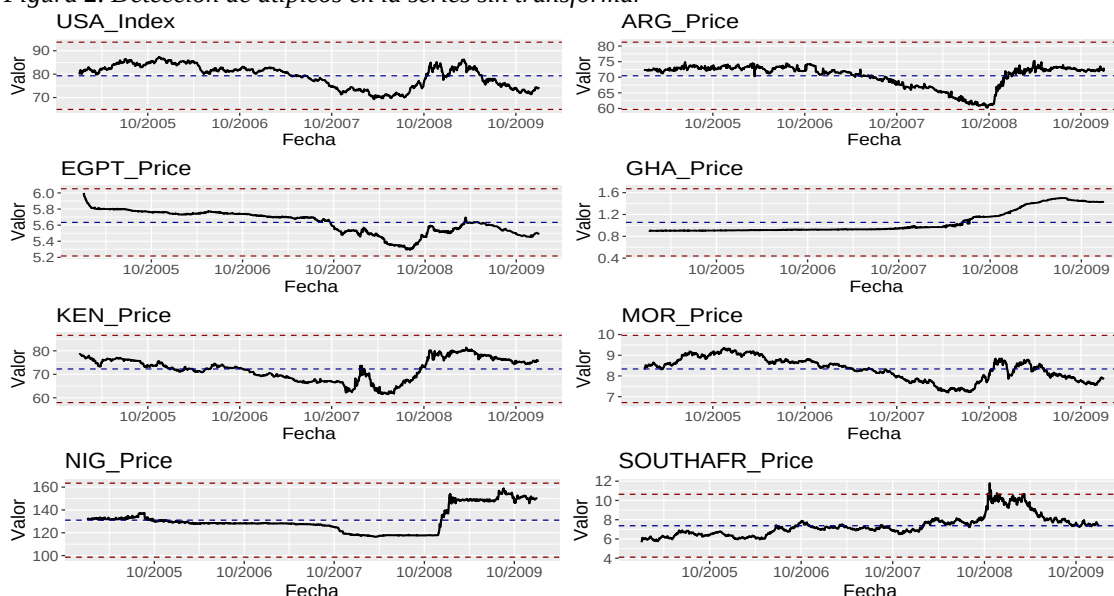
Para la serie sin transformar, se considera como atípico todo valor que sea superior o inferior a la suma o resta, respectivamente, de la media con el triple de su varianza; aunque varía según el investigador. Se cree que establecer valores inferiores al triple es restrictivo, mientras que superiores al quíntuple es todo lo contrario.

Para la serie de rendimientos, pudiendo ser observados sus valores en el Anexo A.3, optamos por establecer un límite del quíntuple de la varianza, ya que los rendimientos presentan valores cercanos y es más fácil que lo superen.

Encontramos en las figuras 2 y 3 la representación de ambas series con tres bandas horizontales, dos de ellas rojas que muestran los límites para que un valor sea considerado atípico y una azul que representa la media. Para la serie sin transformar, todas se encuentran entre franjas, a excepción de Sudáfrica que presenta unos valores en 2008 que superan ligeramente la franja superior. Por otro lado, todas las series de rendimientos, a excepción de la tunecina, presentan atípicos.

Se puede decir que los atípicos observados no son anómalos, ya que no distorsionan los datos lo suficiente, y que además tienen lugar en torno al periodo considerado como crisis. Por lo tanto, creemos que no deberían ser tratados ya que son estas fluctuaciones las que estamos buscando capturar y, si se modifican, puede ser que se pierdan efectos que *a posteriori* afecten a los resultados.

Figura 2. Detección de atípicos en la series sin transformar



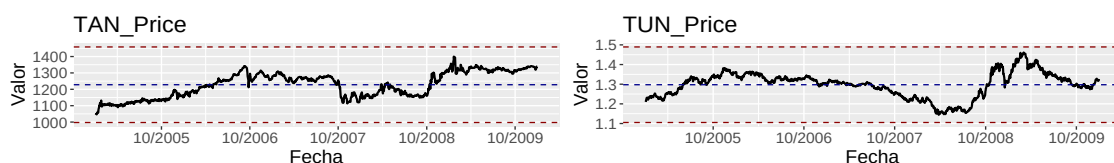
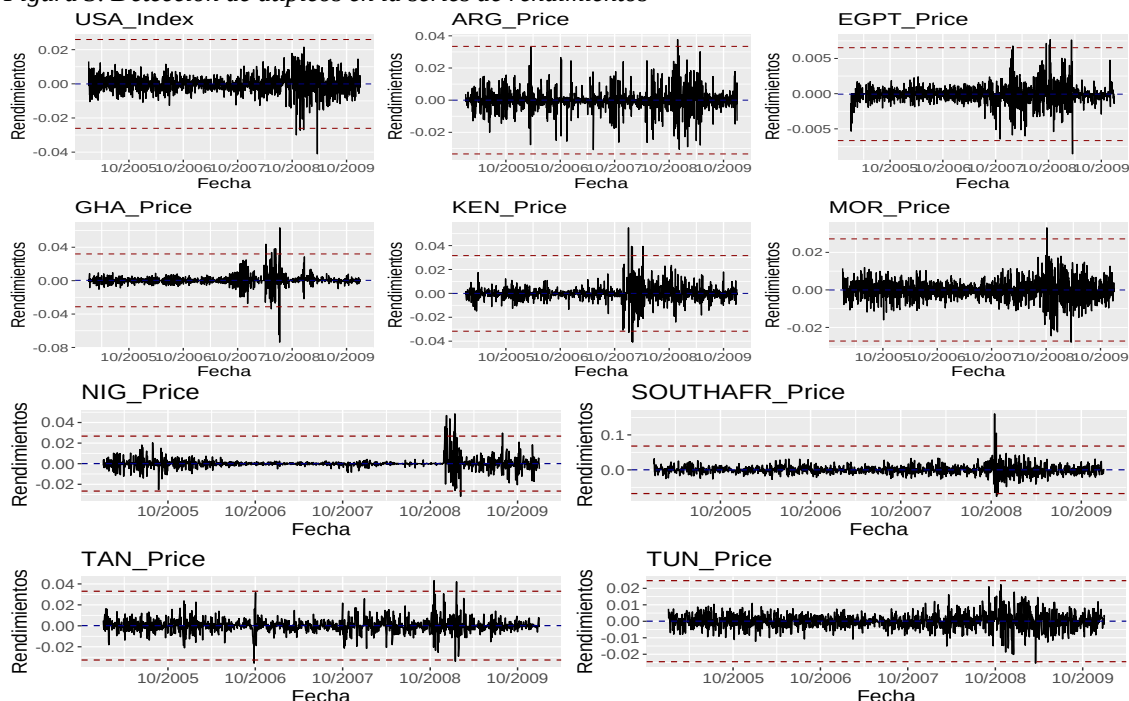


Figura 3. Detección de atípicos en la serie de rendimientos



3.2.3 Análisis exploratorio tras depuración

Tras la depuración, encontramos en la Tabla 3 una foto de la matriz de correlaciones muestrales de los países respecto al índice estadounidense. Además, en las figuras 4 y 5 se presentan las series sin transformar y las de rendimientos con líneas verticales como las fechas comentadas anteriormente como el inicio de la crisis.

Observando las correlaciones, se puede establecer de forma preliminar que las series argelina, egipcia, marroquí y tunecina están bastante relacionadas con el índice estadounidense. Sin embargo, esto es una foto estática y no se puede concluir nada.

Tabla 3. Correlaciones del tipo de cambio por país frente al dólar estadounidense

USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
1	0.66422558	0.8135735	0.32075354	0.54468273
MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
0.97327971	0.16493855	-0.14036739	0.08310543	0.73186995

Por otro lado, se puede decir que las fechas observadas han sido escogidas de forma bastante satisfactoria, ya que antes o después de ellas, de forma general, se presentan cambios en sus fluctuaciones. Sin embargo, para los rendimientos esta noción no está tan clara pero sí permite una subdivisión de la muestra bastante óptima.

Figura 4. Observación de las fechas de corte para la serie sin transformar

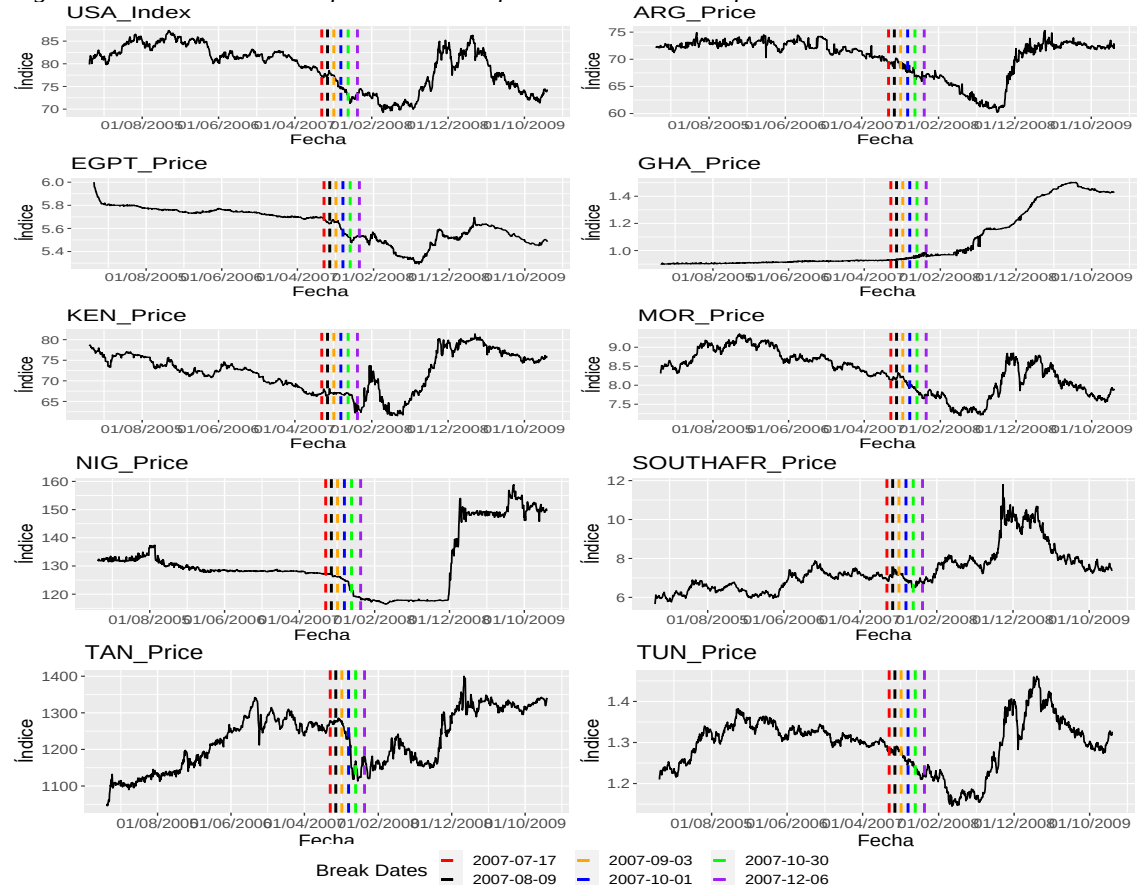
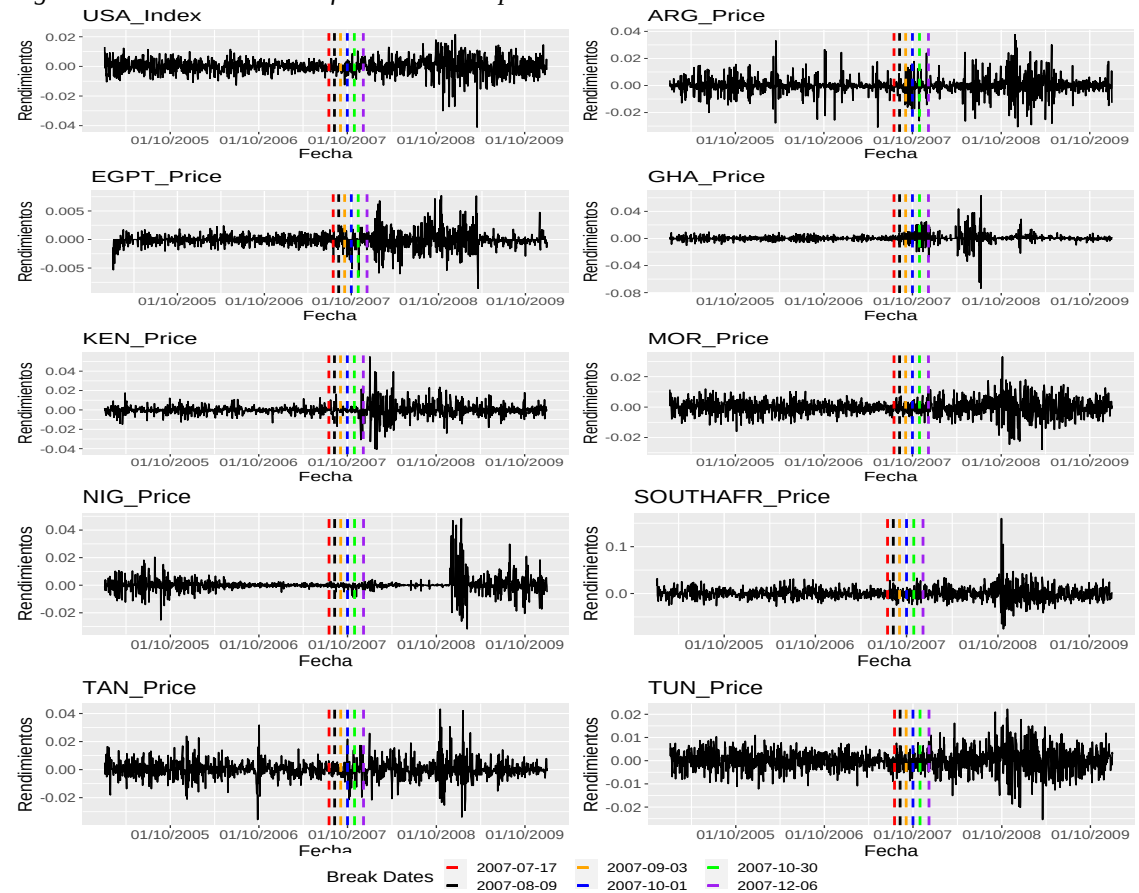


Figura 5. Observación de las fechas de corte para los rendimientos



4. METODOLOGÍA

Este apartado se divide en tres partes: una primera estudia la Hipótesis de Mercados Eficientes, una segunda que trata la modelización univariante y una última trata la modelización multivariante. Es necesario que todos los procesos presentados se cumplan satisfactoriamente, ya que forman la base de los apartados siguientes.

4.1 Hipótesis de Mercados Eficientes

Contrastar la Hipótesis de Mercados Eficientes es clave para determinar si nuestras series pueden ser modelizadas. Según Fama (1970), los mercados son eficientes siempre y cuando se fijen precios y toda la información existente se vea incluida en ellos, es decir, no existiría arbitraje. Esto implica que los precios se ven explicados únicamente por la nueva información incorporada y no por su histórico. Estadísticamente, eso significa que los precios siguen un paseo aleatorio y, por tanto, los rendimientos serán ruido blanco, lo que las haría no modelizables. En particular, un proceso de ruido blanco es una sucesión de variables incorreladas con varianza constante y media cero. Esto es, una secuencia de variables aleatorias, independientes e idénticamente distribuidas (i.i.d.).

Fama (1970) comenta distintos niveles para esta hipótesis. La más débil indica que las variables no dependan en absoluto del pasado, siendo su versión intermedia el reflejo de información pública conocida en los precios y, la más fuerte, que la información privada también sea conocida por el mercado.

Relacionado con nuestro estudio, Hartman & Sedlak (2013) plantean lo comentado en Fama (1970), donde explican que el principal determinante para el mercado del tipo de cambio es la Paridad de Poder Adquisitivo. Comentan que este mercado es incluso más proclive a que esta hipótesis no se cumpla frente a los mercados bursátiles, pudiendo deberse a su dificultad para poder globalizarse.

Además, ellos lo explican con la Paridad del Tipo de Interés, la cual necesita ciertos requerimientos para que se cumpla. Uno de ellos es la libre movilidad de capital y la otra es la perfecta sostenibilidad de los activos entre países. Ellos lo relatan con la Paridad de Tipos de Interés Descubierta, la cual determina una relación existente entre el tipo de interés de dos países y su tipo de cambio, donde sus diferencias deben darse por igual en ambos casos.

Por lo tanto, si se rechaza la hipótesis de mercados eficientes estaríamos negando la validez de estos aspectos para los tipos de cambio entre las economías africanas y la estadounidense. Estudios que rechazan esta hipótesis son Czech & Waszkowski (2012), donde lo estudia para el tipo de cambio estadounidense, suizo, japonés y británico, y Nguyen (2004), que lo hace para el europeo.

Para observar su cumplimiento, se estudian los siguientes aspectos: la estacionariedad de las series, su dependencia temporal, la memoria de las series, su grado de caoticidad o aleatoriedad, dependencia temporal de los rendimientos al cuadrado y la distribución de los datos.

4.1.1 Estacionariedad

La estacionariedad de una serie implica la inexistencia de una tendencia estocástica a lo largo de la muestra. En otras palabras, una serie estacionaria varía de la misma manera en el tiempo, es decir, su variación es constante. Si esto ocurre, su comportamiento puede ser predicho, y por lo tanto, sería ineficiente para el mercado.

Para comprobar esta característica, aplicaremos las metodologías creadas por Dickey & Fuller (1979) y Phillips & Perron (1988), donde ambos estudian la existencia de raíces unitarias en las series de rendimientos. Ambos consideran la hipótesis nula como la existencia de raíz unitaria, lo que implica no estacionariedad en media. Si C es la constante, β el coeficiente de la tendencia temporal, u_t el error inobservado y ρ el retraso de un proceso autorregresivo, encontramos:

$$\Delta x_t = \rho x_{t-1} + C + \beta Tendencia + u_t + \gamma_1 \Delta x_{t-1} + \dots + \gamma_p \Delta x_{t-p}; \quad (4)$$

y se establece el siguiente contraste:

$$\begin{cases} H_0: \rho = 0 \\ H_1: \rho < 0 \end{cases} \quad (5)$$

4.1.2 Dependencia temporal

La dependencia temporal de una serie indica si esta es un ruido blanco. La existencia de autocorrelación implica que las observaciones actuales se ven afectadas por hechos pasados en el tiempo, rechazando la Hipótesis de Mercados Eficientes.

Para estudiar la dependencia, podemos observar dos métodos: visualmente, a través de correlogramas, y estadísticamente, a través del test Ljung & Box (1978); ofreciendo las mismas conclusiones. El contraste de hipótesis es el siguiente:

$$Q = n(n+2) \sum_{k=1}^h \frac{\hat{\rho}_k^2}{n-k}; \quad (6)$$

$$\begin{cases} H_0: Independencia temporal \\ H_1: Dependencia temporal \end{cases}; \quad (7)$$

donde n es el tamaño muestral, $\hat{\rho}_k$ la auto correlación en el retraso k y h los retrasos observados.

Para el análisis visual se usan los gráficos de funciones de auto correlación (ACF) y autocorrelación parcial (PACF). A través de un nivel de confianza determinado, todos aquellos retrasos que superen dicho rango presentan dependencia temporal entre el periodo actual y el observado. La principal diferencia entre los gráficos ACF y PACF es que el segundo no considera la dependencia creada por los retrasos intermedios.

4.1.3 Exponente Hurst

La memoria de una serie se explica como la persistencia temporal de un suceso, también conocido como el Exponente de Hurst (Hurst, 1951). Matemáticamente, encontramos:

$$\rho = \frac{Cov[u_t, u_{t+1}]}{Var[u_t]} = 2(2^{2H-1} - 1); \quad (8)$$

donde ρ es la correlación, u_t el error y H el exponente de Hurst.

Corroborar la existencia de ruidos diferentes al blanco en las series puede significar cierta memoria o persistencia de sucesos pasados en el comportamiento de los rendimientos. Para que esto sea así, H deberá ser distinto a 0.5, siendo ruido blanco si lo fuera, considerándose ruido negro si es superior a ese valor y ruido rosa en caso contrario. Considerar un rendimiento ruido negro implica persistencia temporal positiva, mientras que el ruido rosa poseería persistencia temporal negativa.

Se considerará que las series incumplen la hipótesis de mercados eficientes si el exponente de Hurst de cada uno de los rendimientos es diferente a un ruido blanco.

4.1.4 Test Brock, Dechert y Scheinkman (BDS)

La aleatoriedad de las series implica contrastar si las series son i.i.d. Brock, Dechert, LeBaron & Scheinkman (1996) proponen el test BDS. Es un método no paramétrico que en vez de utilizar la autocorrelación dinámica de las series, usa su autocorrelación espacial, contrastando dicha hipótesis para diferentes dimensiones.

El contraste llevado a cabo realmente se realiza con dos probabilidades, una es la probabilidad de que la distancia entre dos observaciones no sea superior a ε , y otra es la probabilidad de que dos observaciones sean cercanas; implicando que sus predecesoras también lo sean. Por lo tanto, las dos probabilidades se definen tal que:

$$P_1 = (P|x_i - x_j| \leq \varepsilon); \quad (9)$$

$$P_2 = (P|x_i - x_j| \leq \varepsilon, |x_{i-1} - x_{j-1}| \leq \varepsilon); \quad (10)$$

siendo P_1 la primera probabilidad mencionada y P_2 la segunda e $i \neq j$.

Pese a que las dos probabilidades sean distintas, si consideramos que la serie observada es i.i.d., se puede establecer que la probabilidad de que una observación de dos historias esté cerca sea igual al cuadrado de la probabilidad de que dos observaciones estén cerca, tal que $P_2 = P_1^2$.

Por lo tanto, se encontraría el siguiente contraste de hipótesis:

$$\begin{cases} H_0: P_m = P_1^m \\ H_1: P_m \neq P_1^m \end{cases}; \quad (11)$$

siendo m la dimensión considerada.

Al rechazar la hipótesis nula, se cumple la Hipótesis de Mercados Eficientes.

4.1.5 Dependencia temporal de los rendimientos al cuadrado

El estudio de los rendimientos al cuadrado como absolutos permite observar la volatilidad de las series. En general, existen distintas maneras de contrastar esto:

visualmente, a través de los correlogramas ACF y PACF, y estadísticamente, a través del ARCH LM Test (Engle, 1982). Este último puede realizarse a través del test Ljung & Box (1978) modificado sobre los rendimientos al cuadrado, como se ve a continuación:

$$Q^*(h) = n(n+2) \sum_{k=1}^h \frac{\hat{\rho}_k^2}{n-k}; \quad (12)$$

siendo Q^* la prueba modificada para estos residuos y manteniéndose el mismo contraste de hipótesis visto en el apartado 4.1.2

Se busca contemplar la posible captura de la volatilidad de los rendimientos, siendo consideradas eficientes por el mercado si no poseen dependencia temporal.

4.1.6 Distribución de los datos

Por último, se estudia la distribución de los datos, que incumbe tanto la normalidad como la composición de colas pesadas, también conocido como *fat tails*. Para ello, aplicaremos el test de Kolmogorov-Smirnov (1933) y una comprobación visual a través de gráficos Q-Q e histogramas de las series.

El test Kolmogorov-Smirnov (1933) nos permite comprobar la afinidad de dos distribuciones entre sí, o por defecto, la afinidad de cada una de nuestras series a una distribución normal. Es cierto que la prueba de Shapiro & Wilk (1965) nos ofrece los mismos resultados y se considera más potente por la literatura, pero es más restrictivo respecto al número de observaciones a usar (un tamaño muestral menor o igual a 50), motivo por el que se descarta su uso. Esta prueba es un método no paramétrico que se define de la siguiente manera:

$$F_n(x) = \frac{1}{n} \sum_{i=1}^n \begin{cases} H_0: 1 \\ H_1: 0 \end{cases}; \quad (13)$$

$$D_n^+ = \max(F_n(x) - F(x)); \quad (14)$$

$$D_n^- = \max(F(x) - F_n(x)); \quad (15)$$

donde las colas son definidas por D_n^+ y D_n^- y $F(x)$ es la distribución a comparar, en este caso la normal, siendo la hipótesis nula que los datos se comportan como tal.

En la literatura el comportamiento *fat tails* es bastante común cuando se refieren a las series de rendimientos que no son eficientes en el mercado, ya que no presentan normalidad pero sí se caracterizan por un exceso en asimetría y curtosis².

4.2 Modelización Univariante

Tras contrastar la Hipótesis de Mercados Eficientes, suponiendo que no se cumplen, se introduce un paso previo en la modelización multivariante que consiste en la modelización univariante. Este paso es necesario ya que al querer estudiar las matrices de correlaciones condicionales dinámicas se debe aplicar el modelo DCC (Engle & Sheppard, 2001), el cual se discutirá más adelante en este trabajo. Su

² Concepto definido como la acumulación de muchos valores cercanos a la media, haciendo que su forma se estire.

aplicación requiere de la matriz diagonal de la desviación estándar de cada uno de los países observados de forma individual para cada periodo observado en la muestra.

Para ello, se debe aplicar un modelo autorregresivo generalizado condicional heterocedástico GARCH para cada una de nuestras series. Estos modelos surgen de una generalización del modelo ARCH (acrónimo inglés de, *AutoRegressive Conditional Heterocedasticity*) introducido por primera vez por Engle (1982), el cual buscaba capturar la volatilidad de las series de rendimientos, suponiendo que los rendimientos poseen media cero; motivo por el que se descarta un modelo autoregresivo integrado de promedio móvil o ARIMA (acrónimo inglés de, *AutoRegressive Integrated Moving Average*) para la media condicional.

El modelo ARCH se compone de la siguiente metodología:

$$\varepsilon_t = \sigma_t Z_t; \quad (16)$$

$$\sigma_t^2 = \alpha_0 + \alpha_1 \varepsilon_{t-1}^2 + \cdots + \alpha_p \varepsilon_{t-p}^2 = \alpha_0 + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 \quad (17)$$

donde u_t es un proceso de ruido blanco, σ_t la desviación estándar en el periodo t , p el factor autorregresivo de ε_t , siendo este último el término de error, también conocido como los residuos de retorno.

Los modelos ARCH establecen una relación autorregresiva con la volatilidad en la que la varianza del término de error de momentos pasados influye sobre ella misma en la actualidad. De estos surge el modelo GARCH, creado por Bollerslev (1986), donde introduce una mayor flexibilidad en la modelización de la volatilidad y los retrasos de las series, incluyendo la volatilidad de periodos anteriores; tal que:

$$\sigma_t^2 = \omega + \alpha_1 \varepsilon_{t-1}^2 + \cdots + \alpha_p \varepsilon_{t-p}^2 + \beta_1 \sigma_{t-1}^2 + \cdots + \beta_q \sigma_{t-q}^2; \quad (18)$$

$$\sigma_t^2 = w + \sum_{i=1}^p \alpha_i \varepsilon_{t-i}^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2; \quad (19)$$

donde q es el factor autorregresivo de la volatilidad de la serie e $i \neq j$.

El modelo explicado es la versión simétrica y más común de la familia GARCH, conocido como SGARCH (*symmetric* GARCH). De esta familia, se puede diferenciar entre modelos simétricos y asimétricos, referido a como procesan la volatilidad de la serie a la que se ajustan. Estaríamos hablando del efecto apalancamiento, donde un modelo simétrico considera que los cambios en volatilidad son iguales en ambas direcciones, mientras que un asimétrico considera que los *shocks* negativos producen un cambio en la volatilidad superior a lo que un *shock* positivo podría llegar a hacer.

Además, cada modelo de la familia presenta cualidades diferentes que permiten modelizar las series de forma distinta. Debido a la gran cantidad de modelos distintos, hemos realizado una selección donde encontramos los siguientes modelos: SGARCH, APARCH (*asymmetric power* ARCH), TGARCH (*threshold* GARCH), EGARCH (*exponential* GARCH) y NAGARCH (*nonlinear asymmetric* GARCH). Estos modelos son los más usados por la literatura, como se puede comprobar en Lim & Sek (2013) y Salamat, Lixia, Naseem, Mohsin & Zia-ur-Rehman (2020), donde aplican los modelos SGARCH, TGARCH y EGARCH para la captura de la volatilidad, el primero para el mercado bursátil de Malasia y el segundo para ciertas criptomonedas. Además,

comentar las aportaciones de Katsiampa (2017) y Huang, Su, & Tsui (2015), donde utilizan los modelos comentados pero incluyendo también modelos como APARCH, para el primero, donde se estudia la volatilidad del Bitcoin, y NAGARCH, para el segundo, donde se estudia el valor en riesgo del MSCI (acrónimo inglés de *Morgan Stanley Capital International*) durante la crisis financiera.

A su vez, es necesario considerar la distribución aplicada. La más común suele ser la distribución normal, pero también encontramos la T-Student, como se ve en Salamat et al. (2020) y en Gao, Zhang & Zhang (2012), donde en este último realizan una comparación de modelos GARCH con diferentes distribuciones a través de simulaciones de Monte Carlo. A su vez, debido a la naturaleza de nuestros datos, podríamos contemplar la utilización de distribuciones asimétricas, conocidas como *Skewed Distributions*, que permiten capturar la asimetría vista en los datos. Todas ellas se encuentran explicadas en el Anexo C.

Relacionado con lo comentado, otro aspecto a contemplar es que los modelos GARCH presentan dos factores de autorregresión, con notación (p, q) , conocidos como los órdenes de los modelos. Estos factores representan el número de retrasos a introducir en la serie, donde q lo hace para el término de error y p para la volatilidad. La combinación de los mismos es clave para capturar el comportamiento de la serie y por lo general no hay unos valores en específico a establecer.

De forma generalizada en la literatura se suele estudiar su comportamiento de forma combinada con un rango entre 0 y 5 para ambos factores, a excepción del orden $(0,0)$. En Hansen & Lunde (2001) se considera la combinación de órdenes $(1,1)$, donde considera que no puede ser superado, discutido también más adelante en Hansen & Reinhard (2003), donde comparan 330 modelos GARCH distintos. Llegan a la conclusión de que pese a que el modelo GARCH $(1,1)$ suele ofrecer buenos resultados, no está de más compararlo con otro tipo de modelos que ofrecen perspectivas diferentes. Por otro lado, argumentan que la aplicación de modelos distintos ofrece el estudio de conceptos que pueden no estar contemplados en el modelo base, sobre todo el efecto apalancamiento de la volatilidad. Por lo tanto, estudiaremos las treinta y cinco combinaciones posibles en el rango comentado.

4.2.1 Modelos GARCH

- **SGARCH(p,q)**

El modelo introducido por Bollerslev (1986) es conocido como “*Symmetric Generalized Autoregressive Conditional Heterocedasticity*”. Es el único modelo simétrico aplicado para esta investigación. A su vez, es el modelo clásico por excelencia en la literatura (Hansen & Lunde, 2001) y aquél utilizado como modelo de comparación o *benchmark* (Hansen & Reinhard, 2003). La formulación matemática de este modelo cumple el visto anteriormente en las ecuaciones 18 y 19.

- **APARCH(p,q)**

El modelo APARCH es conocido como “*Asymmetric Power Autoregressive Conditional Heterocedasticity*”, es un modelo asimétrico creado por Ding, Granger, &

Engle (1993) con la intención de introducir conceptos GARCH en el estudio de la memoria a largo plazo. Para ello, se incluye un parámetro δ , que eleva los componentes de los factores autorregresivos, como se presenta a continuación:

$$\sigma_t^\delta = w + \sum_{i=1}^p \alpha_i (|\varepsilon_{t-i}| - \gamma_i \varepsilon_{t-i})^\delta + \sum_{j=1}^q \beta_j \sigma_{t-j}^\delta; \quad (20)$$

donde ahora el término de error autorregresivo se compone de la diferencia del término de error en absoluto menos γ_i del mismo, siendo γ_i el coeficiente de asimetría o el efecto apalancamiento, elevado al parámetro δ , encontrando $(\delta, w, \alpha, \gamma, \beta)$ como los parámetros a estimar.

- **TGARCH(p,q)**

El modelo TGARCH es conocido como “*Threshold Generalized Autoregressive Conditional Heterocedasticity*”. Es un modelo asimétrico creado por Rabemananjara & Zakoian (1993) con la intención de capturar el efecto apalancamiento de la volatilidad. Es bastante parecido al modelo APARCH (Ding, Granger & Engle, 1993) que veíamos anteriormente, pero con la principal diferencia de que en este caso no se presenta un empoderamiento de los coeficientes a través del coeficiente δ . De tal manera que se presenta a continuación la forma funcional del modelo:

$$\sigma_t^2 = w + \sum_{i=1}^p \alpha_i (|\varepsilon_{t-i}| - \eta_{1i} \varepsilon_{t-i})^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2; \quad (21)$$

donde η_{1i} ($i = 1, \dots, p$) es el coeficiente del efecto apalancamiento en este modelo.

- **EGARCH(p,q)**

El modelo EGARCH es conocido como “*Exponential Generalized Autoregressive Conditional Heterocedasticity*”. Es un modelo asimétrico creado por Nelson (1991) con la misma búsqueda de la captura del efecto apalancamiento como el resto de modelos presentados anteriormente. Este modelo posee las mismas características que los modelos APARCH y TGARCH, pero con la peculiaridad de que utiliza el logaritmo de las varianzas condicionadas para suavizar la restricción de positividad de los coeficientes del modelo. Por lo tanto, el modelo presentado es el siguiente:

$$\ln(\sigma_t^2) = w + \sum_{i=1}^p \alpha_i (|\varepsilon_{t-i}| - \gamma_i \varepsilon_{t-i}) + \sum_{j=1}^q \beta_j \ln(\sigma_{t-j}^2); \quad (22)$$

donde los coeficientes ya han sido comentados previamente en los otros modelos.

- **NAGARCH(p,q)**

El modelo NAGARCH es conocido como “*Nonlinear Asymmetric Generalized Autoregressive Conditional Heterocedasticity*”. Es el último modelo planteado en este estudio, creado por Engle & Ng (1993), donde buscan capturar los efectos asimétricos de la siguiente manera:

$$\sigma_t^2 = w + \sum_{i=1}^p \alpha_i (\varepsilon_{t-i} - \eta_{2i} \sigma_{t-i})^2 + \sum_{j=1}^q \beta_j \sigma_{t-j}^2; \quad (23)$$

donde η_{2i} ($i = 1, \dots, p$) es el coeficiente del efecto apalancamiento en este modelo.

La gran diferencia respecto a los modelos anteriores es que en el factor autorregresivo p estamos incluyendo la volatilidad observada en dicho retraso interaccionada al coeficiente de asimetría η_{2i} , mientras que antes ocurría lo contrario, era interaccionado con el término de error del modelo para el retraso observado.

4.2.2 Selección de modelos GARCH aplicados

Si recapitulamos, podemos decir que se están aplicando cinco modelos distintos de la familia GARCH con cuatro distribuciones diferentes, combinando para cada uno de ellos treinta y cinco órdenes diferentes. Por lo tanto, se estiman 700 modelos por país, lo que asciende a 7000 modelos ejecutados para esta investigación.

Sin embargo, entre modelos debería establecerse un criterio de selección. Lo primero a tener en cuenta es que según Shmueli (2010), no es lo mismo usar un modelo para predecir (*forecasting*) que para explicar. De esta manera, existen dos tipos de diagnósticos, aquél sobre la muestra (*in-sample*), que es aquél usado para escoger el modelo que explica mejor, y aquél fuera de la misma (*out-of-sample*), utilizado en la selección del modelo que mejor prediga. Esto quiere decir que un modelo que se ajuste bien no necesariamente implica que sea igual prediciendo, y viceversa. Para nuestro caso, estamos buscando explicar las series para realizar un contraste de hipótesis, no predecir su comportamiento a futuro.

En la literatura económica, de series temporales y en en otros campos no relacionados con este trabajo, este concepto está bastante extendido y respaldado. Si hablamos de diagnóstico *in-sample* sobre series univariantes, según Chen, Chen & Härdle (2020) y Minovic (2008) este consiste en la aplicación del L-Jung Box test (Ljung & Box, 1978) para la búsqueda de autocorrelación en los residuos estandarizados y la misma prueba modificada para aquellos al cuadrado en la búsqueda de efectos ARCH (Engle, 1982). Cabe destacar que la comprobación de este segundo es mucho más importante que el primero, ya que nuestro estudio está enfocado en el procesamiento de la volatilidad y se ha supuesto media cero. Sin embargo, puede darse que los residuos estandarizados sí presenten este problema.

Otro aspecto a tener en cuenta es el criterio de información utilizado para comparar el ajuste de los modelos. El paquete de R *rugarch* (Ghalanos, 2022) ofrece cuatro criterios de información en la modelización de modelos GARCH: AIC (Akaike, 1973), BIC (Schwarz, 1978), Shibata (Shibata, 1976) y Hannan-Quinn (Hannan & Quinn, 1979). En la literatura está bastante generalizada la toma de decisiones con el uso de los criterios AIC y BIC, aunque mantendremos los otros dos criterios.

El criterio AIC (Akaike, 1973) y BIC (Schwarz, 1978) se definen, respectivamente, tal que:

$$AIC = 2[l(\widehat{\theta}_2) - l(\widehat{\theta}_1)] - 2(p_2 - p_1); \quad (24)$$

$$BIC = 2[l(\widehat{\theta}_2) - l(\widehat{\theta}_1)] - \log n(p_2 - p_1); \quad (25)$$

donde n es el número de observaciones.

La gran diferencia entre ambos criterios es que el criterio BIC penaliza mucho más el ajuste del modelo. Según Medel & Salgado (2013), el criterio AIC escoge modelos más dinámicos y complejos, mientras que el BIC todo lo contrario, además de que presenta mejores resultados tanto sobre la muestra como prediciendo. A su vez, pese a que el criterio AIC se considere peor, mayoritariamente suele usarse más para ver la capacidad predictiva de un modelo, aunque de forma generalizada se recomienda la utilización de ambos de forma conjunta.

Por otro lado, los criterios Shibata (Shibata, 1976), que es una adaptación del criterio AIC, y el criterio Hannan-Quinn (Hannan & Quinn, 1979) serán observados de forma secundaria; siendo este último formulado de la siguiente manera:

$$HQC = n \log \left(\frac{RSS}{n} \right) + 2k \log(\log(n)); \quad (26)$$

donde k es el número de parámetros del modelo y RSS es la suma residual de cuadrados de la estimación del modelo.

El diagnóstico de modelos GARCH suele consistir en el uso de estos criterios y las pruebas comentadas unido al chequeo de la significatividad de coeficientes y el test de asimetría en la volatilidad, conocido como “*Sign Bias Test*” (Engle & Ng, 1993).

Acerca de la significatividad de los coeficientes, no suele ser necesario que ocurra para todos ellos, pero sí lo es para los coeficientes clave en la creación del modelo, como por ejemplo $\eta_{1i}, \eta_{2i}, \delta, \gamma$, etc.

Respecto el contraste, consta de tres pruebas diferentes. Según Engle & Ng (1993), podemos estudiarlo a través del “*Sign Bias Test*”, que estudia todos los impactos realizados de las nuevas noticias sobre la volatilidad sin importar el signo, “*Negative Sign Bias Test*”, que posee el mismo objetivo pero centrándose únicamente en los impactos negativos, y el “*Positive Sign Bias Test*”, que se enfoca únicamente en los positivos. De esta manera, se consigue contrastar si el modelo aplicado captura los eventos de forma exitosa. Definimos las tres pruebas de la siguiente manera:

$$Sign\ Bias\ Test: v_t^2 = a + b * S_t^- + z_{t-1}\gamma + v_t; \quad (27)$$

$$Negative\ Bias\ Test: v_t^2 = a + b * S_t^- \varepsilon_{t-1} + z_{t-1}\gamma + v_t; \quad (28)$$

$$Positive\ Bias\ Test: v_t^2 = a + b * S_t^+ \varepsilon_{t-1} + z_{t-1}\gamma + v_t; \quad (29)$$

donde ε_t es el término de error observado, z_{t-1} un vector que recoge funciones de información pasada, S_t^- una variable dummy que toma valor 1 si ε_{t-1} es negativo y viceversa, $S_t^+ = 1 - S_t^-$ y, siendo $v_t = e_t / \sqrt{\hat{h}_t}$, encontramos $r_t = \hat{r}_t + e_t$, siendo r_t los rendimientos, y $\hat{h}_t$ la varianza condicional estimada.

Por ende, se contrasta las siguientes hipótesis:

$$\begin{cases} H_0: b = 0 \\ H_1: b \neq 0 \end{cases} \quad (30)$$

donde rechazar la hipótesis nula implica la existencia de efectos asimétricos.

Hasta ahora, se ha establecido el diagnóstico para considerar si nuestro modelo univariante es adecuado, pero no se ha determinado un método de selección entre modelos. Cuando hablamos de comparar modelos, la literatura es escasa y bastante dispersa. La comparación de diferentes órdenes sobre el mismo tipo de modelo GARCH está bastante asentado, como por ejemplo comparar un SGARCH T-Student (1,1) frente a un SGARCH T-Student (1,2), pero no existe un método universal a la hora de comparar *in-sample* entre diferentes modelos, distribuciones u órdenes, como por ejemplo un modelo SGARCH Normal (1,1) frente a un EGARCH T-Student (2,2).

En función de la literatura recogida, se han identificado cuatro tipos de selección, denominándolas la selección básica, vertical, horizontal y diagonal.

- **Selección Básica de modelos univariantes**

Se denomina selección “Básica” a aquel método que consiste en la elección de modelos SGARCH (1,1) con distribución Normal. Generalmente, la literatura se guía por la idea estipulada en Hansen & Lunde (2001), donde el modelo clásico suele capturar, de forma generalizada, todos los efectos y suele ser difícilmente superable.

Existen casos como lo visto en Malo & Kanto (2006), donde lo aplican pero revisando su diagnóstico y pese a no convencer, deciden mantenerlo. Otro ejemplo sería lo visto en Celik (2012), donde aplicando un modelo DCC-GARCH establece ese modelo univariante para todas sus series, sin realizar ningún diagnóstico univariante.

En esta investigación, se utilizará este tipo de selección para demostrar si existen diferencias entre su aplicación y la de métodos de selección más concienzudos, tanto a nivel univariante como, más adelante, a nivel multivariante.

- **Selección Vertical de modelos univariantes**

La selección bautizada como “Vertical” es aquella que consiste en la comparación de modelos de la familia GARCH manteniendo fijos los órdenes, normalmente estableciendo la combinación (1,1). Este tipo de selección es la más común, encontramos su uso en Katsiampa (2017), Lim & Sek (2013) y Abdalla & Winker (2012). Este último artículo estudia la volatilidad del mercado bursátil para datos de Sudán y Egipto. Observan tanto modelos simétricos como asimétricos utilizando varios aspectos del diagnóstico presentado anteriormente, aunque sin especificar su distribución; por lo que se supone que lo hacen para la Normal.

Por otro lado, Salamat & et al. (2020) también contribuye con este tipo de selección, pero incluyendo comparaciones entre distribuciones, donde usa la Normal y T-student. Alcanza la conclusión de que cuatro de las cinco series las modeliza con un PGARCH(*power* GARCH) T-Student mientras que la restante con un EGARCH T-Student. De esta manera, se confirma que es aceptada la comparación entre modelos y distribuciones, siempre y cuando se mantenga fijo el orden (1,1). Por ahora, no existe literatura que realice dicha comparación con otros órdenes distintos.

El proceso que se llevará a cabo en este apartado será el siguiente: como primer paso se realizará un diagnóstico sobre los modelos con orden (1,1), de los cuáles se escogerá el mejor, y luego, como segundo paso, se comprobará si para el

modelo escogido existe algún otro con diferente orden que lo mejore. Si se encuentra uno mejor, se seleccionará como ganador. Este método es congruente con lo visto, junto con lo que se ve en Zivot (2008), donde realiza este tipo de selección, aunque no de forma tan extensa, y comprueba que para algunos modelos sí se presenta mejoría con combinaciones distintas de órdenes.

- **Selección Horizontal de modelos univariantes**

Aquella selección que llamamos “Horizontal” trata de la selección de modelos de la familia GARCH basados en un análisis de los datos previo. La idea es comprobar su comportamiento para distintos órdenes manteniendo constante su tipología.

Hasta el momento se han presentados técnicas de estudio de modelos GARCH *a posteriori*, es decir, se han ido seleccionando modelos tras observar su comportamiento al aplicarlos. La selección Horizontal hace todo lo contrario, aplica el modelo habiendo observado el comportamiento de los datos previamente, algo bastante poco común en la literatura. Algunos ejemplos son los estudios de Zivot (2008) y Akpan & Moffat (2017), que aplican modelos asimétricos porque lo observan previamente en la volatilidad de sus series. En particular, Akpan & Moffat (2017) se basa en el *Sign Bias Test*. Otro ejemplo sería el trabajo de Zhang (2009) que determina la distribución de sus series a través del estudio de la asimetría en los datos.

Por lo tanto, el proceso llevado a cabo en este apartado consiste en la creación de una tabla formada por los estadísticos más importantes, donde encontramos la media, la mediana, el máximo, el mínimo, la desviación típica, la asimetría, la curtosis, el test de Kolmogorov-Smirnov (1933) y las tres versiones del *Sign Bias Test* (Engle & Ng, 1993). Estos tres tests están realizados sobre un modelo SGARCH (1,1) con distribución normal. Está determinado por Engle & Ng (1993) que si un modelo simétrico no presenta problemas, no es necesaria la aplicación de modelos asimétricos. A su vez, comentar que la asimetría en la distribución está calculada con el estadístico de tercer momento, estableciendo los valores fuera del rango 1 y -1 muy poco simétricos; siendo 0 total simetría.

Con esta nueva tabla, se determinará a través de la curtosis, la asimetría y la prueba de Smirnov la distribución a usar, y con el *Sign Bias Test* el tipo de modelo GARCH. Acerca de este último punto, no somos conocedores de métodos para determinar qué modelo asimétrico es mejor sin aplicarlo, por lo que tendremos que comparar su comportamiento. Para estos casos, siguiendo el orden BIC, de mayor a menor, se realiza un diagnóstico para cada uno hasta encontrar el mejor, y para el caso de los modelos asimétricos, se escoge el que menos problemas de diagnóstico posea.

- **Selección Diagonal de modelos univariantes**

La denominada selección “Diagonal” consiste en la selección de modelos sin tener en cuenta ningún patrón de compatibilidad, es decir, sin mantener constante ninguna característica de los mismos, ya sea modelo, distribución u orden. La literatura al respecto es bastante escasa, pero recientemente Perlin, Mastella, Vancin & Ramos

(2020) en su estudio escogen entre muchos modelos de la familia GARCH a través de los criterios de información AIC y BIC.

Pese a que no recurren a ningún diagnóstico, excepto el uso de los criterios de información, demuestran que la selección entre modelos GARCH es posible sin la necesidad de establecer alguna condición previa. En nuestro caso, se realizará el mismo procedimiento pero se diagnosticarán los modelos, ya que no siempre el mejor modelo en términos de BIC o AIC tiene resueltos todos sus problemas de modelización.

4.3 Modelización Multivariante

La modelización multivariante difiere de la univariante ya que esta nos aporta resultados del comportamiento de nuestras series entre sí. Los modelos multivariantes son bastante extensos, pero para este estudio veremos los modelos MEQMA (acrónimo inglés de *Multivariate Equally Weighted Moving Average*), MEWMA (acrónimo inglés de *Multivariate Exponentially Weighted Moving Average*) y DCC. Los dos primeros modelos son bastante comunes en el uso univariante, conocidos como EQMA y EWMA, los cuales presentan un proceso básico y suelen utilizarse como comparativa frente a modelos multivariantes más complejos (Lee, Chiou & Lin, 2006).

El modelo MEQMA es una adaptación del modelo EQMA al caso multivariante, donde se pondera por igual el peso de cada una de las observaciones vistas en el tiempo en una serie, por lo que la correlación calculada entre dos series sería:

$$\hat{\rho}_{ij,t} = \frac{\hat{\sigma}_{ij,t}}{\hat{\sigma}_{i,t}\hat{\sigma}_{j,t}}; \quad (31)$$

donde $i \neq j$ para cada periodo t .

Este método crearía matrices de correlaciones condicionadas para cada periodo que consistirían en la matriz de correlaciones muestrales para el rango temporal observado hasta el periodo t en el que nos encontremos.

El modelo MEWMA es una adaptación del modelo EWMA, el cuál es una forma reducida de un modelo GARCH Básico, que consiste en el cálculo recursivo ponderado de la varianza en el periodo t hasta $t - n$; tal que:

$$\hat{\sigma}_t^2 = (1 - \lambda)r_{t-1}^2 + \lambda\hat{\sigma}_{t-1}^2 + \dots + (1 - \lambda)^{t-1}r_{t-1}^2 + \lambda^{t-1}\hat{\sigma}_{t-1}^2; \quad (32)$$

donde $\lambda < 1$; siendo su correlación condicionada la siguiente:

$$\rho_{ij,t,\lambda} = \frac{cov_{\lambda}(r_{i,t}, r_{j,t})}{\sqrt{Var_{\lambda}(r_{i,t})Var_{\lambda}(r_{j,t})}}; \quad (33)$$

De esta manera, se crearía una matriz de correlaciones condicionadas para cada periodo como la que se comentaba para el MEQMA, aunque siendo los valores observados los resultados de las ecuaciones 32 y 33.

Acerca de los modelos multivariantes de la familia GARCH, la literatura es bastante diversa, donde podemos encontrar modelos como el GO-GARCH (*Generalized*

ortogonal GARCH) de Engle (2009), el propio modelo DCC (Engle & Sheppard, 2001), el modelo BEEK (*Baba Engle Kraft Kroner*) de Engle & Kroner (1995); entre otros. De hecho, tanto el BEEK como el DCC son modelos que estudian las covarianzas dinámicas condicionadas de las series, aunque el DCC es más usado para la correlación dinámica condicionada, además de ser más flexible con el número de series a usar (Caporin & McAleer, 2010). Por lo tanto, usaremos modelos DCC ya que nuestro objetivo se encuentra en las matrices de correlación condicionada.

Por lo tanto, el modelo DCC se puede definir de la siguiente manera:

$$X_t = r_t + H_t^{1/2} \varepsilon_t; \quad (34)$$

$$\begin{cases} H_t = D_t R_t D_t \\ R_t = (\text{diag}(Q_t))^{-\frac{1}{2}} Q_t (\text{diag}(Q_t))^{-\frac{1}{2}}; \\ D_t = \text{diag}(\sqrt{h_{11,t}}, \sqrt{h_{22,t}}, \dots, \sqrt{h_{nn,t}}) \end{cases} \quad (35)$$

donde X_t es un vector de observaciones pasadas tal que $X_t = (X_{1t}, X_{2t}, \dots, X_{nt})$, H_t es la varianza condicional multivariante, r_t es un vector de rendimientos condicionales tal que $r_t = (r_{1t}, r_{2t}, \dots, r_{nt})$, ε_t es el vector de residuos estandarizados tal que $\varepsilon_t = (\varepsilon_{1t}, \varepsilon_{2t}, \dots, \varepsilon_{nt})$, R_t es una matriz NxN de las correlaciones dinámicas y D_t es la matriz diagonal de las desviaciones estandar condicionadas de las series de rendimientos obtenidas de las estimaciones univariantes de modelos GARCH.

A su vez, Q_t es un proxy definido de la siguiente manera:

$$Q_t = \bar{Q} + a(z_{t-1}z'_{t-1} - \bar{Q}) + b(\bar{Q}_{t-1} - \bar{Q}) = (1 - a - b)\bar{Q} + az_{t-1}z'_{t-1} + bQ_{t-1}; \quad (36)$$

donde a y b son escalares no negativos que controlan la persistencia y consistencia ante *shocks*, respectivamente, siendo su suma menor a 1 y $\bar{Q}$ la matriz incondicional de los errores estandarizados, definidos como z_t .

Como se acaba de ver, el modelo DCC requiere de un paso inicial en su modelización que consiste en el ajuste de series univariantes. Lo más generalizado, como se puede observar en Celik (2012), es el ajuste que nosotros llamamos “selección Básica”, ya que se cree que los modelos Básicos son capaces de capturar la mayoría del comportamiento de los rendimientos. Literatura con enfoques diferentes es bastante escasa. Por ejemplo, encontramos el trabajo de Acatrinei, Gorun & Marcu (2013) que realiza una selección de modelos con orden (1,1) para tres series del mercado rumano y se escoge el mismo para las series observadas, y el trabajo de Riedl (2018) que para cinco criptomonedas diferentes ajusta modelos univariantes con orden (1,1) seleccionando el mismo modelo para cuatro de ellas y otro distinto para la restante.

Aunque la evidencia empírica no sea muy extensa, la teoría insiste en una selección univariante adecuada ya que es el principal respaldo de los modelos DCC.

Aparte del ajuste univariante, los modelos DCC poseen otras caracterizaciones, como son una distribución y simetría propias. Cuando hablamos de distribución, no nos referimos a la distribución univariante de cada modelo, sino a la distribución conjunta de las series. Para ello, Hartman & Sedlak (2013) plantean un prediagnóstico

para determinar la distribución multivariante a aplicar, donde recomiendan el uso de las pruebas de Normalidad Multivariante de Henze-Zirkler y Mardia. Ambos presentan como hipótesis nula que los datos se distribuyen de forma Normal multivariada, aunque la segunda prueba se suele introducir para asegurar que los resultados obtenidos por la primera son correctos, ya que esta observa la existencia de sesgos en la distribución.

La prueba de Henze-Zirkler se presenta de la siguiente manera:

$$T_u(d) = \frac{1}{n^2} \sum_{j=1}^n \sum_{k=1}^n \exp\left(-\frac{u^2}{2} |Y_j - Y_k|^2\right) - 2(1 + u^2)^{-\frac{d}{2}} \frac{1}{n} \sum_{j=1}^n \exp\left(-\frac{u^2}{2(1+u^2)} |Y_j|^2\right) + (1 + 2u^2)^{-\frac{d}{2}} ; \quad (37)$$

donde d es la dimensión de la muestra, n el número de observaciones y $u = u(d) = \frac{1}{\sqrt{2}} \left[\frac{(2d+1)}{4} \right]^{\frac{1}{d+4}} n^{\frac{1}{d+4}}$ y $|Y_j - Y_k|^2 = (x_j - x_k)' \vartheta^{-1} (x_j - x_k)$; siendo x_i la muestra y ϑ la matriz de covarianzas muestral.

A su vez, la prueba de Mardia se define de la siguiente manera:

$$g_{1,d} = \frac{1}{n^2} \sum_{i=1}^n \sum_{j=1}^n [(x_i - \bar{x})' \vartheta^{-1} (x_j - \bar{x})]^3 ; \quad (38)$$

$$g_{2,d} = \frac{1}{n} \sum_{i=1}^n [(x_i - \bar{x})' \vartheta^{-1} (x_i - \bar{x})]^2 ; \quad (39)$$

siendo $g_{1,d}$ el estadístico del sesgo de la distribución y $g_{2,d}$ el de la curtosis.

Si se rechaza la hipótesis nula para ambas pruebas, se llega a la conclusión de que se debería aplicar una distribución Multivariante T-Student (Hartman & Sedlak, 2013), explicada en el Anexo C.

Por otro lado, cuando hablamos de la simetría de los modelos DCC, encontramos cuatro tipos: el modelo CCC (acrónimo inglés de *Constant Conditional Correlation*), que presenta la correlación condicionada de forma constante, DCC simétrico, DCC asimétrico y DCC generalizado. Aquí nos centraremos en el segundo y tercer tipo.

Como se comentó, el comportamiento de la volatilidad puede ser diferente ante eventos negativos o positivos. El uso de modelos ADCC (acrónimo en inglés de *Asymmetric Dynamic Conditional Correlation*) suele darse cuando la selección de los modelos univariantes presenta problemas de asimetría. Es cierto que los resultados marginales no son los mismos que para todas las series en su conjunto, pero sí es cierto que una vez capturados de forma individual puede no ser necesaria su aplicación. Además, según Caporin & McAleer (2013) este tipo de modelos no presentan condiciones explícitas sobre su aplicación, siendo no testeables; queriendo decir que no se puede comprobar su consistencia interna y que puede que la aplicación de la asimetría no esté relacionada con la correlación condicional dinámica.

Generalmente, este tipo de modelos suelen ser aplicados y comparados con los resultados de un modelo DCC simétrico para corroborar la existencia de posibles cambios en los resultados, como se muestra en Shiferaw (2019) o en Acatrinei et al. (2013). Sin embargo, en este análisis no se realizará pero se propondrá como futura mejora en la discusión de resultados.

Por último, respecto al diagnóstico de los modelos multivariantes, únicamente nos centraremos en el DCC. Esto se debe a que los modelos MEQMA y MEWMA no presentan residuos ya que son un cálculo recursivo de la varianza en el tiempo. Por lo tanto, pese a que sean modelos válidos no presentan diagnóstico alguno.

Respecto al DCC, ya se habló de que se requería una pre-diagnosis para determinar su distribución, así que una vez estando esta identificada y habiendo estimado el modelo; Hartman & Sedlak (2013) y Chen et al. (2020) presentan su diagnóstico. Actualmente la literatura está bastante dispersa a la hora de determinar un diagnóstico común, pero algunos coinciden. Aparte de observar la significatividad de los coeficientes a y b vistos en la ecuación 36, se estudian tanto la autocorrelación de los residuos estandarizados y los efectos ARCH multivariantes (Hartman & Sedlak, 2013), ambos realizados con la prueba de Portmanteau (Hosking, 1980), como la comparación de la autocorrelación de los residuos marginales del modelo multivariante frente a la autocorrelación de los residuos de su modelo ajustado de forma univariante (Hartman & Sedlak, 2013),(Chen et al., 2020).

El test Pormanteau es una versión multivariante introducida por Hosking (1980) el cuál modifica la prueba de Ljung & Box (1978) de la siguiente manera:

$$HM(M) = T^2 \sum_{j=1}^M (T-j)^{-1} tr\{C_{Y_t}^{-1}(0)C_{Y_t}(j)C_{Y_t}^{-1}(0)C_{Y_t}'(j)\}; \quad (40)$$

donde Y_t es un vector de las observaciones y $C_{Y_t}(j)$ es la matriz de la autocovarianza muestral de orden j . Cuando se testean efectos ARCH con esta fórmula, en la que se deben incluir los residuos estandarizados al cuadrado, $HM(M)$ se distribuye asintóticamente como una chi-cuadrado $X^2(K^2M)$.

Por otro lado, el estudio de los residuos estandarizados marginales frente a los residuos univariantes a través de los gráficos ACF y PACF permite observar las discrepancias en el ajuste de nuestro modelo multivariante. A diferencia del univariante, se busca observar si la mayoría de los efectos han sido capturados en vez de que no haya autocorrelación alguna.

También son considerados como aspectos observables, pero no como diagnóstico, el estudio de gráficos CCF (acrónimo inglés de *Cross Correlation Function*) entre las series, comentado por Hartman & Sedlak (2013) y el ajuste de la volatilidad estimada frente a los residuos estadarizados absolutos, comentado por Chen et al. (2020). Los gráficos CCF muestran si existe autocorrelación entre los residuos estandarizados marginales de las series, donde nos centraremos en la relación de ellas con EE.UU. La no existencia de relación implica que esta ha sido capturada. Por otro lado, graficar el ajuste de la volatilidad solo nos ayuda a describir el comportamiento pero no en la toma de decisiones.

4.4 Contraste de hipótesis: Existencia del Efecto Contagio

Para determinar la existencia del efecto contagio, se usará el contraste de hipótesis visto en Celik (2012). Consiste en un contraste de diferencias de los coeficientes de las correlaciones dinámicas a través del estadístico t , tal que:

$$\begin{cases} H_0: u_{\rho}^{pre-crisis} = u_{\rho}^{crisis} \\ H_1: u_{\rho}^{pre-crisis} \neq u_{\rho}^{crisis} \end{cases}; \quad (41)$$

donde definimos $u_{\rho}^{pre-crisis}$ y u_{ρ}^{crisis} como los coeficientes de la correlación dinámica antes de la crisis y después de la crisis.

A su vez, definimos el estadístico t tal que:

$$t = \frac{(\bar{\rho}_{ij}^{crisis} - \bar{\rho}_{ij}^{pre-crisis}) - (u_{\rho}^{crisis} - u_{\rho}^{pre-crisis})}{\sqrt{\frac{s_{crisis}^2}{n^{crisis}} + \frac{s_{pre-crisis}^2}{n^{pre-crisis}}}}; \quad (42)$$

donde n^{crisis} y $n^{pre-crisis}$ y s_{crisis}^2 y $s_{pre-crisis}^2$ son, respectivamente, las muestras para los periodos observados y las varianzas muestrales después y antes de la crisis. Además, $\bar{\rho}_{ij}^{crisis}$ y $\bar{\rho}_{ij}^{pre-crisis}$ son las medias de los coeficientes de las correlaciones dinámicas para el país i , siendo $j = USA\_Index$. A su vez, los grados de libertad v se definen de la siguiente manera:

$$v = \left(\frac{s_{crisis}^2}{n^{crisis}} + \frac{s_{pre-crisis}^2}{n^{pre-crisis}} \right)^2 / \left(\frac{(s_{crisis}^2/n^{crisis})^2}{n^{crisis}-1} + \frac{(s_{pre-crisis}^2/n^{pre-crisis})^2}{n^{pre-crisis}-1} \right); \quad (43)$$

Si se rechaza la H_0 , se confirma la existencia del efecto contagio. Ahora bien, como ya se comentó, determinar la fecha de inicio de la crisis financiera puede afectar a los resultados. Por lo tanto, en este contraste se estudiarán distintas fechas como medida de robustez. En particular, las fechas observada son las siguientes: el 7 de Julio de 2007 (Celik, 2012), el 10 de Octubre de 2007 (Thi Dieu & Minh Tran, 2021), el 6 de Diciembre de 2007 (National Bureau of Economic Research, 2021) y el 1 de Diciembre de 2007, el 9 de Agosto de 2007, el 3 de Septiembre de 2007 y el 30 de Octubre de 2007 (Guillén, 2011).

5. RESULTADOS

En este apartado se presentan los resultados siguiendo la metodología vista. Primero se contrasta la hipótesis de mercados eficientes, luego se estudia la modelización univariante, después la multivariante, y por último, el efecto contagio.

5.1 Hipótesis de Mercados Eficientes

Los contrastes efectuados para determinar si nuestras series de rendimientos cumplen la Hipótesis de Mercados Eficientes son vitales para saber si estas pueden ser modelizables. Esto es cierto siempre y cuando rechazamos que los mercados a los que pertenecen son eficientes. Para ello, se estudia la estacionariedad de las series, su dependencia temporal, su memoria, su grado de caoticidad o aleatoriedad, la dependencia lineal de los rendimientos al cuadrado y la distribución de los datos.

5.1.1 Estacionariedad

Estudiamos la estacionariedad de las series a través de los test Dickey & Fuller (1979) y Phillips & Perron (1988), donde la hipótesis nula de dichos contraste es la no estacionariedad de las series, esto es, la presencia de una raíz unitaria. Encontramos presentados en la Tabla 4 dichos resultados, donde se recogen los p-valores para cada país. Como se observa, los rendimientos de todos los países rechazan la prueba al 1% de significatividad, por lo que que todas las series son estacionarias. Por lo tanto, para este apartado, no se cumple la eficiencia del mercado.

Tabla 4. P-valores de los test Dickey-Fuller y Phillips Perron

	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
Dickey-Fuller Test (P-Valor)	0.01	0.01	0.01	0.01	0.01
Phillips-Pierron Test (P-Valor)	0.01	0.01	0.01	0.01	0.01
	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
Dickey-Fuller Test (P-Valor)	0.01	0.01	0.01	0.01	0.01
Phillips-Pierron Test (P-Valor)	0.01	0.01	0.01	0.01	0.01

5.1.2 Dependencia temporal

Para estudiar la dependencia temporal de los rendimientos, se aplican dos métodos: la prueba estadística de Ljung & Box (1978) y los gráficos ACF y PACF. La hipótesis a contrastar es la no correlación temporal. A continuación, presentamos en la Tabla 5 los resultados de la prueba para los siete primeros retrasos y en el Anexo B.2 los correlogramas para los rendimientos.

Tabla 5. Resultados Ljung Box Test con siete retrasos para la hipótesis de mercados eficientes

P-valor/País	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
Ljung Box (Lag 1)	0.9997	2.2E-16	0.0003225	2.2E-16	0.7374
Ljung Box (Lag 2)	0.7043	2.2E-16	0.0001942	2.2E-16	6.421E-11
Ljung Box (Lag 3)	0.7253	2.2E-16	0.00008511	2.2E-16	9.244E-11
Ljung Box (Lag 4)	0.8263	2.2E-16	0.00009554	2.2E-16	7.142E-13
Ljung Box (Lag 5)	0.9122	2.2E-16	0.00008488	2.2E-16	2.143E-12
Ljung Box (Lag 6)	0.6445	2.2E-16	0.00001864	2.2E-16	4.841E-12

<i>Ljung Box (Lag 7)</i>	0.3002	2.2E-16	0.00004149	2.2E-16	2.51E-12
<i>P-valor/País</i>	<i>MOR_Price</i>	<i>NIG_Price</i>	<i>SOUTHAFR_Price</i>	<i>TAN_Price</i>	<i>TUN_Price</i>
<i>Ljung Box (Lag 1)</i>	0.7403	2.194E-08	0.006727	0.07703	0.03
<i>Ljung Box (Lag 2)</i>	0.676	3.975E-08	0.002246	0.09184	0.07385
<i>Ljung Box (Lag 3)</i>	0.8511	4.87E-08	0.006063	0.1851	0.1259
<i>Ljung Box (Lag 4)</i>	0.8454	1.793E-07	0.01386	0.2307	0.1081
<i>Ljung Box (Lag 5)</i>	0.9247	3.707E-07	0.003033	0.1113	0.1553
<i>Ljung Box (Lag 6)</i>	0.9636	8.176E-07	0.00005625	0.05978	0.2183
<i>Ljung Box (Lag 7)</i>	0.8031	8.617E-07	0.0001288	0.09591	0.2217

Los resultados obtenidos son de lo más sorprendentes. Lo esperable es que estudiando los rendimientos supongamos que la media de los mismos es cero, pero por lo que parece no se cumple para todas las series. Esto se puede observar para las series de rendimientos de Argelia, Egipto, Ghana, Kenia, Nigeria, Sudáfrica y, excepcionalmente, Túnez que presentan dependencia temporal. Sin embargo, esto también es positivo porque rechazan la hipótesis de mercados eficientes.

Por otro lado, es cierto que los rendimientos para Estados Unidos, Egipto, Marruecos y Tanzania se comportan como ruido blanco, ya que no rechazan la hipótesis nula del contraste ni sobrepasan las líneas discontinuas de los gráficos. Esto implica que para este caso son eficientes y que no es necesario modelizar su media.

5.1.3 Exponente de Hurst

El exponente de Hurst corrobora la existencia de la memoria en las series y en qué dirección la posee. En la Tabla 6 se presentan los resultados de este coeficiente para cada uno de los rendimientos observados.

Tabla 6. Resultados exponente de Hurst

	<i>USA_Index</i>	<i>ARG_Price</i>	<i>EGPT_Price</i>	<i>GHA_Price</i>	<i>KEN_Price</i>
<i>Hurst</i>	0.4722	0.4211	0.8809	0.1969	0.5943
	<i>MOR_Price</i>	<i>NIG_Price</i>	<i>SOUTHAFR_Price</i>	<i>TAN_Price</i>	<i>TUN_Price</i>
<i>Hurst</i>	0.5087	0.4587	0.4572	0.5338	0.5114

Como se puede observar, ninguna de las series es considerada como ruido blanco. Se destaca que las series marroquí y tunecina tienen un coeficiente cercano a 0.5, mientras que series como Egipto o Ghana presentan una fuerte persistencia temporal. Por lo tanto, tampoco se cumpliría la eficiencia del mercado para este caso.

5.1.4 Test BDS

El test BDS (Brock, Dechert y Sheinkman) estudia la existencia de auto correlación espacial en diferentes dimensiones. Contrasta si nuestras series se comportan de forma i.i.d., siendo eficientes para el mercado si lo hacen. A continuación en la Tabla 7 se presentan los resultados obtenidos para las cinco primeras dimensiones.

Como se puede observar, se rechaza la hipótesis nula para cada una de las series y dimensiones, lo que quiere decir que nuestras series no son i.i.d; concepto que contradice la Hipótesis de Mercados Eficientes.

Tabla 7. Resultados Test BDS

	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
$m = 2$	0.004	0	0	0	0
$m = 3$	0	0	0	0	0
$m = 4$	0	0	0	0	0
$m = 5$	0	0	0	0	0
	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
$m = 2$	0	0	0	0	0
$m = 3$	0	0	0	0	0
$m = 4$	0	0	0	0	0
$m = 5$	0	0	0	0	0

5.1.5 Dependencia temporal de los rendimientos al cuadrado

Para confirmar la posible modelización de la varianza, estudiamos los rendimientos al cuadrado y absolutos. Para ello, se aplicará el test Ljung & Box (1978) modificado presentado en la Tabla 8 para los primeros cinco retrasos y en el Anexo B.3 los gráficos ACF y PACF.

Tabla 8. Resultados Ljung Box Test modificado para los rendimientos cuadrados y absolutos

	USA_Index		ARG_Price		EGPT_Price		GHA_Price		KEN_Price	
	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$
(Lag 1)	0.07423	0.01336	2.2E-16	2.2E-16	2.813E-09	2.2E-16	2.2E-16	2.2E-16	2.2E-16	2.2E-16
(Lag 2)	2.517E-08	9.49E-14	2.20E-16	2.20E-16	4.44E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 3)	4.35E-08	4.02E-14	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 4)	1.57E-13	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 5)	2.22E-13	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
	MOR_Price		NIG_Price		SOUTHAFR_Price		TAN_Price		TUN_Price	
	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$	r_t^2	$abs(r_t)$
(Lag 1)	4.098E-10	2.733E-09	3.331E-15	2.2E-16	7.772E-16	2.2E-16	4.761E-09	2.2E-16	2.2E-16	8.549E-15
(Lag 2)	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.22E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 3)	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 4)	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16
(Lag 5)	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16	2.20E-16

Representados los p-valores del estadístico de contraste

Como se puede observar tanto en la tabla como con los correlogramas, todas las series, a excepción de EE.UU, rechazan la hipótesis nula de no correlación y presentan dependencia temporal. Estados Unidos acepta la hipótesis nula para el primer retraso en los rendimientos al cuadrado al 7% de significatividad y en los absolutos al 2%. Pese a esto, se confirma la dependencia temporal de la volatilidad para todas las series, siendo consideradas ineficientes para el mercado.

5.1.6 Distribución de los datos

La última consideración para determinar la eficiencia del mercado es la comprobación de que los datos sigan una distribución normal y no presenten *fat tails*. Se aplica el test de Kolmogorov-Smirnov (1933) y visualmente presentaremos los gráficos Q-Q y los histogramas de los datos. A continuación se presenta en la Tabla 9 los resultados de la prueba y en las Figuras 6 y 7 los gráficos correspondientes.

Como se puede observar, se rechaza la hipótesis nula de normalidad para todas las series, tanto visual como estadísticamente, y confirmamos la existencia de una

distribución *fat tails* para todas las series. Esto último se aprecia por la alta curtosis observada, y ligeramente en su sesgo para todas, excepto para Nigeria y Sudáfrica.

Tabla 9. Resultados del Test Kolmogorov-Smirnov

P-valor	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price
Kolmogorov-Smirnov Test	2.2E-16	2.2E-16	2.2E-16	2.2E-16	2.2E-16
P-valor	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
Kolmogorov-Smirnov Test	2.2E-16	2.2E-16	2.2E-16	2.2E-16	2.2E-16

Figura 6. Gráficos QQ-plot de las series de rendimientos

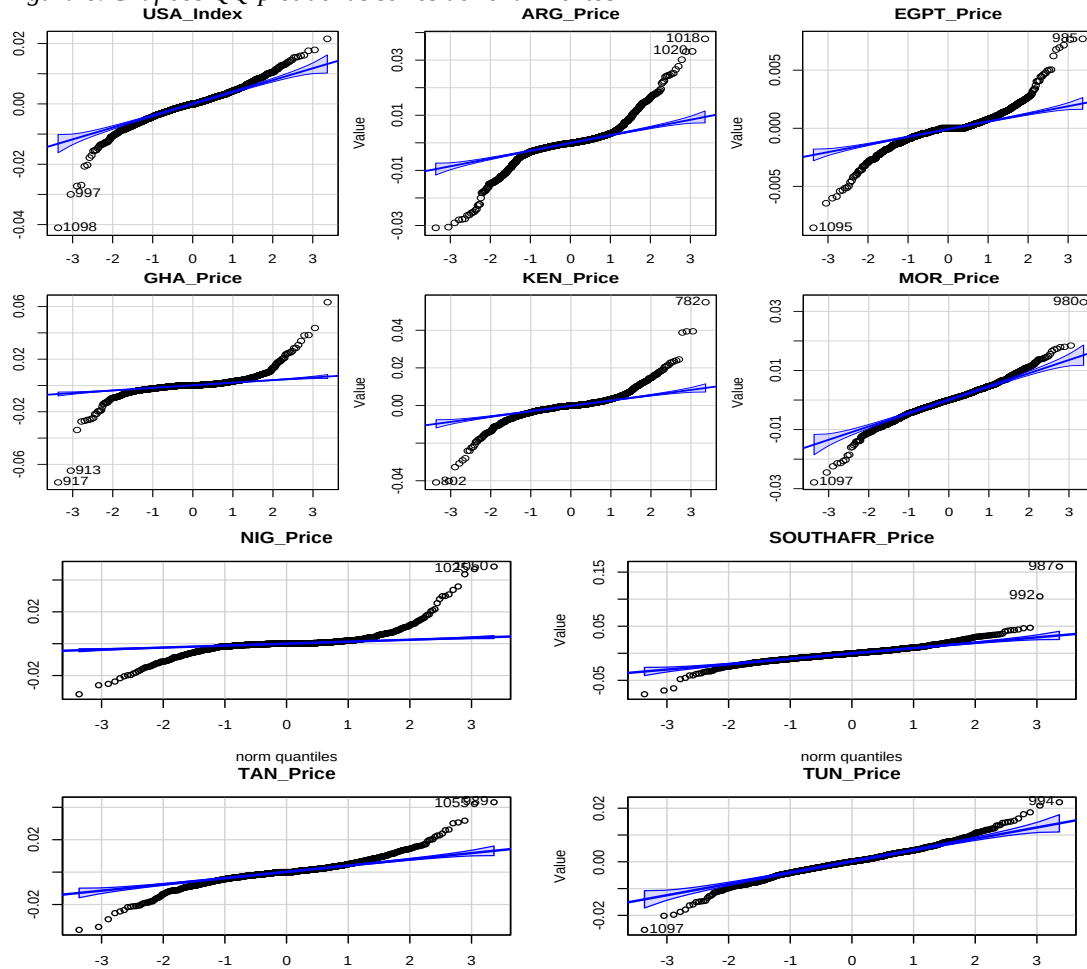
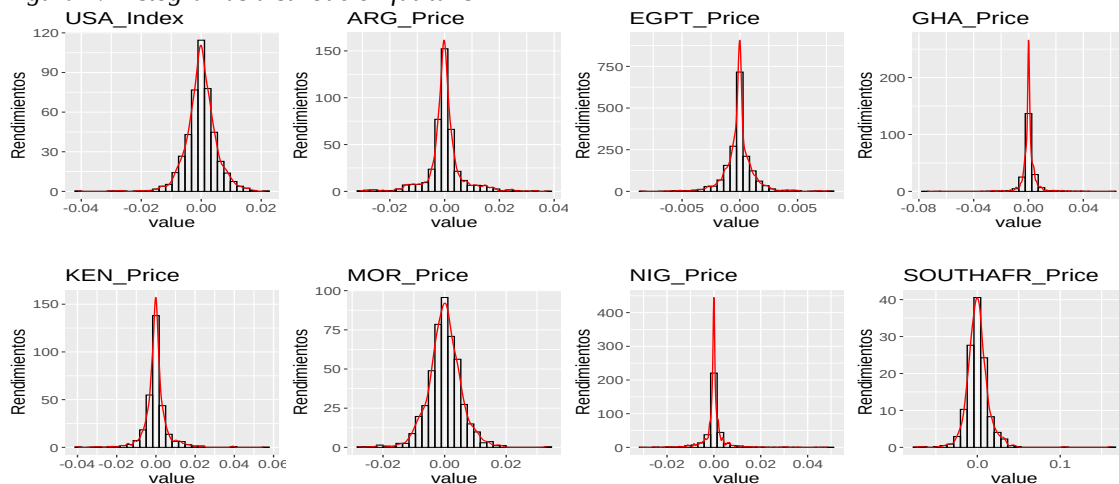
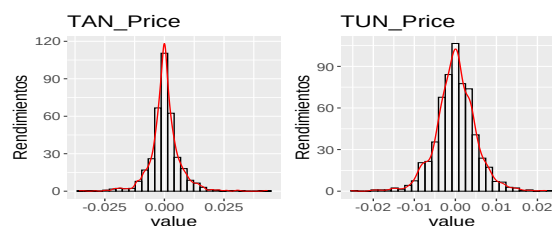


Figura 7. Histogramas distribución fat-tails





5.2 Modelización Univariante

Una vez se confirma el rechazo de la Hipótesis de Mercados Eficientes, la cuál se discutirá con mayor profundidad en la discusión de resultados, se procede a la modelización univariante. Recordamos que en este estudio se aplican 700 modelos de la familia GARCH por país, donde se usan los modelos SGARCH, APARCH, TGARCH, EGARCH y NAGARCH junto a las distribuciones Normal y T-Student tanto sesgadas como no, para una combinación de órdenes (p, q) de 0 a 5, excluyendo el (0,0). Aclarar que no todos los modelos comentados logran la convergencia y por tanto se descartan.

Realizaremos cuatro tipos de selección: Básica, Vertical, Horizontal y Diagonal. Para todas ellas se presentan los modelos escogidos con su respectivo diagnóstico.

5.2.1 Selección Básica y diagnóstico univariante

Esta selección consiste en ajustar el modelo SGARCH (1,1) con distribución Normal para cada serie de rendimientos. En la Tabla 10 se muestran los resultados, donde encontramos las estimaciones de los parámetros del modelo, las pruebas de Ljung & Box (1978) para los residuos estandarizados normales y al cuadrado, la prueba ARCH LM (Engle, 1982) y el *Sign Bias Test* (Engle & Ng, 1993) clasificados con su nivel de significatividad correspondiente. Comentar que pese a que las pruebas Ljung-Box modificada y ARCH LM sean la misma, están aplicadas para distintos retrasos, por lo que es posible que no coincidan; como por ejemplo ocurre para la serie nigeriana.

Como se observa, todos tienen problemas sin resolver ya que presentan significatividad para al menos una prueba. De forma excepcional, podemos comentar que el tipo de cambio argelino, keniano y tunecino presentan buenos resultados con este tipo de modelización, aunque muestran dependencia en los residuos estandarizados. Sin embargo, estos dos últimos países también presentan falta de significatividad en sus coeficientes. Mejor ajuste que los anteriores presenta la serie sudafricana, dónde su único inconveniente es la falta de significatividad en dos de sus coeficientes, pero no es un problema que se considere grave.

Otro caso a comentar es el de Marruecos, que presenta buen comportamiento pero el modelo nos indica que debería aplicarse un modelo asimétrico para capturar el efecto apalancamiento. Para los demás países, el ajuste del modelo es bastante pobre.

5.2.2 Selección Vertical y diagnóstico univariante

Este tipo de selección consiste en la fijación del orden (1,1) para todos los modelos corridos. Se busca el mejor modelo para cada serie a través de un diagnóstico, dando preferencia a modelos con menor BIC.

Tabla 10. Resultados de la aplicación de la selección por defecto

SGARCH Normal (1,1)	USA_Index	ARG_Price	EGPT_Price	GHA_Price	KEN_Price	MOR_Price	NIG_Price	SOUTHAFR_Price	TAN_Price	TUN_Price
<i>Estimates</i>										
ω	0	0.000005***	0	0	0	0	0	0.000002	0.000001	0
α_1	0.033225	0.220345***	0.067295	0.13123	0.088625	0.042962	0.1266	0.88446	0.150465	0.35243
β_1	0.965247***	0.689442***	0.921153	0.84954	0.902783***	0.954594	0.8718	0.89775***	0.831409***	0.961640***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>										
Lag[1]	0.01889	51.54***	36.79***	99.29***	0.4916	0.9823	27.83***	0.06443	2.419	14.89***
Lag[2*(p+q)+(p+q)-1][2]	0.87392	52.54***	37.04***	101.91***	7.2015**	1.2137	29.05***	0.60371	2.549	17.13***
Lag[4*(p+q)+(p+q)-1][5]	2.06371	53.97***	39.88***	105.19***	15.7216***	1.5398	29.93***	1.5227	3.65	19.10***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>										
Lag[1]	4.311**	0.1335	0.9309	0.02891	0.417	0.4056	0.6333***	0.4609	3.114*	0.5699
Lag[2*(p+q)+(p+q)-1][5]	9.579**	0.7496	0.50995	2.08684	1.311	1.4111	43.3723***	1.4955	4.425	0.889
Lag[4*(p+q)+(p+q)-1][9]	12.325**	1.5575	0.96762	16.89049***	1.968	2.3113	49.1491***	3.6415	6.001	1.7445
<i>Weighted ARCH LM Tests</i>										
ARCH Lag[3]	6.558**	0.4287	0.3162	0.6074	0.002921	1.434	2.282	0.03643	1.257	0.009585
ARCH Lag[5]	7.493**	1.1064	0.7688	0.9396	0.426175	1.855	2.433	1.2167	1.972	0.877772
ARCH Lag[7]	8.567**	1.6331	1.0719	15.1566***	0.87615	1.999	3.255	2.84987	3.286	1.202882
<i>Sign Bias Test</i>										
Sign Bias	0.3414	0.65882	2.0318**	0.215498	0.6095	2.625***	0.9181	1.4958	1.901*	0.997
Negative Sign Bias	1.1321*	0.01768	1.9542*	1.276928	0.6571	1.836*	0.5432	1.3765	3.012***	1.3151
Positive Sign Bias	1.7945	0.17802	0.2078	0.005756	0.6878	2.701***	0.1262	0.4275	1.003	0.9218

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad al *** 1%, **5%, * 10%

Una vez localizado el modelo escogido para cada serie, ordenados de menor a mayor BIC, se comprueba la existencia de otra combinación de órdenes que lo mejore. En el Anexo D.1 se presentan por país todos los modelos (1,1) ordenados por BIC con sus respectivos criterios de información. Pese a que la literatura indique que el criterio BIC ofrece los mejores resultados, para nuestro caso no existen grandes discrepancias entre los criterios de información utilizados.

A la hora de seleccionar, se considerará como modelo ganador aquél que siguiendo en orden el criterio BIC ofrezca primero un diagnóstico satisfactorio. En caso de que ninguno sea aceptable, se elegirá el que más problemas resueltos posea.

- **Selección de modelo Vertical para USA_Index**

Para el caso estadounidense, no se termina de encontrar un diagnóstico adecuado. Esto se debe a que no siempre el orden (1,1) satisface los requerimientos mínimos del problema en cuestión y puede que otras combinaciones de órdenes (p,q) puedan solucionarlos. En la Tabla 11 se muestran los modelos más destacados, donde se encuentra el modelo escogido EGARCH T-Student (1,1).

Como se puede observar, el modelo escogido presenta autocorrelación para los residuos estandarizados al cuadrado y efectos ARCH sin capturar. Sin embargo, en comparación a los otros dos modelos que son un poco superiores en términos de BIC, presenta un número mayor de coeficientes significativos, sobre todo aquellos relacionados con el tipo de modelo y distribución, y captura el efecto apalancamiento.

Tabla 11. Resultados del primer paso de la selección vertical para el USA_Index

	<i>SGARCH T-Student (1,1)</i>	<i>NAGARCH T-Student (1,1)</i>	<i>EGARCH T-Student (1,1)</i>
<i>Estimates</i>			
ω	0	0	-0.041958***
α_1	0.032068	0.033153	0.00424
β_1	0.965654**	0.964033***	0.996018***
<i>skew</i>			
η_{21}		0.0571	
γ_1			0.082302***
<i>shape</i>	8.614446***	12.642069	8.713208***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
<i>Lag[1]</i>	0.01747	0.01815	0.0000086
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	0.83087	0.83737	0.7911315
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	1.99137	1.99467	1.8578378
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
<i>Lag[1]</i>	4.239**	4.421**	3.357*
<i>Lag[2*(p+q)+(p+q)-1]</i>	9.440**	9.561**	8.689**
<i>Lag[4*(p+q)+(p+q)-1]</i>	12.231**	12.314**	11.941**
<i>Weighted ARCH LM Tests</i>			
<i>ARCH Lag[3]</i>	6.374**	6.356**	6.128***
<i>ARCH Lag[5]</i>	7.272**	7.286**	6.983**
<i>ARCH Lag[7]</i>	8.431**	8.383**	8.678**
<i>Sign Bias Test</i>			
<i>Sign Bias</i>	0.3672	0.4106	0.3782
<i>Negative Sign Bias</i>	1.0573	1.0715	0.8933
<i>Positive Sign Bias</i>	1.7197*	1.7251*	1.6408

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

En el segundo paso, se busca si existe alguna combinación de órdenes que mejore al escogido. En el Anexo D.2 se presentan todos los modelos ordenados por país y tipología, donde encontramos que el mejor modelo por BIC es el (1,1). Sin embargo, el modelo de orden (1,1) es mejorable por lo que se observa en el resto de combinaciones y alcanzamos la conclusión de que el mejor modelo es el EGARCH T-Student (2,2); como se ve en la Tabla 12. Lo único comentable es que los coeficientes α_1 y α_2 no son significativos.

Tabla 12. Resultados del segundo paso de la selección vertical para USA_Index

	EGARCH T-Student (1,1)	EGARCH T-Student (2,2)
<i>Estimates</i>		
ω	-0.041958***	-0.064179***
α_1	0.00424	-0.039529
α_2	0.996018***	0.039264
β_1		0.328197***
β_2		0.665763***
γ_1		-0.142345**
γ_2	0.082302***	0.284402***
<i>shape</i>	8.713208***	8.813073***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	0.0000086	0.003226
Lag[2*(p+q)+(p+q)-1][2]	0.7911315	0.559322
Lag[4*(p+q)+(p+q)-1][5]	1.8578378	1.72766
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	3.357*	0.8001
Lag[2*(p+q)+(p+q)-1]	8.689**	4.4872
Lag[4*(p+q)+(p+q)-1]	11.941**	6.9043
<i>Weighted ARCH LM Tests</i>		
ARCH Lag[3][5]	6.128***	0.5707
ARCH Lag[5][7]	6.983**	1.6443
ARCH Lag[7][9]	8.678**	2.56
<i>Sign Bias Test</i>		
Sign Bias	0.3782	0.2308
Negative Sign Bias	0.8933	0.6875
Positive Sign Bias	1.6408	0.628

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

shape es el coeficiente que representa la distribución T-Student

• Selección del modelo Vertical para ARG_Price

En la Tabla 13 encontramos el primer, cuarto y quinto modelos en términos BIC, donde se escoge el SGARCH T-Student (1,1). Ninguno resuelve el problema de autocorrelación de los residuos estandarizados. A su vez, los dos últimos ofrecen los mismos resultados en términos de diagnóstico, por lo que si nos guiáramos por el criterio de simplicidad, teniendo en cuenta que la separación en términos BIC es mínima, y que no se presenta rechazo en el *Sign Bias Test*, optaríamos por el modelo simétrico ya que inicialmente no presenta asimetría.

En el segundo paso, se comprueba si alguno mejora al escogido. Tanto en términos de BIC como en diagnóstico no se ve superado, sin embargo, los problemas de dependencia temporal siguen sin solucionarse.

Tabla 13. Resultados del primer paso de la selección vertical para ARG_Price

	EGARCH T-Student (1,1)	TGARCH Skewed T-Student (1,1)	SGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-2.40961	0.002252*	0.000011***
α_1	0.17713	0.96413***	0.548267***
β_1	0.72557***	0.723667***	0.450732***
<i>skew</i>		1.037555***	
η_{11}		-.0354316*	
γ_1	1.50239***		
<i>shape</i>	2.1***	2.036884***	2.454835***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
<i>Lag[1]</i>	28.39***	41.5***	36***
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	29.65***	43.25***	37.36***
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	31.57***	44.78***	39.5***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
<i>Lag[1]</i>	2.051	0.1793	0.6809
<i>Lag[2*(p+q)+(p+q)-1][5]</i>	2.831	1.0705	1.2968
<i>Lag[4*(p+q)+(p+q)-1][9]</i>	5.202	2.0773	3.4702
<i>Weighted ARCH LM Tests</i>			
<i>ARCH Lag[3]</i>	0.5228	0.2512	0.5268
<i>ARCH Lag[5]</i>	0.9401	1.5354	0.9164
<i>ARCH Lag[7]</i>	3.633	2.0911	3.3881
<i>Sign Bias Test</i>			
<i>Sign Bias</i>	0.6017	0.6066	0.4052
<i>Negative Sign Bias</i>	1.2078	0.2235	1.2683
<i>Positive Sign Bias</i>	2.0339**	1.4309	1.3145

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

skew coeficiente que representa la distribución sesgada

• Selección del modelo Vertical para EGPT_Price

El caso de Egipto es bastante similar al estadounidense, con la diferencia de que ahora el primer modelo BIC es el escogido, siendo el EGARCH T-Student (1,1). Se presenta en la Tabla 14 el primer, segundo y cuarto modelos ordenados por BIC, donde se encuentra el mismo problema que para el caso argelino.

El debate es la selección del modelo EGARCH T-Student cuando el modelo TGARCH T-Student captura mejor la asimetría no resuelta en el primero. La dicotomía aparece debido a la falta de significatividad para el coeficiente η_{11} en el modelo TGARCH frente a la baja, pero existente, significatividad del *Sign Bias Test* para el modelo EGARCH. *Cerebis paribus*, falta de significatividad implica que el modelo no es adecuado, además de que la baja significatividad en la prueba de asimetría puede resolverse aplicando otra combinación de órdenes; cosa que no ocurre con la identificación del modelo. Por lo tanto, optaremos por el modelo EGARCH.

Para el segundo paso, la combinación (4,3) aparece primero en términos de BIC. A su vez, se confirma que es también el mejor modelo en términos de diagnóstico. Pese a ser un modelo con una combinación de órdenes alta, soluciona todos los problemas, a excepción de la autocorrelación de los residuos estandarizados; mostrado en la Tabla 15.

Tabla 14. Resultados del primer paso para la selección vertical para EGPT_Price

	EGARCH T-Student (1,1)	SGARCH T-Student(1,1)	TGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.0220848***	0	0.000027**
α_1	0.053867***	0.14421	0.180875***
β_1	0.982321***	0.8541	0.888492***
η_{11}			-0.164087
γ_1	0.30019***		
shape	2.597342***	3.42485	2.596039***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	29.43***	33.68***	24.21***
Lag[2*(p+q)+(p+q)-1][2]	29.66***	33.86***	24.41***
Lag[4*(p+q)+(p+q)-1][5]	32.01***	36.19***	27.16***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.01769	0.03471	0.2045
Lag[2*(p+q)+(p+q)-1][5]	0.37051	0.71706	1.027
Lag[4*(p+q)+(p+q)-1][9]	0.82768	1.55352	1.5517
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.01273	0.04758	0.9398
ARCH Lag[5]	0.41006	0.86419	1.2318
ARCH Lag[7]	0.77058	1.50566	1.523
<i>Sign Bias Test</i>			
Sign Bias	1.688*	1.6462*	1.497
Negative Sign Bias	1.088	1.042	1.07
Positive Sign Bias	1.193	0.8132	1.255

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

Tabla 15. Resultados segundo paso para EGPT_Price

	EGARCH T-Student (1,1)	EGARCH T-Student (4,3)
<i>Estimates</i>		
ω	-0.220848***	-0.494664***
α_1	0.053867***	0.137183*
α_2		0.188725***
α_3		0.016513
α_4		-0.090379
β_1	0.982321***	-0.627847***
β_2		0.598902***
β_3		0.988939***
γ_1	0.30019***	0.683538***
γ_2		0.646536***
γ_3		0.002562
γ_4		-0.476188***
shape	2.597342***	2.532667***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	29.43***	17.39***
Lag[2*(p+q)+(p+q)-1][2]	29.66***	17.6***
Lag[4*(p+q)+(p+q)-1][5]	32.01***	20.74***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	0.01769	0.754
Lag[2*(p+q)+(p+q)-1]	0.37051	6.058
Lag[4*(p+q)+(p+q)-1]	0.82768	9.641
<i>Weighted ARCH LM Tests</i>		
ARCH Lag[3][8]	0.01273	0.01777
ARCH Lag[5][10]	0.41006	0.82715
ARCH Lag[7][12]	0.77058	3.17438
<i>Sign Bias Test</i>		
Sign Bias	1.688*	1.2084

Negative Sign Bias	1.088	0.1146
Positive Sign Bias	1.193	1.5932

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos
Significatividad: *** 1%, **5%, * 10%

- **Selección del modelo Vertical para GHA_Price**

El caso ghanense se repite como los anteriores, escogiéndose nuevamente un modelo que mantiene dependencia temporal, como se ve en la Tabla 16. Se presentan los tres primeros modelos BIC, escogiendo el tercero, el modelo EGARCH T-Student debido a que claramente presenta mejor diagnóstico.

Tabla 16. Resultados del primer paso de la selección vertical para GHA_Price

	TGARCH T-Student (1,1)	TGARCH Skewed T-Student (1,1)	EGARCH T-Student (1,1)
<i>Estimates</i>			
ω	0.001126***	0.001125***	-.20872**
α_1	1***	1***	-0.22246
β_1	0.50685***	0.50951***	0.77748***
η_{11}	0.0975	0.114169	
γ_1			1.73056***
skew		0.985673***	
shape	2.177309***	2.175937***	2.1***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	35.73***	35.81***	37.17***
Lag[2*(p+q)+(p+q)-1][2]	38.62***	38.66***	38.75***
Lag[4*(p+q)+(p+q)-1][5]	43.47***	43.49***	43.01***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.08528***	0.08815***	0.5057
Lag[2*(p+q)+(p+q)-1][5]	0.73258***	0.70887***	0.8421
Lag[4*(p+q)+(p+q)-1][9]	27.17706***	27.32179***	4.4411
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.02512***	0.02405***	0.007067
ARCH Lag[5]	1.88699***	1.81135***	0.45698
ARCH Lag[7]	34.1536***	34.35172***	4.436456
<i>Sign Bias Test</i>			
Sign Bias	1.28	1.2984	1.3583
Negative Sign Bias	0.411	0.4138	0.1562
Positive Sign Bias	1.637	1.626	1.0684

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos
Significatividad: *** 1%, **5%, * 10%

En el segundo paso encontramos que el modelo escogido, el (1,1), se sitúa el doceavo en orden de BIC, siendo el primero la combinación (2,1). En la Tabla 17 se presentan ambos junto al modelo final, que es el modelo (1,2), el sexto en orden de BIC. Como se observa, se mantiene la dependencia temporal.

Tabla 17. Resultados del segundo paso de la selección vertical para GHA_Price

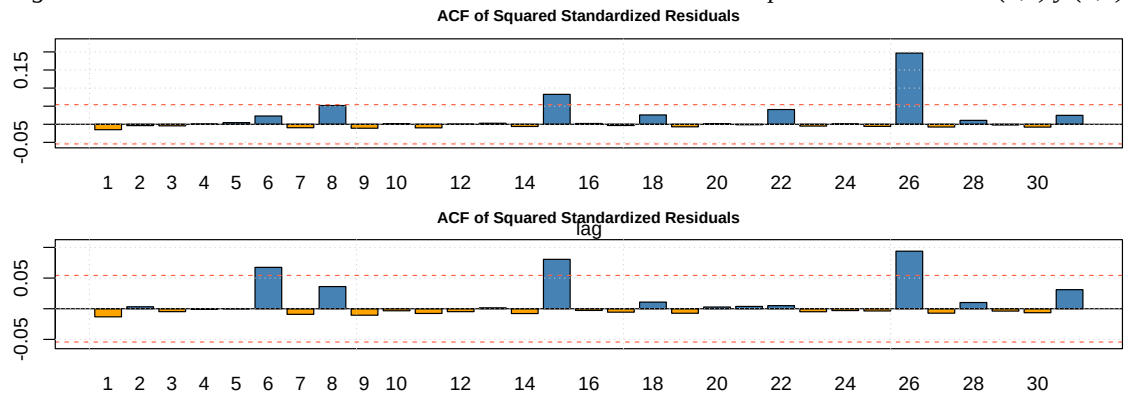
	EGARCH T-Student (2,1)	EGARCH T-Student (1,2)	EGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.049063***	-.158144**	-.20872**
α_1	-.0233249*	-.022481*	-0.22246
α_2	0.017423		
β_1	0.946461***	0.49071***	0.77748***
β_2		0.33935***	

γ_1	2.055784***	1.85554***	1.73056***
γ_2	-.1.202552***	0.646536***	
shape	2.1***	2.1***	2.1***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	28.1***	34.3***	37.17***
Lag[2*(p+q)+(p+q)-1][2]	31.32***	36.53***	38.75***
Lag[4*(p+q)+(p+q)-1][5]	36.27***	40.81***	43.01***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.2283	0.2938	0.5057
Lag[2*(p+q)+(p+q)-1]	2.7439	0.2938	0.8421
Lag[4*(p+q)+(p+q)-1]	5.1288	2.7312	4.4411
<i>Weighted ARCH LM Tests</i>			
ARCH Lag [4] [3] [8]	0.0007305	0.0001731	0.007067
ARCH Lag[6] [5] [10]	3.9574093	0.474755	0.45698
ARCH Lag[8] [7] [12]	5.3708367	2.3563887	4.436456
<i>Sign Bias Test</i>			
Sign Bias	1.0808	1.2624	1.3583
Negative Sign Bias	0.3169	0.2547	0.1562
Positive Sign Bias	1.0064	1.0302	1.0684

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos
Significatividad: *** 1%, **5%, * 10%

Los resultados son prácticamente los mismos, por lo que se debería escoger el modelo (2,1) ya que posee menor criterio de información BIC. Sin embargo, el modelo (1,2) ofrece todos sus coeficientes significativos, por lo que se realizó un diagnóstico visual. Se encontró mejor comportamiento en la dependendencia temporal de los residuos estandarizados al cuadrado para el modelo (1,2) que para el (2,1), pudiéndose observar en la Figura 8, respectivamente para cada modelo. Por lo tanto, se escogerá la combinación (1,2).

Figura 8. Autocorrelación de los residuos estandarizados al cuadrado para la combinación (1,2) y (2,1)



- **Selección del modelo Vertical para KEN_Price**

El tipo de cambio keniano presenta la misma anomalía que en la mayoría de países analizados hasta el momento. En la Tabla 18 se muestran los resultados del modelo seleccionado, SGARCH T-Student, primero en BIC, con el tercero, EGARCH T-Student.

La peculiaridad de este caso es que, en ambos modelos, para el primer retraso no existe autocorrelación en los residuos estandarizados, mientras que según aumentan los retrasos, el estadístico de contraste pasa a ser significativo. Por ser el

primero en términos BIC, ofrecer un comportamiento similar y no presentar problemas de asimetría, se escoge el modelo SGARCH.

Tabla 18. Resultados del primer paso de la selección vertical para KEN_Price

	SGARCH T-Student (1,1)	EGARCH T-Student (1,1)
<i>Estimates</i>		
ω	0.000001	-.0.344373***
α_1	0.230642	0.008694
β_1	0.768358***	0.964836***
γ_1		0.462717***
<i>shape</i>	3.013154***	2.442064***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	1.393	0.6155
Lag[2*(p+q)+(p+q)-1][2]	6.347**	4.8469**
Lag[4*(p+q)+(p+q)-1][5]	12.601***	10.7152***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	0.1446	0.1006
Lag[2*(p+q)+(p+q)-1][5]	0.4794	0.1006
Lag[4*(p+q)+(p+q)-1][9]	0.913	0.8241
<i>Weighted ARCH LM Tests</i>		
ARCH Lag[3]	0.2291	0.1694
ARCH Lag[5]	0.5989	0.5626
ARCH Lag[7]	0.9174	0.788
<i>Sign Bias Test</i>		
Sign Bias	0.9399	0.9145
Negative Sign Bias	0.117	0.1419
Positive Sign Bias	0.6647	0.7138

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

En el segundo paso se observa en el Anexo D.2 que el modelo (1,1) es el primero en orden y se confirma que el resto no mejoran su comportamiento. Por lo tanto, se escoge el modelo SGARCH T-Student (1,1) para Kenia.

- **Selección del modelo Vertical para MOR_Price**

A diferencia de los anteriores, la serie marroquí no presenta problemas en los residuos estandarizados, pero sí en la captura del efecto apalancamiento. En la Tabla 19 se presentan el segundo, SGARCH T-Student, el tercero, SGARCH Skewed Normal, y el cuarto, NAGARCH Normal, modelos ordenados por BIC.

Como se observa, el modelo asimétrico no resuelve la captura del efecto apalancamiento y confirmamos que ningún otro modelo lo hace tampoco; por lo que se escoge el modelo SGARCH Skewed T-Student ya que al menos, en base a la significatividad de los coeficientes, los identifica mejor que para el resto.

Tabla 19. Resultados de la selección vertical para MOR_Price

	SGARCH T-Student (1,1)	SGARCH Skewed Normal (1,1)	NAGARCH Normal (1,1)
<i>Estimates</i>			
ω	0	0	0
α_1	0.042276	0.043816	0.042018
β_1	0.955209***	0.953604**	0.955818
η_{21}			-0.050959
<i>skew</i>		0.957723***	
<i>shape</i>	19.434856		

<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	0.9932	0.9664	1.034
Lag[2*(p+q)+(p+q)-1][2]	1.2258	1.195	1.283
Lag[4*(p+q)+(p+q)-1][5]	1.5522	1.5196	1.627
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.3756	0.4474	0.386
Lag[2*(p+q)+(p+q)-1][5]	1.3587	1.4881	1.308
Lag[4*(p+q)+(p+q)-1][9]	2.2366	2.4211	2.178
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	1.403	1.484	1.286
ARCH Lag[5]	1.811	1.92	1.714
ARCH Lag[7]	1.945	2.079	1.842
<i>Sign Bias Test</i>			
Sign Bias	2.625*	2.624***	2.611***
Negative Sign Bias	1.856*	1.815*	1.865*
Positive Sign Bias	2.682***	2.723***	2.732***
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos			
Significatividad: *** 1%, **5%, * 10%			

En segundo paso se asemeja mucho al keniano, donde vemos en el Anexo D.2 que es el primero en términos de BIC y se confirma que los modelos que le preceden son las combinaciones (2,1), (1,2) y (2,2); en ese orden. A su vez, se concluye que no es mejorado en diagnóstico, por lo que escogemos el SGARCH Skewed T-Student (1,1).

- **Selección del modelo Vertical para NIG_Price**

La serie nigeriana es otro caso donde no se consiguen resolver los problemas en los residuos estandarizados. De los modelos extraídos, el primer modelo por BIC es también el modelo con mejor diagnóstico. Esto se puede ver en la Tabla 20 donde presentamos los tres primeros modelos. Como se observa, los modelos EGARCH se comportan mejor y pese a que el coeficiente del sesgo sea significativo para el segundo, son iguales en diagnóstico, por lo que optamos por el modelo más simple; en este caso el modelo EGARCH T-Student.

Tabla 20. Resultados del primer paso de la selección vertical para NIG_Price

	EGARCH T-Student (1,1)	EGARCH Skewed T-Student (1,1)	APARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.015276***	-.0153682***	0.000048
α_1	0.06127	0.065423	0.457625***
β_1	0.98417***	0.984062***	0.837465***
δ			1.079503***
γ_1	0.74262***	0.74647***	-0.132928
skew		1.011635***	
shape	2.12836***	2.127734***	2.161044***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	28.12***	28.1***	24.85***
Lag[2*(p+q)+(p+q)-1][2]	28.22***	28.2***	26.51***
Lag[4*(p+q)+(p+q)-1][5]	28.43***	28.4***	27.76***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.005978	0.006082	0.2855***
Lag[2*(p+q)+(p+q)-1][5]	0.059278	0.056826	25.3296***
Lag[4*(p+q)+(p+q)-1][9]	0.316462	0.312906	28.617***
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.0222	0.01861	0.5303
ARCH Lag[5]	0.11	0.10829	0.5908

ARCH Lag[7]	0.3401	0.3366	1.0574
<i>Sign Bias Test</i>			
Sign Bias	0.2538	0.2467	0.4738
Negative Sign Bias	0.2871	0.2879	0.3559
Positive Sign Bias	0.4851	0.4915	0.5905

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

En el segundo paso, no se consigue arreglar este problema con otras combinaciones. Se presenta un caso similar al ghanés, donde la combinación (1,1) ocupa el onceavo puesto en orden en cuanto a BIC. Sin embargo, pese a no ser el primero, ocupando esta posición la combinación (2,1), el modelo (1,1) posee el mejor diagnóstico. En la Tabla 21 se encuentra que el (2,1) presenta dependencia temporal también para sus residuos estandarizados al cuadrado, por lo que se escoge el orden (1,1).

Tabla 21. Resultados el segundo paso de la selección vertical para NIG_Price

	EGARCH T-Student (2,1)	EGARCH T-Student (1,1)
<i>Estimates</i>		
ω	-.066773***	-.15276***
α_1	-0.003201	0.06127
α_2	0.027451	
β_1	0.993139***	0.98417***
γ_1	1.286728***	
γ_2	-.0852413***	0.74262***
shape	2.159831***	2.12836***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	14.42***	28.12***
Lag[2*(p+q)+(p+q)-1][2]	16.42***	28.22***
Lag[4*(p+q)+(p+q)-1][5]	17.88***	28.43***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	0.1897***	0.005978
Lag[2*(p+q)+(p+q)-1]	29.889***	0.059278
Lag[4*(p+q)+(p+q)-1]	34.2154***	0.316462
<i>Weighted ARCH LM Tests</i>		
ARCH Lag [4][3]	0.06166	0.0222
ARCH Lag[6][5]	0.80731	0.11
ARCH Lag[8][7]	5.1099	0.3401
<i>Sign Bias Test</i>		
Sign Bias	0.5568	0.2538
Negative Sign Bias	0.5834	0.2871
Positive Sign Bias	0.5834	0.4851

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

- Selección del modelo Vertical para SOUTHAFR_Price**

En este caso, los resultados son distintos a los vistos anteriormente. En la Tabla 22 presentamos los resultados para los tres primeros modelos por BIC, donde el primero, SGARCH Skewed T-Student, posee el diagnóstico deseado. Al ser el mejor en BIC y poseer un comportamiento adecuado, será el modelo definitivo.

Tabla 22. Resultados del primer paso de la selección vertical para SOUTHAFR_Price

	SGARCH Skewed T-Student (1,1)	NAGARCH Skewed T-Student (1,1)	SGARCH T-Student (1,1)
<i>Estimates</i>			
ω	0.000002	0.000002	0.000002
α_1	0.05975	0.054173	0.059636
β_1	0.925502***	0.921613***	0.926953***
η_{21}		-.0.386871	
skew	1.159507***	1.162072***	
shape	10.312726***	11.016424**	9.294272***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	0.008894	0.005132	0.01071
Lag[2*(p+q)+(p+q)-1][2]	0.616285	0.490181	0.61371
Lag[4*(p+q)+(p+q)-1][5]	1.552864	1.431175	1.55256
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.02949	0.02244	0.02732
Lag[2*(p+q)+(p+q)-1][5]	2.09554	1.5479	2.07874
Lag[4*(p+q)+(p+q)-1][9]	5.63254	4.56813	5.60282
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.001137	2.03E-05	0.0005879
ARCH Lag[5]	2.39936	2.09E+00	2.4020385
ARCH Lag[7]	4.947748	4.26E+00	4.9372123
<i>Sign Bias Test</i>			
Sign Bias	1.45694	1.34265	1.45999
Negative Sign Bias	1.04769	0.91987	1.06194
Positive Sign Bias	0.05416	0.01653	0.04325

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

• Selección del modelo Vertical para TAN_Price

El caso tanzano es bastante parecido al sudafricano. En la Tabla 23 se puede observar que no existen problemas de diagnóstico para el modelo EGARCH T-Student. Sin embargo, hay que comentar que el *Sign Bias Test* es ligeramente significativo y, pese a no encontrarse corregido el sesgo por ninguno, el modelo EGARCH consigue corregirlo hasta hacerlo neutro, no como el SGARCH que presenta sesgo positivo. Por otro lado, los resultados del modelo NAGARCH son bastante parecidos a los comentados y está posicionado un puesto por delante en BIC frente al EGARCH. La leve diferencia es que el coeficiente η_{21} posee menor significatividad que la que posee γ_1 . Por lo tanto, se termina por escoger el modelo EGARCH T-Student en este paso.

Tabla 23. Resultados del primer paso de la selección vertical para TAN_Price

	NAGARCH T-Student (1,1)	EGARCH T-Student (1,1)	SGARCH T-Student (1,1)
<i>Estimates</i>			
ω	0.000005***	-.1.36626***	0.000005***
α_1	0.393482***	-.0.16292***	0.408465***
β_1	0.58016***	0.86456***	0.590508***
η_{21}	0.253815**		
γ_1		0.59564***	
shape	3.311529***	3.2562***	3.297409***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	1.921	1.186	1.306
Lag[2*(p+q)+(p+q)-1][2]	2.044	1.387	1.435
Lag[4*(p+q)+(p+q)-1][5]	2.594	1.994	1.998
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.5069	0.3468	0.5595

$Lag[2*(p+q)+(p+q)-1][5]$	2.2714	1.907	2.5563
$Lag[4*(p+q)+(p+q)-1][9]$	2.6266	2.6111	3.0824
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.002054	0.007617	0.07218
ARCH Lag[5]	0.029061	0.568404	0.10525
ARCH Lag[7]	0.122119	0.750957	0.33444
<i>Sign Bias Test</i>			
Sign Bias	1.8382*	1.8984642*	1.097
Negative Sign Bias	0.2899	0.0007571	0.5503
Positive Sign Bias	1.6162	1.6319882	1.8945*
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos			
Significatividad: *** 1%, **5%, * 10%			

En el segundo paso, la combinación (1,1) se posiciona la segunda, siendo solo superada por la (1,2). En la Tabla 24 se comparan sus resultados y observamos que el (1,1) posee mejor diagnóstico ya que captura mejor el efecto apalancamiento. Por lo tanto, se escoge el modelo EGARCH T-Student (1,1) como modelo para Tanzania.

Tabla 24. Resultados del segundo paso de la selección vertical para TAN_Price

	EGARCH T-Student (1,2)	EGARCH T-Student (1,1)
<i>Estimates</i>		
ω	-.128455***	-.136626***
α_1	-.018848***	-.016292***
β_1	0.43304***	0.86456***
β_2	0.43961***	
γ_1	0.69136***	0.59564***
<i>shape</i>	3.29808***	3.2562***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	0.9053	1.186
$Lag[2*(p+q)+(p+q)-1][2]$	1.1323	1.387
$Lag[4*(p+q)+(p+q)-1][5]$	1.7912	1.994
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	1.502	0.3468
$Lag[2*(p+q)+(p+q)-1]$	3.255	1.907
$Lag[4*(p+q)+(p+q)-1]$	5.382	2.6111
<i>Weighted ARCH LM Tests</i>		
ARCH Lag [4][3]	1.931	0.007617
ARCH Lag[6][5]	2.77	0.568404
ARCH Lag[8][7]	2.888	0.750957
<i>Sign Bias Test</i>		
Sign Bias	2.2712**	1.8984642*
Negative Sign Bias	0.0127	0.0007571
Positive Sign Bias	1.9738**	1.6319882
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos		
Significatividad: *** 1%, **5%, * 10%		

- Selección del modelo Vertical para TUN_Price**

Los rendimientos tunecinos presentan buen comportamiento con la excepción de que presentan problemas de autocorrelación en los residuos estandarizados. En la Tabla 25 se presentan los tres primeros modelos por orden BIC, donde escogemos el tercero, el modelo SGARCH Normal, ya que en términos de significatividad de coeficientes es el más congruente. Esto se debe a que el coeficiente *shape* no es significativo para los dos primeros.

Tabla 25. Resultados del primer paso de la selección vertical para TUN_Price

	SGARCH T-Student (1,1)	SGARCH Skewed T-Student (1,1)	SGARCH Normal (1,1)
<i>Estimates</i>			
ω	0	0	0
α_1	0.039505	0.039411	0.035243
β_1	0.957752***	0.957376***	0.96164***
<i>skew</i>		0.961854***	
<i>shape</i>	12.972002	13.094647	
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	14.7***	14.65***	14.89***
Lag[2*(p+q)+(p+q)-1][2]	16.91***	16.86***	17.13***
Lag[4*(p+q)+(p+q)-1][5]	18.83***	18.78***	19.1***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.323	0.315	0.5699
Lag[2*(p+q)+(p+q)-1][5]	0.7849	0.7782	0.889
Lag[4*(p+q)+(p+q)-1][9]	1.7056	1.6917	1.7445
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3]	0.07232	0.07215	0.009585
ARCH Lag[5]	1.0462	1.04067	0.877772
ARCH Lag[7]	1.31986	1.30591	1.202882
<i>Sign Bias Test</i>			
Sign Bias	0.9757	0.9699	0.997
Negative Sign Bias	1.1308	1.1366	1.3151
Positive Sign Bias	1.0932	1.0855	0.9218

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

En el segundo paso, encontramos que nuestro modelo seleccionado es el mejor en términos de BIC y que, ninguna otra combinación resuelve los problemas vistos, por lo que se escoge el modelo SGARCH Normal (1,1).

5.2.3 Selección Horizontal y diagnóstico univariante

La selección Horizontal consiste en la implementación de modelos de la familia GARCH a través de un análisis preliminar sobre los datos. Al contrario de lo que veíamos en la selección Vertical, ahora se ajustarán los modelos según su afinidad a las características de los rendimientos y una vez aplicados, se diagnosticarán.

Presentamos en la Tabla 26 los estadísticos necesarios para este proceso, descritos previamente en la sección de metodología. Se recuerda que, en la toma de decisiones, serán claves: el test de normalidad para saber qué distribución aplicar, la asimetría y curtosis para determinar si la distribución está sesgada o no y las tres versiones del *Sign Bias Test* para identificar la simetría de la volatilidad y, por ende, el tipo de modelo GARCH.

Tabla 26. Tabla de estadísticos de los rendimientos para la selección horizontal

	Media	Mediana	Máximo	Mínimo	Desviación Típica	Asimetría
USA_Index	-5.75937E-05	0	0.021552213	-0.041066398	0.005200906	-0.65959665
ARG_Price	-1.63089E-06	-0.000152149	0.037717206	-0.030842781	0.006689941	0.15374304
EGPT_Price	-6.89016E-05	0	0.007694086	-0.008565552	0.001319992	0.24646234
GHA_Price	0.000355474	0	0.063293815	-0.073719547	0.006323665	-0.56836583
KEN_Price	-2.63553E-05	0	0.054891828	-0.04087857	0.006329255	0.53900457
MOR_Price	-3.89864E-05	-2.15264E-05	0.033093283	-0.0278772	0.005443701	-0.10040902
NIG_Price	9.49633E-05	0	0.048415397	-0.031737978	0.005336927	1.99728504
SOUTHAFR_Price	0.00020703	-0.000370261	0.160173142	-0.075707059	0.013576831	1.45803864

TAN_Price	0.000190669	0	0.043131177	-0.03566018	0.006565552	0.32843462
TUN_Price	7.05588E-05	7.6926E-05	0.02222968	-0.025416674	0.004919704	-0.07492049
	Curtosis	Kolmogorov-Smirnov Test (P-value)	Sign Bias Test GARCH(1,1) (P-value)	Positive Sign Bias Test GARCH(1,1) (P-value)	Negative Sign Bias Test GARCH(1,1) (P-value)	
USA_Index	5.542034	0.492095	0.732877297	0.257804078	0.07296028	
ARG_Price	5.880524	0.4876975	0.510125666	0.985893078	0.85873222	
EGPT_Price	7.755244	0.4969305	0.042380114	0.050893222	0.83539094	
GHA_Price	37.66515	0.4867627	0.829413078	0.201856098	0.99540811	
KEN_Price	12.806186	0.4871581	0.54231777	0.511229826	0.49169891	
MOR_Price	2.794593	0.4918799	0.008775558	0.066565979	0.00700122	
NIG_Price	21.750543	0.4888265	0.358727373	0.587106749	0.89957768	
SOUTHAFR_Price	18.977462	0.4798387	0.134951802	0.168908252	0.6691134	
TAN_Price	6.312026	0.4875984	0.057458345	0.002646115	0.31596327	
TUN_Price	2.082586	0.4911886	0.318972082	0.188716874	0.35679095	

Como se puede observar, ninguno presenta normalidad en su distribución y, a excepción de Túnez, todas presentan un ligero sesgo en la misma. Por otro lado, se encuentra simetría en la volatilidad para las series de Argelia, Ghana, Kenia, Nigeria, Sudáfrica y Túnez; confirmado para las tres pruebas del *Sign Bias Test*.

- **Selección Horizontal para USA_Index**

Para el caso estadounidense, se aplicarán modelos asimétricos en volatilidad, con distribución T-Student sesgada. Al haberse aplicado cuatro tipos de modelos GARCH asimétricos distintos y no ser conocedores de cuál ofrece mejores resultados, se observará cuál presenta mejor diagnóstico. En la Tabla 27 se presentan todos los modelos más destacados de este apartado.

Vemos para el modelo APARCH las combinaciones (1,2) como la primera posición en términos de BIC y el (2,1) en la sexta. Este último posee mejor diagnóstico ya que arregla los problemas de asimetría en la volatilidad y la autocorrelación de los residuos estandarizados al cuadrado. Pese a esto, este modelo no presenta significatividad para ningún coeficiente, exceptuando el del sesgo de la distribución.

Para el modelo TGARCH, la primera posición está ocupada por el modelo (1,1), seguida por el (2,1) y el (2,2), siendo el último el poseedor del mejor diagnóstico de esta familia. Sin embargo, los coeficientes claves del modelo no son significativos.

Para el NAGARCH, encontramos el modelo (1,1) como el mejor en términos de BIC, pero el modelo (3,2), que se posiciona en quinto lugar, presenta mejor diagnóstico para esta familia. Aun así, el modelo (3,2) presenta falta de significatividad en algunos coeficientes claves y es un modelo más complejo que el resto.

Por último, el modelo EGARCH es el que mejor responde de todos los planteados. El primer modelo en términos de BIC de su familia es el (1,1), aunque con un diagnóstico pobre, pero el que queda segundo, el modelo (2,2), resuelve todos los problemas del anterior además de presentar significatividad en los coeficientes clave.

Se puede concluir diciendo que el mejor modelo para la serie de EE.UU bajo este tipo de selección es el modelo EGARCH Skewed T-Student (2,2).

Tabla 27. Resultados de la selección horizontal para USA Index

	APARCH Skewed T-Student (1,2)	APARCH Skewed T-Student (2,1)	TGARCH Skewed T-Student (1,1)	TGARCH Skewed T-Student (2,2)	NAGARCH Skewed T-Student (1,1)	NAGARCH Skewed T-Student (3,2)	EGARCH Skewed T-Student (1,1)	EGARCH Skewed T-Student (2,2)
<i>Estimates</i>								
ω	0	0	0.000018*	0.000031	0	0	-.041872***	-.064022***
α_1	0.040466	0.023714	0.043399***	0.009294	0.032991	0	0.0044	-0.03829
α_2		0.033481		0.107324***	0.965607***	0.042531		0.038537
α_3						0		
β_1	0.462326	0.90515	0.963506***	0.087562***		0.076779	0.996029***	0.325678***
β_2	0.469892***			0.821665***		0.828523***		0.668298***
η_{11}			-0.087339	-0.999993				
η_{12}				-.0452271***				
η_{21}					0.030274	-.1922485		
η_{22}						0.994589		
η_{23}						1.245863		
γ_1	-0.062615	-0.16524					0.082893***	-.013895**
γ_2		0.031855						0.281645***
δ	2.711304***	2.760324						
skew	0.950826	0.94473**	0.973189***	0.971926***	0.97157***	0.964792***	0.970262***	0.975643***
shape	6.951207	7.070606	8.706377***	8.947475***	8.878628	9.692285***	8.876635***	8.944382***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>								
Lag[1]	0.02478	0.04213	0.001064	0.08054	0.01788	0.09046	1.14E-05	0.003219
Lag[2*(p+q)+(p+q)-1][2]	0.9442	0.86264	0.896176	0.76106	0.8539	0.77346	7.99E-01	0.564415
Lag[4*(p+q)+(p+q)-1][5]	2.1654	2.08284	2.058722	1.85745	2.02677	1.89342	1.87E+00	1.730615
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>								
Lag[1]	5.572**	1.635	3.543*	0.9424	4.351**	0.7891	3.37*	0.7451
Lag[2*(p+q)+(p+q)-1]	12.606***	5.918	9.658**	4.5632	9.618**	4.3831	8.696**	4.4231
Lag[4*(p+q)+(p+q)-1]	14.23**	7.125	13.407***	6.5007	12.437**	6.1927	11.92**	6.8143
<i>Weighted ARCH LM Tests</i>								
ARCH Lag	0.001606	0.2129	6.106**	0.5141	6.448**	0.0353	6.165**	0.5728
ARCH Lag	1.627612	1.4442	6.995**	1.2932	7.377**	0.4981	7.018**	1.6285
ARCH Lag	1.893446	1.5758	9.141**	2.1967	8.531**	0.6099	8.68**	2.5127
<i>Sign Bias Test</i>								
Sign Bias	0.3312	0.2372	0.3932	0.47921	0.3743	0.3721	0.3754	0.2294
Negative Sign Bias	1.1937	0.5235	0.9372	0.08943	1.1096	0.2255	0.9013	0.6646
Positive Sign Bias	1.9828**	1.4558	1.7314*	1.11006	1.7622*	1.241	1.6521*	0.5849

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos. Significatividad: *** 1%, **5%, * 10%

- **Selección Horizontal para ARG_Price**

Para la serie argelina, se debe aplicar un modelo SGARCH, con distribución T-Student no sesgada, ya que el valor del estadístico descriptivo de la asimetría asciende a 0.15 y no se considera lo suficiente relevante. Al coincidir con la selección vertical, se llegan a las mismas conclusiones. La combinación (1,1) era aquella que presentaba mejor diagnóstico, además de ser el primer modelo de su familia en términos de BIC. Por lo tanto, se concluye que el modelo escogido es el SGARCH T-Student (1,1).

- **Selección Horizontal para EGPT_Price**

Para la serie egipcia, tampoco se presenta sesgo en la distribución como Argelia, ya que el valor del estadístico descriptivo de la asimetría asciende a 0.24, pero existen efectos volátiles sin capturar, ya que se rechaza la prueba de asimetría positiva. Teniendo en cuenta que no presenta normalidad, se aplicarán modelos asimétricos con distribución T-Student. En la Tabla 28 se presentan los modelos más destacados aunque sin incluir la familia EGARCH ya que somos conocedores de los resultados en la selección Vertical de que el mejor modelo para esa familia es el (4,3).

Para el modelo APARCH, encontramos la combinación (1,1) como la mejor en términos de BIC, y aún habiendo introducido el modelo (2,2) para comparar, no se consigue mejorar el modelo (1,1). Sin embargo, el modelo APARCH (1,1) no resuelve la captura del efecto apalancamiento y que ningún coeficiente sea significativo.

Para el modelo TGARCH se presenta la misma situación que en el anterior, pero con la diferencia de que ahora el efecto apalancamiento sí ha sido capturado. Sin embargo, el modelo (1,1) presenta más fallos que el (2,2), ya que η_{11} no es significativo mientras que para el (2,2) todos los coeficientes son significativos.

Por último, para el modelo NAGARCH se presentan las mismas combinaciones que las presentadas anteriormente, esto es, (1,1) frente a (2,2). Como se observa ninguno de los coeficientes es significativo en ambos casos. Además, el modelo NAGARCH no mejora en absoluto los problemas vistos en los otros modelos.

Se puede concluir que, a la hora de escoger, estaríamos entre los modelos TGARCH y EGARCH. Debido a que el segundo es mucho más complejo y no todos sus coeficientes son significativos, se escogerá el modelo TGARCH T-Student (2,2).

- **Selección Horizontal para GHA_Price**

Para la serie de rendimientos ghanesa encontramos que presenta un sesgo de -0.56 puntos en su distribución, aparte de no ser normal. Por otro lado, no rechaza simetría en la volatilidad. Por ende, se aplicarán modelos SGARCH Skewed T-Student.

En la Tabla 29 se presentan los resultados, donde el mejor modelo en términos de BIC, el modelo (1,1), también lo es en diagnóstico respecto a los que están por debajo de ella. Sin embargo, no se resuelve la autocorrelación de los residuos estandarizados. Por lo tanto, nos quedaremos con la combinación (1,1).

Tabla 28. Resultados de la selección horizontal para EGPT Price

	APARCH T-Student (1,1)	APARCH T-Student (2,2)	TGARCH T-Student (1,1)	TGARCH T-Student (2,2)	NAGARCH T-Student (1,1)	NAGARCH T-Student (2,2)
<i>Estimates</i>						
ω	0	0	0.000027**	0.000042***	0	0
α_1	0.05167	0.025967	0.180875***	0.262411***	0.12168	0.191298
α_2		0.025967		0.112541***		0.048022
β_1	0.89122	0.444745	0.888492***	0.098349***	0.8721	0.015743
β_2		0.443984		0.684812***		0.726486
η_{11}			-0.164087	-.020781**		
η_{12}				-.0653572***		
η_{21}					-0.14314	-.0294241
η_{22}						-0.135965
γ_1	0.03484	0.021706				
γ_2		0.019802				
δ	2.42601	2.414387				
shape	4.02839	4.023386	2.596039***	2.636714***	3.18814	3.254676
<i>Weighted Ljung-Box Test on Standardized Residuals</i>						
Lag[1]	35.85***	37.88***	24.21***	21.56***	32.68***	27.27***
Lag[2*(p+q)+(p+q)-1][2]	36.21***	38.32***	24.41***	21.69***	32.9***	27.5***
Lag[4*(p+q)+(p+q)-1][5]	39.22***	41.48***	27.16***	24.68***	35.56***	30.02***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>						
Lag[1]	0.4012	1.303	0.2045	0.01108	0.007296	0.1822
Lag[2*(p+q)+(p+q)-1]	0.7549	3.675	1.027	1.20322	0.508353	1.3226
Lag[4*(p+q)+(p+q)-1]	1.2602	5.153	1.5517	1.91196	1.153187	2.2932
<i>Weighted ARCH LM Tests</i>						
ARCH Lag	0.1737	1.454	0.9398	0.157	7.10E-07	0.2496
ARCH Lag	0.7283	1.557	1.2318	0.5811	6.83E-01	0.8109
ARCH Lag	0.9875	1.812	1.523	0.7874	1.18E+00	1.1661
<i>Sign Bias Test</i>						
Sign Bias	1.962**	2.1726**	1.497	1.317	1.6188	1.26
Negative Sign Bias	2.368**	2.9569***	1.07	0.834	1.3133	0.865
Positive Sign Bias	0.322	0.7105	1.255	1.563	0.7792	1.238

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos. Significatividad: *** 1%, **5%, * 10%

Tabla 29. Resultados de la selección horizontal para GHA_Price

	SGARCH Skewed T-Student (1,1)	SGARCH Skewed T-Student (1,2)	SGARCH Skewed T-Student (2,1)
<i>Estimates</i>			
ω	0.000002	0.000002	0.000002
α_1	0.496053***	0.535815***	0.49188***
α_2			0
β_1	0.502947	0.28128	0.50712
β_2		0.181905	
skew	1.001175***	1.000197***	1.001094***
shape	2.836283***	2.859982***	2.837138***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	59.2***	57.37***	59.61***
Lag[2*(p+q)+(p+q)-1][2]	61.68***	61.13***	62.06***
Lag[4*(p+q)+(p+q)-1][5]	65.87***	66.22***	66.23***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.2339	0.4545	0.2303
Lag[2*(p+q)+(p+q)-1]	0.4125	10.1414	12.1422**
Lag[4*(p+q)+(p+q)-1]	14.6355	18.2884	21.5118***
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[3][4]	0.000586	0.05609	0.000157***
ARCH Lag[5][6]	0.477113	15.13452***	20.508202***
ARCH Lag[7][8]	17.795286	15.13452***	24.003973***
<i>Sign Bias Test</i>			
Sign Bias	0.2515	0.2474	0.2465
Negative Sign Bias	0.2515	0.2924	0.2306
Positive Sign Bias	1.0102	0.2924	1.0014

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

- **Selección Horizontal para KEN_Price**

Para la serie keniana, las características son las mismas que en la serie ghanesa, presentando 0.54 puntos de sesgo en la distribución. Por lo tanto, se aplica el modelo SGARCH Skewed T-Student y en la Tabla 30 se encuentran presentados los modelos (1,1) y (2,2), siendo el primero y el cuarto en términos de BIC; respectivamente.

Tabla 30. Resultados de la selección horizontal para KEN_Price

	SGARCH Skewed T-Student (1,1)	SGARCH Skewed T-Student (2,2)
<i>Estimates</i>		
ω	0.000001	0.000002
α_1	0.232917	0.29691
α_2		0.000063
β_1	0.766083***	0.390525
β_2		0.3115
skew	1.046582***	1.045681***
shape	3.007671***	3.023264***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	1.411	1.374
Lag[2*(p+q)+(p+q)-1][2]	6.382**	7.146**
Lag[4*(p+q)+(p+q)-1][5]	12.646***	14.018***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
Lag[1]	0.1422	0.2735
Lag[2*(p+q)+(p+q)-1]	0.4651	1.1168
Lag[4*(p+q)+(p+q)-1]	0.898	1.8211
<i>Weighted ARCH LM Tests</i>		
ARCH Lag[3][4][5]	0.2221	0.1286

<i>ARCH Lag[5][6][7]</i>	0.579	0.5395
<i>ARCH Lag[7][8][9]</i>	0.9054	0.6893
<i>Sign Bias Test</i>		
<i>Sign Bias</i>	0.9435	0.9764
<i>Negative Sign Bias</i>	0.109	0.2358
<i>Positive Sign Bias</i>	0.6597	0.8404
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos		
Significatividad: *** 1%, **5%, * 10%		

Como se puede observar, ofrecen el mismo comportamiento y ninguno resuelve los problemas de autocorrelación de los residuos estandarizados. Por lo tanto, siguiendo los criterios de simplicidad y menor BIC, se escoge la combinación (1,1).

- **Selección Horizontal para MOR_Price**

Para el caso marroquí, se presenta asimetría en la volatilidad de la serie, pero no en su distribución, ya que el valor del sesgo asciende al -0.1. Por lo tanto, aplicaremos modelos asimétricos de la familia GARCH con distribución T-Student. En la Tabla 31 se encuentran los modelos más destacables.

Para el modelo APARCH, se muestran el orden (2,2), que ocupa el primer puesto en BIC, seguido por el (1,1). Ninguno resuelve los problemas de asimetría en la volatilidad ni presenta coeficientes significativos. Por lo tanto, se descarta.

Respecto los modelos TGARCH, se mantienen los mismos problemas vistos en el modelo APARCH aunque con la diferencia de que ahora los coeficientes son significativos. Sin embargo, la combinación (1,1) no captura el efecto apalancamiento mientras que la (2,2) sí.

Para los modelos NAGARCH, encontramos la misma situación que para el modelo APARCH. Por lo tanto, no es considerado para el análisis.

Por último, si observamos el modelo EGARCH, encontramos que tampoco se soluciona la captura de la volatilidad pero presenta alta significatividad de los parámetros, excepto para α_1 , tanto en combinación (1,1) como en la (1,2).

Por lo tanto, se presenta la dicotomía de escoger entre el modelo EGARCH (1,1) frente al TGARCH (2,2), ya que ambos presentan el mismo diagnóstico. Si optamos por la simplicidad y el nivel de significatividad de los parámetros estimados, el modelo EGARCH es más simple y además γ_1 presenta mayor significatividad que η_{11} . Pese a que cualquiera podría ser el modelo ganador, se opta por el EGARCH T-Student (1,1).

- **Selección Horizontal para NIG_Price**

La serie nigeriana presenta un alto sesgo en la distribución, casi alcanzando los 2 puntos, pero sin poseer asimetría en la volatilidad. Por lo tanto, aplicaremos el modelo SGARCH Skewed T-Student. En la Tabla 32 se muestran los tres primeros modelos por orden de BIC, donde el escogido es la combinación (1,1). Todos presentan problemas en ambos tipos de residuos estandarizados, a excepción del (1,1) que soluciona el problema de dependencia temporal, para los residuos estandarizados al cuadrado, aunque únicamente para el primer retraso.

Tabla 31. Resultados de la selección horizontal para MOR Price

	APARCH T- Student (2,2)	APARCH T- Student (1,1)	TGARCH T- Student (1,1)	TGARCH T- Student (2,2)	NAGARCH T- Student (1,1)	NAGARCH T- Student (2,1)	EGARCH T- Student (1,1)	EGARCH T- Student (1,3)
<i>Estimates</i>								
ω	0	0	0.000026**	0.000021	0	0	-.055389***	-.018379***
α_1	0.016625	0.046571	0.045652***	0.016418***	0.042117	0.004582	0.009153	-0.000147
α_2	0.01989			0.045403***		0.036796		
β_1	0.594139	0.913466	0.959314***	0.950424***	0.955746***	0.95666***	0.994753***	0.999991***
β_2	0.34153			0.000001				0.86077***
β_3								-.0862491***
η_{11}			-0.146173	-.099995**				
η_{12}				-.0440475***				
η_{21}					-0.018375	-0.19165		
η_{22}						0.146891		
γ_1	0.37435	0.026154					0.094107***	0.024268***
γ_2	-0.501043							
δ	2.442704	2.751987						
<i>shape</i>	12.845185	10.091204	17.923836**	18.274255**	19.720104	20.492565	18.162973***	18.232772***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>								
<i>Lag[1]</i>	1.123	0.8075	0.7387	0.7777	1.01	1.021	7.52E-01	0.7068
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	1.347	0.9004	1.0486	0.9577	1.252	1.261	1.05E+00	1.0028
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	1.719	1.144	1.3775	1.217	1.588	1.631	1.41E+00	1.3625
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>								
<i>Lag[1]</i>	0.0391	0.8868	0.09629	0.1437	0.3841	0.2364	0.07739	0.1461
<i>Lag[2*(p+q)+(p+q)-1]</i>	2.2316	3.0835	0.83788	2.2583	1.3473	1.7561	1.21617	3.2561
<i>Lag[4*(p+q)+(p+q)-1]</i>	4.4933	4.4182	1.45397	5.2836	2.2252	3.93	2.03613	6.333
<i>Weighted ARCH LM Tests</i>								
<i>ARCH Lag[5] [3]</i>	0.8627	2.225	0.4675	0.4853	1.36	0.05164	1.048	0.03376
<i>ARCH Lag[7] [5]</i>	1.0084	3.035	1.0921	0.5613	1.78	0.87741	1.689	0.06979
<i>ARCH Lag[9] [7]</i>	2.0334	3.442	1.1627	1.6017	1.912	1.85473	1.752	0.75121
<i>Sign Bias Test</i>								
<i>Sign Bias</i>	2.537**	2.428**	2.652***	2.608***	2.62***	2.631***	2.616***	2.744***
<i>Negative Sign Bias</i>	1.878*	1.782*	2.224**	3.115***	1.839*	2.72***	2.212**	2.721***
<i>Positive Sign Bias</i>	2.204**	2.598***	2.538**	2.231**	2.716***	2.141**	2.533**	2.089**

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

A su vez, comentar que la falta de significatividad del coeficiente *shape* es un mal indicador, pero tampoco se encuentra arreglado por otras de combinaciones. Basándonos en los supuestos iniciales, se mantiene la selección, pero se es consciente de que el diagnóstico es pésimo.

Tabla 32. Resultados selección horizontal para NIG_Price

<i>Estimates</i>	<i>SGARCH Skewed T-Student (1,3)</i>	<i>SGARCH Skewed T-Student (2,3)</i>	<i>SGARCH Skewed T-Student (1,1)</i>
ω	0	0	0
α_1	0.28868	0.277938	0.15647
α_2		0.072341	
β_1	0.189468	0.000001	0.84245
β_2	0.061847	0.069967	
β_3	0.458932	0.578753	
<i>skew</i>	1.008647***	1.008901***	1.00779***
<i>shape</i>	3.038124	3.042216	3.03333
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
<i>Lag[1]</i>	18.44***	19.49***	25.02***
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	21.34***	21.67***	26.4***
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	23.15***	23.03***	27.46***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
<i>Lag[1]</i>	0.01581***	0.02153***	0.006135
<i>Lag[2*(p+q)+(p+q)-1]</i>	69.63001***	44.77835***	11.609113***
<i>Lag[4*(p+q)+(p+q)-1]</i>	73.20481***	47.18184***	13.218466***
<i>Weighted ARCH LM Tests</i>			
<i>ARCH Lag[5][6][3]</i>	0.1165	0.1497	0.4547
<i>ARCH Lag[7][8][5]</i>	0.3829	0.261	0.5202
<i>ARCH Lag[9][10][7]</i>	0.5623	0.4385	0.7809
<i>Sign Bias Test</i>			
<i>Sign Bias</i>	0.7271	0.6718	0.6517
<i>Negative Sign Bias</i>	0.3429	0.3449	0.1338
<i>Positive Sign Bias</i>	0.6307	0.5969	0.3858

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

- **Selección Horizontal para SOUTHAFR_Price**

El caso de Sufráfrica es prácticamente el mismo que el nigeriano, aunque su asimetría asciende a 1.5 puntos en vez de 2. Por lo tanto, se aplica el modelo SGARCH Skewed T-Student. Al igual que en la selección vertical, se encuentra la combinación (1,1) como la ganadora, siendo la más alta en términos de BIC y sin ser mejorada en diagnóstico por otras combinaciones; por lo que será seleccionada.

- **Selección Horizontal para TAN_Price**

Para Tanzania, la serie no presenta sesgo en su distribución pero sí en su volatilidad. Por lo tanto aplicaremos modelos asimétricos de la familia GARCH con la distribución T-Student no sesgada. Se presentan los modelos más destacados en la Tabla 33, donde los modelos EGARCH no se verán incluidos ya que de la selección vertical para este país se conoce que el ganador fue la combinación (1,1).

Tabla 33. Resultados de la selección horizontal para TAN_Price

	APARCH T-Student (1,2)	APARCH T-Student (1,1)	TGARCH T-Student (1,1)	TGARCH T-Student (2,1)	NAGARCH T-Student (1,1)	NAGARCH T-Student (1,2)
<i>Estimates</i>						
ω	0	0	0.001018***	0.001118***	0.000005***	0.000005
α_1	0.199112	0.12158	0.360896***	0.375606***	0.393482***	0.428876***
α_2				0.202999***	0.58016***	0.234117*
β_1	0.202216	0.66238	0.620418***	0.000019		0.31295
β_2	0.217964			0.503651***		
η_{11}			0.281477***	0.352452***		
η_{12}				-.0657639***		
η_{21}					0.253815**	0.231801*
γ_1	0.089764	0.10843				
δ	3.183763	3.08979				
<i>shape</i>	5.194896	5.39553	3.206141***	3.178303***	3.311529***	3.408423***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>						
<i>Lag[1]</i>	1.822	2.215	1.027	1.729	1.921	1.879
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	1.852	2.287	1.27	1.888	2.044	1.952
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	2.355	2.984	1.888	2.62	2.594	2.637
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>						
<i>Lag[1]</i>	0.5769	0.01193	0.1146	0.4633	0.5069	1.035
<i>Lag[2*(p+q)+(p+q)-1]</i>	1.5597	1.18838	1.6365	2.097	2.2714	1.792
<i>Lag[4*(p+q)+(p+q)-1]</i>	3.2208	1.78517	2.8506	3.638	2.6266	2.841
<i>Weighted ARCH LM Tests</i>						
<i>ARCH Lag</i>	0.9517	0.01342	0.3787	0.1871	0.002054	0.1892
<i>ARCH Lag</i>	1.2305	0.05706	1.7919	0.2766	0.029061	0.5253
<i>ARCH Lag</i>	1.4078	0.5929	2.1378	1.4018	0.122119	0.57
<i>Sign Bias Test</i>						
<i>Sign Bias</i>	1.1181	1.228	2.1867**	2.6208***	1.8382*	2.0301**
<i>Negative Sign Bias</i>	0.8152	1.113	0.1187	0.2174	0.2899	0.2574
<i>Positive Sign Bias</i>	1.0786	1.006	1.9079*	1.7108*	1.6162	1.7622*

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

Para los modelos APARCH, se presentan los modelos (1,2) y (1,1), ordenados por BIC, donde el único problema es la falta de significatividad en sus coeficientes.

Para el caso TGARCH, la respuesta es peor ya que encontramos significatividad en el *Sign Bias Test*; lo que lo hace menos deseable que el modelo APARCH.

Para los modelos NAGARCH, ocurre igual que para el TGARCH, pero presentan mejores resultados en cuanto a significatividad de los parámetros estimados.

Por último, el modelo EGARCH es el que mejor resultados ofrece junto a los modelos APARCH y NAGARCH. Los resultados para el EGARCH aparecen presentados en la Tabla 24 de la selección vertical, donde encontramos que el modelo (1,1) tiene casi el mismo diagnóstico que el modelo NAGARCH con la diferencia de que el rechazo del *Sign Bias Test* presenta una significatividad mucho más alta. Si comparamos el EGARCH con el APARCH, aunque en el modelo APARCH no se rechaza el *Sign Bias Test*, no es un modelo que se encuentre bien identificado.

Por lo tanto, debido a que es mayor la significatividad de los coeficientes en el EGARCH frente al APARCH, y que el EGARCH rechaza en menor medida el *Sign Bias Test* que el NAGARCH, se termina por escoger el modelo EGARCH T-Student (1,1).

- **Selección Horizontal para TUN_Price**

Para la serie tuneciana, se observa un sesgo en la distribución muy cercano a 0 y se muestran efectos en la asimetría de la volatilidad. Por lo tanto, debido a que su distribución no es normal, se aplicará el modelo SGARCH T-Student.

Como se puede observar en la Tabla 34 a continuación, se presentan problemas de autocorrelación en los residuos estandarizados normales y de significatividad en los coeficientes. Sin embargo, frente al resto de combinaciones este problema persiste e incluso incrementa, por lo que nos decantaremos por la combinación (1,1).

Tabla 34. Resultados de la selección horizontal para TUN_Price

	SGARCH T-Student (1,1)	SGARCH T-Student (1,2)	SGARCH T-Student (2,1)
<i>Estimates</i>			
ω	0	0	0
α_1	0.039505	0.053125	0.039462
α_2			0.000022
β_1	0.957752***	0.585348***	0.958362***
β_2		0.35784***	
<i>shape</i>	12.972002	12.830989	12.924237
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
<i>Lag[1]</i>	14.7***	14.26***	14.78***
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	16.91***	16.51***	17.01***
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	18.83***	18.42***	18.92***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
<i>Lag[1]</i>	0.323	0.01103	0.324
<i>Lag[2*(p+q)+(p+q)-1]</i>	0.7849	1.04762	1.503
<i>Lag[4*(p+q)+(p+q)-1]</i>	1.7056	2.56709	3.068
<i>Weighted ARCH LM Tests</i>			
<i>ARCH Lag[3] [4]</i>	0.07232	0.00269	0.003512
<i>ARCH Lag[5] [6]</i>	1.0462	1.34598	1.471318
<i>ARCH Lag[7] [8]</i>	1.31986	1.89877	2.034002
<i>Sign Bias Test</i>			
<i>Sign Bias</i>	0.9757	1.0093	0.9915

Negative Sign Bias	1.1308	0.8966	1.1006
Positive Sign Bias	1.0932	1.3421	1.1006

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos
Significatividad: *** 1%, **5%, * 10%

5.2.4 Selección Diagonal y diagnóstico univariante

En esta selección no se establece ningún supuesto previo. Esta selección consiste en la ordenación de todos los modelos, sin diferenciar, y siguiendo dicho orden se va diagnosticando cada uno de ellos hasta encontrar el más adecuado. Cabe destacar que habrá aspectos que no podrán ser solucionados por ningún modelo como ocurría con los métodos de selección anteriormente presentados.

Debido al gran número de modelos corridos, se establece un corte de selección para los 30 primeros modelos en términos de BIC. Generalmente, los modelos más satisfactorios suelen estar, como mucho, entre los veinte primeros.

- Selección diagonal para USA_Index

Se presenta en la Figura 9 los treinta primeros modelos en términos BIC, donde encontramos que los cuatro criterios de información coinciden en el mejor modelo; marcado en rojo con un asterisco. En la Tabla 35 se presentan sus los resultados junto a la combinación (1,1), donde se confirma que el modelo SGARCH T-Student (2,2) presenta un diagnóstico satisfactorio.

Figura 9. Representación por criterios de información de los modelos para USA_Index

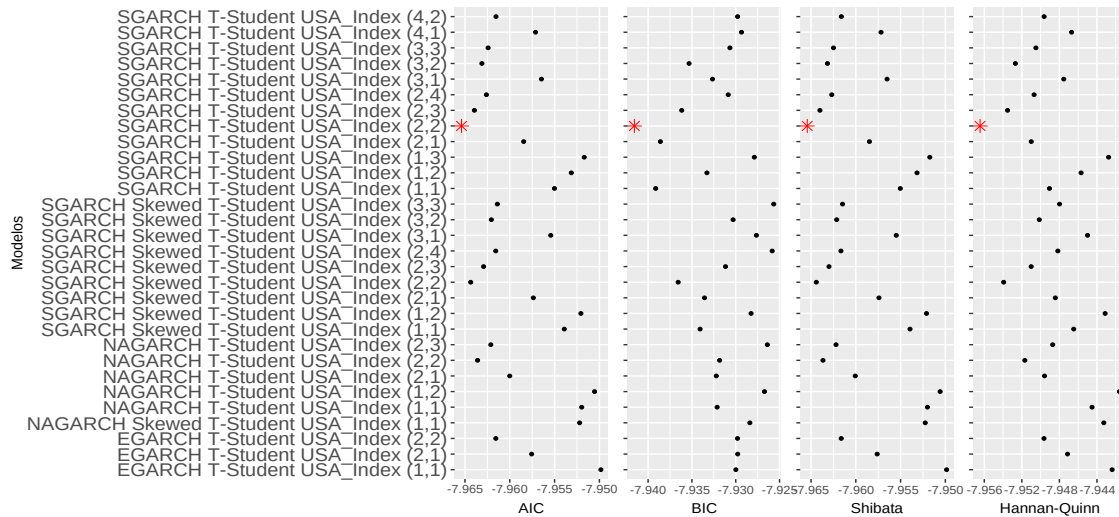


Tabla 35. Resultados de la selección diagonal para USA_Index

	SGARCH T-Student (2,2)	SGARCH T-Student (1,1)
<i>Estimates</i>		
ω	0	0
α_1	0.000168	0.032068
α_2	0.070396	0.965654**
β_1	0.08218	
β_2	0.841698***	
<i>shape</i>	10.229308**	8.614446***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	0.05877	0.01747

$Lag[2*(p+q)+(p+q)-1][2]$	0.77871	0.83087
$Lag[4*(p+q)+(p+q)-1][5]$	1.98388	1.99137
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
$Lag[1]$	0.7439	4.239**
$Lag[2*(p+q)+(p+q)-1][5]$	4.2422	9.440**
$Lag[4*(p+q)+(p+q)-1][9]$	5.4448	12.231**
<i>Weighted ARCH LM Tests</i>		
$ARCH\ Lag[5][3]$	0.4284	6.374**
$ARCH\ Lag[7][5]$	0.5696	7.272**
$ARCH\ Lag[9][7]$	0.6723	8.431**
<i>Sign Bias Test</i>		
<i>Sign Bias</i>	0.4166	0.3672
<i>Negative Sign Bias</i>	0.2982	1.0573
<i>Positive Sign Bias</i>	1.3343	1.7197*

Significativad de parámetros y estadísticos de contraste calculados con errores estándar robustos
Significatividad: *** 1%, **5%, * 10%

- **Selección Diagonal para ARG_Price**

Para el caso argelino, se encuentran discrepancias entre los criterios de información, como se muestra en la Figura 10. Los criterios AIC y Shibata escogen el modelo EGARCH Skewed T-Student (5,4), mientras que los criterios BIC y HQ escogen el modelo EGARCH Skewed T-Student (4,4). Pese a que estos sean considerados los mejores modelos, consideramos que son bastante complejos y muy poco reales.

En la Tabla 36 presentamos sus resultados donde encontramos asimetría en la volatilidad además de dependencia temporal en los residuos estandarizados. A su vez, en la misma tabla se introduce el modelo TGARCH T-Student (1,1), el séptimo en términos de BIC, el cuál soluciona el problema de asimetría en la volatilidad. Otros modelos por delante de él en términos de BIC no consiguen mejorarlo. Por lo tanto, se escoge el modelo TGARCH T-Student (1,1) para este caso.

Figura 10. Representación por criterios de información de los modelos para ARG_Price

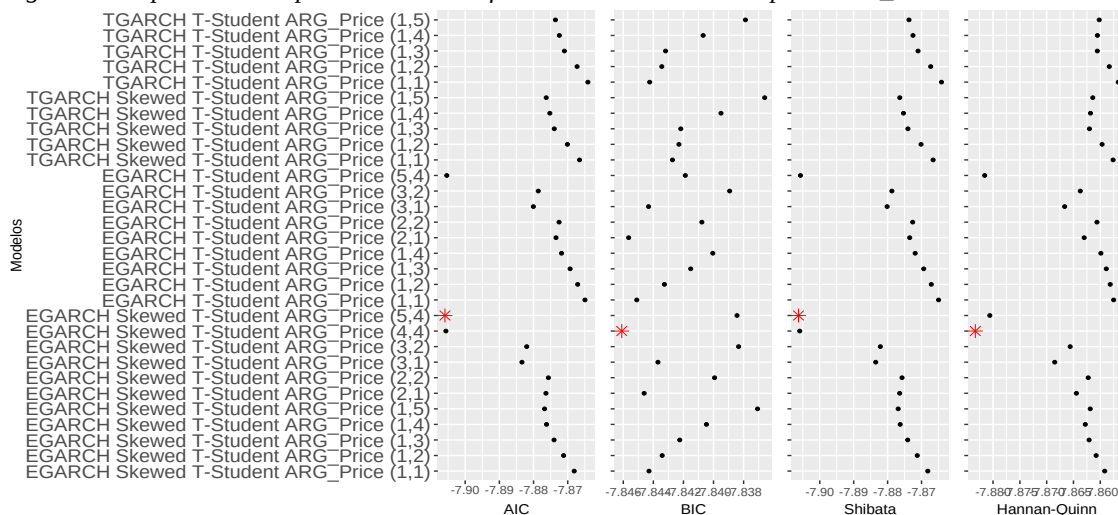


Tabla 36. Resultados para la selección diagonal de ARG_Price

	EGARCH Skewed T-Student (4,4)	EGARCH Skewed T-Student (5,4)	TGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.0411568***	-.0305406***	0.001368*
α_1	0.348742***	0.264795***	0.608347***
α_2	-.040202***	0.258082***	

α_3	0.165882***	0.209361***	
α_4	-.0182195***	-.0143124***	
α_5		-.0114666***	
β_1	0.518506***	0.085779***	0.724929***
β_2	-.0453944***	0.125395***	
β_3	0.999995***	0.955719***	
β_4	-.0112693***	-.0203889***	
γ_1	1.600433***	1.922951***	
γ_2	-.0143311***	1.134738***	
γ_3	0.504965***	-.0079125***	
γ_4	-.131986***	-.1707521***	
γ_5		-.066***	
η_{11}			-.0301045*
skew	1.046162***	1.037295***	
shape	2.084995***	2.072305***	2.1***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	29.63***	32.03***	41.5***
Lag[2*(p+q)+(p+q)-1][2]	32.39***	33***	43.22***
Lag[4*(p+q)+(p+q)-1][5]	34.75***	35.57***	44.75***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	1.877	1.701	0.1199
Lag[2*(p+q)+(p+q)-1]	15.712	21.346**	1.0017
Lag[4*(p+q)+(p+q)-1]	24.147	21.346*	1.9814
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[9] [10] [3]	0.736	0.5248	0.2679
ARCH Lag[11] [12] [5]	1.93	2.1886	1.4783
ARCH Lag[13] [14] [7]	2.391	3.0939	2.0021
<i>Sign Bias Test</i>			
Sign Bias	0.6163	0.05019	0.6578
Negative Sign Bias	0.3791	1.42842	0.0577
Positive Sign Bias	1.9797**	1.42842*	1.4141

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

• Selección Diagonal para EGPT_Price

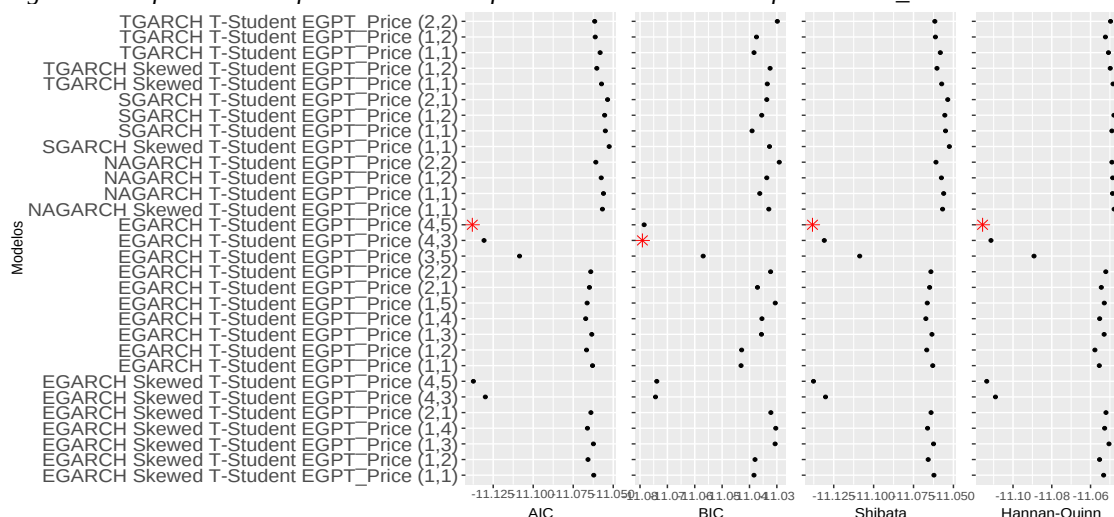
Para el caso egipcio, en la Figura 11 se muestran discrepancias entre el resto de criterios de información con el criterio BIC, aunque el modelo escogido por los otros criterios es el segundo mejor en términos de BIC. Ambos modelos son EGARCH T-Student, los cuáles fueron analizados en la selección Vertical y se vio que la combinación (4,3) es la mejor para esa familia. Por lo tanto, se escogerá esa combinación ya que el resto de combinaciones no le superan, pese a presentar problemas de autocorrelación en los residuos estandarizados.

• Selección Diagonal para GHA_Price

Para el caso ghanés, se muestra en la Figura 12 que el criterio BIC escoge el modelo EGARCH T-Student (2,1) y el resto de criterios el modelo EGARCH Skewed T-Student (4,5). En la Tabla 37 se ven los resultados para ambos modelos, junto al segundo modelo en BIC que es el modelo TGARCH T-Student (1,1).

De los tres, el mejor modelo es el EGARCH T-Student (2,1) ya que el sesgado es bastante complejo y poco real, mientras que el TGARCH presenta efectos ARCH sin capturar. Ahora bien, se es consciente de que en la selección Vertical se escogió para la

Figura 11. Representación por criterios de información de los modelos para EGPT_Price



misma familia la combinación (1,2), sin embargo, el procedimiento en este caso es diferente, ya que si no optamos por ese modelo, se debería optar por el EGARCH Skewed T-Student u otros modelos que se encuentran por debajo del (2,1) en términos BIC pero que se encuentran por encima del (1,2); además de que la aplicación de los métodos de selección debe ocurrir de forma separada. Cuando realizamos la selección horizontal, puede darse que el segundo paso de la selección vertical coincida debido a que el proceso técnicamente es el mismo.

Figura 12. Representación por criterios de información de los modelos para GHA_Price

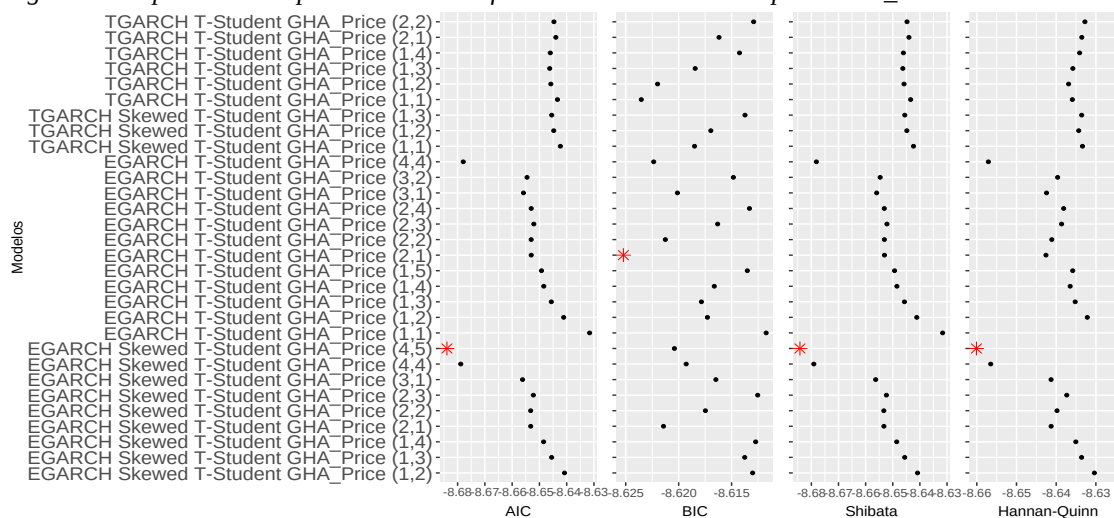


Tabla 37. Resultados de la selección diagonal para GHA_Price

	EGARCH T-Student (2,1)	EGARCH Skewed T-Student (4,5)	TGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.49063***	-.1113212***	0.001126***
α_1	-.0233249*	-.0301171***	1***
α_2	0.017423	-.0545382***	
α_3		-.0281483***	
α_4		-.013373***	
β_1	0.946461***	-.0396745***	0.50685***
β_2		0.940327***	
β_3		0.501079***	
β_4		-.030285***	

β_5		0.12602***	
γ_1	2.055784***	3.284206***	
γ_2	-1.202552***	2.732086***	
γ_3		-1.360612***	
γ_4		-1.948857***	
η_{11}			0.0975
skew		0.980592***	
shape	2.1***	2.047163***	2.177309***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
Lag[1]	28.1***	25.35***	35.73***
Lag[2*(p+q)+(p+q)-1][2]	31.32***	27.43***	38.62***
Lag[4*(p+q)+(p+q)-1][5]	36.27***	33.21***	43.47***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
Lag[1]	0.2283	0.1237	0.08528***
Lag[2*(p+q)+(p+q)-1]	2.7439	4.2864	0.73258***
Lag[4*(p+q)+(p+q)-1]	5.1288	7.3518	27.17706***
<i>Weighted ARCH LM Tests</i>			
ARCH Lag[4] [10] [3]	0.0007305	0.0005857	0.02512***
ARCH Lag[6] [12] [5]	3.9574093	0.1410878	1.88699***
ARCH Lag[8] [14] [7]	5.3708367	0.1708635	34.1536***
<i>Sign Bias Test</i>			
Sign Bias	1.0808	1.1293	1.28
Negative Sign Bias	0.3169	0.1119	0.411
Positive Sign Bias	1.0064	0.7479	1.637

Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

- **Selección Diagonal para KEN_Price**

Para el caso de Kenia, ninguno de los cuatro criterios coincide, como se ve en la Figura 13, donde encontramos el modelo TGARCH Skewed T-Student (1,2) para el AIC, el modelo SGARCH T-Student (1,1) para el BIC, el modelo TGARCH T-Student (2,2) para el Shibata y el TGARCH T-Student (1,2) para el HQ. En la Tabla 38 presentamos sus resultados, donde observamos que el coeficiente η_{11} no es significativo para ningún modelo, por lo que terminamos por escoger el modelo simétrico.

Figura 13. Representación de los resultados de la selección diagonal para KEN_Price

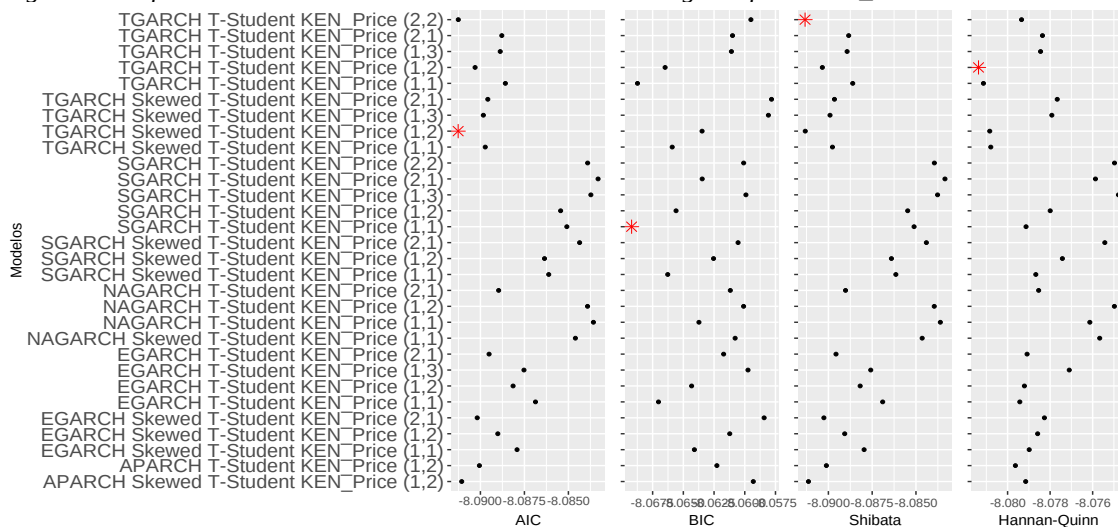


Tabla 38. Resultados de la selección diagonal para KEN_Price

	TGARCH Skewed T-Student (1,2)	SGARCH T-Student (1,1)	TGARCH T-Student (2,2)	TGARCH T-Student (1,2)
<i>Estimates</i>				
ω	0.00036**	0.000001	0.000435***	0.000345**
α_1	0.373094***	0.230642	0.347947***	0.368738***
α_2			0.192198***	
β_1	0.380993**	0.768358***	0.145386***	0.374852**
β_2	0.374764**		0.461024***	0.382656**
η_{11}	-0.035538		-0.128427	-0.036291
η_{12}			-.0407274***	
skew	1.042753***			
shape	2.510444***	3.013154***	2.616472***	2.524661***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>				
Lag[1]	0.9393	1.393	0.9653	0.9254
Lag[2*(p+q)+(p+q)-1][2]	6.9435**	6.347**	5.0282**	6.9451**
Lag[4*(p+q)+(p+q)-1][5]	13.5241***	12.601***	10.244***	13.5438***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>				
Lag[1]	0.1326	0.1446	0.1021	0.1361
Lag[2*(p+q)+(p+q)-1]	0.8422	0.4794	0.1021	0.8733
Lag[4*(p+q)+(p+q)-1]	1.1952	0.913	0.754	1.2331
<i>Weighted ARCH LM Tests</i>				
ARCH Lag[4][3][5][4]	0.1316	0.2291	0.07037	0.1357
ARCH Lag[6][5][7][6]	0.2801	0.5989	0.24785	0.2875
ARCH Lag[8][7][9][8]	0.504	0.9174	0.30215	0.5064
<i>Sign Bias Test</i>				
Sign Bias	1.071	0.9399	1.0226	1.0686
Negative Sign Bias	0.312	0.117	0.2432	0.3204
Positive Sign Bias	1.06	0.6647	1.0876	1.0686

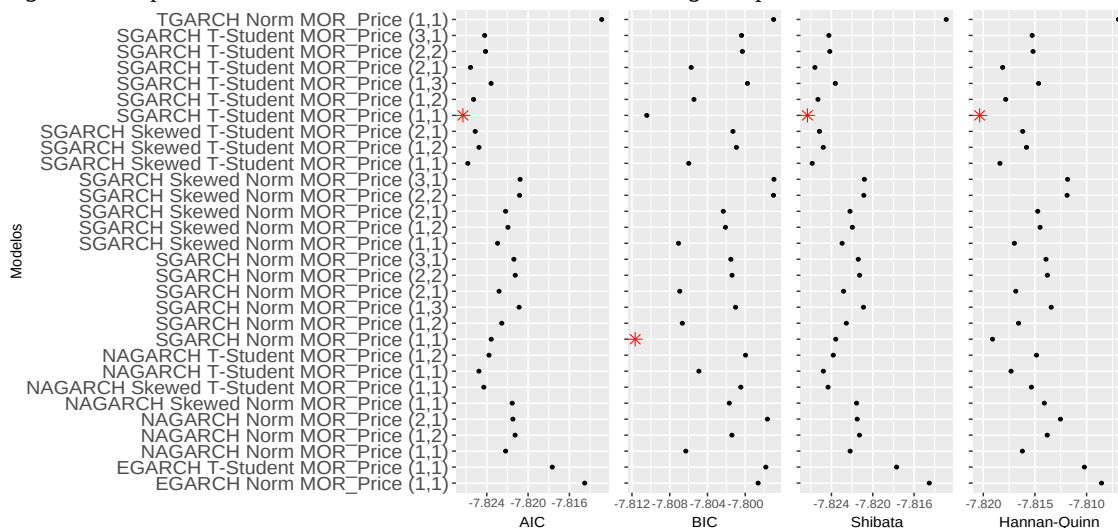
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

• Selección Diagonal para MOR_Price

Para el caso marroquí, encontramos en la Figura 14 que todos los criterios escogen el modelo SGARCH T-Student (1,1), a excepción del BIC que escoge el SGARCH Normal (1,1). Como ya se presentó en la selección Vertical, el modelo de distribución Normal era el mejor de los (1,1), por lo que para este caso también resulta escogido. Sin embargo, se recuerda que no se resuelve la captura del efecto apalancamiento.

Figura 14. Representación de los resultados de la selección diagonal para MOR_Price



- Selección Diagonal para NIG_Price

En la Figura 15 se presenta que el modelo EGARCH Skewed T-Student (4,3) es elegido por todos los criterios menos el BIC, que escoge el modelo EGARCH T-Student (2,1). Ninguno soluciona los problemas de dependencia temporal para ambos tipos de residuos estandarizados, por lo que siguiendo el orden BIC encontramos que el modelo EGARCH T-Student (1,1), en veinteava posición, resuelve la dependencia cuadrática. Ningún otro modelo es capaz de resolver la dependencia temporal de los residuos estandarizados. En la Tabla 39 se muestran los tres modelos comentados.

Figura 15. Representación de los resultados de la selección diagonal para NIG_Price

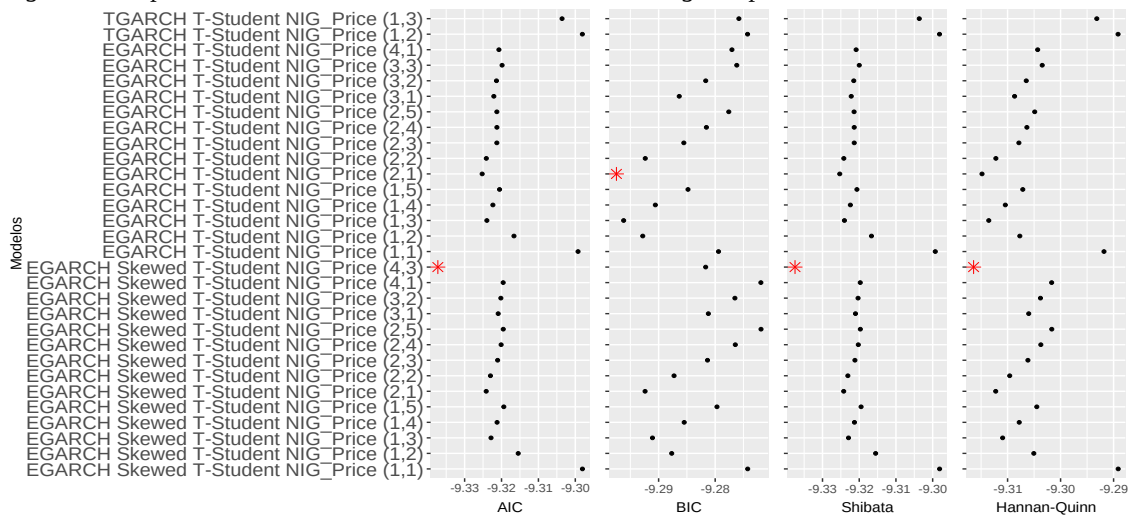


Tabla 39. Resultados de la selección diagonal para NIG_Price

	EGARCH T-Student (2,1)	EGARCH Skewed T-Student (4,3)	EGARCH T-Student (1,1)
<i>Estimates</i>			
ω	-.0066773***	-.0189788***	-.015276***
α_1	-0.003201	-.0051589***	0.06127
α_2	0.027451	0.06122***	
α_3		-.00349***	
α_4		0.000462	
β_1	0.993139***	0.322483***	0.98417***
β_2		-.0332403***	
β_3		0.989005***	
γ_1	1.286728***	1.729871***	
γ_2	-.0852413***	0.072066***	0.74262***
γ_3		0.844927***	
γ_4		-.1181142***	
<i>skew</i>		1.010143***	
<i>shape</i>	2.159831***	2.104165***	2.12836***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>			
<i>Lag[1]</i>	14.42***	16.38***	28.12***
<i>Lag[2*(p+q)+(p+q)-1][2]</i>	16.42***	20.15***	28.22***
<i>Lag[4*(p+q)+(p+q)-1][5]</i>	17.88***	23.6***	28.43***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>			
<i>Lag[1]</i>	0.1897***	0.4421	0.005978
<i>Lag[2*(p+q)+(p+q)-1]</i>	29.889***	170.4473***	0.059278
<i>Lag[4*(p+q)+(p+q)-1]</i>	34.2154***	176.2251***	0.316462

Weighted ARCH LM Tests

ARCH Lag [4] [8] [3]	0.06166	0.1642	0.0222
ARCH Lag[6] [10] [5]	0.80731	0.5865	0.11
ARCH Lag[8] [12] [7]	5.1099	0.7026	0.3401
<i>Sign Bias Test</i>			
Sign Bias	0.5568	0.8358	0.2538
Negative Sign Bias	0.5834	0.5592	0.2871
Positive Sign Bias	0.5834	0.5592	0.4851

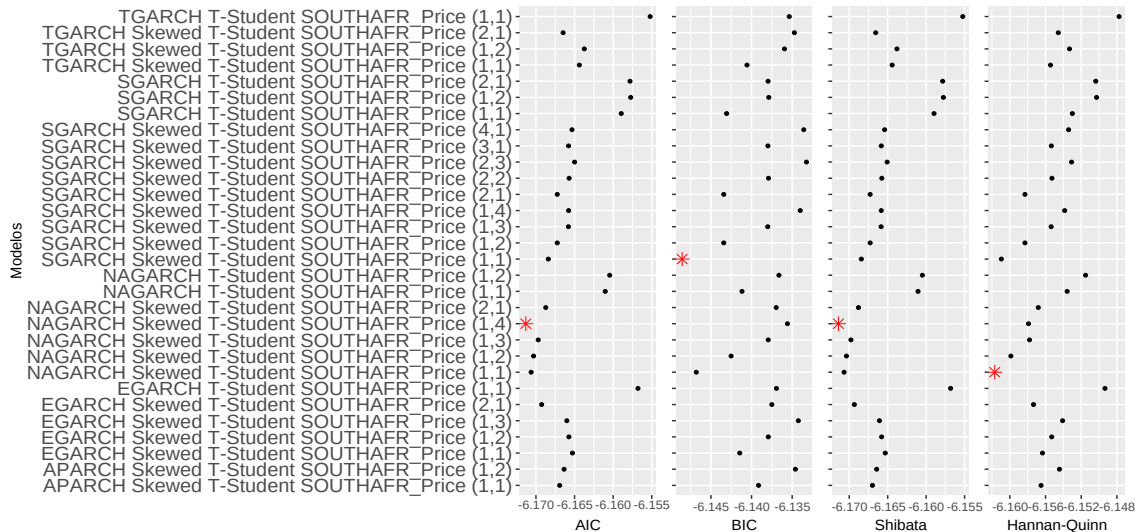
Significatividad de parámetros y estadísticos de contraste calculados con errores estándar robustos

Significatividad: *** 1%, **5%, * 10%

• Selección Diagonal para SOUTHAFR_Price

Para este caso, vemos en la Figura 16 que tres modelos, el modelo SGARCH Skewed T-Student (1,1) escogido por el BIC, el NAGARCH Skewed T-Student (1,4) escogido por AIC y Shibata, y el modelo NAGARCH Skewed T-Student (1,1), escogido por HQ. Para este caso, el mejor BIC presenta un diagnóstico envidiable, visto en apartados anteriores, por lo que se escoge el modelo SGARCH Skewed T-Student (1,1).

Figura 16. Representación de los resultados de la selección diagonal para SOUTHAFR_price



• Selección Diagonal para TAN_Price

Para este caso, en la Figura 17 se muestra que los criterios AIC y Shibata escogen el modelo EGARCH T-Student (2,3) mientras que el BIC y HQ escogen el EGARCH T-Student (1,2). Sin embargo, recordamos que en la selección Vertical tanzana se evaluaron los modelos EGARCH T-Student, donde el modelo (1,1) resultó ganador. Además, este modelo se sitúa el tercero en BIC. El modelo NAGARCH T-Student (1,1) fue el segundo en BIC, pero fue superado en la comparación por el modelo anterior. Por lo tanto, se escogerá el modelo EGARCH T-Student (1,1) para este caso.

• Selección Diagonal para TUN_Price

Para la última serie, la tunecina, encontramos en la Figura 18 que se vuelven a separar en dos los criterios: AIC y Shibata escoge el modelo EGARCH Skewed T-Student (2,3) y el BIC y HQ escogen el SGARCH T-Student (1,1). Como se puede observar en la

Figura 17. Representación de los resultados de la selección diagonal para TAN_Price

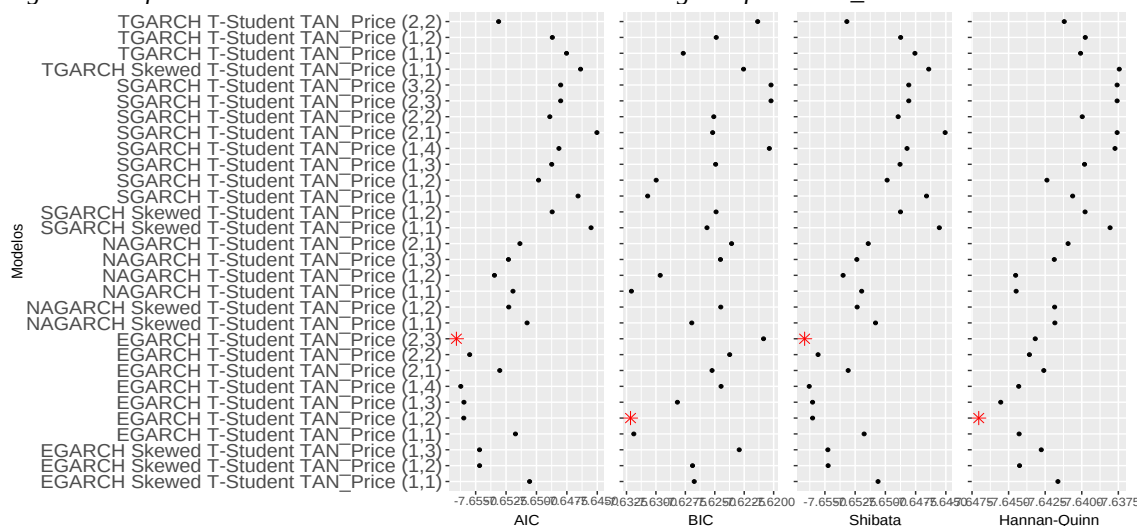


Tabla 40, pese a que no se resuelvan los problemas de autocorrelación en los residuos estandarizados y haya falta de significatividad en algunos coeficientes, consideramos el modelo simétrico como el mejor a aplicar ya que los otros ofrecen peores resultados.

Figura 18. Representación de los resultados de la selección diagonal para TUN_Price

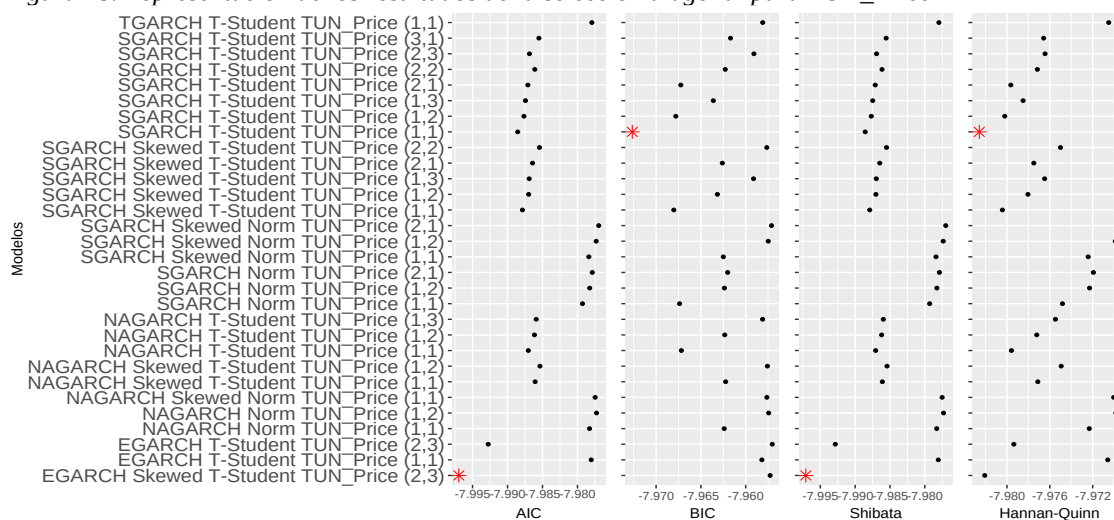


Tabla 40. Resultados de la selección diagonal para TUN_Price

	SGARCH T-Student (1,1)	EGARCH Skewed T-Student (2,3)
<i>Estimates</i>		
ω	0	-.0443947***
α_1	0.039505	0.017571***
α_2		0.033784***
β_1	0.957752***	0.033784***
β_2		0.360604***
β_3		0.961485***
γ_1		0.156528***
γ_2		0.178267***
skew		0.960225**
shape	12.972002	12.308125***
<i>Weighted Ljung-Box Test on Standardized Residuals</i>		
Lag[1]	14.7***	12.62***
Lag[2*(p+q)+(p+q)-1][2]	16.91***	14.42***

$Lag[4*(p+q)+(p+q)-1][5]$	18.83***	16.4***
<i>Weighted Ljung-Box Test on Standardized Squared Residuals</i>		
$Lag[1]$	0.323	0.7173
$Lag[2*(p+q)+(p+q)-1]$	0.7849	3.5137
$Lag[4*(p+q)+(p+q)-1]$	1.7056	7.0094
<i>Weighted ARCH LM Tests</i>		
$ARCH\ Lag[3][6]$	0.07232	0.5133
$ARCH\ Lag[5][8]$	1.0462	1.8013
$ARCH\ Lag[7][10]$	1.31986	2.1127
<i>Sign Bias Test</i>		
<i>Sign Bias</i>	0.9757	1.4419
<i>Negative Sign Bias</i>	1.1308	2.2467**
<i>Positive Sign Bias</i>	1.0932	0.9268
Significativad de parámetros y estadísticos de contraste calculados con errores estándar robustos		
Significatividad: *** 1%, **5%, * 10%		

5.3 Modelización Multivariante

Una vez ajustados los modelos univariantes, encontrándose su estimación resumida en el Anexo A.4, se procede con las metodologías MEQMA, MEWMA y DCC.

La aplicación de los dos primeros métodos consiste en la estimación recursiva de la varianza de forma ponderada igualitariamente y exponencialmente, respectivamente, pudiendo observarse la correlación condicionada de cada país respecto al índice estadounidense en los anexos B.4 y B.5. Por una cuestión computacional en relación al valor inicial asignado, las diez primeras matrices no son definidas positivas y para evitar distorsiones, han sido eliminadas.

Por otro lado, en la modelización DCC se presentan cuatro modelos aplicados, uno por cada método de selección univariante. Así se puede observar si la selección univariante influye en el diagnóstico y en el efecto contagio *a posteriori*.

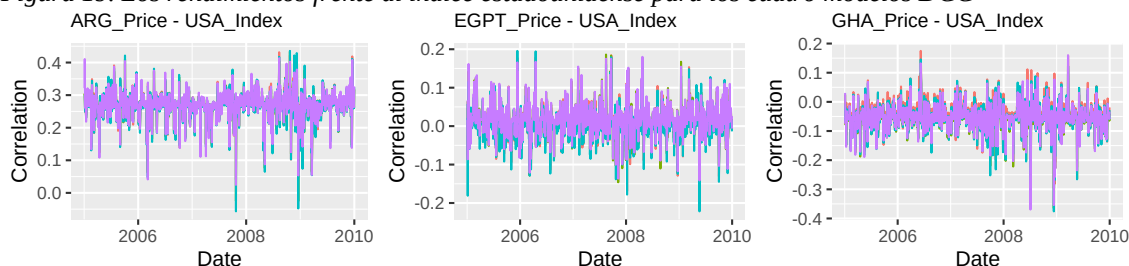
Primero se debe realizar un prediagnóstico para caracterizar el tipo de distribución multivariante a aplicar. A continuación, presentamos en la Tabla 41 los resultados de las pruebas de normalidad multivariante de Henze-Zirkler y de Mardia.

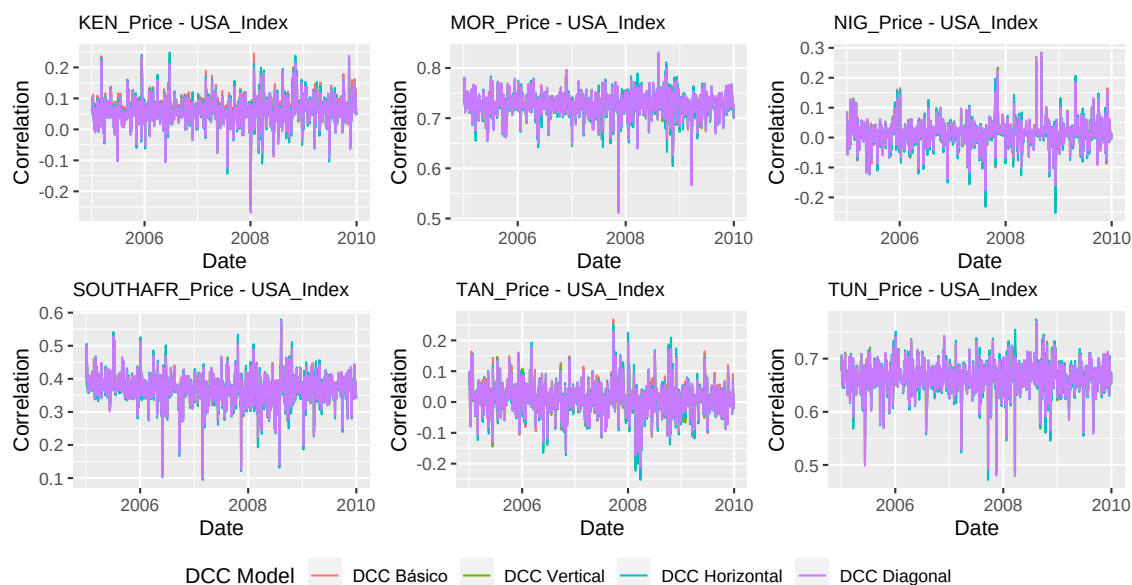
Tabla 41. Resultados de las pruebas de normalidad multivariante de Henze-Zirkler y Mardia

Test	estadístico	p-valor
Henze-Zirkler	8.442842	0
Mardia Skewness	3349.758822	0
Mardia Kurtosis	210.2686917	0

Como se observa, se rechaza la hipótesis nula para las tres pruebas, por lo que aplicaremos la distribución T-Student multivariante. De forma preliminar se presenta en la Figura 19 la correlación condicionada dinámica de los países frente al índice observado para los modelos DCC analizados.

Figura 19. Los rendimientos frente al índice estadounidense para los cuatro modelos DCC





Como se observa, los modelos con la selección Diagonal y Horizontal son los más distorsionantes visualmente; exceptuando la selección básica para Kenia y Ghana. Para finalizar el análisis preliminar, se presentan de las Figuras 20 a la 23 el ajuste de la varianza condicional de los DCC sobre los residuos estandarizados absolutos.

Figura 20. Varianza condicional del modelo DCC-Básico en los residuos estandarizados absolutos

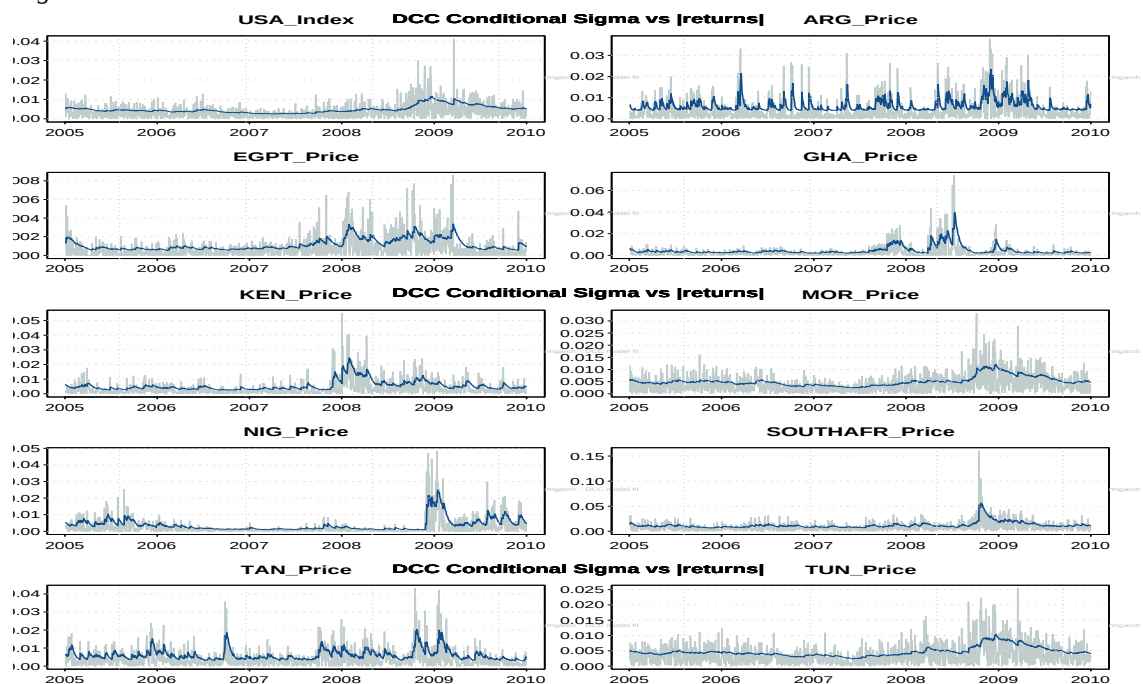
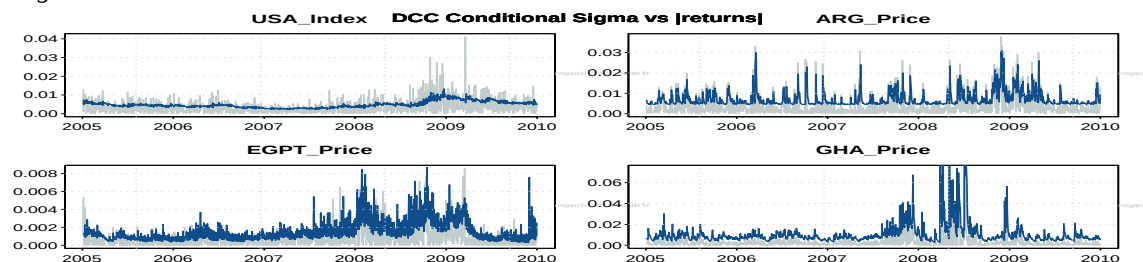


Figura 21. Varianza condicional del modelo DCC-Vertical en los residuos estandarizados absolutos



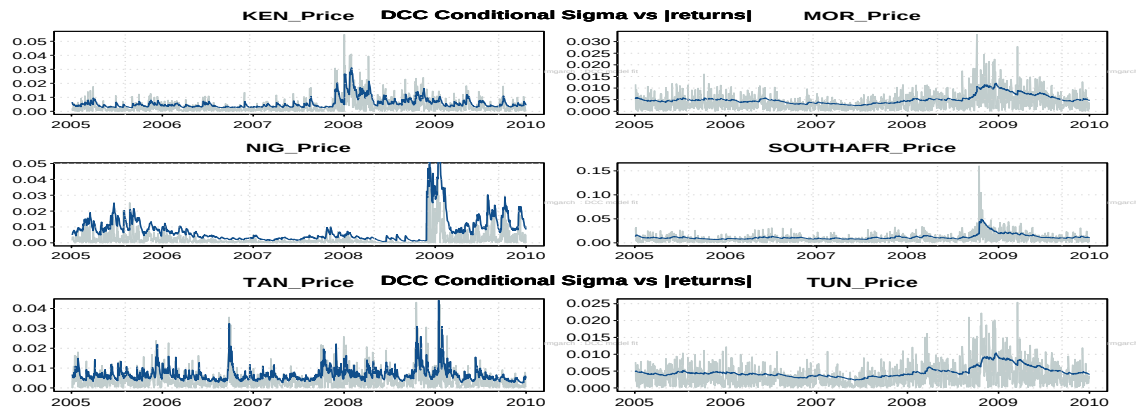


Figura 22. Varianza condicional del modelo DCC-Horizontal en los residuos estandarizados absolutos

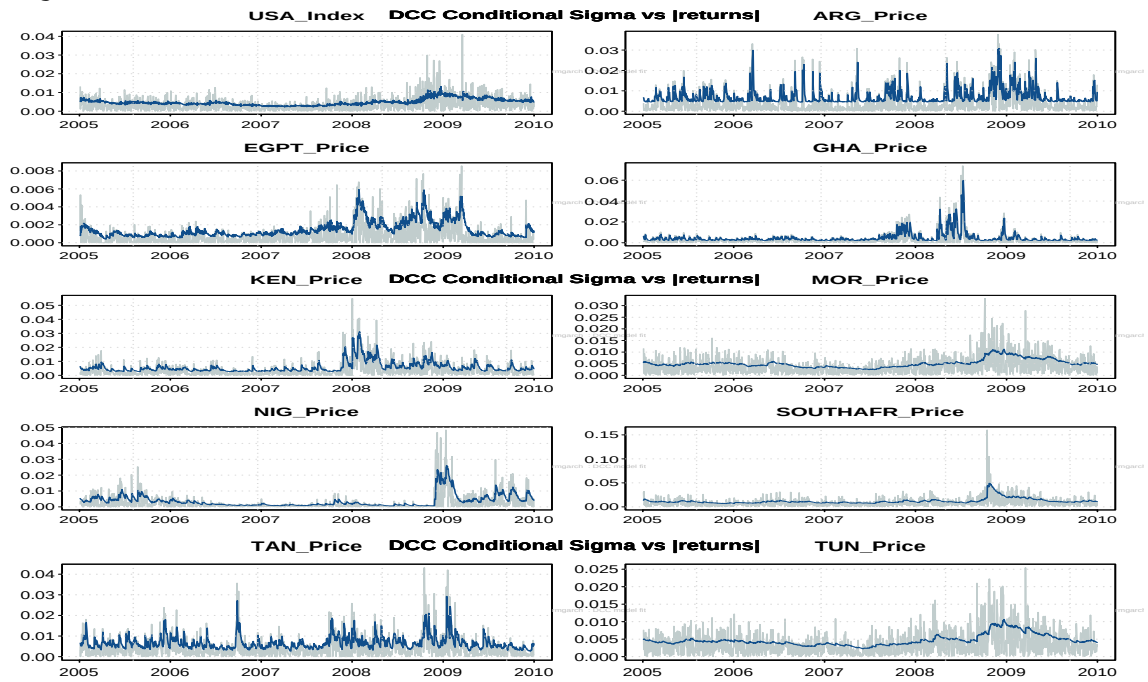
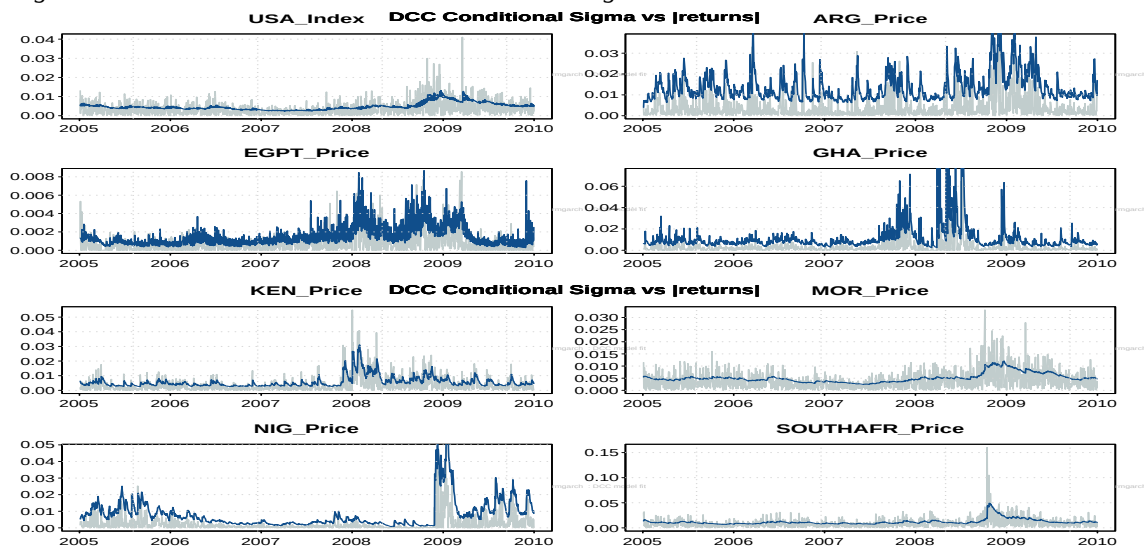
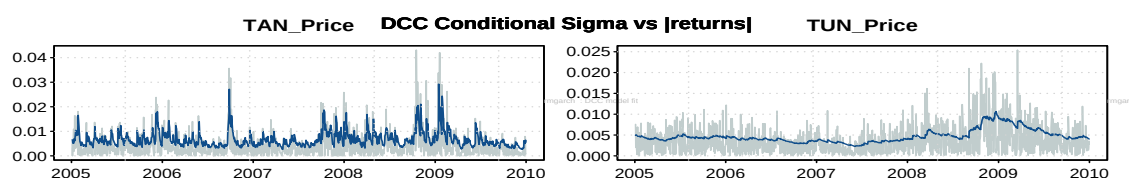


Figura 23. Varianza condicional del modelo DCC-Diagonal en los residuos estandarizados absolutos





Como se puede observar, el ajuste de la varianza condicional es menos intenso para el DCC-Básico que en el resto de modelos, donde los rendimientos estadounidenses y egipcios se presentan con mayor fuerza que para el resto de modelos DCC. Se confirma que las selecciones Horizontal y Diagonal presentan mayores distorsiones que la Básica y la Vertical.

Tras el análisis preliminar, se procede al diagnóstico. A continuación presentamos en las Tablas 42 y 43 los resultados de las estimaciones para los cuatro modelos DCC junto con las pruebas Portmanteau sobre los residuos estandarizados multivariantes normales y al cuadrado; respectivamente. A su vez, se presentan del Anexo B.6 al B.9 los gráficos ACF, PACF y CCF para cada metodología aplicada.

Tabla 42. Resultados de las estimaciones para los cuatro modelos DCC

Estimate	DCC Básico	DCC Vertical	DCC Horizontal	DCC Diagonal
[USA_Index]. ω	0	-.064179**	-.064022***	0
[USA_Index]. α_1	0.033225**	-.039529	-.03829	0.000168
[USA_Index]. α_2		0.039264	0.038537	0.070396***
[USA_Index]. β_1	0.965247***	0.328197***	0.325678***	0.08218***
[USA_Index]. β_2		0.665763***	0.668298***	0.841698***
[USA_Index]. γ_1		-.0142345**	-.013895**	
[USA_Index]. γ_2		0.284402***	0.281645***	
[USA_Index].skew			0.975643***	
[USA_Index].shape		8.813073***	8.944382***	10.229308***
[ARG_Price]. ω	0.000005***	0.000011***	0.000011***	0.001368*
[ARG_Price]. α_1	0.220345***	0.548267***	0.548267***	0.608347***
[ARG_Price]. β_1	0.689442***	0.450732***	0.450732***	0.724929***
[ARG_Price]. η_{11}				-.0301045*
[ARG_Price].shape		2.454835***	2.454835***	2.1***
[EGPT_Price]. ω	0	-.0494664***	0.000042***	-.0494664***
[EGPT_Price]. α_1	0.067295*	0.137183*	0.262411***	0.137183*
[EGPT_Price]. α_2		0.188725***	0.112541***	0.188725***
[EGPT_Price]. α_3		0.016513*		0.016513
[EGPT_Price]. α_4		-.0090379*		-.0090379
[EGPT_Price]. β_1	0.921153***	-.0627847***	0.098349***	-.0627847***
[EGPT_Price]. β_2		0.598902***	0.684812***	0.598902***
[EGPT_Price]. β_3		0.988939***		0.988939***
[EGPT_Price]. η_{11}			-.020781**	
[EGPT_Price]. η_{12}			-.0653572***	
[EGPT_Price]. γ_1		0.683538***		0.683538***
[EGPT_Price]. γ_2		0.646536***		0.646536***
[EGPT_Price]. γ_3		0.002562		0.002562
[EGPT_Price]. γ_4		-.0476188***		-.0476188***
[EGPT_Price].shape		2.532667***	2.636714***	2.532667***
[GHA_Price]. ω	0	-.1581443**	0.000002	-.049063***
[GHA_Price]. α_1	0.131227***	-.0224815*	0.496053***	-.0233249*
[GHA_Price]. α_2				0.017423
[GHA_Price]. β_1	0.849539***	0.490706***	0.502947**	0.946461***
[GHA_Price]. β_2		0.339345***		

[GHA_Price]. γ_1		1.855541***		2.055784***
[GHA_Price]. γ_2				-.1.202552***
[GHA_Price].skew			1.001175***	
[GHA_Price].shape		2.1***	2.836283***	2.1***
[KEN_Price]. ω	0	0.000001	0.000001	0.000001
[KEN_Price]. α_1	0.088625**	0.230642***	0.232917***	0.230642***
[KEN_Price]. β_1	0.902783***	0.768358***	0.766083***	0.768358***
[KEN_Price].skew			1.046582***	
[KEN_Price].shape		3.013154***	3.007671***	3.013154***
[MOR_Price]. ω	0	0	-.055389***	0
[MOR_Price]. α_1	0.042962	0.043816	0.009153	0.042962
[MOR_Price]. β_1	0.954594***	0.953604***	0.994753***	0.954594***
[MOR_Price]. γ_1			0.094107***	
[MOR_Price].skew		0.957723***		
[MOR_Price].shape			18.162973***	
[NIG_Price]. ω	0	-.015276***	0	-.015276***
[NIG_Price]. α_1	0.1266***	0.06127	0.156469	0.06127
[NIG_Price]. β_1	0.871801***	0.984168***	0.842454***	0.984168***
[NIG_Price]. γ_1		0.742622***		0.742622***
[NIG_Price].skew			1.007786***	
[NIG_Price].shape		2.128358***	3.033326***	2.128358***
[SOUTHAFR_Price]. ω	0.000002	0.000002	0.000002	0.000002
[SOUTHAFR_Price]. α_1	0.088446	0.059750*	0.05975*	0.05975*
[SOUTHAFR_Price]. β_1	0.89775***	0.925502***	0.925502***	0.925502***
[SOUTHAFR_Price].skew		1.159507***	1.159507***	1.159507***
[SOUTHAFR_Price].shape		10.312726***	10.312726***	10.312726***
[TAN_Price]. ω	0.000001	-.1.284547***	-.1.366257***	-.1.366257***
[TAN_Price]. α_1	0.150465***	-.0.188482***	-.0.162921***	-.0.162921***
[TAN_Price]. β_1	0.831409	0.433041***	0.864556***	0.864556***
[TAN_Price]. β_2		0.439609***		
[TAN_Price]. γ_1		0.691361***	0.595635***	0.595635***
[TAN_Price].shape		3.298078***	3.256201***	3.256201***
[TUN_Price]. ω	0	0	0	0
[TUN_Price]. α_1	0.035243***	0.035243***	0.039505***	0.039505***
[TUN_Price]. β_1	0.96164***	0.96164***	0.957752***	0.957752***
[TUN_Price].shape			12.972002***	12.972002***
[Joint]dcca1	0.039752***	0.041539***	0.045761***	0.041787***
[Joint]dccb1	0.207887	0.37465	0.182185	0.32995
[Joint]mshape		5.121642***	6.940998***	4.774567***

Significatividad: *** 1%, **5%, * 10%

Tabla 43. Prueba Portmanteau de Ljung-Box y ARCH LM Multivariante para los cuatro modelos DCC

Portmanteau Test	DCC-Básico		DCC-Vertical	
Lags	Ljung Box Multivariante	ARCH LM Multivariante	Ljung Box Multivariante	ARCH LM Multivariante
1	734.1605***	373.5859***	648.0747***	367.4658***
2	862.5523***	845.3329***	780.1332***	1008.4952***
3	978.4407***	861.2278***	888.7415***	1020.4263***
4	1096.5552***	885.7365***	1011.1636***	1034.7202***
5	1205.536***	893.435***	1109.0823***	1055.3548***
6	1312.0455***	921.852***	1213.0831***	1069.6093***
7	1413.0544***	1133.3422***	1305.097***	1305.678***
8	1522.3318***	1292.3912***	1409.9832***	1450.5229***
Portmanteau Test	DCC-Horizontal		DCC-Vertical	
Lags	Ljung Box Multivariante	ARCH LM Multivariante	Ljung Box Multivariante	ARCH LM Multivariante
1	662.1002***	364.9321***	655.3282***	306.2645***
2	797.979***	1070.954***	789.8791***	1011.6501***

3	914.1952***	1085.0058***	894.98***	1018.9563***
4	1023.3778***	1098.8153***	1014.5157***	1031.1373***
5	1121.7431***	1112.9546***	1109.9442***	1036.2281***
6	1220.9121***	1153.691***	1215.9398***	1048.2514***
7	1318.5847***	1456.5091***	1306.9548***	1302.1216***
8	1425.5451***	1655.7361***	1415.6266***	1446.5766***

Representados los valores de los estadísticos de contraste

Significatividad: *** 1%, **5%, * 10%

Para comenzar, viendo la Tabla 42, nuestro interés recae sobre aquellos coeficientes de naturaleza multivariante, ya que el resto de coeficientes vienen dados por el ajuste univariante visto. Para todos los modelos se encuentra que el coeficiente α nos confirma la correcta identificación del ajuste univariante y que la persistencia del modelo está siendo bien capturada, mientras que el coeficiente b , que no es significativo para ninguno, indica dudas respecto a la consistencia del modelo. A su vez, el coeficiente $mshape$ es significativo para los modelos vistos, por lo que el uso de la distribución es correcto y, por lo tanto, presentan mejoría frente al DCC-Básico.

Por otro lado, si se observan las pruebas multivariantes, se confirma que existe dependencia temporal y efectos ARCH sin capturar a nivel global; lo que hace que todos los modelos sean poco satisfactorios en términos de diagnóstico.

Lo comentado no quiere decir que su aplicación sea errónea pero muestra que sería recomendable probar con otro tipo de modelos multivariantes, pudiéndose introducir como futura mejora el uso de órdenes distintos al (1,1) o la aplicación de modelos ADCC o GDCC (*Generalized DCC*).

Sin embargo, comentar que el ajuste univariante es un respaldo a la eficiencia del modelo. Si se observan los gráficos ACF y PACF, en general el comportamiento de los modelos DCC es bastante parecido, con la excepción del modelo DCC-Básico que presenta, levemente, más claridad en sus fallos. Para los residuos estandarizados estadounidenses, marroquí y tunecinos en todos los modelos DCC se presenta un peor ajuste marginal a nivel multivariante que a nivel univariante, pero la mayoría se encuentra entre bandas. Para los residuos estandarizados al cuadrado ocurre igual para Marruecos y Túnez. Tanzania y Sudáfrica son las únicas series que no presentan problemas en ningún modelo DCC por lo que su diagnóstico sería considerado satisfactorio ya que se ve respaldado por todos los procesos.

Por último, tampoco se encuentran grandes discrepancias en el análisis CCF. Ghana y Tanzania son las únicas que en sus residuos no muestran dependencia temporal con los residuos estadounidenses, considerándolas bien capturadas. Para las demás, existe levemente dependencia temporal, excepto para Kenia, Marruecos y Sudáfrica donde claramente esta dependencia persiste. En comparación al modelo básico, el resto de modelos suavizan mejor la aparición de dependencia temporal para los residuos estandarizados marginales. Cabe destacar que este modelo básico es el que se utiliza mayormente en la literatura por lo tanto el mensaje es claro, se recomienda un proceso de selección univariante previo.

De este apartado, se pueden concluir varios puntos. El primero de todos ellos es que los modelos DCC realmente solo presentan un mal diagnóstico cuando observamos su dimensión multivariante, ya que su análisis marginal, visto en los gráficos ACF, PACF y CCF, pese a ser mejorable, es bastante satisfactorio. Esto puede

deberse a la poca profundización en otros modelos u otras combinaciones de órdenes diferentes al (1,1) a nivel multivariante o por la relación previa que posean los datos.

Otro punto a comentar es que en términos de diagnóstico los modelos vistos no se han diferenciado mucho, únicamente en el ajuste de la varianza condicional, en la correcta aplicación de la distribución T-Student y, ligeramente, en los gráficos CCF. Por ende, analíticamente no se pueden establecer diferencias significativas entre ellos.

5.4 Contraste de hipótesis: Existencia del Efecto Contagio

Una vez ajustados los modelos multivariantes, en la Tabla 44 se presentan los resultados del contraste del efecto contagio. En cada casilla, aparece primero clasificado el país como contagiado, sí (YES) o no (NO), y debajo el nivel de significatividad o p-valor del contraste. Se ha considerado como contagio todo nivel inferior al 10%, aunque cabe comentar que la intensidad del contagio para valores cercanos a dicho nivel no es igual de fuerte que para los que presentan un nivel de significatividad inferior al 1%. Sin embargo, la conclusión general debe extraerse del consenso común entre los modelos y las fechas vistas.

Como se ve, el modelo MEQMA presenta contagio para todas las fechas y todos los países, mientras que el MEWMA no lo hace para todos los observados. Sin embargo, las diferencias frente a los modelos DCC son bastante obvias, ya que establecen efecto contagio mientras que los otros todo lo contrario. Un aspecto bastante claro es que los modelos DCC con una selección univariante más púldra presentan mayor tendencia a observar efecto contagio frente al modelo DCC-Básico, ya que en general los modelos univariantes escogidos presentan una mejor captura de la volatilidad que lo que se consigue un modelo SGARCH Normal. Esto querría decir que la selección univariante afecta a la toma de decisiones en base al modelo multivariante que se utiliza para calcular el contraste

Si no se presta especial atención a los resultados ofrecidos por el MEQMA y MEWMA, se pueden establecer resultados que son consistentes para algunos países. En especial, se podría determinar que para Egipto, Ghana, Marruecos y Túnez no existe efecto contagio por parte de Estados Unidos para las fechas observadas. Por otro lado, si obviamos la primera fecha, podríamos decir que Kenia y Nigeria sí presentan efecto contagio por parte del índice estadounidense, ya que se mantienen los resultados para todas las fechas menos para la comentada. Para los restantes países, hay bastante ambigüedad, ya que en función del modelo aplicado y la fecha observada, el resultado puede cambiar; por lo que no podemos extraer conclusiones consistentes más allá de que los resultados no parecen robustos al depender del método de selección.

Por lo tanto, con los resultados vistos se puede concluir que la metodología univariante detrás de cada modelo DCC afecta en la toma de decisiones. Se podría confirmar que Egipto, Ghana, Marruecos y Túnez no se vieron contagiados durante la crisis financiera de 2008 mientras que Kenia y Nigeria sí lo fueron.

Tabla 44. Resultados del efecto contagio

Fecha	17/07/2007						09/08/2007						03/09/2007					
País/Modelo	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal
ARG_Price	YES 2.2E-16	YES 2.2E-16	YES 0.09036	NO 0.1481	NO 0.2105	YES 0.05652	YES 2.2E-16	YES 2.2E-16	NO 0.182	NO 0.2842	NO 0.3513	NO 0.1414	YES 2.2E-16	YES 2.585E-13	NO 0.3289	NO 0.5385	NO 0.5518	NO 0.268
EGPT_Price	YES 2.2E-16	YES 0.002838	NO 0.625	NO 0.9208	NO 0.6391	NO 0.9613	YES 2.2E-16	YES 0.06153	NO 0.7671	NO 0.7429	NO 0.7447	NO 0.809	YES 2.2E-16	NO 0.2457	NO 0.836	NO 0.5939	NO 0.8483	NO 0.6941
GHA_Price	YES 2.2E-16	YES 1.981E-10	NO 0.1961	NO 0.1218	NO 0.175	NO 0.1793	YES 2.2E-16	YES 5.294E-08	NO 0.4158	NO 0.2414	NO 0.3304	NO 0.3352	YES 2.2E-16	YES 0.00004392	NO 0.5219	NO 0.3293	NO 0.4	NO 0.44
KEN_Price	YES 2.2E-16	YES 9.96E-11	NO 0.1915	NO 0.1166	NO 0.1792	NO 0.1532	YES 2.2E-16	YES 1.36E-14	YES 0.1051	YES 0.04881	YES 0.09897	YES 0.07243	YES 2.2E-16	YES 2.2E-16	YES 0.07479	YES 0.03573	YES 0.07879	YES 0.0541
MOR_Price	YES 2.2E-16	YES 0.006974	NO 0.7916	NO 0.6281	NO 0.7223	NO 0.6789	YES 2.2E-16	NO 0.139	NO 0.9846	NO 0.9026	NO 0.9786	NO 0.8768	YES 2.2E-16	YES 0.06745	NO 0.8061	NO 0.6638	NO 0.794	NO 0.6726
NIG_Price	YES 2.2E-16	YES 2.271E-11	NO 0.1621	YES 0.03256	NO 0.1559	YES 0.05313	YES 2.2E-16	YES 6.417E-16	YES 0.05423	YES 0.008223	YES 0.05743	YES 0.01425	YES 2.2E-16	YES 2.2E-16	YES 0.01936	YES 0.001659	YES 0.01876	YES 0.003608
SOUTHAFR_Price	YES 2.2E-16	YES 1.081E-15	YES 0.06306	YES 0.01856	YES 0.0554	YES 0.03202	YES 2.2E-16	YES 7.458E-12	NO 0.2091	YES 0.09825	NO 0.1764	NO 0.1396	YES 2.2E-16	YES 7.695E-14	YES 0.07575	YES 0.02146	YES 0.06067	YES 0.03701
TAN_Price	YES 2.2E-16	YES 0.00001858	NO 0.1993	YES 0.07855	NO 0.1578	YES 0.08232	YES 2.2E-16	YES 0.0004125	NO 0.3778	NO 0.1889	NO 0.2836	NO 0.2018	YES 2.2E-16	YES 0.01704	NO 0.4381	NO 0.2362	NO 0.3304	NO 0.2472
TUN_Price	YES 2.2E-16	NO 0.1914	NO 0.8189	NO 0.7932	NO 0.8427	NO 0.8176	YES 2.2E-16	NO 0.5803	NO 0.9838	NO 0.9584	NO 0.9625	NO 0.9849	YES 2.2E-16	NO 0.7771	NO 0.9518	NO 0.9355	NO 0.9282	NO 0.9628
Fecha	01/10/2007						30/10/2007						06/12/2007					
País/Modelo	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal	MEQMA	MEWMA	DCC-Básico	DCC-Vertical	DCC-Horizontal	DCC-Diagonal
ARG_Price	YES 2.2E-16	YES 4.071E-15	NO 0.2437	NO 0.3465	NO 0.4243	NO 0.134	YES 2.2E-16	YES 2.2E-16	YES 0.05724	YES 0.05852	YES 0.1088	YES 0.01962	YES 2.2E-16	YES 2.2E-16	YES 0.05801	YES 0.06327	YES 0.1203	YES 0.02087
EGPT_Price	YES 2.2E-16	NO 0.9754	NO 0.5631	NO 0.1566	NO 0.5634	NO 0.2389	YES 2.2E-16	NO 0.9323	NO 0.8777	NO 0.4957	NO 0.9189	NO 0.6313	YES 2.2E-16	NO 0.4334	NO 0.9383	NO 0.9108	NO 0.852	NO 0.9609
GHA_Price	YES 2.2E-16	YES 0.002569	NO 0.7687	NO 0.4501	NO 0.6375	NO 0.535	YES 2.2E-16	YES 0.01961	NO 0.6868	NO 0.462	NO 0.6264	NO 0.4985	YES 2.2E-16	NO 0.2493	NO 0.8496	NO 0.5267	NO 0.7536	NO 0.4934
KEN_Price	YES 2.2E-16	YES 2.2E-16	YES 0.05634	YES 0.02894	YES 0.06454	YES 0.04269	YES 2.2E-16	YES 2.2E-16	YES 0.05842	YES 0.02823	YES 0.06576	YES 0.04214	YES 2.2E-16	YES 2.2E-16	YES 0.05368	YES 0.03892	YES 0.08187	YES 0.04948
MOR_Price	YES 2.2E-16	NO 0.1126	NO 0.9467	NO 0.9203	NO 0.9836	NO 0.866	YES 2.2E-16	NO 0.3044	NO 0.9045	NO 0.9228	NO 0.9783	NO 0.86	YES 2.2E-16	NO 0.1647	NO 0.3344	NO 0.3103	NO 0.3512	NO 0.3405
NIG_Price	YES 2.2E-16	YES 2.2E-16	YES 0.03515	YES 0.004086	YES 0.03485	YES 0.008095	YES 2.2E-16	YES 2.2E-16	NO 0.1501	YES 0.04822	NO 0.174	YES 0.06113	YES 2.2E-16	YES 4.648E-10	NO 0.558	NO 0.3403	NO 0.5636	NO 0.3706
SOUTHAFR_Price	YES 2.2E-16	YES 8.588E-13	NO 0.1981	YES 0.09569	NO 0.1739	NO 0.1263	YES 2.2E-16	YES 2.677E-13	YES 0.08008	YES 0.0231	YES 0.06431	YES 0.03845	YES 2.2E-16	YES 4.199E-10	NO 0.3726	NO 0.2356	NO 0.3438	NO 0.291
TAN_Price	YES 2.2E-16	YES 0.00009266	NO 0.1106	YES 0.03774	NO 0.102	YES 0.05048	YES 2.2E-16	YES 3.991E-08	YES 0.05203	YES 0.007523	YES 0.04007	YES 0.01503	YES 2.2E-16	YES 2.561E-16	YES 0.007072	YES 0.0005953	YES 0.006181	YES 0.001206
TUN_Price	YES 2.2E-16	NO 0.6299	NO 0.6762	NO 0.5547	NO 0.6252	NO 0.6395	YES 2.2E-16	YES 0.0709	NO 0.6771	NO 0.525	NO 0.5917	NO 0.6188	YES 2.2E-16	YES 0.001171	NO 0.347	NO 0.2287	NO 0.3222	NO 0.2901

6. DISCUSIÓN DE RESULTADOS

El objetivo de este estudio es la clasificación del efecto contagio sobre países africanos por parte del índice estadounidense durante la crisis *subprime*. Se concluye que Kenia y Nigeria sí fueron contagiados, mientras que Egipto, Ghana, Marruecos y Túnez no lo fueron; siendo indeterminado su efecto para Argelia, Sudáfrica y Tanzania.

El proceso llevado a cabo comenzó con la comprobación de si se cumple o no la Hipótesis de Mercados Eficientes para las series analizadas. Al ser rechazada dicha hipótesis, fue posible modelizar los rendimientos, queriendo decir que la Paridad de Poder Adquisitivo no se cumple para estos países (Hartman & Sedlak, 2013). Podría haber ocurrido que al considerar países europeos los mercados hubieran resultado eficientes, aunque refutado por Nguyen (2004), motivo por lo que en la literatura se suelen estudiar los mercados bursátiles. Sin embargo, el rechazo ocurre de forma parcial debido a que se observa falta de dependencia temporal en algunos rendimientos. Sin embargo, es lógico que ocurra ya que se supuso media cero y dicha dependencia no se modelizó (lo cuál es bastante estándar en esta literatura), aunque esto no nos preocupa ya que se busca modelizar la volatilidad y todas las series presentan dependencia temporal en la varianza.

Además, el estudio del Exponente Hurst mostró que las series no eran ruido blanco, a excepción de Marruecos y Túnez que presentaban valores cercanos a 0.5. Para este caso, Túnez poseía dependencia temporal pero Marruecos no. Sin embargo, el Test BDS no mostró autocorrelación dimensional para ninguna de las series.

Por lo tanto, se confirma que la Hipótesis de Mercados Eficientes es rechazada y que la modelización posterior está justificada. Comentar que como futura mejora se puede considerar la introducción de modelos ARMA-GARCH-type sobre aquellas series que sí presentan dependencia temporal, como realizan Acatrinei et al. (2013), ya que más adelante sus residuos estandarizados presentarán este problema en los modelos ajustados. De hecho, argumentamos que cuán más complicado es el modelo, menos real es y más sobreajuste puede presentar. Además en la versión multivariante, tendríamos que considerar también un VAR-DCC (*Vector Autoregressive DCC*).

Otro aspecto a debatir es la selección de modelos univariantes. Podemos separar su discusión en dos temas principales: primero, la selección óptima para el ajuste univariante y, segundo, su influencia sobre los modelos DCC.

Durante la aplicación de modelos univariantes, se destacó que la literatura es dispersa acerca de la mejor metodología a aplicar. Es cierto lo comentado en Hansen & Lunde (2001) acerca de la gran efectividad de los modelos GARCH (1,1), ya que en general presentan un buen comportamiento. Trabajos como el de Celik (2012) o el de Thi Dieu & Minh Tran (2021) implementan un modelo DCC-GARCH (1,1) que se compone de lo denominado como la selección “Básica”. Como se ha visto al final del estudio, el tipo de selección afecta en los resultados del efecto contagio y en el diagnóstico del modelo univariante, siendo todo lo contrario en el ajuste del modelo DCC; aspecto discutido más adelante. Por lo tanto, se concluye que los modelos univariantes respaldan los resultados que puedan ofrecer los multivariantes, mostrando la necesidad de un análisis previo para comprobar la efectividad marginal.

Ahora bien, cabe destacar que no se encuentra una selección univariante que destaque más que las demás. En nuestro estudio, la selección que denominamos Básica presenta bastantes problemas sobre las series, sobre todo en términos de captura de la volatilidad. Ignorando la dependencia temporal de los residuos estandarizados, el resto de selecciones resultan en un mejor ajuste de las series.

En trabajos como Katsiampa (2017), Lim & Sek (2013) o Salamat et al. (2020), no existe un segundo paso en la selección Vertical univariante como se ve aquí. Generalmente, la aplicación de este proceso consta en comparar qué modelo ajusta mejor para cada serie pero no en un diagnóstico sobre si el ajuste es adecuado. Esto implica que se escogen modelos univariantes a través de los criterios de información sin contrastar que el modelo escogido realmente captura bien la información. Por este motivo, se introdujo en nuestro estudio este segundo paso, ya que pese a que los criterios de información ofrezcan un modelo ganador, su diagnóstico puede ser pobre.

Relacionado con lo comentado, se observa que entre métodos de selección no se termina de establecer un consenso común para ciertas series. Es destacable el hecho de que la selección Horizontal, que está sustentada sobre un análisis preliminar *ad-hoc* sobre los rendimientos, presente tanta discrepancia frente a otros tipos de selección. Por ejemplo, para el caso de Nigeria encontramos simetría en su volatilidad y sesgo en su distribución, mientras que las selecciones Vertical y Diagonal escogen un modelo contrario a lo observado. Para otros casos, como el de Sudáfrica y Tanzania, sí coinciden; indicándonos una relación poco clara entre métodos de selección.

Por otro lado, la selección Diagonal es la menos vista en la literatura. Abdalla & Winker (2012) establecen una selección por criterios de información en la que, al igual que la Vertical, escogen el mejor modelo sin diagnosticarlo. Para estos casos, ocurre lo mismo que comentábamos, por lo que se puede concluir que en la metodología GARCH no siempre los criterios de información van a ofrecer el mejor modelo en términos de diagnóstico. Esto quiere decir que debería darse más importancia al estudio del diagnóstico que a la selección por parte de los criterios de información.

En nuestro estudio, el ajuste univariante ha sido bastante exitoso en las tres metodologías aplicadas. Como no hay un tipo de selección más preferible que otra, se introducen todas en la creación de modelos DCC. Pese a que el ajuste individual sea diferente entre ellos, lo único común entre dimensiones individuales y multivariantes ha sido la aplicación de la distribución T-Student, aunque para algunos de forma sesgada. Esta premisa establece que ha sido bien seleccionada y que determina a los resultados, por lo que debería ser siempre comprobada en futuros trabajos, no como ocurre en Celik (2012) y Thi Dieu & Minh Tran (2021) que no la estudian.

A su vez, los resultados obtenidos nos muestran que los modelos ajustados univariantemente afectan al clasificar el efecto contagio pero no en el diagnóstico del modelo DCC. De hecho, la principal diferencia frente al DCC-Básico en términos de diagnóstico es la distribución y alguna diferencia en la captura de las correlaciones entre series, pero de forma leve. Sin embargo, al calificar el contagio la diferencia es notoria ante modelos con una base univariante más estudiada. Por lo tanto, se puede saltar a la conclusión de que la diferencia entre modelos DCC no se basa en su comportamiento multivariante ni en su diagnóstico, sino en cómo procesan las correlaciones. Por lo tanto, estudios univariantes más concienzudos pueden ofrecer

mayor seguridad en los resultados (Engle & Sheppard, 2001). Se podría decir que trabajos que no realizan un análisis previo univariante, como en Celik (2012) o Thi Dieu & Minh Tran (2021), pueden presentar peor consistencia o robustez en sus resultados.

Relacionado con la consistencia de los resultados, nuestros modelos multivariantes no son del todo satisfactorios. Obviando que el ajuste univariante es satisfactorio, se muestra que el modelo DCC puede que no sea la mejor opción para capturar la correlación. Pese a que nuestros resultados sean consistentes, parece ser que el modelo que lo realiza no termina de serlo. Sin embargo, la literatura no ofrece otros modelos más que el modelo BEEK, aunque este solo se puede aplicar para parejas de series (Engle & Kroner, 1995). Un posible enfoque podría ser su aplicación para cada una de las series con la contagiosa, pero no se estaría observando las influencias que puedan existir entre el resto de series no incluidas en el modelo BEEK.

Otra posible mejora a los modelos DCC sería la consideración de la asimetría y de la inclusión de distintas combinaciones de órdenes. Acerca de lo primero, Caporin & McAleer (2013) comentan que la implementación de la asimetría sobre este tipo de modelos es mucho menos consistente ya que sus premisas no presentan testeabilidad.

Acerca de lo segundo, Hartman & Sedlak (2013) estudian combinaciones de órdenes y aplican el modelo ganador. Como se vio, la combinación de órdenes puede mejorar el diagnóstico de los modelos, pudiendo resultar en la significatividad del coeficiente b y en la aceptación de la hipótesis nula para las pruebas multivariantes.

Alejándonos un poco de los resultados, el enfoque presentado al estudio podría haber sido distinto. Se ha estudiado la diferencia de la correlación en función del tiempo, estableciendo como premisas el tiempo de estudio y los *breakdates*, esto es, fechas consideradas como el inicio de la crisis en 2018. Sin embargo, si somos conocedores de que un país se vio afectado por esta crisis en un rango de tiempo, se podría buscar con la misma metodología cuándo se inicio la crisis.

Relacionado con esto, también se podría haber enfocado con otro tipo de metodología, como con el uso de cópulas. Las cópulas son funciones no paramétricas, en sustitución a los modelos GARCH, que permiten la creación de una función específica para los datos marginales observados de cada una de las series (Haugh, 2016), por lo que no sería necesaria la selección de modelos GARCH. A su vez, unido con modelos de *Machine Learning*, podrían haberse considerado modelos de *random forest*, *stacking*, etc., como se puede observar en Aras (2021). Respecto a esto último, su aplicación se podría dar sólo para casos en los que estuviéramos prediciendo, es decir, realizando un ajuste *out-of-sample*. Esto es, en este trabajo no se han utilizado porque nuestro objetivo es el ajuste, no la predicción.

Para concluir este estudio, podemos decir que los resultados obtenidos son adecuados pero mejorables. La comparación de diferentes modelos con la prueba de robustez de las fechas nos lleva a concluir que no hay evidencias suficientes para rechazar la hipótesis nula de la diferencia en medias, es decir, inexistencia de efecto contagio, entre los periodos pre-crisis y crisis para Egipto, Ghana, Marruecos y Túnez; siendo todo lo contrario para Kenia y Nigeria. Para Argelia, Sudáfrica y Tanzania el efecto es indeterminado, ya que dependiendo de la fecha y modelo estimado, las conclusiones cambian.

7. BIBLIOGRAFÍA

- Aawaar, G., Domeher, D., & Nsiah, C. (2018). Evolving Co-Movements of Africa's Stock Markets: Evidence from DCC-GARCH Analysis. *International Research Journal of Finance and Economics*.
- Abdalla, S. Z., & Winker, P. (2012). Modelling Stock Market Volatility Using Univariate GARCH Models: Evidence from Sudan and Egypt. *International Journal of Economics and Finance*.
- Acatrinei, M., Gorun, A., & Marcu, N. (2013). A DCC-GARCH Model to estimate the risk to the capital market in Romania. *Romanian Journal of Economic Forecasting*.
- Akaike, H. (1973). Information Theory and an Extension of the Maximum Likelihood Principle.
- Akpan, E. A., & Moffat, I. U. (2017). Detection and Modeling of Asymmetric GARCH Effects in a Discrete-Time Series. *International Journal of Statistics and Proba*.
- Aras, S. (2021). Stacking hybrid GARCH models for forecasting Bitcoin volatility.
- Bollerslev, T. (1986). Generalized Autoregressive Conditional Heteroskedasticity. *Journal of Econometrics*.
- Brock, W. A., Dechert, W. D., LeBaron, B., & Scheinkman, J. A. (1996). A Test for Independence Based on the Correlation Dimension. *Economic Review*.
- Calvo, G. A., & Mendoza, E. G. (2000). Rational contagion and the globalization of securities markets. *Journal of International Economics*.
- Caporin, M., & McAleer, M. (2010). Do We Really Need Both BEKK and DCC? A Tale of Two Multivariate GARCH Models.
- Caporin, M., & McAleer, M. (2013). Ten Things You Should Know About the Dynamic Conditional Correlation Representation.
- Celik, S. (2012). The more contagion effect on emerging markets: The evidence of DCC-GARCH model. *Elsevier*.
- Chen, S., Chen, C. Y.-H., & Härdle, W. K. (2020). A first econometric analysis of the CRIX family.
- Chiang, T. C., Jeon, B. N., & Li, H. (2007). Dynamic correlation analysis of financial contagion: Evidence from Asian markets. *Journal of International Money and Finance*.
- Czech, K. A., & Waszkowski, A. (2012). Foreign exchange market efficiency: Empirical results for the USD/EUR market. *eFinance*.
- Dickey, D. A., & Fuller, W. A. (1979). Distribution of the Estimators for Autoregressive Time Series With a Unit Root. *Journal of the American Statistical Association*.
- Ding, Z., Granger, C. W., & Engle, R. F. (1993). A long memory property of stock market returns and a new model.
- Dominguez, K. M., Hashimoto, Y., & Ito, T. (2012). International reserves and the global financial crisis. *Elsevier*.
- Engle, R. F. (1982). Autoregressive Conditional Heteroscedasticity with Estimates of the Variance of United Kingdom Inflation. *Econometrica*.
- Engle, R. F., & Kroner, K. F. (1995). Multivariate Simultaneous Generalized Arch.
- Engle, R. F., & Ng, V. K. (1993). Measuring and Testing the Impact of News on Volatility. *The Journal of Finance*.
- Engle, R. F., & Sheppard, K. (2001). Theoretical and empirical properties of Dynamic Conditional Correlation Multivariate GARCH.
- Fama, E. F. (1970). Efficient Capital Markets: A Review of Theory and Empirical Work. *The Journal of Finance*.
- Federal Reserve Economic Data. (s.f.). Recuperado el 23 de Noviembre de 2021, de <https://fred.stlouisfed.org>
- Forbes, K. J., & Rigobon, R. (2002). No Contagion, Only Interdependence: Measuring Stock Market Comovements. *American Finance Association*.
- Galanos, A. (2022). *rmgarch: Multivariate GARCH models*.
- Gao, Y., Zhang, C., & Zhang, L. (2012). Comparison of GARCH Models based on Different Distributions. *Journal of computers*.
- Ghalanos, A. (2022). *rugarch: Univariate GARCH models*.
- Guillén, M. F. (2011). *The Global Economic & Financial Crisis: A Timeline*. Laude Institute: University of Pennsylvania.
- Hannan, E. J., & Quinn, B. G. (1979). The Determination of the Order of an Autoregression. *Journal of the Royal Statistical Society. Series B (Methodological)*.
- Hansen, & P. Reinhard, L. (2003). Does anything beat a GARCH(1,1)? A comparison based on test for superior predictive ability. *IEEE International Conference on Computational Intelligence for Financial Engineering*.
- Hansen, P. R., & Lunde, A. (2001). A Comparison of Volatility Models: Does Anything Beat a GARCH(1,1)?
- Hartman, J., & Sedlak, J. (2013). Forecasting Conditional Correlation for Exchange Rates using Multivariate GARCH models with Historical Value-at-Risk application.

- Haugh, M. (2016). An Introduction to Copulas. *Quantitative Risk Management*.
- Hosking, J. R. (1980). The Multivariate Portmanteau Statistic.
- Huang, H.-C., Su, Y.-C., & Tsui, J.-T. (2015). Asymmetric GARCH Value-at-Risk over MSCI in Financial Crisis. *International Journal of Economics and Financial Issues*, .
- Hurst, H. E. (1951). Long-term storage capacity of reservoirs. *Transactions of the American Society of Civil Engineers*.
- Investing. (s.f.). Recuperado el 24 de Noviembre de 2021, de <https://www.investing.com>
- Katsiampa, P. (2017). Volatility estimation for Bitcoin: A comparison of GARCH models.
- Kolmogorov-Smirnov, A. (1933). Sulla determinazione empirica di una legge di distribuzione. *Giornale dell'Istituto Italiano degli Attuari*.
- Lee, M.-C., Chiou, J.-S., & Lin, C.-M. (2006). A study of value-at-risk on portfolio in stock return using DCC multivariate GARCH. *Applied Financial Economics Letters*.
- Lim, C. M., & Sek, S. K. (2013). Comparing the Performances of GARCH-type Models in Capturing the Stock Market Volatility in Malaysia.
- Ljung, G. M., & Box, G. E. (1978). On a Measure of Lack of Fit in Time Series Models. *Biometrika*.
- Malo, P., & Kanto, A. (2006). Evaluating Multivariate GARCH models in the Nordic Electricity Markets.
- Mary Aderajo, O., & Olaniran, O. D. (2021). Analysis of financial contagion in influential African stock markets . *Future Business Journal*.
- Medel, C. A., & Salgado, S. C. (2013). Does the BIC estimate and forecast better than the AIC? *Revista de Análisis Económico*.
- Minovic, J. (2008). Application and Diagnostic Checking of Univariate and Multivariate GARCH Models in Serbian Financial Market. *Economic Analysis. National Bureau of Economic Research*. (19 de 7 de 2021). Recuperado el 2021 de 12 de 1, de US Business Cycle Expansions and Contractions: <https://www.nber.org/research/data/us-business-cycle-expansions-and-contractions>
- Nelson, D. B. (1991). Conditional Heteroskedasticity in Asset Returns: A New Approach. *Econometrica*.
- Nguyen, J. (2004). The Efficient Market Hypothesis: Is It Applicable to the Foreign Exchange Market? The Efficient Market Hypothesis: Is It Applicable to the Foreign Exchange Market?
- Perlin, M. S., Mastella, M., Vancin, D. F., & Ramos, H. P. (2020). A GARCH Tutorial with R. *Revista de Administração Contemporânea*.
- Phillips, P. C., & Perron, P. (1988). Testing for a Unit Root in Time Series Regression. *Oxford University Press on behalf of Biometrika Trust*.
- Rabemananjara, R., & Zakoian, J. M. (1993). Threshold Arch Models and Asymmetries in Volatility. *Journal of applied econometrics*.
- Radelet, S. (2010). *Emerging Africa: How 17 Countries Are Leading the Way*.
- Riedl, S. (2018). Multivariate Volatility Modelling for Cryptocurrencies.
- Salamat, S., Lixia, N., Naseem, S., Mohsin, M., & Zia-ur-Rehman, M. (2020). Modeling cryptocurrencies volatility using GARCH models: a comparison based on Normal and T-Students error distribution.
- Schwarz, G. (1978). Estimating the Dimension of a Model. *The Annals of Statistics*.
- Shapiro, S. S., & Wilk, M. B. (1965). An analysis of variance test for normality (complete samples). *Biometrika*.
- Shibata, R. (1976). Selection of the Order of an Autoregressive Model by Akaike's Information Criterion. *Biometrika*.
- Shiferaw, Y. A. (2019). Multivariate Analysis of East African Currency Exchange Rate. *ANNALS OF ECONOMICS AND FINANCE*.
- Shmueli, G. (2010). To Explain or to Predict? *Statistical Science*.
- Signé, L. (3 de Abril de 2019). Africa's emerging economies to take the lead in consumer market growth. *Brookings*.
- Thi Dieu, T. P., & Luong Minh, H. (2021). The Contagion Effect from U.S. Stock Market to the Vietnamese and the Philippine Stock Markets: The Evidence of DCC – GARCH Model. *Journal of Asian Finance, Economics and Business Vol 8 No 2*.
- Thi Dieu, T. P., & Minh Tran, H. L. (2021). The Contagion Effect from U.S. Stock Market to the Vietnamese and the Philippine Stock Markets: The Evidence of DCC – GARCH Model. *Journal of Asian Finance, Economics and Business*.
- Wang, Z., Salin, V., Hooker, N. H., & Leatham, D. (2002). Stock market reaction to food recalls: a GARCH application. *Applied Economics Letters*.
- World Economic Situation and Prospects. (2014). Country classification.
- Zhang, Z. (2009). Analysis skewness in GARCH model. *School of Economics and Social Sciences*.
- Zivot, E. (2008). Practical Issues in the Analysis of Univariate GARCH Models.

8. ANEXOS

ANEXO A. TABLAS

ANEXO A.1 Observaciones iniciales de la base de datos

Estados Unidos					
<i>Date</i>	<i>USA_Index</i>				
01/01/2004	84.9				
02/01/2004	84.8				
24/12/2010	NA				
27/12/2010	73.9				
Marruecos					
<i>Date</i>	<i>MOR_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	8.3552	8.3963	8.4246	8.303	-0.0057
Dec 30, 2010	8.4031	8.4261	8.4371	8.3605	-0.003
Jan 08, 2004	8.6785	8.6685	8.6785	8.6685	-0.0078
Jan 07, 2004	8.7468	8.7368	8.7468	8.7368	0.0059
Sudr�frica					
<i>Date</i>	<i>SOUTHAFR_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	6.6026	6.63	6.6535	6.5725	-0.0041
Dec 30, 2010	6.63	6.6453	6.676	6.5984	-0.0023
Jan 09, 2004	6.6715	6.54	6.819	6.52	0.0116
Jan 08, 2004	6.595	6.537	6.7601	6.49	0.0037
Egipto					
<i>Date</i>	<i>EGPT_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	5.805	5.805	5.805	5.805	0
Dec 30, 2010	5.805	5.804	5.8057	5.804	0
Jan 08, 2004	6.1801	6.1751	6.1951	6.1451	0.0024
Jan 07, 2004	6.165	6.165	6.165	6.165	0
Ghana					
<i>Date</i>	<i>GHA_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	1.486	1.4825	1.486	1.4825	-0.0002
Dec 30, 2010	1.4863	1.4865	1.4888	1.484	0.0022
Jan 09, 2004	0.8847	0.8785	0.8847	0.8785	0.0228
Jan 08, 2004	0.865	0.855	0.865	0.855	0
Kenia					
<i>Date</i>	<i>KEN_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	80.75	80.55	81.03	80.5	0
Dec 30, 2010	80.75	80.6	81	80.4	0
Jan 09, 2004	76.08	75.95	76.21	75.9	-0.0003
Jan 08, 2004	76.1	75.99	76.15	75.76	0.002
Nigeria					
<i>Date</i>	<i>NIG_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	152	152	152	152	-0.001
Dec 30, 2010	152.15	152.15	152.15	152.15	-0.0101
Jan 09, 2004	138.45	138.45	138.45	138.45	0.0004

Jan 08, 2004	138.4	138.4	138.4	138.4	-0.0004
Túnez					
<i>Date</i>	<i>TUN_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	1.403	1.4406	1.4444	1.401	-0.0274
Dec 30, 2010	1.4425	1.4407	1.4505	1.4259	-0.0043
Jan 08, 2004	1.1969	1.2089	1.2153	1.1935	-0.0103
Jan 07, 2004	1.2094	1.1985	1.211	1.1981	0.0028
Argelia					
<i>Date</i>	<i>ARG_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	74.46	73.77	74.96	72.675	-0.0031
Dec 30, 2010	74.695	72.923	74.995	72.81	-0.0016
Jan 09, 2004	70.79	68.79	70.79	68.79	-0.0001
Jan 08, 2004	70.8	68.8	70.8	68.8	-0.0115
Tanzania					
<i>Date</i>	<i>TAN_Price</i>	<i>Open</i>	<i>High</i>	<i>Low</i>	<i>Change..</i>
Dec 31, 2010	1479.75	1459.25	1507.25	1459.25	-0.0002
Dec 30, 2010	1480	1462	1487	1462	0
Jan 09, 2004	1067	1067	1067	1067	0.0014
Jan 08, 2004	1065.5	1065.5	1065.5	1065.5	-0.0005

ANEXO A.2 Estadísticos principales tras tratamiento de ausentes

	<i>USA_Index</i>	<i>ARG_Price</i>	<i>EGPT_Price</i>	<i>GHA_Price</i>	<i>KEN_Price</i>
<i>Mínimo</i>	69.28	60.2	5.291	0.9	61.5
<i>Primer cuartil</i>	74.82	69.16	5.525	0.9138	68.55
<i>Mediana</i>	80.89	72.06	5.686	0.9295	72.8
<i>Media</i>	79.3	70.47	5.634	1.0552	72.28
<i>Tercer cuartil</i>	82.86	72.86	5.746	1.1636	76.15
<i>Máximo</i>	87.35	75.31	6	1.5035	81.4
<i>NA's</i>	-	-	-	-	-
	<i>MOR_Price</i>	<i>NIG_Price</i>	<i>SOUTHAFR_Price</i>	<i>TAN_Price</i>	<i>TUN_Price</i>
<i>Mínimo</i>	7.194	116.5	5.658	1045	1.145
<i>Primer cuartil</i>	7.912	126.2	6.639	1160	1.254
<i>Mediana</i>	8.412	128.3	7.176	1245	1.307
<i>Media</i>	8.337	131	7.373	1228	1.297
<i>Tercer cuartil</i>	8.717	133.2	7.778	1297	1.336
<i>Máximo</i>	9.351	158.9	11.795	1400	1.461
<i>NA's</i>	-	-	-	-	-

ANEXO A.3 Primeros valores de la serie de rendimientos para cada país

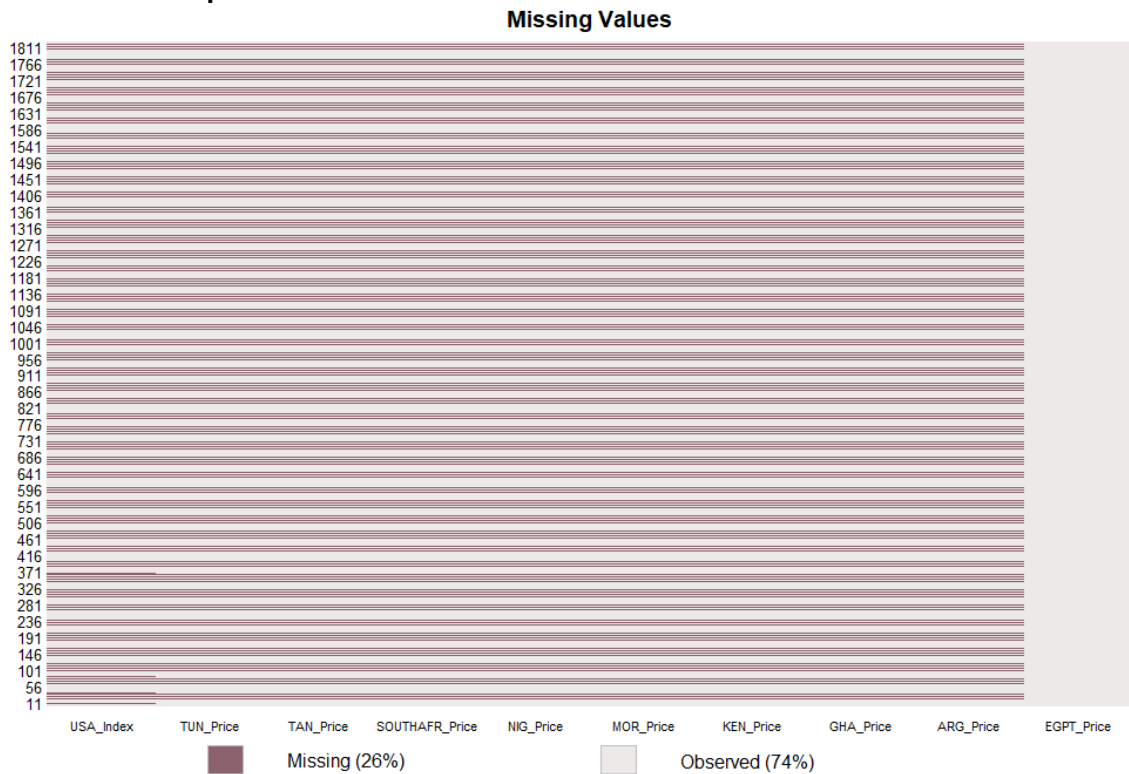
<i>Date</i>	<i>USA_Index</i>	<i>ARG_Price</i>	<i>EGPT_Price</i>	<i>GHA_Price</i>	<i>KEN_Price</i>
04/01/2005	0.013092803	0.00380821	-0.001350912	-0.001110494	0.001909005
05/01/2005	-0.001095783	-0.000276472	-0.005338076	0.001110494	-0.00063593
24/12/2009	-0.000133714	-0.001958567	-0.00036357	0.002098637	0.003307975
25/12/2009	-0.001223336	-0.000372838	0	0	0
<i>Date</i>	<i>MOR_Price</i>	<i>NIG_Price</i>	<i>SOUTHAFR_Price</i>	<i>TAN_Price</i>	<i>TUN_Price</i>
04/01/2005	0.011488877	-0.001704707	0.030375252	0.004935971	0.007575794
05/01/2005	0.000868257	0.0037843	0.017421303	0	0.002048761
24/12/2009	-0.002537622	0	-0.011715527	-0.002649008	-0.001891862
25/12/2009	-0.000203288	0	-0.000239441	0	-0.00136436

ANEXO A.4 Resumen selección univariante

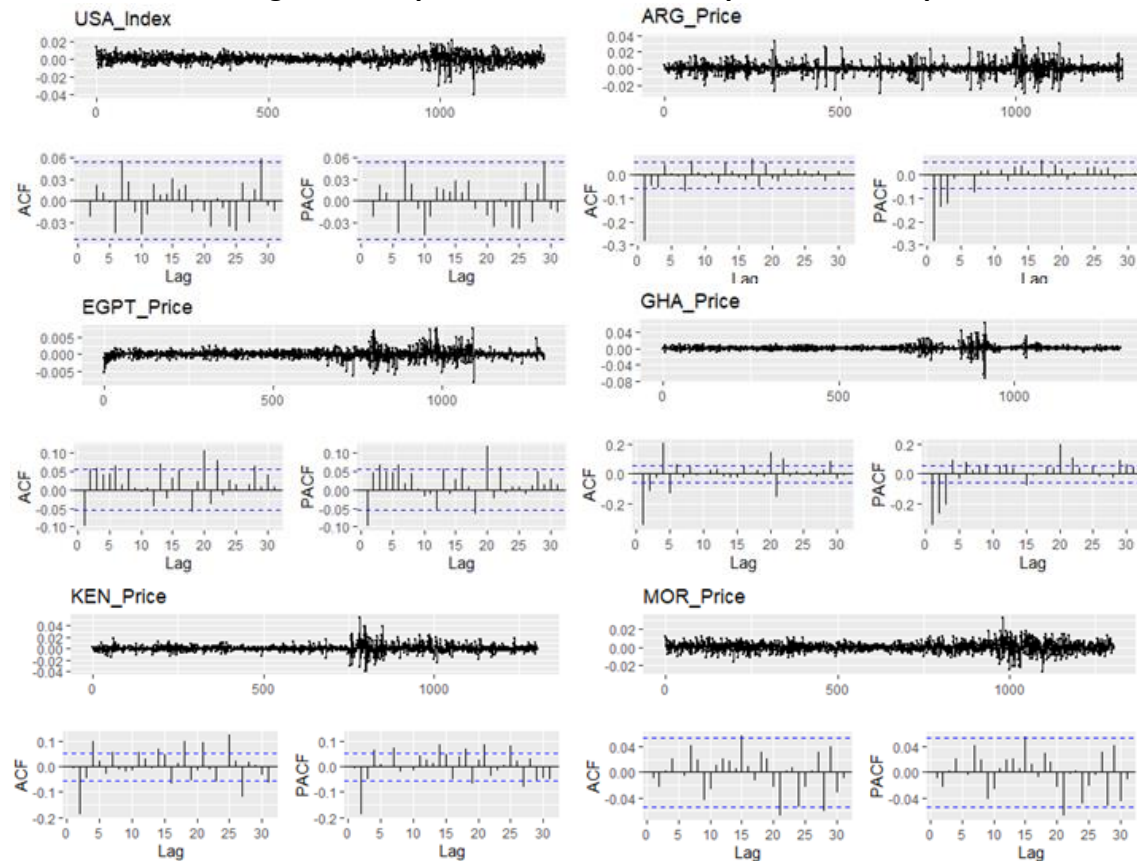
<i>País</i>	<i>Selección por defecto</i>	<i>Selección Vertical: Fijando orden (1,1)</i>
<i>USA_Index</i>	SGARCH Norm USA_Index (1,1)	EGARCH T-Student USA_Index (2,2)
<i>ARG_Price</i>	SGARCH Norm ARG_Price (1,1)	SGARCH T-Student ARG_Price (1,1)
<i>EGPT_Price</i>	SGARCH Norm EGPT_Price (1,1)	EGARCH T-Student EGPT_Price (4,3)
<i>GHA_Price</i>	SGARCH Norm GHA_Price (1,1)	EGARCH T-Student GHA_Price (1,2)
<i>KEN_Price</i>	SGARCH Norm KEN_Price (1,1)	SGARCH T-Student KEN_Price (1,1)
<i>MOR_Price</i>	SGARCH Norm MOR_Price (1,1)	SGARCH Skewed Norm MOR_Price (1,1)
<i>NIG_Price</i>	SGARCH Norm NIG_Price (1,1)	EGARCH T-Student NIG_Price (1,1) SGARCH Skewed T-Student
<i>SOUTHAFR_Price</i>	SGARCH Norm SOUTHAFR_Price (1,1)	SOUTHAFR_Price (1,1)
<i>TAN_Price</i>	SGARCH Norm TAN_Price (1,1)	EGARCH T-Student TAN_Price (1,2)
<i>TUN_Price</i>	SGARCH Norm TUN_Price (1,1)	SGARCH Norm TUN_Price (1,1)
<i>País</i>	<i>Selección Horizontal: Fijando modelo</i>	<i>Selección Diagonal</i>
<i>USA_Index</i>	EGARCH Skewed T-Student USA_Index (2,2)	SGARCH T-Student USA_Index (2,2)
<i>ARG_Price</i>	SGARCH T-Student ARG_Price (1,1)	TGARCH T-Student ARG_Price (1,1)
<i>EGPT_Price</i>	TGARCH T-Student EGPT_Price (2,2) SGARCH Skewed T-Student GHA_Price (1,1)	EGARCH T-Student EGPT_Price (4,3)
<i>GHA_Price</i>	SGARCH Skewed T-Student KEN_Price (1,1)	EGARCH T-Student GHA_Price (2,1)
<i>KEN_Price</i>	EGARCH T-Student MOR_Price (1,1)	SGARCH T-Student KEN_Price (1,1)
<i>MOR_Price</i>	SGARCH Skewed T-Student NIG_Price (1,1) SGARCH Skewed T-Student SOUTHAFR_Price (1,1)	SGARCH Norm MOR_Price (1,1)
<i>NIG_Price</i>	EGARCH T-Student TAN_Price (1,1)	EGARCH T-Student NIG_Price (1,1) SGARCH Skewed T-Student SOUTHAFR_Price (1,1)
<i>SOUTHAFR_Price</i>	SGARCH T-Student TUN_Price (1,1)	EGARCH T-Student TAN_Price (1,1)
<i>TAN_Price</i>		SGARCH T-Student TUN_Price (1,1)

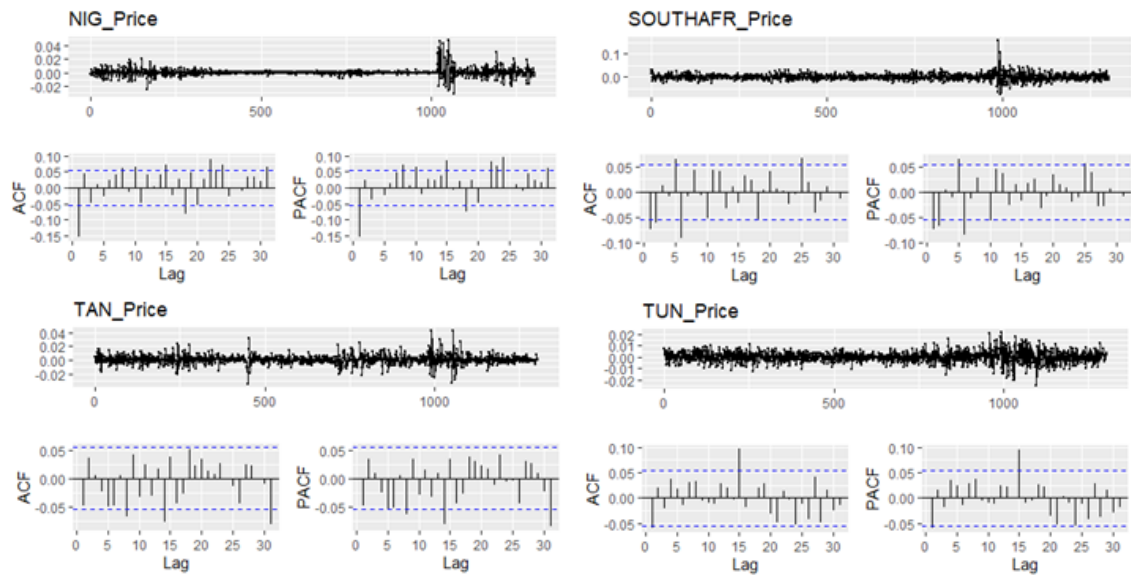
ANEXO B. FIGURAS

ANEXO B.1 Mapeado de las observaciones iniciales de la base de datos

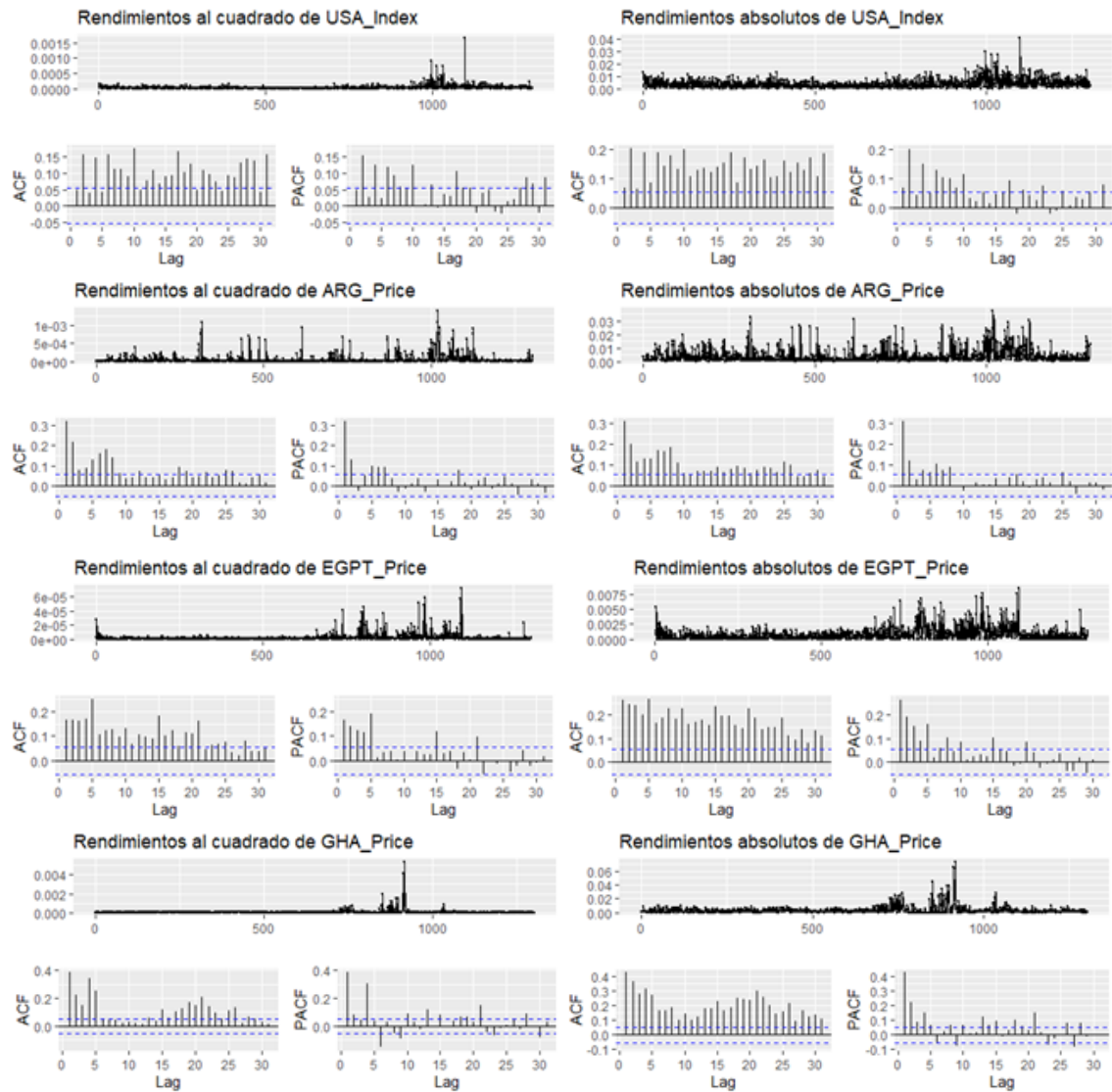


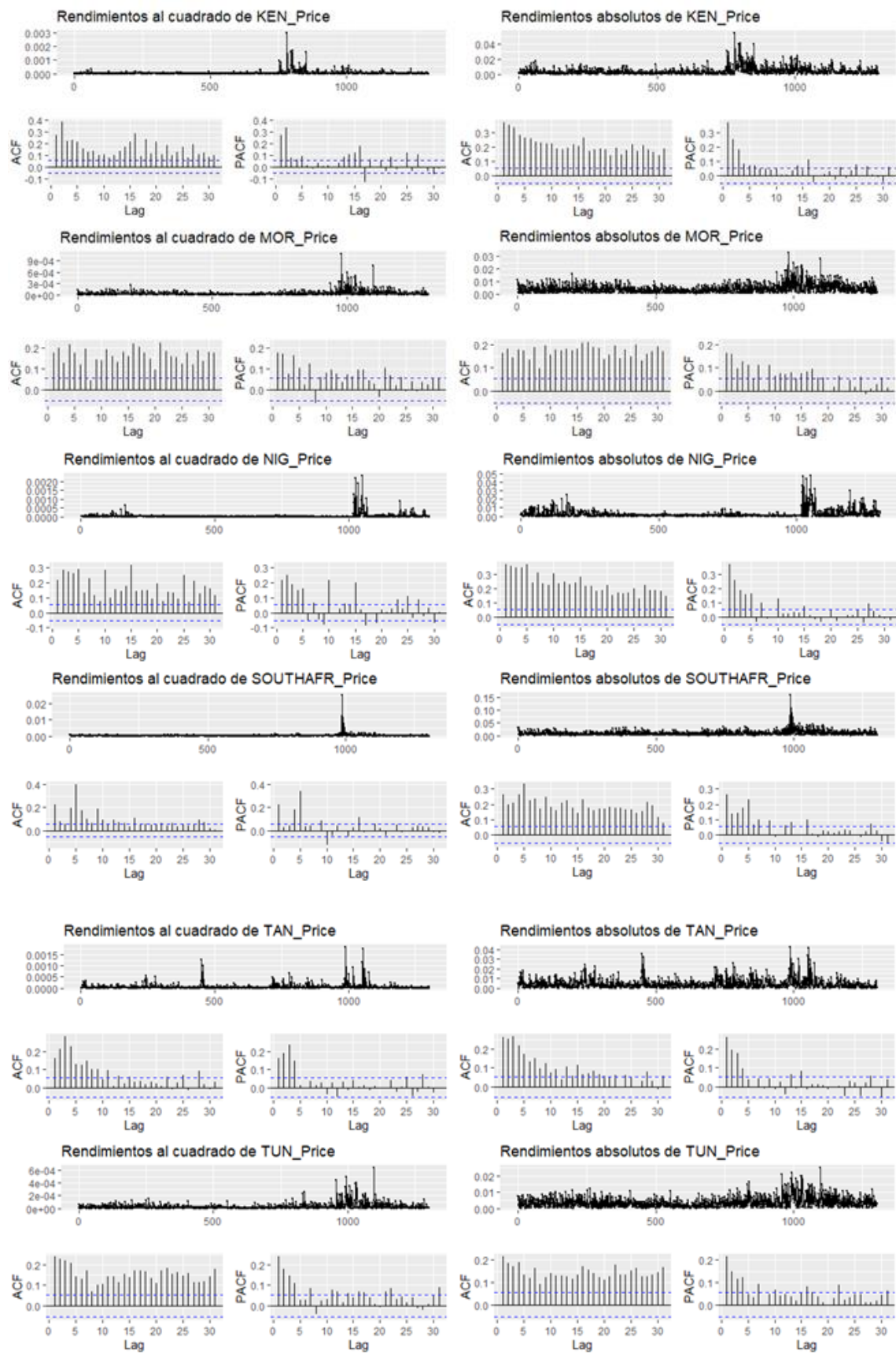
ANEXO B.2 Correlogramas para el estudio de la dependencia temporal



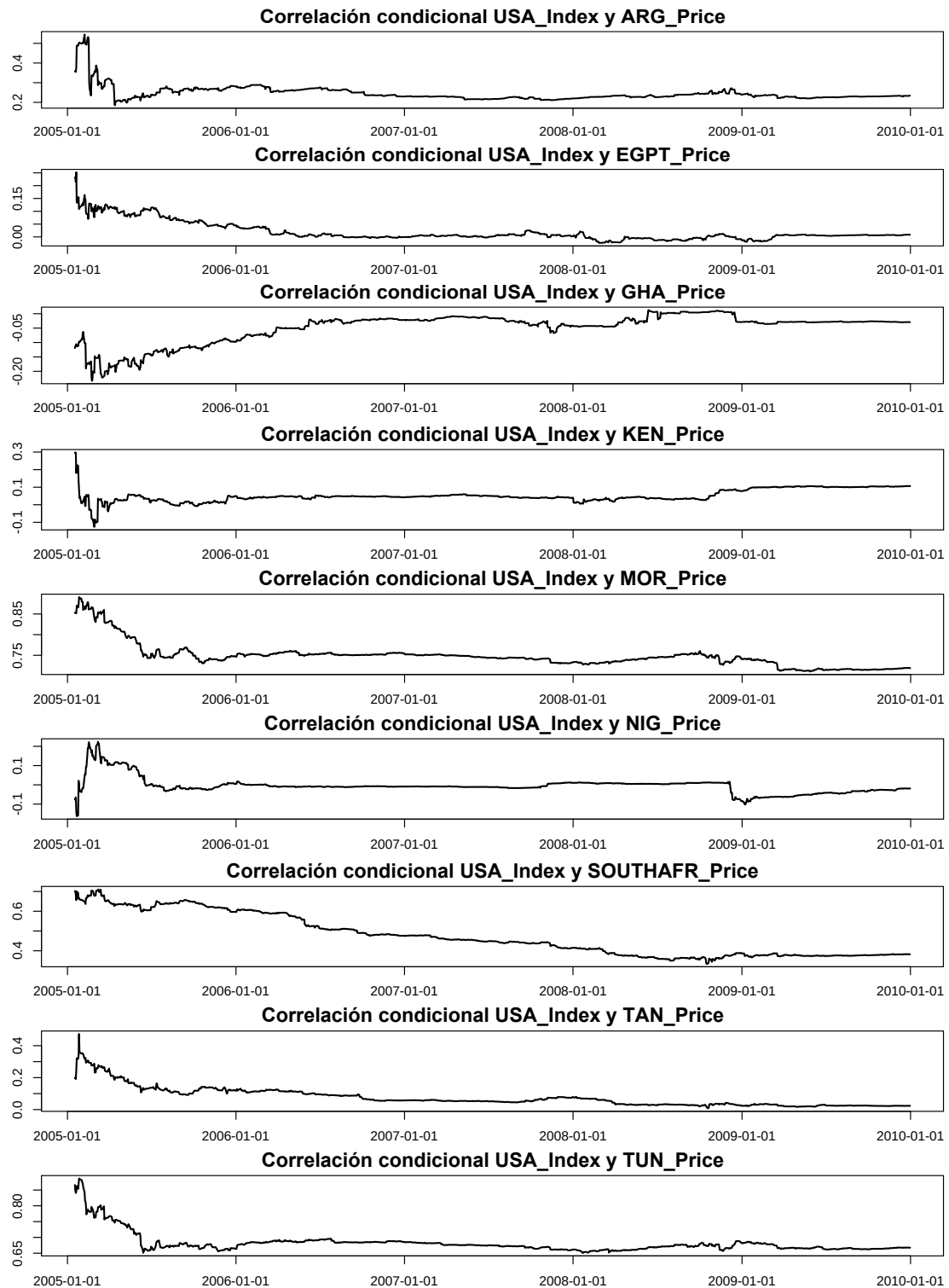


ANEXO B.3 Correlogramas para el estudio de la dependencia temporal al cuadrado y en términos absolutos

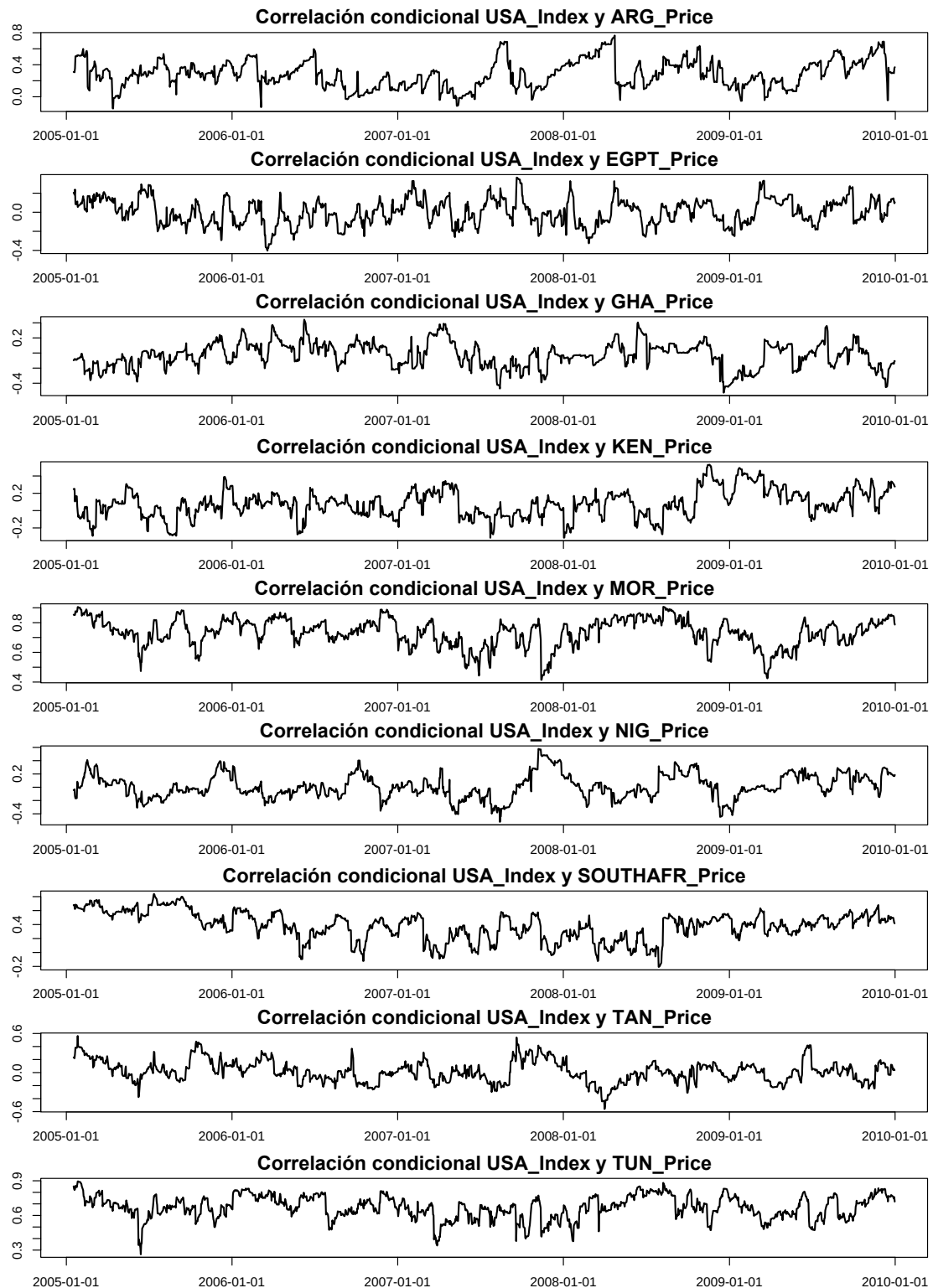




ANEXO B.4 Correlación dinámica condicionada del modelo MEQMA frente el índice estadounidense

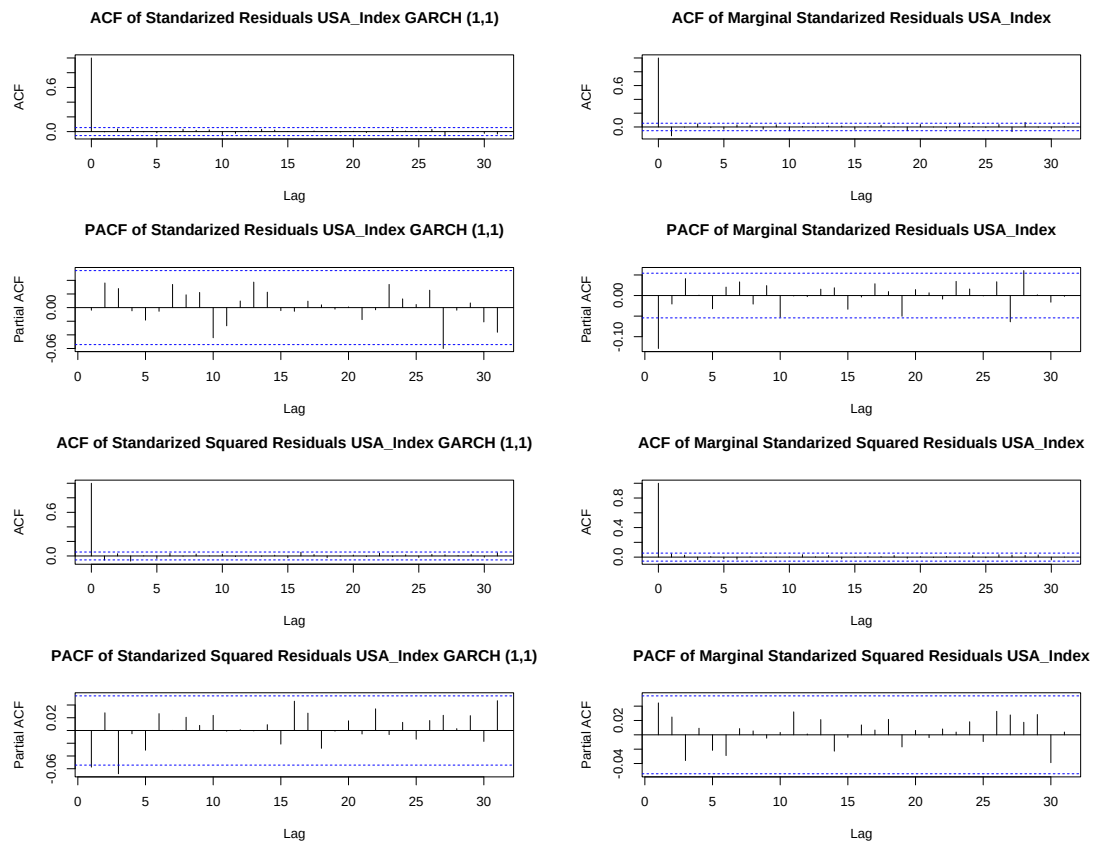


ANEXO B.5 Correlación dinámica condicionada del modelo MEWMA frente el índice estadounidense

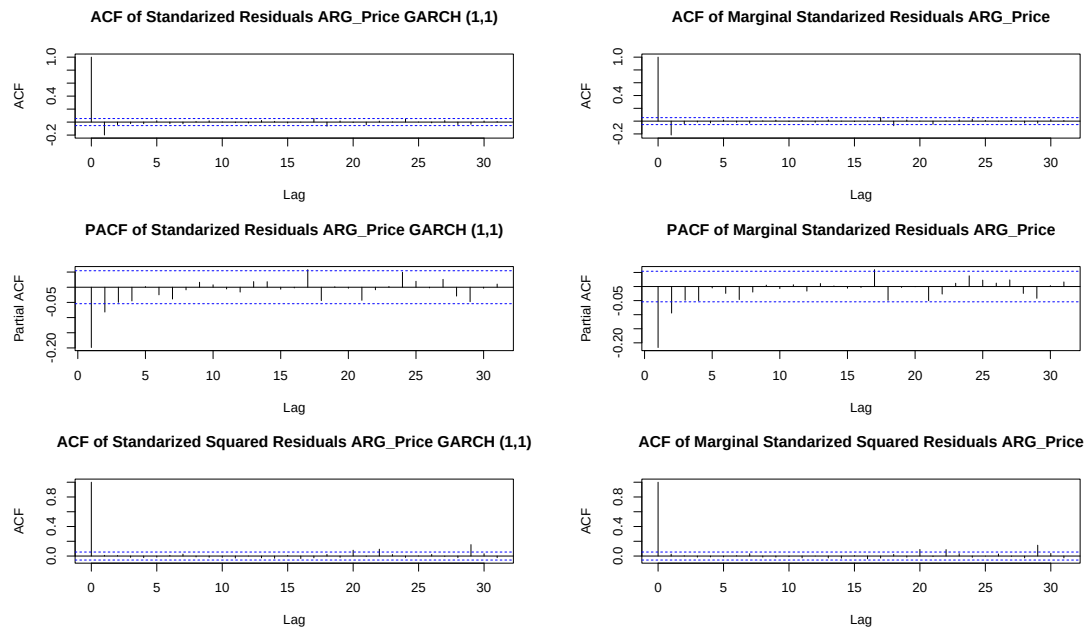


ANEXO B.6 Gráficos ACF, PACF y CCF del modelo DCC-Básico

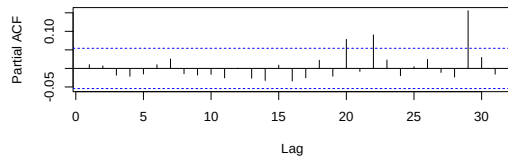
- **Usa Index**



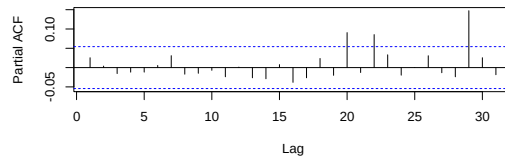
- **ARG Price**



PACF of Standardized Squared Residuals ARG_Price GARCH (1,1)

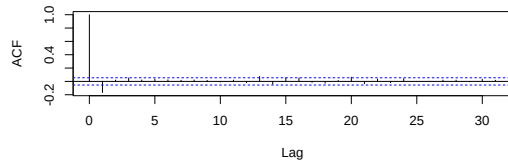


PACF of Marginal Standardized Squared Residuals ARG_Price

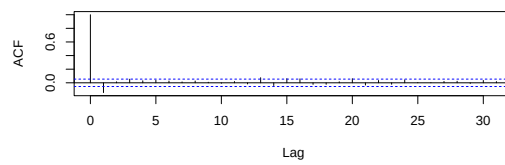


• EGPT Price

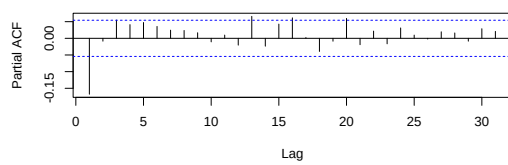
ACF of Standardized Residuals EGPT_Price GARCH (1,1)



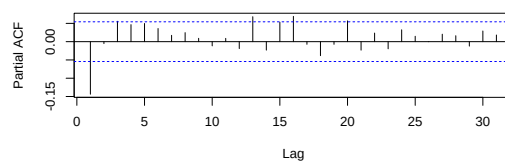
ACF of Marginal Standardized Residuals EGPT_Price



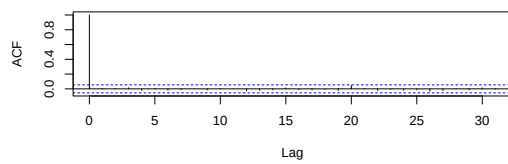
PACF of Standardized Residuals EGPT_Price GARCH (1,1)



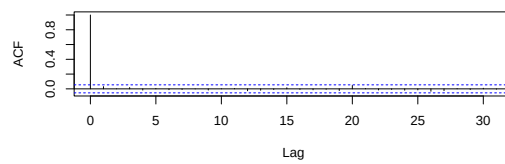
PACF of Marginal Standardized Residuals EGPT_Price



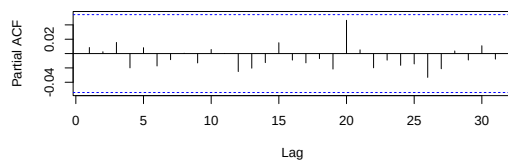
ACF of Standardized Squared Residuals EGPT_Price GARCH (1,1)



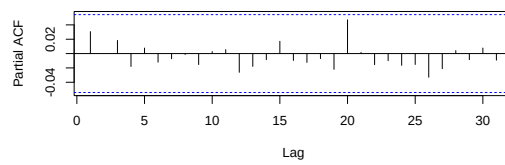
ACF of Marginal Standardized Squared Residuals EGPT_Price



PACF of Standardized Squared Residuals EGPT_Price GARCH (1,1)

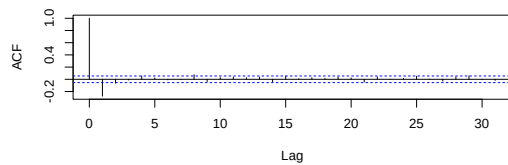


PACF of Marginal Standardized Squared Residuals EGPT_Price

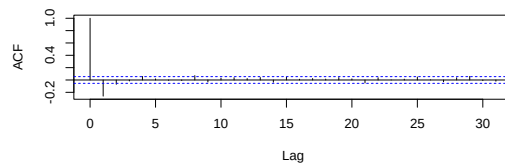


• GHA Price

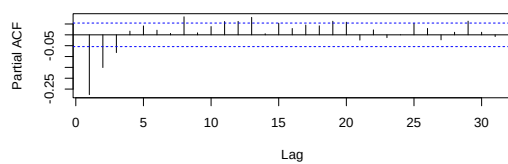
ACF of Standardized Residuals GHA_Price GARCH (1,1)



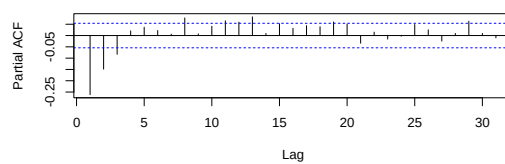
ACF of Marginal Standardized Residuals GHA_Price



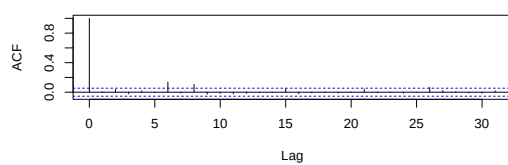
PACF of Standardized Residuals GHA_Price GARCH (1,1)



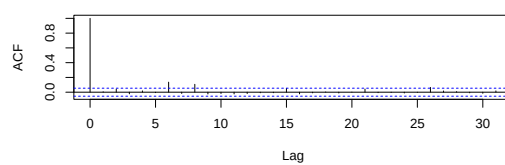
PACF of Marginal Standardized Residuals GHA_Price



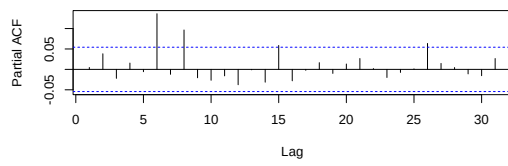
ACF of Standardized Squared Residuals GHA_Price GARCH (1,1)



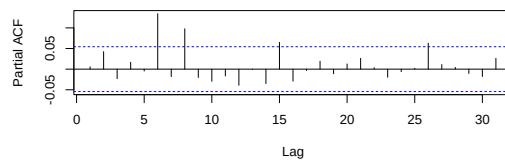
ACF of Marginal Standardized Squared Residuals GHA_Price



PACF of Standarized Squared Residuals GHA_Price GARCH (1,1)

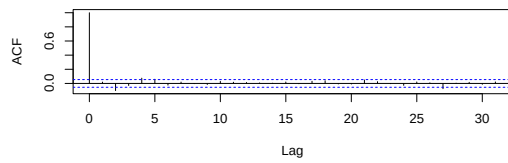


PACF of Marginal Standarized Squared Residuals GHA_Price

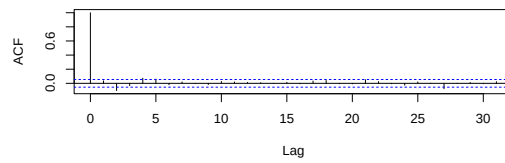


• KEN Price

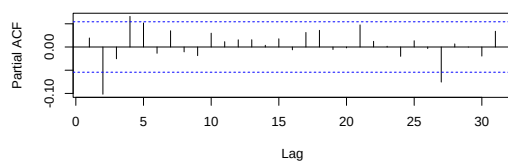
ACF of Standarized Residuals KEN_Price GARCH (1,1)



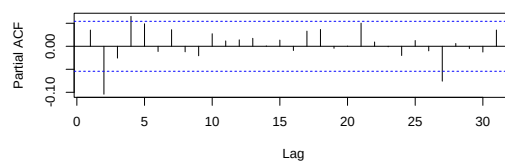
ACF of Marginal Standarized Residuals KEN_Price



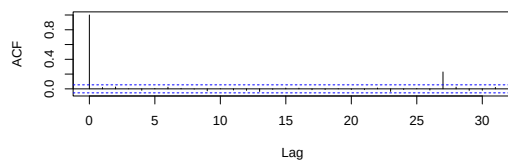
PACF of Standarized Residuals KEN_Price GARCH (1,1)



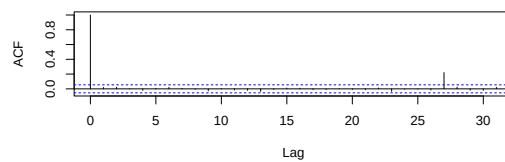
PACF of Marginal Standarized Residuals KEN_Price



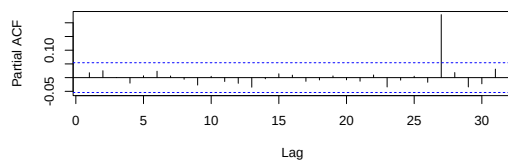
ACF of Standarized Squared Residuals KEN_Price GARCH (1,1)



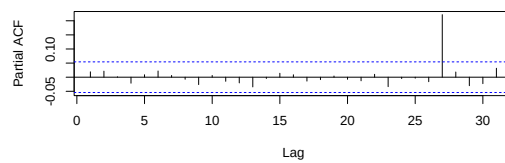
ACF of Marginal Standarized Squared Residuals KEN_Price



PACF of Standarized Squared Residuals KEN_Price GARCH (1,1)

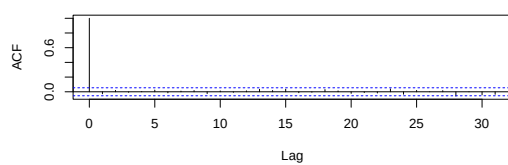


PACF of Marginal Standarized Squared Residuals KEN_Price

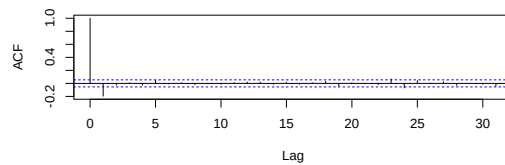


• MOR Price

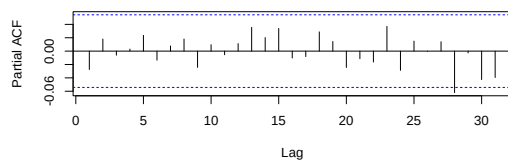
ACF of Standarized Residuals MOR_Price GARCH (1,1)



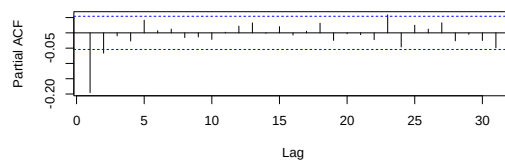
ACF of Marginal Standarized Residuals MOR_Price



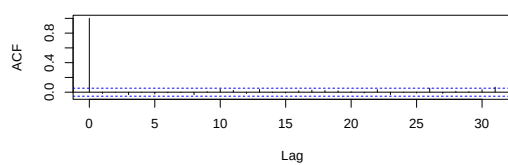
PACF of Standarized Residuals MOR_Price GARCH (1,1)



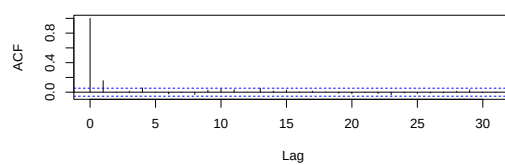
PACF of Marginal Standarized Residuals MOR_Price



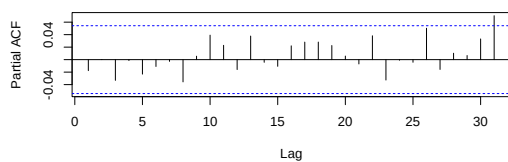
ACF of Standarized Squared Residuals MOR_Price GARCH (1,1)



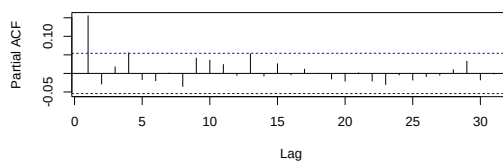
ACF of Marginal Standarized Squared Residuals MOR_Price



PACF of Standardized Squared Residuals MOR_Price GARCH (1,1)

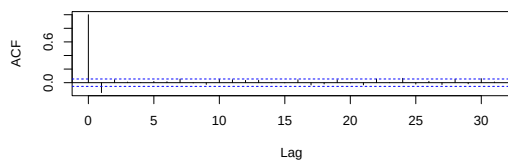


PACF of Marginal Standardized Squared Residuals MOR_Price

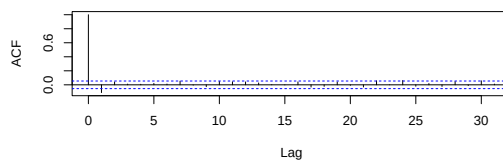


• NIG Price

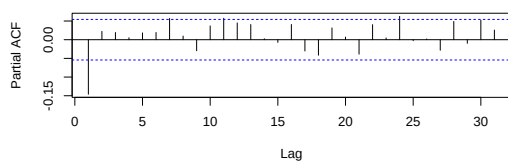
ACF of Standardized Residuals NIG_Price GARCH (1,1)



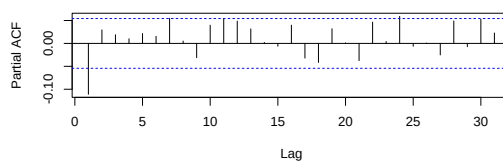
ACF of Marginal Standardized Residuals NIG_Price



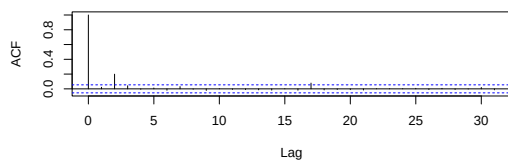
PACF of Standardized Residuals NIG_Price GARCH (1,1)



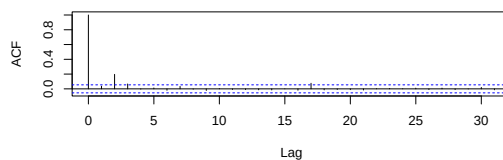
PACF of Marginal Standardized Residuals NIG_Price



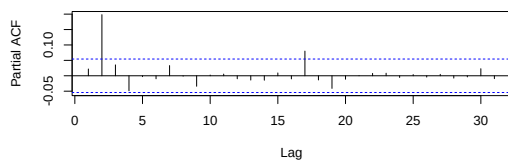
ACF of Standardized Squared Residuals NIG_Price GARCH (1,1)



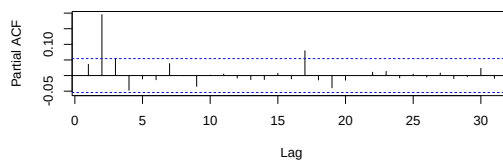
ACF of Marginal Standardized Squared Residuals NIG_Price



PACF of Standardized Squared Residuals NIG_Price GARCH (1,1)

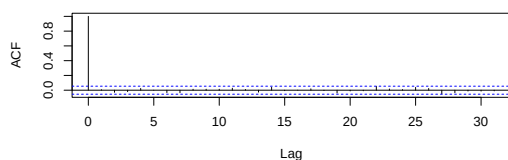


PACF of Marginal Standardized Squared Residuals NIG_Price

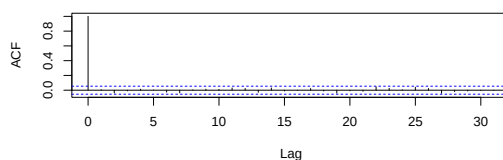


• SOUTHAFR Price

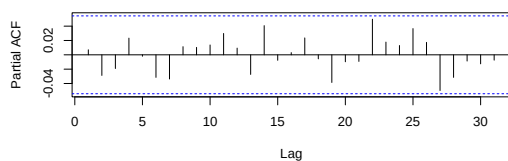
ACF of Standardized Residuals SOUTHAFR_Price GARCH (1,1)



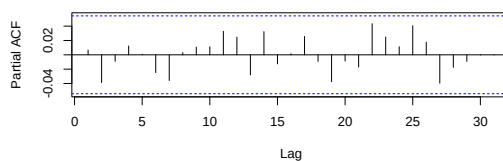
ACF of Marginal Standardized Residuals SOUTHAFR_Price



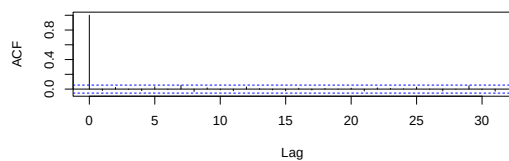
PACF of Standardized Residuals SOUTHAFR_Price GARCH (1,1)



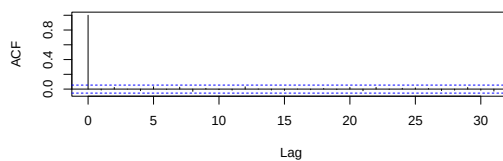
PACF of Marginal Standardized Residuals SOUTHAFR_Price



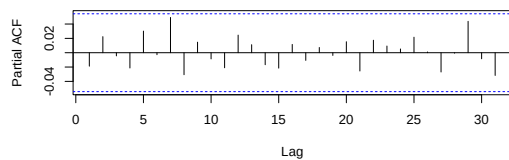
ACF of Standarized Squared Residuals SOUTHAFR_Price GARCH (1,1)



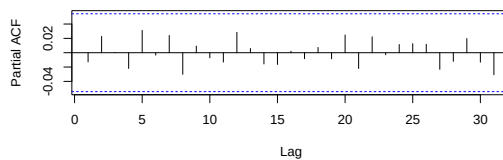
ACF of Marginal Standardized Squared Residuals SOUTHAFR_Price



PACF of Standarized Squared Residuals SOUTHAFR_Price GARCH (1,1)

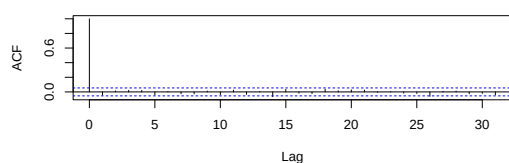


PACF of Marginal Standarized Squared Residuals SOUTHAFR_Price

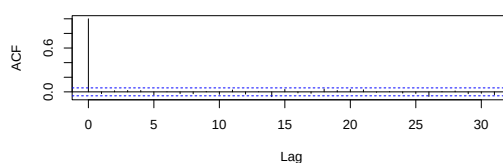


- TAN Price

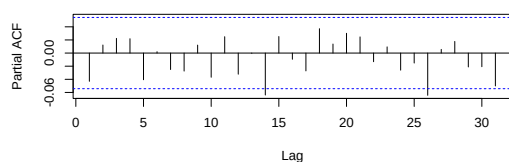
ACF of Standarized Residuals TAN_Price GARCH (1,1)



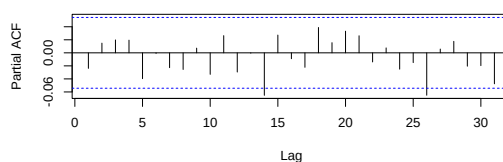
ACF of Marginal Standarized Residuals TAN_Price



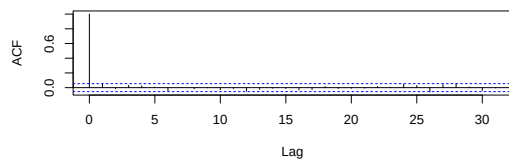
PACF of Standarized Residuals TAN_Price GARCH (1,1)



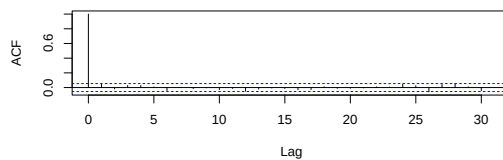
PACF of Marginal Standarized Residuals TAN_Price



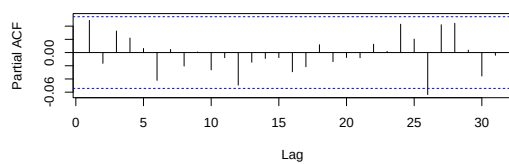
ACF of Standarized Squared Residuals TAN_Price GARCH (1,1)



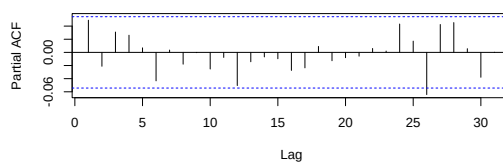
ACF of Marginal Standarized Squared Residuals TAN_Price



PACF of Standarized Squared Residuals TAN_Price GARCH (1,1)

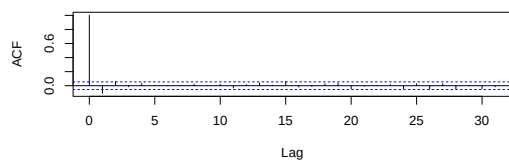


PACF of Marginal Standardized Squared Residuals TAN_Price

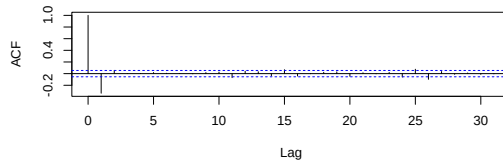


- TUN Price

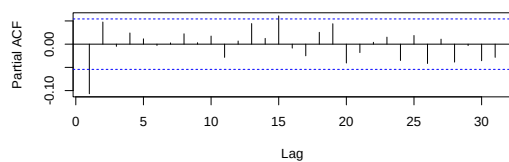
ACF of Standarized Residuals TUN_Price GARCH (1,1)



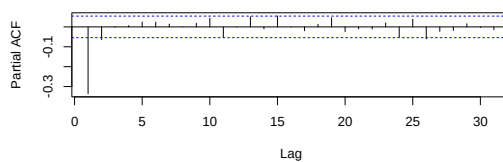
ACF of Marginal Standarized Residuals TUN_Price



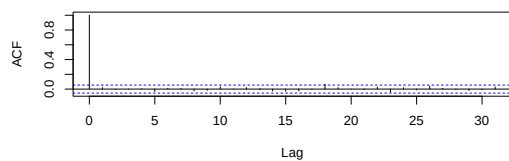
PACF of Standarized Residuals TUN_Price GARCH (1,1)



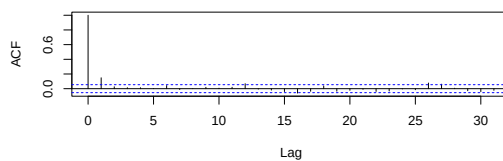
PACF of Marginal Standarized Residuals TUN_Price



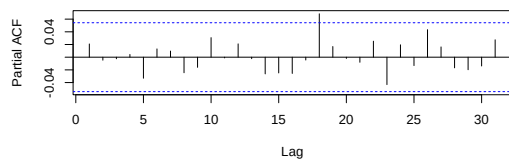
ACF of Standardized Squared Residuals TUN_Price GARCH (1,1)



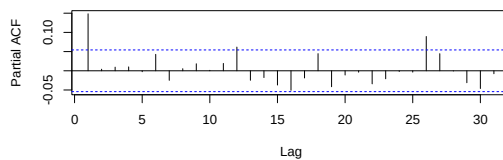
ACF of Marginal Standardized Squared Residuals TUN_Price



PACF of Standardized Squared Residuals TUN_Price GARCH (1,1)

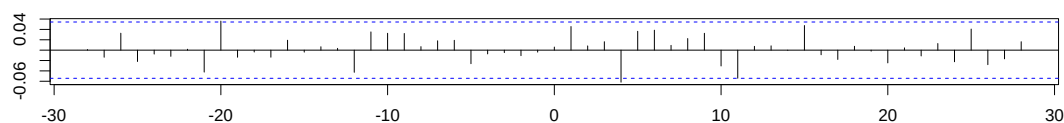


PACF of Marginal Standardized Squared Residuals TUN_Price

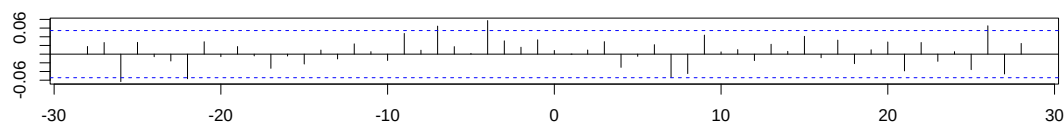


- Gráfico CCF

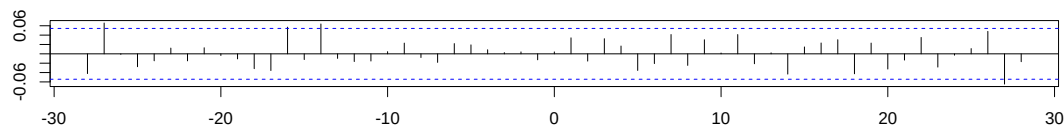
Cross Correlation Standardized Residuals of ARG_Price with USA_Index



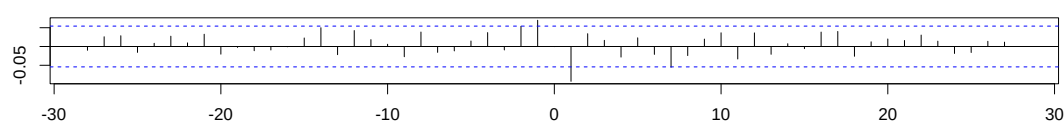
Cross Correlation Standardized Residuals of EGPT_Price with USA_Index



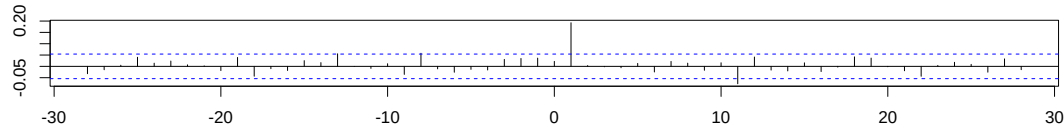
Cross Correlation Standardized Residuals of GHA_Price with USA_Index



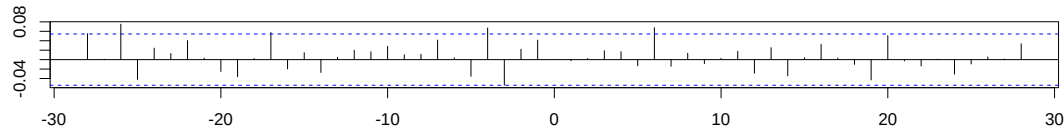
Cross Correlation Standardized Residuals of KEN_Price with USA_Index



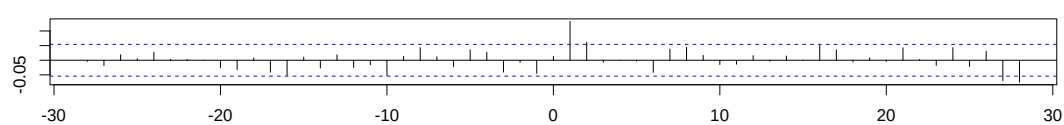
Cross Correlation Standardized Residuals of MOR_Price with USA_Index

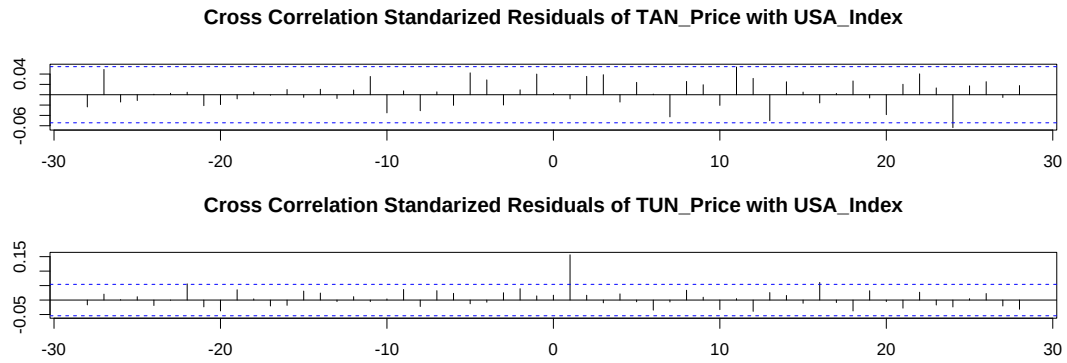


Cross Correlation Standardized Residuals of NIG_Price with USA_Index



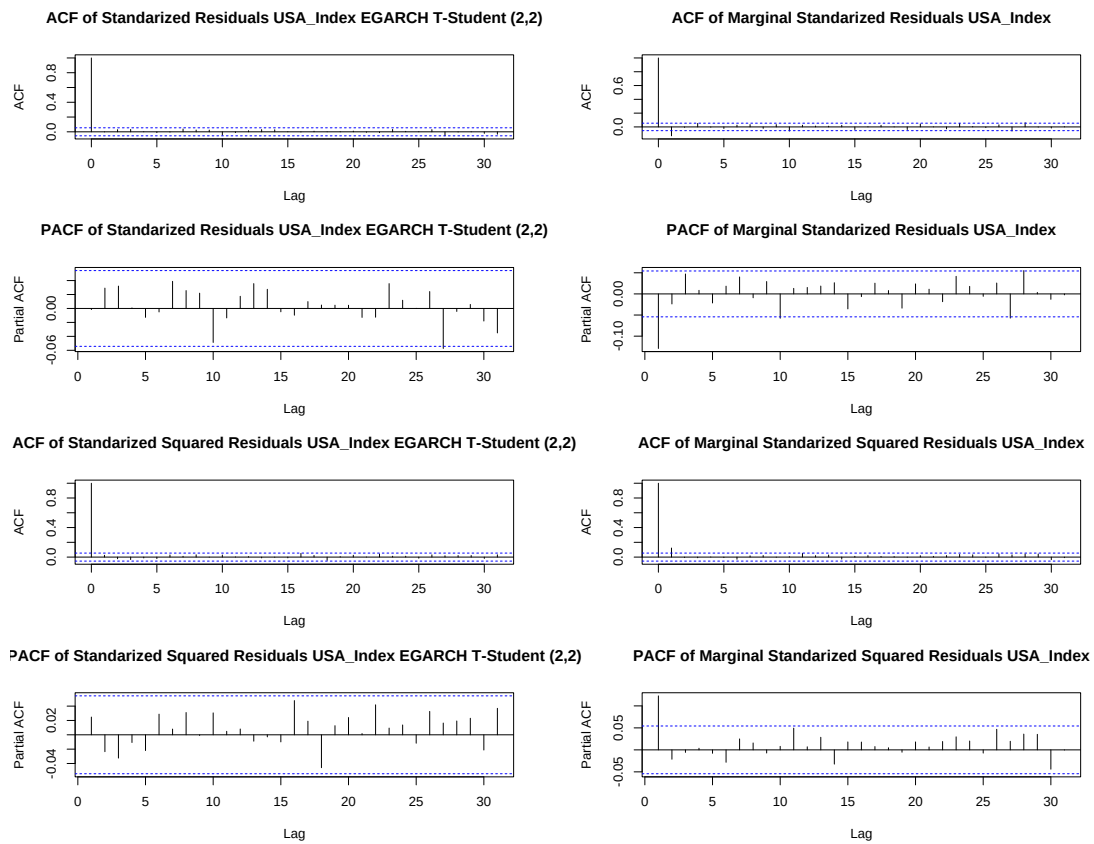
Cross Correlation Standardized Residuals of SOUTHAFR_Price with USA_Index



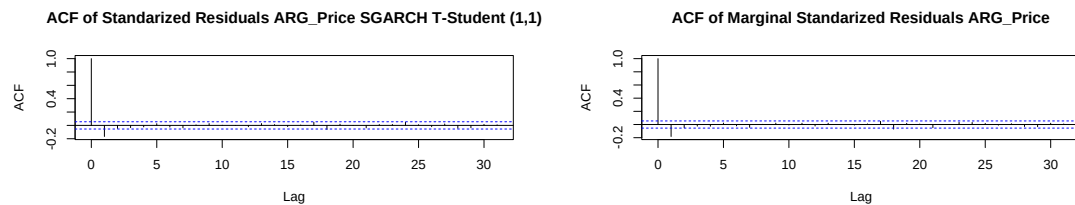


ANEXO B.7 Gráficos ACF, PACF y CCF del modelo DCC-Vertical

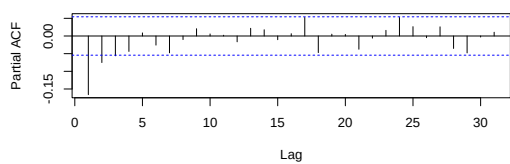
• Usa Index



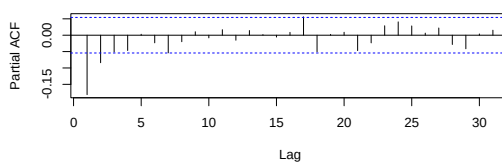
• ARG Price



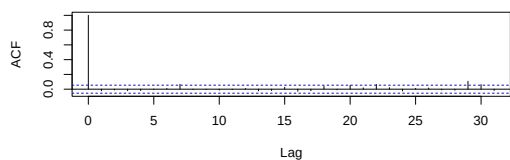
PACF of Standardized Residuals ARG_Price SGARCH T-Student (1,1)



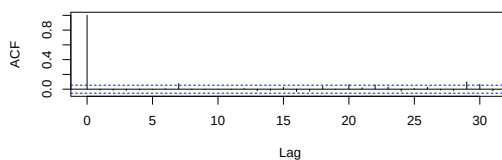
PACF of Marginal Standardized Residuals ARG_Price



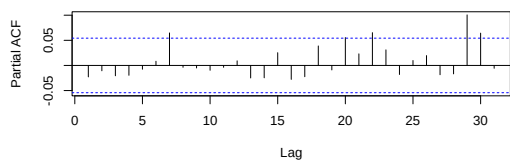
ACF of Standardized Squared Residuals ARG_Price SGARCH T-Student (1,1)



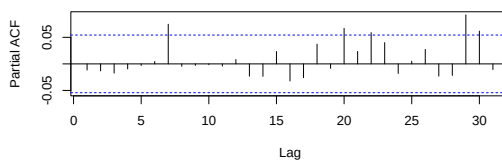
ACF of Marginal Standardized Squared Residuals ARG_Price



PACF of Standardized Squared Residuals ARG_Price SGARCH T-Student (1,1)

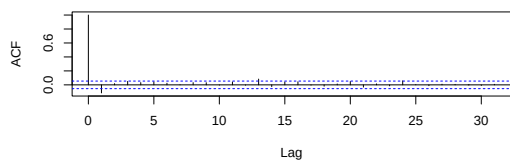


PACF of Marginal Standardized Squared Residuals ARG_Price

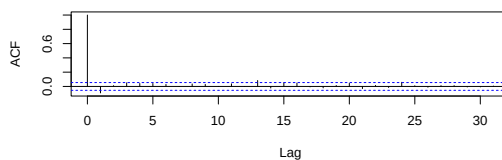


- EGPT Price**

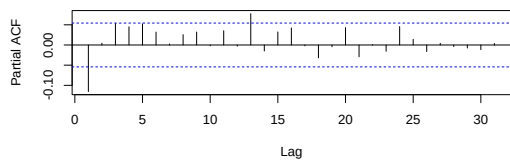
ACF of Standardized Residuals EGPT_Price EGARCH T-Student (4,3)



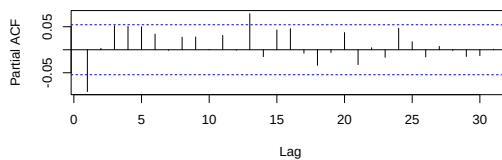
ACF of Marginal Standardized Residuals EGPT_Price



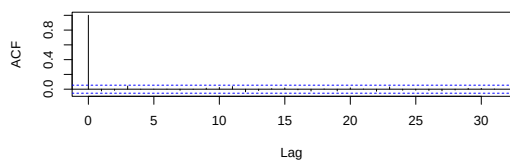
PACF of Standardized Residuals EGPT_Price EGARCH T-Student (4,3)



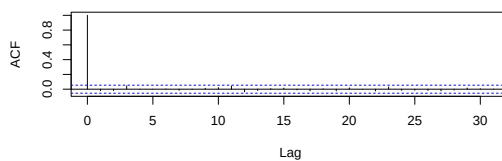
PACF of Marginal Standardized Residuals EGPT_Price



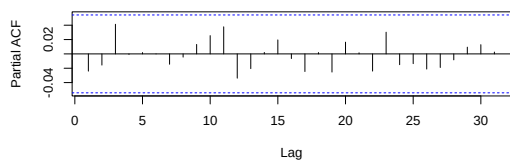
ACF of Standardized Squared Residuals EGPT_Price EGARCH T-Student (4,3)



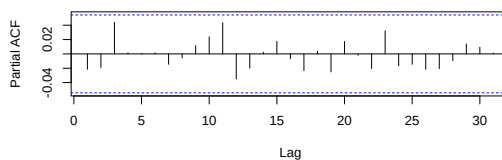
ACF of Marginal Standardized Squared Residuals EGPT_Price



PACF of Standardized Squared Residuals EGPT_Price EGARCH T-Student (4,3)

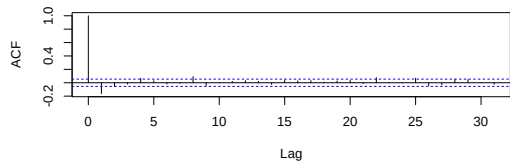


PACF of Marginal Standardized Squared Residuals EGPT_Price

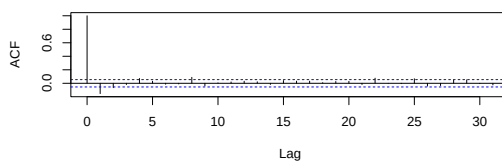


- GHA Price**

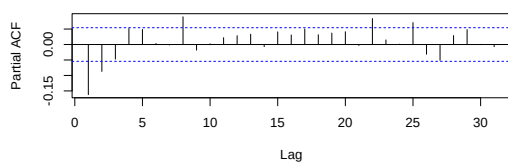
ACF of Standardized Residuals GHA_Price EGARCH T-Student (1,2)



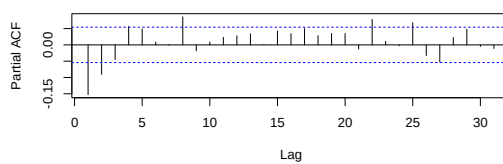
ACF of Marginal Standardized Residuals GHA_Price



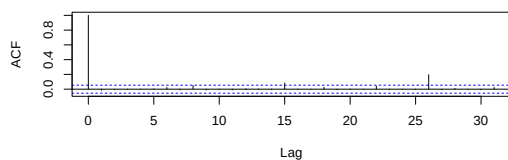
PACF of Standardized Residuals GHA_Price EGARCH T-Student (1,2)



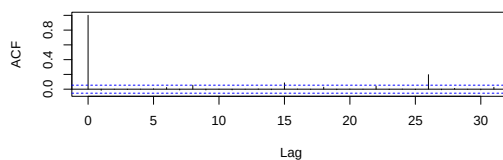
PACF of Marginal Standardized Residuals GHA_Price



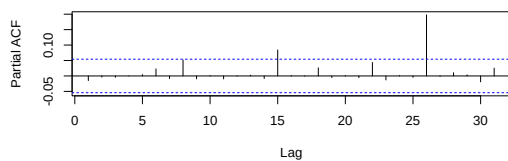
ACF of Standardized Squared Residuals GHA_Price EGARCH T-Student (1,2)



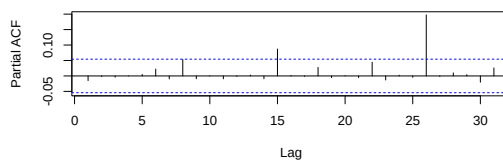
ACF of Marginal Standardized Squared Residuals GHA_Price



PACF of Standardized Squared Residuals GHA_Price EGARCH T-Student (1,2)

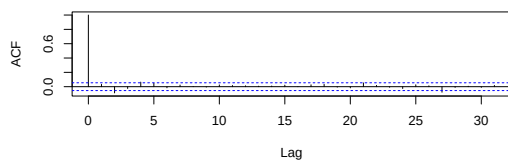


PACF of Marginal Standardized Squared Residuals GHA_Price

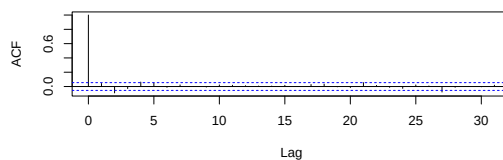


• KEN Price

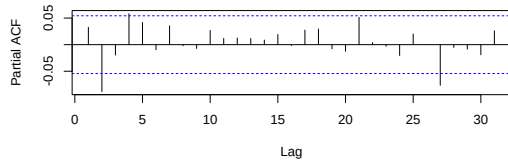
ACF of Standardized Residuals KEN_Price SGARCH T-Student (1,1)



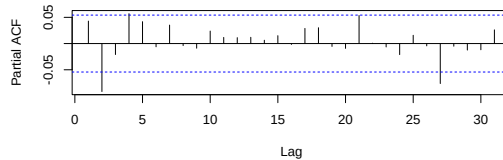
ACF of Marginal Standardized Residuals KEN_Price



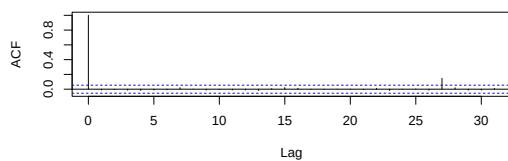
PACF of Standardized Residuals KEN_Price SGARCH T-Student (1,1)



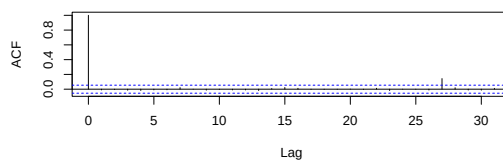
PACF of Marginal Standardized Residuals KEN_Price



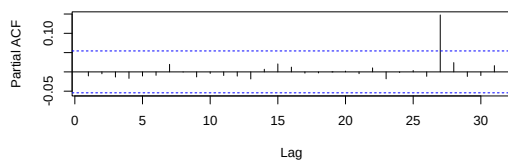
ACF of Standardized Squared Residuals KEN_Price SGARCH T-Student (1,1)



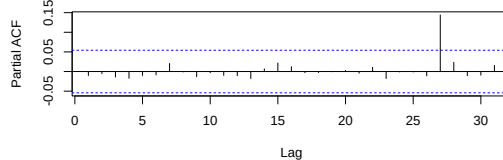
ACF of Marginal Standardized Squared Residuals KEN_Price



PACF of Standardized Squared Residuals KEN_Price SGARCH T-Student (1,1)

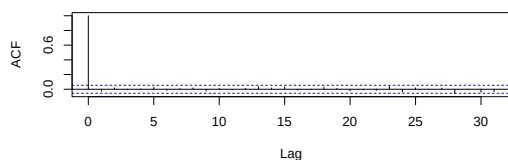


PACF of Marginal Standardized Squared Residuals KEN_Price

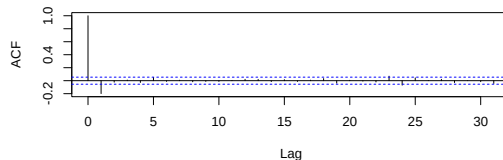


• MOR Price

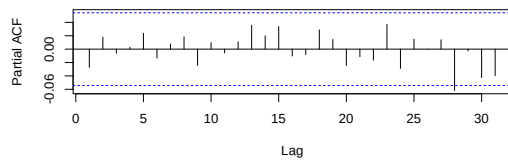
ACF of Standardized Residuals MOR_Price SGARCH Skewed Normal (1,1)



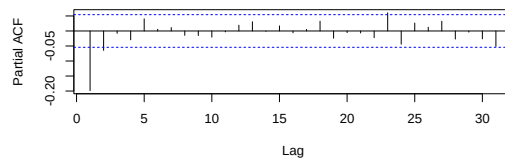
ACF of Marginal Standardized Residuals MOR_Price



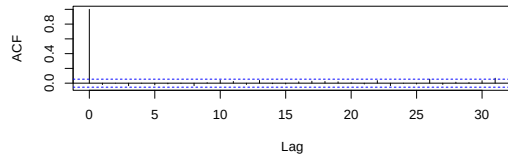
PACF of Standarized Residuals MOR_Price SGARCH Skewed Normal (1,1)



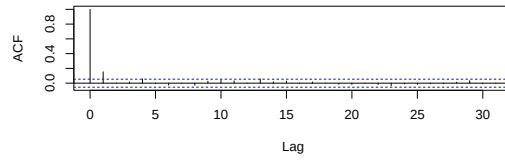
PACF of Marginal Standarized Residuals MOR_Price



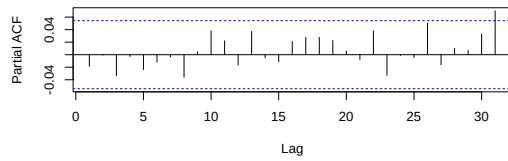
ACF of Standarized Squared Residuals MOR SGARCH Skewed Normal (1,1)



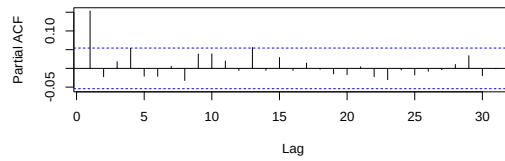
ACF of Marginal Standarized Squared Residuals MOR_Price



PACF of Standarized Squared Residuals MOR SGARCH Skewed Normal (1,1)

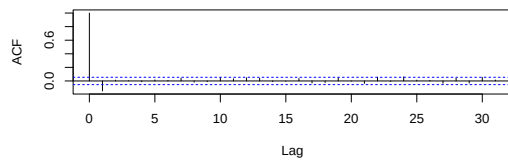


PACF of Marginal Standarized Squared Residuals MOR_Price

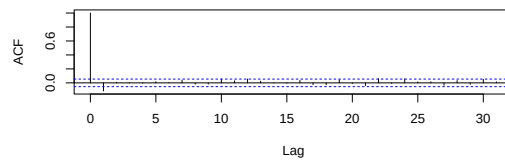


• NIG Price

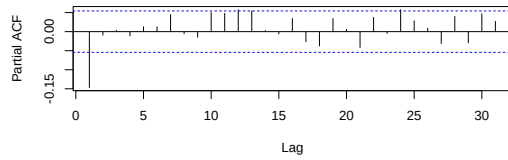
ACF of Standarized Residuals NIG_Price EGARCH T-Student (1,1)



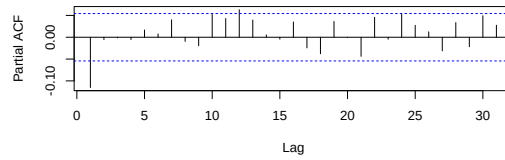
ACF of Marginal Standarized Residuals NIG_Price



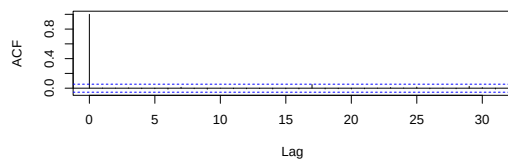
PACF of Standarized Residuals NIG_Price EGARCH T-Student (1,1)



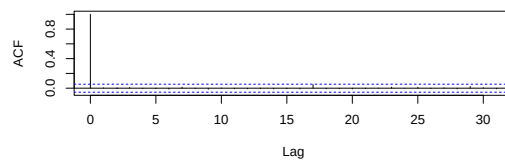
PACF of Marginal Standarized Residuals NIG_Price



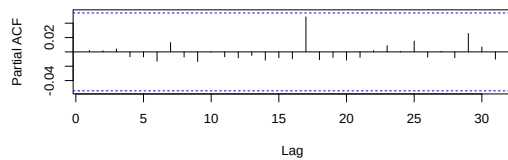
ACF of Standarized Squared Residuals NIG_Price EGARCH T-Student (1,1)



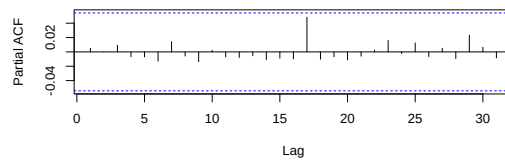
ACF of Marginal Standarized Squared Residuals NIG_Price



PACF of Standarized Squared Residuals NIG_Price EGARCH T-Student (1,1)

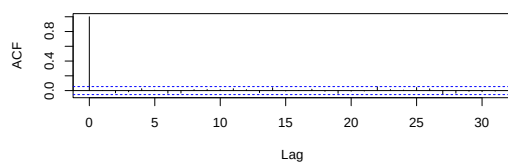


PACF of Marginal Standarized Squared Residuals NIG_Price

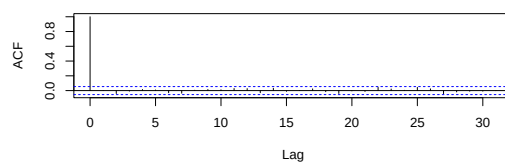


• SOUTHAFR Price

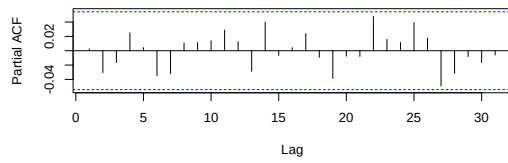
ACF of Standarized Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)



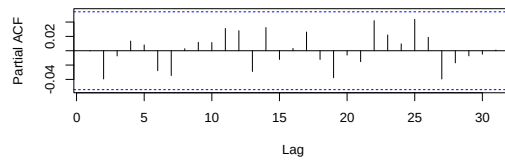
ACF of Marginal Standarized Residuals SOUTHAFR_Price



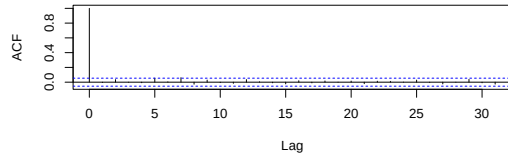
PACF of Standardized Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)



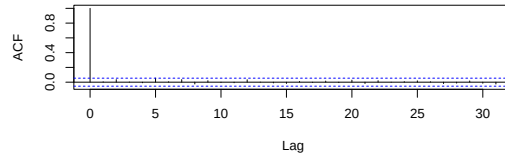
PACF of Marginal Standardized Residuals SOUTHAFR_Price



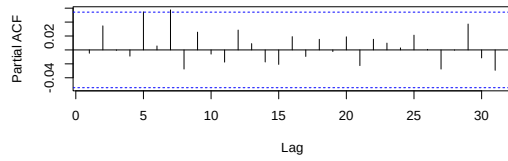
ACF Stand. Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)



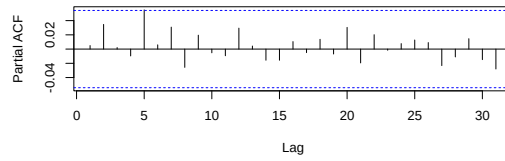
ACF of Marginal Standardized Squared Residuals SOUTHAFR_Price



PACF Stand. Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)

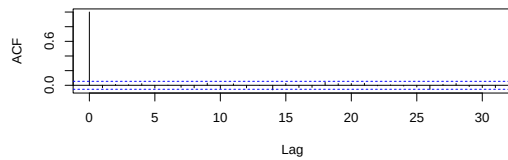


PACF of Marginal Standardized Squared Residuals SOUTHAFR_Price

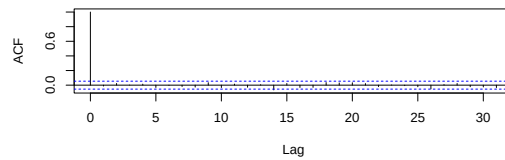


• TAN Price

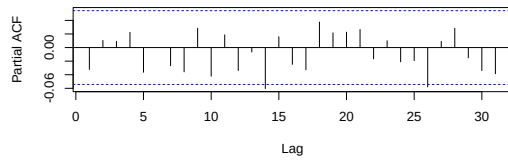
ACF of Standardized Residuals TAN_Price EGARCH T-Student (1,2)



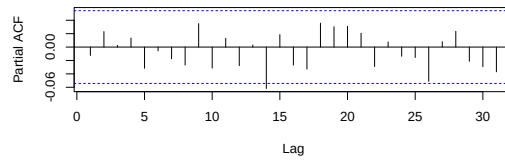
ACF of Marginal Standardized Residuals TAN_Price



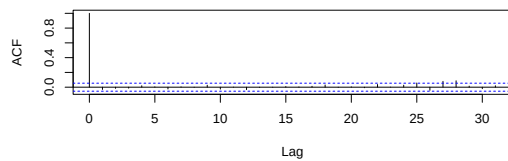
PACF of Standardized Residuals TAN_Price EGARCH T-Student (1,2)



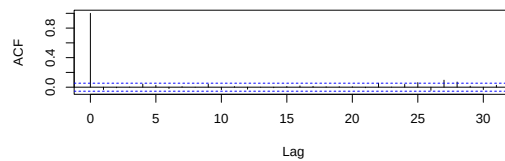
PACF of Marginal Standardized Residuals TAN_Price



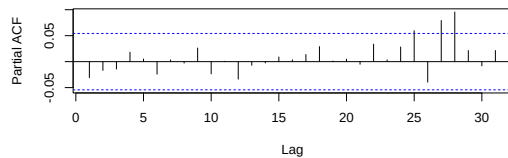
ACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,2)



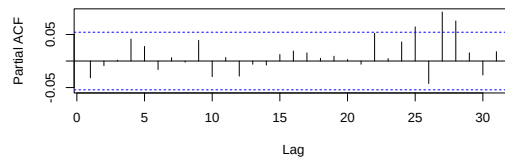
ACF of Marginal Standardized Squared Residuals TAN_Price



PACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,2)

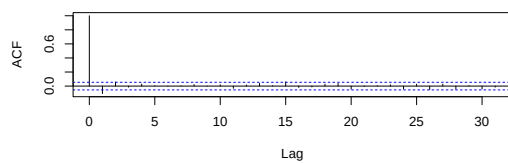


PACF of Marginal Standardized Squared Residuals TAN_Price

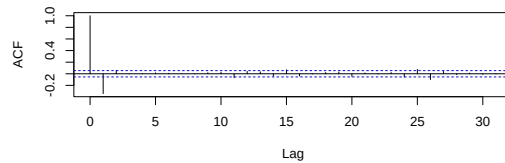


• TUN Price

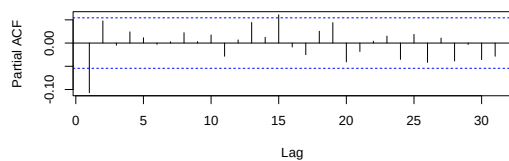
ACF of Standardized Residuals TUN_Price SGARCH Normal (1,1)



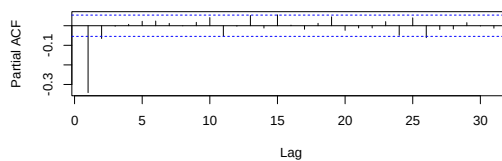
ACF of Marginal Standardized Residuals TUN_Price



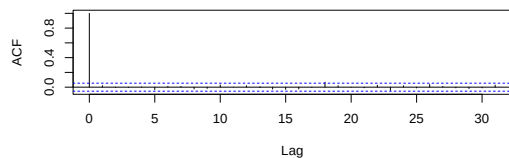
ACF of Standardized Residuals TUN_Price SGARCH Normal (1,1)



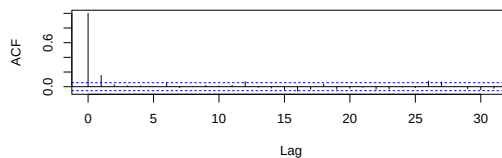
ACF of Marginal Standardized Residuals TUN_Price



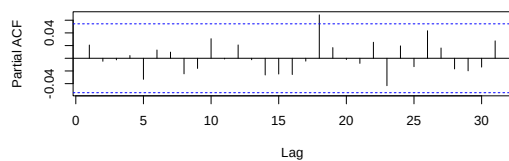
ACF of Standardized Squared Residuals TUN_Price SGARCH Normal (1,1)



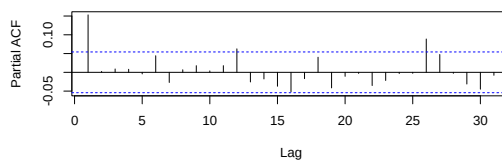
ACF of Marginal Standardized Squared Residuals TUN_Price



PACF of Standardized Squared Residuals TUN_Price SGARCH Normal (1,1)

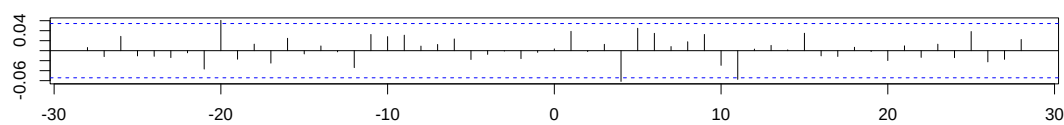


PACF of Marginal Standardized Squared Residuals TUN_Price

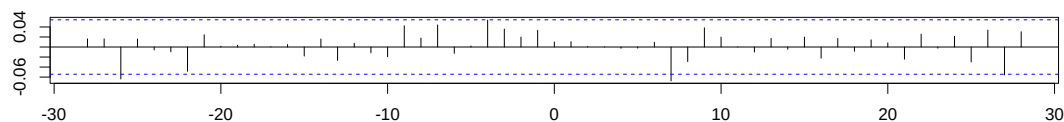


- Gráficos CCF

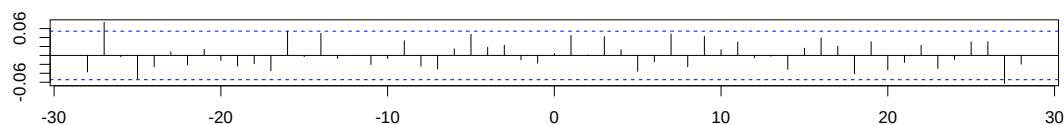
Cross Correlation Standardized Residuals of ARG_Price with USA_Index



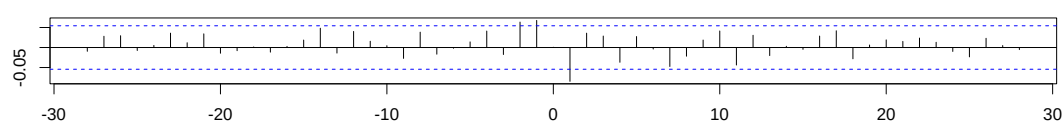
Cross Correlation Standardized Residuals of EGPT_Price with USA_Index



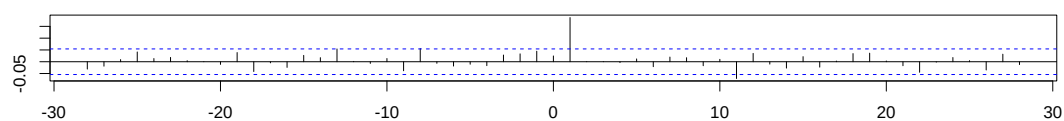
Cross Correlation Standardized Residuals of GHA_Price with USA_Index



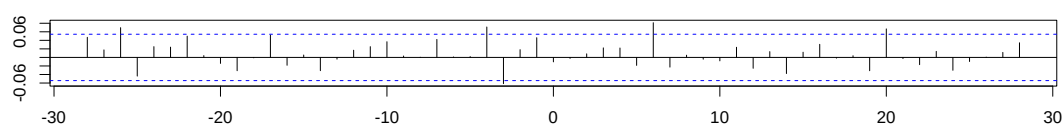
Cross Correlation Standardized Residuals of KEN_Price with USA_Index



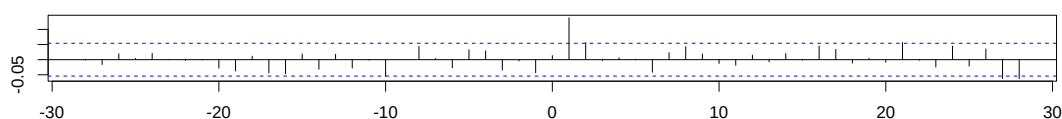
Cross Correlation Standardized Residuals of MOR_Price with USA_Index



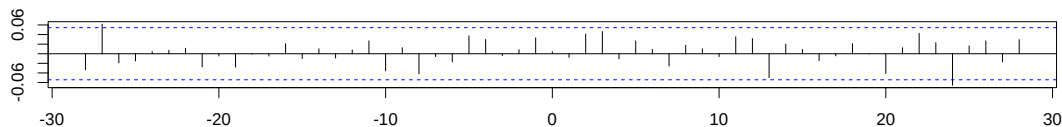
Cross Correlation Standardized Residuals of NIG_Price with USA_Index



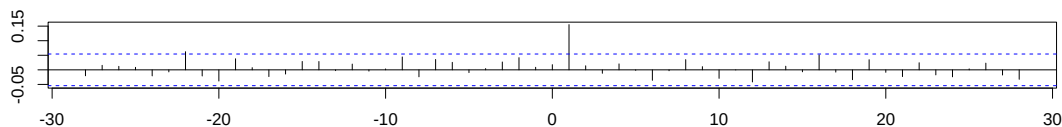
Cross Correlation Standardized Residuals of SOUTHAFR_Price with USA_Index



Cross Correlation Standardized Residuals of TAN_Price with USA_Index



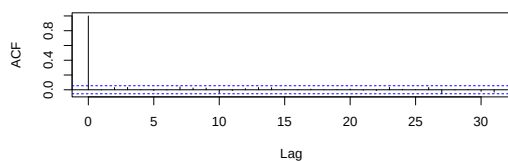
Cross Correlation Standardized Residuals of TUN_Price with USA_Index



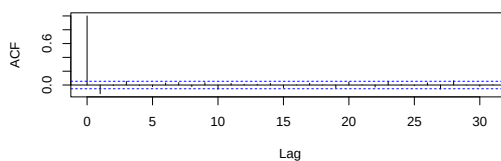
ANEXO B.8 Gráficos ACF, PACF y CCF del modelo DCC-Horizontal

• Usa Index

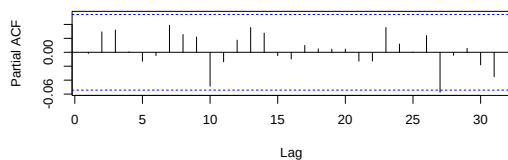
ACF of Standardized Residuals USA_Index EGARCH Skewed T-Student (2,2)



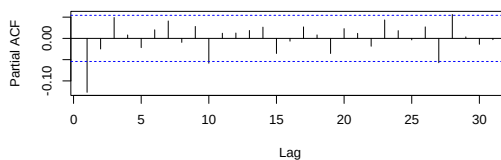
ACF of Marginal Standardized Residuals USA_Index



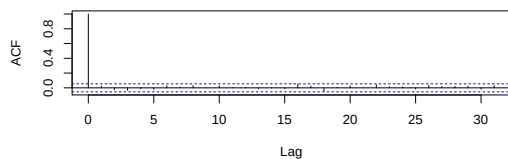
PACF of Standardized Residuals USA_Index EGARCH Skewed T-Student (2,2)



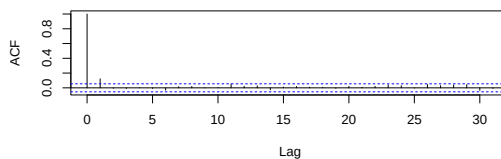
PACF of Marginal Standardized Residuals USA_Index



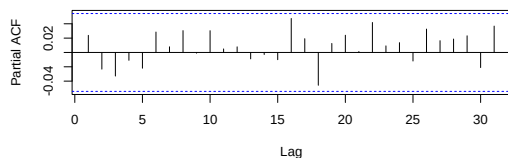
ACF of Standardized Squared Residuals USA_Index EGARCH Skewed T-Student (2,2)



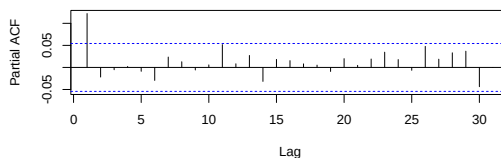
ACF of Marginal Standardized Squared Residuals USA_Index



PACF of Standardized Squared Residuals USA_Index EGARCH Skewed T-Student (2,2)

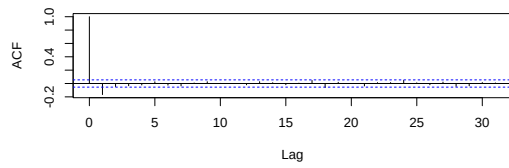


PACF of Marginal Standardized Squared Residuals USA_Index

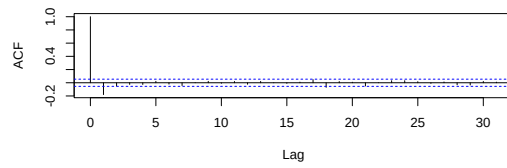


- **ARG Price**

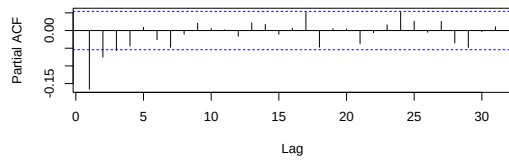
ACF of Standardized Residuals ARG_Price SGARCH T-Student (1,1)



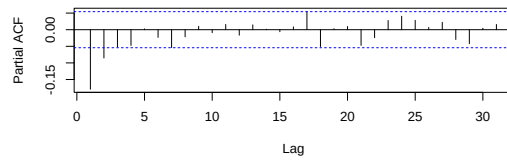
ACF of Marginal Standardized Residuals ARG_Price



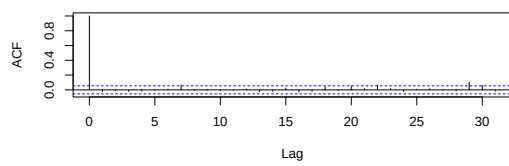
PACF of Standardized Residuals ARG_Price SGARCH T-Student (1,1)



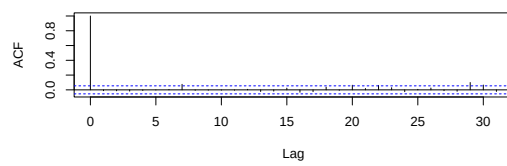
PACF of Marginal Standardized Residuals ARG_Price



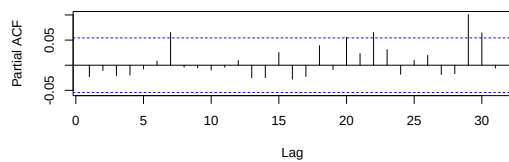
ACF of Standardized Squared Residuals ARG_Price SGARCH T-Student (1,1)



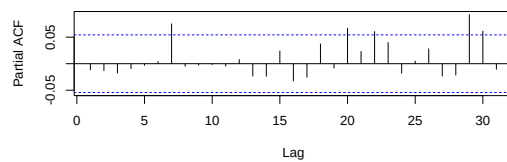
ACF of Marginal Standardized Squared Residuals ARG_Price



PACF of Standardized Squared Residuals ARG_Price SGARCH T-Student (1,1)

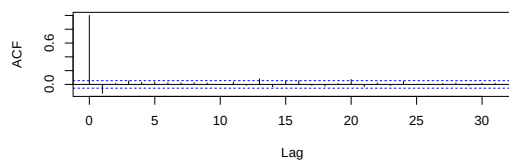


PACF of Marginal Standardized Squared Residuals ARG_Price

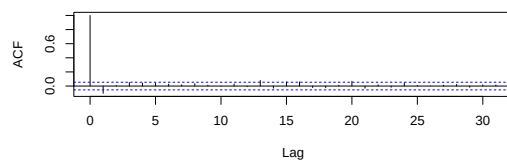


- **EGPT Price**

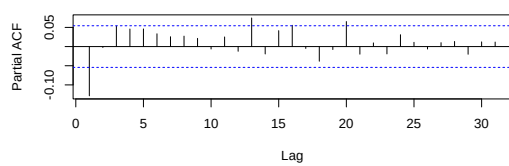
ACF of Standardized Residuals EGPT_Price TGARCH T-Student (2,2)



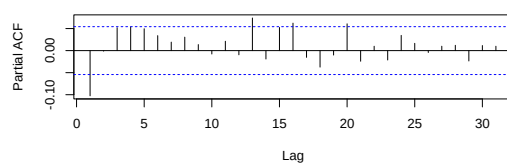
ACF of Marginal Standardized Residuals EGPT_Price



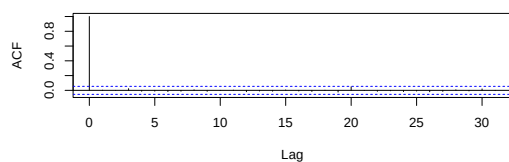
PACF of Standardized Residuals EGPT_Price TGARCH T-Student (2,2)



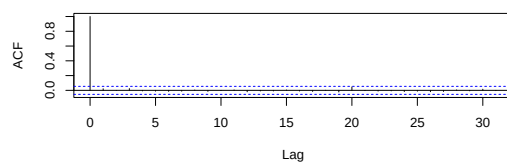
PACF of Marginal Standardized Residuals EGPT_Price



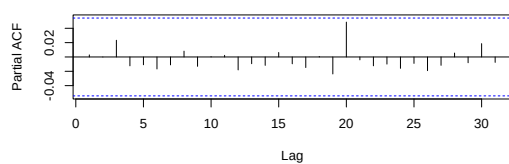
ACF of Standardized Squared Residuals EGPT_Price TGARCH T-Student (2,2)



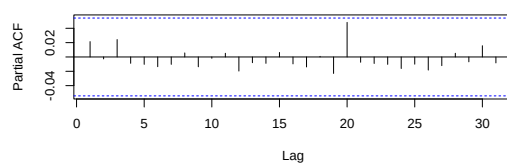
ACF of Marginal Standardized Squared Residuals EGPT_Price



PACF of Standardized Squared Residuals EGPT_Price TGARCH T-Student (2,2)

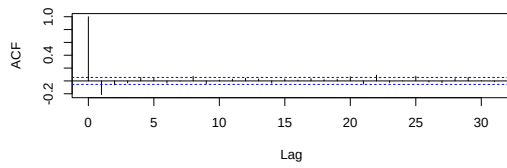


PACF of Marginal Standardized Squared Residuals EGPT_Price

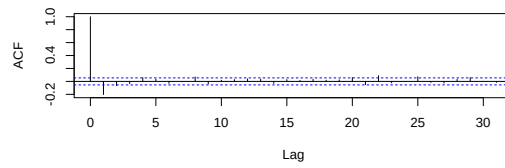


- **GHA Price**

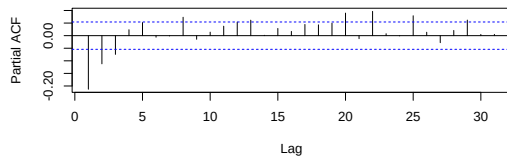
ACF of Standardized Residuals GHA_Price SGARCH Skewed T-Student (1,1)



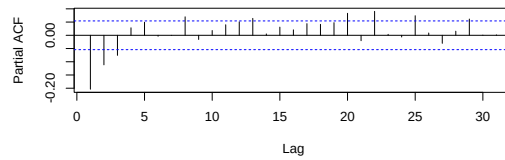
ACF of Marginal Standardized Residuals GHA_Price



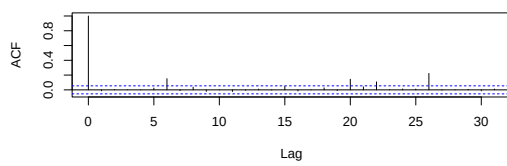
PACF of Standardized Residuals GHA_Price SGARCH Skewed T-Student (1,1)



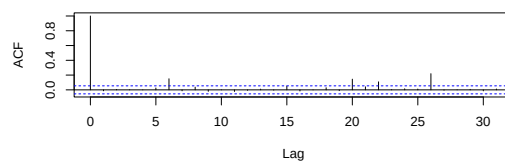
PACF of Marginal Standardized Residuals GHA_Price



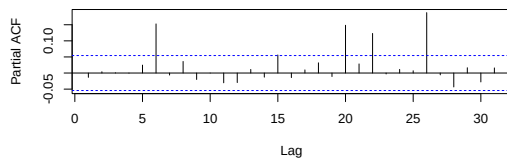
ACF of Standardized Squared Residuals GHA_Price SGARCH Skewed T-Student (1,1)



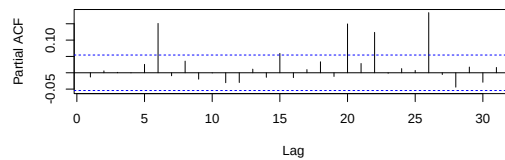
ACF of Marginal Standardized Squared Residuals GHA_Price



PACF of Standardized Squared Residuals GHA_Price SGARCH Skewed T-Student (1,1)

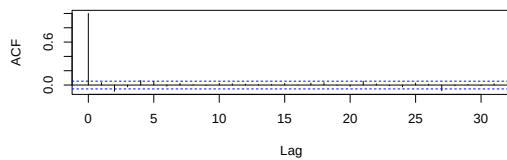


PACF of Marginal Standardized Squared Residuals GHA_Price

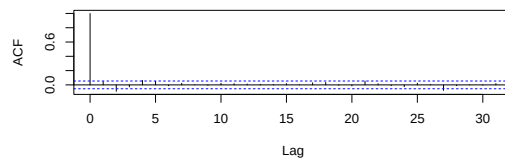


- **KEN Price**

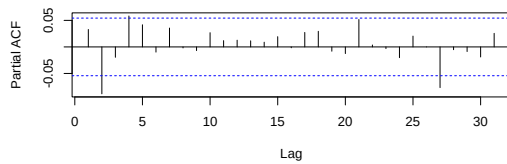
ACF of Standardized Residuals KEN_Price SGARCH Skewed T-Student (1,1)



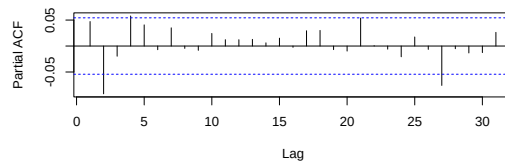
ACF of Marginal Standardized Residuals KEN_Price



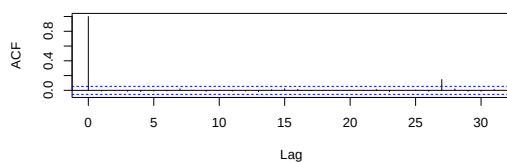
PACF of Standardized Residuals KEN_Price SGARCH Skewed T-Student (1,1)



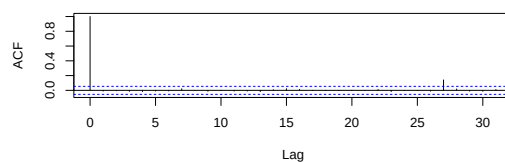
PACF of Marginal Standardized Residuals KEN_Price



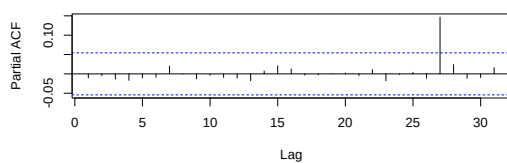
ACF of Standardized Squared Residuals KEN_Price SGARCH Skewed T-Student (1,1)



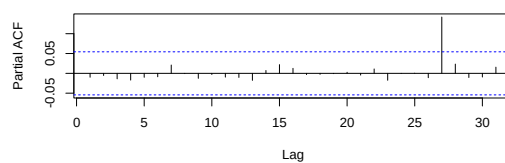
ACF of Marginal Standardized Squared Residuals KEN_Price



PACF of Standardized Squared Residuals KEN_Price SGARCH Skewed T-Student (1,1)

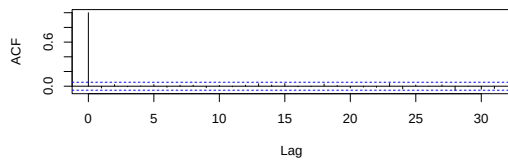


PACF of Marginal Standardized Squared Residuals KEN_Price

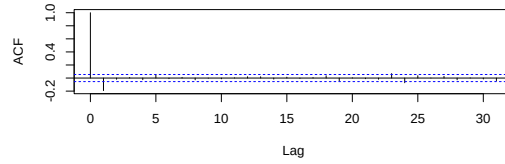


- **MOR Price**

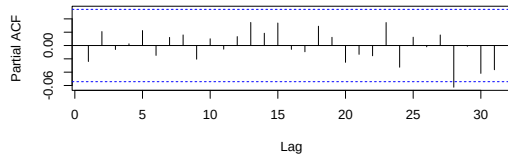
ACF of Standardized Residuals MOR_Price EGARCH T-Student (1,1)



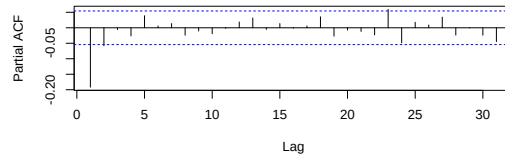
ACF of Marginal Standardized Residuals MOR_Price



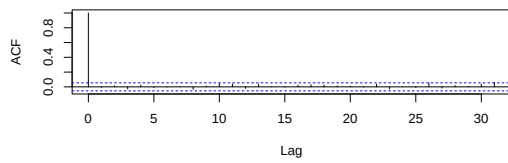
PACF of Standardized Residuals MOR_Price EGARCH T-Student (1,1)



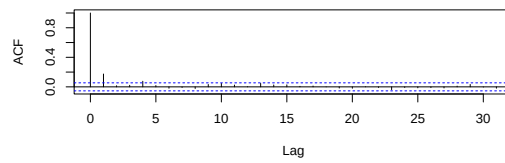
PACF of Marginal Standardized Residuals MOR_Price



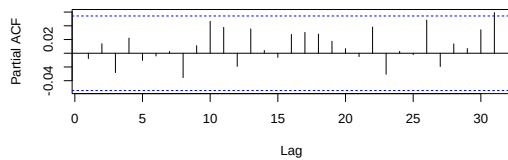
ACF of Standardized Squared Residuals MOR_Price EGARCH T-Student (1,1)



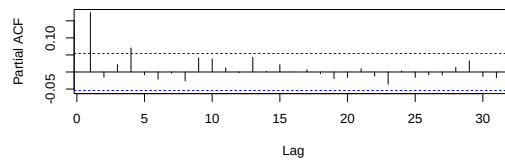
ACF of Marginal Standardized Squared Residuals MOR_Price



PACF of Standardized Squared Residuals MOR_Price EGARCH T-Student (1,1)

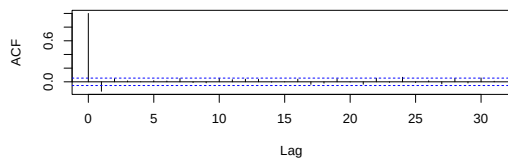


PACF of Marginal Standardized Squared Residuals MOR_Price

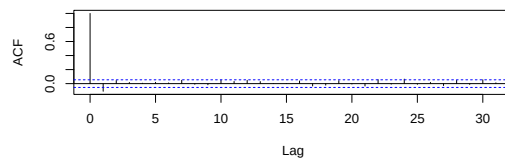


- **NIG Price**

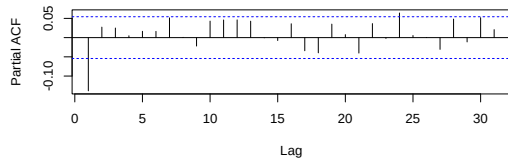
ACF of Standardized Residuals NIG_Price SGARCH Skewed T-Student (1,1)



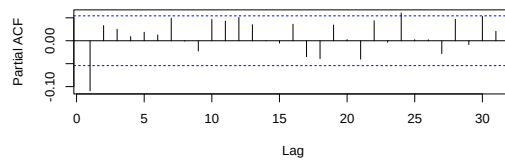
ACF of Marginal Standardized Residuals NIG_Price



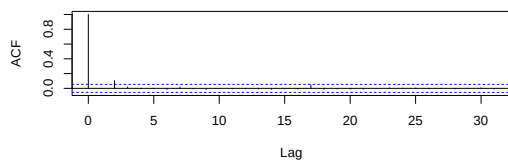
PACF of Standardized Residuals NIG_Price SGARCH Skewed T-Student (1,1)



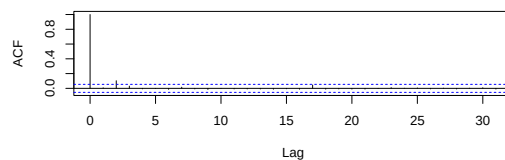
PACF of Marginal Standardized Residuals NIG_Price



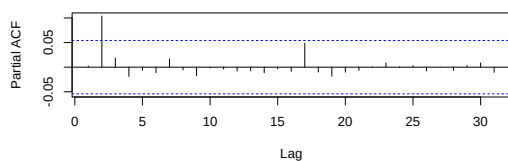
ACF of Stand. Squared Residuals NIG_Price SGARCH Skewed T-Student (1,1)



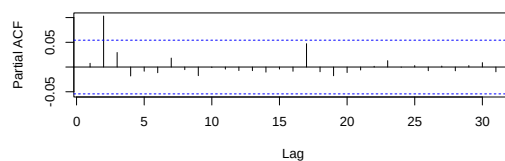
ACF of Marginal Standardized Squared Residuals NIG_Price



PACF Stand. Squared Residuals NIG_Price SGARCH Skewed T-Student (1,1)

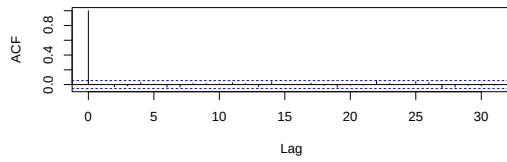


PACF of Marginal Standardized Squared Residuals NIG_Price

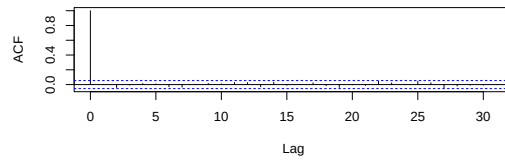


- **SOUTHAFR Price**

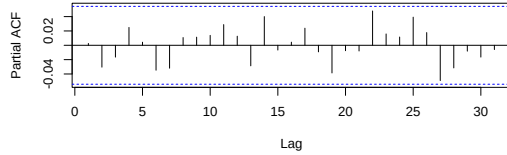
ACF of Stand. Residuals SOUTHAFR_Price SGARCH Skewed T-Student (1,1)



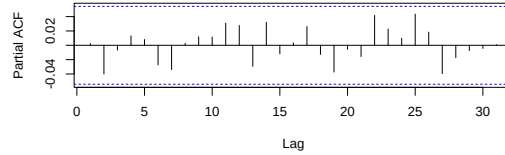
ACF of Marginal Standardized Residuals SOUTHAFR_Price



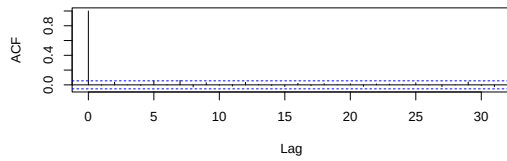
Partial ACF of Stand. Residuals SOUTHAFR_Price SGARCH Skewed T-Student (1,1)



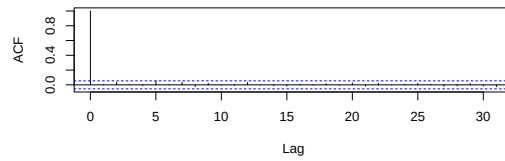
PACF of Marginal Standardized Residuals SOUTHAFR_Price



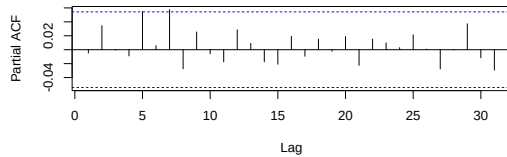
ACF Stand.Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)



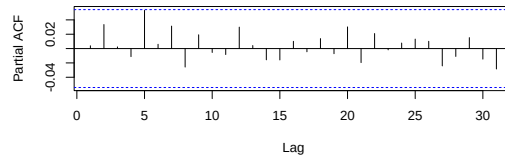
ACF of Marginal Standardized Squared Residuals SOUTHAFR_Price



Partial ACF Stand.Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)

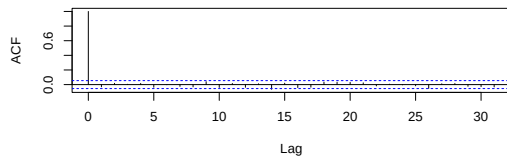


PACF of Marginal Standardized Squared Residuals SOUTHAFR_Price

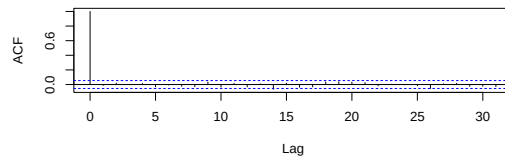


- **TAN Price**

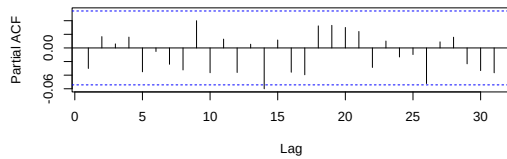
ACF of Standardized Residuals TAN_Price EGARCH T-Student (1,1)



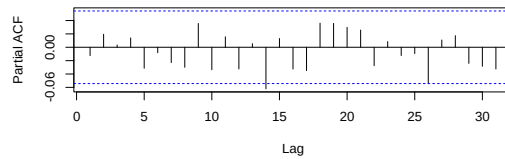
ACF of Marginal Standardized Residuals TAN_Price



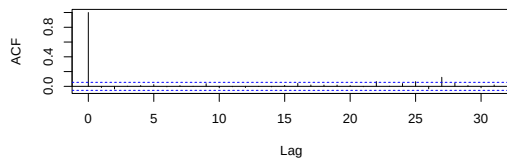
PACF of Standardized Residuals TAN_Price EGARCH T-Student (1,1)



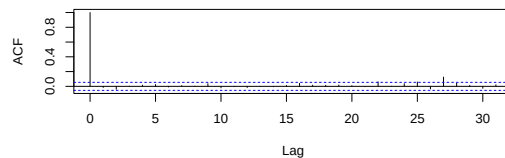
PACF of Marginal Standardized Residuals TAN_Price



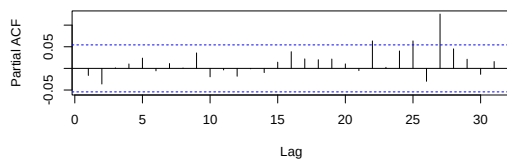
ACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,1)



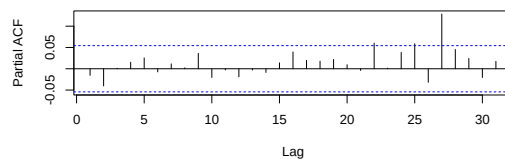
ACF of Marginal Standardized Squared Residuals TAN_Price



PACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,1)

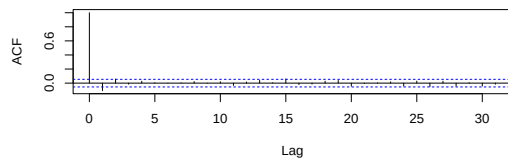


PACF of Marginal Standardized Squared Residuals TAN_Price

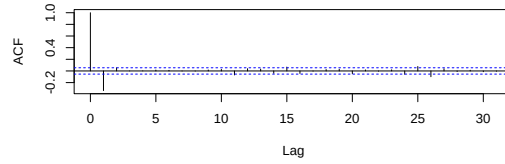


- **TUN Price**

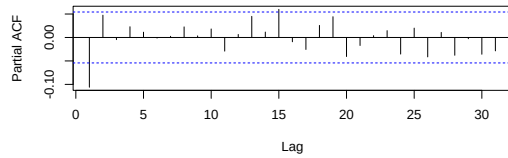
ACF of Standardized Residuals TUN_Price SGARCH T-Student (1,1)



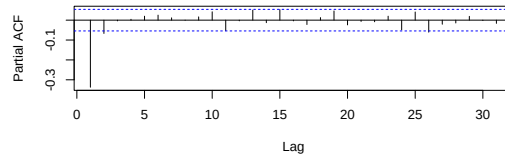
ACF of Marginal Standardized Residuals TUN_Price



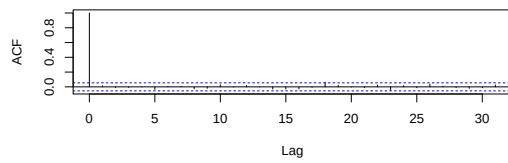
PACF of Standardized Residuals TUN_Price SGARCH T-Student (1,1)



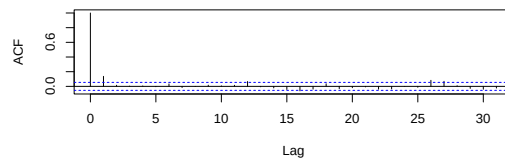
PACF of Marginal Standardized Residuals TUN_Price



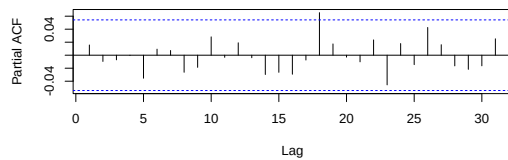
ACF of SStandardized Squared Residuals TUN_Price SGARCH T-Student (1,1)



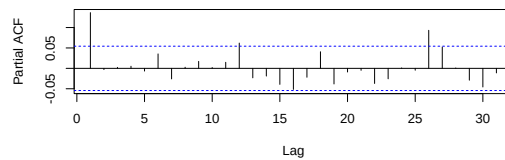
ACF of Marginal Standardized Squared Residuals TUN_Price



PACF of Standardized Squared Residuals TUN_Price SGARCH T-Student (1,1)

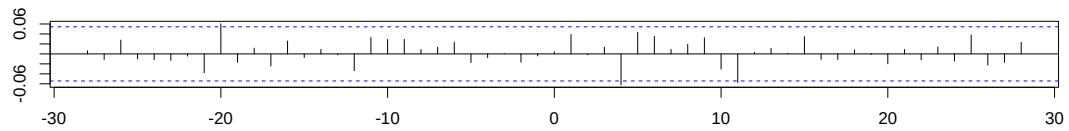


PACF of Marginal Standardized Squared Residuals TUN_Price

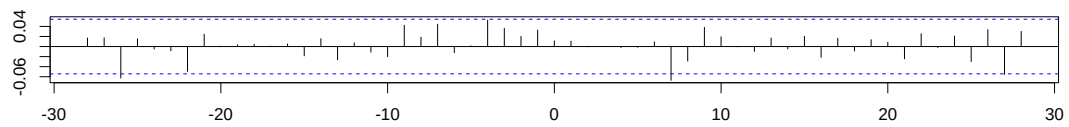


- **Gráficos CCF**

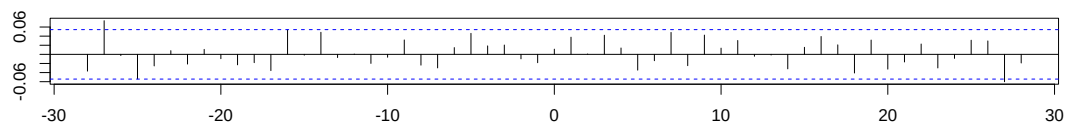
Cross Correlation Standardized Residuals of ARG_Price with USA_Index



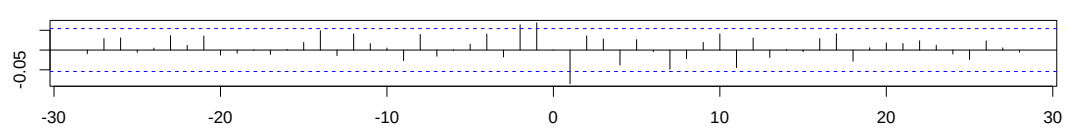
Cross Correlation Standardized Residuals of EGPT_Price with USA_Index



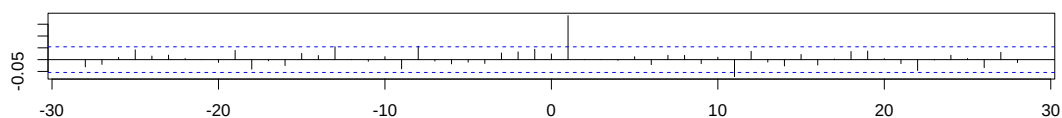
Cross Correlation Standardized Residuals of GHA_Price with USA_Index



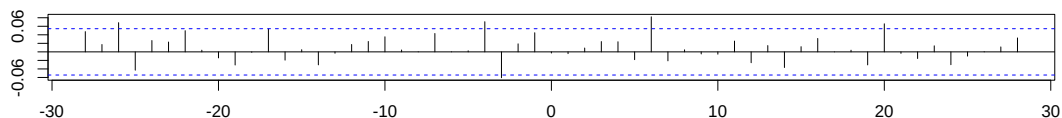
Cross Correlation Standardized Residuals of KEN_Price with USA_Index



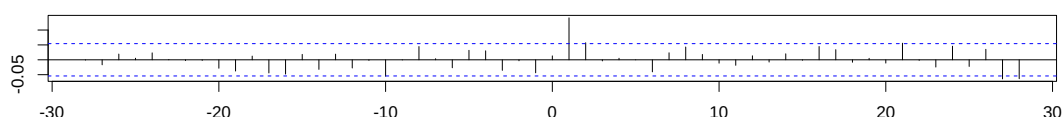
Cross Correlation Standardized Residuals of MOR_Price with USA_Index



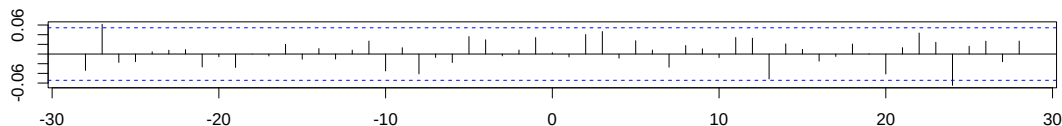
Cross Correlation Standardized Residuals of NIG_Price with USA_Index



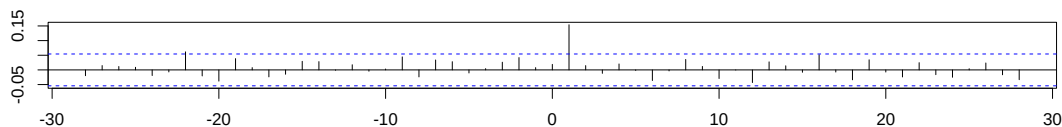
Cross Correlation Standardized Residuals of SOUTHAFR_Price with USA_Index



Cross Correlation Standardized Residuals of TAN_Price with USA_Index



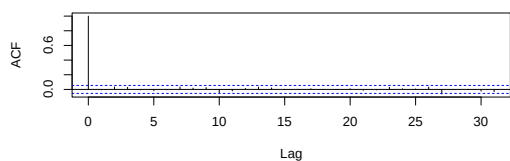
Cross Correlation Standardized Residuals of TUN_Price with USA_Index



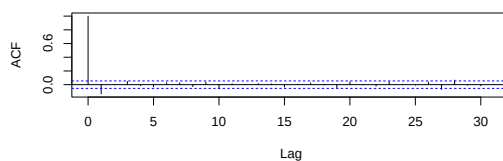
ANEXO B.9 Gráficos ACF, PACF y CCF del modelo DCC-Diagonal

• Usa Index

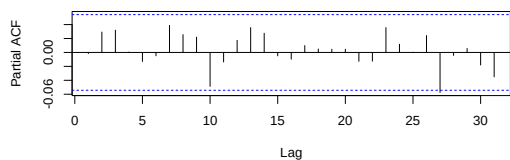
ACF of Standardized Residuals USA_Index SGARCH T-Student (2,2)



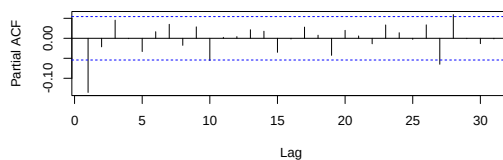
ACF of Marginal Standardized Residuals USA_Index



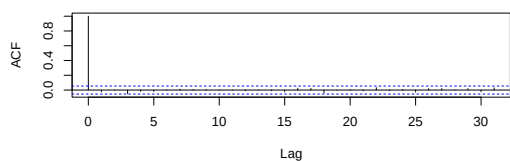
PACF of Standardized Residuals USA_Index EGARCH Skewed T-Student (2,2)



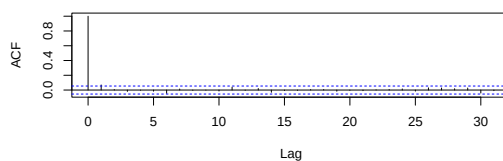
PACF of Marginal Standardized Residuals USA_Index



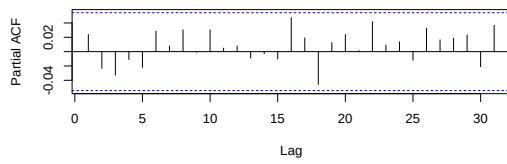
ACF of Standardized Squared Residuals USA_Index SGARCH T-Student (2,2)



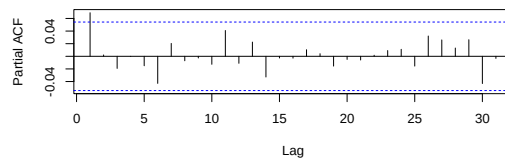
ACF of Marginal Standardized Squared Residuals USA_Index



PACF Stand. Squared Residuals USA EGARCH Skewed T-Student (2,2)

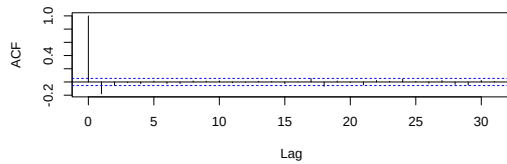


PACF of Marginal Standardized Squared Residuals USA_Index

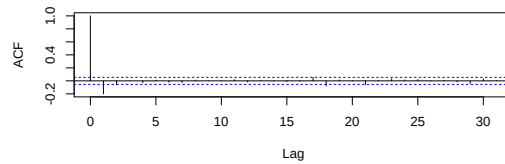


• ARG Price

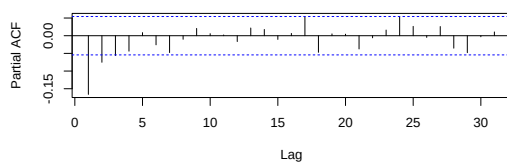
ACF of Standardized Residuals ARG_Price TGARCH T-Student (1,1)



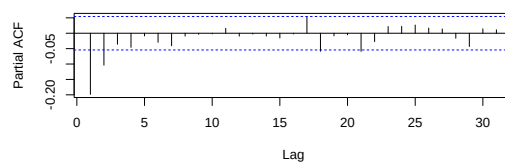
ACF of Marginal Standardized Residuals ARG_Price



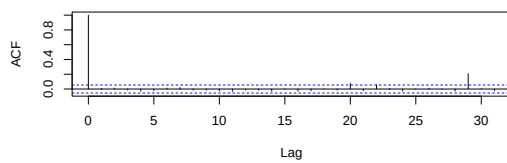
PACF of Standardized Residuals ARG_Price SGARCH T-Student (1,1)



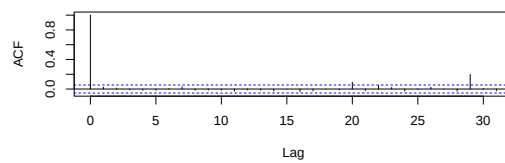
PACF of Marginal Standardized Residuals ARG_Price



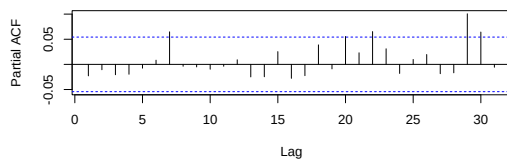
ACF of Standardized Squared Residuals ARG_Price TGARCH T-Student (1,1)



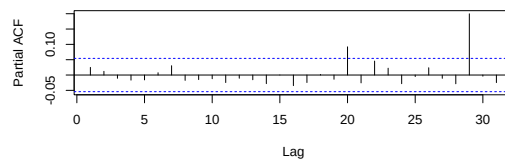
ACF of Marginal Standardized Squared Residuals ARG_Price



PACF of Standardized Squared Residuals ARG_Price SGARCH T-Student (1,1)

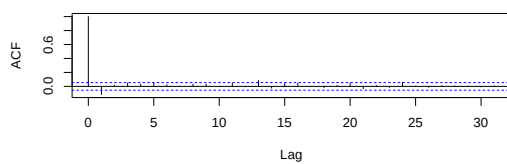


PACF of Marginal Standardized Squared Residuals ARG_Price

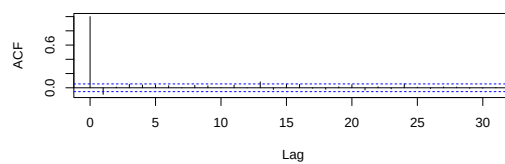


• EGPT Price

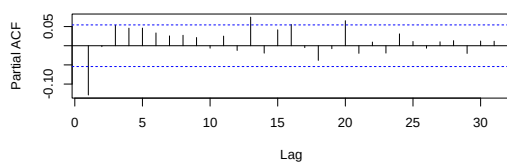
ACF of Standardized Residuals EGPT_Price EGARCH T-Student (4,3)



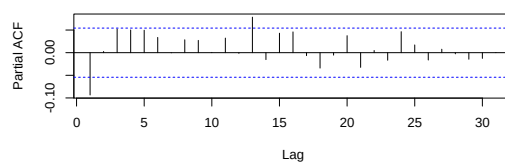
ACF of Marginal Standardized Residuals EGPT_Price

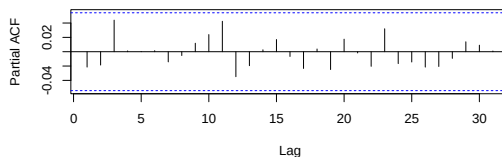
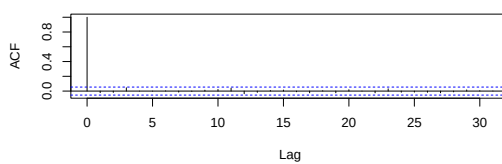


PACF of Standardized Residuals EGPT_Price TGARCH T-Student (2,2)

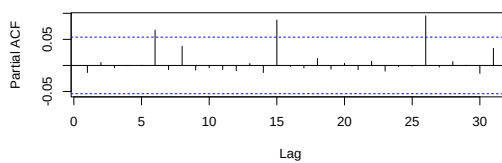
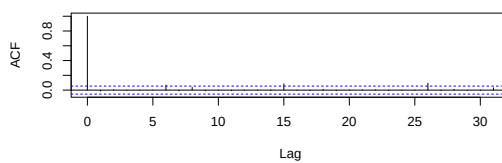
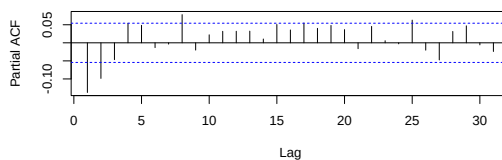
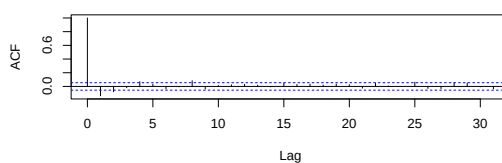


PACF of Marginal Standardized Residuals EGPT_Price

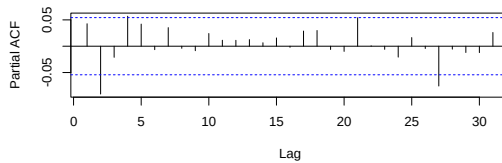
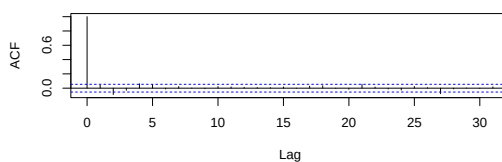




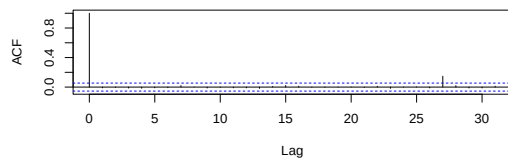
- GHA Price



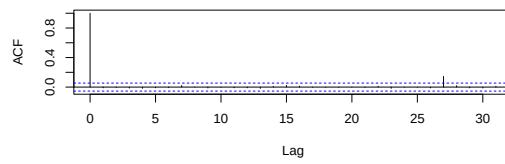
- KEN_Price



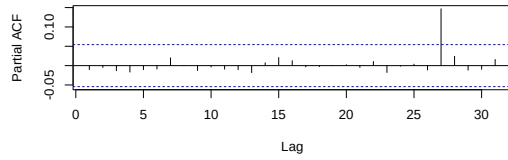
ACF of SStandardized Squared Residuals KEN_Price SGARCH T-Student (1,1)



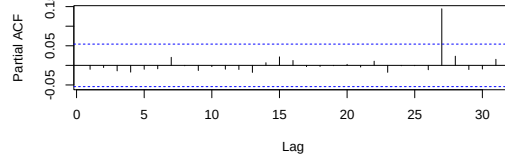
ACF of Marginal Standardized Squared Residuals KEN_Price



PACF Stand. Squared Residuals KEN_Price SGARCH Skewed T-Student (1,1)

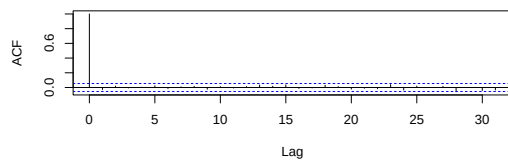


PACF of Marginal Standardized Squared Residuals KEN_Price

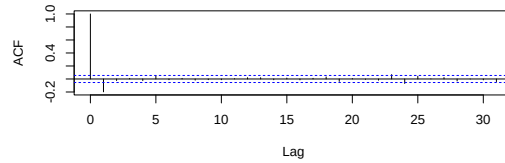


• MOR Price

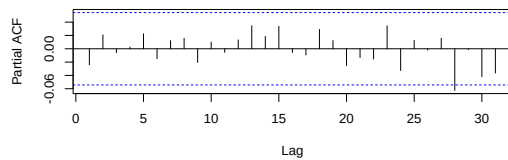
ACF of Standardized Residuals MOR_Price SGARCH Normal (1,1)



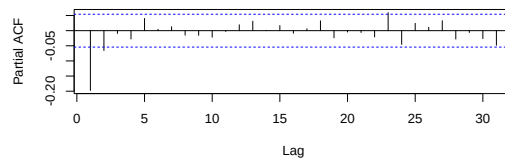
ACF of Marginal Standardized Residuals MOR_Price



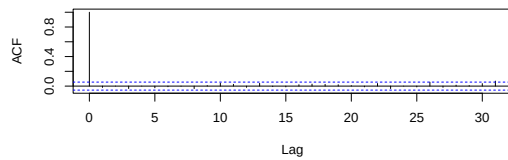
PACF of Standardized Residuals MOR_Price EGARCH T-Student (1,1)



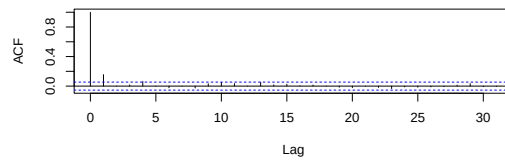
PACF of Marginal Standardized Residuals MOR_Price



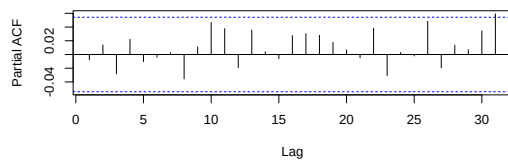
ACF of Standardized Squared Residuals MOR_Price SGARCH Normal (1,1)



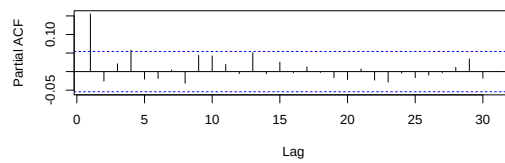
ACF of Marginal Standardized Squared Residuals MOR_Price



PACF of Standardized Squared Residuals MOR_Price EGARCH T-Student (1,1)

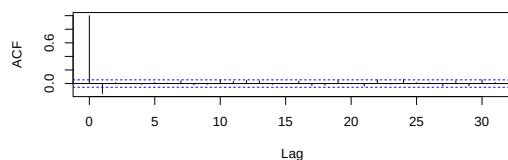


PACF of Marginal Standardized Squared Residuals MOR_Price

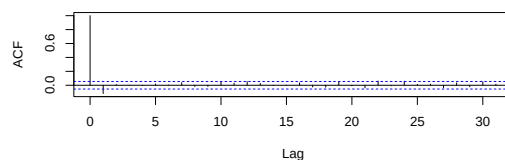


• NIG Price

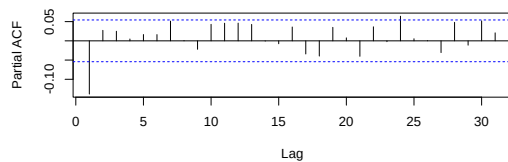
ACF of Standardized Residuals NIG_Price EGARCH T-Student (1,1)



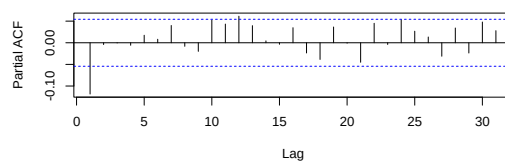
ACF of Marginal Standardized Residuals NIG_Price



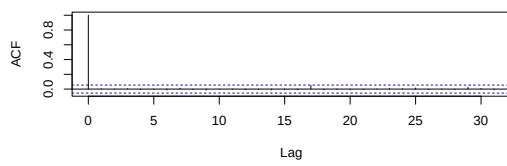
PACF of Standardized Residuals NIG_Price SGARCH Skewed T-Student (1,1)



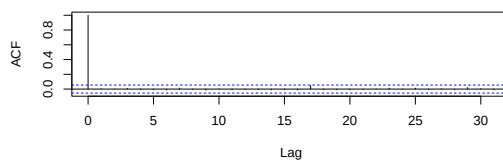
PACF of Marginal Standardized Residuals NIG_Price



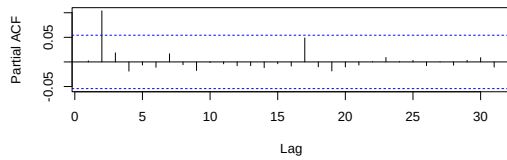
ACF of Standarized Squared Residuals NIG_Price EGARCH T-Student (1,1)



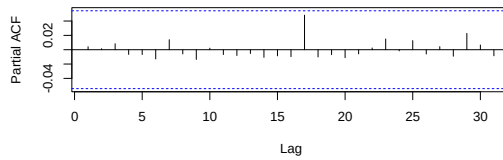
ACF of Marginal Standarized Squared Residuals NIG_Price



PACF Stand. Squared Residuals NIG_Price SGARCH Skewed T-Student (1,1)

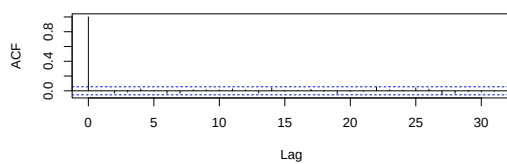


PACF of Marginal Standarized Squared Residuals NIG_Price

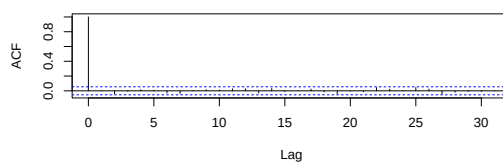


- SOUTHAFR_Price

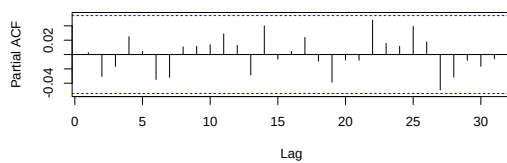
ACF of Stand. Residuals SOUTHAFR_Price SGARCH Skewed T-Student (1,1)



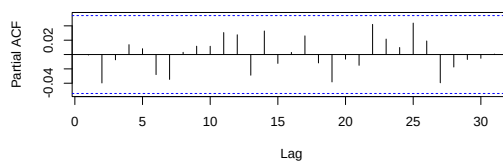
ACF of Marginal Standardized Residuals SOUTHAFR_Price



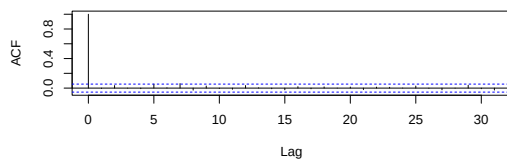
ACF of Stand. Residuals SOUTHAFR_Price SGARCH Skewed T-Student (1,1)



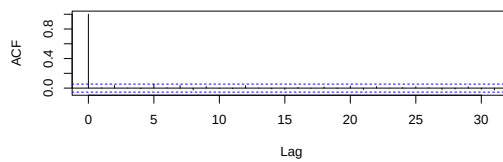
PACF of Marginal Standardized Residuals SOUTHAFR_Price



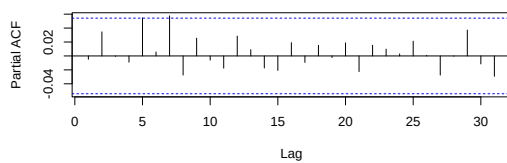
ACF Stand. Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)



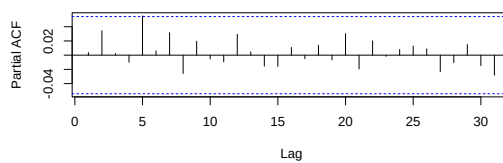
ACF of Marginal Standarized Squared Residuals SOUTHAFR_Price



^aACF Stand. Squared Residuals SOUTHAFR SGARCH Skewed T-Student (1,1)

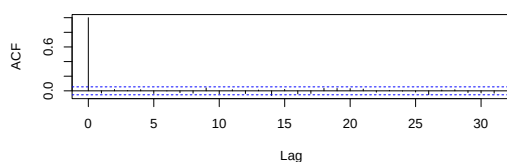


PACF of Marginal Standardized Squared Residuals SOUTHAFR_Price

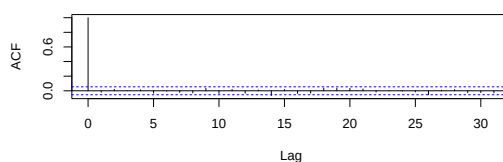


- TAN Price

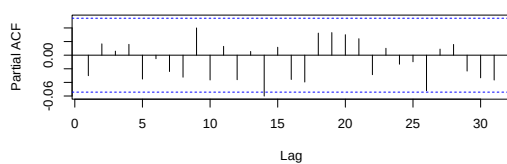
ACF of Standarized Residuals TAN_Price EGARCH T-Student (1,1)



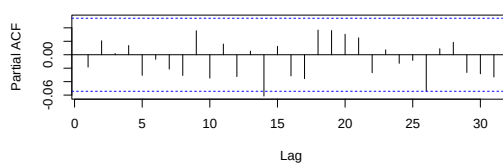
ACF of Marginal Standardized Residuals TAN_Price



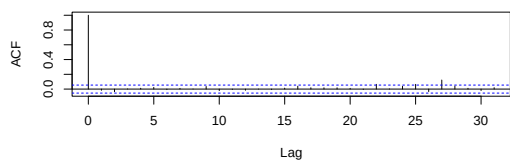
PACF of Standarized Residuals TAN_Price EGARCH T-Student (1,1)



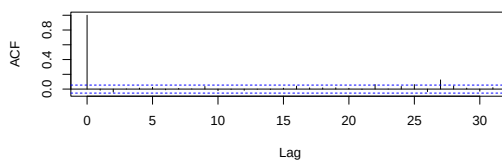
PACF of Marginal Standarized Residuals TAN_Price



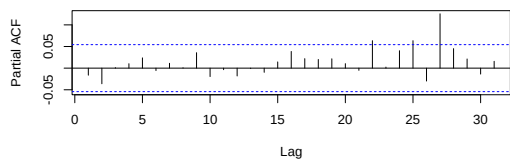
ACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,1)



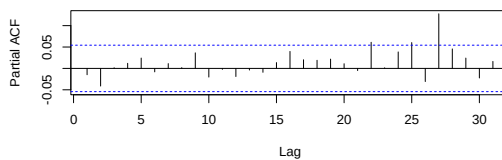
ACF of Marginal Standardized Squared Residuals TAN_Price



PACF of Standardized Squared Residuals TAN_Price EGARCH T-Student (1,1)

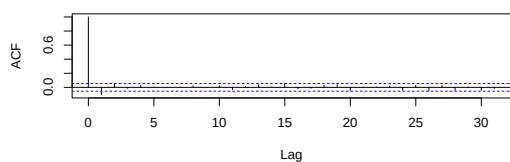


PACF of Marginal Standardized Squared Residuals TAN_Price

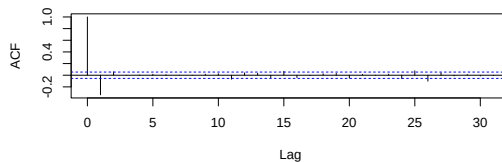


• TUN Price

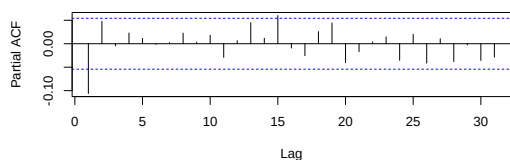
ACF of Standardized Residuals TUN_Price SGARCH T-Student (1,1)



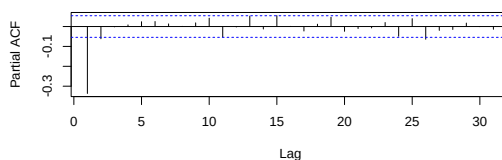
ACF of Marginal Standardized Residuals TUN_Price



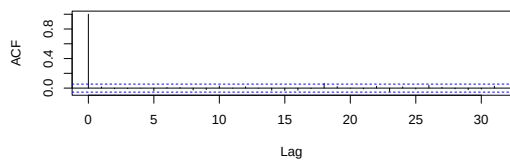
PACF of Standardized Residuals TUN_Price SGARCH T-Student (1,1)



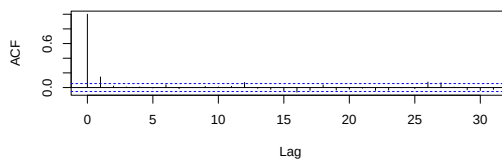
PACF of Marginal Standardized Residuals TUN_Price



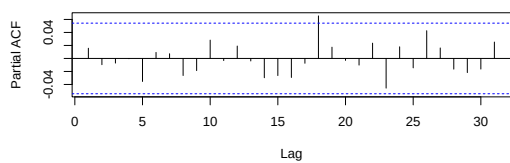
ACF of Standardized Squared Residuals TUN_Price SGARCH T-Student (1,1)



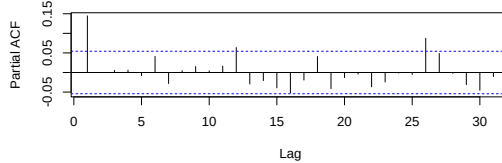
ACF of Marginal Standardized Squared Residuals TUN_Price



PACF of Standardized Squared Residuals TUN_Price SGARCH T-Student (1,1)

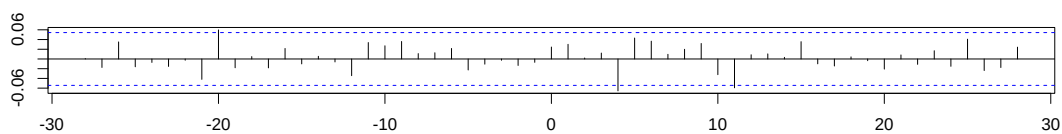


PACF of Marginal Standardized Squared Residuals TUN_Price

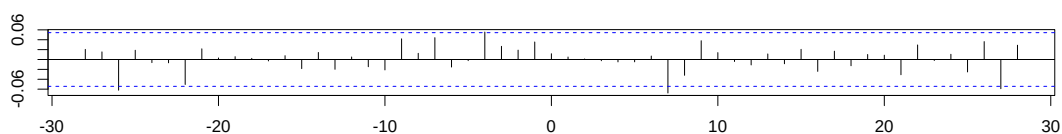


• Gráficos CCF

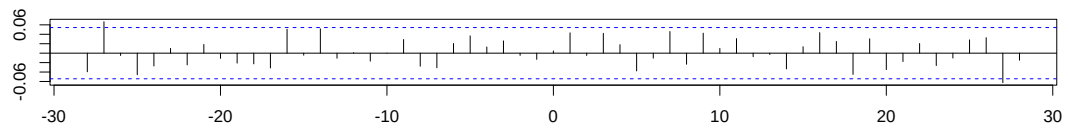
Cross Correlation Standardized Residuals of ARG_Price with USA_Index



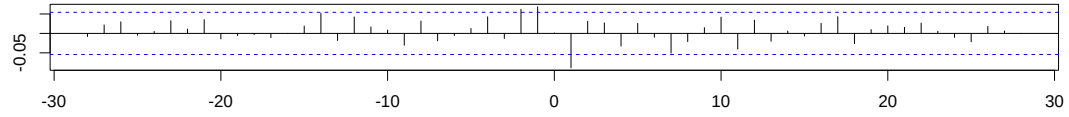
Cross Correlation Standardized Residuals of EGPT_Price with USA_Index



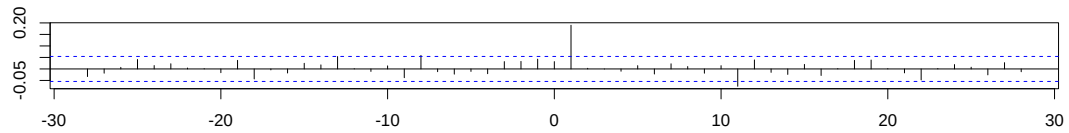
Cross Correlation Standardized Residuals of GHA_Price with USA_Index



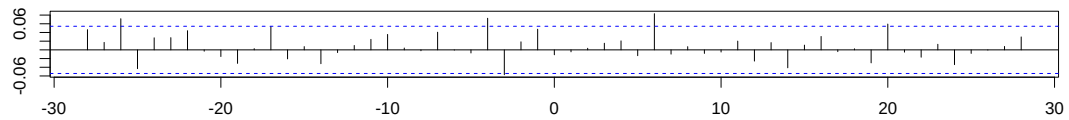
Cross Correlation Standardized Residuals of KEN_Price with USA_Index



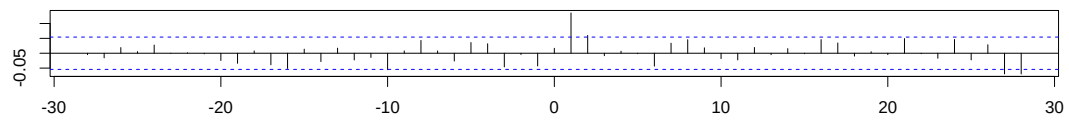
Cross Correlation Standardized Residuals of MOR_Price with USA_Index



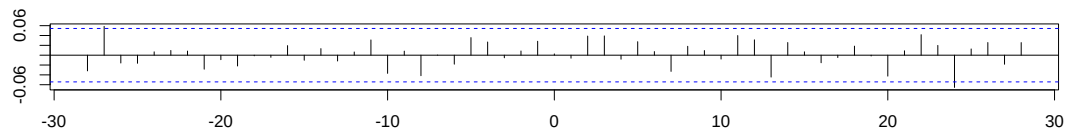
Cross Correlation Standardized Residuals of NIG_Price with USA_Index



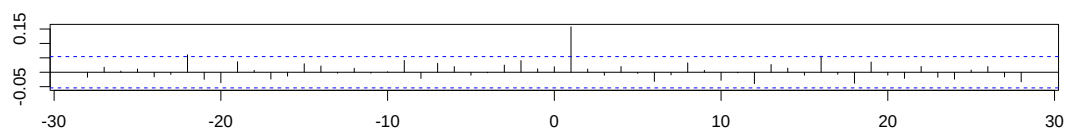
Cross Correlation Standardized Residuals of SOUTHAFR_Price with USA_Index



Cross Correlation Standardized Residuals of TAN_Price with USA_Index



Cross Correlation Standardized Residuals of TUN_Price with USA_Index



ANEXO C. METODOLOGÍA DE LAS DISTRIBUCIONES

- **Distribución Normal**

La distribución normal, también conocida como distribución Gaussiana, es la más común entre variables continuas. Bastante parecida a la distribución de colas pesadas, presenta una forma acampanada y simétrica pero sin alargamiento en sus laterales, definiendo su función de densidad, suponiendo media cero y varianza 1, de la siguiente manera:

$$\Phi(x) = \Phi_{0,1}(x) = \frac{1}{\sqrt{2\pi}} \int_{-\infty}^x e^{-\frac{u^2}{2}} du, \quad x \in \mathbb{R}; \quad (44)$$

- **Distribución Normal Sesgada**

La distribución normal sesgada, también conocida como *Skewed Normal Distribution*, sigue los mismos conceptos que la anterior pero con la diferencia de que permite que el sesgo estadístico sea distinto de cero. Se define de la siguiente manera:

$$\Phi(x) = \frac{2}{\omega\sqrt{2\pi}} e^{-\frac{(x-\xi)^2}{2\omega^2}} \int_{-\infty}^{\alpha(\frac{x-\xi}{\omega})} \frac{1}{\sqrt{2\pi}} e^{-\frac{t^2}{2}} dt; \quad (45)$$

- **Distribución T-Student**

La distribución T-Student suele utilizarse para la estimación de la media cuando la muestra poseída es pequeña y la desviación típica desconocida. Se presenta la función de densidad de la siguiente manera:

$$f_X(x) = \frac{1}{\sqrt{v}B\left(\frac{1}{2}, \frac{v}{2}\right)} \left(1 + \frac{x^2}{v}\right)^{-\frac{v+1}{2}}; \quad (46)$$

donde B representa la función beta.

- **Distribución T-Student Sesgada**

En relación a la distribución presentada anteriormente, la distribución T-Student sesgada, también conocida como *Skewed T-Student*, permite la aplicación de dicha distribución pero de forma sesgada; como se veía con la normal. Su función de densidad se define de la siguiente manera:

$$Si \ z_t < -\frac{m}{s}: f_1(z|\xi, v) = \frac{2}{\xi + \frac{1}{\xi}} s \left(\frac{\Gamma\left(\frac{v+1}{2}\right)}{\Gamma\left(\frac{v}{2}\right)\sqrt{(v-2)\pi\sigma_t^2}} \left(1 + \frac{(\xi(sz+m))^2}{v-2}\right) \right)^{-\frac{(1+v)}{2}}; \quad (47)$$

$$Si \ z_t \geq -\frac{m}{s}: f_1(z|\xi, v) = \frac{2}{\xi + \frac{1}{\xi}} s \left(\frac{\Gamma(\frac{v+1}{2})}{\Gamma(\frac{v}{2}) \sqrt{(v-2)\pi\sigma_t^2}} \left(1 + \frac{((sz+m)/\xi)^2}{v-2} \right) \right)^{-\frac{(1+v)}{2}}; \quad (48)$$

$$\text{donde } m = \frac{\Gamma(\frac{v-1}{2})\sqrt{v-2}}{\sqrt{\pi}\Gamma(\frac{v}{2})} \left(\xi - \frac{1}{\xi} \right) \quad y \quad s^2 = \left(\xi^2 + \frac{1}{\xi^2} - 1 \right) - m^2$$

- **Distribución T-Student Multivariante**

Viene definida de la siguiente manera:

$$f(z_t|v) = \prod_{t=1}^T \frac{\Gamma(\frac{v+n}{2})}{\Gamma(\frac{v}{2}) [\pi(v-2)]^{n/2} |\xi_t|^{1/2}} \left[1 + \frac{z_t^T z_t}{v-2} \right]^{-\frac{n+v}{2}}; \quad (49)$$

donde v representa los grados de libertad y z_t el error estándar.

ANEXO D. MODELIZACIÓN UNIVARIANTE

ANEXO D.1 Modelos (1,1) por país ordenados de mayor a menor BIC

<i>USA_Index</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student USA_Index (1,1)	1	1	-7.955014	-7.939135	-7.955033	-7.949057
SGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.953919	-7.93407	-7.953948	-7.946472
NAGARCH T-Student USA_Index (1,1)	1	1	-7.95197	-7.932122	-7.951999	-7.944524
EGARCH T-Student USA_Index (1,1)	1	1	-7.949832	-7.929984	-7.949861	-7.942386
NAGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.952206	-7.928388	-7.952248	-7.943271
TGARCH T-Student USA_Index (1,1)	1	1	-7.945054	-7.925206	-7.945084	-7.937608
EGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.948872	-7.925055	-7.948915	-7.939937
SGARCH Norm USA_Index (1,1)	1	1	-7.933204	-7.921295	-7.933214	-7.928736
TGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.943999	-7.920181	-7.944041	-7.935063
SGARCH Skewed Norm USA_Index (1,1)	1	1	-7.933672	-7.917794	-7.933691	-7.927715
NAGARCH Norm USA_Index (1,1)	1	1	-7.932208	-7.916329	-7.932226	-7.926251
NAGARCH Skewed Norm USA_Index (1,1)	1	1	-7.932658	-7.91281	-7.932688	-7.925212
EGARCH Norm USA_Index (1,1)	1	1	-7.927976	-7.912097	-7.927994	-7.922019
EGARCH Skewed Norm USA_Index (1,1)	1	1	-7.928875	-7.909027	-7.928905	-7.921429
TGARCH Norm USA_Index (1,1)	1	1	-7.922505	-7.906626	-7.922523	-7.916548
APARCH T-Student USA_Index (1,1)	1	1	-7.929378	-7.90556	-7.92942	-7.920443
APARCH Skewed T-Student USA_Index (1,1)	1	1	-7.931605	-7.903818	-7.931662	-7.92118
TGARCH Skewed Norm USA_Index (1,1)	1	1	-7.922784	-7.902936	-7.922814	-7.915338
APARCH Norm USA_Index (1,1)	1	1	-7.916082	-7.896234	-7.916111	-7.908636
APARCH Skewed Norm USA_Index (1,1)	1	1	-7.916096	-7.892278	-7.916138	-7.90716
<i>ARG_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student ARG_Price (1,1)	1	1	-7.864951	-7.845103	-7.864981	-7.857505
EGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.868107	-7.844289	-7.868149	-7.859171

TGARCH T-Student ARG_Price (1,1)	1	1	-7.864092	-7.844244	-7.864122	-7.856646
TGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.866549	-7.842731	-7.866591	-7.857613
SGARCH T-Student ARG_Price (1,1)	1	1	-7.849053	-7.833175	-7.849072	-7.843096
NAGARCH T-Student ARG_Price (1,1)	1	1	-7.851979	-7.832131	-7.852008	-7.844533
NAGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.85427	-7.830452	-7.854312	-7.845335
SGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.849916	-7.830068	-7.849946	-7.84247
APARCH T-Student ARG_Price (1,1)	1	1	-7.843174	-7.819357	-7.843217	-7.834239
APARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.843625	-7.815838	-7.843682	-7.8332
NAGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.46066	-7.440812	-7.46069	-7.453214
SGARCH Norm ARG_Price (1,1)	1	1	-7.450397	-7.438489	-7.450408	-7.44593
NAGARCH Norm ARG_Price (1,1)	1	1	-7.453563	-7.437685	-7.453582	-7.447606
SGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.453052	-7.437174	-7.453071	-7.447095
TGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.437885	-7.418037	-7.437914	-7.430438
TGARCH Norm ARG_Price (1,1)	1	1	-7.433849	-7.417971	-7.433868	-7.427893
EGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.437693	-7.417845	-7.437722	-7.430247
EGARCH Norm ARG_Price (1,1)	1	1	-7.43279	-7.416912	-7.432809	-7.426833
APARCH Skewed Norm ARG_Price (1,1)	1	1	-7.42472	-7.400903	-7.424762	-7.415785
APARCH Norm ARG_Price (1,1)	1	1	-7.419754	-7.399906	-7.419784	-7.412308
<i>EGPT_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student EGPT_Price (1,1)	1	1	-11.06293	-11.04308	-11.06296	-11.05548
SGARCH T-Student EGPT_Price (1,1)	1	1	-11.05494	-11.03906	-11.05496	-11.04898
EGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.06217	-11.03836	-11.06222	-11.05324
TGARCH T-Student EGPT_Price (1,1)	1	1	-11.05819	-11.03835	-11.05822	-11.05075
NAGARCH T-Student EGPT_Price (1,1)	1	1	-11.05609	-11.03624	-11.05612	-11.04865
TGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05732	-11.0335	-11.05736	-11.04838
NAGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05676	-11.03294	-11.0568	-11.04782
SGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05253	-11.03269	-11.05256	-11.04509
APARCH T-Student EGPT_Price (1,1)	1	1	-11.02714	-11.00332	-11.02718	-11.0182

APARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.0241	-10.99631	-11.02415	-11.01367
SGARCH Norm EGPT_Price (1,1)	1	1	-10.86684	-10.85493	-10.86685	-10.86237
SGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.86894	-10.85307	-10.86896	-10.86299
EGARCH Norm EGPT_Price (1,1)	1	1	-10.86018	-10.8443	-10.8602	-10.85422
EGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.85907	-10.83922	-10.8591	-10.85162
APARCH Norm EGPT_Price (1,1)	1	1	-10.84955	-10.8297	-10.84958	-10.8421
TGARCH Norm EGPT_Price (1,1)	1	1	-10.8427	-10.82682	-10.84272	-10.83674
NAGARCH Norm EGPT_Price (1,1)	1	1	-10.84203	-10.82616	-10.84205	-10.83608
NAGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.84546	-10.82562	-10.84549	-10.83802
APARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.8479	-10.82408	-10.84794	-10.83897
TGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.84117	-10.82132	-10.8412	-10.83373
<i>GHA_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student GHA_Price (1,1)	1	1	-8.643378	-8.62353	-8.643408	-8.635932
TGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.642318	-8.6185	-8.64236	-8.633383
EGARCH T-Student GHA_Price (1,1)	1	1	-8.631589	-8.611741	-8.631618	-8.624142
EGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.631489	-8.607671	-8.631531	-8.622554
SGARCH T-Student GHA_Price (1,1)	1	1	-8.621187	-8.605308	-8.621205	-8.61523
NAGARCH T-Student GHA_Price (1,1)	1	1	-8.619704	-8.599856	-8.619733	-8.612258
SGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.619654	-8.599806	-8.619683	-8.612208
NAGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.618169	-8.594351	-8.618211	-8.609234
APARCH T-Student GHA_Price (1,1)	1	1	-8.589713	-8.565895	-8.589755	-8.580778
APARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.583386	-8.555599	-8.583443	-8.572961
APARCH Norm GHA_Price (1,1)	1	1	-8.346856	-8.327008	-8.346886	-8.33941
APARCH Skewed Norm GHA_Price (1,1)	1	1	-8.349281	-8.325463	-8.349323	-8.340345
SGARCH Norm GHA_Price (1,1)	1	1	-8.336721	-8.324812	-8.336731	-8.332253
SGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.337045	-8.321167	-8.337064	-8.331088
NAGARCH Norm GHA_Price (1,1)	1	1	-8.335524	-8.319646	-8.335543	-8.329567
NAGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.33556	-8.315712	-8.335589	-8.328114

EGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.219343	-8.199495	-8.219372	-8.211897
EGARCH Norm GHA_Price (1,1)	1	1	-8.210922	-8.195044	-8.210941	-8.204965
TGARCH Norm GHA_Price (1,1)	1	1	-8.128289	-8.112411	-8.128308	-8.122332
TGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.127312	-8.107464	-8.127341	-8.119865
<i>KEN_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student KEN_Price (1,1)	1	1	-8.085089	-8.069211	-8.085108	-8.079132
TGARCH T-Student KEN_Price (1,1)	1	1	-8.088581	-8.068733	-8.088611	-8.081135
EGARCH T-Student KEN_Price (1,1)	1	1	-8.086871	-8.067023	-8.086901	-8.079425
SGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.086119	-8.066271	-8.086148	-8.078673
TGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.089726	-8.065908	-8.089768	-8.08079
EGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.087919	-8.064101	-8.087961	-8.078983
NAGARCH T-Student KEN_Price (1,1)	1	1	-8.083579	-8.063731	-8.083608	-8.076132
NAGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.084604	-8.060786	-8.084646	-8.075668
APARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.063373	-8.035586	-8.06343	-8.052948
APARCH T-Student KEN_Price (1,1)	1	1	-8.050764	-8.026946	-8.050806	-8.041828
SGARCH Norm KEN_Price (1,1)	1	1	-7.832322	-7.820413	-7.832332	-7.827854
SGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.833626	-7.817747	-7.833645	-7.827669
NAGARCH Norm KEN_Price (1,1)	1	1	-7.832159	-7.81628	-7.832177	-7.826202
NAGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.833808	-7.81396	-7.833837	-7.826362
APARCH Norm KEN_Price (1,1)	1	1	-7.825979	-7.80613	-7.826008	-7.818532
APARCH Skewed Norm KEN_Price (1,1)	1	1	-7.827279	-7.803461	-7.827321	-7.818344
TGARCH Norm KEN_Price (1,1)	1	1	-7.812136	-7.796257	-7.812155	-7.806179
EGARCH Norm KEN_Price (1,1)	1	1	-7.811497	-7.795618	-7.811515	-7.80554
TGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.81445	-7.794602	-7.81448	-7.807004
EGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.813321	-7.793473	-7.81335	-7.805875
<i>MOR_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm MOR_Price (1,1)	1	1	-7.823571	-7.811662	-7.823581	-7.819103

SGARCH T-Student MOR_Price (1,1)	1	1	-7.826308	-7.810429	-7.826327	-7.820351
SGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.822949	-7.807071	-7.822968	-7.816992
NAGARCH Norm MOR_Price (1,1)	1	1	-7.822174	-7.806296	-7.822193	-7.816217
SGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.825833	-7.805985	-7.825862	-7.818387
NAGARCH T-Student MOR_Price (1,1)	1	1	-7.824757	-7.804909	-7.824787	-7.817311
NAGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.821539	-7.801691	-7.821568	-7.814093
NAGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.824283	-7.800466	-7.824326	-7.815348
EGARCH Norm MOR_Price (1,1)	1	1	-7.814515	-7.798637	-7.814534	-7.808558
EGARCH T-Student MOR_Price (1,1)	1	1	-7.817663	-7.797815	-7.817692	-7.810217
TGARCH Norm MOR_Price (1,1)	1	1	-7.812872	-7.796994	-7.812891	-7.806915
TGARCH T-Student MOR_Price (1,1)	1	1	-7.816158	-7.79631	-7.816187	-7.808712
EGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.813832	-7.793984	-7.813861	-7.806386
EGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.817075	-7.793257	-7.817117	-7.80814
APARCH Norm MOR_Price (1,1)	1	1	-7.81263	-7.792782	-7.81266	-7.805184
TGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.811932	-7.792084	-7.811961	-7.804486
TGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.815356	-7.791538	-7.815398	-7.80642
APARCH Skewed Norm MOR_Price (1,1)	1	1	-7.81204	-7.788223	-7.812083	-7.803105
APARCH T-Student MOR_Price (1,1)	1	1	-7.808831	-7.785013	-7.808873	-7.799895
APARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.809532	-7.781745	-7.809589	-7.799107
<i>NIG_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student NIG_Price (1,1)	1	1	-9.299259	-9.279411	-9.299288	-9.291813
EGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.29807	-9.274252	-9.298112	-9.289134
APARCH T-Student NIG_Price (1,1)	1	1	-9.291824	-9.268007	-9.291867	-9.282889
TGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.289723	-9.265905	-9.289765	-9.280788
APARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.290753	-9.262965	-9.29081	-9.280328
TGARCH T-Student NIG_Price (1,1)	1	1	-9.277101	-9.257253	-9.27713	-9.269654
SGARCH T-Student NIG_Price (1,1)	1	1	-9.263166	-9.247287	-9.263184	-9.257209
NAGARCH T-Student NIG_Price (1,1)	1	1	-9.262168	-9.24232	-9.262197	-9.254722

SGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.261734	-9.241886	-9.261763	-9.254287
NAGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.260862	-9.237044	-9.260904	-9.251926
APARCH Norm NIG_Price (1,1)	1	1	-8.883044	-8.863196	-8.883074	-8.875598
APARCH Skewed Norm NIG_Price (1,1)	1	1	-8.882676	-8.858859	-8.882718	-8.873741
NAGARCH Norm NIG_Price (1,1)	1	1	-8.87301	-8.857131	-8.873028	-8.867053
NAGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.876882	-8.857034	-8.876912	-8.869436
SGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.865734	-8.849856	-8.865753	-8.859777
SGARCH Norm NIG_Price (1,1)	1	1	-8.860826	-8.848917	-8.860837	-8.856358
EGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.850537	-8.830689	-8.850567	-8.843091
EGARCH Norm NIG_Price (1,1)	1	1	-8.845382	-8.829503	-8.845401	-8.839425
TGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.816018	-8.79617	-8.816047	-8.808572
TGARCH Norm NIG_Price (1,1)	1	1	-8.062447	-8.046569	-8.062466	-8.05649
<i>SOUTHAFR_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.168397	-6.148549	-6.168426	-6.160951
NAGARCH Skewed T-Student SOUTHAFR_Price(1,1)	1	1	-6.170626	-6.146808	-6.170668	-6.16169
SGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.158953	-6.143075	-6.158972	-6.152996
EGARCH Skewed T-Student SOUTHAFR_Price(1,1)	1	1	-6.165274	-6.141456	-6.165316	-6.156338
NAGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.161025	-6.141177	-6.161054	-6.153578
TGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.164379	-6.140561	-6.164421	-6.155444
APARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.166926	-6.139138	-6.166983	-6.156501
EGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.156784	-6.136936	-6.156813	-6.149338
TGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.155206	-6.135358	-6.155235	-6.14776
APARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.15669	-6.132873	-6.156733	-6.147755
NAGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.151037	-6.131189	-6.151066	-6.143591
SGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.144932	-6.129054	-6.144951	-6.138975
EGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.141064	-6.121216	-6.141093	-6.133618
TGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.140652	-6.120804	-6.140681	-6.133205
APARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.144451	-6.120633	-6.144493	-6.135516

NAGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.132467	-6.116588	-6.132486	-6.12651
SGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.125422	-6.113513	-6.125432	-6.120954
EGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.12328	-6.107402	-6.123299	-6.117324
TGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.121882	-6.106003	-6.1219	-6.115925
APARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.124535	-6.104687	-6.124564	-6.117088
<i>TAN_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student TAN_Price (1,1)	1	1	-7.651932	-7.632083	-7.651961	-7.644485
EGARCH T-Student TAN_Price (1,1)	1	1	-7.651728	-7.63188	-7.651758	-7.644282
SGARCH T-Student TAN_Price (1,1)	1	1	-7.64658	-7.630701	-7.646599	-7.640623
TGARCH T-Student TAN_Price (1,1)	1	1	-7.647528	-7.62768	-7.647557	-7.640081
NAGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.650773	-7.626955	-7.650815	-7.641837
EGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.650565	-7.626747	-7.650607	-7.641629
SGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.645511	-7.625663	-7.64554	-7.638065
TGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.646373	-7.622555	-7.646415	-7.637438
APARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.629796	-7.602009	-7.629854	-7.619372
APARCH T-Student TAN_Price (1,1)	1	1	-7.622857	-7.599039	-7.622899	-7.613922
NAGARCH Norm TAN_Price (1,1)	1	1	-7.536674	-7.520795	-7.536693	-7.530717
NAGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.53597	-7.516122	-7.535999	-7.528523
SGARCH Norm TAN_Price (1,1)	1	1	-7.525853	-7.513944	-7.525864	-7.521386
SGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.526293	-7.510414	-7.526312	-7.520336
EGARCH Norm TAN_Price (1,1)	1	1	-7.525668	-7.50979	-7.525687	-7.519711
APARCH Skewed Norm TAN_Price (1,1)	1	1	-7.533318	-7.5095	-7.53336	-7.524383
EGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.526148	-7.5063	-7.526177	-7.518701
APARCH Norm TAN_Price (1,1)	1	1	-7.525835	-7.505987	-7.525864	-7.518389
TGARCH Norm TAN_Price (1,1)	1	1	-7.515366	-7.499487	-7.515385	-7.509409
TGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.516319	-7.496471	-7.516348	-7.508873
<i>TUN_Price</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

SGARCH T-Student TUN_Price (1,1)	1	1	-7.988539	-7.97266	-7.988558	-7.982582
SGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.987873	-7.968025	-7.987902	-7.980427
SGARCH Norm TUN_Price (1,1)	1	1	-7.979287	-7.967378	-7.979298	-7.97482
NAGARCH T-Student TUN_Price (1,1)	1	1	-7.98703	-7.967182	-7.98706	-7.979584
SGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.978375	-7.962497	-7.978394	-7.972418
NAGARCH Norm TUN_Price (1,1)	1	1	-7.978276	-7.962398	-7.978295	-7.972319
NAGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.986054	-7.962237	-7.986097	-7.977119
EGARCH T-Student TUN_Price (1,1)	1	1	-7.978038	-7.95819	-7.978067	-7.970592
TGARCH T-Student TUN_Price (1,1)	1	1	-7.977948	-7.9581	-7.977977	-7.970502
NAGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.977481	-7.957633	-7.977511	-7.970035
EGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.97748	-7.953662	-7.977522	-7.968545
TGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.977231	-7.953414	-7.977274	-7.968296
TGARCH Norm TUN_Price (1,1)	1	1	-7.968784	-7.952906	-7.968803	-7.962827
EGARCH Norm TUN_Price (1,1)	1	1	-7.96723	-7.951352	-7.967249	-7.961273
TGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.967808	-7.94796	-7.967837	-7.960362
APARCH T-Student TUN_Price (1,1)	1	1	-7.971524	-7.947706	-7.971566	-7.962588
EGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.966427	-7.946579	-7.966457	-7.958981
APARCH Norm TUN_Price (1,1)	1	1	-7.963843	-7.943995	-7.963872	-7.956396
APARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.968834	-7.941046	-7.968891	-7.958409
APARCH Skewed Norm TUN_Price (1,1)	1	1	-7.964544	-7.940726	-7.964586	-7.955608

ANEXO D.2 Modelos por tipo GARCH y país ordenados de mayor a menor por BIC

<i>USA_Index</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm USA_Index (2,2)	2	2	-7.945485	-7.925637	-7.945514	-7.938038
SGARCH Norm USA_Index (1,1)	1	1	-7.933204	-7.921295	-7.933214	-7.928736
SGARCH Norm USA_Index (2,1)	2	1	-7.936633	-7.920755	-7.936652	-7.930676
SGARCH Norm USA_Index (2,3)	2	3	-7.944434	-7.920616	-7.944476	-7.935498
SGARCH Norm USA_Index (3,2)	3	2	-7.943478	-7.91966	-7.94352	-7.934542
SGARCH Norm USA_Index (1,2)	1	2	-7.931683	-7.915804	-7.931701	-7.925726
SGARCH Norm USA_Index (3,1)	3	1	-7.935093	-7.915245	-7.935122	-7.927647
SGARCH Norm USA_Index (2,4)	2	4	-7.94303	-7.915243	-7.943087	-7.932605
SGARCH Norm USA_Index (3,3)	3	3	-7.942833	-7.915046	-7.942891	-7.932409
SGARCH Norm USA_Index (4,2)	4	2	-7.941877	-7.91409	-7.941935	-7.931453
SGARCH Norm USA_Index (4,1)	4	1	-7.936333	-7.912515	-7.936375	-7.927398
SGARCH Norm USA_Index (5,2)	5	2	-7.942146	-7.910389	-7.942221	-7.930232
SGARCH Norm USA_Index (1,3)	1	3	-7.930181	-7.910333	-7.93021	-7.922735
SGARCH Norm USA_Index (3,4)	3	4	-7.94149	-7.909733	-7.941565	-7.929576
SGARCH Norm USA_Index (2,5)	2	5	-7.941365	-7.909608	-7.94144	-7.929451
SGARCH Norm USA_Index (4,3)	4	3	-7.941186	-7.909429	-7.941261	-7.929272
SGARCH Norm USA_Index (5,1)	5	1	-7.934897	-7.907109	-7.934954	-7.924472
SGARCH Norm USA_Index (5,3)	5	3	-7.940607	-7.904881	-7.940702	-7.927204
SGARCH Norm USA_Index (1,4)	1	4	-7.928666	-7.904848	-7.928708	-7.91973
SGARCH Norm USA_Index (4,4)	4	4	-7.939963	-7.904236	-7.940057	-7.926559
SGARCH Norm USA_Index (3,5)	3	5	-7.939801	-7.904074	-7.939896	-7.926398
SGARCH Norm USA_Index (1,5)	1	5	-7.927142	-7.899355	-7.927199	-7.916717
SGARCH Norm USA_Index (4,5)	4	5	-7.938394	-7.898697	-7.93851	-7.923501
SGARCH Norm USA_Index (5,4)	5	4	-7.938259	-7.898562	-7.938375	-7.923366

SGARCH Norm USA_Index (5,5)	5	5	-7.936859	-7.893193	-7.937	-7.920477
SGARCH Norm USA_Index (5,0)	5	0	-7.825988	-7.80217	-7.82603	-7.817053
SGARCH Norm USA_Index (3,0)	3	0	-7.768396	-7.752518	-7.768415	-7.762439
SGARCH Norm USA_Index (2,0)	2	0	-7.760251	-7.748342	-7.760261	-7.755783
SGARCH Norm USA_Index (1,0)	1	0	-7.687263	-7.679323	-7.687267	-7.684284
SGARCH Norm USA_Index (0,1)	0	1	-7.684646	-7.676707	-7.684651	-7.681668
SGARCH Norm USA_Index (0,2)	0	2	-7.688566	-7.676657	-7.688577	-7.684098
SGARCH Norm USA_Index (0,3)	0	3	-7.687253	-7.671374	-7.687272	-7.681296
SGARCH Norm USA_Index (0,4)	0	4	-7.687071	-7.667223	-7.6871	-7.679625
SGARCH Norm USA_Index (0,5)	0	5	-7.685862	-7.662044	-7.685904	-7.676926
SGARCH Norm USA_Index (4,0)	4	0	-7.434071	-7.414223	-7.4341	-7.426625

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm USA_Index (2,2)	2	2	-7.946297	-7.922479	-7.946339	-7.937361
SGARCH Skewed Norm USA_Index (1,1)	1	1	-7.933672	-7.917794	-7.933691	-7.927715
SGARCH Skewed Norm USA_Index (2,3)	2	3	-7.945125	-7.917338	-7.945183	-7.9347
SGARCH Skewed Norm USA_Index (2,1)	2	1	-7.937134	-7.917286	-7.937164	-7.929688
SGARCH Skewed Norm USA_Index (3,2)	3	2	-7.944294	-7.916507	-7.944352	-7.933869
SGARCH Skewed Norm USA_Index (1,2)	1	2	-7.932145	-7.912296	-7.932174	-7.924698
SGARCH Skewed Norm USA_Index (2,4)	2	4	-7.943781	-7.912024	-7.943856	-7.931868
SGARCH Skewed Norm USA_Index (3,3)	3	3	-7.943608	-7.911851	-7.943683	-7.931694
SGARCH Skewed Norm USA_Index (3,1)	3	1	-7.935584	-7.911766	-7.935626	-7.926648
SGARCH Skewed Norm USA_Index (4,2)	4	2	-7.942663	-7.910906	-7.942737	-7.930749
SGARCH Skewed Norm USA_Index (4,1)	4	1	-7.936784	-7.908997	-7.936841	-7.926359
SGARCH Skewed Norm USA_Index (5,2)	5	2	-7.942958	-7.907232	-7.943053	-7.929555
SGARCH Skewed Norm USA_Index (1,3)	1	3	-7.930646	-7.906828	-7.930688	-7.92171
SGARCH Skewed Norm USA_Index (3,4)	3	4	-7.942249	-7.906522	-7.942343	-7.928845
SGARCH Skewed Norm USA_Index (2,5)	2	5	-7.942087	-7.906361	-7.942182	-7.928684

SGARCH Skewed Norm USA_Index (4,3)	4	3	-7.941982	-7.906256	-7.942077	-7.928579
SGARCH Skewed Norm USA_Index (5,1)	5	1	-7.935306	-7.903549	-7.935381	-7.923392
SGARCH Skewed Norm USA_Index (5,3)	5	3	-7.941366	-7.90167	-7.941483	-7.926474
SGARCH Skewed Norm USA_Index (1,4)	1	4	-7.929138	-7.90135	-7.929195	-7.918713
SGARCH Skewed Norm USA_Index (4,4)	4	4	-7.940727	-7.901031	-7.940844	-7.925835
SGARCH Skewed Norm USA_Index (3,5)	3	5	-7.940574	-7.900878	-7.940691	-7.925682
SGARCH Skewed Norm USA_Index (5,4)	5	4	-7.940042	-7.896376	-7.940183	-7.92366
SGARCH Skewed Norm USA_Index (1,5)	1	5	-7.927609	-7.895852	-7.927684	-7.915695
SGARCH Skewed Norm USA_Index (4,5)	4	5	-7.939045	-7.895379	-7.939186	-7.922663
SGARCH Skewed Norm USA_Index (5,5)	5	5	-7.938516	-7.89088	-7.938683	-7.920645
SGARCH Skewed Norm USA_Index (5,0)	5	0	-7.827091	-7.799304	-7.827148	-7.816666
SGARCH Skewed Norm USA_Index (3,0)	3	0	-7.770317	-7.750469	-7.770346	-7.762871
SGARCH Skewed Norm USA_Index (2,0)	2	0	-7.763568	-7.74769	-7.763587	-7.757611
SGARCH Skewed Norm USA_Index (1,0)	1	0	-7.692255	-7.680346	-7.692265	-7.687787
SGARCH Skewed Norm USA_Index (0,2)	0	2	-7.69107	-7.675191	-7.691089	-7.685113
SGARCH Skewed Norm USA_Index (0,1)	0	1	-7.68212	-7.670211	-7.682131	-7.677652
SGARCH Skewed Norm USA_Index (0,3)	0	3	-7.68302	-7.663172	-7.68305	-7.675574
SGARCH Skewed Norm USA_Index (0,5)	0	5	-7.689686	-7.661898	-7.689743	-7.679261
SGARCH Skewed Norm USA_Index (0,4)	0	4	-7.685658	-7.66184	-7.6857	-7.676722
SGARCH Skewed Norm USA_Index (4,0)	4	0	-7.43289	-7.409072	-7.432932	-7.423955

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student USA_Index (2,2)	2	2	-7.965383	-7.941566	-7.965426	-7.956448
SGARCH T-Student USA_Index (1,1)	1	1	-7.955014	-7.939135	-7.955033	-7.949057
SGARCH T-Student USA_Index (2,1)	2	1	-7.958447	-7.938599	-7.958476	-7.951001
SGARCH T-Student USA_Index (2,3)	2	3	-7.963949	-7.936162	-7.964006	-7.953524
SGARCH T-Student USA_Index (3,2)	3	2	-7.963111	-7.935324	-7.963169	-7.952686
SGARCH T-Student USA_Index (1,2)	1	2	-7.953135	-7.933287	-7.953164	-7.945688

SGARCH T-Student USA_Index (3,1)	3	1	-7.956469	-7.932652	-7.956512	-7.947534
SGARCH T-Student USA_Index (2,4)	2	4	-7.962611	-7.930854	-7.962686	-7.950697
SGARCH T-Student USA_Index (3,3)	3	3	-7.962418	-7.930661	-7.962493	-7.950504
SGARCH T-Student USA_Index (4,2)	4	2	-7.961542	-7.929785	-7.961616	-7.949628
SGARCH T-Student USA_Index (4,1)	4	1	-7.957126	-7.929339	-7.957183	-7.946701
SGARCH T-Student USA_Index (1,3)	1	3	-7.951693	-7.927876	-7.951736	-7.942758
SGARCH T-Student USA_Index (3,4)	3	4	-7.961081	-7.925354	-7.961176	-7.947678
SGARCH T-Student USA_Index (2,5)	2	5	-7.960931	-7.925204	-7.961025	-7.947528
SGARCH T-Student USA_Index (4,3)	4	3	-7.960878	-7.925152	-7.960973	-7.947475
SGARCH T-Student USA_Index (5,2)	5	2	-7.959881	-7.924155	-7.959976	-7.946478
SGARCH T-Student USA_Index (5,1)	5	1	-7.955422	-7.923665	-7.955497	-7.943509
SGARCH T-Student USA_Index (1,4)	1	4	-7.950097	-7.92231	-7.950155	-7.939673
SGARCH T-Student USA_Index (4,4)	4	4	-7.959594	-7.919898	-7.959711	-7.944702
SGARCH T-Student USA_Index (3,5)	3	5	-7.959395	-7.919699	-7.959512	-7.944503
SGARCH T-Student USA_Index (5,3)	5	3	-7.959027	-7.919331	-7.959144	-7.944135
SGARCH T-Student USA_Index (1,5)	1	5	-7.948673	-7.916916	-7.948748	-7.936759
SGARCH T-Student USA_Index (4,5)	4	5	-7.958017	-7.914351	-7.958158	-7.941636
SGARCH T-Student USA_Index (5,4)	5	4	-7.95775	-7.914084	-7.957891	-7.941368
SGARCH T-Student USA_Index (5,5)	5	5	-7.956482	-7.908847	-7.95665	-7.938612
SGARCH T-Student USA_Index (5,0)	5	0	-7.87969	-7.851902	-7.879747	-7.869265
SGARCH T-Student USA_Index (4,0)	4	0	-7.874842	-7.851024	-7.874884	-7.865906
SGARCH T-Student USA_Index (2,0)	2	0	-7.855069	-7.839191	-7.855088	-7.849112
SGARCH T-Student USA_Index (3,0)	3	0	-7.856572	-7.836724	-7.856602	-7.849126
SGARCH T-Student USA_Index (0,1)	0	1	-7.823708	-7.811799	-7.823718	-7.81924
SGARCH T-Student USA_Index (0,2)	0	2	-7.825939	-7.810061	-7.825958	-7.819982
SGARCH T-Student USA_Index (1,0)	1	0	-7.820964	-7.809055	-7.820974	-7.816496
SGARCH T-Student USA_Index (0,3)	0	3	-7.827657	-7.807809	-7.827687	-7.820211
SGARCH T-Student USA_Index (0,4)	0	4	-7.826908	-7.80309	-7.82695	-7.817972

SGARCH T-Student USA_Index (0,5)	0	5	-7.825825	-7.798038	-7.825882	-7.8154
<i>SGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student USA_Index (2,2)	2	2	-7.964358	-7.936571	-7.964416	-7.953934
SGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.953919	-7.93407	-7.953948	-7.946472
SGARCH Skewed T-Student USA_Index (2,1)	2	1	-7.957375	-7.933557	-7.957417	-7.948439
SGARCH Skewed T-Student USA_Index (2,3)	2	3	-7.962921	-7.931164	-7.962996	-7.951007
SGARCH Skewed T-Student USA_Index (3,2)	3	2	-7.962058	-7.930301	-7.962133	-7.950144
SGARCH Skewed T-Student USA_Index (1,2)	1	2	-7.952064	-7.928247	-7.952106	-7.943129
SGARCH Skewed T-Student USA_Index (3,1)	3	1	-7.955428	-7.927641	-7.955485	-7.945003
SGARCH Skewed T-Student USA_Index (2,4)	2	4	-7.961567	-7.92584	-7.961662	-7.948164
SGARCH Skewed T-Student USA_Index (3,3)	3	3	-7.961386	-7.92566	-7.961481	-7.947983
SGARCH Skewed T-Student USA_Index (4,2)	4	2	-7.960486	-7.92476	-7.960581	-7.947083
SGARCH Skewed T-Student USA_Index (4,1)	4	1	-7.956099	-7.924342	-7.956174	-7.944185
SGARCH Skewed T-Student USA_Index (1,3)	1	3	-7.950558	-7.92277	-7.950615	-7.940133
SGARCH Skewed T-Student USA_Index (3,4)	3	4	-7.960033	-7.920337	-7.960149	-7.94514
SGARCH Skewed T-Student USA_Index (2,5)	2	5	-7.959834	-7.920137	-7.95995	-7.944941
SGARCH Skewed T-Student USA_Index (4,3)	4	3	-7.959805	-7.920109	-7.959921	-7.944912
SGARCH Skewed T-Student USA_Index (5,2)	5	2	-7.959119	-7.919423	-7.959235	-7.944226
SGARCH Skewed T-Student USA_Index (5,1)	5	1	-7.954375	-7.918648	-7.95447	-7.940972
SGARCH Skewed T-Student USA_Index (1,4)	1	4	-7.949	-7.917243	-7.949074	-7.937086
SGARCH Skewed T-Student USA_Index (4,4)	4	4	-7.958546	-7.91488	-7.958687	-7.942164
SGARCH Skewed T-Student USA_Index (3,5)	3	5	-7.958299	-7.914633	-7.95844	-7.941917
SGARCH Skewed T-Student USA_Index (5,3)	5	3	-7.95797	-7.914304	-7.958111	-7.941589
SGARCH Skewed T-Student USA_Index (1,5)	1	5	-7.947476	-7.911749	-7.94757	-7.934073
SGARCH Skewed T-Student USA_Index (4,5)	4	5	-7.956913	-7.909277	-7.95708	-7.939042
SGARCH Skewed T-Student USA_Index (5,4)	5	4	-7.956721	-7.909086	-7.956889	-7.938851
SGARCH Skewed T-Student USA_Index (5,5)	5	5	-7.955378	-7.903773	-7.955574	-7.936018

SGARCH Skewed T-Student USA_Index (5,0)	5	0	-7.878396	-7.846639	-7.878471	-7.866482
SGARCH Skewed T-Student USA_Index (4,0)	4	0	-7.873308	-7.845521	-7.873366	-7.862884
SGARCH Skewed T-Student USA_Index (2,0)	2	0	-7.853571	-7.833723	-7.8536	-7.846125
SGARCH Skewed T-Student USA_Index (3,0)	3	0	-7.855044	-7.831226	-7.855086	-7.846109
SGARCH Skewed T-Student USA_Index (0,2)	0	2	-7.826703	-7.806855	-7.826732	-7.819257
SGARCH Skewed T-Student USA_Index (1,0)	1	0	-7.81944	-7.803562	-7.819459	-7.813483
SGARCH Skewed T-Student USA_Index (0,3)	0	3	-7.827097	-7.80328	-7.82714	-7.818162
SGARCH Skewed T-Student USA_Index (0,1)	0	1	-7.816398	-7.800519	-7.816417	-7.810441
SGARCH Skewed T-Student USA_Index (0,4)	0	4	-7.824902	-7.797114	-7.824959	-7.814477
SGARCH Skewed T-Student USA_Index (0,5)	0	5	-7.82433	-7.792572	-7.824404	-7.812416

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm USA_Index (1,2)	1	2	-7.920635	-7.896817	-7.920677	-7.911699
APARCH Norm USA_Index (1,1)	1	1	-7.916082	-7.896234	-7.916111	-7.908636
APARCH Norm USA_Index (1,3)	1	3	-7.923403	-7.895615	-7.92346	-7.912978
APARCH Norm USA_Index (2,2)	2	2	-7.926475	-7.894718	-7.926549	-7.914561
APARCH Norm USA_Index (2,3)	2	3	-7.927912	-7.892185	-7.928006	-7.914509
APARCH Norm USA_Index (1,4)	1	4	-7.920569	-7.888812	-7.920644	-7.908655
APARCH Norm USA_Index (2,4)	2	4	-7.928048	-7.888351	-7.928164	-7.913155
APARCH Norm USA_Index (2,1)	2	1	-7.912973	-7.885185	-7.91303	-7.902548
APARCH Norm USA_Index (2,5)	2	5	-7.926101	-7.882435	-7.926242	-7.90972
APARCH Norm USA_Index (1,5)	1	5	-7.917237	-7.88151	-7.917331	-7.903834
APARCH Norm USA_Index (3,2)	3	2	-7.918769	-7.879073	-7.918886	-7.903877
APARCH Norm USA_Index (3,3)	3	3	-7.921745	-7.878079	-7.921886	-7.905364
APARCH Norm USA_Index (3,4)	3	4	-7.921916	-7.874281	-7.922084	-7.904045
APARCH Norm USA_Index (3,1)	3	1	-7.909654	-7.873927	-7.909749	-7.896251
APARCH Norm USA_Index (4,3)	4	3	-7.921184	-7.869579	-7.921381	-7.901824
APARCH Norm USA_Index (4,2)	4	2	-7.917013	-7.869378	-7.917181	-7.899142

APARCH Norm USA_Index (3,5)	3	5	-7.919118	-7.867513	-7.919314	-7.899758
APARCH Norm USA_Index (4,4)	4	4	-7.920424	-7.864849	-7.920652	-7.899574
APARCH Norm USA_Index (4,1)	4	1	-7.908278	-7.864612	-7.908419	-7.891896
APARCH Norm USA_Index (5,2)	5	2	-7.916261	-7.860687	-7.916489	-7.895412
APARCH Norm USA_Index (5,3)	5	3	-7.918248	-7.858704	-7.918509	-7.89591
APARCH Norm USA_Index (4,5)	4	5	-7.918242	-7.858698	-7.918503	-7.895904
APARCH Norm USA_Index (5,1)	5	1	-7.907898	-7.856293	-7.908095	-7.888538
APARCH Norm USA_Index (5,4)	5	4	-7.915771	-7.852257	-7.916068	-7.891943
APARCH Norm USA_Index (5,5)	5	5	-7.91355	-7.846067	-7.913885	-7.888233
APARCH Norm USA_Index (4,0)	4	0	-7.732574	-7.692878	-7.732691	-7.717682
APARCH Norm USA_Index (2,0)	2	0	-7.714759	-7.690942	-7.714802	-7.705824
APARCH Norm USA_Index (3,0)	3	0	-7.713819	-7.682062	-7.713894	-7.701905
APARCH Norm USA_Index (5,0)	5	0	-7.716985	-7.669349	-7.717152	-7.699114
APARCH Norm USA_Index (0,1)	0	1	-7.674199	-7.66229	-7.67421	-7.669732
APARCH Norm USA_Index (1,0)	1	0	-7.677141	-7.661262	-7.677159	-7.671184
APARCH Norm USA_Index (0,2)	0	2	-7.675805	-7.659927	-7.675824	-7.669848
APARCH Norm USA_Index (0,3)	0	3	-7.672951	-7.653103	-7.67298	-7.665504
APARCH Norm USA_Index (0,4)	0	4	-7.671423	-7.647605	-7.671465	-7.662487
APARCH Norm USA_Index (0,5)	0	5	-7.667907	-7.64012	-7.667965	-7.657483

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm USA_Index (1,2)	1	2	-7.922364	-7.894577	-7.922421	-7.911939
APARCH Skewed Norm USA_Index (1,1)	1	1	-7.916096	-7.892278	-7.916138	-7.90716
APARCH Skewed Norm USA_Index (1,3)	1	3	-7.922609	-7.890852	-7.922683	-7.910695
APARCH Skewed Norm USA_Index (2,2)	2	2	-7.926368	-7.890641	-7.926462	-7.912964
APARCH Skewed Norm USA_Index (2,3)	2	3	-7.928412	-7.888716	-7.928529	-7.91352
APARCH Skewed Norm USA_Index (1,4)	1	4	-7.920641	-7.884914	-7.920735	-7.907238
APARCH Skewed Norm USA_Index (2,4)	2	4	-7.927426	-7.883761	-7.927567	-7.911045

APARCH Skewed Norm USA_Index (2,1)	2	1	-7.913814	-7.882057	-7.913889	-7.9019
APARCH Skewed Norm USA_Index (2,5)	2	5	-7.926482	-7.878847	-7.92665	-7.908611
APARCH Skewed Norm USA_Index (1,5)	1	5	-7.917136	-7.87744	-7.917253	-7.902244
APARCH Skewed Norm USA_Index (3,2)	3	2	-7.921046	-7.87738	-7.921187	-7.904664
APARCH Skewed Norm USA_Index (3,3)	3	3	-7.923658	-7.876022	-7.923825	-7.905787
APARCH Skewed Norm USA_Index (3,4)	3	4	-7.921741	-7.870136	-7.921938	-7.902381
APARCH Skewed Norm USA_Index (3,1)	3	1	-7.909514	-7.869818	-7.90963	-7.894621
APARCH Skewed Norm USA_Index (4,2)	4	2	-7.920912	-7.869307	-7.921108	-7.901551
APARCH Skewed Norm USA_Index (4,3)	4	3	-7.921346	-7.865771	-7.921574	-7.900497
APARCH Skewed Norm USA_Index (4,1)	4	1	-7.912971	-7.865335	-7.913139	-7.8951
APARCH Skewed Norm USA_Index (3,5)	3	5	-7.920117	-7.864543	-7.920345	-7.899268
APARCH Skewed Norm USA_Index (4,4)	4	4	-7.921022	-7.861478	-7.921283	-7.898683
APARCH Skewed Norm USA_Index (5,2)	5	2	-7.917844	-7.8583	-7.918105	-7.895506
APARCH Skewed Norm USA_Index (4,5)	4	5	-7.918463	-7.854949	-7.91876	-7.894635
APARCH Skewed Norm USA_Index (5,3)	5	3	-7.918349	-7.854835	-7.918645	-7.894521
APARCH Skewed Norm USA_Index (5,1)	5	1	-7.909081	-7.853506	-7.909309	-7.888232
APARCH Skewed Norm USA_Index (5,4)	5	4	-7.916769	-7.849285	-7.917103	-7.891452
APARCH Skewed Norm USA_Index (5,5)	5	5	-7.915349	-7.843896	-7.915724	-7.888543
APARCH Skewed Norm USA_Index (2,0)	2	0	-7.72461	-7.696823	-7.724668	-7.714186
APARCH Skewed Norm USA_Index (4,0)	4	0	-7.729841	-7.686175	-7.729982	-7.713459
APARCH Skewed Norm USA_Index (3,0)	3	0	-7.720341	-7.684614	-7.720436	-7.706938
APARCH Skewed Norm USA_Index (5,0)	5	0	-7.72886	-7.677255	-7.729057	-7.7095
APARCH Skewed Norm USA_Index (1,0)	1	0	-7.685649	-7.6658	-7.685678	-7.678202
APARCH Skewed Norm USA_Index (0,1)	0	1	-7.680653	-7.664775	-7.680672	-7.674696
APARCH Skewed Norm USA_Index (0,2)	0	2	-7.680266	-7.660418	-7.680296	-7.67282
APARCH Skewed Norm USA_Index (0,3)	0	3	-7.678194	-7.654376	-7.678236	-7.669258
APARCH Skewed Norm USA_Index (0,4)	0	4	-7.675241	-7.647454	-7.675299	-7.664817
APARCH Skewed Norm USA_Index (0,5)	0	5	-7.671677	-7.63992	-7.671752	-7.659763

<i>APARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student USA_Index (2,2)	2	2	-7.960245	-7.924518	-7.960339	-7.946841
APARCH T-Student USA_Index (1,2)	1	2	-7.939399	-7.911612	-7.939457	-7.928975
APARCH T-Student USA_Index (1,3)	1	3	-7.938401	-7.906644	-7.938475	-7.926487
APARCH T-Student USA_Index (1,4)	1	4	-7.941599	-7.905872	-7.941693	-7.928196
APARCH T-Student USA_Index (1,1)	1	1	-7.929378	-7.90556	-7.92942	-7.920443
APARCH T-Student USA_Index (2,3)	2	3	-7.941069	-7.901373	-7.941186	-7.926177
APARCH T-Student USA_Index (2,1)	2	1	-7.93292	-7.901163	-7.932995	-7.921006
APARCH T-Student USA_Index (2,4)	2	4	-7.94357	-7.899904	-7.943711	-7.927188
APARCH T-Student USA_Index (3,3)	3	3	-7.943942	-7.896306	-7.94411	-7.926071
APARCH T-Student USA_Index (2,5)	2	5	-7.943449	-7.895814	-7.943617	-7.925578
APARCH T-Student USA_Index (1,5)	1	5	-7.934888	-7.895192	-7.935005	-7.919996
APARCH T-Student USA_Index (3,2)	3	2	-7.935647	-7.891981	-7.935788	-7.919265
APARCH T-Student USA_Index (3,1)	3	1	-7.92679	-7.887093	-7.926906	-7.911897
APARCH T-Student USA_Index (4,2)	4	2	-7.938547	-7.886942	-7.938744	-7.919187
APARCH T-Student USA_Index (3,4)	3	4	-7.938149	-7.886544	-7.938345	-7.918789
APARCH T-Student USA_Index (3,5)	3	5	-7.937683	-7.882109	-7.937911	-7.916834
APARCH T-Student USA_Index (4,3)	4	3	-7.935995	-7.88042	-7.936222	-7.915145
APARCH T-Student USA_Index (5,1)	5	1	-7.934875	-7.8793	-7.935103	-7.914026
APARCH T-Student USA_Index (5,2)	5	2	-7.938387	-7.878842	-7.938648	-7.916048
APARCH T-Student USA_Index (4,1)	4	1	-7.92599	-7.878354	-7.926158	-7.908119
APARCH T-Student USA_Index (4,4)	4	4	-7.934262	-7.874717	-7.934523	-7.911923
APARCH T-Student USA_Index (4,5)	4	5	-7.932301	-7.868787	-7.932597	-7.908473
APARCH T-Student USA_Index (5,3)	5	3	-7.930497	-7.866983	-7.930794	-7.906669
APARCH T-Student USA_Index (5,4)	5	4	-7.932628	-7.865145	-7.932963	-7.907311
APARCH T-Student USA_Index (5,5)	5	5	-7.932607	-7.861154	-7.932982	-7.9058
APARCH T-Student USA_Index (0,1)	0	1	-7.818597	-7.802718	-7.818616	-7.81264

APARCH T-Student USA_Index (2,0)	2	0	-7.828245	-7.800458	-7.828303	-7.817821
APARCH T-Student USA_Index (1,0)	1	0	-7.816988	-7.79714	-7.817017	-7.809542
APARCH T-Student USA_Index (0,2)	0	2	-7.816661	-7.796813	-7.816691	-7.809215
APARCH T-Student USA_Index (0,3)	0	3	-7.815756	-7.791938	-7.815798	-7.806821
APARCH T-Student USA_Index (3,0)	3	0	-7.825757	-7.79003	-7.825852	-7.812354
APARCH T-Student USA_Index (0,4)	0	4	-7.813686	-7.785899	-7.813744	-7.803262
APARCH T-Student USA_Index (4,0)	4	0	-7.825864	-7.782199	-7.826005	-7.809483
APARCH T-Student USA_Index (0,5)	0	5	-7.811581	-7.779824	-7.811656	-7.799667
APARCH T-Student USA_Index (5,0)	5	0	-7.820048	-7.768443	-7.820245	-7.800688

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student USA_Index (1,2)	1	2	-7.938296	-7.906539	-7.938371	-7.926382
APARCH Skewed T-Student USA_Index (1,3)	1	3	-7.942126	-7.9064	-7.942221	-7.928723
APARCH Skewed T-Student USA_Index (2,2)	2	2	-7.944707	-7.905011	-7.944824	-7.929815
APARCH Skewed T-Student USA_Index (1,1)	1	1	-7.931605	-7.903818	-7.931662	-7.92118
APARCH Skewed T-Student USA_Index (2,3)	2	3	-7.946082	-7.902417	-7.946223	-7.929701
APARCH Skewed T-Student USA_Index (2,1)	2	1	-7.934743	-7.899016	-7.934837	-7.921339
APARCH Skewed T-Student USA_Index (1,4)	1	4	-7.938229	-7.898533	-7.938345	-7.923336
APARCH Skewed T-Student USA_Index (2,4)	2	4	-7.945587	-7.897952	-7.945755	-7.927716
APARCH Skewed T-Student USA_Index (2,5)	2	5	-7.943365	-7.89176	-7.943562	-7.924005
APARCH Skewed T-Student USA_Index (3,1)	3	1	-7.935241	-7.891575	-7.935382	-7.918859
APARCH Skewed T-Student USA_Index (1,5)	1	5	-7.935167	-7.891502	-7.935308	-7.918786
APARCH Skewed T-Student USA_Index (3,4)	3	4	-7.93969	-7.884115	-7.939918	-7.918841
APARCH Skewed T-Student USA_Index (3,3)	3	3	-7.934792	-7.883187	-7.934989	-7.915432
APARCH Skewed T-Student USA_Index (3,2)	3	2	-7.930771	-7.883135	-7.930938	-7.9129
APARCH Skewed T-Student USA_Index (4,1)	4	1	-7.93445	-7.882845	-7.934647	-7.91509
APARCH Skewed T-Student USA_Index (4,2)	4	2	-7.933746	-7.878171	-7.933973	-7.912896
APARCH Skewed T-Student USA_Index (3,5)	3	5	-7.936314	-7.87677	-7.936575	-7.913975

APARCH Skewed T-Student USA_Index (4,3)	4	3	-7.935396	-7.875851	-7.935657	-7.913057
APARCH Skewed T-Student USA_Index (4,4)	4	4	-7.931751	-7.868237	-7.932048	-7.907924
APARCH Skewed T-Student USA_Index (4,5)	4	5	-7.935191	-7.867707	-7.935525	-7.909874
APARCH Skewed T-Student USA_Index (5,3)	5	3	-7.933165	-7.865682	-7.9335	-7.907848
APARCH Skewed T-Student USA_Index (5,1)	5	1	-7.923499	-7.863955	-7.92376	-7.901161
APARCH Skewed T-Student USA_Index (5,2)	5	2	-7.926752	-7.863238	-7.927049	-7.902925
APARCH Skewed T-Student USA_Index (5,4)	5	4	-7.932272	-7.860819	-7.932647	-7.905465
APARCH Skewed T-Student USA_Index (5,5)	5	5	-7.93548	-7.860057	-7.935897	-7.907184
APARCH Skewed T-Student USA_Index (0,1)	0	1	-7.816454	-7.796605	-7.816483	-7.809007
APARCH Skewed T-Student USA_Index (2,0)	2	0	-7.827885	-7.796128	-7.82796	-7.815971
APARCH Skewed T-Student USA_Index (1,0)	1	0	-7.81601	-7.792192	-7.816052	-7.807074
APARCH Skewed T-Student USA_Index (0,2)	0	2	-7.815663	-7.791845	-7.815705	-7.806728
APARCH Skewed T-Student USA_Index (0,3)	0	3	-7.813824	-7.786037	-7.813881	-7.803399
APARCH Skewed T-Student USA_Index (3,0)	3	0	-7.823821	-7.784125	-7.823938	-7.808929
APARCH Skewed T-Student USA_Index (0,4)	0	4	-7.81175	-7.779993	-7.811825	-7.799836
APARCH Skewed T-Student USA_Index (4,0)	4	0	-7.822688	-7.775052	-7.822855	-7.804817
APARCH Skewed T-Student USA_Index (0,5)	0	5	-7.809522	-7.773795	-7.809616	-7.796118
APARCH Skewed T-Student USA_Index (5,0)	5	0	-7.820555	-7.76498	-7.820783	-7.799706

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm USA_Index (1,1)	1	1	-7.922505	-7.906626	-7.922523	-7.916548
TGARCH Norm USA_Index (2,1)	2	1	-7.925536	-7.901718	-7.925578	-7.916601
TGARCH Norm USA_Index (1,2)	1	2	-7.919092	-7.899244	-7.919122	-7.911646
TGARCH Norm USA_Index (2,2)	2	2	-7.924001	-7.896214	-7.924059	-7.913577
TGARCH Norm USA_Index (1,3)	1	3	-7.917949	-7.894131	-7.917991	-7.909013
TGARCH Norm USA_Index (2,3)	2	3	-7.920772	-7.889015	-7.920847	-7.908858
TGARCH Norm USA_Index (3,1)	3	1	-7.920772	-7.889015	-7.920847	-7.908858
TGARCH Norm USA_Index (1,4)	1	4	-7.915229	-7.887441	-7.915286	-7.904804

TGARCH Norm USA_Index (4,1)	4	1	-7.923337	-7.883641	-7.923454	-7.908445
TGARCH Norm USA_Index (3,2)	3	2	-7.919237	-7.88351	-7.919332	-7.905834
TGARCH Norm USA_Index (4,2)	4	2	-7.926486	-7.88282	-7.926627	-7.910105
TGARCH Norm USA_Index (2,4)	2	4	-7.91823	-7.882503	-7.918324	-7.904826
TGARCH Norm USA_Index (1,5)	1	5	-7.913527	-7.88177	-7.913602	-7.901613
TGARCH Norm USA_Index (3,3)	3	3	-7.917702	-7.878005	-7.917818	-7.902809
TGARCH Norm USA_Index (4,3)	4	3	-7.92503	-7.877395	-7.925198	-7.907159
TGARCH Norm USA_Index (2,5)	2	5	-7.915303	-7.875607	-7.91542	-7.900411
TGARCH Norm USA_Index (4,4)	4	4	-7.923495	-7.87189	-7.923692	-7.904135
TGARCH Norm USA_Index (5,2)	5	2	-7.92318	-7.871575	-7.923377	-7.90382
TGARCH Norm USA_Index (3,4)	3	4	-7.91516	-7.871494	-7.915301	-7.898778
TGARCH Norm USA_Index (5,1)	5	1	-7.918963	-7.871327	-7.91913	-7.901092
TGARCH Norm USA_Index (5,3)	5	3	-7.921645	-7.86607	-7.921873	-7.900796
TGARCH Norm USA_Index (3,5)	3	5	-7.912234	-7.864598	-7.912401	-7.894363
TGARCH Norm USA_Index (4,5)	4	5	-7.919248	-7.863673	-7.919476	-7.898398
TGARCH Norm USA_Index (5,5)	5	5	-7.925656	-7.862142	-7.925953	-7.901828
TGARCH Norm USA_Index (5,4)	5	4	-7.920028	-7.860483	-7.920289	-7.897689
TGARCH Norm USA_Index (5,0)	5	0	-7.82239	-7.778724	-7.822531	-7.806008
TGARCH Norm USA_Index (4,0)	4	0	-7.814384	-7.778657	-7.814479	-7.800981
TGARCH Norm USA_Index (0,3)	0	3	-7.76734	-7.751462	-7.767359	-7.761383
TGARCH Norm USA_Index (0,5)	0	5	-7.764323	-7.740505	-7.764365	-7.755388
TGARCH Norm USA_Index (0,4)	0	4	-7.750954	-7.731105	-7.750983	-7.743507
TGARCH Norm USA_Index (2,0)	2	0	-7.749762	-7.729914	-7.749792	-7.742316
TGARCH Norm USA_Index (3,0)	3	0	-7.754606	-7.726819	-7.754663	-7.744181
TGARCH Norm USA_Index (1,0)	1	0	19.259088	19.270996	19.259077	19.263555
TGARCH Norm USA_Index (0,2)	0	2	65.835665	65.847574	65.835654	65.840132
TGARCH Norm USA_Index (0,1)	0	1	69.532686	69.540625	69.532681	69.535664

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm USA_Index (1,1)	1	1	-7.922784	-7.902936	-7.922814	-7.915338
TGARCH Skewed Norm USA_Index (2,1)	2	1	-7.926042	-7.898254	-7.926099	-7.915617
TGARCH Skewed Norm USA_Index (1,2)	1	2	-7.919342	-7.895524	-7.919384	-7.910406
TGARCH Skewed Norm USA_Index (2,2)	2	2	-7.924507	-7.89275	-7.924582	-7.912593
TGARCH Skewed Norm USA_Index (1,3)	1	3	-7.918208	-7.89042	-7.918265	-7.907783
TGARCH Skewed Norm USA_Index (3,1)	3	1	-7.921219	-7.885492	-7.921313	-7.907815
TGARCH Skewed Norm USA_Index (2,3)	2	3	-7.921219	-7.885492	-7.921313	-7.907815
TGARCH Skewed Norm USA_Index (1,4)	1	4	-7.91554	-7.883783	-7.915615	-7.903626
TGARCH Skewed Norm USA_Index (3,2)	3	2	-7.919684	-7.879987	-7.9198	-7.904791
TGARCH Skewed Norm USA_Index (4,1)	4	1	-7.923375	-7.87971	-7.923516	-7.906994
TGARCH Skewed Norm USA_Index (4,2)	4	2	-7.926812	-7.879177	-7.92698	-7.908941
TGARCH Skewed Norm USA_Index (2,4)	2	4	-7.918719	-7.879023	-7.918836	-7.903827
TGARCH Skewed Norm USA_Index (1,5)	1	5	-7.913851	-7.878125	-7.913946	-7.900448
TGARCH Skewed Norm USA_Index (3,3)	3	3	-7.918149	-7.874483	-7.91829	-7.901767
TGARCH Skewed Norm USA_Index (4,3)	4	3	-7.925351	-7.873746	-7.925548	-7.905991
TGARCH Skewed Norm USA_Index (2,5)	2	5	-7.915826	-7.87216	-7.915967	-7.899444
TGARCH Skewed Norm USA_Index (5,1)	5	1	-7.91994	-7.868334	-7.920136	-7.900579
TGARCH Skewed Norm USA_Index (4,4)	4	4	-7.923741	-7.868166	-7.923969	-7.902892
TGARCH Skewed Norm USA_Index (3,4)	3	4	-7.915649	-7.868014	-7.915817	-7.897778
TGARCH Skewed Norm USA_Index (5,2)	5	2	-7.918411	-7.862836	-7.918639	-7.897562
TGARCH Skewed Norm USA_Index (3,5)	3	5	-7.912756	-7.861151	-7.912952	-7.893396
TGARCH Skewed Norm USA_Index (4,5)	4	5	-7.919616	-7.860072	-7.919877	-7.897278
TGARCH Skewed Norm USA_Index (5,3)	5	3	-7.916867	-7.857322	-7.917128	-7.894528
TGARCH Skewed Norm USA_Index (5,4)	5	4	-7.915332	-7.851818	-7.915628	-7.891504
TGARCH Skewed Norm USA_Index (5,5)	5	5	-7.91379	-7.846307	-7.914125	-7.888473
TGARCH Skewed Norm USA_Index (4,0)	4	0	-7.81435	-7.774653	-7.814466	-7.799457
TGARCH Skewed Norm USA_Index (5,0)	5	0	-7.814804	-7.767168	-7.814971	-7.796933

TGARCH Skewed Norm USA_Index (0,1)	0	1	-7.761329	-7.74942	-7.76134	-7.756862
TGARCH Skewed Norm USA_Index (0,2)	0	2	-7.750363	-7.734485	-7.750382	-7.744406
TGARCH Skewed Norm USA_Index (0,4)	0	4	-7.752447	-7.728629	-7.752489	-7.743512
TGARCH Skewed Norm USA_Index (0,5)	0	5	-7.751918	-7.724131	-7.751976	-7.741494
TGARCH Skewed Norm USA_Index (3,0)	3	0	-7.754759	-7.723002	-7.754834	-7.742846
TGARCH Skewed Norm USA_Index (0,3)	0	3	-1.926625	-1.906777	-1.926654	-1.919179
TGARCH Skewed Norm USA_Index (2,0)	2	0	3.71505	3.738868	3.715008	3.723986
TGARCH Skewed Norm USA_Index (1,0)	1	0	17.528436	17.544315	17.528417	17.534393
<i>TGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student USA_Index (1,1)	1	1	-7.945054	-7.925206	-7.945084	-7.937608
TGARCH T-Student USA_Index (2,1)	2	1	-7.950621	-7.922834	-7.950679	-7.940197
TGARCH T-Student USA_Index (2,2)	2	2	-7.954315	-7.922558	-7.95439	-7.942401
TGARCH T-Student USA_Index (1,2)	1	2	-7.941813	-7.917996	-7.941856	-7.932878
TGARCH T-Student USA_Index (2,3)	2	3	-7.949726	-7.913999	-7.94982	-7.936322
TGARCH T-Student USA_Index (1,3)	1	3	-7.940608	-7.91282	-7.940665	-7.930183
TGARCH T-Student USA_Index (3,1)	3	1	-7.945593	-7.909867	-7.945688	-7.93219
TGARCH T-Student USA_Index (3,2)	3	2	-7.948114	-7.908418	-7.948231	-7.933222
TGARCH T-Student USA_Index (2,4)	2	4	-7.947962	-7.908266	-7.948079	-7.93307
TGARCH T-Student USA_Index (1,4)	1	4	-7.937997	-7.90624	-7.938071	-7.926083
TGARCH T-Student USA_Index (3,3)	3	3	-7.946579	-7.902913	-7.94672	-7.930197
TGARCH T-Student USA_Index (4,1)	4	1	-7.946255	-7.902589	-7.946396	-7.929874
TGARCH T-Student USA_Index (4,2)	4	2	-7.94955	-7.901914	-7.949717	-7.931679
TGARCH T-Student USA_Index (2,5)	2	5	-7.944433	-7.900767	-7.944574	-7.928051
TGARCH T-Student USA_Index (1,5)	1	5	-7.936338	-7.900612	-7.936433	-7.922935
TGARCH T-Student USA_Index (3,4)	3	4	-7.944761	-7.897126	-7.944929	-7.92689
TGARCH T-Student USA_Index (4,3)	4	3	-7.948213	-7.896608	-7.94841	-7.928853
TGARCH T-Student USA_Index (4,4)	4	4	-7.946799	-7.891224	-7.947027	-7.92595

TGARCH T-Student USA_Index (5,2)	5	2	-7.946321	-7.890746	-7.946549	-7.925472
TGARCH T-Student USA_Index (5,1)	5	1	-7.941711	-7.890106	-7.941907	-7.922351
TGARCH T-Student USA_Index (3,5)	3	5	-7.941364	-7.889759	-7.941561	-7.922004
TGARCH T-Student USA_Index (5,3)	5	3	-7.945052	-7.885508	-7.945313	-7.922714
TGARCH T-Student USA_Index (4,5)	4	5	-7.942493	-7.882948	-7.942754	-7.920154
TGARCH T-Student USA_Index (5,4)	5	4	-7.943923	-7.880409	-7.94422	-7.920095
TGARCH T-Student USA_Index (5,5)	5	5	-7.943243	-7.875759	-7.943577	-7.917925
TGARCH T-Student USA_Index (5,0)	5	0	-7.872881	-7.825246	-7.873049	-7.85501
TGARCH T-Student USA_Index (0,2)	0	2	-7.840775	-7.824896	-7.840794	-7.834818
TGARCH T-Student USA_Index (0,1)	0	1	-7.83669	-7.824781	-7.8367	-7.832222
TGARCH T-Student USA_Index (0,3)	0	3	-7.841168	-7.82132	-7.841198	-7.833722
TGARCH T-Student USA_Index (2,0)	2	0	-7.842193	-7.818375	-7.842235	-7.833258
TGARCH T-Student USA_Index (0,4)	0	4	-7.840586	-7.816769	-7.840629	-7.831651
TGARCH T-Student USA_Index (0,5)	0	5	-7.839645	-7.811857	-7.839702	-7.82922
TGARCH T-Student USA_Index (3,0)	3	0	-7.840515	-7.808758	-7.840589	-7.828601
TGARCH T-Student USA_Index (1,0)	1	0	-7.818808	-7.802929	-7.818826	-7.812851
TGARCH T-Student USA_Index (4,0)	4	0	-7.815107	-7.77541	-7.815223	-7.800214

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.943999	-7.920181	-7.944041	-7.935063
TGARCH Skewed T-Student USA_Index (2,1)	2	1	-7.949533	-7.917776	-7.949608	-7.937619
TGARCH Skewed T-Student USA_Index (2,2)	2	2	-7.9533	-7.917573	-7.953394	-7.939897
TGARCH Skewed T-Student USA_Index (1,2)	1	2	-7.940755	-7.912967	-7.940812	-7.93033
TGARCH Skewed T-Student USA_Index (2,3)	2	3	-7.948628	-7.908932	-7.948745	-7.933735
TGARCH Skewed T-Student USA_Index (1,3)	1	3	-7.939551	-7.907794	-7.939626	-7.927637
TGARCH Skewed T-Student USA_Index (3,1)	3	1	-7.944494	-7.904798	-7.944611	-7.929601
TGARCH Skewed T-Student USA_Index (3,2)	3	2	-7.947093	-7.903427	-7.947234	-7.930711
TGARCH Skewed T-Student USA_Index (2,4)	2	4	-7.946936	-7.90327	-7.947077	-7.930554

TGARCH Skewed T-Student USA_Index (1,4)	1	4	-7.936957	-7.90123	-7.937052	-7.923554
TGARCH Skewed T-Student USA_Index (3,3)	3	3	-7.945558	-7.897923	-7.945726	-7.927687
TGARCH Skewed T-Student USA_Index (4,1)	4	1	-7.945143	-7.897507	-7.94531	-7.927272
TGARCH Skewed T-Student USA_Index (4,2)	4	2	-7.948478	-7.896873	-7.948674	-7.929118
TGARCH Skewed T-Student USA_Index (2,5)	2	5	-7.943387	-7.895752	-7.943555	-7.925516
TGARCH Skewed T-Student USA_Index (1,5)	1	5	-7.935301	-7.895605	-7.935418	-7.920409
TGARCH Skewed T-Student USA_Index (3,4)	3	4	-7.94374	-7.892135	-7.943937	-7.92438
TGARCH Skewed T-Student USA_Index (4,3)	4	3	-7.947135	-7.89156	-7.947362	-7.926285
TGARCH Skewed T-Student USA_Index (5,1)	5	1	-7.941951	-7.886376	-7.942179	-7.921102
TGARCH Skewed T-Student USA_Index (4,4)	4	4	-7.9456	-7.886055	-7.945861	-7.923261
TGARCH Skewed T-Student USA_Index (3,5)	3	5	-7.940373	-7.884798	-7.940601	-7.919523
TGARCH Skewed T-Student USA_Index (5,2)	5	2	-7.94069	-7.881145	-7.940951	-7.918351
TGARCH Skewed T-Student USA_Index (5,3)	5	3	-7.942447	-7.878933	-7.942744	-7.918619
TGARCH Skewed T-Student USA_Index (4,5)	4	5	-7.941293	-7.877779	-7.94159	-7.917465
TGARCH Skewed T-Student USA_Index (5,4)	5	4	-7.937413	-7.869929	-7.937748	-7.912096
TGARCH Skewed T-Student USA_Index (5,5)	5	5	-7.939424	-7.867971	-7.939799	-7.912618
TGARCH Skewed T-Student USA_Index (0,2)	0	2	-7.839243	-7.819395	-7.839272	-7.831797
TGARCH Skewed T-Student USA_Index (0,1)	0	1	-7.835156	-7.819278	-7.835175	-7.829199
TGARCH Skewed T-Student USA_Index (2,0)	2	0	-7.84072	-7.812933	-7.840778	-7.830296
TGARCH Skewed T-Student USA_Index (0,4)	0	4	-7.839078	-7.811291	-7.839135	-7.828653
TGARCH Skewed T-Student USA_Index (0,5)	0	5	-7.838114	-7.806357	-7.838189	-7.8262
TGARCH Skewed T-Student USA_Index (1,0)	1	0	-7.817283	-7.797435	-7.817312	-7.809837
TGARCH Skewed T-Student USA_Index (4,0)	4	0	-7.831609	-7.787943	-7.83175	-7.815228
TGARCH Skewed T-Student USA_Index (3,0)	3	0	-7.82254	-7.786814	-7.822635	-7.809137
TGARCH Skewed T-Student USA_Index (5,0)	5	0	-7.823955	-7.77235	-7.824151	-7.804595
TGARCH Skewed T-Student USA_Index (0,3)	0	3	-7.772849	-7.749031	-7.772891	-7.763913

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

EGARCH Norm USA_Index (1,1)	1	1	-7.927976	-7.912097	-7.927994	-7.922019
EGARCH Norm USA_Index (2,2)	2	2	-7.938553	-7.910766	-7.938611	-7.928129
EGARCH Norm USA_Index (2,1)	2	1	-7.933085	-7.909267	-7.933127	-7.92415
EGARCH Norm USA_Index (1,4)	1	4	-7.936568	-7.90878	-7.936625	-7.926143
EGARCH Norm USA_Index (4,4)	4	4	-7.958587	-7.906982	-7.958784	-7.939227
EGARCH Norm USA_Index (1,2)	1	2	-7.926625	-7.906777	-7.926654	-7.919179
EGARCH Norm USA_Index (2,5)	2	5	-7.946073	-7.906376	-7.946189	-7.93118
EGARCH Norm USA_Index (2,3)	2	3	-7.93806	-7.906303	-7.938135	-7.926146
EGARCH Norm USA_Index (1,5)	1	5	-7.938052	-7.906295	-7.938127	-7.926138
EGARCH Norm USA_Index (2,4)	2	4	-7.940642	-7.904915	-7.940736	-7.927239
EGARCH Norm USA_Index (3,5)	3	5	-7.94885	-7.901215	-7.949018	-7.930979
EGARCH Norm USA_Index (1,3)	1	3	-7.92499	-7.901172	-7.925032	-7.916054
EGARCH Norm USA_Index (3,2)	3	2	-7.936063	-7.900336	-7.936157	-7.92266
EGARCH Norm USA_Index (3,1)	3	1	-7.931841	-7.900084	-7.931916	-7.919927
EGARCH Norm USA_Index (4,1)	4	1	-7.937788	-7.898092	-7.937905	-7.922896
EGARCH Norm USA_Index (3,3)	3	3	-7.935342	-7.895646	-7.935459	-7.92045
EGARCH Norm USA_Index (4,5)	4	5	-7.951144	-7.895569	-7.951372	-7.930295
EGARCH Norm USA_Index (3,4)	3	4	-7.938584	-7.894918	-7.938725	-7.922202
EGARCH Norm USA_Index (5,5)	5	5	-7.957682	-7.894168	-7.957979	-7.933854
EGARCH Norm USA_Index (4,2)	4	2	-7.936884	-7.893218	-7.937025	-7.920502
EGARCH Norm USA_Index (5,1)	5	1	-7.936804	-7.889168	-7.936971	-7.918933
EGARCH Norm USA_Index (4,3)	4	3	-7.935889	-7.888254	-7.936057	-7.918018
EGARCH Norm USA_Index (5,2)	5	2	-7.935734	-7.884129	-7.935931	-7.916374
EGARCH Norm USA_Index (5,3)	5	3	-7.936177	-7.880602	-7.936405	-7.915327
EGARCH Norm USA_Index (5,4)	5	4	-7.936667	-7.877123	-7.936929	-7.914329
EGARCH Norm USA_Index (4,0)	4	0	-7.730127	-7.6944	-7.730222	-7.716724
EGARCH Norm USA_Index (0,1)	0	1	-7.677559	-7.669619	-7.677563	-7.67458
EGARCH Norm USA_Index (0,2)	0	2	-7.676024	-7.664115	-7.676035	-7.671556

EGARCH Norm USA_Index (2,0)	2	0	-7.681918	-7.66207	-7.681948	-7.674472
EGARCH Norm USA_Index (0,3)	0	3	-7.674491	-7.658612	-7.67451	-7.668534
EGARCH Norm USA_Index (3,0)	3	0	-7.685029	-7.657242	-7.685086	-7.674604
EGARCH Norm USA_Index (0,4)	0	4	-7.672957	-7.653109	-7.672986	-7.665511
EGARCH Norm USA_Index (0,5)	0	5	-7.671425	-7.647607	-7.671467	-7.662489
EGARCH Norm USA_Index (1,0)	1	0	-7.598015	-7.586106	-7.598026	-7.593547
EGARCH Norm USA_Index (5,0)	5	0	-6.25617	-6.212504	-6.256311	-6.239788

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm USA_Index (1,1)	1	1	-7.928875	-7.909027	-7.928905	-7.921429
EGARCH Skewed Norm USA_Index (2,2)	2	2	-7.939053	-7.907296	-7.939128	-7.927139
EGARCH Skewed Norm USA_Index (4,4)	4	4	-7.961367	-7.905792	-7.961594	-7.940517
EGARCH Skewed Norm USA_Index (2,1)	2	1	-7.933478	-7.905691	-7.933536	-7.923054
EGARCH Skewed Norm USA_Index (1,4)	1	4	-7.936978	-7.905221	-7.937053	-7.925064
EGARCH Skewed Norm USA_Index (1,2)	1	2	-7.927504	-7.903687	-7.927547	-7.918569
EGARCH Skewed Norm USA_Index (2,5)	2	5	-7.946544	-7.902878	-7.946685	-7.930162
EGARCH Skewed Norm USA_Index (2,3)	2	3	-7.938365	-7.902638	-7.938459	-7.924961
EGARCH Skewed Norm USA_Index (2,4)	2	4	-7.940645	-7.900949	-7.940762	-7.925753
EGARCH Skewed Norm USA_Index (1,5)	1	5	-7.935696	-7.899969	-7.935791	-7.922293
EGARCH Skewed Norm USA_Index (1,3)	1	3	-7.925931	-7.898143	-7.925988	-7.915506
EGARCH Skewed Norm USA_Index (3,5)	3	5	-7.948955	-7.89735	-7.949151	-7.929595
EGARCH Skewed Norm USA_Index (3,2)	3	2	-7.93639	-7.896694	-7.936507	-7.921498
EGARCH Skewed Norm USA_Index (3,1)	3	1	-7.932155	-7.896428	-7.932249	-7.918752
EGARCH Skewed Norm USA_Index (4,1)	4	1	-7.938306	-7.89464	-7.938447	-7.921924
EGARCH Skewed Norm USA_Index (3,3)	3	3	-7.935521	-7.891855	-7.935662	-7.919139
EGARCH Skewed Norm USA_Index (5,5)	5	5	-7.958876	-7.891393	-7.959211	-7.933559
EGARCH Skewed Norm USA_Index (4,5)	4	5	-7.950906	-7.891361	-7.951167	-7.928567
EGARCH Skewed Norm USA_Index (3,4)	3	4	-7.938368	-7.890732	-7.938535	-7.920497

EGARCH Skewed Norm USA_Index (4,2)	4	2	-7.937293	-7.889658	-7.937461	-7.919423
EGARCH Skewed Norm USA_Index (5,1)	5	1	-7.937288	-7.885683	-7.937484	-7.917927
EGARCH Skewed Norm USA_Index (4,3)	4	3	-7.936213	-7.884608	-7.93641	-7.916853
EGARCH Skewed Norm USA_Index (5,2)	5	2	-7.936131	-7.880557	-7.936359	-7.915282
EGARCH Skewed Norm USA_Index (5,3)	5	3	-7.936431	-7.876887	-7.936692	-7.914093
EGARCH Skewed Norm USA_Index (5,4)	5	4	-7.936555	-7.873041	-7.936852	-7.912728
EGARCH Skewed Norm USA_Index (4,0)	4	0	-7.729058	-7.689361	-7.729174	-7.714165
EGARCH Skewed Norm USA_Index (5,0)	5	0	-7.733797	-7.686161	-7.733964	-7.715926
EGARCH Skewed Norm USA_Index (0,1)	0	1	-7.681846	-7.669937	-7.681856	-7.677378
EGARCH Skewed Norm USA_Index (0,2)	0	2	-7.680312	-7.664434	-7.680331	-7.674355
EGARCH Skewed Norm USA_Index (2,0)	2	0	-7.683417	-7.6596	-7.68346	-7.674482
EGARCH Skewed Norm USA_Index (0,3)	0	3	-7.678781	-7.658933	-7.67881	-7.671335
EGARCH Skewed Norm USA_Index (3,0)	3	0	-7.685693	-7.653936	-7.685768	-7.673779
EGARCH Skewed Norm USA_Index (0,4)	0	4	-7.677238	-7.653421	-7.677281	-7.668303
EGARCH Skewed Norm USA_Index (0,5)	0	5	-7.675716	-7.647929	-7.675774	-7.665292
EGARCH Skewed Norm USA_Index (1,0)	1	0	-7.600534	-7.584655	-7.600553	-7.594577

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student USA_Index (1,1)	1	1	-7.949832	-7.929984	-7.949861	-7.942386
EGARCH T-Student USA_Index (2,2)	2	2	-7.961556	-7.929799	-7.96163	-7.949642
EGARCH T-Student USA_Index (2,1)	2	1	-7.957559	-7.929772	-7.957617	-7.947135
EGARCH T-Student USA_Index (2,3)	2	3	-7.960829	-7.925102	-7.960923	-7.947426
EGARCH T-Student USA_Index (1,2)	1	2	-7.948156	-7.924338	-7.948198	-7.939221
EGARCH T-Student USA_Index (1,3)	1	3	-7.951877	-7.92409	-7.951935	-7.941453
EGARCH T-Student USA_Index (1,4)	1	4	-7.954314	-7.922557	-7.954389	-7.9424
EGARCH T-Student USA_Index (5,4)	5	4	-7.986043	-7.922529	-7.98634	-7.962215
EGARCH T-Student USA_Index (2,4)	2	4	-7.962177	-7.922481	-7.962294	-7.947285
EGARCH T-Student USA_Index (2,5)	2	5	-7.963411	-7.919745	-7.963552	-7.947029

EGARCH T-Student USA_Index (3,1)	3	1	-7.955271	-7.919545	-7.955366	-7.941868
EGARCH T-Student USA_Index (3,2)	3	2	-7.958203	-7.918507	-7.95832	-7.943311
EGARCH T-Student USA_Index (1,5)	1	5	-7.95285	-7.917123	-7.952945	-7.939447
EGARCH T-Student USA_Index (4,1)	4	1	-7.958812	-7.915146	-7.958953	-7.94243
EGARCH T-Student USA_Index (3,3)	3	3	-7.958611	-7.914945	-7.958752	-7.942229
EGARCH T-Student USA_Index (3,5)	3	5	-7.964424	-7.912819	-7.964621	-7.945064
EGARCH T-Student USA_Index (3,4)	3	4	-7.959171	-7.911535	-7.959338	-7.9413
EGARCH T-Student USA_Index (4,2)	4	2	-7.957716	-7.91008	-7.957883	-7.939845
EGARCH T-Student USA_Index (5,5)	5	5	-7.973706	-7.906222	-7.974041	-7.948389
EGARCH T-Student USA_Index (4,5)	4	5	-7.964468	-7.904923	-7.964729	-7.942129
EGARCH T-Student USA_Index (4,3)	4	3	-7.956521	-7.904916	-7.956718	-7.937161
EGARCH T-Student USA_Index (5,1)	5	1	-7.956453	-7.904848	-7.956649	-7.937093
EGARCH T-Student USA_Index (4,4)	4	4	-7.956227	-7.900652	-7.956455	-7.935378
EGARCH T-Student USA_Index (5,2)	5	2	-7.955447	-7.899873	-7.955675	-7.934598
EGARCH T-Student USA_Index (5,3)	5	3	-7.954964	-7.895419	-7.955225	-7.932625
EGARCH T-Student USA_Index (0,1)	0	1	-7.817923	-7.806014	-7.817933	-7.813455
EGARCH T-Student USA_Index (0,2)	0	2	-7.816418	-7.80054	-7.816437	-7.810461
EGARCH T-Student USA_Index (3,0)	3	0	-7.828853	-7.797096	-7.828928	-7.816939
EGARCH T-Student USA_Index (0,3)	0	3	-7.816442	-7.796594	-7.816471	-7.808996
EGARCH T-Student USA_Index (0,4)	0	4	-7.819069	-7.795251	-7.819111	-7.810133
EGARCH T-Student USA_Index (5,0)	5	0	-7.834613	-7.786977	-7.83478	-7.816742
EGARCH T-Student USA_Index (0,5)	0	5	-7.811682	-7.783895	-7.811739	-7.801257
EGARCH T-Student USA_Index (4,0)	4	0	-6.791898	-6.752201	-6.792014	-6.777005
EGARCH T-Student USA_Index (2,0)	2	0	-6.311397	-6.287579	-6.311439	-6.302461
EGARCH T-Student USA_Index (1,0)	1	0	-4.869154	-4.853276	-4.869173	-4.863197

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.948872	-7.925055	-7.948915	-7.939937

EGARCH Skewed T-Student USA_Index (2,2)	2	2	-7.960392	-7.924665	-7.960487	-7.946989
EGARCH Skewed T-Student USA_Index (2,1)	2	1	-7.956358	-7.924601	-7.956432	-7.944444
EGARCH Skewed T-Student USA_Index (2,3)	2	3	-7.959673	-7.919977	-7.95979	-7.944781
EGARCH Skewed T-Student USA_Index (1,2)	1	2	-7.947202	-7.919415	-7.94726	-7.936778
EGARCH Skewed T-Student USA_Index (1,3)	1	3	-7.950834	-7.919077	-7.950909	-7.93892
EGARCH Skewed T-Student USA_Index (1,4)	1	4	-7.953305	-7.917579	-7.9534	-7.939902
EGARCH Skewed T-Student USA_Index (2,4)	2	4	-7.960956	-7.91729	-7.961097	-7.944575
EGARCH Skewed T-Student USA_Index (2,5)	2	5	-7.962308	-7.914672	-7.962475	-7.944437
EGARCH Skewed T-Student USA_Index (3,1)	3	1	-7.954098	-7.914401	-7.954214	-7.939205
EGARCH Skewed T-Student USA_Index (3,2)	3	2	-7.957057	-7.913391	-7.957197	-7.940675
EGARCH Skewed T-Student USA_Index (1,5)	1	5	-7.951868	-7.912172	-7.951985	-7.936976
EGARCH Skewed T-Student USA_Index (4,1)	4	1	-7.957754	-7.910119	-7.957922	-7.939883
EGARCH Skewed T-Student USA_Index (3,3)	3	3	-7.957475	-7.909839	-7.957642	-7.939604
EGARCH Skewed T-Student USA_Index (3,5)	3	5	-7.963234	-7.907659	-7.963462	-7.942385
EGARCH Skewed T-Student USA_Index (3,4)	3	4	-7.957951	-7.906345	-7.958147	-7.93859
EGARCH Skewed T-Student USA_Index (4,2)	4	2	-7.956633	-7.905028	-7.956829	-7.937273
EGARCH Skewed T-Student USA_Index (4,5)	4	5	-7.967911	-7.904397	-7.968208	-7.944083
EGARCH Skewed T-Student USA_Index (5,1)	5	1	-7.955507	-7.899932	-7.955735	-7.934658
EGARCH Skewed T-Student USA_Index (4,3)	4	3	-7.955389	-7.899814	-7.955616	-7.934539
EGARCH Skewed T-Student USA_Index (4,4)	4	4	-7.955024	-7.89548	-7.955286	-7.932686
EGARCH Skewed T-Student USA_Index (5,2)	5	2	-7.954462	-7.894918	-7.954723	-7.932123
EGARCH Skewed T-Student USA_Index (5,3)	5	3	-7.95389	-7.890376	-7.954186	-7.930062
EGARCH Skewed T-Student USA_Index (5,5)	5	5	-7.960652	-7.889198	-7.961026	-7.933845
EGARCH Skewed T-Student USA_Index (5,4)	5	4	-7.953086	-7.885602	-7.95342	-7.927768
EGARCH Skewed T-Student USA_Index (2,0)	2	0	-7.830854	-7.803066	-7.830911	-7.820429
EGARCH Skewed T-Student USA_Index (0,1)	0	1	-7.816387	-7.800509	-7.816406	-7.81043
EGARCH Skewed T-Student USA_Index (0,2)	0	2	-7.814884	-7.795035	-7.814913	-7.807437
EGARCH Skewed T-Student USA_Index (3,0)	3	0	-7.82732	-7.791594	-7.827415	-7.813917

EGARCH Skewed T-Student USA_Index (0,3)	0	3	-7.814907	-7.79109	-7.814949	-7.805972
EGARCH Skewed T-Student USA_Index (0,4)	0	4	-7.816069	-7.788282	-7.816126	-7.805644
EGARCH Skewed T-Student USA_Index (0,5)	0	5	-7.811414	-7.779657	-7.811489	-7.7995
EGARCH Skewed T-Student USA_Index (5,0)	5	0	-6.938259	-6.886654	-6.938456	-6.918899
EGARCH Skewed T-Student USA_Index (1,0)	1	0	-4.123878	-4.10403	-4.123907	-4.116431

<i>NAGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm USA_Index (1,1)	1	1	-7.932208	-7.916329	-7.932226	-7.926251
NAGARCH Norm USA_Index (2,2)	2	2	-7.943557	-7.91577	-7.943614	-7.933132
NAGARCH Norm USA_Index (2,1)	2	1	-7.935137	-7.911319	-7.935179	-7.926201
NAGARCH Norm USA_Index (1,2)	1	2	-7.930813	-7.910965	-7.930842	-7.923367
NAGARCH Norm USA_Index (2,3)	2	3	-7.942543	-7.910786	-7.942618	-7.930629
NAGARCH Norm USA_Index (1,3)	1	3	-7.929315	-7.905498	-7.929358	-7.92038
NAGARCH Norm USA_Index (2,4)	2	4	-7.94113	-7.905403	-7.941225	-7.927727
NAGARCH Norm USA_Index (3,2)	3	2	-7.940009	-7.904282	-7.940103	-7.926605
NAGARCH Norm USA_Index (3,1)	3	1	-7.932977	-7.90122	-7.933052	-7.921063
NAGARCH Norm USA_Index (3,0)	3	0	-7.928036	-7.900248	-7.928093	-7.917611
NAGARCH Norm USA_Index (1,4)	1	4	-7.927796	-7.900009	-7.927854	-7.917372
NAGARCH Norm USA_Index (3,3)	3	3	-7.939609	-7.899912	-7.939725	-7.924716
NAGARCH Norm USA_Index (2,5)	2	5	-7.939421	-7.899724	-7.939537	-7.924528
NAGARCH Norm USA_Index (1,5)	1	5	-7.926274	-7.894517	-7.926349	-7.91436
NAGARCH Norm USA_Index (3,4)	3	4	-7.93806	-7.894394	-7.938201	-7.921678
NAGARCH Norm USA_Index (4,2)	4	2	-7.937313	-7.893647	-7.937454	-7.920931
NAGARCH Norm USA_Index (4,1)	4	1	-7.931442	-7.891746	-7.931559	-7.91655
NAGARCH Norm USA_Index (4,0)	4	0	-7.926422	-7.890696	-7.926517	-7.913019
NAGARCH Norm USA_Index (4,3)	4	3	-7.937308	-7.889673	-7.937476	-7.919437
NAGARCH Norm USA_Index (5,2)	5	2	-7.937055	-7.88545	-7.937252	-7.917695

NAGARCH Norm USA_Index (4,4)	4	4	-7.936745	-7.88514	-7.936942	-7.917385
NAGARCH Norm USA_Index (3,5)	3	5	-7.930635	-7.882999	-7.930802	-7.912764
NAGARCH Norm USA_Index (5,1)	5	1	-7.927734	-7.880099	-7.927902	-7.909863
NAGARCH Norm USA_Index (4,5)	4	5	-7.93499	-7.879416	-7.935218	-7.914141
NAGARCH Norm USA_Index (5,0)	5	0	-7.921696	-7.87803	-7.921837	-7.905315
NAGARCH Norm USA_Index (5,3)	5	3	-7.933401	-7.877826	-7.933629	-7.912551
NAGARCH Norm USA_Index (5,4)	5	4	-7.933256	-7.873712	-7.933517	-7.910918
NAGARCH Norm USA_Index (5,5)	5	5	-7.929014	-7.8655	-7.929311	-7.905186
NAGARCH Norm USA_Index (2,0)	2	0	-7.769746	-7.749897	-7.769775	-7.762299
NAGARCH Norm USA_Index (0,1)	0	1	-7.685105	-7.677166	-7.68511	-7.682127
NAGARCH Norm USA_Index (0,2)	0	2	-7.688611	-7.676702	-7.688622	-7.684143
NAGARCH Norm USA_Index (1,0)	1	0	-7.686541	-7.674632	-7.686551	-7.682073
NAGARCH Norm USA_Index (0,3)	0	3	-7.687618	-7.67174	-7.687637	-7.681661
NAGARCH Norm USA_Index (0,4)	0	4	-7.68704	-7.667192	-7.687069	-7.679594
NAGARCH Norm USA_Index (0,5)	0	5	-7.685862	-7.662044	-7.685904	-7.676926

NAGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm USA_Index (1,1)	1	1	-7.932658	-7.91281	-7.932688	-7.925212
NAGARCH Skewed Norm USA_Index (2,2)	2	2	-7.944389	-7.912632	-7.944464	-7.932475
NAGARCH Skewed Norm USA_Index (2,1)	2	1	-7.935592	-7.907804	-7.935649	-7.925167
NAGARCH Skewed Norm USA_Index (2,3)	2	3	-7.943257	-7.907531	-7.943352	-7.929854
NAGARCH Skewed Norm USA_Index (1,2)	1	2	-7.931164	-7.907346	-7.931206	-7.922228
NAGARCH Skewed Norm USA_Index (2,4)	2	4	-7.941907	-7.902211	-7.942024	-7.927015
NAGARCH Skewed Norm USA_Index (1,3)	1	3	-7.92976	-7.901973	-7.929818	-7.919335
NAGARCH Skewed Norm USA_Index (3,2)	3	2	-7.941544	-7.901847	-7.94166	-7.926651
NAGARCH Skewed Norm USA_Index (3,1)	3	1	-7.932951	-7.897225	-7.933046	-7.919548
NAGARCH Skewed Norm USA_Index (3,3)	3	3	-7.940186	-7.896521	-7.940327	-7.923805
NAGARCH Skewed Norm USA_Index (1,4)	1	4	-7.928132	-7.896375	-7.928207	-7.916219

NAGARCH Skewed Norm USA_Index (4,2)	4	2	-7.938907	-7.891271	-7.939074	-7.921036
NAGARCH Skewed Norm USA_Index (3,4)	3	4	-7.938837	-7.891201	-7.939004	-7.920966
NAGARCH Skewed Norm USA_Index (1,5)	1	5	-7.926614	-7.890887	-7.926708	-7.91321
NAGARCH Skewed Norm USA_Index (3,0)	3	0	-7.921696	-7.889939	-7.921771	-7.909782
NAGARCH Skewed Norm USA_Index (4,1)	4	1	-7.932303	-7.888637	-7.932444	-7.915922
NAGARCH Skewed Norm USA_Index (4,3)	4	3	-7.936926	-7.885321	-7.937122	-7.917566
NAGARCH Skewed Norm USA_Index (4,0)	4	0	-7.9243	-7.884604	-7.924417	-7.909408
NAGARCH Skewed Norm USA_Index (5,2)	5	2	-7.93779	-7.882215	-7.938017	-7.91694
NAGARCH Skewed Norm USA_Index (4,4)	4	4	-7.937676	-7.882101	-7.937904	-7.916827
NAGARCH Skewed Norm USA_Index (2,5)	2	5	-7.92506	-7.881394	-7.925201	-7.908678
NAGARCH Skewed Norm USA_Index (5,1)	5	1	-7.92915	-7.877544	-7.929346	-7.909789
NAGARCH Skewed Norm USA_Index (5,0)	5	0	-7.924731	-7.877095	-7.924898	-7.90686
NAGARCH Skewed Norm USA_Index (5,3)	5	3	-7.934191	-7.874647	-7.934452	-7.911852
NAGARCH Skewed Norm USA_Index (5,4)	5	4	-7.935557	-7.872043	-7.935853	-7.911729
NAGARCH Skewed Norm USA_Index (3,5)	3	5	-7.921067	-7.869462	-7.921264	-7.901707
NAGARCH Skewed Norm USA_Index (5,5)	5	5	-7.934059	-7.866576	-7.934394	-7.908742
NAGARCH Skewed Norm USA_Index (4,5)	4	5	-7.906513	-7.846969	-7.906774	-7.884174
NAGARCH Skewed Norm USA_Index (2,0)	2	0	-7.77169	-7.747872	-7.771732	-7.762755
NAGARCH Skewed Norm USA_Index (0,2)	0	2	-7.690973	-7.675095	-7.690992	-7.685016
NAGARCH Skewed Norm USA_Index (0,1)	0	1	-7.682002	-7.670093	-7.682013	-7.677534
NAGARCH Skewed Norm USA_Index (0,3)	0	3	-7.685929	-7.666081	-7.685958	-7.678483
NAGARCH Skewed Norm USA_Index (0,4)	0	4	-7.689815	-7.665997	-7.689857	-7.680879
NAGARCH Skewed Norm USA_Index (0,5)	0	5	-7.690022	-7.662235	-7.69008	-7.679598
NAGARCH Skewed Norm USA_Index (1,0)	1	0	-7.577866	-7.561987	-7.577885	-7.571909

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student USA_Index (2,1)	2	1	-7.960006	-7.932219	-7.960063	-7.949581
NAGARCH T-Student USA_Index (1,1)	1	1	-7.95197	-7.932122	-7.951999	-7.944524

NAGARCH T-Student USA_Index (2,2)	2	2	-7.963593	-7.931836	-7.963667	-7.951679
NAGARCH T-Student USA_Index (1,2)	1	2	-7.95054	-7.926723	-7.950583	-7.941605
NAGARCH T-Student USA_Index (2,3)	2	3	-7.962117	-7.92639	-7.962212	-7.948714
NAGARCH T-Student USA_Index (1,3)	1	3	-7.950273	-7.922486	-7.95033	-7.939848
NAGARCH T-Student USA_Index (3,1)	3	1	-7.954444	-7.918717	-7.954539	-7.941041
NAGARCH T-Student USA_Index (3,3)	3	3	-7.961463	-7.917797	-7.961604	-7.945081
NAGARCH T-Student USA_Index (1,4)	1	4	-7.948615	-7.916858	-7.94869	-7.936701
NAGARCH T-Student USA_Index (2,5)	2	5	-7.959018	-7.915352	-7.959159	-7.942637
NAGARCH T-Student USA_Index (3,2)	3	2	-7.952307	-7.91261	-7.952423	-7.937414
NAGARCH T-Student USA_Index (2,4)	2	4	-7.951797	-7.912101	-7.951914	-7.936905
NAGARCH T-Student USA_Index (3,4)	3	4	-7.959585	-7.91195	-7.959753	-7.941714
NAGARCH T-Student USA_Index (1,5)	1	5	-7.947099	-7.911372	-7.947193	-7.933695
NAGARCH T-Student USA_Index (4,2)	4	2	-7.95863	-7.910994	-7.958797	-7.940759
NAGARCH T-Student USA_Index (4,1)	4	1	-7.952814	-7.909148	-7.952955	-7.936433
NAGARCH T-Student USA_Index (4,3)	4	3	-7.958225	-7.90662	-7.958421	-7.938865
NAGARCH T-Student USA_Index (4,4)	4	4	-7.957596	-7.902021	-7.957824	-7.936747
NAGARCH T-Student USA_Index (5,1)	5	1	-7.950538	-7.898933	-7.950734	-7.931178
NAGARCH T-Student USA_Index (5,0)	5	0	-7.946312	-7.898676	-7.946479	-7.928441
NAGARCH T-Student USA_Index (3,0)	3	0	-7.929802	-7.898045	-7.929877	-7.917888
NAGARCH T-Student USA_Index (5,3)	5	3	-7.954191	-7.894647	-7.954453	-7.931853
NAGARCH T-Student USA_Index (5,2)	5	2	-7.948593	-7.893018	-7.94882	-7.927743
NAGARCH T-Student USA_Index (5,5)	5	5	-7.953473	-7.88599	-7.953808	-7.928156
NAGARCH T-Student USA_Index (4,5)	4	5	-7.942854	-7.88331	-7.943115	-7.920516
NAGARCH T-Student USA_Index (5,4)	5	4	-7.922153	-7.858638	-7.922449	-7.898325
NAGARCH T-Student USA_Index (4,0)	4	0	-7.878974	-7.839277	-7.87909	-7.864081
NAGARCH T-Student USA_Index (2,0)	2	0	-7.85289	-7.829072	-7.852932	-7.843955
NAGARCH T-Student USA_Index (0,1)	0	1	-7.82448	-7.812571	-7.82449	-7.820012
NAGARCH T-Student USA_Index (0,2)	0	2	-7.826066	-7.810188	-7.826085	-7.820109

NAGARCH T-Student USA_Index (0,3)	0	3	-7.82766	-7.807811	-7.827689	-7.820213
NAGARCH T-Student USA_Index (0,4)	0	4	-7.826904	-7.803086	-7.826946	-7.817968
NAGARCH T-Student USA_Index (1,0)	1	0	-7.816399	-7.80052	-7.816417	-7.810442
NAGARCH T-Student USA_Index (0,5)	0	5	-7.825904	-7.798117	-7.825962	-7.81548

<i>NAGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student USA_Index (1,1)	1	1	-7.952206	-7.928388	-7.952248	-7.943271
NAGARCH Skewed T-Student USA_Index (1,2)	1	2	-7.9505	-7.922713	-7.950557	-7.940075
NAGARCH Skewed T-Student USA_Index (2,1)	2	1	-7.949144	-7.917387	-7.949219	-7.93723
NAGARCH Skewed T-Student USA_Index (1,3)	1	3	-7.949132	-7.917375	-7.949207	-7.937218
NAGARCH Skewed T-Student USA_Index (3,2)	3	2	-7.959934	-7.916268	-7.960075	-7.943552
NAGARCH Skewed T-Student USA_Index (2,4)	2	4	-7.95978	-7.916114	-7.959921	-7.943398
NAGARCH Skewed T-Student USA_Index (3,1)	3	1	-7.954592	-7.914895	-7.954708	-7.939699
NAGARCH Skewed T-Student USA_Index (2,2)	2	2	-7.950132	-7.914405	-7.950227	-7.936729
NAGARCH Skewed T-Student USA_Index (3,3)	3	3	-7.960688	-7.913053	-7.960856	-7.942817
NAGARCH Skewed T-Student USA_Index (1,4)	1	4	-7.947497	-7.91177	-7.947591	-7.934094
NAGARCH Skewed T-Student USA_Index (2,3)	2	3	-7.950337	-7.910641	-7.950454	-7.935444
NAGARCH Skewed T-Student USA_Index (2,5)	2	5	-7.957979	-7.910344	-7.958147	-7.940108
NAGARCH Skewed T-Student USA_Index (3,4)	3	4	-7.959565	-7.90796	-7.959761	-7.940205
NAGARCH Skewed T-Student USA_Index (1,5)	1	5	-7.946006	-7.90631	-7.946123	-7.931114
NAGARCH Skewed T-Student USA_Index (4,2)	4	2	-7.957827	-7.906222	-7.958023	-7.938467
NAGARCH Skewed T-Student USA_Index (4,1)	4	1	-7.951498	-7.903863	-7.951666	-7.933627
NAGARCH Skewed T-Student USA_Index (3,5)	3	5	-7.957696	-7.902121	-7.957923	-7.936846
NAGARCH Skewed T-Student USA_Index (4,3)	4	3	-7.957575	-7.902	-7.957802	-7.936725
NAGARCH Skewed T-Student USA_Index (4,4)	4	4	-7.956581	-7.897037	-7.956842	-7.934243
NAGARCH Skewed T-Student USA_Index (5,1)	5	1	-7.949585	-7.89401	-7.949813	-7.928736
NAGARCH Skewed T-Student USA_Index (3,0)	3	0	-7.929158	-7.893432	-7.929253	-7.915755

NAGARCH Skewed T-Student USA_Index (4,5)	4	5	-7.95521	-7.891696	-7.955506	-7.931382
NAGARCH Skewed T-Student USA_Index (5,3)	5	3	-7.954763	-7.891248	-7.955059	-7.930935
NAGARCH Skewed T-Student USA_Index (5,2)	5	2	-7.947749	-7.888205	-7.94801	-7.925411
NAGARCH Skewed T-Student USA_Index (5,4)	5	4	-7.950034	-7.882551	-7.950369	-7.924717
NAGARCH Skewed T-Student USA_Index (5,5)	5	5	-7.953321	-7.881868	-7.953696	-7.926514
NAGARCH Skewed T-Student USA_Index (4,0)	4	0	-7.877456	-7.83379	-7.877597	-7.861074
NAGARCH Skewed T-Student USA_Index (5,0)	5	0	-7.885367	-7.833762	-7.885563	-7.866007
NAGARCH Skewed T-Student USA_Index (2,0)	2	0	-7.851391	-7.823604	-7.851449	-7.840967
NAGARCH Skewed T-Student USA_Index (0,2)	0	2	-7.825739	-7.805891	-7.825768	-7.818292
NAGARCH Skewed T-Student USA_Index (0,3)	0	3	-7.827269	-7.803451	-7.827311	-7.818333
NAGARCH Skewed T-Student USA_Index (0,1)	0	1	-7.816493	-7.800614	-7.816512	-7.810536
NAGARCH Skewed T-Student USA_Index (0,4)	0	4	-7.825139	-7.797351	-7.825196	-7.814714
NAGARCH Skewed T-Student USA_Index (1,0)	1	0	-7.814305	-7.794456	-7.814334	-7.806858
NAGARCH Skewed T-Student USA_Index (0,5)	0	5	-7.824417	-7.79266	-7.824492	-7.812503

ARG_Price

SGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm ARG_Price (1,1)	1	1	-7.450397	-7.438489	-7.450408	-7.44593
SGARCH Norm ARG_Price (1,2)	1	2	-7.448428	-7.43255	-7.448447	-7.442471
SGARCH Norm ARG_Price (2,1)	2	1	-7.448383	-7.432505	-7.448402	-7.442426
SGARCH Norm ARG_Price (1,3)	1	3	-7.447162	-7.427314	-7.447191	-7.439716
SGARCH Norm ARG_Price (2,2)	2	2	-7.446892	-7.427044	-7.446921	-7.439446
SGARCH Norm ARG_Price (3,1)	3	1	-7.446119	-7.42627	-7.446148	-7.438672
SGARCH Norm ARG_Price (2,3)	2	3	-7.44674	-7.422923	-7.446783	-7.437805
SGARCH Norm ARG_Price (4,1)	4	1	-7.445913	-7.422095	-7.445955	-7.436977
SGARCH Norm ARG_Price (2,4)	2	4	-7.449282	-7.421495	-7.449339	-7.438857
SGARCH Norm ARG_Price (1,4)	1	4	-7.44519	-7.421373	-7.445233	-7.436255

SGARCH Norm ARG_Price (3,2)	3	2	-7.444629	-7.420811	-7.444671	-7.435694
SGARCH Norm ARG_Price (5,1)	5	1	-7.44692	-7.419133	-7.446977	-7.436495
SGARCH Norm ARG_Price (1,5)	1	5	-7.446123	-7.418336	-7.446181	-7.435698
SGARCH Norm ARG_Price (2,5)	2	5	-7.450069	-7.418312	-7.450144	-7.438155
SGARCH Norm ARG_Price (3,3)	3	3	-7.445205	-7.417418	-7.445263	-7.434781
SGARCH Norm ARG_Price (4,2)	4	2	-7.444378	-7.41659	-7.444435	-7.433953
SGARCH Norm ARG_Price (3,4)	3	4	-7.447747	-7.41599	-7.447822	-7.435833
SGARCH Norm ARG_Price (5,2)	5	2	-7.445385	-7.413628	-7.44546	-7.433471
SGARCH Norm ARG_Price (3,5)	3	5	-7.448534	-7.412808	-7.448629	-7.435131
SGARCH Norm ARG_Price (4,3)	4	3	-7.442844	-7.411086	-7.442918	-7.43093
SGARCH Norm ARG_Price (4,4)	4	4	-7.446212	-7.410485	-7.446307	-7.432809
SGARCH Norm ARG_Price (4,5)	4	5	-7.449176	-7.40948	-7.449293	-7.434284
SGARCH Norm ARG_Price (5,3)	5	3	-7.44385	-7.408124	-7.443945	-7.430447
SGARCH Norm ARG_Price (5,4)	5	4	-7.44381	-7.404114	-7.443926	-7.428917
SGARCH Norm ARG_Price (5,5)	5	5	-7.447653	-7.403987	-7.447794	-7.431271
SGARCH Norm ARG_Price (4,0)	4	0	-7.41	-7.390152	-7.410029	-7.402554
SGARCH Norm ARG_Price (5,0)	5	0	-7.410636	-7.386818	-7.410678	-7.4017
SGARCH Norm ARG_Price (3,0)	3	0	-7.390092	-7.374214	-7.390111	-7.384135
SGARCH Norm ARG_Price (2,0)	2	0	-7.385234	-7.373325	-7.385244	-7.380766
SGARCH Norm ARG_Price (1,0)	1	0	-7.331015	-7.323076	-7.33102	-7.328037
SGARCH Norm ARG_Price (0,1)	0	1	-7.179039	-7.1711	-7.179043	-7.17606
SGARCH Norm ARG_Price (0,2)	0	2	-7.177515	-7.165606	-7.177525	-7.173047
SGARCH Norm ARG_Price (0,3)	0	3	-7.176423	-7.160544	-7.176442	-7.170466
SGARCH Norm ARG_Price (0,4)	0	4	-7.175274	-7.155426	-7.175303	-7.167828
SGARCH Norm ARG_Price (0,5)	0	5	-7.174045	-7.150228	-7.174088	-7.16511

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.453052	-7.437174	-7.453071	-7.447095

SGARCH Skewed Norm ARG_Price (1,2)	1	2	-7.451068	-7.43122	-7.451098	-7.443622
SGARCH Skewed Norm ARG_Price (2,1)	2	1	-7.451031	-7.431183	-7.45106	-7.443585
SGARCH Skewed Norm ARG_Price (1,3)	1	3	-7.449778	-7.42596	-7.44982	-7.440843
SGARCH Skewed Norm ARG_Price (2,2)	2	2	-7.449534	-7.425716	-7.449576	-7.440599
SGARCH Skewed Norm ARG_Price (3,1)	3	1	-7.448755	-7.424937	-7.448797	-7.439819
SGARCH Skewed Norm ARG_Price (2,3)	2	3	-7.449414	-7.421626	-7.449471	-7.438989
SGARCH Skewed Norm ARG_Price (4,1)	4	1	-7.449143	-7.421356	-7.449201	-7.438719
SGARCH Skewed Norm ARG_Price (1,4)	1	4	-7.447552	-7.419764	-7.447609	-7.437127
SGARCH Skewed Norm ARG_Price (3,2)	3	2	-7.447258	-7.419471	-7.447315	-7.436833
SGARCH Skewed Norm ARG_Price (2,4)	2	4	-7.451117	-7.41936	-7.451192	-7.439203
SGARCH Skewed Norm ARG_Price (5,1)	5	1	-7.450101	-7.418344	-7.450176	-7.438187
SGARCH Skewed Norm ARG_Price (2,5)	2	5	-7.452639	-7.416913	-7.452734	-7.439236
SGARCH Skewed Norm ARG_Price (1,5)	1	5	-7.448103	-7.416346	-7.448178	-7.436189
SGARCH Skewed Norm ARG_Price (3,3)	3	3	-7.447879	-7.416122	-7.447953	-7.435965
SGARCH Skewed Norm ARG_Price (4,2)	4	2	-7.447609	-7.415851	-7.447683	-7.435695
SGARCH Skewed Norm ARG_Price (3,4)	3	4	-7.449583	-7.413856	-7.449677	-7.436179
SGARCH Skewed Norm ARG_Price (5,2)	5	2	-7.448566	-7.412839	-7.448661	-7.435163
SGARCH Skewed Norm ARG_Price (3,5)	3	5	-7.451104	-7.411408	-7.451221	-7.436212
SGARCH Skewed Norm ARG_Price (4,3)	4	3	-7.445907	-7.41018	-7.446001	-7.432504
SGARCH Skewed Norm ARG_Price (4,5)	4	5	-7.452085	-7.408419	-7.452226	-7.435703
SGARCH Skewed Norm ARG_Price (4,4)	4	4	-7.448047	-7.408351	-7.448164	-7.433155
SGARCH Skewed Norm ARG_Price (5,3)	5	3	-7.447031	-7.407335	-7.447148	-7.432139
SGARCH Skewed Norm ARG_Price (5,5)	5	5	-7.450569	-7.402934	-7.450737	-7.432698
SGARCH Skewed Norm ARG_Price (5,4)	5	4	-7.445885	-7.402219	-7.446026	-7.429503
SGARCH Skewed Norm ARG_Price (4,0)	4	0	-7.411606	-7.387788	-7.411648	-7.40267
SGARCH Skewed Norm ARG_Price (5,0)	5	0	-7.412487	-7.384699	-7.412544	-7.402062
SGARCH Skewed Norm ARG_Price (3,0)	3	0	-7.39162	-7.371772	-7.39165	-7.384174
SGARCH Skewed Norm ARG_Price (2,0)	2	0	-7.38729	-7.371412	-7.387309	-7.381333

SGARCH Skewed Norm ARG_Price (1,0)	1	0	-7.331266	-7.319357	-7.331277	-7.326798
SGARCH Skewed Norm ARG_Price (0,1)	0	1	-7.174109	-7.162201	-7.17412	-7.169642
SGARCH Skewed Norm ARG_Price (0,2)	0	2	-7.175028	-7.15915	-7.175047	-7.169071
SGARCH Skewed Norm ARG_Price (0,3)	0	3	-7.174696	-7.154848	-7.174726	-7.16725
SGARCH Skewed Norm ARG_Price (0,4)	0	4	-7.173895	-7.150077	-7.173937	-7.16496
SGARCH Skewed Norm ARG_Price (0,5)	0	5	-7.173071	-7.145284	-7.173128	-7.162646

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student ARG_Price (1,1)	1	1	-7.849053	-7.833175	-7.849072	-7.843096
SGARCH T-Student ARG_Price (2,0)	2	0	-7.844921	-7.829043	-7.84494	-7.838964
SGARCH T-Student ARG_Price (1,2)	1	2	-7.848298	-7.82845	-7.848327	-7.840852
SGARCH T-Student ARG_Price (2,1)	2	1	-7.847324	-7.827476	-7.847353	-7.839878
SGARCH T-Student ARG_Price (1,3)	1	3	-7.84986	-7.826042	-7.849902	-7.840924
SGARCH T-Student ARG_Price (3,0)	3	0	-7.844038	-7.82419	-7.844067	-7.836592
SGARCH T-Student ARG_Price (2,2)	2	2	-7.846763	-7.822945	-7.846805	-7.837828
SGARCH T-Student ARG_Price (1,4)	1	4	-7.849819	-7.822032	-7.849877	-7.839395
SGARCH T-Student ARG_Price (4,0)	4	0	-7.845704	-7.821886	-7.845746	-7.836768
SGARCH T-Student ARG_Price (3,1)	3	1	-7.845355	-7.821537	-7.845397	-7.836419
SGARCH T-Student ARG_Price (2,3)	2	3	-7.848325	-7.820537	-7.848382	-7.8379
SGARCH T-Student ARG_Price (1,5)	1	5	-7.85202	-7.820263	-7.852094	-7.840106
SGARCH T-Student ARG_Price (1,0)	1	0	-7.828884	-7.816975	-7.828894	-7.824416
SGARCH T-Student ARG_Price (3,2)	3	2	-7.844758	-7.81697	-7.844815	-7.834333
SGARCH T-Student ARG_Price (2,4)	2	4	-7.848679	-7.816922	-7.848754	-7.836765
SGARCH T-Student ARG_Price (4,1)	4	1	-7.844677	-7.81689	-7.844735	-7.834253
SGARCH T-Student ARG_Price (5,0)	5	0	-7.843892	-7.816104	-7.843949	-7.833467
SGARCH T-Student ARG_Price (2,5)	2	5	-7.851585	-7.815859	-7.85168	-7.838182
SGARCH T-Student ARG_Price (3,3)	3	3	-7.84679	-7.815033	-7.846864	-7.834876
SGARCH T-Student ARG_Price (5,1)	5	1	-7.844732	-7.812975	-7.844806	-7.832818

SGARCH T-Student ARG_Price (4,2)	4	2	-7.843241	-7.811484	-7.843316	-7.831327
SGARCH T-Student ARG_Price (3,4)	3	4	-7.847144	-7.811417	-7.847239	-7.833741
SGARCH T-Student ARG_Price (3,5)	3	5	-7.85005	-7.810354	-7.850167	-7.835158
SGARCH T-Student ARG_Price (4,3)	4	3	-7.844861	-7.809134	-7.844955	-7.831457
SGARCH T-Student ARG_Price (5,2)	5	2	-7.843197	-7.80747	-7.843291	-7.829794
SGARCH T-Student ARG_Price (4,4)	4	4	-7.845609	-7.805913	-7.845726	-7.830717
SGARCH T-Student ARG_Price (4,5)	4	5	-7.848515	-7.804849	-7.848656	-7.832134
SGARCH T-Student ARG_Price (5,3)	5	3	-7.842963	-7.803267	-7.84308	-7.828071
SGARCH T-Student ARG_Price (5,4)	5	4	-7.84364	-7.799974	-7.843781	-7.827258
SGARCH T-Student ARG_Price (5,5)	5	5	-7.84698	-7.799345	-7.847148	-7.82911
SGARCH T-Student ARG_Price (0,1)	0	1	-7.727516	-7.715607	-7.727527	-7.723048
SGARCH T-Student ARG_Price (0,2)	0	2	-7.726509	-7.71063	-7.726527	-7.720552
SGARCH T-Student ARG_Price (0,3)	0	3	-7.724878	-7.70503	-7.724907	-7.717432
SGARCH T-Student ARG_Price (0,4)	0	4	-7.724348	-7.70053	-7.72439	-7.715412
SGARCH T-Student ARG_Price (0,5)	0	5	-7.722606	-7.694818	-7.722663	-7.712181

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.849916	-7.830068	-7.849946	-7.84247
SGARCH Skewed T-Student ARG_Price (2,0)	2	0	-7.846584	-7.826735	-7.846613	-7.839137
SGARCH Skewed T-Student ARG_Price (1,2)	1	2	-7.849032	-7.825214	-7.849074	-7.840096
SGARCH Skewed T-Student ARG_Price (2,1)	2	1	-7.848194	-7.824376	-7.848236	-7.839259
SGARCH Skewed T-Student ARG_Price (1,3)	1	3	-7.850714	-7.822926	-7.850771	-7.840289
SGARCH Skewed T-Student ARG_Price (3,0)	3	0	-7.845505	-7.821687	-7.845547	-7.836569
SGARCH Skewed T-Student ARG_Price (2,2)	2	2	-7.847497	-7.81971	-7.847554	-7.837072
SGARCH Skewed T-Student ARG_Price (4,0)	4	0	-7.846875	-7.819088	-7.846933	-7.836451
SGARCH Skewed T-Student ARG_Price (1,4)	1	4	-7.850782	-7.819025	-7.850857	-7.838868
SGARCH Skewed T-Student ARG_Price (3,1)	3	1	-7.846229	-7.818442	-7.846286	-7.835804
SGARCH Skewed T-Student ARG_Price (1,5)	1	5	-7.853449	-7.817722	-7.853543	-7.840045

SGARCH Skewed T-Student ARG_Price (2,3)	2	3	-7.849179	-7.817422	-7.849253	-7.837265
SGARCH Skewed T-Student ARG_Price (1,0)	1	0	-7.830629	-7.81475	-7.830647	-7.824672
SGARCH Skewed T-Student ARG_Price (2,4)	2	4	-7.849682	-7.813955	-7.849777	-7.836279
SGARCH Skewed T-Student ARG_Price (4,1)	4	1	-7.845579	-7.813822	-7.845653	-7.833665
SGARCH Skewed T-Student ARG_Price (3,2)	3	2	-7.845494	-7.813737	-7.845569	-7.83358
SGARCH Skewed T-Student ARG_Price (2,5)	2	5	-7.853088	-7.813392	-7.853205	-7.838196
SGARCH Skewed T-Student ARG_Price (5,0)	5	0	-7.845053	-7.813296	-7.845128	-7.833139
SGARCH Skewed T-Student ARG_Price (3,3)	3	3	-7.847644	-7.811917	-7.847738	-7.834241
SGARCH Skewed T-Student ARG_Price (5,1)	5	1	-7.845539	-7.809813	-7.845634	-7.832136
SGARCH Skewed T-Student ARG_Price (3,4)	3	4	-7.848147	-7.808451	-7.848264	-7.833255
SGARCH Skewed T-Student ARG_Price (4,2)	4	2	-7.84407	-7.808344	-7.844165	-7.830667
SGARCH Skewed T-Student ARG_Price (3,5)	3	5	-7.851553	-7.807887	-7.851694	-7.835172
SGARCH Skewed T-Student ARG_Price (4,3)	4	3	-7.845726	-7.80603	-7.845843	-7.830834
SGARCH Skewed T-Student ARG_Price (5,2)	5	2	-7.844005	-7.804308	-7.844121	-7.829112
SGARCH Skewed T-Student ARG_Price (4,4)	4	4	-7.846612	-7.802946	-7.846753	-7.830231
SGARCH Skewed T-Student ARG_Price (4,5)	4	5	-7.850018	-7.802383	-7.850186	-7.832147
SGARCH Skewed T-Student ARG_Price (5,3)	5	3	-7.843832	-7.800166	-7.843973	-7.82745
SGARCH Skewed T-Student ARG_Price (5,4)	5	4	-7.844638	-7.797002	-7.844805	-7.826767
SGARCH Skewed T-Student ARG_Price (5,5)	5	5	-7.848483	-7.796878	-7.84868	-7.829123
SGARCH Skewed T-Student ARG_Price (0,1)	0	1	-7.727273	-7.711394	-7.727291	-7.721316
SGARCH Skewed T-Student ARG_Price (0,2)	0	2	-7.727171	-7.707323	-7.7272	-7.719725
SGARCH Skewed T-Student ARG_Price (0,3)	0	3	-7.725989	-7.702171	-7.726031	-7.717054
SGARCH Skewed T-Student ARG_Price (0,4)	0	4	-7.724511	-7.696723	-7.724568	-7.714086
SGARCH Skewed T-Student ARG_Price (0,5)	0	5	-7.723356	-7.691599	-7.72343	-7.711442

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm ARG_Price (1,1)	1	1	-7.419754	-7.399906	-7.419784	-7.412308
APARCH Norm ARG_Price (1,2)	1	2	-7.419663	-7.395845	-7.419705	-7.410727

APARCH Norm ARG_Price (1,3)	1	3	-7.417565	-7.389777	-7.417622	-7.40714
APARCH Norm ARG_Price (1,5)	1	5	-7.423179	-7.387452	-7.423273	-7.409776
APARCH Norm ARG_Price (1,4)	1	4	-7.418268	-7.386511	-7.418343	-7.406354
APARCH Norm ARG_Price (2,1)	2	1	-7.407036	-7.379249	-7.407094	-7.396612
APARCH Norm ARG_Price (2,3)	2	3	-7.414739	-7.379012	-7.414833	-7.401336
APARCH Norm ARG_Price (2,2)	2	2	-7.407575	-7.375818	-7.40765	-7.395661
APARCH Norm ARG_Price (2,4)	2	4	-7.412828	-7.373131	-7.412944	-7.397935
APARCH Norm ARG_Price (2,5)	2	5	-7.416515	-7.372849	-7.416656	-7.400134
APARCH Norm ARG_Price (3,1)	3	1	-7.397068	-7.361342	-7.397163	-7.383665
APARCH Norm ARG_Price (3,3)	3	3	-7.403439	-7.359773	-7.40358	-7.387057
APARCH Norm ARG_Price (3,4)	3	4	-7.406371	-7.358735	-7.406538	-7.3885
APARCH Norm ARG_Price (3,5)	3	5	-7.410337	-7.358732	-7.410533	-7.390977
APARCH Norm ARG_Price (3,2)	3	2	-7.398204	-7.358507	-7.39832	-7.383311
APARCH Norm ARG_Price (4,3)	4	3	-7.393351	-7.341746	-7.393547	-7.373991
APARCH Norm ARG_Price (4,4)	4	4	-7.39602	-7.340446	-7.396248	-7.375171
APARCH Norm ARG_Price (4,2)	4	2	-7.386427	-7.338792	-7.386595	-7.368557
APARCH Norm ARG_Price (5,0)	5	0	-7.386321	-7.338685	-7.386489	-7.36845
APARCH Norm ARG_Price (4,1)	4	1	-7.381155	-7.337489	-7.381296	-7.364773
APARCH Norm ARG_Price (2,0)	2	0	-7.360899	-7.337081	-7.360941	-7.351963
APARCH Norm ARG_Price (4,5)	4	5	-7.396446	-7.336902	-7.396707	-7.374108
APARCH Norm ARG_Price (5,4)	5	4	-7.388997	-7.325482	-7.389293	-7.365169
APARCH Norm ARG_Price (5,5)	5	5	-7.384094	-7.31661	-7.384429	-7.358777
APARCH Norm ARG_Price (5,1)	5	1	-7.367889	-7.316284	-7.368085	-7.348529
APARCH Norm ARG_Price (4,0)	4	0	-7.355285	-7.315588	-7.355401	-7.340392
APARCH Norm ARG_Price (5,3)	5	3	-7.372146	-7.312602	-7.372407	-7.349807
APARCH Norm ARG_Price (5,2)	5	2	-7.367986	-7.312411	-7.368213	-7.347136
APARCH Norm ARG_Price (3,0)	3	0	-7.342441	-7.310684	-7.342516	-7.330527
APARCH Norm ARG_Price (1,0)	1	0	-7.316471	-7.300592	-7.316489	-7.310514

APARCH Norm ARG_Price (0,1)	0	1	-7.165741	-7.153832	-7.165752	-7.161274
APARCH Norm ARG_Price (0,2)	0	2	-7.163459	-7.14758	-7.163477	-7.157502
APARCH Norm ARG_Price (0,3)	0	3	-7.159892	-7.140044	-7.159922	-7.152446
APARCH Norm ARG_Price (0,4)	0	4	-7.156156	-7.132338	-7.156198	-7.147221
APARCH Norm ARG_Price (0,5)	0	5	-7.152237	-7.124449	-7.152294	-7.141812

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm ARG_Price (1,2)	1	2	-7.438775	-7.410987	-7.438832	-7.42835
APARCH Skewed Norm ARG_Price (1,1)	1	1	-7.42472	-7.400903	-7.424762	-7.415785
APARCH Skewed Norm ARG_Price (1,4)	1	4	-7.427318	-7.391591	-7.427412	-7.413914
APARCH Skewed Norm ARG_Price (1,3)	1	3	-7.422817	-7.39106	-7.422892	-7.410903
APARCH Skewed Norm ARG_Price (2,2)	2	2	-7.424424	-7.388698	-7.424519	-7.411021
APARCH Skewed Norm ARG_Price (1,5)	1	5	-7.426148	-7.386451	-7.426264	-7.411255
APARCH Skewed Norm ARG_Price (2,1)	2	1	-7.417558	-7.3858	-7.417632	-7.405644
APARCH Skewed Norm ARG_Price (2,3)	2	3	-7.421258	-7.381562	-7.421375	-7.406366
APARCH Skewed Norm ARG_Price (2,4)	2	4	-7.42093	-7.377264	-7.421071	-7.404548
APARCH Skewed Norm ARG_Price (2,5)	2	5	-7.424852	-7.377216	-7.425019	-7.406981
APARCH Skewed Norm ARG_Price (3,1)	3	1	-7.407093	-7.367397	-7.40721	-7.392201
APARCH Skewed Norm ARG_Price (3,3)	3	3	-7.414013	-7.366378	-7.414181	-7.396142
APARCH Skewed Norm ARG_Price (3,5)	3	5	-7.416659	-7.361084	-7.416886	-7.395809
APARCH Skewed Norm ARG_Price (3,4)	3	4	-7.412262	-7.360657	-7.412458	-7.392902
APARCH Skewed Norm ARG_Price (3,2)	3	2	-7.401961	-7.358295	-7.402102	-7.38558
APARCH Skewed Norm ARG_Price (4,3)	4	3	-7.408149	-7.352574	-7.408377	-7.3873
APARCH Skewed Norm ARG_Price (4,2)	4	2	-7.399174	-7.347569	-7.39937	-7.379814
APARCH Skewed Norm ARG_Price (4,4)	4	4	-7.401896	-7.342351	-7.402157	-7.379557
APARCH Skewed Norm ARG_Price (4,1)	4	1	-7.388054	-7.340418	-7.388221	-7.370183
APARCH Skewed Norm ARG_Price (4,5)	4	5	-7.403822	-7.340308	-7.404119	-7.379994
APARCH Skewed Norm ARG_Price (2,0)	2	0	-7.35495	-7.327163	-7.355007	-7.344525

APARCH Skewed Norm ARG_Price (5,0)	5	0	-7.378054	-7.326448	-7.37825	-7.358693
APARCH Skewed Norm ARG_Price (5,1)	5	1	-7.381914	-7.326339	-7.382142	-7.361065
APARCH Skewed Norm ARG_Price (5,5)	5	5	-7.397607	-7.326154	-7.397982	-7.3708
APARCH Skewed Norm ARG_Price (5,3)	5	3	-7.385858	-7.322344	-7.386155	-7.36203
APARCH Skewed Norm ARG_Price (5,4)	5	4	-7.389297	-7.321813	-7.389631	-7.363979
APARCH Skewed Norm ARG_Price (3,0)	3	0	-7.355757	-7.320031	-7.355852	-7.342354
APARCH Skewed Norm ARG_Price (4,0)	4	0	-7.360832	-7.317166	-7.360973	-7.34445
APARCH Skewed Norm ARG_Price (5,2)	5	2	-7.376126	-7.316582	-7.376387	-7.353787
APARCH Skewed Norm ARG_Price (1,0)	1	0	-7.317407	-7.297559	-7.317437	-7.309961
APARCH Skewed Norm ARG_Price (0,1)	0	1	-7.166317	-7.150439	-7.166336	-7.16036
APARCH Skewed Norm ARG_Price (0,2)	0	2	-7.162432	-7.142584	-7.162462	-7.154986
APARCH Skewed Norm ARG_Price (0,3)	0	3	-7.158504	-7.134687	-7.158547	-7.149569
APARCH Skewed Norm ARG_Price (0,4)	0	4	-7.155454	-7.127667	-7.155511	-7.145029
APARCH Skewed Norm ARG_Price (0,5)	0	5	-7.151507	-7.11975	-7.151582	-7.139593

APARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student ARG_Price (1,5)	1	5	-7.872156	-7.83246	-7.872273	-7.857264
APARCH T-Student ARG_Price (2,4)	2	4	-7.867867	-7.824201	-7.868008	-7.851485
APARCH T-Student ARG_Price (2,0)	2	0	-7.850809	-7.823021	-7.850866	-7.840384
APARCH T-Student ARG_Price (2,5)	2	5	-7.869313	-7.821678	-7.869481	-7.851443
APARCH T-Student ARG_Price (1,3)	1	3	-7.851465	-7.819708	-7.85154	-7.839551
APARCH T-Student ARG_Price (1,1)	1	1	-7.843174	-7.819357	-7.843217	-7.834239
APARCH T-Student ARG_Price (1,4)	1	4	-7.854607	-7.81888	-7.854702	-7.841204
APARCH T-Student ARG_Price (1,2)	1	2	-7.845828	-7.818041	-7.845886	-7.835404
APARCH T-Student ARG_Price (3,0)	3	0	-7.851925	-7.816198	-7.85202	-7.838522
APARCH T-Student ARG_Price (3,3)	3	3	-7.863365	-7.81573	-7.863533	-7.845495
APARCH T-Student ARG_Price (3,4)	3	4	-7.864799	-7.813194	-7.864996	-7.845439
APARCH T-Student ARG_Price (3,5)	3	5	-7.866424	-7.810849	-7.866651	-7.845574

APARCH T-Student ARG_Price (1,0)	1	0	-7.82969	-7.809841	-7.829719	-7.822243
APARCH T-Student ARG_Price (4,0)	4	0	-7.853418	-7.809752	-7.853559	-7.837037
APARCH T-Student ARG_Price (2,3)	2	3	-7.848402	-7.808705	-7.848518	-7.833509
APARCH T-Student ARG_Price (2,1)	2	1	-7.839249	-7.807492	-7.839324	-7.827335
APARCH T-Student ARG_Price (2,2)	2	2	-7.84276	-7.807033	-7.842854	-7.829356
APARCH T-Student ARG_Price (4,2)	4	2	-7.85686	-7.805255	-7.857057	-7.8375
APARCH T-Student ARG_Price (4,3)	4	3	-7.860255	-7.80468	-7.860482	-7.839405
APARCH T-Student ARG_Price (4,4)	4	4	-7.86224	-7.802696	-7.862501	-7.839902
APARCH T-Student ARG_Price (5,0)	5	0	-7.852465	-7.80086	-7.852662	-7.833105
APARCH T-Student ARG_Price (4,5)	4	5	-7.863313	-7.799799	-7.86361	-7.839485
APARCH T-Student ARG_Price (3,1)	3	1	-7.836494	-7.796798	-7.83661	-7.821601
APARCH T-Student ARG_Price (5,2)	5	2	-7.855987	-7.796443	-7.856248	-7.833648
APARCH T-Student ARG_Price (3,2)	3	2	-7.83997	-7.796304	-7.840111	-7.823588
APARCH T-Student ARG_Price (5,3)	5	3	-7.857986	-7.794472	-7.858282	-7.834158
APARCH T-Student ARG_Price (5,4)	5	4	-7.859068	-7.791584	-7.859402	-7.833751
APARCH T-Student ARG_Price (5,5)	5	5	-7.860817	-7.789363	-7.861191	-7.83401
APARCH T-Student ARG_Price (4,1)	4	1	-7.833504	-7.785869	-7.833672	-7.815633
APARCH T-Student ARG_Price (5,1)	5	1	-7.830024	-7.77445	-7.830252	-7.809175
APARCH T-Student ARG_Price (0,1)	0	1	-7.736263	-7.720384	-7.736282	-7.730306
APARCH T-Student ARG_Price (0,2)	0	2	-7.738186	-7.718338	-7.738215	-7.73074
APARCH T-Student ARG_Price (0,4)	0	4	-7.732083	-7.704296	-7.732141	-7.721659
APARCH T-Student ARG_Price (0,5)	0	5	-7.730686	-7.698929	-7.73076	-7.718772

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student ARG_Price (1,4)	1	4	-7.873692	-7.833996	-7.873809	-7.858799
APARCH Skewed T-Student ARG_Price (1,5)	1	5	-7.874789	-7.831123	-7.87493	-7.858408
APARCH Skewed T-Student ARG_Price (2,4)	2	4	-7.87051	-7.822875	-7.870678	-7.852639

APARCH Skewed T-Student ARG_Price (2,0)	2	0	-7.854018	-7.822261	-7.854093	-7.842104
APARCH Skewed T-Student ARG_Price (2,5)	2	5	-7.871824	-7.820218	-7.87202	-7.852463
APARCH Skewed T-Student ARG_Price (1,3)	1	3	-7.852023	-7.816297	-7.852118	-7.83862
APARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.843625	-7.815838	-7.843682	-7.8332
APARCH Skewed T-Student ARG_Price (3,0)	3	0	-7.85468	-7.814983	-7.854796	-7.839787
APARCH Skewed T-Student ARG_Price (3,2)	3	2	-7.862496	-7.814861	-7.862664	-7.844625
APARCH Skewed T-Student ARG_Price (3,3)	3	3	-7.866255	-7.81465	-7.866452	-7.846895
APARCH Skewed T-Student ARG_Price (1,2)	1	2	-7.846	-7.814243	-7.846075	-7.834086
APARCH Skewed T-Student ARG_Price (3,5)	3	5	-7.868754	-7.809209	-7.869015	-7.846415
APARCH Skewed T-Student ARG_Price (1,0)	1	0	-7.83268	-7.808862	-7.832722	-7.823744
APARCH Skewed T-Student ARG_Price (4,0)	4	0	-7.855693	-7.808058	-7.855861	-7.837822
APARCH Skewed T-Student ARG_Price (2,3)	2	3	-7.848933	-7.805267	-7.849074	-7.832551
APARCH Skewed T-Student ARG_Price (4,2)	4	2	-7.859281	-7.803706	-7.859508	-7.838431
APARCH Skewed T-Student ARG_Price (2,1)	2	1	-7.83934	-7.803613	-7.839434	-7.825936
APARCH Skewed T-Student ARG_Price (4,3)	4	3	-7.862942	-7.803398	-7.863203	-7.840604
APARCH Skewed T-Student ARG_Price (2,2)	2	2	-7.84293	-7.803234	-7.843047	-7.828038
APARCH Skewed T-Student ARG_Price (4,4)	4	4	-7.864728	-7.801214	-7.865025	-7.8409
APARCH Skewed T-Student ARG_Price (5,0)	5	0	-7.854617	-7.799042	-7.854845	-7.833767
APARCH Skewed T-Student ARG_Price (4,5)	4	5	-7.865717	-7.798233	-7.866051	-7.8404
APARCH Skewed T-Student ARG_Price (3,4)	3	4	-7.852615	-7.79704	-7.852842	-7.831765
APARCH Skewed T-Student ARG_Price (5,2)	5	2	-7.858075	-7.794561	-7.858372	-7.834248
APARCH Skewed T-Student ARG_Price (3,1)	3	1	-7.836615	-7.792949	-7.836756	-7.820234
APARCH Skewed T-Student ARG_Price (5,3)	5	3	-7.8597	-7.792216	-7.860035	-7.834383
APARCH Skewed T-Student ARG_Price (5,4)	5	4	-7.859433	-7.78798	-7.859808	-7.832627
APARCH Skewed T-Student ARG_Price (5,5)	5	5	-7.862647	-7.787224	-7.863064	-7.834351
APARCH Skewed T-Student ARG_Price (4,1)	4	1	-7.833622	-7.782017	-7.833819	-7.814262
APARCH Skewed T-Student ARG_Price (5,1)	5	1	-7.830051	-7.770507	-7.830312	-7.807713
APARCH Skewed T-Student ARG_Price (0,1)	0	1	-7.742254	-7.722406	-7.742284	-7.734808

APARCH Skewed T-Student ARG_Price (0,4)	0	4	-7.737976	-7.706219	-7.738051	-7.726062
APARCH Skewed T-Student ARG_Price (0,5)	0	5	-7.735287	-7.699561	-7.735382	-7.721884

<i>TGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm ARG_Price (1,1)	1	1	-7.433849	-7.417971	-7.433868	-7.427893
TGARCH Norm ARG_Price (1,2)	1	2	-7.433389	-7.413541	-7.433419	-7.425943
TGARCH Norm ARG_Price (2,1)	2	1	-7.436324	-7.412506	-7.436366	-7.427388
TGARCH Norm ARG_Price (1,3)	1	3	-7.434195	-7.410377	-7.434237	-7.42526
TGARCH Norm ARG_Price (1,4)	1	4	-7.435136	-7.407349	-7.435194	-7.424712
TGARCH Norm ARG_Price (2,3)	2	3	-7.438596	-7.406839	-7.438671	-7.426682
TGARCH Norm ARG_Price (1,5)	1	5	-7.438131	-7.406374	-7.438206	-7.426217
TGARCH Norm ARG_Price (2,4)	2	4	-7.440053	-7.404326	-7.440147	-7.42665
TGARCH Norm ARG_Price (2,5)	2	5	-7.443342	-7.403646	-7.443459	-7.42845
TGARCH Norm ARG_Price (2,2)	2	2	-7.43032	-7.402533	-7.430378	-7.419896
TGARCH Norm ARG_Price (3,1)	3	1	-7.433225	-7.401468	-7.4333	-7.421311
TGARCH Norm ARG_Price (3,2)	3	2	-7.433201	-7.397474	-7.433296	-7.419798
TGARCH Norm ARG_Price (3,3)	3	3	-7.435516	-7.39582	-7.435633	-7.420623
TGARCH Norm ARG_Price (3,4)	3	4	-7.436983	-7.393317	-7.437124	-7.420601
TGARCH Norm ARG_Price (3,5)	3	5	-7.440604	-7.392969	-7.440772	-7.422733
TGARCH Norm ARG_Price (4,1)	4	1	-7.43169	-7.391994	-7.431807	-7.416798
TGARCH Norm ARG_Price (4,2)	4	2	-7.431102	-7.387436	-7.431243	-7.41472
TGARCH Norm ARG_Price (4,3)	4	3	-7.43235	-7.384715	-7.432518	-7.414479
TGARCH Norm ARG_Price (4,4)	4	4	-7.435424	-7.383819	-7.435621	-7.416064
TGARCH Norm ARG_Price (5,1)	5	1	-7.430399	-7.382763	-7.430566	-7.412528
TGARCH Norm ARG_Price (4,5)	4	5	-7.437534	-7.38196	-7.437762	-7.416685
TGARCH Norm ARG_Price (5,2)	5	2	-7.432746	-7.381141	-7.432943	-7.413386

TGARCH Norm ARG_Price (5,3)	5	3	-7.429365	-7.37379	-7.429593	-7.408516
TGARCH Norm ARG_Price (5,5)	5	5	-7.435569	-7.372055	-7.435866	-7.411741
TGARCH Norm ARG_Price (5,4)	5	4	-7.430915	-7.371371	-7.431176	-7.408576
TGARCH Norm ARG_Price (3,0)	3	0	-7.393009	-7.365221	-7.393066	-7.382584
TGARCH Norm ARG_Price (4,0)	4	0	-7.400724	-7.364997	-7.400819	-7.387321
TGARCH Norm ARG_Price (5,0)	5	0	-7.400431	-7.356765	-7.400572	-7.384049
TGARCH Norm ARG_Price (0,2)	0	2	-7.166533	-7.154624	-7.166544	-7.162065
TGARCH Norm ARG_Price (0,3)	0	3	-7.16482	-7.148941	-7.164838	-7.158863
TGARCH Norm ARG_Price (0,4)	0	4	-7.163235	-7.143387	-7.163264	-7.155789
TGARCH Norm ARG_Price (0,5)	0	5	-7.16129	-7.137473	-7.161332	-7.152355
TGARCH Norm ARG_Price (2,0)	2	0	-3.55345	-3.533602	-3.553479	-3.546003
TGARCH Norm ARG_Price (1,0)	1	0	27.455491	27.467399	27.45548	27.459958
TGARCH Norm ARG_Price (0,1)	0	1	65.067309	65.075248	65.067304	65.070287

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.437885	-7.418037	-7.437914	-7.430438
TGARCH Skewed Norm ARG_Price (1,2)	1	2	-7.437557	-7.413739	-7.437599	-7.428621
TGARCH Skewed Norm ARG_Price (2,1)	2	1	-7.441062	-7.413274	-7.441119	-7.430637
TGARCH Skewed Norm ARG_Price (1,3)	1	3	-7.438519	-7.410732	-7.438576	-7.428094
TGARCH Skewed Norm ARG_Price (2,2)	2	2	-7.441852	-7.410095	-7.441927	-7.429938
TGARCH Skewed Norm ARG_Price (2,3)	2	3	-7.444139	-7.408413	-7.444234	-7.430736
TGARCH Skewed Norm ARG_Price (1,4)	1	4	-7.439118	-7.407361	-7.439193	-7.427204
TGARCH Skewed Norm ARG_Price (2,4)	2	4	-7.445487	-7.405791	-7.445604	-7.430595
TGARCH Skewed Norm ARG_Price (1,5)	1	5	-7.441102	-7.405375	-7.441196	-7.427698
TGARCH Skewed Norm ARG_Price (2,5)	2	5	-7.447489	-7.403823	-7.44763	-7.431107
TGARCH Skewed Norm ARG_Price (3,1)	3	1	-7.437737	-7.40201	-7.437832	-7.424334
TGARCH Skewed Norm ARG_Price (3,2)	3	2	-7.438555	-7.398859	-7.438672	-7.423662
TGARCH Skewed Norm ARG_Price (3,3)	3	3	-7.441423	-7.397757	-7.441564	-7.425041

TGARCH Skewed Norm ARG_Price (3,4)	3	4	-7.442417	-7.394782	-7.442585	-7.424546
TGARCH Skewed Norm ARG_Price (4,1)	4	1	-7.437402	-7.393736	-7.437542	-7.42102
TGARCH Skewed Norm ARG_Price (3,5)	3	5	-7.444899	-7.393294	-7.445096	-7.425539
TGARCH Skewed Norm ARG_Price (5,1)	5	1	-7.443871	-7.392266	-7.444068	-7.424511
TGARCH Skewed Norm ARG_Price (4,2)	4	2	-7.43538	-7.387745	-7.435548	-7.417509
TGARCH Skewed Norm ARG_Price (4,3)	4	3	-7.438298	-7.386693	-7.438494	-7.418938
TGARCH Skewed Norm ARG_Price (5,2)	5	2	-7.442252	-7.386677	-7.442479	-7.421402
TGARCH Skewed Norm ARG_Price (4,4)	4	4	-7.439279	-7.383704	-7.439506	-7.418429
TGARCH Skewed Norm ARG_Price (4,5)	4	5	-7.442729	-7.383184	-7.44299	-7.42039
TGARCH Skewed Norm ARG_Price (5,3)	5	3	-7.440801	-7.381257	-7.441062	-7.418463
TGARCH Skewed Norm ARG_Price (5,4)	5	4	-7.4396	-7.376086	-7.439897	-7.415772
TGARCH Skewed Norm ARG_Price (5,5)	5	5	-7.442079	-7.374595	-7.442413	-7.416761
TGARCH Skewed Norm ARG_Price (4,0)	4	0	-7.406434	-7.366737	-7.40655	-7.391541
TGARCH Skewed Norm ARG_Price (3,0)	3	0	-7.398305	-7.366548	-7.398379	-7.386391
TGARCH Skewed Norm ARG_Price (5,0)	5	0	-7.413128	-7.365492	-7.413295	-7.395257
TGARCH Skewed Norm ARG_Price (0,1)	0	1	-7.204282	-7.192373	-7.204292	-7.199814
TGARCH Skewed Norm ARG_Price (0,4)	0	4	-7.199474	-7.175657	-7.199517	-7.190539
TGARCH Skewed Norm ARG_Price (0,5)	0	5	-7.197862	-7.170074	-7.197919	-7.187437
TGARCH Skewed Norm ARG_Price (2,0)	2	0	-1.63601	-1.612192	-1.636052	-1.627075
TGARCH Skewed Norm ARG_Price (1,0)	1	0	27.452145	27.468024	27.452127	27.458102
TGARCH Skewed Norm ARG_Price (0,3)	0	3	65.325683	65.345531	65.325654	65.333129
TGARCH Skewed Norm ARG_Price (0,2)	0	2	82.321133	82.337012	82.321114	82.32709

TGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student ARG_Price (1,1)	1	1	-7.864092	-7.844244	-7.864122	-7.856646
TGARCH T-Student ARG_Price (1,2)	1	2	-7.867256	-7.843438	-7.867298	-7.858321
TGARCH T-Student ARG_Price (1,3)	1	3	-7.870975	-7.843188	-7.871033	-7.860551
TGARCH T-Student ARG_Price (1,4)	1	4	-7.872448	-7.840691	-7.872523	-7.860534

TGARCH T-Student ARG_Price (1,5)	1	5	-7.873604	-7.837877	-7.873698	-7.8602
TGARCH T-Student ARG_Price (2,1)	2	1	-7.863788	-7.836001	-7.863846	-7.853364
TGARCH T-Student ARG_Price (2,2)	2	2	-7.864186	-7.832429	-7.864261	-7.852272
TGARCH T-Student ARG_Price (2,3)	2	3	-7.867905	-7.832179	-7.868	-7.854502
TGARCH T-Student ARG_Price (2,4)	2	4	-7.869378	-7.829682	-7.869495	-7.854485
TGARCH T-Student ARG_Price (3,1)	3	1	-7.864822	-7.829095	-7.864916	-7.851419
TGARCH T-Student ARG_Price (2,5)	2	5	-7.870534	-7.826868	-7.870675	-7.854152
TGARCH T-Student ARG_Price (2,0)	2	0	-7.848371	-7.824553	-7.848413	-7.839435
TGARCH T-Student ARG_Price (3,2)	3	2	-7.863287	-7.823591	-7.863403	-7.848394
TGARCH T-Student ARG_Price (3,0)	3	0	-7.85433	-7.822573	-7.854405	-7.842416
TGARCH T-Student ARG_Price (3,3)	3	3	-7.864854	-7.821188	-7.864995	-7.848473
TGARCH T-Student ARG_Price (3,4)	3	4	-7.866321	-7.818686	-7.866489	-7.84845
TGARCH T-Student ARG_Price (4,1)	4	1	-7.861847	-7.818181	-7.861988	-7.845465
TGARCH T-Student ARG_Price (3,5)	3	5	-7.86738	-7.815775	-7.867576	-7.84802
TGARCH T-Student ARG_Price (1,0)	1	0	-7.830103	-7.814225	-7.830122	-7.824146
TGARCH T-Student ARG_Price (4,0)	4	0	-7.852856	-7.81316	-7.852973	-7.837964
TGARCH T-Student ARG_Price (4,2)	4	2	-7.860398	-7.812762	-7.860565	-7.842527
TGARCH T-Student ARG_Price (4,3)	4	3	-7.861725	-7.81012	-7.861921	-7.842365
TGARCH T-Student ARG_Price (5,1)	5	1	-7.860292	-7.808687	-7.860488	-7.840932
TGARCH T-Student ARG_Price (4,4)	4	4	-7.863251	-7.807676	-7.863479	-7.842402
TGARCH T-Student ARG_Price (4,5)	4	5	-7.864551	-7.805006	-7.864812	-7.842212
TGARCH T-Student ARG_Price (5,2)	5	2	-7.858777	-7.803203	-7.859005	-7.837928
TGARCH T-Student ARG_Price (5,0)	5	0	-7.85083	-7.803195	-7.850998	-7.832959
TGARCH T-Student ARG_Price (5,3)	5	3	-7.859272	-7.799727	-7.859533	-7.836933
TGARCH T-Student ARG_Price (5,4)	5	4	-7.860411	-7.796897	-7.860708	-7.836583
TGARCH T-Student ARG_Price (5,5)	5	5	-7.861649	-7.794165	-7.861983	-7.836332
TGARCH T-Student ARG_Price (0,1)	0	1	-7.737503	-7.725594	-7.737514	-7.733035
TGARCH T-Student ARG_Price (0,2)	0	2	-7.736302	-7.720424	-7.736321	-7.730345

TGARCH T-Student ARG_Price (0,3)	0	3	-7.734966	-7.715118	-7.734995	-7.72752
TGARCH T-Student ARG_Price (0,4)	0	4	-7.733575	-7.709758	-7.733618	-7.72464
TGARCH T-Student ARG_Price (0,5)	0	5	-7.73227	-7.704482	-7.732327	-7.721845

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.866549	-7.842731	-7.866591	-7.857613
TGARCH Skewed T-Student ARG_Price (1,2)	1	2	-7.870088	-7.842301	-7.870146	-7.859664
TGARCH Skewed T-Student ARG_Price (1,3)	1	3	-7.873933	-7.842176	-7.874008	-7.862019
TGARCH Skewed T-Student ARG_Price (1,4)	1	4	-7.875231	-7.839504	-7.875326	-7.861828
TGARCH Skewed T-Student ARG_Price (1,5)	1	5	-7.876294	-7.836598	-7.876411	-7.861402
TGARCH Skewed T-Student ARG_Price (2,1)	2	1	-7.867492	-7.835735	-7.867567	-7.855578
TGARCH Skewed T-Student ARG_Price (2,2)	2	2	-7.867018	-7.831292	-7.867113	-7.853615
TGARCH Skewed T-Student ARG_Price (2,3)	2	3	-7.870863	-7.831167	-7.87098	-7.855971
TGARCH Skewed T-Student ARG_Price (2,4)	2	4	-7.872161	-7.828495	-7.872302	-7.855779
TGARCH Skewed T-Student ARG_Price (2,5)	2	5	-7.873224	-7.825589	-7.873392	-7.855353
TGARCH Skewed T-Student ARG_Price (3,1)	3	1	-7.864269	-7.824572	-7.864385	-7.849376
TGARCH Skewed T-Student ARG_Price (2,0)	2	0	-7.851921	-7.824133	-7.851978	-7.841496
TGARCH Skewed T-Student ARG_Price (3,2)	3	2	-7.867469	-7.823803	-7.86761	-7.851087
TGARCH Skewed T-Student ARG_Price (3,0)	3	0	-7.856515	-7.820788	-7.85661	-7.843112
TGARCH Skewed T-Student ARG_Price (3,3)	3	3	-7.867869	-7.820233	-7.868036	-7.849998
TGARCH Skewed T-Student ARG_Price (4,1)	4	1	-7.865755	-7.81812	-7.865923	-7.847884
TGARCH Skewed T-Student ARG_Price (3,4)	3	4	-7.869152	-7.817547	-7.869348	-7.849792
TGARCH Skewed T-Student ARG_Price (3,5)	3	5	-7.870186	-7.814611	-7.870414	-7.849337
TGARCH Skewed T-Student ARG_Price (1,0)	1	0	-7.833027	-7.813179	-7.833056	-7.82558
TGARCH Skewed T-Student ARG_Price (4,2)	4	2	-7.864225	-7.81262	-7.864422	-7.844865
TGARCH Skewed T-Student ARG_Price (4,0)	4	0	-7.853884	-7.810218	-7.854024	-7.837502
TGARCH Skewed T-Student ARG_Price (4,3)	4	3	-7.864551	-7.808976	-7.864779	-7.843702
TGARCH Skewed T-Student ARG_Price (5,1)	5	1	-7.864338	-7.808763	-7.864565	-7.843488

TGARCH Skewed T-Student ARG_Price (5,0)	5	0	-7.860052	-7.808447	-7.860248	-7.840692
TGARCH Skewed T-Student ARG_Price (4,4)	4	4	-7.866082	-7.806537	-7.866343	-7.843743
TGARCH Skewed T-Student ARG_Price (4,5)	4	5	-7.867231	-7.803717	-7.867527	-7.843403
TGARCH Skewed T-Student ARG_Price (5,2)	5	2	-7.862666	-7.803121	-7.862927	-7.840327
TGARCH Skewed T-Student ARG_Price (5,3)	5	3	-7.861173	-7.797659	-7.86147	-7.837345
TGARCH Skewed T-Student ARG_Price (5,4)	5	4	-7.863049	-7.795566	-7.863384	-7.837732
TGARCH Skewed T-Student ARG_Price (5,5)	5	5	-7.864161	-7.792707	-7.864535	-7.837354
TGARCH Skewed T-Student ARG_Price (0,1)	0	1	-7.743518	-7.727639	-7.743536	-7.737561
TGARCH Skewed T-Student ARG_Price (0,2)	0	2	-7.742072	-7.722224	-7.742101	-7.734626
TGARCH Skewed T-Student ARG_Price (0,3)	0	3	-7.74033	-7.716512	-7.740372	-7.731394
TGARCH Skewed T-Student ARG_Price (0,4)	0	4	-7.738205	-7.710418	-7.738262	-7.72778
TGARCH Skewed T-Student ARG_Price (0,5)	0	5	-7.736572	-7.704815	-7.736647	-7.724658

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm ARG_Price (5,3)	5	3	-7.521546	-7.465971	-7.521774	-7.500697
EGARCH Norm ARG_Price (5,5)	5	5	-7.528387	-7.464873	-7.528683	-7.504559
EGARCH Norm ARG_Price (5,4)	5	4	-7.485296	-7.425752	-7.485557	-7.462957
EGARCH Norm ARG_Price (1,1)	1	1	-7.43279	-7.416912	-7.432809	-7.426833
EGARCH Norm ARG_Price (1,3)	1	3	-7.437287	-7.413469	-7.437329	-7.428351
EGARCH Norm ARG_Price (1,4)	1	4	-7.439281	-7.411494	-7.439338	-7.428856
EGARCH Norm ARG_Price (1,2)	1	2	-7.431184	-7.411336	-7.431214	-7.423738
EGARCH Norm ARG_Price (3,5)	3	5	-7.457454	-7.409818	-7.457621	-7.439583
EGARCH Norm ARG_Price (1,5)	1	5	-7.439571	-7.407814	-7.439646	-7.427657
EGARCH Norm ARG_Price (2,1)	2	1	-7.429738	-7.40592	-7.42978	-7.420802
EGARCH Norm ARG_Price (2,3)	2	3	-7.434337	-7.40258	-7.434412	-7.422423
EGARCH Norm ARG_Price (3,1)	3	1	-7.433769	-7.402012	-7.433843	-7.421855
EGARCH Norm ARG_Price (2,4)	2	4	-7.437618	-7.401891	-7.437712	-7.424215
EGARCH Norm ARG_Price (2,2)	2	2	-7.42939	-7.401602	-7.429447	-7.418965

EGARCH Norm ARG_Price (2,5)	2	5	-7.437841	-7.398145	-7.437958	-7.422949
EGARCH Norm ARG_Price (3,2)	3	2	-7.432402	-7.396675	-7.432496	-7.418998
EGARCH Norm ARG_Price (3,4)	3	4	-7.439395	-7.39573	-7.439536	-7.423014
EGARCH Norm ARG_Price (3,3)	3	3	-7.433555	-7.393859	-7.433672	-7.418663
EGARCH Norm ARG_Price (4,4)	4	4	-7.442757	-7.391152	-7.442954	-7.423397
EGARCH Norm ARG_Price (4,1)	4	1	-7.430823	-7.391127	-7.43094	-7.415931
EGARCH Norm ARG_Price (4,2)	4	2	-7.429365	-7.385699	-7.429506	-7.412983
EGARCH Norm ARG_Price (4,5)	4	5	-7.441171	-7.385597	-7.441399	-7.420322
EGARCH Norm ARG_Price (4,3)	4	3	-7.431729	-7.384093	-7.431896	-7.413858
EGARCH Norm ARG_Price (5,1)	5	1	-7.428888	-7.381252	-7.429055	-7.411017
EGARCH Norm ARG_Price (5,2)	5	2	-7.426425	-7.37482	-7.426622	-7.407065
EGARCH Norm ARG_Price (3,0)	3	0	-7.37534	-7.347552	-7.375397	-7.364915
EGARCH Norm ARG_Price (2,0)	2	0	-7.364065	-7.344217	-7.364094	-7.356619
EGARCH Norm ARG_Price (5,0)	5	0	-7.38422	-7.340554	-7.384361	-7.367838
EGARCH Norm ARG_Price (0,1)	0	1	-7.181021	-7.173082	-7.181025	-7.178042
EGARCH Norm ARG_Price (0,2)	0	2	-7.172587	-7.160678	-7.172598	-7.16812
EGARCH Norm ARG_Price (0,3)	0	3	-7.171294	-7.155415	-7.171312	-7.165337
EGARCH Norm ARG_Price (0,5)	0	5	-7.1693	-7.145483	-7.169343	-7.160365
EGARCH Norm ARG_Price (4,0)	4	0	-5.758358	-5.722631	-5.758453	-5.744955
EGARCH Norm ARG_Price (1,0)	1	0	-4.769325	-4.757416	-4.769336	-4.764857

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm ARG_Price (5,3)	5	3	-7.486302	-7.426757	-7.486563	-7.463963
EGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.437693	-7.417845	-7.437722	-7.430247
EGARCH Skewed Norm ARG_Price (1,3)	1	3	-7.441128	-7.41334	-7.441185	-7.430703
EGARCH Skewed Norm ARG_Price (1,2)	1	2	-7.436123	-7.412305	-7.436165	-7.427187
EGARCH Skewed Norm ARG_Price (1,4)	1	4	-7.442242	-7.410485	-7.442317	-7.430328

EGARCH Skewed Norm ARG_Price (2,1)	2	1	-7.434706	-7.406919	-7.434764	-7.424282
EGARCH Skewed Norm ARG_Price (1,5)	1	5	-7.442316	-7.406589	-7.442411	-7.428913
EGARCH Skewed Norm ARG_Price (2,2)	2	2	-7.434316	-7.402559	-7.43439	-7.422402
EGARCH Skewed Norm ARG_Price (2,3)	2	3	-7.438226	-7.4025	-7.438321	-7.424823
EGARCH Skewed Norm ARG_Price (3,1)	3	1	-7.43752	-7.401793	-7.437614	-7.424116
EGARCH Skewed Norm ARG_Price (2,4)	2	4	-7.44068	-7.400984	-7.440797	-7.425788
EGARCH Skewed Norm ARG_Price (5,5)	5	5	-7.465521	-7.398037	-7.465856	-7.440204
EGARCH Skewed Norm ARG_Price (2,5)	2	5	-7.440713	-7.397047	-7.440854	-7.424331
EGARCH Skewed Norm ARG_Price (3,2)	3	2	-7.436033	-7.396336	-7.436149	-7.42114
EGARCH Skewed Norm ARG_Price (5,4)	5	4	-7.459354	-7.39584	-7.45965	-7.435526
EGARCH Skewed Norm ARG_Price (3,3)	3	3	-7.438224	-7.394558	-7.438365	-7.421842
EGARCH Skewed Norm ARG_Price (3,4)	3	4	-7.44205	-7.394414	-7.442217	-7.424179
EGARCH Skewed Norm ARG_Price (4,4)	4	4	-7.446599	-7.391024	-7.446827	-7.42575
EGARCH Skewed Norm ARG_Price (4,1)	4	1	-7.434054	-7.390388	-7.434195	-7.417673
EGARCH Skewed Norm ARG_Price (3,5)	3	5	-7.43911	-7.387505	-7.439307	-7.41975
EGARCH Skewed Norm ARG_Price (4,5)	4	5	-7.445035	-7.385491	-7.445296	-7.422696
EGARCH Skewed Norm ARG_Price (4,2)	4	2	-7.432548	-7.384913	-7.432716	-7.414677
EGARCH Skewed Norm ARG_Price (5,1)	5	1	-7.436	-7.384395	-7.436197	-7.41664
EGARCH Skewed Norm ARG_Price (4,3)	4	3	-7.435071	-7.383466	-7.435268	-7.415711
EGARCH Skewed Norm ARG_Price (5,2)	5	2	-7.429881	-7.374307	-7.430109	-7.409032
EGARCH Skewed Norm ARG_Price (3,0)	3	0	-7.377482	-7.345725	-7.377557	-7.365568
EGARCH Skewed Norm ARG_Price (4,0)	4	0	-7.384088	-7.344391	-7.384204	-7.369195
EGARCH Skewed Norm ARG_Price (2,0)	2	0	-7.367293	-7.343476	-7.367335	-7.358358
EGARCH Skewed Norm ARG_Price (5,0)	5	0	-7.387655	-7.34002	-7.387823	-7.369784
EGARCH Skewed Norm ARG_Price (1,0)	1	0	-7.294341	-7.278463	-7.29436	-7.288384
EGARCH Skewed Norm ARG_Price (0,1)	0	1	-7.179991	-7.168082	-7.180001	-7.175523
EGARCH Skewed Norm ARG_Price (0,2)	0	2	-7.170725	-7.154847	-7.170744	-7.164768
EGARCH Skewed Norm ARG_Price (0,3)	0	3	-7.170169	-7.150321	-7.170198	-7.162723

EGARCH Skewed Norm ARG_Price (0,4)	0	4	-7.16863	-7.144813	-7.168673	-7.159695
EGARCH Skewed Norm ARG_Price (0,5)	0	5	-7.167376	-7.139588	-7.167433	-7.156951
<i>EGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student ARG_Price (2,1)	2	1	-7.873429	-7.845642	-7.873487	-7.863005
EGARCH T-Student ARG_Price (1,1)	1	1	-7.864951	-7.845103	-7.864981	-7.857505
EGARCH T-Student ARG_Price (3,1)	3	1	-7.880046	-7.84432	-7.880141	-7.866643
EGARCH T-Student ARG_Price (1,2)	1	2	-7.867083	-7.843265	-7.867125	-7.858147
EGARCH T-Student ARG_Price (5,4)	5	4	-7.905389	-7.841875	-7.905686	-7.881561
EGARCH T-Student ARG_Price (1,3)	1	3	-7.869305	-7.841517	-7.869362	-7.85888
EGARCH T-Student ARG_Price (2,2)	2	2	-7.872532	-7.840775	-7.872607	-7.860618
EGARCH T-Student ARG_Price (1,4)	1	4	-7.871805	-7.840048	-7.87188	-7.859891
EGARCH T-Student ARG_Price (3,2)	3	2	-7.878623	-7.838927	-7.87874	-7.863731
EGARCH T-Student ARG_Price (1,5)	1	5	-7.871911	-7.836184	-7.872005	-7.858507
EGARCH T-Student ARG_Price (4,1)	4	1	-7.87938	-7.835714	-7.879521	-7.862998
EGARCH T-Student ARG_Price (3,3)	3	3	-7.87856	-7.834894	-7.8787	-7.862178
EGARCH T-Student ARG_Price (2,3)	2	3	-7.870538	-7.834812	-7.870633	-7.857135
EGARCH T-Student ARG_Price (2,4)	2	4	-7.871634	-7.831937	-7.87175	-7.856741
EGARCH T-Student ARG_Price (3,5)	3	5	-7.883233	-7.831628	-7.883429	-7.863872
EGARCH T-Student ARG_Price (4,2)	4	2	-7.877952	-7.830316	-7.878119	-7.860081
EGARCH T-Student ARG_Price (3,4)	3	4	-7.877086	-7.82945	-7.877254	-7.859215
EGARCH T-Student ARG_Price (4,5)	4	5	-7.888722	-7.829178	-7.888983	-7.866383
EGARCH T-Student ARG_Price (4,4)	4	4	-7.883917	-7.828343	-7.884145	-7.863068
EGARCH T-Student ARG_Price (2,5)	2	5	-7.871024	-7.827358	-7.871165	-7.854642
EGARCH T-Student ARG_Price (5,3)	5	3	-7.886071	-7.826526	-7.886332	-7.863732
EGARCH T-Student ARG_Price (4,3)	4	3	-7.876666	-7.825061	-7.876862	-7.857306
EGARCH T-Student ARG_Price (5,1)	5	1	-7.876532	-7.824926	-7.876728	-7.857171
EGARCH T-Student ARG_Price (5,2)	5	2	-7.874937	-7.819362	-7.875165	-7.854088

EGARCH T-Student ARG_Price (5,5)	5	5	-7.882973	-7.815489	-7.883308	-7.857656
EGARCH T-Student ARG_Price (1,0)	1	0	-7.817363	-7.801485	-7.817382	-7.811406
EGARCH T-Student ARG_Price (0,3)	0	3	-7.746458	-7.72661	-7.746487	-7.739012
EGARCH T-Student ARG_Price (0,1)	0	1	-7.736346	-7.724437	-7.736356	-7.731878
EGARCH T-Student ARG_Price (0,4)	0	4	-7.745657	-7.72184	-7.7457	-7.736722
EGARCH T-Student ARG_Price (0,2)	0	2	-7.735041	-7.719162	-7.735059	-7.729084
EGARCH T-Student ARG_Price (0,5)	0	5	-7.731228	-7.703441	-7.731286	-7.720804
EGARCH T-Student ARG_Price (5,0)	5	0	-6.70846	-6.660824	-6.708627	-6.690589
EGARCH T-Student ARG_Price (4,0)	4	0	-6.633393	-6.593697	-6.63351	-6.618501
EGARCH T-Student ARG_Price (3,0)	3	0	-6.447208	-6.415451	-6.447283	-6.435294
EGARCH T-Student ARG_Price (2,0)	2	0	-6.128585	-6.104768	-6.128627	-6.11965

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student ARG_Price (4,4)	4	4	-7.905646	-7.846101	-7.905907	-7.883307
EGARCH Skewed T-Student ARG_Price (2,1)	2	1	-7.876371	-7.844614	-7.876446	-7.864457
EGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.868107	-7.844289	-7.868149	-7.859171
EGARCH Skewed T-Student ARG_Price (3,1)	3	1	-7.883391	-7.843695	-7.883508	-7.868498
EGARCH Skewed T-Student ARG_Price (1,2)	1	2	-7.871201	-7.843413	-7.871258	-7.860776
EGARCH Skewed T-Student ARG_Price (1,3)	1	3	-7.874003	-7.842246	-7.874077	-7.862089
EGARCH Skewed T-Student ARG_Price (1,4)	1	4	-7.876198	-7.840471	-7.876293	-7.862795
EGARCH Skewed T-Student ARG_Price (2,2)	2	2	-7.875656	-7.83993	-7.875751	-7.862253
EGARCH Skewed T-Student ARG_Price (5,4)	5	4	-7.905922	-7.838439	-7.906257	-7.880605
EGARCH Skewed T-Student ARG_Price (3,2)	3	2	-7.881998	-7.838332	-7.882139	-7.865616
EGARCH Skewed T-Student ARG_Price (1,5)	1	5	-7.876769	-7.837073	-7.876886	-7.861877
EGARCH Skewed T-Student ARG_Price (2,3)	2	3	-7.875399	-7.835702	-7.875515	-7.860506
EGARCH Skewed T-Student ARG_Price (4,1)	4	1	-7.882698	-7.835062	-7.882865	-7.864827
EGARCH Skewed T-Student ARG_Price (3,3)	3	3	-7.881509	-7.833874	-7.881677	-7.863638
EGARCH Skewed T-Student ARG_Price (2,4)	2	4	-7.876351	-7.832685	-7.876492	-7.859969

EGARCH Skewed T-Student ARG_Price (3,5)	3	5	-7.88536	-7.829785	-7.885587	-7.86451
EGARCH Skewed T-Student ARG_Price (4,2)	4	2	-7.881205	-7.8296	-7.881402	-7.861845
EGARCH Skewed T-Student ARG_Price (5,5)	5	5	-7.900571	-7.829118	-7.900946	-7.873765
EGARCH Skewed T-Student ARG_Price (3,4)	3	4	-7.88071	-7.829105	-7.880907	-7.86135
EGARCH Skewed T-Student ARG_Price (2,5)	2	5	-7.875533	-7.827897	-7.8757	-7.857662
EGARCH Skewed T-Student ARG_Price (5,3)	5	3	-7.889752	-7.826238	-7.890049	-7.865924
EGARCH Skewed T-Student ARG_Price (5,2)	5	2	-7.885372	-7.825828	-7.885633	-7.863034
EGARCH Skewed T-Student ARG_Price (2,0)	2	0	-7.852114	-7.824327	-7.852172	-7.84169
EGARCH Skewed T-Student ARG_Price (4,3)	4	3	-7.879747	-7.824172	-7.879974	-7.858897
EGARCH Skewed T-Student ARG_Price (5,1)	5	1	-7.879671	-7.824096	-7.879898	-7.858821
EGARCH Skewed T-Student ARG_Price (4,5)	4	5	-7.887136	-7.823622	-7.887432	-7.863308
EGARCH Skewed T-Student ARG_Price (3,0)	3	0	-7.856908	-7.821181	-7.857003	-7.843505
EGARCH Skewed T-Student ARG_Price (5,0)	5	0	-7.855003	-7.803397	-7.855199	-7.835642
EGARCH Skewed T-Student ARG_Price (1,0)	1	0	-7.821717	-7.801869	-7.821746	-7.814271
EGARCH Skewed T-Student ARG_Price (0,1)	0	1	-7.745382	-7.729503	-7.745401	-7.739425
EGARCH Skewed T-Student ARG_Price (0,3)	0	3	-7.753011	-7.729193	-7.753053	-7.744076
EGARCH Skewed T-Student ARG_Price (0,4)	0	4	-7.752363	-7.724576	-7.75242	-7.741938
EGARCH Skewed T-Student ARG_Price (0,2)	0	2	-7.743959	-7.724111	-7.743989	-7.736513
EGARCH Skewed T-Student ARG_Price (0,5)	0	5	-7.752332	-7.720575	-7.752407	-7.740418
EGARCH Skewed T-Student ARG_Price (4,0)	4	0	-6.696818	-6.653152	-6.696959	-6.680436

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm ARG_Price (1,1)	1	1	-7.453563	-7.437685	-7.453582	-7.447606
NAGARCH Norm ARG_Price (1,2)	1	2	-7.452115	-7.432266	-7.452144	-7.444668
NAGARCH Norm ARG_Price (1,3)	1	3	-7.451222	-7.427405	-7.451265	-7.442287
NAGARCH Norm ARG_Price (2,1)	2	1	-7.451045	-7.427227	-7.451087	-7.442109
NAGARCH Norm ARG_Price (2,2)	2	2	-7.449546	-7.421759	-7.449603	-7.439121
NAGARCH Norm ARG_Price (1,4)	1	4	-7.449291	-7.421504	-7.449349	-7.438867

NAGARCH Norm ARG_Price (2,3)	2	3	-7.451676	-7.419919	-7.451751	-7.439762
NAGARCH Norm ARG_Price (5,0)	5	0	-7.46168	-7.418014	-7.461821	-7.445299
NAGARCH Norm ARG_Price (1,5)	1	5	-7.448792	-7.417035	-7.448866	-7.436878
NAGARCH Norm ARG_Price (3,1)	3	1	-7.447372	-7.415615	-7.447447	-7.435458
NAGARCH Norm ARG_Price (2,4)	2	4	-7.448828	-7.413101	-7.448922	-7.435425
NAGARCH Norm ARG_Price (2,5)	2	5	-7.449172	-7.409476	-7.449289	-7.43428
NAGARCH Norm ARG_Price (3,3)	3	3	-7.446056	-7.406359	-7.446172	-7.431163
NAGARCH Norm ARG_Price (4,1)	4	1	-7.443584	-7.403887	-7.4437	-7.428691
NAGARCH Norm ARG_Price (3,5)	3	5	-7.448894	-7.401258	-7.449061	-7.431023
NAGARCH Norm ARG_Price (4,2)	4	2	-7.444563	-7.400897	-7.444704	-7.428181
NAGARCH Norm ARG_Price (3,4)	3	4	-7.443968	-7.400302	-7.444109	-7.427586
NAGARCH Norm ARG_Price (4,3)	4	3	-7.447337	-7.399702	-7.447505	-7.429466
NAGARCH Norm ARG_Price (4,5)	4	5	-7.443892	-7.388317	-7.44412	-7.423042
NAGARCH Norm ARG_Price (5,4)	5	4	-7.444527	-7.384983	-7.444788	-7.422189
NAGARCH Norm ARG_Price (5,2)	5	2	-7.434904	-7.383299	-7.435101	-7.415544
NAGARCH Norm ARG_Price (5,3)	5	3	-7.437665	-7.38209	-7.437893	-7.416815
NAGARCH Norm ARG_Price (5,5)	5	5	-7.437381	-7.373867	-7.437678	-7.413553
NAGARCH Norm ARG_Price (1,0)	1	0	-7.327745	-7.315836	-7.327755	-7.323277
NAGARCH Norm ARG_Price (0,1)	0	1	-7.179056	-7.171117	-7.179061	-7.176078
NAGARCH Norm ARG_Price (0,2)	0	2	-7.177452	-7.165543	-7.177463	-7.172984
NAGARCH Norm ARG_Price (0,3)	0	3	-7.17642	-7.160541	-7.176439	-7.170463
NAGARCH Norm ARG_Price (0,4)	0	4	-7.175274	-7.155426	-7.175304	-7.167828
NAGARCH Norm ARG_Price (0,5)	0	5	-7.174045	-7.150227	-7.174087	-7.16511
NAGARCH Norm ARG_Price (2,0)	2	0	11.733905	11.753753	11.733876	11.741351
NAGARCH Norm ARG_Price (4,0)	4	0	369.254058	369.289785	369.253964	369.267462

<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm ARG_Price (1,1)	1	1	-7.46066	-7.440812	-7.46069	-7.453214
NAGARCH Skewed Norm ARG_Price (1,2)	1	2	-7.459656	-7.435838	-7.459698	-7.45072
NAGARCH Skewed Norm ARG_Price (1,3)	1	3	-7.459022	-7.431235	-7.459079	-7.448597
NAGARCH Skewed Norm ARG_Price (2,1)	2	1	-7.457468	-7.429681	-7.457525	-7.447043
NAGARCH Skewed Norm ARG_Price (1,4)	1	4	-7.456912	-7.425155	-7.456987	-7.444998
NAGARCH Skewed Norm ARG_Price (2,2)	2	2	-7.456585	-7.424828	-7.45666	-7.444671
NAGARCH Skewed Norm ARG_Price (2,3)	2	3	-7.459969	-7.424242	-7.460064	-7.446566
NAGARCH Skewed Norm ARG_Price (5,0)	5	0	-7.468458	-7.420823	-7.468626	-7.450587
NAGARCH Skewed Norm ARG_Price (1,5)	1	5	-7.455458	-7.419731	-7.455552	-7.442055
NAGARCH Skewed Norm ARG_Price (2,4)	2	4	-7.458838	-7.419142	-7.458955	-7.443946
NAGARCH Skewed Norm ARG_Price (3,1)	3	1	-7.454479	-7.418752	-7.454573	-7.441076
NAGARCH Skewed Norm ARG_Price (2,5)	2	5	-7.457585	-7.413919	-7.457726	-7.441203
NAGARCH Skewed Norm ARG_Price (3,0)	3	0	-7.44227	-7.410513	-7.442345	-7.430356
NAGARCH Skewed Norm ARG_Price (4,1)	4	1	-7.453337	-7.409671	-7.453478	-7.436956
NAGARCH Skewed Norm ARG_Price (3,3)	3	3	-7.452882	-7.409217	-7.453023	-7.436501
NAGARCH Skewed Norm ARG_Price (4,0)	4	0	-7.448099	-7.408403	-7.448215	-7.433206
NAGARCH Skewed Norm ARG_Price (5,1)	5	1	-7.459993	-7.408388	-7.46019	-7.440633
NAGARCH Skewed Norm ARG_Price (3,4)	3	4	-7.453256	-7.40562	-7.453423	-7.435385
NAGARCH Skewed Norm ARG_Price (4,2)	4	2	-7.451017	-7.403381	-7.451184	-7.433146
NAGARCH Skewed Norm ARG_Price (3,5)	3	5	-7.454515	-7.40291	-7.454711	-7.435154
NAGARCH Skewed Norm ARG_Price (5,2)	5	2	-7.457193	-7.401619	-7.457421	-7.436344
NAGARCH Skewed Norm ARG_Price (5,4)	5	4	-7.462417	-7.398903	-7.462713	-7.438589
NAGARCH Skewed Norm ARG_Price (4,5)	4	5	-7.455721	-7.396177	-7.455982	-7.433382
NAGARCH Skewed Norm ARG_Price (5,3)	5	3	-7.453331	-7.393786	-7.453592	-7.430992
NAGARCH Skewed Norm ARG_Price (5,5)	5	5	-7.46046	-7.392976	-7.460795	-7.435143

NAGARCH Skewed Norm ARG_Price (2,0)	2	0	-7.294495	-7.270677	-7.294537	-7.285559
NAGARCH Skewed Norm ARG_Price (0,1)	0	1	-7.174103	-7.162194	-7.174113	-7.169635
NAGARCH Skewed Norm ARG_Price (0,2)	0	2	-7.175036	-7.159157	-7.175055	-7.169079
NAGARCH Skewed Norm ARG_Price (0,3)	0	3	-7.174291	-7.154443	-7.17432	-7.166845
NAGARCH Skewed Norm ARG_Price (0,4)	0	4	-7.173927	-7.150109	-7.173969	-7.164991
NAGARCH Skewed Norm ARG_Price (0,5)	0	5	-7.172788	-7.145001	-7.172845	-7.162363
NAGARCH Skewed Norm ARG_Price (1,0)	1	0	14.37978	14.395659	14.379762	14.385737

NAGARCH T-Student						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student ARG_Price (1,1)	1	1	-7.851979	-7.832131	-7.852008	-7.844533
NAGARCH T-Student ARG_Price (3,0)	3	0	-7.861177	-7.82942	-7.861251	-7.849263
NAGARCH T-Student ARG_Price (1,2)	1	2	-7.852166	-7.828348	-7.852208	-7.84323
NAGARCH T-Student ARG_Price (1,3)	1	3	-7.853475	-7.825688	-7.853533	-7.84305
NAGARCH T-Student ARG_Price (1,4)	1	4	-7.85378	-7.822023	-7.853855	-7.841866
NAGARCH T-Student ARG_Price (2,1)	2	1	-7.848942	-7.821155	-7.848999	-7.838517
NAGARCH T-Student ARG_Price (4,1)	4	1	-7.863186	-7.81952	-7.863326	-7.846804
NAGARCH T-Student ARG_Price (3,1)	3	1	-7.85452	-7.818793	-7.854614	-7.841117
NAGARCH T-Student ARG_Price (1,5)	1	5	-7.85408	-7.818353	-7.854174	-7.840676
NAGARCH T-Student ARG_Price (2,2)	2	2	-7.849396	-7.817639	-7.84947	-7.837482
NAGARCH T-Student ARG_Price (2,3)	2	3	-7.851283	-7.815556	-7.851377	-7.83788
NAGARCH T-Student ARG_Price (3,2)	3	2	-7.854101	-7.814405	-7.854218	-7.839209
NAGARCH T-Student ARG_Price (2,4)	2	4	-7.851897	-7.812201	-7.852014	-7.837005
NAGARCH T-Student ARG_Price (4,2)	4	2	-7.858222	-7.810587	-7.85839	-7.840351
NAGARCH T-Student ARG_Price (3,3)	3	3	-7.853284	-7.809618	-7.853425	-7.836902
NAGARCH T-Student ARG_Price (2,5)	2	5	-7.850093	-7.806427	-7.850233	-7.833711

NAGARCH T-Student ARG_Price (4,3)	4	3	-7.85213	-7.800524	-7.852326	-7.832769
NAGARCH T-Student ARG_Price (5,3)	5	3	-7.859429	-7.799884	-7.85969	-7.83709
NAGARCH T-Student ARG_Price (3,5)	3	5	-7.849782	-7.798177	-7.849979	-7.830422
NAGARCH T-Student ARG_Price (4,5)	4	5	-7.850397	-7.790853	-7.850658	-7.828059
NAGARCH T-Student ARG_Price (2,0)	2	0	-7.808153	-7.784335	-7.808195	-7.799218
NAGARCH T-Student ARG_Price (4,4)	4	4	-7.838294	-7.782719	-7.838522	-7.817445
NAGARCH T-Student ARG_Price (3,4)	3	4	-7.828318	-7.780683	-7.828486	-7.810447
NAGARCH T-Student ARG_Price (5,2)	5	2	-7.829597	-7.774022	-7.829825	-7.808748
NAGARCH T-Student ARG_Price (4,0)	4	0	-7.813114	-7.773417	-7.81323	-7.798221
NAGARCH T-Student ARG_Price (5,4)	5	4	-7.831828	-7.768314	-7.832125	-7.808
NAGARCH T-Student ARG_Price (5,5)	5	5	-7.822973	-7.75549	-7.823308	-7.797656
NAGARCH T-Student ARG_Price (5,0)	5	0	-7.797862	-7.750227	-7.79803	-7.779991
NAGARCH T-Student ARG_Price (0,1)	0	1	-7.726795	-7.714886	-7.726805	-7.722327
NAGARCH T-Student ARG_Price (1,0)	1	0	-7.728402	-7.712524	-7.728421	-7.722445
NAGARCH T-Student ARG_Price (0,2)	0	2	-7.726414	-7.710535	-7.726433	-7.720457
NAGARCH T-Student ARG_Price (0,3)	0	3	-7.724844	-7.704996	-7.724874	-7.717398
NAGARCH T-Student ARG_Price (0,4)	0	4	-7.724333	-7.700515	-7.724375	-7.715398
NAGARCH T-Student ARG_Price (0,5)	0	5	-7.722602	-7.694815	-7.722659	-7.712177

<i>NAGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student ARG_Price (1,1)	1	1	-7.85427	-7.830452	-7.854312	-7.845335
NAGARCH Skewed T-Student ARG_Price (2,0)	2	0	-7.856958	-7.829171	-7.857016	-7.846533
NAGARCH Skewed T-Student ARG_Price (3,1)	3	1	-7.865241	-7.825545	-7.865358	-7.850349
NAGARCH Skewed T-Student ARG_Price (1,3)	1	3	-7.855864	-7.824107	-7.855938	-7.84395
NAGARCH Skewed T-Student ARG_Price (1,4)	1	4	-7.85636	-7.820633	-7.856454	-7.842956
NAGARCH Skewed T-Student ARG_Price (2,1)	2	1	-7.851275	-7.819518	-7.85135	-7.839361
NAGARCH Skewed T-Student ARG_Price (1,5)	1	5	-7.856839	-7.817142	-7.856955	-7.841946

NAGARCH Skewed T-Student ARG_Price (2,2)	2	2	-7.851349	-7.815623	-7.851444	-7.837946
NAGARCH Skewed T-Student ARG_Price (2,3)	2	3	-7.852812	-7.813115	-7.852928	-7.837919
NAGARCH Skewed T-Student ARG_Price (2,4)	2	4	-7.854984	-7.811318	-7.855125	-7.838602
NAGARCH Skewed T-Student ARG_Price (3,4)	3	4	-7.862741	-7.811136	-7.862938	-7.843381
NAGARCH Skewed T-Student ARG_Price (3,0)	3	0	-7.845932	-7.810206	-7.846027	-7.832529
NAGARCH Skewed T-Student ARG_Price (2,5)	2	5	-7.853769	-7.806133	-7.853936	-7.835898
NAGARCH Skewed T-Student ARG_Price (4,2)	4	2	-7.851104	-7.799499	-7.8513	-7.831744
NAGARCH Skewed T-Student ARG_Price (3,5)	3	5	-7.852799	-7.797224	-7.853027	-7.83195
NAGARCH Skewed T-Student ARG_Price (4,1)	4	1	-7.838934	-7.791298	-7.839101	-7.821063
NAGARCH Skewed T-Student ARG_Price (3,2)	3	2	-7.833379	-7.789713	-7.83352	-7.816997
NAGARCH Skewed T-Student ARG_Price (3,3)	3	3	-7.834567	-7.786932	-7.834735	-7.816696
NAGARCH Skewed T-Student ARG_Price (4,5)	4	5	-7.848527	-7.785013	-7.848824	-7.824699
NAGARCH Skewed T-Student ARG_Price (1,2)	1	2	-7.808298	-7.78051	-7.808355	-7.797873
NAGARCH Skewed T-Student ARG_Price (4,4)	4	4	-7.831096	-7.771552	-7.831357	-7.808757
NAGARCH Skewed T-Student ARG_Price (5,2)	5	2	-7.829467	-7.769923	-7.829729	-7.807129
NAGARCH Skewed T-Student ARG_Price (4,0)	4	0	-7.811853	-7.768187	-7.811994	-7.795471
NAGARCH Skewed T-Student ARG_Price (1,0)	1	0	-7.787189	-7.767341	-7.787219	-7.779743
NAGARCH Skewed T-Student ARG_Price (5,4)	5	4	-7.834251	-7.766767	-7.834585	-7.808934
NAGARCH Skewed T-Student ARG_Price (5,0)	5	0	-7.807154	-7.755549	-7.80735	-7.787794
NAGARCH Skewed T-Student ARG_Price (5,3)	5	3	-7.817412	-7.753898	-7.817709	-7.793584
NAGARCH Skewed T-Student ARG_Price (5,5)	5	5	-7.823256	-7.751802	-7.823631	-7.796449
NAGARCH Skewed T-Student ARG_Price (0,1)	0	1	-7.727783	-7.711904	-7.727802	-7.721826
NAGARCH Skewed T-Student ARG_Price (0,2)	0	2	-7.727188	-7.70734	-7.727218	-7.719742
NAGARCH Skewed T-Student ARG_Price (0,3)	0	3	-7.726073	-7.702255	-7.726115	-7.717137
NAGARCH Skewed T-Student ARG_Price (0,4)	0	4	-7.724518	-7.696731	-7.724576	-7.714094
NAGARCH Skewed T-Student ARG_Price (0,5)	0	5	-7.723278	-7.691521	-7.723353	-7.711364

EGPT_Price						
SGARCH Normal						
Modelo	p	q	AIC	BIC	Shibata	Hannan-Quinn
SGARCH Norm EGPT_Price (1,1)	1	1	-10.86684	-10.85493	-10.86685	-10.86237
SGARCH Norm EGPT_Price (1,2)	1	2	-10.86192	-10.84604	-10.86194	-10.85596
SGARCH Norm EGPT_Price (1,3)	1	3	-10.86005	-10.8402	-10.86008	-10.8526
SGARCH Norm EGPT_Price (2,1)	2	1	-10.85444	-10.83856	-10.85446	-10.84849
SGARCH Norm EGPT_Price (1,4)	1	4	-10.8581	-10.83428	-10.85814	-10.84916
SGARCH Norm EGPT_Price (1,5)	1	5	-10.86086	-10.83307	-10.86092	-10.85043
SGARCH Norm EGPT_Price (2,2)	2	2	-10.85142	-10.83158	-10.85145	-10.84398
SGARCH Norm EGPT_Price (2,3)	2	3	-10.8538	-10.82998	-10.85384	-10.84486
SGARCH Norm EGPT_Price (2,5)	2	5	-10.85947	-10.82771	-10.85954	-10.84755
SGARCH Norm EGPT_Price (3,1)	3	1	-10.84733	-10.82749	-10.84736	-10.83989
SGARCH Norm EGPT_Price (2,4)	2	4	-10.85342	-10.82563	-10.85347	-10.84299
SGARCH Norm EGPT_Price (3,5)	3	5	-10.85873	-10.823	-10.85882	-10.84533
SGARCH Norm EGPT_Price (3,4)	3	4	-10.85471	-10.82295	-10.85478	-10.84279
SGARCH Norm EGPT_Price (3,2)	3	2	-10.84582	-10.822	-10.84586	-10.83688
SGARCH Norm EGPT_Price (3,3)	3	3	-10.84924	-10.82146	-10.8493	-10.83882
SGARCH Norm EGPT_Price (4,4)	4	4	-10.85675	-10.82102	-10.85684	-10.84335
SGARCH Norm EGPT_Price (4,1)	4	1	-10.84146	-10.81764	-10.8415	-10.83252
SGARCH Norm EGPT_Price (5,1)	5	1	-10.84411	-10.81632	-10.84417	-10.83368
SGARCH Norm EGPT_Price (4,5)	4	5	-10.85449	-10.81479	-10.85461	-10.8396
SGARCH Norm EGPT_Price (4,2)	4	2	-10.84175	-10.81396	-10.8418	-10.83132
SGARCH Norm EGPT_Price (4,3)	4	3	-10.84513	-10.81337	-10.8452	-10.83322
SGARCH Norm EGPT_Price (5,4)	5	4	-10.85221	-10.81251	-10.85233	-10.83732
SGARCH Norm EGPT_Price (5,5)	5	5	-10.85331	-10.80964	-10.85345	-10.83693
SGARCH Norm EGPT_Price (5,3)	5	3	-10.84115	-10.80542	-10.84125	-10.82775

SGARCH Norm EGPT_Price (5,2)	5	2	-10.83596	-10.8042	-10.83604	-10.82405
SGARCH Norm EGPT_Price (5,0)	5	0	-10.79277	-10.76895	-10.79281	-10.78383
SGARCH Norm EGPT_Price (4,0)	4	0	-10.76873	-10.74888	-10.76876	-10.76128
SGARCH Norm EGPT_Price (3,0)	3	0	-10.74913	-10.73325	-10.74915	-10.74317
SGARCH Norm EGPT_Price (2,0)	2	0	-10.68802	-10.67611	-10.68803	-10.68355
SGARCH Norm EGPT_Price (1,0)	1	0	-10.57082	-10.56288	-10.57082	-10.56784
SGARCH Norm EGPT_Price (0,1)	0	1	-10.41673	-10.40879	-10.41674	-10.41375
SGARCH Norm EGPT_Price (0,4)	0	4	-10.42778	-10.40793	-10.42781	-10.42033
SGARCH Norm EGPT_Price (0,5)	0	5	-10.42536	-10.40155	-10.42541	-10.41643
SGARCH Norm EGPT_Price (0,3)	0	3	-10.41688	-10.401	-10.4169	-10.41092
SGARCH Norm EGPT_Price (0,2)	0	2	-10.40528	-10.39337	-10.40529	-10.40081

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.868944	-10.85307	-10.868963	-10.862987
SGARCH Skewed Norm EGPT_Price (2,1)	2	1	-10.86083	-10.84098	-10.86086	-10.853384
SGARCH Skewed Norm EGPT_Price (1,2)	1	2	-10.860084	-10.84024	-10.860114	-10.852638
SGARCH Skewed Norm EGPT_Price (1,3)	1	3	-10.85945	-10.83563	-10.859492	-10.850514
SGARCH Skewed Norm EGPT_Price (1,4)	1	4	-10.862195	-10.83441	-10.862252	-10.85177
SGARCH Skewed Norm EGPT_Price (2,2)	2	2	-10.856794	-10.83298	-10.856837	-10.847859
SGARCH Skewed Norm EGPT_Price (2,3)	2	3	-10.856551	-10.82876	-10.856609	-10.846127
SGARCH Skewed Norm EGPT_Price (3,1)	3	1	-10.852091	-10.82827	-10.852133	-10.843155
SGARCH Skewed Norm EGPT_Price (1,5)	1	5	-10.858585	-10.82683	-10.85866	-10.846671
SGARCH Skewed Norm EGPT_Price (2,4)	2	4	-10.856024	-10.82427	-10.856098	-10.84411
SGARCH Skewed Norm EGPT_Price (2,5)	2	5	-10.858399	-10.82267	-10.858494	-10.844996
SGARCH Skewed Norm EGPT_Price (3,2)	3	2	-10.850188	-10.8224	-10.850245	-10.839763
SGARCH Skewed Norm EGPT_Price (3,4)	3	4	-10.858026	-10.8223	-10.85812	-10.844622
SGARCH Skewed Norm EGPT_Price (3,5)	3	5	-10.858071	-10.81837	-10.858188	-10.843179
SGARCH Skewed Norm EGPT_Price (4,1)	4	1	-10.84541	-10.81762	-10.845468	-10.834986

SGARCH Skewed Norm EGPT_Price (3,3)	3	3	-10.84712	-10.81536	-10.847195	-10.835206
SGARCH Skewed Norm EGPT_Price (4,4)	4	4	-10.851841	-10.81215	-10.851958	-10.836949
SGARCH Skewed Norm EGPT_Price (4,2)	4	2	-10.843077	-10.81132	-10.843151	-10.831163
SGARCH Skewed Norm EGPT_Price (5,1)	5	1	-10.842765	-10.81101	-10.84284	-10.830851
SGARCH Skewed Norm EGPT_Price (4,3)	4	3	-10.844951	-10.80922	-10.845045	-10.831547
SGARCH Skewed Norm EGPT_Price (4,5)	4	5	-10.850749	-10.80708	-10.85089	-10.834368
SGARCH Skewed Norm EGPT_Price (5,4)	5	4	-10.846955	-10.80329	-10.847096	-10.830573
SGARCH Skewed Norm EGPT_Price (5,2)	5	2	-10.836767	-10.80104	-10.836862	-10.823364
SGARCH Skewed Norm EGPT_Price (5,5)	5	5	-10.848621	-10.80099	-10.848789	-10.830751
SGARCH Skewed Norm EGPT_Price (5,3)	5	3	-10.836049	-10.79635	-10.836166	-10.821157
SGARCH Skewed Norm EGPT_Price (5,0)	5	0	-10.792538	-10.76475	-10.792595	-10.782113
SGARCH Skewed Norm EGPT_Price (4,0)	4	0	-10.768092	-10.74427	-10.768134	-10.759156
SGARCH Skewed Norm EGPT_Price (3,0)	3	0	-10.748853	-10.729	-10.748882	-10.741406
SGARCH Skewed Norm EGPT_Price (1,0)	1	0	-10.569636	-10.55773	-10.569646	-10.565168
SGARCH Skewed Norm EGPT_Price (0,1)	0	1	-10.417087	-10.40518	-10.417097	-10.412619
SGARCH Skewed Norm EGPT_Price (0,2)	0	2	-10.415516	-10.39964	-10.415535	-10.409559
SGARCH Skewed Norm EGPT_Price (0,5)	0	5	-10.427072	-10.39928	-10.427129	-10.416647
SGARCH Skewed Norm EGPT_Price (0,3)	0	3	-10.415496	-10.39565	-10.415526	-10.40805
SGARCH Skewed Norm EGPT_Price (0,4)	0	4	-10.414544	-10.39073	-10.414586	-10.405609
SGARCH Skewed Norm EGPT_Price (2,0)	2	0	-1.491208	-1.47533	-1.491227	-1.485251

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student EGPT_Price (1,1)	1	1	-11.05494	-11.03906	-11.05496	-11.04898
SGARCH T-Student EGPT_Price (1,2)	1	2	-11.05537	-11.03552	-11.0554	-11.04792
SGARCH T-Student EGPT_Price (2,1)	2	1	-11.05353	-11.03368	-11.05356	-11.04609
SGARCH T-Student EGPT_Price (1,3)	1	3	-11.05279	-11.02897	-11.05283	-11.04386
SGARCH T-Student EGPT_Price (2,2)	2	2	-11.05264	-11.02882	-11.05268	-11.0437
SGARCH T-Student EGPT_Price (1,4)	1	4	-11.05462	-11.02683	-11.05467	-11.04419

SGARCH T-Student EGPT_Price (3,1)	3	1	-11.05042	-11.02661	-11.05047	-11.04149
SGARCH T-Student EGPT_Price (2,4)	2	4	-11.05663	-11.02487	-11.0567	-11.04471
SGARCH T-Student EGPT_Price (2,3)	2	3	-11.05169	-11.0239	-11.05175	-11.04127
SGARCH T-Student EGPT_Price (1,5)	1	5	-11.05439	-11.02263	-11.05447	-11.04248
SGARCH T-Student EGPT_Price (3,2)	3	2	-11.05018	-11.02239	-11.05024	-11.03976
SGARCH T-Student EGPT_Price (3,4)	3	4	-11.05705	-11.02132	-11.05714	-11.04365
SGARCH T-Student EGPT_Price (2,5)	2	5	-11.0559	-11.02017	-11.05599	-11.0425
SGARCH T-Student EGPT_Price (4,1)	4	1	-11.04747	-11.01968	-11.04752	-11.03704
SGARCH T-Student EGPT_Price (3,3)	3	3	-11.04989	-11.01813	-11.04996	-11.03797
SGARCH T-Student EGPT_Price (4,2)	4	2	-11.04783	-11.01607	-11.04791	-11.03592
SGARCH T-Student EGPT_Price (4,4)	4	4	-11.05552	-11.01582	-11.05564	-11.04063
SGARCH T-Student EGPT_Price (3,5)	3	5	-11.05443	-11.01473	-11.05455	-11.03954
SGARCH T-Student EGPT_Price (5,1)	5	1	-11.04577	-11.01402	-11.04585	-11.03386
SGARCH T-Student EGPT_Price (4,3)	4	3	-11.04857	-11.01285	-11.04867	-11.03517
SGARCH T-Student EGPT_Price (5,2)	5	2	-11.04687	-11.01115	-11.04697	-11.03347
SGARCH T-Student EGPT_Price (5,4)	5	4	-11.05311	-11.00944	-11.05325	-11.03672
SGARCH T-Student EGPT_Price (5,3)	5	3	-11.04743	-11.00773	-11.04754	-11.03254
SGARCH T-Student EGPT_Price (4,5)	4	5	-11.04859	-11.00492	-11.04873	-11.03221
SGARCH T-Student EGPT_Price (5,5)	5	5	-11.05139	-11.00375	-11.05155	-11.03352
SGARCH T-Student EGPT_Price (5,0)	5	0	-11.02918	-11.00139	-11.02923	-11.01875
SGARCH T-Student EGPT_Price (4,0)	4	0	-11.01687	-10.99305	-11.01691	-11.00793
SGARCH T-Student EGPT_Price (3,0)	3	0	-11.01257	-10.99272	-11.0126	-11.00512
SGARCH T-Student EGPT_Price (2,0)	2	0	-10.99087	-10.97499	-10.99089	-10.98491
SGARCH T-Student EGPT_Price (1,0)	1	0	-10.94366	-10.93175	-10.94367	-10.93919
SGARCH T-Student EGPT_Price (0,5)	0	5	-10.86138	-10.83359	-10.86143	-10.85095
SGARCH T-Student EGPT_Price (0,3)	0	3	-10.84969	-10.82984	-10.84972	-10.84224
SGARCH T-Student EGPT_Price (0,1)	0	1	-10.8352	-10.82329	-10.83521	-10.83073
SGARCH T-Student EGPT_Price (0,2)	0	2	-10.8231	-10.80722	-10.82311	-10.81714

SGARCH T-Student EGPT_Price (0,4)	0	4	-10.80637	-10.78255	-10.80641	-10.79743
<i>SGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05253	-11.03269	-11.05256	-11.04509
SGARCH Skewed T-Student EGPT_Price (1,2)	1	2	-11.05231	-11.02849	-11.05235	-11.04337
SGARCH Skewed T-Student EGPT_Price (2,1)	2	1	-11.05043	-11.02661	-11.05047	-11.04149
SGARCH Skewed T-Student EGPT_Price (2,2)	2	2	-11.05192	-11.02413	-11.05197	-11.04149
SGARCH Skewed T-Student EGPT_Price (1,3)	1	3	-11.0515	-11.02371	-11.05156	-11.04108
SGARCH Skewed T-Student EGPT_Price (1,4)	1	4	-11.05338	-11.02163	-11.05346	-11.04147
SGARCH Skewed T-Student EGPT_Price (3,1)	3	1	-11.04734	-11.01955	-11.0474	-11.03691
SGARCH Skewed T-Student EGPT_Price (2,3)	2	3	-11.04998	-11.01822	-11.05005	-11.03806
SGARCH Skewed T-Student EGPT_Price (1,5)	1	5	-11.05296	-11.01723	-11.05305	-11.03956
SGARCH Skewed T-Student EGPT_Price (3,2)	3	2	-11.0484	-11.01664	-11.04847	-11.03648
SGARCH Skewed T-Student EGPT_Price (2,4)	2	4	-11.05232	-11.01659	-11.05242	-11.03892
SGARCH Skewed T-Student EGPT_Price (3,4)	3	4	-11.0558	-11.0161	-11.05592	-11.04091
SGARCH Skewed T-Student EGPT_Price (2,5)	2	5	-11.05455	-11.01486	-11.05467	-11.03966
SGARCH Skewed T-Student EGPT_Price (4,1)	4	1	-11.04563	-11.01387	-11.0457	-11.03371
SGARCH Skewed T-Student EGPT_Price (3,3)	3	3	-11.04845	-11.01272	-11.04854	-11.03504
SGARCH Skewed T-Student EGPT_Price (4,2)	4	2	-11.04648	-11.01076	-11.04658	-11.03308
SGARCH Skewed T-Student EGPT_Price (4,4)	4	4	-11.05426	-11.01059	-11.0544	-11.03788
SGARCH Skewed T-Student EGPT_Price (5,1)	5	1	-11.04452	-11.00879	-11.04461	-11.03112
SGARCH Skewed T-Student EGPT_Price (4,3)	4	3	-11.0479	-11.0082	-11.04801	-11.03301
SGARCH Skewed T-Student EGPT_Price (3,5)	3	5	-11.0499	-11.00623	-11.05004	-11.03352
SGARCH Skewed T-Student EGPT_Price (5,2)	5	2	-11.04459	-11.00489	-11.04471	-11.0297
SGARCH Skewed T-Student EGPT_Price (5,3)	5	3	-11.04683	-11.00316	-11.04697	-11.03045
SGARCH Skewed T-Student EGPT_Price (4,5)	4	5	-11.04841	-11.00078	-11.04858	-11.03054
SGARCH Skewed T-Student EGPT_Price (5,4)	5	4	-11.04839	-11.00076	-11.04856	-11.03052
SGARCH Skewed T-Student EGPT_Price (5,5)	5	5	-11.04996	-10.99835	-11.05015	-11.0306

SGARCH Skewed T-Student EGPT_Price (5,0)	5	0	-11.02802	-10.99626	-11.0281	-11.01611
SGARCH Skewed T-Student EGPT_Price (4,0)	4	0	-11.01569	-10.9879	-11.01575	-11.00527
SGARCH Skewed T-Student EGPT_Price (3,0)	3	0	-11.01133	-10.98752	-11.01138	-11.0024
SGARCH Skewed T-Student EGPT_Price (2,0)	2	0	-10.99531	-10.97546	-10.99534	-10.98786
SGARCH Skewed T-Student EGPT_Price (1,0)	1	0	-10.94266	-10.92678	-10.94267	-10.9367
SGARCH Skewed T-Student EGPT_Price (0,5)	0	5	-10.90082	-10.86906	-10.9009	-10.88891
SGARCH Skewed T-Student EGPT_Price (0,1)	0	1	-10.86788	-10.852	-10.86789	-10.86192
SGARCH Skewed T-Student EGPT_Price (0,4)	0	4	-10.87871	-10.85093	-10.87877	-10.86829
SGARCH Skewed T-Student EGPT_Price (0,2)	0	2	-10.85372	-10.83387	-10.85375	-10.84628
SGARCH Skewed T-Student EGPT_Price (0,3)	0	3	-10.84048	-10.81666	-10.84052	-10.83155
<i>APARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm EGPT_Price (1,1)	1	1	-10.84955	-10.8297	-10.84958	-10.8421
APARCH Norm EGPT_Price (1,2)	1	2	-10.84661	-10.82279	-10.84665	-10.83767
APARCH Norm EGPT_Price (2,1)	2	1	-10.84434	-10.81656	-10.8444	-10.83392
APARCH Norm EGPT_Price (1,3)	1	3	-10.83655	-10.80876	-10.8366	-10.82612
APARCH Norm EGPT_Price (2,2)	2	2	-10.83976	-10.808	-10.83984	-10.82785
APARCH Norm EGPT_Price (3,1)	3	1	-10.83716	-10.80143	-10.83725	-10.82376
APARCH Norm EGPT_Price (1,4)	1	4	-10.82928	-10.79752	-10.82935	-10.81736
APARCH Norm EGPT_Price (2,3)	2	3	-10.83197	-10.79624	-10.83207	-10.81857
APARCH Norm EGPT_Price (3,2)	3	2	-10.83318	-10.79349	-10.8333	-10.81829
APARCH Norm EGPT_Price (2,4)	2	4	-10.82694	-10.78724	-10.82706	-10.81205
APARCH Norm EGPT_Price (4,1)	4	1	-10.82957	-10.78591	-10.82971	-10.81319
APARCH Norm EGPT_Price (1,5)	1	5	-10.81987	-10.78414	-10.81996	-10.80646
APARCH Norm EGPT_Price (3,3)	3	3	-10.82774	-10.78408	-10.82788	-10.81136
APARCH Norm EGPT_Price (4,2)	4	2	-10.8266	-10.77897	-10.82677	-10.80873
APARCH Norm EGPT_Price (2,5)	2	5	-10.81309	-10.76943	-10.81323	-10.79671
APARCH Norm EGPT_Price (3,4)	3	4	-10.81567	-10.76803	-10.81584	-10.7978

APARCH Norm EGPT_Price (5,1)	5	1	-10.81601	-10.76441	-10.81621	-10.79665
APARCH Norm EGPT_Price (4,3)	4	3	-10.81368	-10.76208	-10.81388	-10.79432
APARCH Norm EGPT_Price (5,2)	5	2	-10.81643	-10.76085	-10.81665	-10.79558
APARCH Norm EGPT_Price (3,5)	3	5	-10.8106	-10.75899	-10.81079	-10.79124
APARCH Norm EGPT_Price (4,4)	4	4	-10.81255	-10.75698	-10.81278	-10.79171
APARCH Norm EGPT_Price (5,3)	5	3	-10.8155	-10.75596	-10.81576	-10.79316
APARCH Norm EGPT_Price (5,4)	5	4	-10.8061	-10.74258	-10.80639	-10.78227
APARCH Norm EGPT_Price (4,5)	4	5	-10.80178	-10.74224	-10.80204	-10.77944
APARCH Norm EGPT_Price (5,5)	5	5	-10.79407	-10.72659	-10.79441	-10.76876
APARCH Norm EGPT_Price (4,0)	4	0	-10.52985	-10.49015	-10.52996	-10.51496
APARCH Norm EGPT_Price (5,0)	5	0	-10.49066	-10.44302	-10.49082	-10.47279
APARCH Norm EGPT_Price (1,0)	1	0	-10.45799	-10.44211	-10.458	-10.45203
APARCH Norm EGPT_Price (2,0)	2	0	-10.46567	-10.44185	-10.46571	-10.45673
APARCH Norm EGPT_Price (0,1)	0	1	-10.42158	-10.40968	-10.4216	-10.41712
APARCH Norm EGPT_Price (0,2)	0	2	-10.41996	-10.40408	-10.41998	-10.41401
APARCH Norm EGPT_Price (0,4)	0	4	-10.41405	-10.39023	-10.41409	-10.40511
APARCH Norm EGPT_Price (3,0)	3	0	-10.42076	-10.389	-10.42084	-10.40885
APARCH Norm EGPT_Price (0,5)	0	5	-10.38489	-10.3571	-10.38495	-10.37446
APARCH Norm EGPT_Price (0,3)	0	3	-10.32641	-10.30656	-10.32644	-10.31896

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.8479	-10.82408	-10.84794	-10.83897
APARCH Skewed Norm EGPT_Price (1,2)	1	2	-10.83918	-10.81139	-10.83923	-10.82875
APARCH Skewed Norm EGPT_Price (2,1)	2	1	-10.83838	-10.80663	-10.83846	-10.82647
APARCH Skewed Norm EGPT_Price (1,3)	1	3	-10.83582	-10.80406	-10.8359	-10.82391
APARCH Skewed Norm EGPT_Price (2,2)	2	2	-10.83896	-10.80323	-10.83905	-10.82555
APARCH Skewed Norm EGPT_Price (3,1)	3	1	-10.83628	-10.79659	-10.8364	-10.82139
APARCH Skewed Norm EGPT_Price (1,4)	1	4	-10.82141	-10.78569	-10.82151	-10.80801

APARCH Skewed Norm EGPT_Price (2,3)	2	3	-10.82353	-10.78383	-10.82364	-10.80863
APARCH Skewed Norm EGPT_Price (3,2)	3	2	-10.82458	-10.78091	-10.82472	-10.8082
APARCH Skewed Norm EGPT_Price (2,4)	2	4	-10.82238	-10.77871	-10.82252	-10.806
APARCH Skewed Norm EGPT_Price (4,1)	4	1	-10.82358	-10.77594	-10.82375	-10.80571
APARCH Skewed Norm EGPT_Price (1,5)	1	5	-10.8156	-10.77591	-10.81572	-10.80071
APARCH Skewed Norm EGPT_Price (3,3)	3	3	-10.82286	-10.77522	-10.82302	-10.80498
APARCH Skewed Norm EGPT_Price (4,2)	4	2	-10.82202	-10.77041	-10.82222	-10.80266
APARCH Skewed Norm EGPT_Price (2,5)	2	5	-10.81525	-10.76761	-10.81541	-10.79738
APARCH Skewed Norm EGPT_Price (5,1)	5	1	-10.82223	-10.76666	-10.82246	-10.80138
APARCH Skewed Norm EGPT_Price (3,4)	3	4	-10.81817	-10.76656	-10.81836	-10.79881
APARCH Skewed Norm EGPT_Price (4,3)	4	3	-10.81637	-10.76079	-10.8166	-10.79552
APARCH Skewed Norm EGPT_Price (3,5)	3	5	-10.81074	-10.75517	-10.81097	-10.7899
APARCH Skewed Norm EGPT_Price (4,4)	4	4	-10.80972	-10.75017	-10.80998	-10.78738
APARCH Skewed Norm EGPT_Price (5,2)	5	2	-10.80934	-10.74979	-10.8096	-10.787
APARCH Skewed Norm EGPT_Price (5,3)	5	3	-10.81258	-10.74907	-10.81288	-10.78876
APARCH Skewed Norm EGPT_Price (4,5)	4	5	-10.79718	-10.73367	-10.79748	-10.77336
APARCH Skewed Norm EGPT_Price (5,4)	5	4	-10.80111	-10.73363	-10.80145	-10.7758
APARCH Skewed Norm EGPT_Price (5,5)	5	5	-10.7961	-10.72464	-10.79647	-10.76929
APARCH Skewed Norm EGPT_Price (4,0)	4	0	-10.52051	-10.47684	-10.52065	-10.50412
APARCH Skewed Norm EGPT_Price (2,0)	2	0	-10.49408	-10.46629	-10.49414	-10.48365
APARCH Skewed Norm EGPT_Price (1,0)	1	0	-10.46399	-10.44414	-10.46402	-10.45654
APARCH Skewed Norm EGPT_Price (5,0)	5	0	-10.47798	-10.42638	-10.47818	-10.45862
APARCH Skewed Norm EGPT_Price (0,1)	0	1	-10.39883	-10.38295	-10.39885	-10.39287
APARCH Skewed Norm EGPT_Price (0,3)	0	3	-10.39353	-10.36971	-10.39357	-10.38459
APARCH Skewed Norm EGPT_Price (3,0)	3	0	-10.3968	-10.36107	-10.39689	-10.3834
APARCH Skewed Norm EGPT_Price (0,5)	0	5	-10.38683	-10.35508	-10.38691	-10.37492
APARCH Skewed Norm EGPT_Price (0,4)	0	4	-10.35145	-10.32366	-10.3515	-10.34102
APARCH Skewed Norm EGPT_Price (0,2)	0	2	-10.33354	-10.3137	-10.33357	-10.3261

<i>APARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student EGPT_Price (1,1)	1	1	-11.02714	-11.00332	-11.02718	-11.0182
APARCH T-Student EGPT_Price (1,2)	1	2	-11.01815	-10.99036	-11.0182	-11.00772
APARCH T-Student EGPT_Price (2,1)	2	1	-11.01756	-10.9858	-11.01763	-11.00564
APARCH T-Student EGPT_Price (2,2)	2	2	-11.01192	-10.9762	-11.01202	-10.99852
APARCH T-Student EGPT_Price (1,3)	1	3	-11.00617	-10.97441	-11.00625	-10.99426
APARCH T-Student EGPT_Price (3,1)	3	1	-11.01131	-10.97161	-11.01143	-10.99642
APARCH T-Student EGPT_Price (1,4)	1	4	-11.00009	-10.96436	-11.00018	-10.98668
APARCH T-Student EGPT_Price (2,3)	2	3	-11.00236	-10.96266	-11.00247	-10.98746
APARCH T-Student EGPT_Price (3,2)	3	2	-11.00417	-10.96051	-11.00431	-10.98779
APARCH T-Student EGPT_Price (4,1)	4	1	-11.00493	-10.9573	-11.0051	-10.98706
APARCH T-Student EGPT_Price (3,3)	3	3	-11.00014	-10.9525	-11.00031	-10.98227
APARCH T-Student EGPT_Price (2,4)	2	4	-10.99597	-10.95231	-10.99612	-10.97959
APARCH T-Student EGPT_Price (1,5)	1	5	-10.99007	-10.95037	-10.99019	-10.97518
APARCH T-Student EGPT_Price (4,2)	4	2	-10.99692	-10.94531	-10.99712	-10.97756
APARCH T-Student EGPT_Price (5,1)	5	1	-10.99846	-10.94288	-10.99868	-10.97761
APARCH T-Student EGPT_Price (2,5)	2	5	-10.98836	-10.94073	-10.98853	-10.97049
APARCH T-Student EGPT_Price (3,4)	3	4	-10.99091	-10.9393	-10.9911	-10.97155
APARCH T-Student EGPT_Price (4,3)	4	3	-10.98993	-10.93435	-10.99015	-10.96908
APARCH T-Student EGPT_Price (5,2)	5	2	-10.99169	-10.93215	-10.99195	-10.96935
APARCH T-Student EGPT_Price (3,5)	3	5	-10.98269	-10.92712	-10.98292	-10.96184
APARCH T-Student EGPT_Price (4,4)	4	4	-10.98176	-10.92221	-10.98202	-10.95942
APARCH T-Student EGPT_Price (5,3)	5	3	-10.98363	-10.92011	-10.98392	-10.9598
APARCH T-Student EGPT_Price (4,5)	4	5	-10.97605	-10.91253	-10.97634	-10.95222
APARCH T-Student EGPT_Price (5,4)	5	4	-10.97934	-10.91186	-10.97968	-10.95403
APARCH T-Student EGPT_Price (5,5)	5	5	-10.97005	-10.89859	-10.97042	-10.94324
APARCH T-Student EGPT_Price (3,0)	3	0	-10.86378	-10.82805	-10.86387	-10.85037

APARCH T-Student EGPT_Price (1,0)	1	0	-10.83431	-10.81446	-10.83434	-10.82686
APARCH T-Student EGPT_Price (4,0)	4	0	-10.85696	-10.81329	-10.8571	-10.84058
APARCH T-Student EGPT_Price (2,0)	2	0	-10.84103	-10.81324	-10.84108	-10.8306
APARCH T-Student EGPT_Price (5,0)	5	0	-10.84918	-10.79757	-10.84938	-10.82982
APARCH T-Student EGPT_Price (0,1)	0	1	-10.79376	-10.77788	-10.79378	-10.7878
APARCH T-Student EGPT_Price (0,3)	0	3	-10.78986	-10.76604	-10.7899	-10.78092
APARCH T-Student EGPT_Price (0,5)	0	5	-10.78353	-10.75178	-10.78361	-10.77162
APARCH T-Student EGPT_Price (0,4)	0	4	-10.7567	-10.72891	-10.75675	-10.74627
APARCH T-Student EGPT_Price (0,2)	0	2	-10.74339	-10.72354	-10.74341	-10.73594

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.0241	-10.99631	-11.02415	-11.01367
APARCH Skewed T-Student EGPT_Price (1,2)	1	2	-11.01527	-10.98352	-11.01535	-11.00336
APARCH Skewed T-Student EGPT_Price (2,1)	2	1	-11.01754	-10.98181	-11.01763	-11.00413
APARCH Skewed T-Student EGPT_Price (1,3)	1	3	-11.00609	-10.97037	-11.00619	-10.99269
APARCH Skewed T-Student EGPT_Price (2,2)	2	2	-11.00958	-10.96988	-11.00969	-10.99468
APARCH Skewed T-Student EGPT_Price (3,1)	3	1	-11.00926	-10.96559	-11.0094	-10.99288
APARCH Skewed T-Student EGPT_Price (1,4)	1	4	-10.99802	-10.95832	-10.99813	-10.98312
APARCH Skewed T-Student EGPT_Price (2,3)	2	3	-11.00126	-10.95759	-11.0014	-10.98488
APARCH Skewed T-Student EGPT_Price (3,2)	3	2	-11.00486	-10.95722	-11.00502	-10.98699
APARCH Skewed T-Student EGPT_Price (4,1)	4	1	-11.0022	-10.9506	-11.0024	-10.98284
APARCH Skewed T-Student EGPT_Price (1,5)	1	5	-10.99204	-10.94837	-10.99218	-10.97566
APARCH Skewed T-Student EGPT_Price (2,4)	2	4	-10.99424	-10.9466	-10.99441	-10.97637
APARCH Skewed T-Student EGPT_Price (3,3)	3	3	-10.99674	-10.94513	-10.99693	-10.97738
APARCH Skewed T-Student EGPT_Price (4,2)	4	2	-10.99626	-10.94069	-10.99649	-10.97541
APARCH Skewed T-Student EGPT_Price (5,1)	5	1	-10.99649	-10.93694	-10.99675	-10.97415
APARCH Skewed T-Student EGPT_Price (2,5)	2	5	-10.98697	-10.93536	-10.98716	-10.96761
APARCH Skewed T-Student EGPT_Price (3,4)	3	4	-10.98929	-10.93372	-10.98952	-10.96844

APARCH Skewed T-Student EGPT_Price (4,3)	4	3	-10.98806	-10.92851	-10.98832	-10.96572
APARCH Skewed T-Student EGPT_Price (5,2)	5	2	-10.98958	-10.92606	-10.98987	-10.96575
APARCH Skewed T-Student EGPT_Price (3,5)	3	5	-10.98102	-10.92148	-10.98128	-10.95868
APARCH Skewed T-Student EGPT_Price (4,4)	4	4	-10.98133	-10.91782	-10.98163	-10.9575
APARCH Skewed T-Student EGPT_Price (5,3)	5	3	-10.98445	-10.91697	-10.98479	-10.95913
APARCH Skewed T-Student EGPT_Price (4,5)	4	5	-10.97599	-10.9085	-10.97632	-10.95067
APARCH Skewed T-Student EGPT_Price (5,4)	5	4	-10.97632	-10.90487	-10.9767	-10.94952
APARCH Skewed T-Student EGPT_Price (5,5)	5	5	-10.9702	-10.89478	-10.97062	-10.94191
APARCH Skewed T-Student EGPT_Price (2,0)	2	0	-10.8569	-10.82514	-10.85697	-10.84499
APARCH Skewed T-Student EGPT_Price (3,0)	3	0	-10.85642	-10.81672	-10.85653	-10.84153
APARCH Skewed T-Student EGPT_Price (1,0)	1	0	-10.83721	-10.81339	-10.83725	-10.82827
APARCH Skewed T-Student EGPT_Price (4,0)	4	0	-10.85391	-10.80627	-10.85407	-10.83603
APARCH Skewed T-Student EGPT_Price (5,0)	5	0	-10.85253	-10.79695	-10.85276	-10.83168
APARCH Skewed T-Student EGPT_Price (0,2)	0	2	-10.79112	-10.7673	-10.79116	-10.78218
APARCH Skewed T-Student EGPT_Price (0,4)	0	4	-10.78539	-10.75363	-10.78546	-10.77347
APARCH Skewed T-Student EGPT_Price (0,5)	0	5	-10.78545	-10.74972	-10.78554	-10.77204
APARCH Skewed T-Student EGPT_Price (0,3)	0	3	-10.76254	-10.73476	-10.7626	-10.75212
APARCH Skewed T-Student EGPT_Price (0,1)	0	1	-10.74332	-10.72347	-10.74335	-10.73587
<i>TGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm EGPT_Price (1,1)	1	1	-10.8427	-10.82682	-10.84272	-10.83674
TGARCH Norm EGPT_Price (1,2)	1	2	-10.84067	-10.82082	-10.8407	-10.83322
TGARCH Norm EGPT_Price (2,2)	2	2	-10.84789	-10.82011	-10.84795	-10.83747
TGARCH Norm EGPT_Price (5,5)	5	5	-10.88188	-10.81836	-10.88217	-10.85805
TGARCH Norm EGPT_Price (2,1)	2	1	-10.84143	-10.81761	-10.84147	-10.8325
TGARCH Norm EGPT_Price (2,3)	2	3	-10.83843	-10.80668	-10.83851	-10.82652
TGARCH Norm EGPT_Price (3,2)	3	2	-10.84191	-10.80618	-10.842	-10.8285
TGARCH Norm EGPT_Price (3,1)	3	1	-10.83786	-10.80611	-10.83794	-10.82595

TGARCH Norm EGPT_Price (1,3)	1	3	-10.8264	-10.80259	-10.82645	-10.81747
TGARCH Norm EGPT_Price (3,3)	3	3	-10.83961	-10.79992	-10.83973	-10.82472
TGARCH Norm EGPT_Price (2,4)	2	4	-10.83541	-10.79968	-10.8355	-10.822
TGARCH Norm EGPT_Price (3,4)	3	4	-10.84324	-10.79957	-10.84338	-10.82686
TGARCH Norm EGPT_Price (2,5)	2	5	-10.83769	-10.798	-10.83781	-10.8228
TGARCH Norm EGPT_Price (1,4)	1	4	-10.82518	-10.79739	-10.82524	-10.81476
TGARCH Norm EGPT_Price (1,5)	1	5	-10.82715	-10.79539	-10.82722	-10.81523
TGARCH Norm EGPT_Price (4,2)	4	2	-10.83847	-10.7948	-10.83861	-10.82208
TGARCH Norm EGPT_Price (4,1)	4	1	-10.83251	-10.79282	-10.83263	-10.81762
TGARCH Norm EGPT_Price (4,3)	4	3	-10.83918	-10.79154	-10.83935	-10.82131
TGARCH Norm EGPT_Price (4,4)	4	4	-10.84088	-10.78927	-10.84107	-10.82152
TGARCH Norm EGPT_Price (3,5)	3	5	-10.83581	-10.78817	-10.83598	-10.81794
TGARCH Norm EGPT_Price (4,5)	4	5	-10.83482	-10.77925	-10.83505	-10.81397
TGARCH Norm EGPT_Price (5,2)	5	2	-10.82861	-10.77701	-10.82881	-10.80925
TGARCH Norm EGPT_Price (5,1)	5	1	-10.82308	-10.77544	-10.82325	-10.80521
TGARCH Norm EGPT_Price (5,3)	5	3	-10.82903	-10.77345	-10.82926	-10.80818
TGARCH Norm EGPT_Price (5,4)	5	4	-10.82926	-10.76972	-10.82952	-10.80692
TGARCH Norm EGPT_Price (5,0)	5	0	-10.74079	-10.69712	-10.74093	-10.72441
TGARCH Norm EGPT_Price (3,0)	3	0	-10.71911	-10.69132	-10.71917	-10.70868
TGARCH Norm EGPT_Price (2,0)	2	0	-10.66032	-10.64047	-10.66035	-10.65288
TGARCH Norm EGPT_Price (0,3)	0	3	-10.55523	-10.53936	-10.55525	-10.54928
TGARCH Norm EGPT_Price (0,5)	0	5	-10.5414	-10.51758	-10.54144	-10.53247
TGARCH Norm EGPT_Price (4,0)	4	0	-10.40225	-10.36652	-10.40234	-10.38884
TGARCH Norm EGPT_Price (1,0)	1	0	15.32615	15.33806	15.32614	15.33062
TGARCH Norm EGPT_Price (0,4)	0	4	39.95538	39.97522	39.95535	39.96282
TGARCH Norm EGPT_Price (0,1)	0	1	42.90054	42.90848	42.90053	42.90352
TGARCH Norm EGPT_Price (0,2)	0	2	43.26044	43.27234	43.26042	43.2649

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.84117	-10.82132	-10.8412	-10.83373
TGARCH Skewed Norm EGPT_Price (1,2)	1	2	-10.83926	-10.81544	-10.8393	-10.83032
TGARCH Skewed Norm EGPT_Price (2,2)	2	2	-10.84654	-10.81478	-10.84662	-10.83463
TGARCH Skewed Norm EGPT_Price (2,1)	2	1	-10.83995	-10.81216	-10.84	-10.82952
TGARCH Skewed Norm EGPT_Price (2,3)	2	3	-10.83702	-10.80129	-10.83711	-10.82362
TGARCH Skewed Norm EGPT_Price (3,1)	3	1	-10.83638	-10.80065	-10.83647	-10.82297
TGARCH Skewed Norm EGPT_Price (3,2)	3	2	-10.83986	-10.80017	-10.83998	-10.82497
TGARCH Skewed Norm EGPT_Price (1,3)	1	3	-10.8251	-10.79731	-10.82516	-10.81467
TGARCH Skewed Norm EGPT_Price (3,4)	3	4	-10.84369	-10.79605	-10.84386	-10.82582
TGARCH Skewed Norm EGPT_Price (2,4)	2	4	-10.83432	-10.79462	-10.83444	-10.81943
TGARCH Skewed Norm EGPT_Price (3,3)	3	3	-10.83751	-10.79384	-10.83765	-10.82113
TGARCH Skewed Norm EGPT_Price (2,5)	2	5	-10.83669	-10.79302	-10.83683	-10.82031
TGARCH Skewed Norm EGPT_Price (1,4)	1	4	-10.82399	-10.79223	-10.82406	-10.81208
TGARCH Skewed Norm EGPT_Price (1,5)	1	5	-10.8259	-10.79017	-10.82599	-10.8125
TGARCH Skewed Norm EGPT_Price (4,2)	4	2	-10.83704	-10.78941	-10.83721	-10.81917
TGARCH Skewed Norm EGPT_Price (4,1)	4	1	-10.83191	-10.78825	-10.83206	-10.81553
TGARCH Skewed Norm EGPT_Price (4,3)	4	3	-10.83784	-10.78624	-10.83804	-10.81848
TGARCH Skewed Norm EGPT_Price (3,5)	3	5	-10.83481	-10.78321	-10.83501	-10.81545
TGARCH Skewed Norm EGPT_Price (4,4)	4	4	-10.83725	-10.78168	-10.83748	-10.8164
TGARCH Skewed Norm EGPT_Price (4,5)	4	5	-10.83375	-10.77421	-10.83401	-10.81141
TGARCH Skewed Norm EGPT_Price (5,2)	5	2	-10.82909	-10.77352	-10.82932	-10.80824
TGARCH Skewed Norm EGPT_Price (5,1)	5	1	-10.82325	-10.77164	-10.82344	-10.80389
TGARCH Skewed Norm EGPT_Price (5,3)	5	3	-10.82849	-10.76894	-10.82875	-10.80615
TGARCH Skewed Norm EGPT_Price (5,4)	5	4	-10.82809	-10.76457	-10.82838	-10.80426
TGARCH Skewed Norm EGPT_Price (5,5)	5	5	-10.83115	-10.76367	-10.83149	-10.80583
TGARCH Skewed Norm EGPT_Price (5,0)	5	0	-10.74227	-10.69463	-10.74243	-10.72439
TGARCH Skewed Norm EGPT_Price (4,0)	4	0	-10.71833	-10.67863	-10.71845	-10.70344

TGARCH Skewed Norm EGPT_Price (0,3)	0	3	-10.55428	-10.53443	-10.55431	-10.54684
TGARCH Skewed Norm EGPT_Price (2,0)	2	0	-10.55653	-10.53272	-10.55658	-10.5476
TGARCH Skewed Norm EGPT_Price (0,4)	0	4	-10.55276	-10.52894	-10.5528	-10.54383
TGARCH Skewed Norm EGPT_Price (3,0)	3	0	-10.49996	-10.4682	-10.50003	-10.48804
TGARCH Skewed Norm EGPT_Price (1,0)	1	0	32.61669	32.63257	32.61667	32.62265
TGARCH Skewed Norm EGPT_Price (0,2)	0	2	42.68102	42.6969	42.681	42.68697
TGARCH Skewed Norm EGPT_Price (0,1)	0	1	43.02429	43.0362	43.02428	43.02875

<i>TGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student EGPT_Price (1,1)	1	1	-11.05819	-11.03835	-11.05822	-11.05075
TGARCH T-Student EGPT_Price (1,2)	1	2	-11.06126	-11.03744	-11.0613	-11.05233
TGARCH T-Student EGPT_Price (2,2)	2	2	-11.06158	-11.02983	-11.06166	-11.04967
TGARCH T-Student EGPT_Price (2,1)	2	1	-11.05597	-11.02819	-11.05603	-11.04555
TGARCH T-Student EGPT_Price (1,3)	1	3	-11.05394	-11.02615	-11.054	-11.04351
TGARCH T-Student EGPT_Price (1,4)	1	4	-11.05637	-11.02461	-11.05644	-11.04445
TGARCH T-Student EGPT_Price (1,5)	1	5	-11.0557	-11.01998	-11.0558	-11.0423
TGARCH T-Student EGPT_Price (2,3)	2	3	-11.05557	-11.01984	-11.05566	-11.04216
TGARCH T-Student EGPT_Price (2,4)	2	4	-11.05853	-11.01883	-11.05864	-11.04363
TGARCH T-Student EGPT_Price (3,2)	3	2	-11.05563	-11.01594	-11.05575	-11.04074
TGARCH T-Student EGPT_Price (3,1)	3	1	-11.05044	-11.01472	-11.05054	-11.03704
TGARCH T-Student EGPT_Price (2,5)	2	5	-11.05751	-11.01384	-11.05765	-11.04113
TGARCH T-Student EGPT_Price (3,3)	3	3	-11.05291	-11.00924	-11.05305	-11.03653
TGARCH T-Student EGPT_Price (3,4)	3	4	-11.05546	-11.00782	-11.05562	-11.03759
TGARCH T-Student EGPT_Price (4,2)	4	2	-11.05169	-11.00405	-11.05186	-11.03382
TGARCH T-Student EGPT_Price (3,5)	3	5	-11.0551	-11.00349	-11.0553	-11.03574
TGARCH T-Student EGPT_Price (4,1)	4	1	-11.04617	-11.0025	-11.04631	-11.02978
TGARCH T-Student EGPT_Price (4,3)	4	3	-11.05066	-10.99906	-11.05086	-11.0313

TGARCH T-Student EGPT_Price (4,4)	4	4	-11.05396	-10.99839	-11.05419	-11.03311
TGARCH T-Student EGPT_Price (5,2)	5	2	-11.04995	-10.99438	-11.05018	-11.0291
TGARCH T-Student EGPT_Price (4,5)	4	5	-11.05203	-10.99249	-11.05229	-11.02969
TGARCH T-Student EGPT_Price (5,1)	5	1	-11.04325	-10.99165	-11.04345	-11.02389
TGARCH T-Student EGPT_Price (5,3)	5	3	-11.04818	-10.98863	-11.04844	-11.02584
TGARCH T-Student EGPT_Price (5,4)	5	4	-11.05131	-10.9878	-11.05161	-11.02748
TGARCH T-Student EGPT_Price (5,5)	5	5	-11.04766	-10.98018	-11.048	-11.02235
TGARCH T-Student EGPT_Price (3,0)	3	0	-11.01038	-10.97862	-11.01045	-10.99846
TGARCH T-Student EGPT_Price (5,0)	5	0	-11.02469	-10.97706	-11.02486	-11.00682
TGARCH T-Student EGPT_Price (4,0)	4	0	-11.00935	-10.96965	-11.00946	-10.99445
TGARCH T-Student EGPT_Price (1,0)	1	0	-10.94688	-10.931	-10.9469	-10.94092
TGARCH T-Student EGPT_Price (0,1)	0	1	-10.90685	-10.89494	-10.90686	-10.90238
TGARCH T-Student EGPT_Price (0,2)	0	2	-10.90526	-10.88938	-10.90528	-10.8993
TGARCH T-Student EGPT_Price (0,3)	0	3	-10.90385	-10.88401	-10.90388	-10.89641
TGARCH T-Student EGPT_Price (0,4)	0	4	-10.9024	-10.87858	-10.90244	-10.89346
TGARCH T-Student EGPT_Price (0,5)	0	5	-10.90068	-10.87289	-10.90073	-10.89025
TGARCH T-Student EGPT_Price (2,0)	2	0	-10.71441	-10.69059	-10.71445	-10.70547

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05732	-11.0335	-11.05736	-11.04838
TGARCH Skewed T-Student EGPT_Price (1,2)	1	2	-11.06026	-11.03247	-11.06032	-11.04984
TGARCH Skewed T-Student EGPT_Price (2,2)	2	2	-11.06063	-11.0249	-11.06072	-11.04723
TGARCH Skewed T-Student EGPT_Price (2,1)	2	1	-11.05536	-11.0236	-11.05544	-11.04345
TGARCH Skewed T-Student EGPT_Price (1,3)	1	3	-11.05285	-11.0211	-11.05293	-11.04094
TGARCH Skewed T-Student EGPT_Price (1,4)	1	4	-11.05523	-11.0195	-11.05532	-11.04182
TGARCH Skewed T-Student EGPT_Price (2,3)	2	3	-11.05475	-11.01505	-11.05487	-11.03986
TGARCH Skewed T-Student EGPT_Price (1,5)	1	5	-11.05456	-11.01487	-11.05468	-11.03967
TGARCH Skewed T-Student EGPT_Price (2,4)	2	4	-11.05747	-11.0138	-11.05761	-11.04109

TGARCH Skewed T-Student EGPT_Price (3,1)	3	1	-11.04943	-11.00973	-11.04954	-11.03453
TGARCH Skewed T-Student EGPT_Price (3,2)	3	2	-11.05337	-11.0097	-11.05351	-11.03699
TGARCH Skewed T-Student EGPT_Price (2,5)	2	5	-11.05644	-11.0088	-11.05661	-11.03857
TGARCH Skewed T-Student EGPT_Price (3,4)	3	4	-11.05605	-11.00445	-11.05625	-11.03669
TGARCH Skewed T-Student EGPT_Price (3,3)	3	3	-11.05184	-11.0042	-11.05201	-11.03397
TGARCH Skewed T-Student EGPT_Price (4,1)	4	1	-11.04604	-10.9984	-11.0462	-11.02816
TGARCH Skewed T-Student EGPT_Price (4,2)	4	2	-11.04974	-10.99813	-11.04993	-11.03038
TGARCH Skewed T-Student EGPT_Price (3,5)	3	5	-11.05337	-10.9978	-11.0536	-11.03252
TGARCH Skewed T-Student EGPT_Price (4,4)	4	4	-11.05133	-10.99179	-11.05159	-11.02899
TGARCH Skewed T-Student EGPT_Price (4,3)	4	3	-11.04701	-10.99143	-11.04724	-11.02616
TGARCH Skewed T-Student EGPT_Price (5,2)	5	2	-11.04917	-10.98962	-11.04943	-11.02683
TGARCH Skewed T-Student EGPT_Price (5,1)	5	1	-11.04472	-10.98915	-11.04495	-11.02387
TGARCH Skewed T-Student EGPT_Price (4,5)	4	5	-11.05093	-10.98742	-11.05123	-11.02711
TGARCH Skewed T-Student EGPT_Price (5,4)	5	4	-11.05209	-10.9846	-11.05242	-11.02677
TGARCH Skewed T-Student EGPT_Price (5,3)	5	3	-11.04798	-10.98446	-11.04827	-11.02415
TGARCH Skewed T-Student EGPT_Price (3,0)	3	0	-11.01587	-10.98014	-11.01596	-11.00246
TGARCH Skewed T-Student EGPT_Price (5,5)	5	5	-11.049	-10.97755	-11.04937	-11.02219
TGARCH Skewed T-Student EGPT_Price (4,0)	4	0	-11.01536	-10.97169	-11.0155	-10.99898
TGARCH Skewed T-Student EGPT_Price (5,0)	5	0	-11.00824	-10.95663	-11.00843	-10.98888
TGARCH Skewed T-Student EGPT_Price (1,0)	1	0	-10.94678	-10.92693	-10.94681	-10.93933
TGARCH Skewed T-Student EGPT_Price (0,1)	0	1	-10.9062	-10.89032	-10.90622	-10.90024
TGARCH Skewed T-Student EGPT_Price (0,2)	0	2	-10.90436	-10.88451	-10.90439	-10.89691
TGARCH Skewed T-Student EGPT_Price (0,3)	0	3	-10.90302	-10.8792	-10.90306	-10.89408
TGARCH Skewed T-Student EGPT_Price (0,4)	0	4	-10.90158	-10.87379	-10.90164	-10.89115
TGARCH Skewed T-Student EGPT_Price (0,5)	0	5	-10.89999	-10.86824	-10.90007	-10.88808
TGARCH Skewed T-Student EGPT_Price (2,0)	2	0	-10.76297	-10.73518	-10.76303	-10.75254
<i>EGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

EGARCH Norm EGPT_Price (5,5)	5	5	-10.960287	-10.896773	-10.960583	-10.936459
EGARCH Norm EGPT_Price (4,4)	4	4	-10.945375	-10.89377	-10.945571	-10.926015
EGARCH Norm EGPT_Price (5,3)	5	3	-10.946111	-10.890536	-10.946338	-10.925261
EGARCH Norm EGPT_Price (3,5)	3	5	-10.936478	-10.888843	-10.936646	-10.918607
EGARCH Norm EGPT_Price (5,4)	5	4	-10.946759	-10.887214	-10.94702	-10.92442
EGARCH Norm EGPT_Price (3,3)	3	3	-10.904012	-10.864315	-10.904128	-10.889119
EGARCH Norm EGPT_Price (3,4)	3	4	-10.904527	-10.860861	-10.904668	-10.888145
EGARCH Norm EGPT_Price (4,3)	4	3	-10.906766	-10.859131	-10.906934	-10.888895
EGARCH Norm EGPT_Price (1,5)	1	5	-10.889679	-10.857922	-10.889754	-10.877765
EGARCH Norm EGPT_Price (2,5)	2	5	-10.895443	-10.855747	-10.89556	-10.880551
EGARCH Norm EGPT_Price (1,1)	1	1	-10.860181	-10.844302	-10.8602	-10.854224
EGARCH Norm EGPT_Price (1,2)	1	2	-10.863156	-10.843308	-10.863186	-10.85571
EGARCH Norm EGPT_Price (2,1)	2	1	-10.86112	-10.837302	-10.861162	-10.852184
EGARCH Norm EGPT_Price (1,3)	1	3	-10.86045	-10.836632	-10.860492	-10.851515
EGARCH Norm EGPT_Price (4,5)	4	5	-10.892121	-10.836546	-10.892348	-10.871271
EGARCH Norm EGPT_Price (1,4)	1	4	-10.86054	-10.832753	-10.860597	-10.850115
EGARCH Norm EGPT_Price (2,2)	2	2	-10.860259	-10.832472	-10.860316	-10.849834
EGARCH Norm EGPT_Price (3,1)	3	1	-10.863171	-10.831414	-10.863246	-10.851257
EGARCH Norm EGPT_Price (4,1)	4	1	-10.868806	-10.82911	-10.868923	-10.853914
EGARCH Norm EGPT_Price (2,3)	2	3	-10.857446	-10.825689	-10.85752	-10.845532
EGARCH Norm EGPT_Price (2,4)	2	4	-10.86017	-10.824444	-10.860265	-10.846767
EGARCH Norm EGPT_Price (4,2)	4	2	-10.86728	-10.823614	-10.867421	-10.850898
EGARCH Norm EGPT_Price (3,2)	3	2	-10.858788	-10.823061	-10.858882	-10.845384
EGARCH Norm EGPT_Price (5,1)	5	1	-10.867428	-10.819792	-10.867595	-10.849557
EGARCH Norm EGPT_Price (5,2)	5	2	-10.866892	-10.815287	-10.867089	-10.847532
EGARCH Norm EGPT_Price (0,1)	0	1	-10.417483	-10.409543	-10.417487	-10.414504
EGARCH Norm EGPT_Price (0,2)	0	2	-10.415968	-10.404059	-10.415979	-10.4115
EGARCH Norm EGPT_Price (0,4)	0	4	-10.412851	-10.393003	-10.41288	-10.405405

EGARCH Norm EGPT_Price (0,5)	0	5	-10.411366	-10.387549	-10.411409	-10.402431
EGARCH Norm EGPT_Price (1,0)	1	0	-9.640093	-9.628184	-9.640104	-9.635625
EGARCH Norm EGPT_Price (5,0)	5	0	-8.876876	-8.83321	-8.877017	-8.860494
EGARCH Norm EGPT_Price (4,0)	4	0	-8.761889	-8.726163	-8.761984	-8.748486
EGARCH Norm EGPT_Price (3,0)	3	0	-8.456539	-8.428752	-8.456597	-8.446115
EGARCH Norm EGPT_Price (2,0)	2	0	-7.330607	-7.310759	-7.330636	-7.323161
EGARCH Norm EGPT_Price (0,3)	0	3	38.223711	38.23959	38.223692	38.229668

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm EGPT_Price (4,4)	4	4	-10.943877	-10.888302	-10.944105	-10.923028
EGARCH Skewed Norm EGPT_Price (5,3)	5	3	-10.944586	-10.885042	-10.944847	-10.922247
EGARCH Skewed Norm EGPT_Price (4,5)	4	5	-10.943679	-10.884135	-10.94394	-10.92134
EGARCH Skewed Norm EGPT_Price (5,4)	5	4	-10.945279	-10.881765	-10.945575	-10.921451
EGARCH Skewed Norm EGPT_Price (5,5)	5	5	-10.94235	-10.874866	-10.942685	-10.917033
EGARCH Skewed Norm EGPT_Price (3,4)	3	4	-10.915625	-10.86799	-10.915793	-10.897754
EGARCH Skewed Norm EGPT_Price (3,3)	3	3	-10.904923	-10.861257	-10.905063	-10.888541
EGARCH Skewed Norm EGPT_Price (4,3)	4	3	-10.90224	-10.850635	-10.902437	-10.88288
EGARCH Skewed Norm EGPT_Price (2,5)	2	5	-10.893992	-10.850327	-10.894133	-10.877611
EGARCH Skewed Norm EGPT_Price (1,5)	1	5	-10.879632	-10.843905	-10.879726	-10.866228
EGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.859069	-10.839221	-10.859098	-10.851623
EGARCH Skewed Norm EGPT_Price (1,2)	1	2	-10.861883	-10.838065	-10.861925	-10.852947
EGARCH Skewed Norm EGPT_Price (2,1)	2	1	-10.860148	-10.832361	-10.860205	-10.849723
EGARCH Skewed Norm EGPT_Price (1,3)	1	3	-10.859121	-10.831333	-10.859178	-10.848696
EGARCH Skewed Norm EGPT_Price (2,3)	2	3	-10.86543	-10.829703	-10.865524	-10.852026
EGARCH Skewed Norm EGPT_Price (1,4)	1	4	-10.85927	-10.827513	-10.859345	-10.847356
EGARCH Skewed Norm EGPT_Price (2,2)	2	2	-10.858938	-10.827181	-10.859013	-10.847024
EGARCH Skewed Norm EGPT_Price (3,1)	3	1	-10.862599	-10.826872	-10.862693	-10.849196
EGARCH Skewed Norm EGPT_Price (4,1)	4	1	-10.86834	-10.824674	-10.868481	-10.851958

EGARCH Skewed Norm EGPT_Price (3,2)	3	2	-10.861126	-10.82143	-10.861243	-10.846234
EGARCH Skewed Norm EGPT_Price (2,4)	2	4	-10.859301	-10.819604	-10.859417	-10.844408
EGARCH Skewed Norm EGPT_Price (4,2)	4	2	-10.866813	-10.819178	-10.866981	-10.848942
EGARCH Skewed Norm EGPT_Price (3,5)	3	5	-10.867458	-10.815852	-10.867654	-10.848097
EGARCH Skewed Norm EGPT_Price (5,1)	5	1	-10.866863	-10.815258	-10.867059	-10.847503
EGARCH Skewed Norm EGPT_Price (5,2)	5	2	-10.86624	-10.810665	-10.866468	-10.845391
EGARCH Skewed Norm EGPT_Price (0,5)	0	5	-10.433593	-10.405805	-10.43365	-10.423168
EGARCH Skewed Norm EGPT_Price (0,1)	0	1	-10.417241	-10.405333	-10.417252	-10.412774
EGARCH Skewed Norm EGPT_Price (0,2)	0	2	-10.415727	-10.399849	-10.415746	-10.40977
EGARCH Skewed Norm EGPT_Price (0,3)	0	3	-10.414459	-10.394611	-10.414488	-10.407012
EGARCH Skewed Norm EGPT_Price (0,4)	0	4	-10.412672	-10.388855	-10.412714	-10.403737
EGARCH Skewed Norm EGPT_Price (1,0)	1	0	-9.639272	-9.623394	-9.639291	-9.633315
EGARCH Skewed Norm EGPT_Price (5,0)	5	0	-8.878539	-8.830904	-8.878707	-8.860668
EGARCH Skewed Norm EGPT_Price (4,0)	4	0	-8.760411	-8.720714	-8.760527	-8.745518
EGARCH Skewed Norm EGPT_Price (3,0)	3	0	-8.45508	-8.423323	-8.455155	-8.443166
EGARCH Skewed Norm EGPT_Price (2,0)	2	0	-8.085341	-8.061523	-8.085383	-8.076405

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student EGPT_Price (4,3)	4	3	-11.130735	-11.079129	-11.130931	-11.111374
EGARCH T-Student EGPT_Price (4,5)	4	5	-11.138047	-11.078503	-11.138308	-11.115709
EGARCH T-Student EGPT_Price (3,5)	3	5	-11.108534	-11.056929	-11.10873	-11.089173
EGARCH T-Student EGPT_Price (1,1)	1	1	-11.06293	-11.043082	-11.06296	-11.055484
EGARCH T-Student EGPT_Price (1,2)	1	2	-11.066682	-11.042864	-11.066724	-11.057747
EGARCH T-Student EGPT_Price (2,1)	2	1	-11.064869	-11.037082	-11.064927	-11.054445
EGARCH T-Student EGPT_Price (1,3)	1	3	-11.063409	-11.035622	-11.063466	-11.052984
EGARCH T-Student EGPT_Price (1,4)	1	4	-11.067207	-11.03545	-11.067282	-11.055293
EGARCH T-Student EGPT_Price (2,2)	2	2	-11.064041	-11.032284	-11.064116	-11.052127
EGARCH T-Student EGPT_Price (1,5)	1	5	-11.066312	-11.030585	-11.066407	-11.052909

EGARCH T-Student EGPT_Price (2,4)	2	4	-11.065078	-11.025381	-11.065194	-11.050185
EGARCH T-Student EGPT_Price (2,3)	2	3	-11.06096	-11.025233	-11.061054	-11.047556
EGARCH T-Student EGPT_Price (3,1)	3	1	-11.059942	-11.024215	-11.060037	-11.046539
EGARCH T-Student EGPT_Price (3,4)	3	4	-11.068624	-11.020989	-11.068792	-11.050754
EGARCH T-Student EGPT_Price (2,5)	2	5	-11.064454	-11.020788	-11.064595	-11.048072
EGARCH T-Student EGPT_Price (3,2)	3	2	-11.060338	-11.020642	-11.060455	-11.045446
EGARCH T-Student EGPT_Price (4,1)	4	1	-11.062056	-11.01839	-11.062197	-11.045674
EGARCH T-Student EGPT_Price (3,3)	3	3	-11.058703	-11.015037	-11.058844	-11.042321
EGARCH T-Student EGPT_Price (5,1)	5	1	-11.066396	-11.014791	-11.066593	-11.047036
EGARCH T-Student EGPT_Price (4,2)	4	2	-11.061749	-11.014113	-11.061917	-11.043878
EGARCH T-Student EGPT_Price (5,2)	5	2	-11.067603	-11.012029	-11.067831	-11.046754
EGARCH T-Student EGPT_Price (4,4)	4	4	-11.066057	-11.010482	-11.066284	-11.045207
EGARCH T-Student EGPT_Price (5,3)	5	3	-11.066316	-11.006772	-11.066577	-11.043977
EGARCH T-Student EGPT_Price (0,2)	0	2	-10.915399	-10.899521	-10.915418	-10.909442
EGARCH T-Student EGPT_Price (0,3)	0	3	-10.913867	-10.894019	-10.913896	-10.906421
EGARCH T-Student EGPT_Price (0,5)	0	5	-10.910837	-10.88305	-10.910894	-10.900412
EGARCH T-Student EGPT_Price (0,1)	0	1	-10.860829	-10.84892	-10.86084	-10.856361
EGARCH T-Student EGPT_Price (0,4)	0	4	-10.851546	-10.827728	-10.851588	-10.842611
EGARCH T-Student EGPT_Price (5,4)	5	4	-10.748096	-10.684582	-10.748393	-10.724269
EGARCH T-Student EGPT_Price (5,0)	5	0	-9.627091	-9.579455	-9.627258	-9.60922
EGARCH T-Student EGPT_Price (4,0)	4	0	-9.519271	-9.479575	-9.519388	-9.504379
EGARCH T-Student EGPT_Price (3,0)	3	0	-9.190225	-9.158468	-9.1903	-9.178311
EGARCH T-Student EGPT_Price (2,0)	2	0	-8.642225	-8.618407	-8.642267	-8.633289
EGARCH T-Student EGPT_Price (1,0)	1	0	-5.796188	-5.78031	-5.796207	-5.790231

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student EGPT_Price (4,3)	4	3	-11.129919	-11.074344	-11.130147	-11.10907

EGARCH Skewed T-Student EGPT_Price (4,5)	4	5	-11.137394	-11.07388	-11.13769	-11.113566
EGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.062173	-11.038355	-11.062215	-11.053238
EGARCH Skewed T-Student EGPT_Price (1,2)	1	2	-11.065768	-11.037981	-11.065826	-11.055344
EGARCH Skewed T-Student EGPT_Price (2,1)	2	1	-11.063945	-11.032188	-11.06402	-11.052031
EGARCH Skewed T-Student EGPT_Price (1,3)	1	3	-11.062391	-11.030634	-11.062465	-11.050477
EGARCH Skewed T-Student EGPT_Price (1,4)	1	4	-11.06612	-11.030394	-11.066215	-11.052717
EGARCH Skewed T-Student EGPT_Price (2,2)	2	2	-11.063067	-11.027341	-11.063162	-11.049664
EGARCH Skewed T-Student EGPT_Price (1,5)	1	5	-11.065216	-11.02552	-11.065333	-11.050323
EGARCH Skewed T-Student EGPT_Price (2,4)	2	4	-11.063883	-11.020217	-11.064024	-11.047501
EGARCH Skewed T-Student EGPT_Price (3,1)	3	1	-11.059008	-11.019312	-11.059124	-11.044115
EGARCH Skewed T-Student EGPT_Price (2,3)	2	3	-11.058403	-11.018707	-11.05852	-11.04351
EGARCH Skewed T-Student EGPT_Price (3,4)	3	4	-11.067406	-11.015801	-11.067603	-11.048046
EGARCH Skewed T-Student EGPT_Price (3,2)	3	2	-11.059356	-11.01569	-11.059497	-11.042974
EGARCH Skewed T-Student EGPT_Price (2,5)	2	5	-11.063231	-11.015595	-11.063398	-11.04536
EGARCH Skewed T-Student EGPT_Price (4,1)	4	1	-11.061186	-11.01355	-11.061354	-11.043315
EGARCH Skewed T-Student EGPT_Price (3,3)	3	3	-11.058866	-11.01123	-11.059033	-11.040995
EGARCH Skewed T-Student EGPT_Price (5,1)	5	1	-11.065381	-11.009807	-11.065609	-11.044532
EGARCH Skewed T-Student EGPT_Price (3,5)	3	5	-11.06514	-11.009565	-11.065368	-11.044291
EGARCH Skewed T-Student EGPT_Price (4,2)	4	2	-11.060789	-11.009183	-11.060985	-11.041428
EGARCH Skewed T-Student EGPT_Price (5,4)	5	4	-11.076076	-11.008592	-11.076411	-11.050759
EGARCH Skewed T-Student EGPT_Price (5,2)	5	2	-11.066597	-11.007053	-11.066858	-11.044258
EGARCH Skewed T-Student EGPT_Price (4,4)	4	4	-11.064842	-11.005297	-11.065103	-11.042503
EGARCH Skewed T-Student EGPT_Price (5,3)	5	3	-11.065299	-11.001785	-11.065595	-11.041471
EGARCH Skewed T-Student EGPT_Price (0,2)	0	2	-10.915154	-10.895306	-10.915184	-10.907708
EGARCH Skewed T-Student EGPT_Price (0,3)	0	3	-10.913613	-10.889795	-10.913655	-10.904678
EGARCH Skewed T-Student EGPT_Price (0,1)	0	1	-10.862666	-10.846788	-10.862685	-10.856709
EGARCH Skewed T-Student EGPT_Price (0,4)	0	4	-10.853666	-10.825879	-10.853723	-10.843241
EGARCH Skewed T-Student EGPT_Price (0,5)	0	5	-10.85039	-10.818633	-10.850465	-10.838476

EGARCH Skewed T-Student EGPT_Price (5,0)	5	0	-9.63866	-9.587055	-9.638856	-9.619299
EGARCH Skewed T-Student EGPT_Price (4,0)	4	0	-9.519987	-9.476321	-9.520128	-9.503606
EGARCH Skewed T-Student EGPT_Price (3,0)	3	0	-9.189697	-9.15397	-9.189791	-9.176294
EGARCH Skewed T-Student EGPT_Price (5,5)	5	5	-8.551509	-8.480056	-8.551884	-8.524703
EGARCH Skewed T-Student EGPT_Price (2,0)	2	0	-5.16064	-5.132853	-5.160697	-5.150215
EGARCH Skewed T-Student EGPT_Price (1,0)	1	0	-4.194815	-4.174967	-4.194844	-4.187369

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm EGPT_Price (1,5)	1	5	-10.86359	-10.83183	-10.863664	-10.851676
NAGARCH Norm EGPT_Price (1,3)	1	3	-10.853543	-10.82972	-10.853585	-10.844607
NAGARCH Norm EGPT_Price (1,2)	1	2	-10.849501	-10.82965	-10.84953	-10.842055
NAGARCH Norm EGPT_Price (2,1)	2	1	-10.851224	-10.82741	-10.851266	-10.842288
NAGARCH Norm EGPT_Price (1,4)	1	4	-10.854353	-10.82657	-10.85441	-10.843928
NAGARCH Norm EGPT_Price (1,1)	1	1	-10.842034	-10.82616	-10.842052	-10.836077
NAGARCH Norm EGPT_Price (2,3)	2	3	-10.853705	-10.82195	-10.85378	-10.841791
NAGARCH Norm EGPT_Price (2,4)	2	4	-10.857665	-10.82194	-10.857759	-10.844262
NAGARCH Norm EGPT_Price (3,4)	3	4	-10.85605	-10.81238	-10.856191	-10.839669
NAGARCH Norm EGPT_Price (3,1)	3	1	-10.831351	-10.79959	-10.831426	-10.819437
NAGARCH Norm EGPT_Price (3,2)	3	2	-10.833515	-10.79779	-10.833609	-10.820111
NAGARCH Norm EGPT_Price (4,5)	4	5	-10.851598	-10.79602	-10.851826	-10.830749
NAGARCH Norm EGPT_Price (4,1)	4	1	-10.834469	-10.79477	-10.834585	-10.819576
NAGARCH Norm EGPT_Price (5,4)	5	4	-10.852503	-10.79296	-10.852765	-10.830165
NAGARCH Norm EGPT_Price (3,0)	3	0	-10.81005	-10.78226	-10.810108	-10.799626
NAGARCH Norm EGPT_Price (5,5)	5	5	-10.843787	-10.78027	-10.844083	-10.819959
NAGARCH Norm EGPT_Price (5,2)	5	2	-10.831158	-10.77955	-10.831354	-10.811798
NAGARCH Norm EGPT_Price (5,0)	5	0	-10.822452	-10.77879	-10.822593	-10.806071
NAGARCH Norm EGPT_Price (3,3)	3	3	-10.818376	-10.77868	-10.818493	-10.803484
NAGARCH Norm EGPT_Price (2,2)	2	2	-10.806251	-10.77846	-10.806309	-10.795827

NAGARCH Norm EGPT_Price (4,0)	4	0	-10.811794	-10.77607	-10.811888	-10.79839
NAGARCH Norm EGPT_Price (2,5)	2	5	-10.812338	-10.77264	-10.812454	-10.797445
NAGARCH Norm EGPT_Price (4,2)	4	2	-10.814792	-10.77113	-10.814933	-10.79841
NAGARCH Norm EGPT_Price (3,5)	3	5	-10.817781	-10.77015	-10.817949	-10.79991
NAGARCH Norm EGPT_Price (4,3)	4	3	-10.817193	-10.76956	-10.81736	-10.799322
NAGARCH Norm EGPT_Price (5,1)	5	1	-10.813277	-10.76564	-10.813445	-10.795406
NAGARCH Norm EGPT_Price (5,3)	5	3	-10.811612	-10.75604	-10.811839	-10.790762
NAGARCH Norm EGPT_Price (2,0)	2	0	-10.698888	-10.67904	-10.698917	-10.691441
NAGARCH Norm EGPT_Price (1,0)	1	0	-10.58082	-10.56891	-10.580831	-10.576352
NAGARCH Norm EGPT_Price (0,1)	0	1	-10.416739	-10.4088	-10.416743	-10.41376
NAGARCH Norm EGPT_Price (0,4)	0	4	-10.427794	-10.40795	-10.427824	-10.420348
NAGARCH Norm EGPT_Price (0,5)	0	5	-10.42524	-10.40142	-10.425282	-10.416305
NAGARCH Norm EGPT_Price (0,3)	0	3	-10.416841	-10.40096	-10.41686	-10.410885
NAGARCH Norm EGPT_Price (0,2)	0	2	-10.405256	-10.39335	-10.405267	-10.400788
NAGARCH Norm EGPT_Price (4,4)	4	4	-9.649095	-9.59749	-9.649292	-9.629735

NAGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm EGPT_Price (1,2)	1	2	-10.8566	-10.83279	-10.85665	-10.84767
NAGARCH Skewed Norm EGPT_Price (1,4)	1	4	-10.85879	-10.82703	-10.85886	-10.84687
NAGARCH Skewed Norm EGPT_Price (1,3)	1	3	-10.85393	-10.82614	-10.85399	-10.8435
NAGARCH Skewed Norm EGPT_Price (1,1)	1	1	-10.84546	-10.82562	-10.84549	-10.83802
NAGARCH Skewed Norm EGPT_Price (1,5)	1	5	-10.85746	-10.82174	-10.85756	-10.84406
NAGARCH Skewed Norm EGPT_Price (2,1)	2	1	-10.84406	-10.81627	-10.84412	-10.83363
NAGARCH Skewed Norm EGPT_Price (2,5)	2	5	-10.85787	-10.8142	-10.85801	-10.84149
NAGARCH Skewed Norm EGPT_Price (2,3)	2	3	-10.8476	-10.81187	-10.84769	-10.83419
NAGARCH Skewed Norm EGPT_Price (3,1)	3	1	-10.83898	-10.80325	-10.83907	-10.82558
NAGARCH Skewed Norm EGPT_Price (4,5)	4	5	-10.85205	-10.7925	-10.85231	-10.82971
NAGARCH Skewed Norm EGPT_Price (4,0)	4	0	-10.82969	-10.78999	-10.82981	-10.8148

NAGARCH Skewed Norm EGPT_Price (3,2)	3	2	-10.8289	-10.7892	-10.82901	-10.81401
NAGARCH Skewed Norm EGPT_Price (3,0)	3	0	-10.82079	-10.78903	-10.82087	-10.80888
NAGARCH Skewed Norm EGPT_Price (5,5)	5	5	-10.84858	-10.7811	-10.84891	-10.82326
NAGARCH Skewed Norm EGPT_Price (3,4)	3	4	-10.82847	-10.78084	-10.82864	-10.8106
NAGARCH Skewed Norm EGPT_Price (3,3)	3	3	-10.82415	-10.78049	-10.82429	-10.80777
NAGARCH Skewed Norm EGPT_Price (2,4)	2	4	-10.81581	-10.77612	-10.81593	-10.80092
NAGARCH Skewed Norm EGPT_Price (4,2)	4	2	-10.82233	-10.77469	-10.82249	-10.80445
NAGARCH Skewed Norm EGPT_Price (2,0)	2	0	-10.79796	-10.77414	-10.798	-10.78902
NAGARCH Skewed Norm EGPT_Price (5,3)	5	3	-10.83206	-10.77252	-10.83232	-10.80972
NAGARCH Skewed Norm EGPT_Price (5,0)	5	0	-10.82004	-10.77241	-10.82021	-10.80217
NAGARCH Skewed Norm EGPT_Price (2,2)	2	2	-10.80384	-10.77208	-10.80391	-10.79193
NAGARCH Skewed Norm EGPT_Price (4,1)	4	1	-10.81168	-10.76802	-10.81182	-10.7953
NAGARCH Skewed Norm EGPT_Price (4,3)	4	3	-10.81673	-10.76512	-10.81692	-10.79737
NAGARCH Skewed Norm EGPT_Price (5,1)	5	1	-10.81639	-10.76478	-10.81658	-10.79703
NAGARCH Skewed Norm EGPT_Price (5,2)	5	2	-10.8189	-10.76333	-10.81913	-10.79805
NAGARCH Skewed Norm EGPT_Price (4,4)	4	4	-10.81417	-10.7586	-10.8144	-10.79332
NAGARCH Skewed Norm EGPT_Price (3,5)	3	5	-10.80868	-10.75708	-10.80888	-10.78932
NAGARCH Skewed Norm EGPT_Price (5,4)	5	4	-10.80588	-10.74236	-10.80618	-10.78205
NAGARCH Skewed Norm EGPT_Price (1,0)	1	0	-10.50406	-10.48818	-10.50407	-10.4981
NAGARCH Skewed Norm EGPT_Price (0,1)	0	1	-10.41709	-10.40518	-10.4171	-10.41262
NAGARCH Skewed Norm EGPT_Price (0,2)	0	2	-10.4155	-10.39963	-10.41552	-10.40955
NAGARCH Skewed Norm EGPT_Price (0,5)	0	5	-10.42707	-10.39928	-10.42713	-10.41665
NAGARCH Skewed Norm EGPT_Price (0,3)	0	3	-10.41551	-10.39566	-10.41553	-10.40806
NAGARCH Skewed Norm EGPT_Price (0,4)	0	4	-10.41454	-10.39072	-10.41458	-10.4056

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student EGPT_Price (1,1)	1	1	-11.05609	-11.03624	-11.05612	-11.04865
NAGARCH T-Student EGPT_Price (1,2)	1	2	-11.0575	-11.03368	-11.05754	-11.04857

NAGARCH T-Student EGPT_Price (2,2)	2	2	-11.06088	-11.02912	-11.06095	-11.04896
NAGARCH T-Student EGPT_Price (1,3)	1	3	-11.05387	-11.02608	-11.05393	-11.04345
NAGARCH T-Student EGPT_Price (1,4)	1	4	-11.05694	-11.02518	-11.05701	-11.04502
NAGARCH T-Student EGPT_Price (1,5)	1	5	-11.05929	-11.02356	-11.05938	-11.04589
NAGARCH T-Student EGPT_Price (2,4)	2	4	-11.05901	-11.01931	-11.05912	-11.04411
NAGARCH T-Student EGPT_Price (2,3)	2	3	-11.05396	-11.01824	-11.05406	-11.04056
NAGARCH T-Student EGPT_Price (2,5)	2	5	-11.05917	-11.0155	-11.05931	-11.04278
NAGARCH T-Student EGPT_Price (3,2)	3	2	-11.05425	-11.01455	-11.05436	-11.03936
NAGARCH T-Student EGPT_Price (4,2)	4	2	-11.06081	-11.01318	-11.06098	-11.04294
NAGARCH T-Student EGPT_Price (3,1)	3	1	-11.04765	-11.01193	-11.04775	-11.03425
NAGARCH T-Student EGPT_Price (3,4)	3	4	-11.05887	-11.01123	-11.05903	-11.041
NAGARCH T-Student EGPT_Price (2,0)	2	0	-11.03111	-11.00729	-11.03115	-11.02217
NAGARCH T-Student EGPT_Price (3,5)	3	5	-11.05854	-11.00693	-11.05873	-11.03918
NAGARCH T-Student EGPT_Price (3,3)	3	3	-11.05036	-11.00669	-11.0505	-11.03397
NAGARCH T-Student EGPT_Price (4,3)	4	3	-11.05588	-11.00427	-11.05607	-11.03652
NAGARCH T-Student EGPT_Price (3,0)	3	0	-11.03565	-11.00389	-11.03572	-11.02374
NAGARCH T-Student EGPT_Price (5,1)	5	1	-11.05397	-11.00237	-11.05417	-11.03461
NAGARCH T-Student EGPT_Price (4,4)	4	4	-11.05153	-10.99596	-11.05176	-11.03068
NAGARCH T-Student EGPT_Price (5,3)	5	3	-11.05469	-10.99515	-11.05495	-11.03236
NAGARCH T-Student EGPT_Price (4,1)	4	1	-11.03597	-10.99231	-11.03611	-11.01959
NAGARCH T-Student EGPT_Price (5,5)	5	5	-11.05566	-10.98818	-11.056	-11.03034
NAGARCH T-Student EGPT_Price (5,4)	5	4	-11.05142	-10.98791	-11.05172	-11.02759
NAGARCH T-Student EGPT_Price (5,2)	5	2	-11.03781	-10.98224	-11.03804	-11.01696
NAGARCH T-Student EGPT_Price (4,0)	4	0	-11.02047	-10.98077	-11.02058	-11.00557
NAGARCH T-Student EGPT_Price (5,0)	5	0	-11.02535	-10.97772	-11.02552	-11.00748
NAGARCH T-Student EGPT_Price (1,0)	1	0	-10.96086	-10.94498	-10.96088	-10.9549
NAGARCH T-Student EGPT_Price (0,5)	0	5	-10.8614	-10.83361	-10.86146	-10.85098
NAGARCH T-Student EGPT_Price (0,3)	0	3	-10.84994	-10.83009	-10.84997	-10.84249

NAGARCH T-Student EGPT_Price (0,1)	0	1	-10.83519	-10.82328	-10.8352	-10.83072
NAGARCH T-Student EGPT_Price (4,5)	4	5	-10.87873	-10.81919	-10.87899	-10.85639
NAGARCH T-Student EGPT_Price (0,2)	0	2	-10.82304	-10.80716	-10.82305	-10.81708
NAGARCH T-Student EGPT_Price (0,4)	0	4	-10.80634	-10.78252	-10.80638	-10.7974

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student EGPT_Price (1,1)	1	1	-11.05676	-11.03294	-11.0568	-11.04782
NAGARCH Skewed T-Student EGPT_Price (1,2)	1	2	-11.05598	-11.0282	-11.05604	-11.04556
NAGARCH Skewed T-Student EGPT_Price (2,0)	2	0	-11.05436	-11.02658	-11.05442	-11.04394
NAGARCH Skewed T-Student EGPT_Price (2,1)	2	1	-11.05408	-11.02232	-11.05415	-11.04216
NAGARCH Skewed T-Student EGPT_Price (4,0)	4	0	-11.06597	-11.02231	-11.06612	-11.04959
NAGARCH Skewed T-Student EGPT_Price (2,2)	2	2	-11.05666	-11.02093	-11.05675	-11.04325
NAGARCH Skewed T-Student EGPT_Price (1,3)	1	3	-11.05234	-11.02058	-11.05241	-11.04042
NAGARCH Skewed T-Student EGPT_Price (1,5)	1	5	-11.0584	-11.0187	-11.05852	-11.04351
NAGARCH Skewed T-Student EGPT_Price (3,1)	3	1	-11.0565	-11.0168	-11.05662	-11.04161
NAGARCH Skewed T-Student EGPT_Price (1,4)	1	4	-11.05105	-11.01533	-11.05115	-11.03765
NAGARCH Skewed T-Student EGPT_Price (2,3)	2	3	-11.05301	-11.01331	-11.05312	-11.03811
NAGARCH Skewed T-Student EGPT_Price (2,4)	2	4	-11.0563	-11.01263	-11.05644	-11.03992
NAGARCH Skewed T-Student EGPT_Price (3,2)	3	2	-11.05567	-11.012	-11.05581	-11.03929
NAGARCH Skewed T-Student EGPT_Price (4,2)	4	2	-11.0628	-11.0112	-11.063	-11.04344
NAGARCH Skewed T-Student EGPT_Price (2,5)	2	5	-11.05821	-11.01057	-11.05838	-11.04034
NAGARCH Skewed T-Student EGPT_Price (3,4)	3	4	-11.05977	-11.00816	-11.05997	-11.04041
NAGARCH Skewed T-Student EGPT_Price (3,3)	3	3	-11.05247	-11.00484	-11.05264	-11.0346
NAGARCH Skewed T-Student EGPT_Price (4,3)	4	3	-11.05967	-11.0041	-11.0599	-11.03882
NAGARCH Skewed T-Student EGPT_Price (3,5)	3	5	-11.05724	-11.00166	-11.05747	-11.03639
NAGARCH Skewed T-Student EGPT_Price (5,1)	5	1	-11.05285	-10.99727	-11.05307	-11.032
NAGARCH Skewed T-Student EGPT_Price (4,4)	4	4	-11.05515	-10.9956	-11.05541	-11.03281

NAGARCH Skewed T-Student EGPT_Price (3,0)	3	0	-11.02962	-10.99389	-11.02972	-11.01622
NAGARCH Skewed T-Student EGPT_Price (5,2)	5	2	-11.04911	-10.98956	-11.04937	-11.02677
NAGARCH Skewed T-Student EGPT_Price (5,3)	5	3	-11.05218	-10.98867	-11.05248	-11.02835
NAGARCH Skewed T-Student EGPT_Price (4,5)	4	5	-11.05013	-10.98662	-11.05043	-11.0263
NAGARCH Skewed T-Student EGPT_Price (4,1)	4	1	-11.03255	-10.98491	-11.03272	-11.01468
NAGARCH Skewed T-Student EGPT_Price (5,5)	5	5	-11.04918	-10.97773	-11.04956	-11.02237
NAGARCH Skewed T-Student EGPT_Price (5,0)	5	0	-11.02444	-10.97283	-11.02463	-11.00507
NAGARCH Skewed T-Student EGPT_Price (5,4)	5	4	-11.04001	-10.97253	-11.04035	-11.0147
NAGARCH Skewed T-Student EGPT_Price (0,5)	0	5	-10.90086	-10.8691	-10.90094	-10.88895
NAGARCH Skewed T-Student EGPT_Price (1,0)	1	0	-10.88651	-10.86666	-10.88654	-10.87906
NAGARCH Skewed T-Student EGPT_Price (0,1)	0	1	-10.86825	-10.85237	-10.86827	-10.8623
NAGARCH Skewed T-Student EGPT_Price (0,4)	0	4	-10.87847	-10.85068	-10.87853	-10.86805
NAGARCH Skewed T-Student EGPT_Price (0,2)	0	2	-10.85388	-10.83403	-10.85391	-10.84643
NAGARCH Skewed T-Student EGPT_Price (0,3)	0	3	-10.84074	-10.81692	-10.84078	-10.8318

<i>GHA_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm GHA_Price (1,1)	1	1	-8.336721	-8.324812	-8.336731	-8.332253
SGARCH Norm GHA_Price (1,2)	1	2	-8.335221	-8.319342	-8.335239	-8.329264
SGARCH Norm GHA_Price (2,1)	2	1	-8.334639	-8.31876	-8.334658	-8.328682
SGARCH Norm GHA_Price (1,3)	1	3	-8.336631	-8.316783	-8.33666	-8.329185
SGARCH Norm GHA_Price (2,2)	2	2	-8.333658	-8.31381	-8.333687	-8.326212
SGARCH Norm GHA_Price (1,4)	1	4	-8.337045	-8.313227	-8.337087	-8.328109
SGARCH Norm GHA_Price (3,1)	3	1	-8.332553	-8.312705	-8.332583	-8.325107
SGARCH Norm GHA_Price (2,3)	2	3	-8.335989	-8.312172	-8.336031	-8.327054
SGARCH Norm GHA_Price (1,5)	1	5	-8.339107	-8.311319	-8.339164	-8.328682
SGARCH Norm GHA_Price (2,4)	2	4	-8.338716	-8.310928	-8.338773	-8.328291

SGARCH Norm GHA_Price (2,5)	2	5	-8.341169	-8.309412	-8.341244	-8.329255
SGARCH Norm GHA_Price (3,2)	3	2	-8.331565	-8.307747	-8.331607	-8.322629
SGARCH Norm GHA_Price (3,3)	3	3	-8.334454	-8.306667	-8.334512	-8.32403
SGARCH Norm GHA_Price (4,1)	4	1	-8.330471	-8.306653	-8.330513	-8.321535
SGARCH Norm GHA_Price (3,4)	3	4	-8.33718	-8.305423	-8.337255	-8.325266
SGARCH Norm GHA_Price (3,5)	3	5	-8.339636	-8.303909	-8.33973	-8.326233
SGARCH Norm GHA_Price (4,2)	4	2	-8.329471	-8.301683	-8.329528	-8.319046
SGARCH Norm GHA_Price (5,1)	5	1	-8.32838	-8.300593	-8.328437	-8.317955
SGARCH Norm GHA_Price (4,3)	4	3	-8.33232	-8.300563	-8.332395	-8.320406
SGARCH Norm GHA_Price (4,4)	4	4	-8.336185	-8.300459	-8.33628	-8.322782
SGARCH Norm GHA_Price (4,5)	4	5	-8.338215	-8.298518	-8.338331	-8.323322
SGARCH Norm GHA_Price (5,2)	5	2	-8.327313	-8.295556	-8.327388	-8.315399
SGARCH Norm GHA_Price (5,4)	5	4	-8.334425	-8.294729	-8.334542	-8.319533
SGARCH Norm GHA_Price (5,3)	5	3	-8.330376	-8.294649	-8.33047	-8.316973
SGARCH Norm GHA_Price (5,5)	5	5	-8.336353	-8.292687	-8.336494	-8.319972
SGARCH Norm GHA_Price (5,0)	5	0	-8.154411	-8.130594	-8.154454	-8.145476
SGARCH Norm GHA_Price (4,0)	4	0	-8.149172	-8.129324	-8.149201	-8.141726
SGARCH Norm GHA_Price (3,0)	3	0	-8.080986	-8.065108	-8.081005	-8.075029
SGARCH Norm GHA_Price (2,0)	2	0	-8.004706	-7.992797	-8.004716	-8.000238
SGARCH Norm GHA_Price (1,0)	1	0	-7.763238	-7.755299	-7.763243	-7.76026
SGARCH Norm GHA_Price (0,1)	0	1	-7.301495	-7.293556	-7.3015	-7.298517
SGARCH Norm GHA_Price (0,2)	0	2	-7.301608	-7.289699	-7.301618	-7.29714
SGARCH Norm GHA_Price (0,3)	0	3	-7.300996	-7.285118	-7.301015	-7.295039
SGARCH Norm GHA_Price (0,4)	0	4	-7.299612	-7.279764	-7.299642	-7.292166
SGARCH Norm GHA_Price (0,5)	0	5	-7.29842	-7.274602	-7.298462	-7.289484

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.337045	-8.321167	-8.337064	-8.331088

SGARCH Skewed Norm GHA_Price (1,2)	1	2	-8.335064	-8.315215	-8.335093	-8.327617
SGARCH Skewed Norm GHA_Price (2,1)	2	1	-8.334937	-8.315089	-8.334966	-8.327491
SGARCH Skewed Norm GHA_Price (1,3)	1	3	-8.336829	-8.313011	-8.336871	-8.327894
SGARCH Skewed Norm GHA_Price (2,2)	2	2	-8.333985	-8.310167	-8.334027	-8.32505
SGARCH Skewed Norm GHA_Price (1,4)	1	4	-8.337273	-8.309486	-8.33733	-8.326848
SGARCH Skewed Norm GHA_Price (3,1)	3	1	-8.332854	-8.309036	-8.332896	-8.323919
SGARCH Skewed Norm GHA_Price (2,3)	2	3	-8.336072	-8.308285	-8.33613	-8.325648
SGARCH Skewed Norm GHA_Price (1,5)	1	5	-8.339495	-8.307738	-8.33957	-8.327581
SGARCH Skewed Norm GHA_Price (2,4)	2	4	-8.338968	-8.307211	-8.339043	-8.327054
SGARCH Skewed Norm GHA_Price (2,5)	2	5	-8.341159	-8.305433	-8.341254	-8.327756
SGARCH Skewed Norm GHA_Price (3,2)	3	2	-8.331879	-8.304091	-8.331936	-8.321454
SGARCH Skewed Norm GHA_Price (4,1)	4	1	-8.330762	-8.302974	-8.330819	-8.320337
SGARCH Skewed Norm GHA_Price (3,3)	3	3	-8.334537	-8.30278	-8.334612	-8.322623
SGARCH Skewed Norm GHA_Price (3,4)	3	4	-8.337424	-8.301698	-8.337519	-8.324021
SGARCH Skewed Norm GHA_Price (3,5)	3	5	-8.339622	-8.299926	-8.339738	-8.324729
SGARCH Skewed Norm GHA_Price (4,2)	4	2	-8.329786	-8.298029	-8.329861	-8.317872
SGARCH Skewed Norm GHA_Price (5,1)	5	1	-8.328663	-8.296906	-8.328738	-8.31675
SGARCH Skewed Norm GHA_Price (4,4)	4	4	-8.336491	-8.296794	-8.336607	-8.321598
SGARCH Skewed Norm GHA_Price (4,3)	4	3	-8.332398	-8.296672	-8.332493	-8.318995
SGARCH Skewed Norm GHA_Price (4,5)	4	5	-8.338293	-8.294627	-8.338434	-8.321911
SGARCH Skewed Norm GHA_Price (5,2)	5	2	-8.327689	-8.291963	-8.327784	-8.314286
SGARCH Skewed Norm GHA_Price (5,4)	5	4	-8.334713	-8.291047	-8.334854	-8.318332
SGARCH Skewed Norm GHA_Price (5,3)	5	3	-8.330437	-8.29074	-8.330553	-8.315544
SGARCH Skewed Norm GHA_Price (5,5)	5	5	-8.336758	-8.289122	-8.336925	-8.318887
SGARCH Skewed Norm GHA_Price (5,0)	5	0	-8.156648	-8.128861	-8.156706	-8.146224
SGARCH Skewed Norm GHA_Price (4,0)	4	0	-8.150191	-8.126373	-8.150233	-8.141256
SGARCH Skewed Norm GHA_Price (2,0)	2	0	-8.011472	-7.995594	-8.011491	-8.005515
SGARCH Skewed Norm GHA_Price (1,0)	1	0	-7.763214	-7.751305	-7.763225	-7.758746

SGARCH Skewed Norm GHA_Price (0,1)	0	1	-7.297709	-7.2858	-7.297719	-7.293241
SGARCH Skewed Norm GHA_Price (0,2)	0	2	-7.300758	-7.28488	-7.300777	-7.294801
SGARCH Skewed Norm GHA_Price (0,3)	0	3	-7.299625	-7.279776	-7.299654	-7.292178
SGARCH Skewed Norm GHA_Price (0,4)	0	4	-7.298888	-7.27507	-7.29893	-7.289953
SGARCH Skewed Norm GHA_Price (0,5)	0	5	-7.297539	-7.269752	-7.297597	-7.287115
SGARCH Skewed Norm GHA_Price (3,0)	3	0	-4.82652	-4.806672	-4.826549	-4.819073

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student GHA_Price (1,1)	1	1	-8.621187	-8.605308	-8.621205	-8.61523
SGARCH T-Student GHA_Price (1,2)	1	2	-8.622822	-8.602974	-8.622852	-8.615376
SGARCH T-Student GHA_Price (2,1)	2	1	-8.619365	-8.599517	-8.619394	-8.611919
SGARCH T-Student GHA_Price (1,3)	1	3	-8.62201	-8.598192	-8.622052	-8.613075
SGARCH T-Student GHA_Price (2,2)	2	2	-8.621287	-8.59747	-8.621329	-8.612352
SGARCH T-Student GHA_Price (3,1)	3	1	-8.617902	-8.594084	-8.617944	-8.608967
SGARCH T-Student GHA_Price (1,4)	1	4	-8.62155	-8.593762	-8.621607	-8.611125
SGARCH T-Student GHA_Price (2,3)	2	3	-8.620475	-8.592688	-8.620532	-8.61005
SGARCH T-Student GHA_Price (3,2)	3	2	-8.619836	-8.592049	-8.619893	-8.609411
SGARCH T-Student GHA_Price (1,5)	1	5	-8.623444	-8.591687	-8.623519	-8.61153
SGARCH T-Student GHA_Price (4,1)	4	1	-8.616839	-8.589051	-8.616896	-8.606414
SGARCH T-Student GHA_Price (2,4)	2	4	-8.620015	-8.588258	-8.62009	-8.608101
SGARCH T-Student GHA_Price (4,0)	4	0	-8.61157	-8.587753	-8.611612	-8.602635
SGARCH T-Student GHA_Price (3,3)	3	3	-8.61894	-8.587183	-8.619015	-8.607026
SGARCH T-Student GHA_Price (4,2)	4	2	-8.618384	-8.586627	-8.618458	-8.60647
SGARCH T-Student GHA_Price (3,0)	3	0	-8.606279	-8.586431	-8.606308	-8.598833
SGARCH T-Student GHA_Price (2,5)	2	5	-8.621909	-8.586182	-8.622004	-8.608506
SGARCH T-Student GHA_Price (5,0)	5	0	-8.613864	-8.586077	-8.613922	-8.60344
SGARCH T-Student GHA_Price (5,1)	5	1	-8.616607	-8.58485	-8.616682	-8.604693
SGARCH T-Student GHA_Price (3,4)	3	4	-8.61848	-8.582753	-8.618575	-8.605077

SGARCH T-Student GHA_Price (5,2)	5	2	-8.617689	-8.581962	-8.617783	-8.604286
SGARCH T-Student GHA_Price (4,3)	4	3	-8.617416	-8.58169	-8.617511	-8.604013
SGARCH T-Student GHA_Price (3,5)	3	5	-8.620692	-8.580996	-8.620809	-8.6058
SGARCH T-Student GHA_Price (4,4)	4	4	-8.616945	-8.577249	-8.617062	-8.602053
SGARCH T-Student GHA_Price (5,3)	5	3	-8.616725	-8.577028	-8.616841	-8.601832
SGARCH T-Student GHA_Price (2,0)	2	0	-8.59279	-8.576911	-8.592809	-8.586833
SGARCH T-Student GHA_Price (4,5)	4	5	-8.619157	-8.575491	-8.619298	-8.602776
SGARCH T-Student GHA_Price (5,4)	5	4	-8.616252	-8.572586	-8.616393	-8.59987
SGARCH T-Student GHA_Price (5,5)	5	5	-8.617622	-8.569987	-8.61779	-8.599751
SGARCH T-Student GHA_Price (1,0)	1	0	-8.557176	-8.545267	-8.557186	-8.552708
SGARCH T-Student GHA_Price (0,1)	0	1	-8.404152	-8.392243	-8.404162	-8.399684
SGARCH T-Student GHA_Price (0,2)	0	2	-8.399406	-8.383528	-8.399425	-8.393449
SGARCH T-Student GHA_Price (0,3)	0	3	-8.400263	-8.380415	-8.400292	-8.392817
SGARCH T-Student GHA_Price (0,4)	0	4	-8.398131	-8.374313	-8.398173	-8.389195
SGARCH T-Student GHA_Price (0,5)	0	5	-8.394058	-8.366271	-8.394116	-8.383634

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.619654	-8.599806	-8.619683	-8.612208
SGARCH Skewed T-Student GHA_Price (1,2)	1	2	-8.621287	-8.59747	-8.62133	-8.612352
SGARCH Skewed T-Student GHA_Price (2,1)	2	1	-8.617832	-8.594014	-8.617874	-8.608896
SGARCH Skewed T-Student GHA_Price (1,3)	1	3	-8.620477	-8.592689	-8.620534	-8.610052
SGARCH Skewed T-Student GHA_Price (2,2)	2	2	-8.619752	-8.591965	-8.61981	-8.609328
SGARCH Skewed T-Student GHA_Price (3,1)	3	1	-8.616369	-8.588581	-8.616426	-8.605944
SGARCH Skewed T-Student GHA_Price (1,4)	1	4	-8.620019	-8.588262	-8.620094	-8.608105
SGARCH Skewed T-Student GHA_Price (2,3)	2	3	-8.618942	-8.587185	-8.619017	-8.607028
SGARCH Skewed T-Student GHA_Price (3,2)	3	2	-8.618301	-8.586544	-8.618376	-8.606387
SGARCH Skewed T-Student GHA_Price (1,5)	1	5	-8.62192	-8.586193	-8.622014	-8.608517
SGARCH Skewed T-Student GHA_Price (4,1)	4	1	-8.615305	-8.583548	-8.61538	-8.603391

SGARCH Skewed T-Student GHA_Price (2,4)	2	4	-8.618484	-8.582758	-8.618579	-8.605081
SGARCH Skewed T-Student GHA_Price (4,0)	4	0	-8.610062	-8.582275	-8.61012	-8.599638
SGARCH Skewed T-Student GHA_Price (3,3)	3	3	-8.617407	-8.58168	-8.617501	-8.604004
SGARCH Skewed T-Student GHA_Price (4,2)	4	2	-8.616849	-8.581122	-8.616943	-8.603445
SGARCH Skewed T-Student GHA_Price (3,0)	3	0	-8.604781	-8.580963	-8.604823	-8.595846
SGARCH Skewed T-Student GHA_Price (2,5)	2	5	-8.620385	-8.580689	-8.620501	-8.605492
SGARCH Skewed T-Student GHA_Price (5,0)	5	0	-8.612343	-8.580586	-8.612417	-8.600429
SGARCH Skewed T-Student GHA_Price (5,1)	5	1	-8.615073	-8.579346	-8.615167	-8.601669
SGARCH Skewed T-Student GHA_Price (3,4)	3	4	-8.61695	-8.577253	-8.617066	-8.602057
SGARCH Skewed T-Student GHA_Price (5,2)	5	2	-8.616154	-8.576458	-8.616271	-8.601262
SGARCH Skewed T-Student GHA_Price (4,3)	4	3	-8.615883	-8.576187	-8.615999	-8.60099
SGARCH Skewed T-Student GHA_Price (3,5)	3	5	-8.619164	-8.575498	-8.619304	-8.602782
SGARCH Skewed T-Student GHA_Price (4,4)	4	4	-8.615415	-8.571749	-8.615556	-8.599033
SGARCH Skewed T-Student GHA_Price (5,3)	5	3	-8.615192	-8.571526	-8.615333	-8.59881
SGARCH Skewed T-Student GHA_Price (2,0)	2	0	-8.59126	-8.571412	-8.591289	-8.583813
SGARCH Skewed T-Student GHA_Price (4,5)	4	5	-8.617629	-8.569993	-8.617796	-8.599758
SGARCH Skewed T-Student GHA_Price (5,4)	5	4	-8.614723	-8.567087	-8.61489	-8.596852
SGARCH Skewed T-Student GHA_Price (5,5)	5	5	-8.616094	-8.564489	-8.61629	-8.596734
SGARCH Skewed T-Student GHA_Price (1,0)	1	0	-8.555704	-8.539825	-8.555722	-8.549747
SGARCH Skewed T-Student GHA_Price (0,1)	0	1	-8.41077	-8.394892	-8.410789	-8.404813
SGARCH Skewed T-Student GHA_Price (0,2)	0	2	-8.398762	-8.378914	-8.398791	-8.391316
SGARCH Skewed T-Student GHA_Price (0,3)	0	3	-8.396077	-8.372259	-8.396119	-8.387142
SGARCH Skewed T-Student GHA_Price (0,4)	0	4	-8.39694	-8.369152	-8.396997	-8.386515

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm GHA_Price (1,1)	1	1	-8.346856	-8.327008	-8.346886	-8.33941
APARCH Norm GHA_Price (1,2)	1	2	-8.344075	-8.320257	-8.344117	-8.335139

APARCH Norm GHA_Price (1,3)	1	3	-8.342353	-8.314566	-8.34241	-8.331928
APARCH Norm GHA_Price (2,2)	2	2	-8.340913	-8.309156	-8.340988	-8.328999
APARCH Norm GHA_Price (2,1)	2	1	-8.336518	-8.30873	-8.336575	-8.326093
APARCH Norm GHA_Price (1,4)	1	4	-8.33955	-8.307793	-8.339625	-8.327636
APARCH Norm GHA_Price (2,3)	2	3	-8.340647	-8.304921	-8.340742	-8.327244
APARCH Norm GHA_Price (1,5)	1	5	-8.338923	-8.303196	-8.339017	-8.325519
APARCH Norm GHA_Price (2,4)	2	4	-8.334808	-8.295112	-8.334925	-8.319916
APARCH Norm GHA_Price (3,1)	3	1	-8.329586	-8.293859	-8.32968	-8.316183
APARCH Norm GHA_Price (3,2)	3	2	-8.322188	-8.282492	-8.322305	-8.307296
APARCH Norm GHA_Price (2,5)	2	5	-8.325831	-8.282165	-8.325972	-8.309449
APARCH Norm GHA_Price (3,3)	3	3	-8.322864	-8.279198	-8.323005	-8.306482
APARCH Norm GHA_Price (4,1)	4	1	-8.319696	-8.276031	-8.319837	-8.303315
APARCH Norm GHA_Price (4,2)	4	2	-8.32353	-8.275894	-8.323697	-8.305659
APARCH Norm GHA_Price (3,4)	3	4	-8.320792	-8.273157	-8.32096	-8.302922
APARCH Norm GHA_Price (3,5)	3	5	-8.321822	-8.270217	-8.322019	-8.302462
APARCH Norm GHA_Price (4,3)	4	3	-8.314783	-8.263178	-8.314979	-8.295423
APARCH Norm GHA_Price (5,1)	5	1	-8.305818	-8.254212	-8.306014	-8.286457
APARCH Norm GHA_Price (4,4)	4	4	-8.308778	-8.253203	-8.309006	-8.287929
APARCH Norm GHA_Price (5,3)	5	3	-8.309983	-8.250439	-8.310244	-8.287644
APARCH Norm GHA_Price (5,2)	5	2	-8.291573	-8.235998	-8.291801	-8.270723
APARCH Norm GHA_Price (4,5)	4	5	-8.288748	-8.229204	-8.289009	-8.26641
APARCH Norm GHA_Price (5,4)	5	4	-8.28415	-8.220636	-8.284446	-8.260322
APARCH Norm GHA_Price (5,5)	5	5	-8.285414	-8.217931	-8.285749	-8.260097
APARCH Norm GHA_Price (5,0)	5	0	-8.000677	-7.953041	-8.000844	-7.982806
APARCH Norm GHA_Price (4,0)	4	0	-7.991706	-7.95201	-7.991822	-7.976813
APARCH Norm GHA_Price (2,0)	2	0	-7.918423	-7.894605	-7.918465	-7.909488
APARCH Norm GHA_Price (3,0)	3	0	-7.919201	-7.887444	-7.919276	-7.907287
APARCH Norm GHA_Price (1,0)	1	0	-7.703495	-7.687616	-7.703513	-7.697538

APARCH Norm GHA_Price (0,1)	0	1	-7.272994	-7.261085	-7.273004	-7.268526
APARCH Norm GHA_Price (0,2)	0	2	-7.264721	-7.248843	-7.26474	-7.258764
APARCH Norm GHA_Price (0,3)	0	3	-7.25592	-7.236072	-7.255949	-7.248474
APARCH Norm GHA_Price (0,4)	0	4	-7.253516	-7.229698	-7.253558	-7.244581
APARCH Norm GHA_Price (0,5)	0	5	-7.24695	-7.219162	-7.247007	-7.236525

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm GHA_Price (1,1)	1	1	-8.349281	-8.325463	-8.349323	-8.340345
APARCH Skewed Norm GHA_Price (1,2)	1	2	-8.344477	-8.31669	-8.344535	-8.334053
APARCH Skewed Norm GHA_Price (1,3)	1	3	-8.34461	-8.312853	-8.344685	-8.332696
APARCH Skewed Norm GHA_Price (2,2)	2	2	-8.344877	-8.309151	-8.344972	-8.331474
APARCH Skewed Norm GHA_Price (2,1)	2	1	-8.338512	-8.306755	-8.338586	-8.326598
APARCH Skewed Norm GHA_Price (1,4)	1	4	-8.341802	-8.306076	-8.341897	-8.328399
APARCH Skewed Norm GHA_Price (2,3)	2	3	-8.342794	-8.303098	-8.34291	-8.327901
APARCH Skewed Norm GHA_Price (1,5)	1	5	-8.34061	-8.300914	-8.340727	-8.325718
APARCH Skewed Norm GHA_Price (2,4)	2	4	-8.342322	-8.298656	-8.342463	-8.325941
APARCH Skewed Norm GHA_Price (3,1)	3	1	-8.328337	-8.288641	-8.328453	-8.313444
APARCH Skewed Norm GHA_Price (2,5)	2	5	-8.335716	-8.28808	-8.335883	-8.317845
APARCH Skewed Norm GHA_Price (3,2)	3	2	-8.329321	-8.285655	-8.329462	-8.31294
APARCH Skewed Norm GHA_Price (3,3)	3	3	-8.327813	-8.280178	-8.327981	-8.309942
APARCH Skewed Norm GHA_Price (3,4)	3	4	-8.326077	-8.274471	-8.326273	-8.306716
APARCH Skewed Norm GHA_Price (4,1)	4	1	-8.319298	-8.271663	-8.319466	-8.301427
APARCH Skewed Norm GHA_Price (4,2)	4	2	-8.320943	-8.269337	-8.321139	-8.301582
APARCH Skewed Norm GHA_Price (3,5)	3	5	-8.322499	-8.266924	-8.322727	-8.30165
APARCH Skewed Norm GHA_Price (4,3)	4	3	-8.319944	-8.264369	-8.320171	-8.299094
APARCH Skewed Norm GHA_Price (4,4)	4	4	-8.320757	-8.261213	-8.321018	-8.298419
APARCH Skewed Norm GHA_Price (5,1)	5	1	-8.310847	-8.255272	-8.311074	-8.289997
APARCH Skewed Norm GHA_Price (5,2)	5	2	-8.312531	-8.252986	-8.312792	-8.290192

APARCH Skewed Norm GHA_Price (5,3)	5	3	-8.31463	-8.251116	-8.314927	-8.290802
APARCH Skewed Norm GHA_Price (5,5)	5	5	-8.319776	-8.248323	-8.320151	-8.29297
APARCH Skewed Norm GHA_Price (5,4)	5	4	-8.306157	-8.238673	-8.306491	-8.280839
APARCH Skewed Norm GHA_Price (4,5)	4	5	-8.296208	-8.232694	-8.296505	-8.27238
APARCH Skewed Norm GHA_Price (5,0)	5	0	-8.075711	-8.024106	-8.075908	-8.056351
APARCH Skewed Norm GHA_Price (4,0)	4	0	-8.021354	-7.977688	-8.021495	-8.004972
APARCH Skewed Norm GHA_Price (2,0)	2	0	-7.935732	-7.907944	-7.935789	-7.925307
APARCH Skewed Norm GHA_Price (3,0)	3	0	-7.937512	-7.901785	-7.937606	-7.924108
APARCH Skewed Norm GHA_Price (1,0)	1	0	-7.706569	-7.686721	-7.706599	-7.699123
APARCH Skewed Norm GHA_Price (0,1)	0	1	-7.271361	-7.255483	-7.27138	-7.265404
APARCH Skewed Norm GHA_Price (0,2)	0	2	-7.263904	-7.244056	-7.263934	-7.256458
APARCH Skewed Norm GHA_Price (0,3)	0	3	-7.258303	-7.234485	-7.258345	-7.249367
APARCH Skewed Norm GHA_Price (0,4)	0	4	-7.252468	-7.224681	-7.252525	-7.242043
APARCH Skewed Norm GHA_Price (0,5)	0	5	-7.245951	-7.214194	-7.246026	-7.234037

APARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student GHA_Price (1,4)	1	4	-8.641255	-8.605529	-8.64135	-8.627852
APARCH T-Student GHA_Price (1,5)	1	5	-8.64326	-8.603564	-8.643376	-8.628367
APARCH T-Student GHA_Price (3,0)	3	0	-8.638358	-8.602632	-8.638453	-8.624955
APARCH T-Student GHA_Price (2,3)	2	3	-8.642166	-8.60247	-8.642283	-8.627274
APARCH T-Student GHA_Price (3,3)	3	3	-8.64527	-8.597635	-8.645438	-8.627399
APARCH T-Student GHA_Price (4,0)	4	0	-8.639893	-8.596227	-8.640034	-8.623512
APARCH T-Student GHA_Price (5,0)	5	0	-8.636912	-8.585307	-8.637108	-8.617551
APARCH T-Student GHA_Price (3,5)	3	5	-8.639235	-8.58366	-8.639463	-8.618386
APARCH T-Student GHA_Price (4,4)	4	4	-8.642051	-8.582506	-8.642312	-8.619712
APARCH T-Student GHA_Price (4,5)	4	5	-8.640226	-8.576712	-8.640522	-8.616398
APARCH T-Student GHA_Price (1,0)	1	0	-8.592044	-8.572196	-8.592074	-8.584598
APARCH T-Student GHA_Price (5,4)	5	4	-8.637507	-8.570023	-8.637842	-8.61219

APARCH T-Student GHA_Price (1,1)	1	1	-8.589713	-8.565895	-8.589755	-8.580778
APARCH T-Student GHA_Price (1,2)	1	2	-8.583954	-8.556166	-8.584011	-8.573529
APARCH T-Student GHA_Price (5,3)	5	3	-8.614258	-8.550744	-8.614555	-8.59043
APARCH T-Student GHA_Price (1,3)	1	3	-8.578641	-8.546884	-8.578716	-8.566727
APARCH T-Student GHA_Price (2,1)	2	1	-8.56681	-8.535053	-8.566885	-8.554896
APARCH T-Student GHA_Price (2,4)	2	4	-8.56827	-8.524604	-8.568411	-8.551888
APARCH T-Student GHA_Price (2,5)	2	5	-8.565783	-8.518148	-8.565951	-8.547913
APARCH T-Student GHA_Price (2,2)	2	2	-8.550987	-8.51526	-8.551082	-8.537584
APARCH T-Student GHA_Price (3,1)	3	1	-8.552942	-8.513245	-8.553058	-8.538049
APARCH T-Student GHA_Price (3,2)	3	2	-8.554969	-8.511303	-8.55511	-8.538588
APARCH T-Student GHA_Price (5,5)	5	5	-8.566113	-8.49466	-8.566488	-8.539306
APARCH T-Student GHA_Price (4,1)	4	1	-8.532309	-8.484673	-8.532476	-8.514438
APARCH T-Student GHA_Price (4,3)	4	3	-8.538896	-8.483321	-8.539123	-8.518046
APARCH T-Student GHA_Price (3,4)	3	4	-8.527675	-8.47607	-8.527872	-8.508315
APARCH T-Student GHA_Price (4,2)	4	2	-8.522171	-8.470566	-8.522368	-8.502811
APARCH T-Student GHA_Price (5,1)	5	1	-8.516179	-8.460604	-8.516406	-8.495329
APARCH T-Student GHA_Price (2,0)	2	0	-8.459324	-8.431537	-8.459381	-8.448899
APARCH T-Student GHA_Price (5,2)	5	2	-8.467986	-8.408442	-8.468247	-8.445647
APARCH T-Student GHA_Price (0,1)	0	1	-8.403515	-8.387636	-8.403534	-8.397558
APARCH T-Student GHA_Price (0,2)	0	2	-8.403504	-8.383655	-8.403533	-8.396057
APARCH T-Student GHA_Price (0,4)	0	4	-8.400439	-8.372652	-8.400497	-8.390015

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student GHA_Price (2,0)	2	0	-8.623846	-8.592089	-8.623921	-8.611932
APARCH Skewed T-Student GHA_Price (2,5)	2	5	-8.641492	-8.589887	-8.641689	-8.622132
APARCH Skewed T-Student GHA_Price (3,4)	3	4	-8.644489	-8.588914	-8.644717	-8.62364

APARCH Skewed T-Student GHA_Price (3,5)	3	5	-8.64145	-8.581905	-8.641711	-8.619111
APARCH Skewed T-Student GHA_Price (1,0)	1	0	-8.591326	-8.567508	-8.591368	-8.58239
APARCH Skewed T-Student GHA_Price (5,4)	5	4	-8.636871	-8.565418	-8.637246	-8.610065
APARCH Skewed T-Student GHA_Price (5,5)	5	5	-8.636455	-8.561032	-8.636872	-8.608159
APARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.583386	-8.555599	-8.583443	-8.572961
APARCH Skewed T-Student GHA_Price (1,2)	1	2	-8.584434	-8.552677	-8.584509	-8.57252
APARCH Skewed T-Student GHA_Price (2,1)	2	1	-8.586143	-8.550416	-8.586237	-8.572739
APARCH Skewed T-Student GHA_Price (1,3)	1	3	-8.581072	-8.545346	-8.581167	-8.567669
APARCH Skewed T-Student GHA_Price (2,3)	2	3	-8.581893	-8.538227	-8.582034	-8.565511
APARCH Skewed T-Student GHA_Price (1,4)	1	4	-8.577064	-8.537368	-8.577181	-8.562172
APARCH Skewed T-Student GHA_Price (1,5)	1	5	-8.580696	-8.53703	-8.580837	-8.564315
APARCH Skewed T-Student GHA_Price (2,4)	2	4	-8.575695	-8.52806	-8.575863	-8.557824
APARCH Skewed T-Student GHA_Price (4,1)	4	1	-8.568925	-8.51732	-8.569122	-8.549565
APARCH Skewed T-Student GHA_Price (4,4)	4	4	-8.567111	-8.503597	-8.567408	-8.543283
APARCH Skewed T-Student GHA_Price (2,2)	2	2	-8.542522	-8.502825	-8.542638	-8.527629
APARCH Skewed T-Student GHA_Price (3,1)	3	1	-8.535056	-8.49139	-8.535197	-8.518674
APARCH Skewed T-Student GHA_Price (4,3)	4	3	-8.531644	-8.4721	-8.531905	-8.509306
APARCH Skewed T-Student GHA_Price (5,3)	5	3	-8.537953	-8.47047	-8.538288	-8.512636
APARCH Skewed T-Student GHA_Price (3,3)	3	3	-8.516509	-8.464904	-8.516705	-8.497148
APARCH Skewed T-Student GHA_Price (3,2)	3	2	-8.50103	-8.453394	-8.501197	-8.483159
APARCH Skewed T-Student GHA_Price (4,2)	4	2	-8.501179	-8.445604	-8.501407	-8.480329
APARCH Skewed T-Student GHA_Price (4,5)	4	5	-8.510986	-8.443502	-8.51132	-8.485669
APARCH Skewed T-Student GHA_Price (3,0)	3	0	-8.476567	-8.436871	-8.476684	-8.461675
APARCH Skewed T-Student GHA_Price (4,0)	4	0	-8.482365	-8.43473	-8.482533	-8.464494
APARCH Skewed T-Student GHA_Price (5,1)	5	1	-8.488375	-8.428831	-8.488636	-8.466037
APARCH Skewed T-Student GHA_Price (5,2)	5	2	-8.476279	-8.412765	-8.476576	-8.452451
APARCH Skewed T-Student GHA_Price (5,0)	5	0	-8.453189	-8.397614	-8.453416	-8.432339
APARCH Skewed T-Student GHA_Price (0,1)	0	1	-8.40988	-8.390031	-8.409909	-8.402433

APARCH Skewed T-Student GHA_Price (0,2)	0	2	-8.408649	-8.384831	-8.408691	-8.399714
APARCH Skewed T-Student GHA_Price (0,3)	0	3	-8.407099	-8.379312	-8.407157	-8.396675
APARCH Skewed T-Student GHA_Price (0,4)	0	4	-8.405572	-8.373815	-8.405646	-8.393658
APARCH Skewed T-Student GHA_Price (0,5)	0	5	-8.404017	-8.36829	-8.404112	-8.390614
<i>TGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm GHA_Price (2,3)	2	3	-8.318771	-8.287014	-8.318846	-8.306857
TGARCH Norm GHA_Price (2,2)	2	2	-8.314782	-8.286994	-8.314839	-8.304357
TGARCH Norm GHA_Price (2,4)	2	4	-8.320669	-8.284942	-8.320763	-8.307266
TGARCH Norm GHA_Price (2,5)	2	5	-8.322419	-8.282723	-8.322536	-8.307527
TGARCH Norm GHA_Price (3,3)	3	3	-8.321659	-8.281962	-8.321775	-8.306766
TGARCH Norm GHA_Price (3,4)	3	4	-8.321867	-8.278201	-8.322008	-8.305485
TGARCH Norm GHA_Price (3,2)	3	2	-8.313757	-8.27803	-8.313851	-8.300354
TGARCH Norm GHA_Price (3,5)	3	5	-8.322502	-8.274867	-8.32267	-8.304631
TGARCH Norm GHA_Price (2,1)	2	1	-8.295733	-8.271915	-8.295775	-8.286797
TGARCH Norm GHA_Price (4,3)	4	3	-8.318494	-8.270859	-8.318662	-8.300623
TGARCH Norm GHA_Price (4,2)	4	2	-8.311113	-8.267447	-8.311254	-8.294731
TGARCH Norm GHA_Price (4,4)	4	4	-8.318797	-8.267192	-8.318994	-8.299437
TGARCH Norm GHA_Price (4,5)	4	5	-8.319432	-8.263858	-8.31966	-8.298583
TGARCH Norm GHA_Price (3,1)	3	1	-8.292511	-8.260754	-8.292586	-8.280597
TGARCH Norm GHA_Price (5,3)	5	3	-8.31547	-8.259895	-8.315698	-8.294621
TGARCH Norm GHA_Price (5,2)	5	2	-8.308024	-8.256419	-8.308221	-8.288664
TGARCH Norm GHA_Price (5,4)	5	4	-8.315762	-8.256218	-8.316023	-8.293423
TGARCH Norm GHA_Price (5,5)	5	5	-8.316362	-8.252848	-8.316659	-8.292535
TGARCH Norm GHA_Price (4,1)	4	1	-8.29033	-8.250634	-8.290447	-8.275438
TGARCH Norm GHA_Price (5,1)	5	1	-8.287301	-8.239666	-8.287469	-8.26943
TGARCH Norm GHA_Price (4,0)	4	0	-8.223665	-8.187938	-8.223759	-8.210262
TGARCH Norm GHA_Price (5,0)	5	0	-8.221421	-8.177755	-8.221562	-8.205039

TGARCH Norm GHA_Price (3,0)	3	0	-8.202626	-8.174839	-8.202683	-8.192201
TGARCH Norm GHA_Price (1,2)	1	2	-8.189138	-8.16929	-8.189167	-8.181692
TGARCH Norm GHA_Price (1,3)	1	3	-8.192707	-8.168889	-8.192749	-8.183772
TGARCH Norm GHA_Price (1,5)	1	5	-8.200095	-8.168338	-8.20017	-8.188181
TGARCH Norm GHA_Price (1,4)	1	4	-8.1959	-8.168113	-8.195957	-8.185475
TGARCH Norm GHA_Price (1,1)	1	1	-8.128289	-8.112411	-8.128308	-8.122332
TGARCH Norm GHA_Price (2,0)	2	0	-8.108233	-8.088384	-8.108262	-8.100786
TGARCH Norm GHA_Price (0,3)	0	3	-7.510675	-7.494797	-7.510694	-7.504718
TGARCH Norm GHA_Price (0,5)	0	5	-7.503637	-7.479819	-7.503679	-7.494701
TGARCH Norm GHA_Price (1,0)	1	0	15.703586	15.715495	15.703575	15.708054
TGARCH Norm GHA_Price (0,1)	0	1	55.945862	55.953801	55.945857	55.948841

<i>TGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm GHA_Price (2,2)	2	2	-8.315657	-8.2839	-8.315732	-8.303744
TGARCH Skewed Norm GHA_Price (2,3)	2	3	-8.319223	-8.283496	-8.319317	-8.305819
TGARCH Skewed Norm GHA_Price (2,4)	2	4	-8.320536	-8.28084	-8.320653	-8.305644
TGARCH Skewed Norm GHA_Price (2,5)	2	5	-8.322547	-8.278882	-8.322688	-8.306166
TGARCH Skewed Norm GHA_Price (3,3)	3	3	-8.320795	-8.277129	-8.320936	-8.304413
TGARCH Skewed Norm GHA_Price (3,2)	3	2	-8.314058	-8.274362	-8.314175	-8.299165
TGARCH Skewed Norm GHA_Price (3,4)	3	4	-8.321276	-8.27364	-8.321443	-8.303405
TGARCH Skewed Norm GHA_Price (3,5)	3	5	-8.322059	-8.270454	-8.322256	-8.302699
TGARCH Skewed Norm GHA_Price (2,1)	2	1	-8.296428	-8.268641	-8.296485	-8.286003
TGARCH Skewed Norm GHA_Price (4,3)	4	3	-8.317609	-8.266004	-8.317806	-8.298249
TGARCH Skewed Norm GHA_Price (4,2)	4	2	-8.311442	-8.263807	-8.31161	-8.293571
TGARCH Skewed Norm GHA_Price (4,4)	4	4	-8.318204	-8.262629	-8.318432	-8.297355
TGARCH Skewed Norm GHA_Price (4,5)	4	5	-8.31899	-8.259445	-8.319251	-8.296651

TGARCH Skewed Norm GHA_Price (3,1)	3	1	-8.293202	-8.257475	-8.293296	-8.279798
TGARCH Skewed Norm GHA_Price (5,3)	5	3	-8.314606	-8.255062	-8.314868	-8.292268
TGARCH Skewed Norm GHA_Price (5,2)	5	2	-8.30833	-8.252756	-8.308558	-8.287481
TGARCH Skewed Norm GHA_Price (5,4)	5	4	-8.315167	-8.251652	-8.315463	-8.291339
TGARCH Skewed Norm GHA_Price (5,5)	5	5	-8.31592	-8.248436	-8.316254	-8.290603
TGARCH Skewed Norm GHA_Price (4,1)	4	1	-8.291019	-8.247353	-8.29116	-8.274637
TGARCH Skewed Norm GHA_Price (5,1)	5	1	-8.288416	-8.236811	-8.288613	-8.269056
TGARCH Skewed Norm GHA_Price (5,0)	5	0	-8.268832	-8.221197	-8.269	-8.250961
TGARCH Skewed Norm GHA_Price (4,0)	4	0	-8.22225	-8.182553	-8.222366	-8.207357
TGARCH Skewed Norm GHA_Price (1,2)	1	2	-8.189631	-8.165813	-8.189673	-8.180695
TGARCH Skewed Norm GHA_Price (1,3)	1	3	-8.192451	-8.164663	-8.192508	-8.182026
TGARCH Skewed Norm GHA_Price (1,4)	1	4	-8.195617	-8.16386	-8.195692	-8.183704
TGARCH Skewed Norm GHA_Price (1,5)	1	5	-8.199527	-8.1638	-8.199621	-8.186123
TGARCH Skewed Norm GHA_Price (3,0)	3	0	-8.17002	-8.138263	-8.170095	-8.158106
TGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.127312	-8.107464	-8.127341	-8.119865
TGARCH Skewed Norm GHA_Price (2,0)	2	0	-8.123424	-8.099606	-8.123466	-8.114488
TGARCH Skewed Norm GHA_Price (0,2)	0	2	-7.50724	-7.491362	-7.507259	-7.501283
TGARCH Skewed Norm GHA_Price (0,4)	0	4	-7.503212	-7.479395	-7.503255	-7.494277
TGARCH Skewed Norm GHA_Price (0,5)	0	5	-7.474411	-7.446623	-7.474468	-7.463986
TGARCH Skewed Norm GHA_Price (0,1)	0	1	54.44455	54.456458	54.444539	54.449017

<i>TGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student GHA_Price (1,1)	1	1	-8.643378	-8.62353	-8.643408	-8.635932
TGARCH T-Student GHA_Price (1,2)	1	2	-8.645809	-8.621991	-8.645851	-8.636874
TGARCH T-Student GHA_Price (1,3)	1	3	-8.646228	-8.618441	-8.646286	-8.635804
TGARCH T-Student GHA_Price (2,1)	2	1	-8.643976	-8.616189	-8.644034	-8.633552

TGARCH T-Student GHA_Price (1,4)	1	4	-8.64601	-8.614253	-8.646085	-8.634096
TGARCH T-Student GHA_Price (2,2)	2	2	-8.644676	-8.612919	-8.644751	-8.632762
TGARCH T-Student GHA_Price (1,5)	1	5	-8.647327	-8.6116	-8.647421	-8.633924
TGARCH T-Student GHA_Price (2,3)	2	3	-8.644025	-8.608298	-8.644119	-8.630622
TGARCH T-Student GHA_Price (3,1)	3	1	-8.64135	-8.605624	-8.641445	-8.627947
TGARCH T-Student GHA_Price (2,4)	2	4	-8.6438	-8.604104	-8.643917	-8.628907
TGARCH T-Student GHA_Price (2,0)	2	0	-8.627545	-8.603727	-8.627587	-8.61861
TGARCH T-Student GHA_Price (3,2)	3	2	-8.641353	-8.601657	-8.64147	-8.626461
TGARCH T-Student GHA_Price (3,0)	3	0	-8.632739	-8.600982	-8.632813	-8.620825
TGARCH T-Student GHA_Price (2,5)	2	5	-8.644259	-8.600593	-8.6444	-8.627877
TGARCH T-Student GHA_Price (3,3)	3	3	-8.64103	-8.597364	-8.641171	-8.624648
TGARCH T-Student GHA_Price (4,1)	4	1	-8.638741	-8.595076	-8.638882	-8.62236
TGARCH T-Student GHA_Price (3,4)	3	4	-8.639885	-8.59225	-8.640053	-8.622014
TGARCH T-Student GHA_Price (4,0)	4	0	-8.630983	-8.591287	-8.6311	-8.616091
TGARCH T-Student GHA_Price (4,2)	4	2	-8.638104	-8.590468	-8.638272	-8.620233
TGARCH T-Student GHA_Price (3,5)	3	5	-8.641696	-8.590091	-8.641892	-8.622336
TGARCH T-Student GHA_Price (4,3)	4	3	-8.638147	-8.586542	-8.638343	-8.618787
TGARCH T-Student GHA_Price (5,1)	5	1	-8.634724	-8.583119	-8.634921	-8.615364
TGARCH T-Student GHA_Price (4,4)	4	4	-8.63766	-8.582086	-8.637888	-8.616811
TGARCH T-Student GHA_Price (4,5)	4	5	-8.638626	-8.579081	-8.638887	-8.616287
TGARCH T-Student GHA_Price (5,0)	5	0	-8.626644	-8.579009	-8.626812	-8.608773
TGARCH T-Student GHA_Price (5,2)	5	2	-8.634324	-8.578749	-8.634552	-8.613475
TGARCH T-Student GHA_Price (5,3)	5	3	-8.634184	-8.574639	-8.634445	-8.611845
TGARCH T-Student GHA_Price (5,4)	5	4	-8.633763	-8.570249	-8.63406	-8.609935
TGARCH T-Student GHA_Price (5,5)	5	5	-8.636469	-8.568985	-8.636803	-8.611152
TGARCH T-Student GHA_Price (1,0)	1	0	-8.583066	-8.567187	-8.583084	-8.577109
TGARCH T-Student GHA_Price (0,1)	0	1	-8.405149	-8.39324	-8.40516	-8.400681
TGARCH T-Student GHA_Price (0,2)	0	2	-8.403415	-8.387536	-8.403434	-8.397458

TGARCH T-Student GHA_Price (0,3)	0	3	-8.401701	-8.381853	-8.401731	-8.394255
TGARCH T-Student GHA_Price (0,4)	0	4	-8.400061	-8.376243	-8.400103	-8.391126
TGARCH T-Student GHA_Price (0,5)	0	5	-8.394103	-8.366316	-8.394161	-8.383679

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.642318	-8.6185	-8.64236	-8.633383
TGARCH Skewed T-Student GHA_Price (1,2)	1	2	-8.64475	-8.616962	-8.644807	-8.634325
TGARCH Skewed T-Student GHA_Price (1,3)	1	3	-8.645493	-8.613736	-8.645568	-8.633579
TGARCH Skewed T-Student GHA_Price (2,1)	2	1	-8.642884	-8.611127	-8.642958	-8.63097
TGARCH Skewed T-Student GHA_Price (1,4)	1	4	-8.645182	-8.609455	-8.645276	-8.631779
TGARCH Skewed T-Student GHA_Price (2,2)	2	2	-8.64358	-8.607854	-8.643675	-8.630177
TGARCH Skewed T-Student GHA_Price (1,5)	1	5	-8.64654	-8.606844	-8.646657	-8.631648
TGARCH Skewed T-Student GHA_Price (2,3)	2	3	-8.643196	-8.603499	-8.643312	-8.628303
TGARCH Skewed T-Student GHA_Price (2,0)	2	0	-8.628133	-8.600346	-8.62819	-8.617708
TGARCH Skewed T-Student GHA_Price (3,1)	3	1	-8.639566	-8.599869	-8.639682	-8.624673
TGARCH Skewed T-Student GHA_Price (2,4)	2	4	-8.642926	-8.599261	-8.643067	-8.626545
TGARCH Skewed T-Student GHA_Price (3,2)	3	2	-8.640264	-8.596598	-8.640405	-8.623882
TGARCH Skewed T-Student GHA_Price (3,0)	3	0	-8.631597	-8.59587	-8.631692	-8.618194
TGARCH Skewed T-Student GHA_Price (2,5)	2	5	-8.643471	-8.595836	-8.643639	-8.6256
TGARCH Skewed T-Student GHA_Price (3,3)	3	3	-8.640516	-8.59288	-8.640684	-8.622645
TGARCH Skewed T-Student GHA_Price (4,1)	4	1	-8.637529	-8.589893	-8.637696	-8.619658
TGARCH Skewed T-Student GHA_Price (3,4)	3	4	-8.639855	-8.58825	-8.640052	-8.620495
TGARCH Skewed T-Student GHA_Price (4,0)	4	0	-8.630098	-8.586432	-8.630239	-8.613716
TGARCH Skewed T-Student GHA_Price (4,2)	4	2	-8.637007	-8.585402	-8.637204	-8.617647
TGARCH Skewed T-Student GHA_Price (3,5)	3	5	-8.640866	-8.585292	-8.641094	-8.620017
TGARCH Skewed T-Student GHA_Price (4,3)	4	3	-8.636417	-8.580842	-8.636644	-8.615567
TGARCH Skewed T-Student GHA_Price (5,0)	5	0	-8.629199	-8.577593	-8.629395	-8.609838
TGARCH Skewed T-Student GHA_Price (4,4)	4	4	-8.636918	-8.577374	-8.637179	-8.614579

TGARCH Skewed T-Student GHA_Price (5,1)	5	1	-8.632656	-8.577081	-8.632884	-8.611807
TGARCH Skewed T-Student GHA_Price (5,2)	5	2	-8.635587	-8.576043	-8.635849	-8.613249
TGARCH Skewed T-Student GHA_Price (4,5)	4	5	-8.63868	-8.575166	-8.638977	-8.614852
TGARCH Skewed T-Student GHA_Price (5,3)	5	3	-8.63416	-8.570646	-8.634457	-8.610332
TGARCH Skewed T-Student GHA_Price (5,4)	5	4	-8.634048	-8.566564	-8.634382	-8.608731
TGARCH Skewed T-Student GHA_Price (5,5)	5	5	-8.63561	-8.564157	-8.635985	-8.608804
TGARCH Skewed T-Student GHA_Price (1,0)	1	0	-8.581875	-8.562027	-8.581905	-8.574429
TGARCH Skewed T-Student GHA_Price (0,1)	0	1	-8.409139	-8.39326	-8.409158	-8.403182
TGARCH Skewed T-Student GHA_Price (0,2)	0	2	-8.405895	-8.386047	-8.405924	-8.398449
TGARCH Skewed T-Student GHA_Price (0,3)	0	3	-8.403198	-8.37938	-8.40324	-8.394262
TGARCH Skewed T-Student GHA_Price (0,4)	0	4	-8.400812	-8.373025	-8.40087	-8.390388
TGARCH Skewed T-Student GHA_Price (0,5)	0	5	-8.395114	-8.363357	-8.395189	-8.3832

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm GHA_Price (4,5)	4	5	-8.359927	-8.304352	-8.360155	-8.339078
EGARCH Norm GHA_Price (5,4)	5	4	-8.360389	-8.300845	-8.36065	-8.33805
EGARCH Norm GHA_Price (4,4)	4	4	-8.349257	-8.297651	-8.349453	-8.329896
EGARCH Norm GHA_Price (5,5)	5	5	-8.316214	-8.2527	-8.31651	-8.292386
EGARCH Norm GHA_Price (5,3)	5	3	-8.291755	-8.23618	-8.291982	-8.270905
EGARCH Norm GHA_Price (4,3)	4	3	-8.281912	-8.234277	-8.28208	-8.264041
EGARCH Norm GHA_Price (3,4)	3	4	-8.274379	-8.230713	-8.27452	-8.257997
EGARCH Norm GHA_Price (3,5)	3	5	-8.274849	-8.227214	-8.275017	-8.256978
EGARCH Norm GHA_Price (3,1)	3	1	-8.251449	-8.219692	-8.251523	-8.239535
EGARCH Norm GHA_Price (5,1)	5	1	-8.265214	-8.217579	-8.265382	-8.247343
EGARCH Norm GHA_Price (3,2)	3	2	-8.249936	-8.21421	-8.250031	-8.236533
EGARCH Norm GHA_Price (3,3)	3	3	-8.252863	-8.213166	-8.252979	-8.23797
EGARCH Norm GHA_Price (5,2)	5	2	-8.26475	-8.213145	-8.264946	-8.24539
EGARCH Norm GHA_Price (2,1)	2	1	-8.235317	-8.211499	-8.235359	-8.226382

EGARCH Norm GHA_Price (4,1)	4	1	-8.247946	-8.20825	-8.248062	-8.233053
EGARCH Norm GHA_Price (2,2)	2	2	-8.234962	-8.207175	-8.235019	-8.224537
EGARCH Norm GHA_Price (4,2)	4	2	-8.24682	-8.203154	-8.246961	-8.230439
EGARCH Norm GHA_Price (2,5)	2	5	-8.241732	-8.202036	-8.241849	-8.22684
EGARCH Norm GHA_Price (1,1)	1	1	-8.210922	-8.195044	-8.210941	-8.204965
EGARCH Norm GHA_Price (2,3)	2	3	-8.223976	-8.192219	-8.224051	-8.212062
EGARCH Norm GHA_Price (1,3)	1	3	-8.214732	-8.190915	-8.214774	-8.205797
EGARCH Norm GHA_Price (1,2)	1	2	-8.209519	-8.189671	-8.209548	-8.202073
EGARCH Norm GHA_Price (1,4)	1	4	-8.212747	-8.18496	-8.212805	-8.202323
EGARCH Norm GHA_Price (1,5)	1	5	-8.213256	-8.181499	-8.213331	-8.201342
EGARCH Norm GHA_Price (2,4)	2	4	-8.21394	-8.178214	-8.214035	-8.200537
EGARCH Norm GHA_Price (5,0)	5	0	-8.031025	-7.987359	-8.031166	-8.014643
EGARCH Norm GHA_Price (4,0)	4	0	-7.968705	-7.932978	-7.968799	-7.955301
EGARCH Norm GHA_Price (3,0)	3	0	-7.918053	-7.890266	-7.91811	-7.907628
EGARCH Norm GHA_Price (2,0)	2	0	-7.797809	-7.777961	-7.797838	-7.790363
EGARCH Norm GHA_Price (1,0)	1	0	-7.552661	-7.540752	-7.552671	-7.548193
EGARCH Norm GHA_Price (0,1)	0	1	-7.305791	-7.297852	-7.305796	-7.302813
EGARCH Norm GHA_Price (0,3)	0	3	-7.302833	-7.286954	-7.302852	-7.296876
EGARCH Norm GHA_Price (0,2)	0	2	-7.282043	-7.270134	-7.282053	-7.277575
EGARCH Norm GHA_Price (0,4)	0	4	-7.280042	-7.260193	-7.280071	-7.272595
EGARCH Norm GHA_Price (0,5)	0	5	-7.277447	-7.253629	-7.277489	-7.268512

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm GHA_Price (4,4)	4	4	-8.352895	-8.29732	-8.353122	-8.332045
EGARCH Skewed Norm GHA_Price (4,5)	4	5	-8.354054	-8.294509	-8.354315	-8.331715
EGARCH Skewed Norm GHA_Price (5,5)	5	5	-8.341912	-8.274428	-8.342246	-8.316595
EGARCH Skewed Norm GHA_Price (4,3)	4	3	-8.298642	-8.247036	-8.298838	-8.279281
EGARCH Skewed Norm GHA_Price (5,3)	5	3	-8.290506	-8.230961	-8.290767	-8.268167

EGARCH Skewed Norm GHA_Price (5,4)	5	4	-8.290191	-8.226677	-8.290488	-8.266363
EGARCH Skewed Norm GHA_Price (3,4)	3	4	-8.274118	-8.226483	-8.274286	-8.256247
EGARCH Skewed Norm GHA_Price (3,5)	3	5	-8.274029	-8.222424	-8.274225	-8.254669
EGARCH Skewed Norm GHA_Price (3,1)	3	1	-8.251297	-8.21557	-8.251391	-8.237893
EGARCH Skewed Norm GHA_Price (3,3)	3	3	-8.257714	-8.214048	-8.257855	-8.241332
EGARCH Skewed Norm GHA_Price (2,1)	2	1	-8.240427	-8.212639	-8.240484	-8.230002
EGARCH Skewed Norm GHA_Price (5,1)	5	1	-8.263792	-8.212187	-8.263989	-8.244432
EGARCH Skewed Norm GHA_Price (3,2)	3	2	-8.250123	-8.210426	-8.250239	-8.23523
EGARCH Skewed Norm GHA_Price (2,2)	2	2	-8.239755	-8.207998	-8.23983	-8.227841
EGARCH Skewed Norm GHA_Price (5,2)	5	2	-8.263313	-8.207738	-8.263541	-8.242463
EGARCH Skewed Norm GHA_Price (4,1)	4	1	-8.247755	-8.204089	-8.247896	-8.231373
EGARCH Skewed Norm GHA_Price (1,5)	1	5	-8.237469	-8.201742	-8.237564	-8.224066
EGARCH Skewed Norm GHA_Price (2,5)	2	5	-8.244434	-8.200768	-8.244575	-8.228052
EGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.219343	-8.199495	-8.219372	-8.211897
EGARCH Skewed Norm GHA_Price (4,2)	4	2	-8.24675	-8.199115	-8.246918	-8.228879
EGARCH Skewed Norm GHA_Price (1,2)	1	2	-8.217415	-8.193597	-8.217457	-8.20848
EGARCH Skewed Norm GHA_Price (2,3)	2	3	-8.227735	-8.192008	-8.227829	-8.214332
EGARCH Skewed Norm GHA_Price (1,3)	1	3	-8.217222	-8.189435	-8.21728	-8.206798
EGARCH Skewed Norm GHA_Price (1,4)	1	4	-8.216371	-8.184614	-8.216446	-8.204457
EGARCH Skewed Norm GHA_Price (2,4)	2	4	-8.215554	-8.175858	-8.215671	-8.200662
EGARCH Skewed Norm GHA_Price (5,0)	5	0	-8.033171	-7.985536	-8.033339	-8.0153
EGARCH Skewed Norm GHA_Price (4,0)	4	0	-7.972176	-7.93248	-7.972293	-7.957284
EGARCH Skewed Norm GHA_Price (3,0)	3	0	-7.920408	-7.888651	-7.920482	-7.908494
EGARCH Skewed Norm GHA_Price (2,0)	2	0	-7.803438	-7.77962	-7.80348	-7.794503
EGARCH Skewed Norm GHA_Price (1,0)	1	0	-7.558119	-7.54224	-7.558137	-7.552162
EGARCH Skewed Norm GHA_Price (0,1)	0	1	-7.304357	-7.292448	-7.304368	-7.299889
EGARCH Skewed Norm GHA_Price (0,2)	0	2	-7.302877	-7.286998	-7.302895	-7.29692
EGARCH Skewed Norm GHA_Price (0,4)	0	4	-7.304071	-7.280253	-7.304113	-7.295135

EGARCH Skewed Norm GHA_Price (0,3)	0	3	-7.279004	-7.259156	-7.279033	-7.271558
EGARCH Skewed Norm GHA_Price (0,5)	0	5	-5.971778	-5.94399	-5.971835	-5.961353

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student GHA_Price (2,1)	2	1	-8.653004	-8.625217	-8.653062	-8.64258
EGARCH T-Student GHA_Price (4,4)	4	4	-8.677933	-8.622358	-8.678161	-8.657084
EGARCH T-Student GHA_Price (2,2)	2	2	-8.653017	-8.62126	-8.653091	-8.641103
EGARCH T-Student GHA_Price (3,1)	3	1	-8.655843	-8.620117	-8.655938	-8.64244
EGARCH T-Student GHA_Price (1,3)	1	3	-8.645641	-8.617853	-8.645698	-8.635216
EGARCH T-Student GHA_Price (1,2)	1	2	-8.641102	-8.617284	-8.641144	-8.632166
EGARCH T-Student GHA_Price (1,4)	1	4	-8.648395	-8.616638	-8.648469	-8.636481
EGARCH T-Student GHA_Price (2,3)	2	3	-8.652046	-8.61632	-8.652141	-8.638643
EGARCH T-Student GHA_Price (3,2)	3	2	-8.654529	-8.614833	-8.654646	-8.639637
EGARCH T-Student GHA_Price (1,5)	1	5	-8.649243	-8.613516	-8.649337	-8.63584
EGARCH T-Student GHA_Price (2,4)	2	4	-8.65301	-8.613314	-8.653126	-8.638117
EGARCH T-Student GHA_Price (1,1)	1	1	-8.631589	-8.611741	-8.631618	-8.624142
EGARCH T-Student GHA_Price (4,1)	4	1	-8.654126	-8.61046	-8.654267	-8.637744
EGARCH T-Student GHA_Price (3,3)	3	3	-8.653746	-8.61008	-8.653887	-8.637364
EGARCH T-Student GHA_Price (3,5)	3	5	-8.657581	-8.605975	-8.657777	-8.63822
EGARCH T-Student GHA_Price (4,2)	4	2	-8.653289	-8.605654	-8.653457	-8.635418
EGARCH T-Student GHA_Price (3,4)	3	4	-8.652751	-8.605115	-8.652918	-8.63488
EGARCH T-Student GHA_Price (2,5)	2	5	-8.648427	-8.604761	-8.648568	-8.632045
EGARCH T-Student GHA_Price (5,1)	5	1	-8.654295	-8.60269	-8.654491	-8.634935
EGARCH T-Student GHA_Price (4,3)	4	3	-8.652742	-8.601136	-8.652938	-8.633381
EGARCH T-Student GHA_Price (5,3)	5	3	-8.657527	-8.597983	-8.657788	-8.635188
EGARCH T-Student GHA_Price (5,2)	5	2	-8.652949	-8.597374	-8.653176	-8.632099
EGARCH T-Student GHA_Price (4,5)	4	5	-8.655862	-8.596317	-8.656123	-8.633523
EGARCH T-Student GHA_Price (5,5)	5	5	-8.655886	-8.588402	-8.65622	-8.630569

EGARCH T-Student GHA_Price (5,4)	5	4	-8.650774	-8.58726	-8.651071	-8.626946
EGARCH T-Student GHA_Price (3,0)	3	0	-8.59757	-8.565813	-8.597645	-8.585656
EGARCH T-Student GHA_Price (5,0)	5	0	-8.608263	-8.560628	-8.608431	-8.590393
EGARCH T-Student GHA_Price (0,1)	0	1	-8.4062	-8.394291	-8.406211	-8.401732
EGARCH T-Student GHA_Price (0,2)	0	2	-8.404656	-8.388778	-8.404675	-8.398699
EGARCH T-Student GHA_Price (0,3)	0	3	-8.40448	-8.384632	-8.404509	-8.397034
EGARCH T-Student GHA_Price (0,4)	0	4	-8.406484	-8.382666	-8.406526	-8.397548
EGARCH T-Student GHA_Price (0,5)	0	5	-8.401867	-8.37408	-8.401925	-8.391443
EGARCH T-Student GHA_Price (4,0)	4	0	-7.162601	-7.122904	-7.162717	-7.147708
EGARCH T-Student GHA_Price (2,0)	2	0	-6.545632	-6.521815	-6.545675	-6.536697
EGARCH T-Student GHA_Price (1,0)	1	0	-5.073685	-5.057806	-5.073703	-5.067728

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student GHA_Price (2,1)	2	1	-8.653189	-8.621432	-8.653263	-8.641275
EGARCH Skewed T-Student GHA_Price (4,5)	4	5	-8.683916	-8.620401	-8.684212	-8.660088
EGARCH Skewed T-Student GHA_Price (4,4)	4	4	-8.678837	-8.619292	-8.679098	-8.656498
EGARCH Skewed T-Student GHA_Price (2,2)	2	2	-8.653201	-8.617474	-8.653295	-8.639797
EGARCH Skewed T-Student GHA_Price (3,1)	3	1	-8.656183	-8.616487	-8.6563	-8.641291
EGARCH Skewed T-Student GHA_Price (1,3)	1	3	-8.645519	-8.613762	-8.645594	-8.633605
EGARCH Skewed T-Student GHA_Price (1,2)	1	2	-8.640804	-8.613016	-8.640861	-8.630379
EGARCH Skewed T-Student GHA_Price (1,4)	1	4	-8.648455	-8.612728	-8.648549	-8.635051
EGARCH Skewed T-Student GHA_Price (2,3)	2	3	-8.652232	-8.612535	-8.652348	-8.637339
EGARCH Skewed T-Student GHA_Price (3,2)	3	2	-8.654872	-8.611206	-8.655013	-8.63849
EGARCH Skewed T-Student GHA_Price (1,5)	1	5	-8.649274	-8.609578	-8.649391	-8.634382
EGARCH Skewed T-Student GHA_Price (2,4)	2	4	-8.653159	-8.609493	-8.6533	-8.636778
EGARCH Skewed T-Student GHA_Price (5,5)	5	5	-8.680756	-8.609303	-8.681131	-8.65395
EGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.631489	-8.607671	-8.631531	-8.622554
EGARCH Skewed T-Student GHA_Price (4,1)	4	1	-8.654467	-8.606832	-8.654635	-8.636597

EGARCH Skewed T-Student GHA_Price (3,3)	3	3	-8.654173	-8.606537	-8.65434	-8.636302
EGARCH Skewed T-Student GHA_Price (2,5)	2	5	-8.652732	-8.605096	-8.6529	-8.634861
EGARCH Skewed T-Student GHA_Price (3,5)	3	5	-8.657625	-8.60205	-8.657852	-8.636775
EGARCH Skewed T-Student GHA_Price (4,2)	4	2	-8.653531	-8.601925	-8.653727	-8.63417
EGARCH Skewed T-Student GHA_Price (3,4)	3	4	-8.653119	-8.601514	-8.653315	-8.633759
EGARCH Skewed T-Student GHA_Price (5,1)	5	1	-8.6546	-8.599026	-8.654828	-8.633751
EGARCH Skewed T-Student GHA_Price (4,3)	4	3	-8.652786	-8.597211	-8.653013	-8.631936
EGARCH Skewed T-Student GHA_Price (5,3)	5	3	-8.657834	-8.59432	-8.658131	-8.634006
EGARCH Skewed T-Student GHA_Price (5,2)	5	2	-8.653241	-8.593697	-8.653502	-8.630902
EGARCH Skewed T-Student GHA_Price (5,4)	5	4	-8.651118	-8.583634	-8.651453	-8.625801
EGARCH Skewed T-Student GHA_Price (3,0)	3	0	-8.598435	-8.562708	-8.598529	-8.585031
EGARCH Skewed T-Student GHA_Price (5,0)	5	0	-8.608138	-8.556533	-8.608335	-8.588778
EGARCH Skewed T-Student GHA_Price (2,0)	2	0	-8.584223	-8.556436	-8.58428	-8.573798
EGARCH Skewed T-Student GHA_Price (0,1)	0	1	-8.41087	-8.394991	-8.410888	-8.404913
EGARCH Skewed T-Student GHA_Price (0,2)	0	2	-8.408729	-8.388881	-8.408759	-8.401283
EGARCH Skewed T-Student GHA_Price (0,3)	0	3	-8.408966	-8.385148	-8.409008	-8.40003
EGARCH Skewed T-Student GHA_Price (0,4)	0	4	-8.411216	-8.383429	-8.411274	-8.400792
EGARCH Skewed T-Student GHA_Price (0,5)	0	5	-8.412978	-8.381221	-8.413053	-8.401064
EGARCH Skewed T-Student GHA_Price (4,0)	4	0	-7.138497	-7.094831	-7.138638	-7.122115
EGARCH Skewed T-Student GHA_Price (1,0)	1	0	-4.138798	-4.11895	-4.138828	-4.131352

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm GHA_Price (2,2)	2	2	-8.350197	-8.32241	-8.350255	-8.339773
NAGARCH Norm GHA_Price (4,3)	4	3	-8.367457	-8.319821	-8.367625	-8.349586
NAGARCH Norm GHA_Price (1,1)	1	1	-8.335524	-8.319646	-8.335543	-8.329567
NAGARCH Norm GHA_Price (5,4)	5	4	-8.374865	-8.315321	-8.375126	-8.352526
NAGARCH Norm GHA_Price (1,2)	1	2	-8.333999	-8.314151	-8.334028	-8.326553
NAGARCH Norm GHA_Price (1,3)	1	3	-8.335975	-8.312158	-8.336018	-8.32704

NAGARCH Norm GHA_Price (3,3)	3	3	-8.351685	-8.311988	-8.351801	-8.336792
NAGARCH Norm GHA_Price (3,1)	3	1	-8.341757	-8.31	-8.341832	-8.329844
NAGARCH Norm GHA_Price (1,4)	1	4	-8.33615	-8.308363	-8.336207	-8.325725
NAGARCH Norm GHA_Price (4,4)	4	4	-8.359455	-8.30785	-8.359652	-8.340095
NAGARCH Norm GHA_Price (2,1)	2	1	-8.331309	-8.307491	-8.331351	-8.322374
NAGARCH Norm GHA_Price (1,5)	1	5	-8.338721	-8.306964	-8.338795	-8.326807
NAGARCH Norm GHA_Price (5,0)	5	0	-8.349951	-8.306285	-8.350092	-8.333569
NAGARCH Norm GHA_Price (3,2)	3	2	-8.341053	-8.305326	-8.341147	-8.32765
NAGARCH Norm GHA_Price (5,2)	5	2	-8.35667	-8.305065	-8.356867	-8.33731
NAGARCH Norm GHA_Price (2,3)	2	3	-8.336404	-8.304647	-8.336479	-8.32449
NAGARCH Norm GHA_Price (2,4)	2	4	-8.337301	-8.301574	-8.337396	-8.323898
NAGARCH Norm GHA_Price (3,4)	3	4	-8.344833	-8.301167	-8.344974	-8.328452
NAGARCH Norm GHA_Price (3,5)	3	5	-8.347628	-8.299993	-8.347796	-8.329757
NAGARCH Norm GHA_Price (5,3)	5	3	-8.354416	-8.298842	-8.354644	-8.333567
NAGARCH Norm GHA_Price (2,5)	2	5	-8.338431	-8.298735	-8.338548	-8.323539
NAGARCH Norm GHA_Price (4,1)	4	1	-8.338249	-8.298553	-8.338366	-8.323357
NAGARCH Norm GHA_Price (5,5)	5	5	-8.360609	-8.297095	-8.360905	-8.336781
NAGARCH Norm GHA_Price (4,2)	4	2	-8.337265	-8.293599	-8.337406	-8.320883
NAGARCH Norm GHA_Price (5,1)	5	1	-8.321108	-8.273472	-8.321275	-8.303237
NAGARCH Norm GHA_Price (3,0)	3	0	-8.297762	-8.269975	-8.29782	-8.287338
NAGARCH Norm GHA_Price (4,5)	4	5	-8.321638	-8.266064	-8.321866	-8.300789
NAGARCH Norm GHA_Price (4,0)	4	0	-8.298751	-8.263025	-8.298846	-8.285348
NAGARCH Norm GHA_Price (2,0)	2	0	-8.2375	-8.217652	-8.23753	-8.230054
NAGARCH Norm GHA_Price (1,0)	1	0	-7.898866	-7.886957	-7.898877	-7.894398
NAGARCH Norm GHA_Price (0,1)	0	1	-7.301492	-7.293553	-7.301497	-7.298514
NAGARCH Norm GHA_Price (0,2)	0	2	-7.301607	-7.289698	-7.301618	-7.29714
NAGARCH Norm GHA_Price (0,3)	0	3	-7.300988	-7.285109	-7.301007	-7.295031
NAGARCH Norm GHA_Price (0,4)	0	4	-7.29961	-7.279762	-7.299639	-7.292164

NAGARCH Norm GHA_Price (0,5)	0	5	-7.298416	-7.274598	-7.298458	-7.289481
<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm GHA_Price (1,1)	1	1	-8.33556	-8.315712	-8.335589	-8.328114
NAGARCH Skewed Norm GHA_Price (2,4)	2	4	-8.351648	-8.311952	-8.351765	-8.336756
NAGARCH Skewed Norm GHA_Price (1,2)	1	2	-8.334046	-8.310228	-8.334088	-8.32511
NAGARCH Skewed Norm GHA_Price (1,3)	1	3	-8.335616	-8.307829	-8.335674	-8.325192
NAGARCH Skewed Norm GHA_Price (2,5)	2	5	-8.349838	-8.306173	-8.349979	-8.333457
NAGARCH Skewed Norm GHA_Price (5,2)	5	2	-8.361086	-8.305511	-8.361314	-8.340236
NAGARCH Skewed Norm GHA_Price (2,1)	2	1	-8.333037	-8.30525	-8.333094	-8.322612
NAGARCH Skewed Norm GHA_Price (1,4)	1	4	-8.335905	-8.304148	-8.33598	-8.323991
NAGARCH Skewed Norm GHA_Price (5,1)	5	1	-8.35564	-8.304035	-8.355837	-8.33628
NAGARCH Skewed Norm GHA_Price (1,5)	1	5	-8.338376	-8.302649	-8.33847	-8.324973
NAGARCH Skewed Norm GHA_Price (3,2)	3	2	-8.340934	-8.301238	-8.341051	-8.326042
NAGARCH Skewed Norm GHA_Price (2,2)	2	2	-8.332368	-8.300611	-8.332443	-8.320454
NAGARCH Skewed Norm GHA_Price (2,3)	2	3	-8.335099	-8.299372	-8.335193	-8.321695
NAGARCH Skewed Norm GHA_Price (3,3)	3	3	-8.341767	-8.298101	-8.341908	-8.325386
NAGARCH Skewed Norm GHA_Price (4,2)	4	2	-8.34477	-8.297135	-8.344938	-8.326899
NAGARCH Skewed Norm GHA_Price (3,4)	3	4	-8.34425	-8.296615	-8.344418	-8.326379
NAGARCH Skewed Norm GHA_Price (3,1)	3	1	-8.328335	-8.292608	-8.328429	-8.314932
NAGARCH Skewed Norm GHA_Price (4,5)	4	5	-8.343983	-8.284439	-8.344244	-8.321644
NAGARCH Skewed Norm GHA_Price (5,3)	5	3	-8.34396	-8.284416	-8.344221	-8.321621
NAGARCH Skewed Norm GHA_Price (4,1)	4	1	-8.324723	-8.281057	-8.324863	-8.308341
NAGARCH Skewed Norm GHA_Price (3,5)	3	5	-8.332245	-8.28064	-8.332442	-8.312885
NAGARCH Skewed Norm GHA_Price (5,5)	5	5	-8.344898	-8.277415	-8.345233	-8.319581
NAGARCH Skewed Norm GHA_Price (4,3)	4	3	-8.32591	-8.274305	-8.326107	-8.30655
NAGARCH Skewed Norm GHA_Price (5,0)	5	0	-8.315212	-8.267577	-8.31538	-8.297341
NAGARCH Skewed Norm GHA_Price (3,0)	3	0	-8.298749	-8.266992	-8.298824	-8.286835

NAGARCH Skewed Norm GHA_Price (5,4)	5	4	-8.327319	-8.263805	-8.327616	-8.303491
NAGARCH Skewed Norm GHA_Price (4,0)	4	0	-8.299642	-8.259946	-8.299759	-8.28475
NAGARCH Skewed Norm GHA_Price (4,4)	4	4	-8.315415	-8.25984	-8.315642	-8.294565
NAGARCH Skewed Norm GHA_Price (2,0)	2	0	-7.703049	-7.679231	-7.703091	-7.694113
NAGARCH Skewed Norm GHA_Price (0,1)	0	1	-7.297402	-7.285493	-7.297412	-7.292934
NAGARCH Skewed Norm GHA_Price (0,2)	0	2	-7.300349	-7.284471	-7.300368	-7.294392
NAGARCH Skewed Norm GHA_Price (0,3)	0	3	-7.299551	-7.279703	-7.29958	-7.292105
NAGARCH Skewed Norm GHA_Price (0,4)	0	4	-7.298983	-7.275165	-7.299025	-7.290048
NAGARCH Skewed Norm GHA_Price (0,5)	0	5	-7.297285	-7.269497	-7.297342	-7.28686
NAGARCH Skewed Norm GHA_Price (1,0)	1	0	-2.762743	-2.746864	-2.762761	-2.756786

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student GHA_Price (3,0)	3	0	-8.64311	-8.611353	-8.643185	-8.631196
NAGARCH T-Student GHA_Price (1,1)	1	1	-8.619704	-8.599856	-8.619733	-8.612258
NAGARCH T-Student GHA_Price (4,0)	4	0	-8.639304	-8.599607	-8.63942	-8.624411
NAGARCH T-Student GHA_Price (1,2)	1	2	-8.621291	-8.597473	-8.621333	-8.612355
NAGARCH T-Student GHA_Price (3,1)	3	1	-8.63222	-8.596493	-8.632314	-8.618817
NAGARCH T-Student GHA_Price (1,3)	1	3	-8.620482	-8.592695	-8.620539	-8.610057
NAGARCH T-Student GHA_Price (2,4)	2	4	-8.631214	-8.591518	-8.63133	-8.616321
NAGARCH T-Student GHA_Price (3,2)	3	2	-8.629231	-8.589534	-8.629347	-8.614338
NAGARCH T-Student GHA_Price (2,5)	2	5	-8.6328	-8.589134	-8.632941	-8.616418
NAGARCH T-Student GHA_Price (1,4)	1	4	-8.620016	-8.588259	-8.620091	-8.608102
NAGARCH T-Student GHA_Price (4,1)	4	1	-8.630399	-8.586733	-8.630539	-8.614017
NAGARCH T-Student GHA_Price (1,5)	1	5	-8.621909	-8.586182	-8.622004	-8.608506
NAGARCH T-Student GHA_Price (3,3)	3	3	-8.62752	-8.583854	-8.627661	-8.611138
NAGARCH T-Student GHA_Price (4,2)	4	2	-8.628733	-8.581098	-8.628901	-8.610862
NAGARCH T-Student GHA_Price (3,4)	3	4	-8.626643	-8.579007	-8.62681	-8.608772
NAGARCH T-Student GHA_Price (4,4)	4	4	-8.633194	-8.577619	-8.633422	-8.612345

NAGARCH T-Student GHA_Price (5,1)	5	1	-8.628448	-8.576843	-8.628645	-8.609088
NAGARCH T-Student GHA_Price (4,3)	4	3	-8.626848	-8.575242	-8.627044	-8.607487
NAGARCH T-Student GHA_Price (3,5)	3	5	-8.625301	-8.573696	-8.625498	-8.605941
NAGARCH T-Student GHA_Price (5,2)	5	2	-8.624948	-8.569373	-8.625175	-8.604098
NAGARCH T-Student GHA_Price (4,5)	4	5	-8.628531	-8.568986	-8.628792	-8.606192
NAGARCH T-Student GHA_Price (5,3)	5	3	-8.617109	-8.557564	-8.61737	-8.59477
NAGARCH T-Student GHA_Price (5,5)	5	5	-8.617447	-8.549964	-8.617782	-8.59213
NAGARCH T-Student GHA_Price (1,0)	1	0	-8.563704	-8.547826	-8.563723	-8.557747
NAGARCH T-Student GHA_Price (2,0)	2	0	-8.562095	-8.538277	-8.562137	-8.55316
NAGARCH T-Student GHA_Price (5,0)	5	0	-8.557012	-8.509376	-8.557179	-8.539141
NAGARCH T-Student GHA_Price (5,4)	5	4	-8.555539	-8.492025	-8.555835	-8.531711
NAGARCH T-Student GHA_Price (0,1)	0	1	-8.404104	-8.392195	-8.404115	-8.399636
NAGARCH T-Student GHA_Price (0,2)	0	2	-8.399041	-8.383163	-8.39906	-8.393084
NAGARCH T-Student GHA_Price (0,3)	0	3	-8.400792	-8.380944	-8.400821	-8.393346
NAGARCH T-Student GHA_Price (0,4)	0	4	-8.395679	-8.371862	-8.395721	-8.386744
NAGARCH T-Student GHA_Price (0,5)	0	5	-8.393876	-8.366089	-8.393933	-8.383451

<i>NAGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student GHA_Price (3,0)	3	0	-8.641744	-8.606018	-8.641839	-8.628341
NAGARCH Skewed T-Student GHA_Price (3,1)	3	1	-8.636202	-8.596506	-8.636319	-8.62131
NAGARCH Skewed T-Student GHA_Price (1,1)	1	1	-8.618169	-8.594351	-8.618211	-8.609234
NAGARCH Skewed T-Student GHA_Price (1,2)	1	2	-8.619756	-8.591969	-8.619814	-8.609332
NAGARCH Skewed T-Student GHA_Price (1,3)	1	3	-8.618951	-8.587194	-8.619026	-8.607037
NAGARCH Skewed T-Student GHA_Price (3,2)	3	2	-8.627739	-8.584073	-8.62788	-8.611357
NAGARCH Skewed T-Student GHA_Price (2,0)	2	0	-8.611728	-8.58394	-8.611785	-8.601303

NAGARCH Skewed T-Student GHA_Price (1,4)	1	4	-8.618487	-8.58276	-8.618582	-8.605084
NAGARCH Skewed T-Student GHA_Price (2,2)	2	2	-8.617233	-8.581506	-8.617328	-8.60383
NAGARCH Skewed T-Student GHA_Price (1,5)	1	5	-8.620386	-8.58069	-8.620503	-8.605494
NAGARCH Skewed T-Student GHA_Price (4,1)	4	1	-8.627975	-8.580339	-8.628142	-8.610104
NAGARCH Skewed T-Student GHA_Price (4,2)	4	2	-8.63142	-8.579815	-8.631617	-8.61206
NAGARCH Skewed T-Student GHA_Price (3,4)	3	4	-8.626083	-8.574478	-8.62628	-8.606723
NAGARCH Skewed T-Student GHA_Price (5,1)	5	1	-8.627079	-8.571505	-8.627307	-8.60623
NAGARCH Skewed T-Student GHA_Price (4,3)	4	3	-8.625386	-8.569811	-8.625614	-8.604537
NAGARCH Skewed T-Student GHA_Price (4,4)	4	4	-8.627014	-8.567469	-8.627275	-8.604675
NAGARCH Skewed T-Student GHA_Price (5,5)	5	5	-8.632011	-8.560557	-8.632385	-8.605204
NAGARCH Skewed T-Student GHA_Price (3,5)	3	5	-8.615738	-8.560163	-8.615965	-8.594888
NAGARCH Skewed T-Student GHA_Price (5,3)	5	3	-8.617122	-8.553608	-8.617418	-8.593294
NAGARCH Skewed T-Student GHA_Price (4,5)	4	5	-8.614847	-8.551333	-8.615144	-8.591019
NAGARCH Skewed T-Student GHA_Price (5,4)	5	4	-8.613912	-8.546428	-8.614246	-8.588595
NAGARCH Skewed T-Student GHA_Price (5,2)	5	2	-8.60465	-8.545106	-8.604911	-8.582312
NAGARCH Skewed T-Student GHA_Price (1,0)	1	0	-8.561329	-8.541481	-8.561359	-8.553883
NAGARCH Skewed T-Student GHA_Price (4,0)	4	0	-8.559672	-8.516006	-8.559813	-8.54329
NAGARCH Skewed T-Student GHA_Price (5,0)	5	0	-8.557563	-8.505958	-8.55776	-8.538203
NAGARCH Skewed T-Student GHA_Price (0,1)	0	1	-8.41077	-8.394892	-8.410789	-8.404813
NAGARCH Skewed T-Student GHA_Price (0,2)	0	2	-8.39744	-8.377592	-8.397469	-8.389994
NAGARCH Skewed T-Student GHA_Price (0,3)	0	3	-8.39535	-8.371533	-8.395393	-8.386415
NAGARCH Skewed T-Student GHA_Price (0,4)	0	4	-8.396932	-8.369145	-8.39699	-8.386508
NAGARCH Skewed T-Student GHA_Price (0,5)	0	5	-8.392526	-8.360769	-8.3926	-8.380612
NAGARCH Skewed T-Student GHA_Price (2,3)	2	3	371.617576	371.657272	371.617459	371.632469
NAGARCH Skewed T-Student GHA_Price (2,1)	2	1	375.999235	376.030992	375.999161	376.011149
NAGARCH Skewed T-Student GHA_Price (2,4)	2	4	380.959101	381.002767	380.95896	380.975482

<i>KEN_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm KEN_Price (1,1)	1	1	-7.832322	-7.820413	-7.832332	-7.827854
SGARCH Norm KEN_Price (1,3)	1	3	-7.834279	-7.814431	-7.834309	-7.826833
SGARCH Norm KEN_Price (2,1)	2	1	-7.83029	-7.814412	-7.830309	-7.824333
SGARCH Norm KEN_Price (2,2)	2	2	-7.833817	-7.813969	-7.833846	-7.826371
SGARCH Norm KEN_Price (1,4)	1	4	-7.8373	-7.813482	-7.837342	-7.828365
SGARCH Norm KEN_Price (1,5)	1	5	-7.838631	-7.810843	-7.838688	-7.828206
SGARCH Norm KEN_Price (2,3)	2	3	-7.832736	-7.808918	-7.832778	-7.823801
SGARCH Norm KEN_Price (3,1)	3	1	-7.828156	-7.808307	-7.828185	-7.820709
SGARCH Norm KEN_Price (3,2)	3	2	-7.831841	-7.808024	-7.831883	-7.822906
SGARCH Norm KEN_Price (2,4)	2	4	-7.835765	-7.807978	-7.835822	-7.82534
SGARCH Norm KEN_Price (2,5)	2	5	-7.837171	-7.805414	-7.837246	-7.825257
SGARCH Norm KEN_Price (3,3)	3	3	-7.831199	-7.803411	-7.831256	-7.820774
SGARCH Norm KEN_Price (3,5)	3	5	-7.838592	-7.802866	-7.838687	-7.825189
SGARCH Norm KEN_Price (3,4)	3	4	-7.834231	-7.802474	-7.834306	-7.822317
SGARCH Norm KEN_Price (4,1)	4	1	-7.826282	-7.802464	-7.826324	-7.817347
SGARCH Norm KEN_Price (4,2)	4	2	-7.829849	-7.802062	-7.829907	-7.819425
SGARCH Norm KEN_Price (4,3)	4	3	-7.829234	-7.797477	-7.829309	-7.81732
SGARCH Norm KEN_Price (4,5)	4	5	-7.837057	-7.797361	-7.837174	-7.822165
SGARCH Norm KEN_Price (4,4)	4	4	-7.832695	-7.796968	-7.83279	-7.819292
SGARCH Norm KEN_Price (5,1)	5	1	-7.824363	-7.796576	-7.82442	-7.813938
SGARCH Norm KEN_Price (5,2)	5	2	-7.827961	-7.796204	-7.828036	-7.816048
SGARCH Norm KEN_Price (5,5)	5	5	-7.836604	-7.792938	-7.836745	-7.820222
SGARCH Norm KEN_Price (5,3)	5	3	-7.827378	-7.791652	-7.827473	-7.813975
SGARCH Norm KEN_Price (5,4)	5	4	-7.830861	-7.791165	-7.830978	-7.815969

SGARCH Norm KEN_Price (1,2)	1	2	-7.805794	-7.789916	-7.805813	-7.799838
SGARCH Norm KEN_Price (3,0)	3	0	-7.679803	-7.663924	-7.679821	-7.673846
SGARCH Norm KEN_Price (5,0)	5	0	-7.686561	-7.662743	-7.686603	-7.677626
SGARCH Norm KEN_Price (2,0)	2	0	-7.608248	-7.596339	-7.608258	-7.60378
SGARCH Norm KEN_Price (1,0)	1	0	-7.53182	-7.523881	-7.531825	-7.528842
SGARCH Norm KEN_Price (0,1)	0	1	-7.298177	-7.290238	-7.298182	-7.295199
SGARCH Norm KEN_Price (0,2)	0	2	-7.296887	-7.284978	-7.296898	-7.292419
SGARCH Norm KEN_Price (0,3)	0	3	-7.296255	-7.280376	-7.296273	-7.290298
SGARCH Norm KEN_Price (0,4)	0	4	-7.294849	-7.275001	-7.294878	-7.287403
SGARCH Norm KEN_Price (0,5)	0	5	-7.293531	-7.269713	-7.293573	-7.284595
SGARCH Norm KEN_Price (4,0)	4	0	-7.056165	-7.036317	-7.056195	-7.048719

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.833626	-7.817747	-7.833645	-7.827669
SGARCH Skewed Norm KEN_Price (1,3)	1	3	-7.83557	-7.811752	-7.835612	-7.826635
SGARCH Skewed Norm KEN_Price (2,1)	2	1	-7.831598	-7.81175	-7.831628	-7.824152
SGARCH Skewed Norm KEN_Price (2,2)	2	2	-7.835137	-7.811319	-7.835179	-7.826202
SGARCH Skewed Norm KEN_Price (1,4)	1	4	-7.838423	-7.810636	-7.83848	-7.827998
SGARCH Skewed Norm KEN_Price (1,5)	1	5	-7.839519	-7.807762	-7.839593	-7.827605
SGARCH Skewed Norm KEN_Price (2,3)	2	3	-7.83403	-7.806243	-7.834087	-7.823605
SGARCH Skewed Norm KEN_Price (3,1)	3	1	-7.829569	-7.805751	-7.829611	-7.820634
SGARCH Skewed Norm KEN_Price (3,2)	3	2	-7.833126	-7.805339	-7.833184	-7.822702
SGARCH Skewed Norm KEN_Price (2,4)	2	4	-7.836885	-7.805128	-7.83696	-7.824971
SGARCH Skewed Norm KEN_Price (2,5)	2	5	-7.837991	-7.802264	-7.838085	-7.824587
SGARCH Skewed Norm KEN_Price (3,3)	3	3	-7.832495	-7.800738	-7.83257	-7.820581
SGARCH Skewed Norm KEN_Price (3,5)	3	5	-7.839485	-7.799789	-7.839602	-7.824593
SGARCH Skewed Norm KEN_Price (4,1)	4	1	-7.827576	-7.799788	-7.827633	-7.817151
SGARCH Skewed Norm KEN_Price (3,4)	3	4	-7.835353	-7.799627	-7.835448	-7.82195

SGARCH Skewed Norm KEN_Price (4,2)	4	2	-7.831125	-7.799368	-7.8312	-7.819211
SGARCH Skewed Norm KEN_Price (4,3)	4	3	-7.830523	-7.794796	-7.830617	-7.81712
SGARCH Skewed Norm KEN_Price (4,5)	4	5	-7.837951	-7.794285	-7.838092	-7.821569
SGARCH Skewed Norm KEN_Price (4,4)	4	4	-7.833818	-7.794122	-7.833935	-7.818926
SGARCH Skewed Norm KEN_Price (5,1)	5	1	-7.825651	-7.793894	-7.825726	-7.813737
SGARCH Skewed Norm KEN_Price (5,2)	5	2	-7.829233	-7.793506	-7.829327	-7.815829
SGARCH Skewed Norm KEN_Price (5,5)	5	5	-7.837369	-7.789733	-7.837536	-7.819498
SGARCH Skewed Norm KEN_Price (5,3)	5	3	-7.828664	-7.788968	-7.82878	-7.813771
SGARCH Skewed Norm KEN_Price (5,4)	5	4	-7.831982	-7.788316	-7.832123	-7.8156
SGARCH Skewed Norm KEN_Price (1,2)	1	2	-7.803979	-7.784131	-7.804008	-7.796533
SGARCH Skewed Norm KEN_Price (2,0)	2	0	-7.633076	-7.617197	-7.633094	-7.627119
SGARCH Skewed Norm KEN_Price (0,2)	0	2	-7.297598	-7.28172	-7.297617	-7.291641
SGARCH Skewed Norm KEN_Price (0,3)	0	3	-7.297682	-7.277834	-7.297711	-7.290236
SGARCH Skewed Norm KEN_Price (0,1)	0	1	-7.287793	-7.275884	-7.287804	-7.283325
SGARCH Skewed Norm KEN_Price (0,4)	0	4	-7.297267	-7.27345	-7.297309	-7.288332
SGARCH Skewed Norm KEN_Price (0,5)	0	5	-7.294916	-7.267128	-7.294973	-7.284491
SGARCH Skewed Norm KEN_Price (5,0)	5	0	-7.14064	-7.112853	-7.140698	-7.130216
SGARCH Skewed Norm KEN_Price (1,0)	1	0	-6.103402	-6.091493	-6.103412	-6.098934
SGARCH Skewed Norm KEN_Price (3,0)	3	0	-5.965569	-5.945721	-5.965599	-5.958123
SGARCH Skewed Norm KEN_Price (4,0)	4	0	-4.466605	-4.442787	-4.466647	-4.457669

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student KEN_Price (1,1)	1	1	-8.085089	-8.069211	-8.085108	-8.079132
SGARCH T-Student KEN_Price (1,2)	1	2	-8.085442	-8.065594	-8.085472	-8.077996
SGARCH T-Student KEN_Price (2,1)	2	1	-8.083314	-8.063466	-8.083344	-8.075868
SGARCH T-Student KEN_Price (2,2)	2	2	-8.083907	-8.06009	-8.08395	-8.074972
SGARCH T-Student KEN_Price (1,3)	1	3	-8.083724	-8.059906	-8.083766	-8.074788
SGARCH T-Student KEN_Price (3,1)	3	1	-8.081601	-8.057784	-8.081644	-8.072666

SGARCH T-Student KEN_Price (1,4)	1	4	-8.082795	-8.055008	-8.082853	-8.072371
SGARCH T-Student KEN_Price (2,3)	2	3	-8.082189	-8.054401	-8.082246	-8.071764
SGARCH T-Student KEN_Price (3,2)	3	2	-8.08218	-8.054393	-8.082237	-8.071755
SGARCH T-Student KEN_Price (4,1)	4	1	-8.079963	-8.052175	-8.08002	-8.069538
SGARCH T-Student KEN_Price (1,5)	1	5	-8.08191	-8.050153	-8.081985	-8.069996
SGARCH T-Student KEN_Price (2,4)	2	4	-8.081261	-8.049503	-8.081335	-8.069347
SGARCH T-Student KEN_Price (3,3)	3	3	-8.080654	-8.048897	-8.080729	-8.06874
SGARCH T-Student KEN_Price (4,2)	4	2	-8.080478	-8.048721	-8.080552	-8.068564
SGARCH T-Student KEN_Price (5,1)	5	1	-8.078348	-8.046591	-8.078423	-8.066434
SGARCH T-Student KEN_Price (2,5)	2	5	-8.080728	-8.045002	-8.080823	-8.067325
SGARCH T-Student KEN_Price (3,4)	3	4	-8.0799	-8.044173	-8.079995	-8.066497
SGARCH T-Student KEN_Price (4,3)	4	3	-8.078954	-8.043228	-8.079049	-8.065551
SGARCH T-Student KEN_Price (5,2)	5	2	-8.078932	-8.043205	-8.079026	-8.065529
SGARCH T-Student KEN_Price (5,0)	5	0	-8.068328	-8.040541	-8.068385	-8.057903
SGARCH T-Student KEN_Price (3,0)	3	0	-8.060011	-8.040163	-8.06004	-8.052565
SGARCH T-Student KEN_Price (3,5)	3	5	-8.079304	-8.039607	-8.07942	-8.064411
SGARCH T-Student KEN_Price (4,0)	4	0	-8.063294	-8.039476	-8.063336	-8.054359
SGARCH T-Student KEN_Price (4,4)	4	4	-8.078365	-8.038669	-8.078482	-8.063473
SGARCH T-Student KEN_Price (5,3)	5	3	-8.077418	-8.037722	-8.077535	-8.062526
SGARCH T-Student KEN_Price (4,5)	4	5	-8.077768	-8.034102	-8.077909	-8.061386
SGARCH T-Student KEN_Price (5,4)	5	4	-8.076865	-8.0332	-8.077006	-8.060484
SGARCH T-Student KEN_Price (5,5)	5	5	-8.076222	-8.028586	-8.076389	-8.058351
SGARCH T-Student KEN_Price (2,0)	2	0	-8.025566	-8.009688	-8.025585	-8.019609
SGARCH T-Student KEN_Price (1,0)	1	0	-7.983094	-7.971185	-7.983105	-7.978626
SGARCH T-Student KEN_Price (0,1)	0	1	-7.904313	-7.892405	-7.904324	-7.899846
SGARCH T-Student KEN_Price (0,3)	0	3	-7.905103	-7.885255	-7.905133	-7.897657
SGARCH T-Student KEN_Price (0,4)	0	4	-7.903906	-7.880088	-7.903948	-7.89497
SGARCH T-Student KEN_Price (0,5)	0	5	-7.9024	-7.874613	-7.902458	-7.891976

SGARCH T-Student KEN_Price (0,2)	0	2	-7.842766	-7.826887	-7.842784	-7.836809
<i>SGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.086119	-8.066271	-8.086148	-8.078673
SGARCH Skewed T-Student KEN_Price (1,2)	1	2	-8.086359	-8.062541	-8.086401	-8.077423
SGARCH Skewed T-Student KEN_Price (2,1)	2	1	-8.084363	-8.060545	-8.084405	-8.075428
SGARCH Skewed T-Student KEN_Price (2,2)	2	2	-8.084824	-8.057036	-8.084881	-8.074399
SGARCH Skewed T-Student KEN_Price (1,3)	1	3	-8.084662	-8.056874	-8.084719	-8.074237
SGARCH Skewed T-Student KEN_Price (3,1)	3	1	-8.082677	-8.05489	-8.082735	-8.072253
SGARCH Skewed T-Student KEN_Price (1,4)	1	4	-8.083739	-8.051982	-8.083814	-8.071825
SGARCH Skewed T-Student KEN_Price (2,3)	2	3	-8.083127	-8.05137	-8.083202	-8.071213
SGARCH Skewed T-Student KEN_Price (3,2)	3	2	-8.083123	-8.051366	-8.083198	-8.071209
SGARCH Skewed T-Student KEN_Price (4,1)	4	1	-8.081063	-8.049306	-8.081137	-8.069149
SGARCH Skewed T-Student KEN_Price (1,5)	1	5	-8.082805	-8.047078	-8.0829	-8.069402
SGARCH Skewed T-Student KEN_Price (2,4)	2	4	-8.082204	-8.046477	-8.082299	-8.068801
SGARCH Skewed T-Student KEN_Price (3,3)	3	3	-8.081592	-8.045865	-8.081686	-8.068189
SGARCH Skewed T-Student KEN_Price (4,2)	4	2	-8.08144	-8.045713	-8.081534	-8.068036
SGARCH Skewed T-Student KEN_Price (5,1)	5	1	-8.079473	-8.043747	-8.079568	-8.06607
SGARCH Skewed T-Student KEN_Price (2,5)	2	5	-8.081631	-8.041934	-8.081747	-8.066738
SGARCH Skewed T-Student KEN_Price (3,4)	3	4	-8.080843	-8.041146	-8.080959	-8.06595
SGARCH Skewed T-Student KEN_Price (5,2)	5	2	-8.079921	-8.040225	-8.080037	-8.065028
SGARCH Skewed T-Student KEN_Price (4,3)	4	3	-8.079911	-8.040214	-8.080027	-8.065018
SGARCH Skewed T-Student KEN_Price (5,0)	5	0	-8.069808	-8.038051	-8.069883	-8.057894
SGARCH Skewed T-Student KEN_Price (3,0)	3	0	-8.06159	-8.037772	-8.061632	-8.052655
SGARCH Skewed T-Student KEN_Price (4,0)	4	0	-8.064743	-8.036956	-8.0648	-8.054318
SGARCH Skewed T-Student KEN_Price (3,5)	3	5	-8.080195	-8.036529	-8.080336	-8.063813
SGARCH Skewed T-Student KEN_Price (4,4)	4	4	-8.079308	-8.035642	-8.079449	-8.062926
SGARCH Skewed T-Student KEN_Price (5,3)	5	3	-8.0784	-8.034734	-8.078541	-8.062018

SGARCH Skewed T-Student KEN_Price (4,5)	4	5	-8.07866	-8.031024	-8.078827	-8.060789
SGARCH Skewed T-Student KEN_Price (5,4)	5	4	-8.077842	-8.030206	-8.078009	-8.059971
SGARCH Skewed T-Student KEN_Price (5,5)	5	5	-8.07711	-8.025505	-8.077306	-8.05775
SGARCH Skewed T-Student KEN_Price (2,0)	2	0	-8.027258	-8.00741	-8.027288	-8.019812
SGARCH Skewed T-Student KEN_Price (1,0)	1	0	-7.984176	-7.968297	-7.984194	-7.978219
SGARCH Skewed T-Student KEN_Price (0,1)	0	1	-7.906559	-7.89068	-7.906578	-7.900602
SGARCH Skewed T-Student KEN_Price (0,2)	0	2	-7.907781	-7.887933	-7.90781	-7.900335
SGARCH Skewed T-Student KEN_Price (0,3)	0	3	-7.906349	-7.882531	-7.906391	-7.897413
SGARCH Skewed T-Student KEN_Price (0,4)	0	4	-7.90133	-7.873542	-7.901387	-7.890905
SGARCH Skewed T-Student KEN_Price (0,5)	0	5	-7.904499	-7.872742	-7.904574	-7.892585

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm KEN_Price (1,1)	1	1	-7.825979	-7.80613	-7.826008	-7.818532
APARCH Norm KEN_Price (1,2)	1	2	-7.828214	-7.804396	-7.828256	-7.819279
APARCH Norm KEN_Price (1,3)	1	3	-7.82657	-7.798783	-7.826627	-7.816145
APARCH Norm KEN_Price (1,4)	1	4	-7.825529	-7.793772	-7.825604	-7.813615
APARCH Norm KEN_Price (1,5)	1	5	-7.826133	-7.790406	-7.826227	-7.812729
APARCH Norm KEN_Price (2,1)	2	1	-7.815204	-7.787417	-7.815261	-7.804779
APARCH Norm KEN_Price (2,2)	2	2	-7.81704	-7.785283	-7.817115	-7.805126
APARCH Norm KEN_Price (2,3)	2	3	-7.81395	-7.778224	-7.814045	-7.800547
APARCH Norm KEN_Price (2,4)	2	4	-7.815632	-7.775936	-7.815749	-7.80074
APARCH Norm KEN_Price (2,5)	2	5	-7.81572	-7.772054	-7.815861	-7.799338
APARCH Norm KEN_Price (3,1)	3	1	-7.805282	-7.769556	-7.805377	-7.791879
APARCH Norm KEN_Price (3,2)	3	2	-7.806871	-7.767175	-7.806988	-7.791979
APARCH Norm KEN_Price (3,3)	3	3	-7.805179	-7.761513	-7.80532	-7.788797
APARCH Norm KEN_Price (3,4)	3	4	-7.801209	-7.753573	-7.801377	-7.783338
APARCH Norm KEN_Price (4,1)	4	1	-7.796926	-7.75326	-7.797067	-7.780544
APARCH Norm KEN_Price (4,2)	4	2	-7.798716	-7.75108	-7.798883	-7.780845

APARCH Norm KEN_Price (3,5)	3	5	-7.8022	-7.750595	-7.802397	-7.78284
APARCH Norm KEN_Price (4,3)	4	3	-7.793254	-7.741649	-7.793451	-7.773894
APARCH Norm KEN_Price (5,1)	5	1	-7.792548	-7.740943	-7.792745	-7.773188
APARCH Norm KEN_Price (4,4)	4	4	-7.793743	-7.738168	-7.79397	-7.772893
APARCH Norm KEN_Price (5,2)	5	2	-7.791894	-7.736319	-7.792122	-7.771045
APARCH Norm KEN_Price (4,5)	4	5	-7.79093	-7.731386	-7.791192	-7.768592
APARCH Norm KEN_Price (5,3)	5	3	-7.78626	-7.726716	-7.786522	-7.763922
APARCH Norm KEN_Price (5,4)	5	4	-7.788207	-7.724693	-7.788504	-7.764379
APARCH Norm KEN_Price (5,5)	5	5	-7.78561	-7.718127	-7.785945	-7.760293
APARCH Norm KEN_Price (5,0)	5	0	-7.609582	-7.561947	-7.60975	-7.591711
APARCH Norm KEN_Price (4,0)	4	0	-7.592372	-7.552676	-7.592489	-7.57748
APARCH Norm KEN_Price (3,0)	3	0	-7.582921	-7.551164	-7.582996	-7.571007
APARCH Norm KEN_Price (2,0)	2	0	-7.515264	-7.491446	-7.515306	-7.506329
APARCH Norm KEN_Price (1,0)	1	0	-7.479204	-7.463325	-7.479222	-7.473247
APARCH Norm KEN_Price (0,1)	0	1	-7.275269	-7.26336	-7.27528	-7.270801
APARCH Norm KEN_Price (0,2)	0	2	-7.273287	-7.257408	-7.273306	-7.26733
APARCH Norm KEN_Price (0,3)	0	3	-7.270008	-7.250159	-7.270037	-7.262561
APARCH Norm KEN_Price (0,4)	0	4	-7.265254	-7.241436	-7.265296	-7.256318
APARCH Norm KEN_Price (0,5)	0	5	-7.260355	-7.232567	-7.260412	-7.24993

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm KEN_Price (1,1)	1	1	-7.827279	-7.803461	-7.827321	-7.818344
APARCH Skewed Norm KEN_Price (1,2)	1	2	-7.829145	-7.801358	-7.829203	-7.818721
APARCH Skewed Norm KEN_Price (1,3)	1	3	-7.828065	-7.796308	-7.82814	-7.816151
APARCH Skewed Norm KEN_Price (1,4)	1	4	-7.827256	-7.79153	-7.827351	-7.813853
APARCH Skewed Norm KEN_Price (1,5)	1	5	-7.827126	-7.78743	-7.827243	-7.812233
APARCH Skewed Norm KEN_Price (2,1)	2	1	-7.815921	-7.784164	-7.815996	-7.804007
APARCH Skewed Norm KEN_Price (2,2)	2	2	-7.817415	-7.781689	-7.81751	-7.804012

APARCH Skewed Norm KEN_Price (2,3)	2	3	-7.816378	-7.776682	-7.816495	-7.801486
APARCH Skewed Norm KEN_Price (2,4)	2	4	-7.81687	-7.773205	-7.817011	-7.800489
APARCH Skewed Norm KEN_Price (3,1)	3	1	-7.806122	-7.766426	-7.806239	-7.79123
APARCH Skewed Norm KEN_Price (2,5)	2	5	-7.813484	-7.765848	-7.813651	-7.795613
APARCH Skewed Norm KEN_Price (3,2)	3	2	-7.80684	-7.763174	-7.806981	-7.790458
APARCH Skewed Norm KEN_Price (3,4)	3	4	-7.81363	-7.762025	-7.813827	-7.79427
APARCH Skewed Norm KEN_Price (3,3)	3	3	-7.806493	-7.758858	-7.806661	-7.788622
APARCH Skewed Norm KEN_Price (3,5)	3	5	-7.809282	-7.753708	-7.80951	-7.788433
APARCH Skewed Norm KEN_Price (4,1)	4	1	-7.800404	-7.752769	-7.800572	-7.782533
APARCH Skewed Norm KEN_Price (4,2)	4	2	-7.799266	-7.747661	-7.799463	-7.779906
APARCH Skewed Norm KEN_Price (4,3)	4	3	-7.797748	-7.742173	-7.797976	-7.776899
APARCH Skewed Norm KEN_Price (5,1)	5	1	-7.793046	-7.737471	-7.793274	-7.772197
APARCH Skewed Norm KEN_Price (5,2)	5	2	-7.792066	-7.732522	-7.792327	-7.769728
APARCH Skewed Norm KEN_Price (4,4)	4	4	-7.791113	-7.731569	-7.791374	-7.768774
APARCH Skewed Norm KEN_Price (4,5)	4	5	-7.79035	-7.726836	-7.790646	-7.766522
APARCH Skewed Norm KEN_Price (5,3)	5	3	-7.788724	-7.72521	-7.789021	-7.764896
APARCH Skewed Norm KEN_Price (5,4)	5	4	-7.781947	-7.714463	-7.782282	-7.75663
APARCH Skewed Norm KEN_Price (5,5)	5	5	-7.785747	-7.714294	-7.786122	-7.758941
APARCH Skewed Norm KEN_Price (3,0)	3	0	-7.60944	-7.573714	-7.609535	-7.596037
APARCH Skewed Norm KEN_Price (4,0)	4	0	-7.616155	-7.572489	-7.616296	-7.599773
APARCH Skewed Norm KEN_Price (5,0)	5	0	-7.623677	-7.572072	-7.623874	-7.604317
APARCH Skewed Norm KEN_Price (1,0)	1	0	-7.551014	-7.531166	-7.551044	-7.543568
APARCH Skewed Norm KEN_Price (2,0)	2	0	-7.550608	-7.522821	-7.550665	-7.540183
APARCH Skewed Norm KEN_Price (0,1)	0	1	-7.27961	-7.263731	-7.279628	-7.273653
APARCH Skewed Norm KEN_Price (0,2)	0	2	-7.275402	-7.255554	-7.275431	-7.267956
APARCH Skewed Norm KEN_Price (0,3)	0	3	-7.271385	-7.247567	-7.271427	-7.26245
APARCH Skewed Norm KEN_Price (0,4)	0	4	-7.267826	-7.240038	-7.267883	-7.257401
APARCH Skewed Norm KEN_Price (0,5)	0	5	-7.263342	-7.231585	-7.263417	-7.251428

<i>APARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student KEN_Price (1,2)	1	2	-8.090057	-8.06227	-8.090115	-8.079633
APARCH T-Student KEN_Price (2,1)	2	1	-8.085773	-8.054016	-8.085848	-8.073859
APARCH T-Student KEN_Price (1,4)	1	4	-8.087765	-8.052039	-8.08786	-8.074362
APARCH T-Student KEN_Price (1,5)	1	5	-8.087745	-8.048049	-8.087862	-8.072853
APARCH T-Student KEN_Price (2,3)	2	3	-8.086549	-8.046853	-8.086666	-8.071657
APARCH T-Student KEN_Price (2,4)	2	4	-8.086053	-8.042387	-8.086194	-8.069672
APARCH T-Student KEN_Price (3,1)	3	1	-8.077848	-8.038152	-8.077965	-8.062956
APARCH T-Student KEN_Price (2,5)	2	5	-8.085471	-8.037836	-8.085639	-8.0676
APARCH T-Student KEN_Price (4,1)	4	1	-8.079949	-8.032313	-8.080116	-8.062078
APARCH T-Student KEN_Price (1,3)	1	3	-8.060307	-8.02855	-8.060382	-8.048393
APARCH T-Student KEN_Price (1,1)	1	1	-8.050764	-8.026946	-8.050806	-8.041828
APARCH T-Student KEN_Price (4,4)	4	4	-8.079914	-8.020369	-8.080175	-8.057575
APARCH T-Student KEN_Price (5,3)	5	3	-8.077506	-8.013992	-8.077803	-8.053678
APARCH T-Student KEN_Price (3,2)	3	2	-8.052875	-8.009209	-8.053016	-8.036494
APARCH T-Student KEN_Price (2,2)	2	2	-8.035979	-8.000252	-8.036073	-8.022576
APARCH T-Student KEN_Price (3,4)	3	4	-8.044517	-7.992911	-8.044713	-8.025156
APARCH T-Student KEN_Price (3,5)	3	5	-8.045456	-7.989881	-8.045683	-8.024606
APARCH T-Student KEN_Price (4,3)	4	3	-8.043379	-7.987804	-8.043606	-8.022529
APARCH T-Student KEN_Price (3,3)	3	3	-8.030401	-7.982765	-8.030568	-8.01253
APARCH T-Student KEN_Price (4,5)	4	5	-8.044271	-7.980757	-8.044567	-8.020443
APARCH T-Student KEN_Price (5,4)	5	4	-8.040156	-7.972672	-8.04049	-8.014839
APARCH T-Student KEN_Price (4,2)	4	2	-8.023651	-7.972046	-8.023848	-8.004291
APARCH T-Student KEN_Price (5,5)	5	5	-8.041476	-7.970023	-8.041851	-8.01467
APARCH T-Student KEN_Price (1,0)	1	0	-7.989394	-7.969545	-7.989423	-7.981947
APARCH T-Student KEN_Price (5,2)	5	2	-8.028711	-7.969167	-8.028972	-8.006373
APARCH T-Student KEN_Price (5,1)	5	1	-7.989769	-7.934195	-7.989997	-7.96892

APARCH T-Student KEN_Price (3,0)	3	0	-7.96275	-7.927024	-7.962845	-7.949347
APARCH T-Student KEN_Price (5,0)	5	0	-7.959589	-7.907984	-7.959785	-7.940229
APARCH T-Student KEN_Price (4,0)	4	0	-7.948401	-7.904735	-7.948542	-7.93202
APARCH T-Student KEN_Price (2,0)	2	0	-7.926897	-7.899109	-7.926954	-7.916472
APARCH T-Student KEN_Price (0,1)	0	1	-7.908388	-7.892509	-7.908407	-7.902431
APARCH T-Student KEN_Price (0,2)	0	2	-7.869995	-7.850147	-7.870024	-7.862549
APARCH T-Student KEN_Price (0,3)	0	3	-7.868727	-7.844909	-7.868769	-7.859792
APARCH T-Student KEN_Price (0,4)	0	4	-7.866978	-7.839191	-7.867036	-7.856554
APARCH T-Student KEN_Price (0,5)	0	5	-7.865096	-7.833339	-7.865171	-7.853182

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student KEN_Price (1,2)	1	2	-8.091063	-8.059306	-8.091138	-8.079149
APARCH Skewed T-Student KEN_Price (1,3)	1	3	-8.0896	-8.053873	-8.089695	-8.076197
APARCH Skewed T-Student KEN_Price (1,4)	1	4	-8.088802	-8.049105	-8.088918	-8.073909
APARCH Skewed T-Student KEN_Price (1,5)	1	5	-8.088642	-8.044976	-8.088783	-8.07226
APARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.063373	-8.035586	-8.06343	-8.052948
APARCH Skewed T-Student KEN_Price (2,5)	2	5	-8.085546	-8.033941	-8.085742	-8.066186
APARCH Skewed T-Student KEN_Price (3,3)	3	3	-8.084258	-8.032653	-8.084454	-8.064898
APARCH Skewed T-Student KEN_Price (2,1)	2	1	-8.063397	-8.02767	-8.063491	-8.049993
APARCH Skewed T-Student KEN_Price (3,5)	3	5	-8.083292	-8.023747	-8.083553	-8.060953
APARCH Skewed T-Student KEN_Price (4,2)	4	2	-8.07883	-8.023255	-8.079058	-8.057981
APARCH Skewed T-Student KEN_Price (5,1)	5	1	-8.078106	-8.018561	-8.078367	-8.055767
APARCH Skewed T-Student KEN_Price (5,2)	5	2	-8.079803	-8.016289	-8.0801	-8.055975
APARCH Skewed T-Student KEN_Price (2,2)	2	2	-8.053671	-8.013975	-8.053788	-8.038779
APARCH Skewed T-Student KEN_Price (4,5)	4	5	-8.080057	-8.012574	-8.080392	-8.05474
APARCH Skewed T-Student KEN_Price (5,3)	5	3	-8.078352	-8.010868	-8.078686	-8.053034
APARCH Skewed T-Student KEN_Price (5,5)	5	5	-8.077694	-8.002271	-8.078111	-8.049398
APARCH Skewed T-Student KEN_Price (2,0)	2	0	-8.031368	-7.999611	-8.031443	-8.019454

APARCH Skewed T-Student KEN_Price (4,3)	4	3	-8.052364	-7.992819	-8.052625	-8.030025
APARCH Skewed T-Student KEN_Price (2,4)	2	4	-8.038756	-7.99112	-8.038923	-8.020885
APARCH Skewed T-Student KEN_Price (3,2)	3	2	-8.038555	-7.990919	-8.038722	-8.020684
APARCH Skewed T-Student KEN_Price (2,3)	2	3	-8.02903	-7.985364	-8.029171	-8.012648
APARCH Skewed T-Student KEN_Price (4,1)	4	1	-8.036837	-7.985232	-8.037033	-8.017477
APARCH Skewed T-Student KEN_Price (3,4)	3	4	-8.040402	-7.984827	-8.04063	-8.019553
APARCH Skewed T-Student KEN_Price (3,1)	3	1	-8.025882	-7.982217	-8.026023	-8.009501
APARCH Skewed T-Student KEN_Price (4,4)	4	4	-8.038308	-7.974794	-8.038605	-8.01448
APARCH Skewed T-Student KEN_Price (5,4)	5	4	-8.010415	-7.938961	-8.010789	-7.983608
APARCH Skewed T-Student KEN_Price (4,0)	4	0	-7.960828	-7.913193	-7.960996	-7.942957
APARCH Skewed T-Student KEN_Price (3,0)	3	0	-7.946082	-7.906386	-7.946198	-7.931189
APARCH Skewed T-Student KEN_Price (5,0)	5	0	-7.949086	-7.893511	-7.949313	-7.928236
APARCH Skewed T-Student KEN_Price (0,2)	0	2	-7.914844	-7.891027	-7.914887	-7.905909
APARCH Skewed T-Student KEN_Price (0,3)	0	3	-7.913321	-7.885533	-7.913378	-7.902896
APARCH Skewed T-Student KEN_Price (0,4)	0	4	-7.911778	-7.880021	-7.911853	-7.899864
APARCH Skewed T-Student KEN_Price (0,5)	0	5	-7.910243	-7.874516	-7.910337	-7.896839
APARCH Skewed T-Student KEN_Price (1,0)	1	0	-7.895691	-7.871873	-7.895733	-7.886756
APARCH Skewed T-Student KEN_Price (0,1)	0	1	-7.87648	-7.856632	-7.876509	-7.869034

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm KEN_Price (2,2)	2	2	-7.82597	-7.798182	-7.826027	-7.815545
TGARCH Norm KEN_Price (1,1)	1	1	-7.812136	-7.796257	-7.812155	-7.806179
TGARCH Norm KEN_Price (3,3)	3	3	-7.835839	-7.796143	-7.835956	-7.820947
TGARCH Norm KEN_Price (2,1)	2	1	-7.817245	-7.793427	-7.817287	-7.80831
TGARCH Norm KEN_Price (1,2)	1	2	-7.81288	-7.793032	-7.812909	-7.805434
TGARCH Norm KEN_Price (2,3)	2	3	-7.821423	-7.789666	-7.821497	-7.809509
TGARCH Norm KEN_Price (1,3)	1	3	-7.812885	-7.789068	-7.812928	-7.80395
TGARCH Norm KEN_Price (2,4)	2	4	-7.824743	-7.789017	-7.824838	-7.81134

TGARCH Norm KEN_Price (1,4)	1	4	-7.816313	-7.788526	-7.816371	-7.805889
TGARCH Norm KEN_Price (3,2)	3	2	-7.823023	-7.787296	-7.823117	-7.809619
TGARCH Norm KEN_Price (1,5)	1	5	-7.819018	-7.787261	-7.819093	-7.807104
TGARCH Norm KEN_Price (4,3)	4	3	-7.832657	-7.785022	-7.832825	-7.814786
TGARCH Norm KEN_Price (2,5)	2	5	-7.823233	-7.783537	-7.82335	-7.808341
TGARCH Norm KEN_Price (3,4)	3	4	-7.826081	-7.782415	-7.826222	-7.809699
TGARCH Norm KEN_Price (3,1)	3	1	-7.813921	-7.782164	-7.813996	-7.802007
TGARCH Norm KEN_Price (4,2)	4	2	-7.820002	-7.776336	-7.820143	-7.80362
TGARCH Norm KEN_Price (4,4)	4	4	-7.82518	-7.773575	-7.825376	-7.80582
TGARCH Norm KEN_Price (3,5)	3	5	-7.820715	-7.773079	-7.820882	-7.802844
TGARCH Norm KEN_Price (4,1)	4	1	-7.810803	-7.771107	-7.81092	-7.795911
TGARCH Norm KEN_Price (4,5)	4	5	-7.823777	-7.768202	-7.824004	-7.802927
TGARCH Norm KEN_Price (5,2)	5	2	-7.816883	-7.765278	-7.81708	-7.797523
TGARCH Norm KEN_Price (5,4)	5	4	-7.822242	-7.762697	-7.822503	-7.799903
TGARCH Norm KEN_Price (5,1)	5	1	-7.807872	-7.760236	-7.808039	-7.790001
TGARCH Norm KEN_Price (5,3)	5	3	-7.813678	-7.758103	-7.813905	-7.792828
TGARCH Norm KEN_Price (5,5)	5	5	-7.816344	-7.75283	-7.816641	-7.792516
TGARCH Norm KEN_Price (5,0)	5	0	-7.713288	-7.669622	-7.713429	-7.696906
TGARCH Norm KEN_Price (4,0)	4	0	-7.692112	-7.656385	-7.692206	-7.678709
TGARCH Norm KEN_Price (0,3)	0	3	-7.405816	-7.389937	-7.405835	-7.399859
TGARCH Norm KEN_Price (0,5)	0	5	-7.40943	-7.385612	-7.409472	-7.400494
TGARCH Norm KEN_Price (0,4)	0	4	-7.404256	-7.384408	-7.404286	-7.39681
TGARCH Norm KEN_Price (3,0)	3	0	-7.338491	-7.310704	-7.338549	-7.328067
TGARCH Norm KEN_Price (2,0)	2	0	-6.137858	-6.11801	-6.137887	-6.130412
TGARCH Norm KEN_Price (1,0)	1	0	10.412536	10.424445	10.412525	10.417004
TGARCH Norm KEN_Price (0,2)	0	2	65.113725	65.125634	65.113715	65.118193
TGARCH Norm KEN_Price (0,1)	0	1	65.634622	65.642562	65.634618	65.637601

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm KEN_Price (2,2)	2	2	-7.827336	-7.795579	-7.827411	-7.815423
TGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.81445	-7.794602	-7.81448	-7.807004
TGARCH Skewed Norm KEN_Price (3,3)	3	3	-7.835751	-7.792085	-7.835892	-7.819369
TGARCH Skewed Norm KEN_Price (2,1)	2	1	-7.819628	-7.791841	-7.819685	-7.809203
TGARCH Skewed Norm KEN_Price (1,2)	1	2	-7.815297	-7.79148	-7.815339	-7.806362
TGARCH Skewed Norm KEN_Price (2,3)	2	3	-7.82371	-7.787984	-7.823805	-7.810307
TGARCH Skewed Norm KEN_Price (1,3)	1	3	-7.815541	-7.787754	-7.815598	-7.805116
TGARCH Skewed Norm KEN_Price (1,4)	1	4	-7.819041	-7.787284	-7.819116	-7.807127
TGARCH Skewed Norm KEN_Price (2,4)	2	4	-7.826157	-7.786461	-7.826274	-7.811265
TGARCH Skewed Norm KEN_Price (1,5)	1	5	-7.821394	-7.785668	-7.821489	-7.807991
TGARCH Skewed Norm KEN_Price (3,2)	3	2	-7.824407	-7.78471	-7.824523	-7.809514
TGARCH Skewed Norm KEN_Price (2,5)	2	5	-7.824668	-7.781002	-7.824809	-7.808286
TGARCH Skewed Norm KEN_Price (4,3)	4	3	-7.832571	-7.780966	-7.832768	-7.813211
TGARCH Skewed Norm KEN_Price (3,1)	3	1	-7.816328	-7.780602	-7.816423	-7.802925
TGARCH Skewed Norm KEN_Price (3,4)	3	4	-7.826725	-7.77909	-7.826893	-7.808854
TGARCH Skewed Norm KEN_Price (3,5)	3	5	-7.825663	-7.774058	-7.825859	-7.806302
TGARCH Skewed Norm KEN_Price (4,2)	4	2	-7.821494	-7.773858	-7.821661	-7.803623
TGARCH Skewed Norm KEN_Price (4,4)	4	4	-7.826978	-7.771403	-7.827205	-7.806128
TGARCH Skewed Norm KEN_Price (4,1)	4	1	-7.813214	-7.769549	-7.813355	-7.796833
TGARCH Skewed Norm KEN_Price (4,5)	4	5	-7.825505	-7.765961	-7.825767	-7.803167
TGARCH Skewed Norm KEN_Price (5,2)	5	2	-7.819268	-7.763693	-7.819496	-7.798419
TGARCH Skewed Norm KEN_Price (5,1)	5	1	-7.815079	-7.763474	-7.815275	-7.795719
TGARCH Skewed Norm KEN_Price (5,3)	5	3	-7.818672	-7.759127	-7.818933	-7.796333
TGARCH Skewed Norm KEN_Price (5,4)	5	4	-7.82035	-7.756836	-7.820647	-7.796523
TGARCH Skewed Norm KEN_Price (5,5)	5	5	-7.823398	-7.755915	-7.823733	-7.798081
TGARCH Skewed Norm KEN_Price (5,0)	5	0	-7.732977	-7.685342	-7.733145	-7.715106
TGARCH Skewed Norm KEN_Price (4,0)	4	0	-7.696475	-7.656779	-7.696592	-7.681583

TGARCH Skewed Norm KEN_Price (3,0)	3	0	-7.644402	-7.612645	-7.644477	-7.632488
TGARCH Skewed Norm KEN_Price (0,2)	0	2	-7.413338	-7.39746	-7.413357	-7.407381
TGARCH Skewed Norm KEN_Price (0,5)	0	5	-7.409888	-7.3821	-7.409945	-7.399463
TGARCH Skewed Norm KEN_Price (2,0)	2	0	-7.05031	-7.026492	-7.050352	-7.041374
TGARCH Skewed Norm KEN_Price (1,0)	1	0	10.542873	10.558751	10.542854	10.54883
TGARCH Skewed Norm KEN_Price (0,3)	0	3	55.596673	55.616521	55.596643	55.604119
TGARCH Skewed Norm KEN_Price (0,4)	0	4	57.505726	57.529544	57.505684	57.514662
TGARCH Skewed Norm KEN_Price (0,1)	0	1	67.743288	67.755197	67.743278	67.747756

TGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student KEN_Price (1,1)	1	1	-8.088581	-8.068733	-8.088611	-8.081135
TGARCH T-Student KEN_Price (1,2)	1	2	-8.090303	-8.066485	-8.090345	-8.081367
TGARCH T-Student KEN_Price (1,3)	1	3	-8.088874	-8.061087	-8.088932	-8.07845
TGARCH T-Student KEN_Price (2,1)	2	1	-8.088784	-8.060997	-8.088841	-8.078359
TGARCH T-Student KEN_Price (2,2)	2	2	-8.091257	-8.0595	-8.091332	-8.079343
TGARCH T-Student KEN_Price (1,4)	1	4	-8.088141	-8.056384	-8.088216	-8.076227
TGARCH T-Student KEN_Price (2,3)	2	3	-8.089826	-8.0541	-8.089921	-8.076423
TGARCH T-Student KEN_Price (1,5)	1	5	-8.088071	-8.052344	-8.088165	-8.074667
TGARCH T-Student KEN_Price (3,1)	3	1	-8.085904	-8.050178	-8.085999	-8.072501
TGARCH T-Student KEN_Price (2,4)	2	4	-8.088655	-8.048959	-8.088772	-8.073763
TGARCH T-Student KEN_Price (3,2)	3	2	-8.087732	-8.048036	-8.087848	-8.072839
TGARCH T-Student KEN_Price (2,5)	2	5	-8.087521	-8.043856	-8.087662	-8.07114
TGARCH T-Student KEN_Price (3,3)	3	3	-8.086378	-8.042712	-8.086519	-8.069996
TGARCH T-Student KEN_Price (4,1)	4	1	-8.082783	-8.039117	-8.082924	-8.066401
TGARCH T-Student KEN_Price (3,4)	3	4	-8.085585	-8.03795	-8.085753	-8.067714
TGARCH T-Student KEN_Price (4,2)	4	2	-8.085263	-8.037628	-8.085431	-8.067392
TGARCH T-Student KEN_Price (3,0)	3	0	-8.066886	-8.035129	-8.066961	-8.054972
TGARCH T-Student KEN_Price (3,5)	3	5	-8.084552	-8.032947	-8.084749	-8.065192

TGARCH T-Student KEN_Price (4,3)	4	3	-8.083728	-8.032123	-8.083925	-8.064368
TGARCH T-Student KEN_Price (5,1)	5	1	-8.079728	-8.028123	-8.079924	-8.060368
TGARCH T-Student KEN_Price (4,4)	4	4	-8.082447	-8.026872	-8.082675	-8.061598
TGARCH T-Student KEN_Price (2,0)	2	0	-8.050682	-8.026864	-8.050724	-8.041746
TGARCH T-Student KEN_Price (5,2)	5	2	-8.082074	-8.026499	-8.082301	-8.061224
TGARCH T-Student KEN_Price (4,0)	4	0	-8.063433	-8.023737	-8.063549	-8.04854
TGARCH T-Student KEN_Price (4,5)	4	5	-8.081107	-8.021562	-8.081368	-8.058768
TGARCH T-Student KEN_Price (5,3)	5	3	-8.079941	-8.020397	-8.080202	-8.057602
TGARCH T-Student KEN_Price (5,0)	5	0	-8.064464	-8.016829	-8.064632	-8.046593
TGARCH T-Student KEN_Price (5,4)	5	4	-8.079472	-8.015958	-8.079768	-8.055644
TGARCH T-Student KEN_Price (5,5)	5	5	-8.0784	-8.010917	-8.078735	-8.053083
TGARCH T-Student KEN_Price (1,0)	1	0	-7.990885	-7.975006	-7.990904	-7.984928
TGARCH T-Student KEN_Price (0,1)	0	1	-7.898742	-7.886834	-7.898753	-7.894275
TGARCH T-Student KEN_Price (0,2)	0	2	-7.898474	-7.882595	-7.898492	-7.892517
TGARCH T-Student KEN_Price (0,3)	0	3	-7.897109	-7.877261	-7.897138	-7.889663
TGARCH T-Student KEN_Price (0,4)	0	4	-7.895621	-7.871804	-7.895664	-7.886686
TGARCH T-Student KEN_Price (0,5)	0	5	-7.894063	-7.866275	-7.89412	-7.883638

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.089726	-8.065908	-8.089768	-8.08079
TGARCH Skewed T-Student KEN_Price (1,2)	1	2	-8.091264	-8.063477	-8.091321	-8.080839
TGARCH Skewed T-Student KEN_Price (1,3)	1	3	-8.089833	-8.058076	-8.089908	-8.077919
TGARCH Skewed T-Student KEN_Price (2,1)	2	1	-8.089579	-8.057822	-8.089654	-8.077665
TGARCH Skewed T-Student KEN_Price (2,2)	2	2	-8.092073	-8.056347	-8.092168	-8.07867
TGARCH Skewed T-Student KEN_Price (1,4)	1	4	-8.089107	-8.053381	-8.089202	-8.075704
TGARCH Skewed T-Student KEN_Price (2,3)	2	3	-8.090662	-8.050965	-8.090778	-8.075769
TGARCH Skewed T-Student KEN_Price (1,5)	1	5	-8.088912	-8.049216	-8.089029	-8.07402
TGARCH Skewed T-Student KEN_Price (3,1)	3	1	-8.086689	-8.046993	-8.086806	-8.071797

TGARCH Skewed T-Student KEN_Price (2,4)	2	4	-8.08943	-8.045764	-8.089571	-8.073048
TGARCH Skewed T-Student KEN_Price (3,2)	3	2	-8.089127	-8.045461	-8.089268	-8.072745
TGARCH Skewed T-Student KEN_Price (2,5)	2	5	-8.088298	-8.040662	-8.088465	-8.070427
TGARCH Skewed T-Student KEN_Price (3,3)	3	3	-8.087592	-8.039956	-8.087759	-8.069721
TGARCH Skewed T-Student KEN_Price (4,1)	4	1	-8.083574	-8.035938	-8.083741	-8.065703
TGARCH Skewed T-Student KEN_Price (3,4)	3	4	-8.086345	-8.03474	-8.086541	-8.066985
TGARCH Skewed T-Student KEN_Price (4,2)	4	2	-8.086103	-8.034498	-8.0863	-8.066743
TGARCH Skewed T-Student KEN_Price (3,0)	3	0	-8.068888	-8.033161	-8.068983	-8.055485
TGARCH Skewed T-Student KEN_Price (3,5)	3	5	-8.085228	-8.029653	-8.085456	-8.064379
TGARCH Skewed T-Student KEN_Price (4,3)	4	3	-8.084549	-8.028974	-8.084777	-8.0637
TGARCH Skewed T-Student KEN_Price (5,1)	5	1	-8.08177	-8.026195	-8.081997	-8.06092
TGARCH Skewed T-Student KEN_Price (5,2)	5	2	-8.083047	-8.023502	-8.083308	-8.060708
TGARCH Skewed T-Student KEN_Price (2,0)	2	0	-8.05128	-8.023493	-8.051338	-8.040856
TGARCH Skewed T-Student KEN_Price (4,4)	4	4	-8.082974	-8.023429	-8.083235	-8.060635
TGARCH Skewed T-Student KEN_Price (4,0)	4	0	-8.064318	-8.020652	-8.064459	-8.047936
TGARCH Skewed T-Student KEN_Price (4,5)	4	5	-8.082026	-8.018512	-8.082323	-8.058198
TGARCH Skewed T-Student KEN_Price (5,3)	5	3	-8.081155	-8.017641	-8.081451	-8.057327
TGARCH Skewed T-Student KEN_Price (5,4)	5	4	-8.080239	-8.012755	-8.080573	-8.054922
TGARCH Skewed T-Student KEN_Price (5,0)	5	0	-8.062967	-8.011362	-8.063164	-8.043607
TGARCH Skewed T-Student KEN_Price (5,5)	5	5	-8.079084	-8.007631	-8.079459	-8.052278
TGARCH Skewed T-Student KEN_Price (1,0)	1	0	-7.992082	-7.972234	-7.992112	-7.984636
TGARCH Skewed T-Student KEN_Price (0,1)	0	1	-7.900592	-7.884713	-7.900611	-7.894635
TGARCH Skewed T-Student KEN_Price (0,2)	0	2	-7.900316	-7.880467	-7.900345	-7.892869
TGARCH Skewed T-Student KEN_Price (0,3)	0	3	-7.898913	-7.875096	-7.898955	-7.889978
TGARCH Skewed T-Student KEN_Price (0,4)	0	4	-7.897414	-7.869627	-7.897472	-7.88699
TGARCH Skewed T-Student KEN_Price (0,5)	0	5	-7.895747	-7.86399	-7.895822	-7.883833

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

EGARCH Norm KEN_Price (3,3)	3	3	-7.886774	-7.847078	-7.886891	-7.871882
EGARCH Norm KEN_Price (5,5)	5	5	-7.884889	-7.821375	-7.885186	-7.861061
EGARCH Norm KEN_Price (2,5)	2	5	-7.856102	-7.816406	-7.856219	-7.84121
EGARCH Norm KEN_Price (4,5)	4	5	-7.869568	-7.813993	-7.869795	-7.848718
EGARCH Norm KEN_Price (1,4)	1	4	-7.828334	-7.800547	-7.828392	-7.81791
EGARCH Norm KEN_Price (1,5)	1	5	-7.827747	-7.79599	-7.827822	-7.815833
EGARCH Norm KEN_Price (1,1)	1	1	-7.811497	-7.795618	-7.811515	-7.80554
EGARCH Norm KEN_Price (2,1)	2	1	-7.815894	-7.792076	-7.815936	-7.806958
EGARCH Norm KEN_Price (1,2)	1	2	-7.811123	-7.791275	-7.811152	-7.803677
EGARCH Norm KEN_Price (2,4)	2	4	-7.826612	-7.790885	-7.826706	-7.813208
EGARCH Norm KEN_Price (5,3)	5	3	-7.846223	-7.790648	-7.846451	-7.825373
EGARCH Norm KEN_Price (1,3)	1	3	-7.811398	-7.78758	-7.81144	-7.802462
EGARCH Norm KEN_Price (2,2)	2	2	-7.814525	-7.786738	-7.814582	-7.8041
EGARCH Norm KEN_Price (5,4)	5	4	-7.846065	-7.786521	-7.846326	-7.823726
EGARCH Norm KEN_Price (3,1)	3	1	-7.815921	-7.784164	-7.815996	-7.804007
EGARCH Norm KEN_Price (3,4)	3	4	-7.82763	-7.783964	-7.827771	-7.811248
EGARCH Norm KEN_Price (2,3)	2	3	-7.812392	-7.780635	-7.812466	-7.800478
EGARCH Norm KEN_Price (3,2)	3	2	-7.814441	-7.778715	-7.814536	-7.801038
EGARCH Norm KEN_Price (3,5)	3	5	-7.825672	-7.778036	-7.825839	-7.807801
EGARCH Norm KEN_Price (4,1)	4	1	-7.815587	-7.775891	-7.815704	-7.800695
EGARCH Norm KEN_Price (4,2)	4	2	-7.817814	-7.774149	-7.817955	-7.801433
EGARCH Norm KEN_Price (4,4)	4	4	-7.825471	-7.773866	-7.825667	-7.806111
EGARCH Norm KEN_Price (4,3)	4	3	-7.818034	-7.770399	-7.818202	-7.800163
EGARCH Norm KEN_Price (5,1)	5	1	-7.816968	-7.769332	-7.817135	-7.799097
EGARCH Norm KEN_Price (5,2)	5	2	-7.815565	-7.76396	-7.815761	-7.796205
EGARCH Norm KEN_Price (4,0)	4	0	-7.597517	-7.56179	-7.597611	-7.584114
EGARCH Norm KEN_Price (3,0)	3	0	-7.586381	-7.558593	-7.586438	-7.575956
EGARCH Norm KEN_Price (2,0)	2	0	-7.534944	-7.515096	-7.534974	-7.527498

EGARCH Norm KEN_Price (1,0)	1	0	-7.412692	-7.400783	-7.412703	-7.408224
EGARCH Norm KEN_Price (0,1)	0	1	-7.300419	-7.292479	-7.300423	-7.29744
EGARCH Norm KEN_Price (0,3)	0	3	-7.299677	-7.283799	-7.299696	-7.29372
EGARCH Norm KEN_Price (0,5)	0	5	-7.298448	-7.27463	-7.29849	-7.289512
EGARCH Norm KEN_Price (0,2)	0	2	-7.283166	-7.271257	-7.283177	-7.278698
EGARCH Norm KEN_Price (0,4)	0	4	-7.280414	-7.260566	-7.280444	-7.272968
EGARCH Norm KEN_Price (5,0)	5	0	-6.377288	-6.333622	-6.377429	-6.360906

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm KEN_Price (3,3)	3	3	-7.884988	-7.841322	-7.885129	-7.868607
EGARCH Skewed Norm KEN_Price (3,5)	3	5	-7.880156	-7.828551	-7.880353	-7.860796
EGARCH Skewed Norm KEN_Price (4,5)	4	5	-7.875059	-7.815515	-7.87532	-7.85272
EGARCH Skewed Norm KEN_Price (2,5)	2	5	-7.85488	-7.811215	-7.855021	-7.838499
EGARCH Skewed Norm KEN_Price (4,3)	4	3	-7.849982	-7.798376	-7.850178	-7.830621
EGARCH Skewed Norm KEN_Price (1,4)	1	4	-7.829216	-7.797459	-7.829291	-7.817302
EGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.813321	-7.793473	-7.81335	-7.805875
EGARCH Skewed Norm KEN_Price (1,5)	1	5	-7.828311	-7.792584	-7.828405	-7.814908
EGARCH Skewed Norm KEN_Price (2,1)	2	1	-7.817394	-7.789606	-7.817451	-7.806969
EGARCH Skewed Norm KEN_Price (1,2)	1	2	-7.812976	-7.789158	-7.813018	-7.80404
EGARCH Skewed Norm KEN_Price (2,4)	2	4	-7.827263	-7.787566	-7.827379	-7.81237
EGARCH Skewed Norm KEN_Price (5,3)	5	3	-7.846678	-7.787134	-7.846939	-7.824339
EGARCH Skewed Norm KEN_Price (1,3)	1	3	-7.81375	-7.785963	-7.813808	-7.803326
EGARCH Skewed Norm KEN_Price (2,2)	2	2	-7.81608	-7.784323	-7.816155	-7.804166
EGARCH Skewed Norm KEN_Price (3,1)	3	1	-7.818775	-7.783048	-7.818869	-7.805371
EGARCH Skewed Norm KEN_Price (3,4)	3	4	-7.827409	-7.779774	-7.827577	-7.809538
EGARCH Skewed Norm KEN_Price (2,3)	2	3	-7.81367	-7.777943	-7.813764	-7.800267
EGARCH Skewed Norm KEN_Price (3,2)	3	2	-7.81732	-7.777623	-7.817436	-7.802427
EGARCH Skewed Norm KEN_Price (4,1)	4	1	-7.818497	-7.774831	-7.818638	-7.802115

EGARCH Skewed Norm KEN_Price (4,2)	4	2	-7.820526	-7.77289	-7.820693	-7.802655
EGARCH Skewed Norm KEN_Price (4,4)	4	4	-7.825045	-7.769471	-7.825273	-7.804196
EGARCH Skewed Norm KEN_Price (5,1)	5	1	-7.818413	-7.766808	-7.81861	-7.799053
EGARCH Skewed Norm KEN_Price (5,4)	5	4	-7.826494	-7.76298	-7.826791	-7.802666
EGARCH Skewed Norm KEN_Price (5,2)	5	2	-7.816991	-7.761417	-7.817219	-7.796142
EGARCH Skewed Norm KEN_Price (5,5)	5	5	-7.826737	-7.759253	-7.827071	-7.80142
EGARCH Skewed Norm KEN_Price (4,0)	4	0	-7.616023	-7.576327	-7.61614	-7.601131
EGARCH Skewed Norm KEN_Price (5,0)	5	0	-7.621975	-7.57434	-7.622143	-7.604104
EGARCH Skewed Norm KEN_Price (3,0)	3	0	-7.604649	-7.572892	-7.604723	-7.592735
EGARCH Skewed Norm KEN_Price (2,0)	2	0	-7.551096	-7.527279	-7.551139	-7.542161
EGARCH Skewed Norm KEN_Price (1,0)	1	0	-7.427149	-7.411271	-7.427168	-7.421192
EGARCH Skewed Norm KEN_Price (0,2)	0	2	-7.300256	-7.284377	-7.300274	-7.294299
EGARCH Skewed Norm KEN_Price (0,3)	0	3	-7.298732	-7.278883	-7.298761	-7.291285
EGARCH Skewed Norm KEN_Price (0,1)	0	1	-7.287069	-7.27516	-7.287079	-7.282601
EGARCH Skewed Norm KEN_Price (0,4)	0	4	-7.282471	-7.258654	-7.282513	-7.273536
EGARCH Skewed Norm KEN_Price (0,5)	0	5	51.610677	51.638465	51.61062	51.621102

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student KEN_Price (1,1)	1	1	-8.086871	-8.067023	-8.086901	-8.079425
EGARCH T-Student KEN_Price (1,2)	1	2	-8.088144	-8.064327	-8.088187	-8.079209
EGARCH T-Student KEN_Price (2,1)	2	1	-8.089508	-8.061721	-8.089565	-8.079083
EGARCH T-Student KEN_Price (1,3)	1	3	-8.087525	-8.059738	-8.087582	-8.0771
EGARCH T-Student KEN_Price (1,4)	1	4	-8.089164	-8.057407	-8.089239	-8.07725
EGARCH T-Student KEN_Price (2,2)	2	2	-8.088117	-8.05636	-8.088192	-8.076203
EGARCH T-Student KEN_Price (1,5)	1	5	-8.088813	-8.053086	-8.088908	-8.07541
EGARCH T-Student KEN_Price (3,1)	3	1	-8.088809	-8.053083	-8.088904	-8.075406
EGARCH T-Student KEN_Price (2,3)	2	3	-8.086556	-8.050829	-8.086651	-8.073153
EGARCH T-Student KEN_Price (3,3)	3	3	-8.093694	-8.050028	-8.093835	-8.077312

EGARCH T-Student KEN_Price (3,2)	3	2	-8.087366	-8.04767	-8.087483	-8.072474
EGARCH T-Student KEN_Price (2,4)	2	4	-8.087341	-8.047645	-8.087457	-8.072448
EGARCH T-Student KEN_Price (4,1)	4	1	-8.090415	-8.046749	-8.090556	-8.074033
EGARCH T-Student KEN_Price (3,4)	3	4	-8.092397	-8.044762	-8.092565	-8.074526
EGARCH T-Student KEN_Price (2,5)	2	5	-8.086726	-8.04306	-8.086867	-8.070344
EGARCH T-Student KEN_Price (4,2)	4	2	-8.088911	-8.041275	-8.089078	-8.07104
EGARCH T-Student KEN_Price (4,3)	4	3	-8.091924	-8.040319	-8.092121	-8.072564
EGARCH T-Student KEN_Price (3,5)	3	5	-8.091365	-8.039759	-8.091561	-8.072004
EGARCH T-Student KEN_Price (4,4)	4	4	-8.094865	-8.039291	-8.095093	-8.074016
EGARCH T-Student KEN_Price (5,1)	5	1	-8.088308	-8.036702	-8.088504	-8.068947
EGARCH T-Student KEN_Price (4,5)	4	5	-8.094894	-8.035349	-8.095155	-8.072555
EGARCH T-Student KEN_Price (5,2)	5	2	-8.090031	-8.034456	-8.090258	-8.069181
EGARCH T-Student KEN_Price (5,5)	5	5	-8.09609	-8.028606	-8.096425	-8.070773
EGARCH T-Student KEN_Price (5,3)	5	3	-8.086897	-8.027353	-8.087158	-8.064558
EGARCH T-Student KEN_Price (5,4)	5	4	-8.088419	-8.024905	-8.088716	-8.064591
EGARCH T-Student KEN_Price (4,0)	4	0	-8.019479	-7.979783	-8.019596	-8.004587
EGARCH T-Student KEN_Price (3,0)	3	0	-8.007374	-7.975617	-8.007449	-7.99546
EGARCH T-Student KEN_Price (0,2)	0	2	-7.911587	-7.895708	-7.911605	-7.90563
EGARCH T-Student KEN_Price (0,3)	0	3	-7.910047	-7.890198	-7.910076	-7.9026
EGARCH T-Student KEN_Price (0,4)	0	4	-7.908504	-7.884686	-7.908546	-7.899568
EGARCH T-Student KEN_Price (0,1)	0	1	-7.873002	-7.861093	-7.873012	-7.868534
EGARCH T-Student KEN_Price (0,5)	0	5	-7.87372	-7.845933	-7.873778	-7.863296
EGARCH T-Student KEN_Price (5,0)	5	0	-7.094743	-7.047108	-7.094911	-7.076873
EGARCH T-Student KEN_Price (2,0)	2	0	-6.351117	-6.3273	-6.351159	-6.342182
EGARCH T-Student KEN_Price (1,0)	1	0	-4.946256	-4.930378	-4.946275	-4.940299

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.087919	-8.064101	-8.087961	-8.078983

EGARCH Skewed T-Student KEN_Price (1,2)	1	2	-8.089011	-8.061224	-8.089068	-8.078586
EGARCH Skewed T-Student KEN_Price (2,1)	2	1	-8.090182	-8.058425	-8.090257	-8.078268
EGARCH Skewed T-Student KEN_Price (1,3)	1	3	-8.088506	-8.056749	-8.08858	-8.076592
EGARCH Skewed T-Student KEN_Price (1,4)	1	4	-8.090039	-8.054313	-8.090134	-8.076636
EGARCH Skewed T-Student KEN_Price (2,2)	2	2	-8.088806	-8.05308	-8.088901	-8.075403
EGARCH Skewed T-Student KEN_Price (1,5)	1	5	-8.08967	-8.049974	-8.089786	-8.074777
EGARCH Skewed T-Student KEN_Price (3,1)	3	1	-8.089557	-8.049861	-8.089673	-8.074664
EGARCH Skewed T-Student KEN_Price (2,3)	2	3	-8.087327	-8.04763	-8.087443	-8.072434
EGARCH Skewed T-Student KEN_Price (3,3)	3	3	-8.094462	-8.046827	-8.09463	-8.076591
EGARCH Skewed T-Student KEN_Price (2,4)	2	4	-8.088173	-8.044507	-8.088314	-8.071791
EGARCH Skewed T-Student KEN_Price (3,2)	3	2	-8.088118	-8.044452	-8.088258	-8.071736
EGARCH Skewed T-Student KEN_Price (4,1)	4	1	-8.090966	-8.04333	-8.091133	-8.073095
EGARCH Skewed T-Student KEN_Price (3,4)	3	4	-8.093212	-8.041606	-8.093408	-8.073851
EGARCH Skewed T-Student KEN_Price (2,5)	2	5	-8.086494	-8.038859	-8.086662	-8.068623
EGARCH Skewed T-Student KEN_Price (4,2)	4	2	-8.089467	-8.037862	-8.089664	-8.070107
EGARCH Skewed T-Student KEN_Price (4,3)	4	3	-8.092563	-8.036988	-8.092791	-8.071714
EGARCH Skewed T-Student KEN_Price (3,5)	3	5	-8.092148	-8.036573	-8.092376	-8.071299
EGARCH Skewed T-Student KEN_Price (4,4)	4	4	-8.095477	-8.035932	-8.095738	-8.073138
EGARCH Skewed T-Student KEN_Price (5,1)	5	1	-8.088912	-8.033337	-8.08914	-8.068063
EGARCH Skewed T-Student KEN_Price (4,5)	4	5	-8.095489	-8.031975	-8.095785	-8.071661
EGARCH Skewed T-Student KEN_Price (5,2)	5	2	-8.087387	-8.027842	-8.087648	-8.065048
EGARCH Skewed T-Student KEN_Price (5,3)	5	3	-8.090656	-8.027142	-8.090953	-8.066829
EGARCH Skewed T-Student KEN_Price (5,5)	5	5	-8.097041	-8.025588	-8.097416	-8.070235
EGARCH Skewed T-Student KEN_Price (5,4)	5	4	-8.092938	-8.025454	-8.093273	-8.067621
EGARCH Skewed T-Student KEN_Price (2,0)	2	0	-7.985127	-7.95734	-7.985184	-7.974702
EGARCH Skewed T-Student KEN_Price (0,2)	0	2	-7.91369	-7.893842	-7.91372	-7.906244
EGARCH Skewed T-Student KEN_Price (0,3)	0	3	-7.912152	-7.888334	-7.912194	-7.903216
EGARCH Skewed T-Student KEN_Price (0,4)	0	4	-7.910606	-7.882819	-7.910664	-7.900182

EGARCH Skewed T-Student KEN_Price (0,1)	0	1	-7.877211	-7.861333	-7.87723	-7.871254
EGARCH Skewed T-Student KEN_Price (0,5)	0	5	-7.864135	-7.832377	-7.864209	-7.852221
EGARCH Skewed T-Student KEN_Price (5,0)	5	0	-7.143767	-7.092162	-7.143964	-7.124407
EGARCH Skewed T-Student KEN_Price (4,0)	4	0	-7.072647	-7.028981	-7.072788	-7.056265
EGARCH Skewed T-Student KEN_Price (3,0)	3	0	-6.731042	-6.695315	-6.731137	-6.717639
EGARCH Skewed T-Student KEN_Price (1,0)	1	0	-4.124309	-4.104461	-4.124338	-4.116863

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm KEN_Price (1,1)	1	1	-7.832159	-7.81628	-7.832177	-7.826202
NAGARCH Norm KEN_Price (2,2)	2	2	-7.838871	-7.811084	-7.838929	-7.828447
NAGARCH Norm KEN_Price (1,4)	1	4	-7.836563	-7.808776	-7.836621	-7.826138
NAGARCH Norm KEN_Price (1,5)	1	5	-7.837516	-7.805759	-7.837591	-7.825602
NAGARCH Norm KEN_Price (2,1)	2	1	-7.828561	-7.804743	-7.828603	-7.819625
NAGARCH Norm KEN_Price (2,3)	2	3	-7.836481	-7.804724	-7.836555	-7.824567
NAGARCH Norm KEN_Price (4,0)	4	0	-7.837059	-7.801333	-7.837154	-7.823656
NAGARCH Norm KEN_Price (2,4)	2	4	-7.832168	-7.796442	-7.832263	-7.818765
NAGARCH Norm KEN_Price (3,1)	3	1	-7.827889	-7.796132	-7.827963	-7.815975
NAGARCH Norm KEN_Price (2,5)	2	5	-7.835456	-7.79576	-7.835573	-7.820564
NAGARCH Norm KEN_Price (3,2)	3	2	-7.828113	-7.792386	-7.828207	-7.814709
NAGARCH Norm KEN_Price (4,2)	4	2	-7.835898	-7.792232	-7.836039	-7.819516
NAGARCH Norm KEN_Price (1,2)	1	2	-7.811094	-7.791246	-7.811123	-7.803648
NAGARCH Norm KEN_Price (3,5)	3	5	-7.835314	-7.787679	-7.835482	-7.817443
NAGARCH Norm KEN_Price (3,3)	3	3	-7.827031	-7.787335	-7.827148	-7.812139
NAGARCH Norm KEN_Price (3,4)	3	4	-7.830422	-7.786756	-7.830563	-7.81404
NAGARCH Norm KEN_Price (4,1)	4	1	-7.821456	-7.78176	-7.821573	-7.806564
NAGARCH Norm KEN_Price (5,2)	5	2	-7.829019	-7.777414	-7.829215	-7.809659
NAGARCH Norm KEN_Price (4,3)	4	3	-7.824863	-7.777228	-7.825031	-7.806993
NAGARCH Norm KEN_Price (4,4)	4	4	-7.82794	-7.776335	-7.828137	-7.80858

NAGARCH Norm KEN_Price (5,3)	5	3	-7.830392	-7.774817	-7.83062	-7.809543
NAGARCH Norm KEN_Price (4,5)	4	5	-7.828312	-7.772738	-7.82854	-7.807463
NAGARCH Norm KEN_Price (5,0)	5	0	-7.814435	-7.770769	-7.814576	-7.798053
NAGARCH Norm KEN_Price (5,1)	5	1	-7.817861	-7.770225	-7.818029	-7.79999
NAGARCH Norm KEN_Price (5,4)	5	4	-7.824499	-7.764955	-7.82476	-7.80216
NAGARCH Norm KEN_Price (2,0)	2	0	-7.605895	-7.586047	-7.605924	-7.598449
NAGARCH Norm KEN_Price (1,0)	1	0	-7.549061	-7.537152	-7.549072	-7.544594
NAGARCH Norm KEN_Price (0,1)	0	1	-7.298173	-7.290234	-7.298178	-7.295195
NAGARCH Norm KEN_Price (0,2)	0	2	-7.296881	-7.284972	-7.296891	-7.292413
NAGARCH Norm KEN_Price (0,3)	0	3	-7.296413	-7.280534	-7.296431	-7.290456
NAGARCH Norm KEN_Price (0,4)	0	4	-7.29485	-7.275001	-7.294879	-7.287403
NAGARCH Norm KEN_Price (0,5)	0	5	-7.293528	-7.26971	-7.29357	-7.284592
NAGARCH Norm KEN_Price (3,0)	3	0	-7.037367	-7.009579	-7.037424	-7.026942

<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm KEN_Price (1,1)	1	1	-7.833808	-7.81396	-7.833837	-7.826362
NAGARCH Skewed Norm KEN_Price (1,3)	1	3	-7.834687	-7.806899	-7.834744	-7.824262
NAGARCH Skewed Norm KEN_Price (1,4)	1	4	-7.837935	-7.806178	-7.838009	-7.826021
NAGARCH Skewed Norm KEN_Price (1,5)	1	5	-7.838583	-7.802856	-7.838677	-7.825179
NAGARCH Skewed Norm KEN_Price (2,1)	2	1	-7.830192	-7.802405	-7.83025	-7.819768
NAGARCH Skewed Norm KEN_Price (2,3)	2	3	-7.837549	-7.801822	-7.837643	-7.824146
NAGARCH Skewed Norm KEN_Price (2,2)	2	2	-7.833217	-7.80146	-7.833291	-7.821303
NAGARCH Skewed Norm KEN_Price (2,4)	2	4	-7.839316	-7.79962	-7.839433	-7.824424
NAGARCH Skewed Norm KEN_Price (2,5)	2	5	-7.837115	-7.793449	-7.837256	-7.820733
NAGARCH Skewed Norm KEN_Price (3,1)	3	1	-7.826634	-7.790908	-7.826729	-7.813231
NAGARCH Skewed Norm KEN_Price (3,2)	3	2	-7.829674	-7.789978	-7.82979	-7.814781

NAGARCH Skewed Norm KEN_Price (4,1)	4	1	-7.832762	-7.789096	-7.832903	-7.81638
NAGARCH Skewed Norm KEN_Price (1,2)	1	2	-7.809643	-7.785825	-7.809685	-7.800707
NAGARCH Skewed Norm KEN_Price (4,2)	4	2	-7.832931	-7.785295	-7.833099	-7.81506
NAGARCH Skewed Norm KEN_Price (3,3)	3	3	-7.828243	-7.784577	-7.828384	-7.811861
NAGARCH Skewed Norm KEN_Price (3,4)	3	4	-7.831795	-7.784159	-7.831962	-7.813924
NAGARCH Skewed Norm KEN_Price (4,0)	4	0	-7.823579	-7.783883	-7.823695	-7.808686
NAGARCH Skewed Norm KEN_Price (4,3)	4	3	-7.834583	-7.782978	-7.834779	-7.815223
NAGARCH Skewed Norm KEN_Price (3,5)	3	5	-7.833632	-7.782027	-7.833829	-7.814272
NAGARCH Skewed Norm KEN_Price (5,1)	5	1	-7.831486	-7.779881	-7.831682	-7.812126
NAGARCH Skewed Norm KEN_Price (5,2)	5	2	-7.830296	-7.774721	-7.830524	-7.809447
NAGARCH Skewed Norm KEN_Price (4,4)	4	4	-7.828518	-7.772943	-7.828745	-7.807668
NAGARCH Skewed Norm KEN_Price (4,5)	4	5	-7.829855	-7.770311	-7.830117	-7.807517
NAGARCH Skewed Norm KEN_Price (5,3)	5	3	-7.828133	-7.768589	-7.828394	-7.805795
NAGARCH Skewed Norm KEN_Price (5,4)	5	4	-7.826158	-7.762644	-7.826455	-7.80233
NAGARCH Skewed Norm KEN_Price (5,5)	5	5	-7.827473	-7.759989	-7.827807	-7.802156
NAGARCH Skewed Norm KEN_Price (5,0)	5	0	-7.801204	-7.753569	-7.801372	-7.783334
NAGARCH Skewed Norm KEN_Price (3,0)	3	0	-7.782993	-7.751236	-7.783068	-7.771079
NAGARCH Skewed Norm KEN_Price (2,0)	2	0	-7.769094	-7.745276	-7.769136	-7.760158
NAGARCH Skewed Norm KEN_Price (0,2)	0	2	-7.296301	-7.280422	-7.296319	-7.290344
NAGARCH Skewed Norm KEN_Price (0,3)	0	3	-7.297512	-7.277664	-7.297542	-7.290066
NAGARCH Skewed Norm KEN_Price (0,1)	0	1	-7.288379	-7.27647	-7.28839	-7.283912
NAGARCH Skewed Norm KEN_Price (0,4)	0	4	-7.295117	-7.271299	-7.295159	-7.286181
NAGARCH Skewed Norm KEN_Price (0,5)	0	5	-7.294918	-7.267131	-7.294976	-7.284493
NAGARCH Skewed Norm KEN_Price (1,0)	1	0	-4.342166	-4.326287	-4.342185	-4.336209

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student KEN_Price (1,1)	1	1	-8.083579	-8.0637306	-8.083608	-8.0761325
NAGARCH T-Student KEN_Price (2,1)	2	1	-8.088964	-8.0611767	-8.0890214	-8.0785393

NAGARCH T-Student KEN_Price (1,2)	1	2	-8.083913	-8.0600957	-8.0839556	-8.074978
NAGARCH T-Student KEN_Price (1,3)	1	3	-8.082199	-8.0544115	-8.0822562	-8.0717742
NAGARCH T-Student KEN_Price (1,4)	1	4	-8.081279	-8.0495217	-8.0813535	-8.0693647
NAGARCH T-Student KEN_Price (2,2)	2	2	-8.08076	-8.0490029	-8.0808347	-8.068846
NAGARCH T-Student KEN_Price (3,1)	3	1	-8.084193	-8.0484665	-8.0842877	-8.0707899
NAGARCH T-Student KEN_Price (2,3)	2	3	-8.081115	-8.0453887	-8.0812099	-8.0677121
NAGARCH T-Student KEN_Price (1,5)	1	5	-8.080412	-8.0446855	-8.0805067	-8.0670089
NAGARCH T-Student KEN_Price (3,0)	3	0	-8.075636	-8.0438786	-8.0757104	-8.0637217
NAGARCH T-Student KEN_Price (3,2)	3	2	-8.082592	-8.0428955	-8.0827083	-8.0676993
NAGARCH T-Student KEN_Price (2,4)	2	4	-8.078312	-8.0386157	-8.0784286	-8.0634195
NAGARCH T-Student KEN_Price (4,1)	4	1	-8.081437	-8.0377709	-8.0815778	-8.0650551
NAGARCH T-Student KEN_Price (3,3)	3	3	-8.081101	-8.0374355	-8.0812424	-8.0647197
NAGARCH T-Student KEN_Price (2,0)	2	0	-8.060817	-8.0369988	-8.0608587	-8.051881
NAGARCH T-Student KEN_Price (3,4)	3	4	-8.079583	-8.0319476	-8.0797507	-8.0617122
NAGARCH T-Student KEN_Price (5,1)	5	1	-8.079281	-8.0276757	-8.0794773	-8.0599207
NAGARCH T-Student KEN_Price (2,5)	2	5	-8.069875	-8.0262095	-8.0700164	-8.0534937
NAGARCH T-Student KEN_Price (5,2)	5	2	-8.079371	-8.0237964	-8.0795988	-8.0585217
NAGARCH T-Student KEN_Price (4,3)	4	3	-8.074294	-8.0226886	-8.0744902	-8.0549335
NAGARCH T-Student KEN_Price (4,4)	4	4	-8.077013	-8.0214379	-8.0772403	-8.0561632
NAGARCH T-Student KEN_Price (5,3)	5	3	-8.075552	-8.0160075	-8.075813	-8.0532133
NAGARCH T-Student KEN_Price (4,5)	4	5	-8.074934	-8.0153897	-8.0751952	-8.0525954
NAGARCH T-Student KEN_Price (5,4)	5	4	-8.073237	-8.0097225	-8.0735333	-8.0494086
NAGARCH T-Student KEN_Price (5,5)	5	5	-8.072364	-8.0048806	-8.0726989	-8.0470471
NAGARCH T-Student KEN_Price (5,0)	5	0	-8.047887	-8.0002511	-8.0480542	-8.0300157
NAGARCH T-Student KEN_Price (3,5)	3	5	-8.036873	-7.9852676	-8.0370693	-8.0175126
NAGARCH T-Student KEN_Price (1,0)	1	0	-7.983517	-7.9676389	-7.9835362	-7.9775604
NAGARCH T-Student KEN_Price (0,1)	0	1	-7.904136	-7.8922276	-7.904147	-7.8996687
NAGARCH T-Student KEN_Price (0,3)	0	3	-7.905128	-7.8852801	-7.9051575	-7.897682

NAGARCH T-Student KEN_Price (0,4)	0	4	-7.9039	-7.8800819	-7.9039418	-7.8949642
NAGARCH T-Student KEN_Price (0,5)	0	5	-7.9024	-7.874613	-7.9024577	-7.8919756
NAGARCH T-Student KEN_Price (0,2)	0	2	-7.843179	-7.8273009	-7.8431982	-7.8372224
NAGARCH T-Student KEN_Price (4,2)	4	2	-0.653541	-0.6059055	-0.6537086	-0.6356701
NAGARCH T-Student KEN_Price (4,0)	4	0	360.958083	360.997779	360.9579661	360.9729752

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student KEN_Price (1,1)	1	1	-8.084604	-8.060786	-8.084646	-8.075668
NAGARCH Skewed T-Student KEN_Price (1,2)	1	2	-8.084827	-8.057039	-8.084884	-8.074402
NAGARCH Skewed T-Student KEN_Price (1,3)	1	3	-8.083132	-8.051375	-8.083207	-8.071218
NAGARCH Skewed T-Student KEN_Price (1,4)	1	4	-8.082216	-8.04649	-8.082311	-8.068813
NAGARCH Skewed T-Student KEN_Price (2,2)	2	2	-8.081626	-8.0459	-8.081721	-8.068223
NAGARCH Skewed T-Student KEN_Price (1,5)	1	5	-8.081296	-8.0416	-8.081413	-8.066404
NAGARCH Skewed T-Student KEN_Price (2,3)	2	3	-8.080054	-8.040358	-8.08017	-8.065161
NAGARCH Skewed T-Student KEN_Price (2,5)	2	5	-8.084813	-8.037178	-8.084981	-8.066942
NAGARCH Skewed T-Student KEN_Price (4,1)	4	1	-8.084037	-8.036401	-8.084204	-8.066166
NAGARCH Skewed T-Student KEN_Price (2,4)	2	4	-8.078515	-8.034849	-8.078656	-8.062133
NAGARCH Skewed T-Student KEN_Price (3,2)	3	2	-8.078386	-8.03472	-8.078527	-8.062005
NAGARCH Skewed T-Student KEN_Price (3,3)	3	3	-8.081096	-8.033461	-8.081264	-8.063225
NAGARCH Skewed T-Student KEN_Price (4,0)	4	0	-8.074274	-8.030608	-8.074415	-8.057892
NAGARCH Skewed T-Student KEN_Price (4,2)	4	2	-8.081243	-8.029638	-8.081439	-8.061883
NAGARCH Skewed T-Student KEN_Price (5,0)	5	0	-8.079892	-8.028287	-8.080089	-8.060532
NAGARCH Skewed T-Student KEN_Price (3,5)	3	5	-8.080921	-8.025347	-8.081149	-8.060072
NAGARCH Skewed T-Student KEN_Price (5,1)	5	1	-8.080114	-8.024539	-8.080341	-8.059264
NAGARCH Skewed T-Student KEN_Price (2,0)	2	0	-8.050907	-8.02312	-8.050964	-8.040482
NAGARCH Skewed T-Student KEN_Price (4,3)	4	3	-8.077556	-8.021982	-8.077784	-8.056707
NAGARCH Skewed T-Student KEN_Price (4,4)	4	4	-8.08077	-8.021225	-8.081031	-8.058431
NAGARCH Skewed T-Student KEN_Price (5,2)	5	2	-8.078959	-8.019415	-8.07922	-8.05662

NAGARCH Skewed T-Student KEN_Price (4,5)	4	5	-8.079484	-8.01597	-8.079781	-8.055656
NAGARCH Skewed T-Student KEN_Price (5,3)	5	3	-8.074443	-8.010929	-8.07474	-8.050616
NAGARCH Skewed T-Student KEN_Price (5,4)	5	4	-8.075604	-8.00812	-8.075939	-8.050287
NAGARCH Skewed T-Student KEN_Price (3,1)	3	1	-8.04739	-8.007694	-8.047507	-8.032498
NAGARCH Skewed T-Student KEN_Price (5,5)	5	5	-8.073208	-8.001755	-8.073583	-8.046402
NAGARCH Skewed T-Student KEN_Price (1,0)	1	0	-7.984954	-7.965106	-7.984983	-7.977507
NAGARCH Skewed T-Student KEN_Price (0,1)	0	1	-7.906553	-7.890675	-7.906572	-7.900596
NAGARCH Skewed T-Student KEN_Price (0,2)	0	2	-7.907754	-7.887905	-7.907783	-7.900307
NAGARCH Skewed T-Student KEN_Price (0,3)	0	3	-7.907277	-7.883459	-7.907319	-7.898341
NAGARCH Skewed T-Student KEN_Price (0,4)	0	4	-7.905773	-7.877985	-7.90583	-7.895348
NAGARCH Skewed T-Student KEN_Price (0,5)	0	5	-7.904497	-7.87274	-7.904572	-7.892583
NAGARCH Skewed T-Student KEN_Price (3,4)	3	4	353.818021	353.869626	353.817825	353.837381
NAGARCH Skewed T-Student KEN_Price (2,1)	2	1	379.695065	379.726822	379.69499	379.706979

<i>MOR_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm MOR_Price (1,1)	1	1	-7.823571	-7.811662	-7.823581	-7.819103
SGARCH Norm MOR_Price (2,1)	2	1	-7.822808	-7.80693	-7.822827	-7.816852
SGARCH Norm MOR_Price (1,2)	1	2	-7.822544	-7.806665	-7.822562	-7.816587
SGARCH Norm MOR_Price (3,1)	3	1	-7.821375	-7.801527	-7.821405	-7.813929
SGARCH Norm MOR_Price (2,2)	2	2	-7.821245	-7.801397	-7.821274	-7.813799
SGARCH Norm MOR_Price (1,3)	1	3	-7.820872	-7.801024	-7.820901	-7.813426
SGARCH Norm MOR_Price (2,3)	2	3	-7.820306	-7.796488	-7.820348	-7.811371
SGARCH Norm MOR_Price (4,1)	4	1	-7.820267	-7.79645	-7.82031	-7.811332
SGARCH Norm MOR_Price (3,2)	3	2	-7.820215	-7.796397	-7.820257	-7.81128

SGARCH Norm MOR_Price (1,4)	1	4	-7.81926	-7.795443	-7.819303	-7.810325
SGARCH Norm MOR_Price (5,1)	5	1	-7.819387	-7.791599	-7.819444	-7.808962
SGARCH Norm MOR_Price (4,2)	4	2	-7.818823	-7.791036	-7.81888	-7.808398
SGARCH Norm MOR_Price (3,3)	3	3	-7.818814	-7.791026	-7.818871	-7.808389
SGARCH Norm MOR_Price (2,4)	2	4	-7.818787	-7.791	-7.818844	-7.808362
SGARCH Norm MOR_Price (1,5)	1	5	-7.818099	-7.790312	-7.818156	-7.807674
SGARCH Norm MOR_Price (5,2)	5	2	-7.81766	-7.785903	-7.817734	-7.805746
SGARCH Norm MOR_Price (4,3)	4	3	-7.81747	-7.785713	-7.817544	-7.805556
SGARCH Norm MOR_Price (2,5)	2	5	-7.817306	-7.785549	-7.817381	-7.805392
SGARCH Norm MOR_Price (3,4)	3	4	-7.817304	-7.785547	-7.817379	-7.805391
SGARCH Norm MOR_Price (5,3)	5	3	-7.816385	-7.780659	-7.81648	-7.802982
SGARCH Norm MOR_Price (4,4)	4	4	-7.815929	-7.780202	-7.816023	-7.802526
SGARCH Norm MOR_Price (3,5)	3	5	-7.815771	-7.780045	-7.815866	-7.802368
SGARCH Norm MOR_Price (4,5)	4	5	-7.817544	-7.777848	-7.817661	-7.802652
SGARCH Norm MOR_Price (5,4)	5	4	-7.814981	-7.775284	-7.815097	-7.800088
SGARCH Norm MOR_Price (5,5)	5	5	-7.81347	-7.769804	-7.813611	-7.797088
SGARCH Norm MOR_Price (5,0)	5	0	-7.720687	-7.69687	-7.720729	-7.711752
SGARCH Norm MOR_Price (4,0)	4	0	-7.707518	-7.68767	-7.707547	-7.700072
SGARCH Norm MOR_Price (2,0)	2	0	-7.679764	-7.667855	-7.679775	-7.675297
SGARCH Norm MOR_Price (1,0)	1	0	-7.639529	-7.63159	-7.639534	-7.636551
SGARCH Norm MOR_Price (3,0)	3	0	-7.631058	-7.615179	-7.631076	-7.625101
SGARCH Norm MOR_Price (0,1)	0	1	-7.592463	-7.584524	-7.592467	-7.589484
SGARCH Norm MOR_Price (0,2)	0	2	-7.59354	-7.581631	-7.59355	-7.589072
SGARCH Norm MOR_Price (0,3)	0	3	-7.593369	-7.577491	-7.593388	-7.587412
SGARCH Norm MOR_Price (0,4)	0	4	-7.59246	-7.572611	-7.592489	-7.585013
SGARCH Norm MOR_Price (0,5)	0	5	-7.591558	-7.567741	-7.591601	-7.582623

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

SGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.822949	-7.807071	-7.822968	-7.816992
SGARCH Skewed Norm MOR_Price (2,1)	2	1	-7.822175	-7.802327	-7.822204	-7.814729
SGARCH Skewed Norm MOR_Price (1,2)	1	2	-7.82195	-7.802101	-7.821979	-7.814503
SGARCH Skewed Norm MOR_Price (2,2)	2	2	-7.820824	-7.797006	-7.820866	-7.811888
SGARCH Skewed Norm MOR_Price (3,1)	3	1	-7.820772	-7.796955	-7.820814	-7.811837
SGARCH Skewed Norm MOR_Price (1,3)	1	3	-7.820264	-7.796446	-7.820306	-7.811329
SGARCH Skewed Norm MOR_Price (2,3)	2	3	-7.819836	-7.792048	-7.819893	-7.809411
SGARCH Skewed Norm MOR_Price (3,2)	3	2	-7.819677	-7.79189	-7.819734	-7.809252
SGARCH Skewed Norm MOR_Price (4,1)	4	1	-7.819653	-7.791865	-7.81971	-7.809228
SGARCH Skewed Norm MOR_Price (1,4)	1	4	-7.818655	-7.790867	-7.818712	-7.80823
SGARCH Skewed Norm MOR_Price (5,1)	5	1	-7.818838	-7.787081	-7.818913	-7.806924
SGARCH Skewed Norm MOR_Price (3,3)	3	3	-7.81834	-7.786583	-7.818415	-7.806426
SGARCH Skewed Norm MOR_Price (2,4)	2	4	-7.81832	-7.786562	-7.818394	-7.806406
SGARCH Skewed Norm MOR_Price (4,2)	4	2	-7.81827	-7.786513	-7.818345	-7.806356
SGARCH Skewed Norm MOR_Price (1,5)	1	5	-7.817526	-7.785768	-7.8176	-7.805612
SGARCH Skewed Norm MOR_Price (5,2)	5	2	-7.817476	-7.78175	-7.817571	-7.804073
SGARCH Skewed Norm MOR_Price (4,3)	4	3	-7.817017	-7.781291	-7.817112	-7.803614
SGARCH Skewed Norm MOR_Price (2,5)	2	5	-7.816831	-7.781105	-7.816926	-7.803428
SGARCH Skewed Norm MOR_Price (3,4)	3	4	-7.81681	-7.781084	-7.816905	-7.803407
SGARCH Skewed Norm MOR_Price (5,3)	5	3	-7.815982	-7.776286	-7.816098	-7.801089
SGARCH Skewed Norm MOR_Price (4,4)	4	4	-7.815471	-7.775775	-7.815588	-7.800579
SGARCH Skewed Norm MOR_Price (3,5)	3	5	-7.815312	-7.775616	-7.815429	-7.800419
SGARCH Skewed Norm MOR_Price (4,5)	4	5	-7.81695	-7.773284	-7.817091	-7.800568
SGARCH Skewed Norm MOR_Price (5,4)	5	4	-7.814452	-7.770786	-7.814593	-7.79807
SGARCH Skewed Norm MOR_Price (5,5)	5	5	-7.812912	-7.765276	-7.813079	-7.795041
SGARCH Skewed Norm MOR_Price (5,0)	5	0	-7.720959	-7.693172	-7.721016	-7.710534
SGARCH Skewed Norm MOR_Price (4,0)	4	0	-7.708599	-7.684781	-7.708641	-7.699663
SGARCH Skewed Norm MOR_Price (2,0)	2	0	-7.679243	-7.663364	-7.679262	-7.673286

SGARCH Skewed Norm MOR_Price (1,0)	1	0	-7.638715	-7.626806	-7.638725	-7.634247
SGARCH Skewed Norm MOR_Price (0,1)	0	1	-7.593677	-7.581768	-7.593687	-7.589209
SGARCH Skewed Norm MOR_Price (0,2)	0	2	-7.590198	-7.574319	-7.590217	-7.584241
SGARCH Skewed Norm MOR_Price (0,4)	0	4	-7.591973	-7.568156	-7.592016	-7.583038
SGARCH Skewed Norm MOR_Price (0,3)	0	3	-7.586059	-7.566211	-7.586089	-7.578613
SGARCH Skewed Norm MOR_Price (0,5)	0	5	-7.59145	-7.563663	-7.591508	-7.581026
SGARCH Skewed Norm MOR_Price (3,0)	3	0	-7.307654	-7.287806	-7.307684	-7.300208

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student MOR_Price (1,1)	1	1	-7.826308	-7.810429	-7.826327	-7.820351
SGARCH T-Student MOR_Price (2,1)	2	1	-7.825572	-7.805724	-7.825602	-7.818126
SGARCH T-Student MOR_Price (1,2)	1	2	-7.825278	-7.80543	-7.825307	-7.817832
SGARCH T-Student MOR_Price (3,1)	3	1	-7.824207	-7.800389	-7.824249	-7.815271
SGARCH T-Student MOR_Price (2,2)	2	2	-7.824116	-7.800299	-7.824158	-7.815181
SGARCH T-Student MOR_Price (1,3)	1	3	-7.823581	-7.799763	-7.823623	-7.814646
SGARCH T-Student MOR_Price (4,1)	4	1	-7.823117	-7.79533	-7.823175	-7.812693
SGARCH T-Student MOR_Price (2,3)	2	3	-7.823034	-7.795246	-7.823091	-7.812609
SGARCH T-Student MOR_Price (3,2)	3	2	-7.822973	-7.795186	-7.823031	-7.812549
SGARCH T-Student MOR_Price (1,4)	1	4	-7.82196	-7.794173	-7.822017	-7.811535
SGARCH T-Student MOR_Price (5,1)	5	1	-7.822278	-7.790521	-7.822353	-7.810364
SGARCH T-Student MOR_Price (2,4)	2	4	-7.821565	-7.789808	-7.82164	-7.809651
SGARCH T-Student MOR_Price (4,2)	4	2	-7.821543	-7.789786	-7.821618	-7.809629
SGARCH T-Student MOR_Price (3,3)	3	3	-7.821475	-7.789718	-7.82155	-7.809561
SGARCH T-Student MOR_Price (1,5)	1	5	-7.820812	-7.789055	-7.820887	-7.808898
SGARCH T-Student MOR_Price (5,2)	5	2	-7.820693	-7.784966	-7.820787	-7.80729
SGARCH T-Student MOR_Price (4,3)	4	3	-7.82015	-7.784424	-7.820245	-7.806747
SGARCH T-Student MOR_Price (3,4)	3	4	-7.820091	-7.784364	-7.820186	-7.806688
SGARCH T-Student MOR_Price (2,5)	2	5	-7.82006	-7.784333	-7.820155	-7.806657

SGARCH T-Student MOR_Price (4,4)	4	4	-7.820815	-7.781119	-7.820932	-7.805923
SGARCH T-Student MOR_Price (5,3)	5	3	-7.819547	-7.779851	-7.819664	-7.804655
SGARCH T-Student MOR_Price (3,5)	3	5	-7.818553	-7.778857	-7.81867	-7.803661
SGARCH T-Student MOR_Price (4,5)	4	5	-7.819755	-7.776089	-7.819896	-7.803373
SGARCH T-Student MOR_Price (5,4)	5	4	-7.81803	-7.774364	-7.818171	-7.801648
SGARCH T-Student MOR_Price (5,5)	5	5	-7.816491	-7.768855	-7.816658	-7.79862
SGARCH T-Student MOR_Price (5,0)	5	0	-7.742962	-7.715175	-7.74302	-7.732538
SGARCH T-Student MOR_Price (4,0)	4	0	-7.735412	-7.711594	-7.735454	-7.726477
SGARCH T-Student MOR_Price (3,0)	3	0	-7.722597	-7.702749	-7.722626	-7.715151
SGARCH T-Student MOR_Price (2,0)	2	0	-7.715539	-7.699661	-7.715558	-7.709583
SGARCH T-Student MOR_Price (1,0)	1	0	-7.692218	-7.680309	-7.692229	-7.687751
SGARCH T-Student MOR_Price (0,2)	0	2	-7.676381	-7.660502	-7.6764	-7.670424
SGARCH T-Student MOR_Price (0,1)	0	1	-7.671307	-7.659398	-7.671317	-7.666839
SGARCH T-Student MOR_Price (0,3)	0	3	-7.674826	-7.654978	-7.674855	-7.667379
SGARCH T-Student MOR_Price (0,4)	0	4	-7.675227	-7.651409	-7.675269	-7.666291
SGARCH T-Student MOR_Price (0,5)	0	5	-7.673462	-7.645674	-7.673519	-7.663037

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.825833	-7.805985	-7.825862	-7.818387
SGARCH Skewed T-Student MOR_Price (2,1)	2	1	-7.825119	-7.801301	-7.825161	-7.816183
SGARCH Skewed T-Student MOR_Price (1,2)	1	2	-7.824753	-7.800935	-7.824795	-7.815817
SGARCH Skewed T-Student MOR_Price (2,2)	2	2	-7.823785	-7.795998	-7.823843	-7.813361
SGARCH Skewed T-Student MOR_Price (3,1)	3	1	-7.823753	-7.795965	-7.82381	-7.813328
SGARCH Skewed T-Student MOR_Price (1,3)	1	3	-7.823074	-7.795286	-7.823131	-7.812649
SGARCH Skewed T-Student MOR_Price (2,3)	2	3	-7.822658	-7.790901	-7.822733	-7.810744
SGARCH Skewed T-Student MOR_Price (4,1)	4	1	-7.822633	-7.790876	-7.822708	-7.810719
SGARCH Skewed T-Student MOR_Price (3,2)	3	2	-7.822588	-7.790831	-7.822663	-7.810674
SGARCH Skewed T-Student MOR_Price (1,4)	1	4	-7.821537	-7.78978	-7.821612	-7.809623

SGARCH Skewed T-Student MOR_Price (5,1)	5	1	-7.821754	-7.786028	-7.821849	-7.808351
SGARCH Skewed T-Student MOR_Price (2,4)	2	4	-7.821254	-7.785527	-7.821348	-7.80785
SGARCH Skewed T-Student MOR_Price (4,2)	4	2	-7.821097	-7.78537	-7.821192	-7.807694
SGARCH Skewed T-Student MOR_Price (3,3)	3	3	-7.821092	-7.785365	-7.821186	-7.807689
SGARCH Skewed T-Student MOR_Price (1,5)	1	5	-7.820345	-7.784619	-7.82044	-7.806942
SGARCH Skewed T-Student MOR_Price (5,2)	5	2	-7.8201	-7.780404	-7.820217	-7.805208
SGARCH Skewed T-Student MOR_Price (4,3)	4	3	-7.819975	-7.780279	-7.820092	-7.805083
SGARCH Skewed T-Student MOR_Price (3,4)	3	4	-7.819755	-7.780059	-7.819872	-7.804863
SGARCH Skewed T-Student MOR_Price (2,5)	2	5	-7.819747	-7.780051	-7.819864	-7.804855
SGARCH Skewed T-Student MOR_Price (5,3)	5	3	-7.818544	-7.774878	-7.818685	-7.802162
SGARCH Skewed T-Student MOR_Price (4,4)	4	4	-7.818416	-7.77475	-7.818557	-7.802034
SGARCH Skewed T-Student MOR_Price (3,5)	3	5	-7.818226	-7.774561	-7.818367	-7.801845
SGARCH Skewed T-Student MOR_Price (4,5)	4	5	-7.819282	-7.771647	-7.81945	-7.801411
SGARCH Skewed T-Student MOR_Price (5,4)	5	4	-7.817635	-7.77	-7.817803	-7.799764
SGARCH Skewed T-Student MOR_Price (5,5)	5	5	-7.816101	-7.764496	-7.816297	-7.796741
SGARCH Skewed T-Student MOR_Price (5,0)	5	0	-7.742667	-7.71091	-7.742742	-7.730753
SGARCH Skewed T-Student MOR_Price (4,0)	4	0	-7.735	-7.707212	-7.735057	-7.724575
SGARCH Skewed T-Student MOR_Price (3,0)	3	0	-7.721455	-7.697637	-7.721497	-7.712519
SGARCH Skewed T-Student MOR_Price (2,0)	2	0	-7.714286	-7.694438	-7.714315	-7.706839
SGARCH Skewed T-Student MOR_Price (1,0)	1	0	-7.690762	-7.674884	-7.690781	-7.684805
SGARCH Skewed T-Student MOR_Price (0,2)	0	2	-7.67377	-7.653922	-7.673799	-7.666323
SGARCH Skewed T-Student MOR_Price (0,1)	0	1	-7.667849	-7.65197	-7.667868	-7.661892
SGARCH Skewed T-Student MOR_Price (0,3)	0	3	-7.673211	-7.649393	-7.673253	-7.664275
SGARCH Skewed T-Student MOR_Price (0,4)	0	4	-7.671699	-7.643911	-7.671756	-7.661274
SGARCH Skewed T-Student MOR_Price (0,5)	0	5	-7.672099	-7.640342	-7.672174	-7.660185

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm MOR_Price (1,1)	1	1	-7.81263	-7.792782	-7.81266	-7.805184

APARCH Norm MOR_Price (1,2)	1	2	-7.816509	-7.792691	-7.816551	-7.807573
APARCH Norm MOR_Price (2,1)	2	1	-7.820396	-7.792608	-7.820453	-7.809971
APARCH Norm MOR_Price (1,3)	1	3	-7.815376	-7.787589	-7.815434	-7.804952
APARCH Norm MOR_Price (2,2)	2	2	-7.81919	-7.787433	-7.819265	-7.807276
APARCH Norm MOR_Price (2,3)	2	3	-7.819825	-7.784099	-7.81992	-7.806422
APARCH Norm MOR_Price (1,4)	1	4	-7.814252	-7.782495	-7.814327	-7.802338
APARCH Norm MOR_Price (2,4)	2	4	-7.817948	-7.778252	-7.818065	-7.803055
APARCH Norm MOR_Price (1,5)	1	5	-7.812264	-7.776537	-7.812359	-7.798861
APARCH Norm MOR_Price (3,1)	3	1	-7.810781	-7.775055	-7.810876	-7.797378
APARCH Norm MOR_Price (2,5)	2	5	-7.816941	-7.773275	-7.817082	-7.800559
APARCH Norm MOR_Price (3,2)	3	2	-7.808212	-7.768516	-7.808328	-7.793319
APARCH Norm MOR_Price (3,3)	3	3	-7.812177	-7.768511	-7.812317	-7.795795
APARCH Norm MOR_Price (3,4)	3	4	-7.814176	-7.76654	-7.814344	-7.796305
APARCH Norm MOR_Price (4,2)	4	2	-7.813068	-7.765432	-7.813235	-7.795197
APARCH Norm MOR_Price (4,1)	4	1	-7.807532	-7.763867	-7.807673	-7.791151
APARCH Norm MOR_Price (3,5)	3	5	-7.812833	-7.761228	-7.813029	-7.793473
APARCH Norm MOR_Price (4,3)	4	3	-7.812067	-7.760462	-7.812264	-7.792707
APARCH Norm MOR_Price (4,4)	4	4	-7.81025	-7.754675	-7.810478	-7.789401
APARCH Norm MOR_Price (5,1)	5	1	-7.805746	-7.754141	-7.805943	-7.786386
APARCH Norm MOR_Price (5,2)	5	2	-7.809355	-7.753781	-7.809583	-7.788506
APARCH Norm MOR_Price (4,5)	4	5	-7.809283	-7.749739	-7.809544	-7.786944
APARCH Norm MOR_Price (5,3)	5	3	-7.8013	-7.741755	-7.801561	-7.778961
APARCH Norm MOR_Price (5,4)	5	4	-7.800981	-7.737467	-7.801278	-7.777153
APARCH Norm MOR_Price (5,5)	5	5	-7.803079	-7.735595	-7.803413	-7.777762
APARCH Norm MOR_Price (2,0)	2	0	-7.652968	-7.62915	-7.65301	-7.644033
APARCH Norm MOR_Price (3,0)	3	0	-7.639149	-7.607392	-7.639224	-7.627235
APARCH Norm MOR_Price (1,0)	1	0	-7.621297	-7.605419	-7.621316	-7.61534
APARCH Norm MOR_Price (4,0)	4	0	-7.644912	-7.605215	-7.645028	-7.630019

APARCH Norm MOR_Price (5,0)	5	0	-7.64592	-7.598285	-7.646088	-7.628049
APARCH Norm MOR_Price (0,1)	0	1	-7.581875	-7.569966	-7.581885	-7.577407
APARCH Norm MOR_Price (0,2)	0	2	-7.580442	-7.564564	-7.580461	-7.574485
APARCH Norm MOR_Price (0,3)	0	3	-7.579266	-7.559418	-7.579295	-7.57182
APARCH Norm MOR_Price (0,4)	0	4	-7.576718	-7.5529	-7.57676	-7.567782
APARCH Norm MOR_Price (0,5)	0	5	-7.573638	-7.545851	-7.573696	-7.563214

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm MOR_Price (2,1)	2	1	-7.820263	-7.788506	-7.820337	-7.808349
APARCH Skewed Norm MOR_Price (1,1)	1	1	-7.81204	-7.788223	-7.812083	-7.803105
APARCH Skewed Norm MOR_Price (1,2)	1	2	-7.815997	-7.78821	-7.816054	-7.805572
APARCH Skewed Norm MOR_Price (2,2)	2	2	-7.819122	-7.783395	-7.819216	-7.805718
APARCH Skewed Norm MOR_Price (1,3)	1	3	-7.814848	-7.783091	-7.814923	-7.802934
APARCH Skewed Norm MOR_Price (2,3)	2	3	-7.81925	-7.779554	-7.819367	-7.804357
APARCH Skewed Norm MOR_Price (1,4)	1	4	-7.812411	-7.776685	-7.812506	-7.799008
APARCH Skewed Norm MOR_Price (2,4)	2	4	-7.817195	-7.773529	-7.817336	-7.800814
APARCH Skewed Norm MOR_Price (1,5)	1	5	-7.811501	-7.771805	-7.811618	-7.796608
APARCH Skewed Norm MOR_Price (3,1)	3	1	-7.811007	-7.771311	-7.811124	-7.796114
APARCH Skewed Norm MOR_Price (3,2)	3	2	-7.811499	-7.767834	-7.81164	-7.795118
APARCH Skewed Norm MOR_Price (3,3)	3	3	-7.814979	-7.767343	-7.815146	-7.797108
APARCH Skewed Norm MOR_Price (2,5)	2	5	-7.808367	-7.760732	-7.808535	-7.790496
APARCH Skewed Norm MOR_Price (4,2)	4	2	-7.81162	-7.760015	-7.811816	-7.79226
APARCH Skewed Norm MOR_Price (3,4)	3	4	-7.811428	-7.759822	-7.811624	-7.792067
APARCH Skewed Norm MOR_Price (4,3)	4	3	-7.812056	-7.756482	-7.812284	-7.791207
APARCH Skewed Norm MOR_Price (3,5)	3	5	-7.811777	-7.756203	-7.812005	-7.790928
APARCH Skewed Norm MOR_Price (4,1)	4	1	-7.799968	-7.752333	-7.800136	-7.782097
APARCH Skewed Norm MOR_Price (5,1)	5	1	-7.806516	-7.750941	-7.806743	-7.785666
APARCH Skewed Norm MOR_Price (4,4)	4	4	-7.809764	-7.75022	-7.810025	-7.787426

APARCH Skewed Norm MOR_Price (5,2)	5	2	-7.808729	-7.749185	-7.80899	-7.786391
APARCH Skewed Norm MOR_Price (4,5)	4	5	-7.8083	-7.744786	-7.808597	-7.784472
APARCH Skewed Norm MOR_Price (5,3)	5	3	-7.808047	-7.744532	-7.808343	-7.784219
APARCH Skewed Norm MOR_Price (5,4)	5	4	-7.805391	-7.737907	-7.805726	-7.780074
APARCH Skewed Norm MOR_Price (5,5)	5	5	-7.804131	-7.732678	-7.804506	-7.777325
APARCH Skewed Norm MOR_Price (2,0)	2	0	-7.636893	-7.609105	-7.63695	-7.626468
APARCH Skewed Norm MOR_Price (1,0)	1	0	-7.624611	-7.604763	-7.62464	-7.617165
APARCH Skewed Norm MOR_Price (3,0)	3	0	-7.63665	-7.600924	-7.636745	-7.623247
APARCH Skewed Norm MOR_Price (4,0)	4	0	-7.640087	-7.596421	-7.640228	-7.623705
APARCH Skewed Norm MOR_Price (5,0)	5	0	-7.647868	-7.596263	-7.648065	-7.628508
APARCH Skewed Norm MOR_Price (0,1)	0	1	-7.579799	-7.56392	-7.579817	-7.573842
APARCH Skewed Norm MOR_Price (0,2)	0	2	-7.580607	-7.560759	-7.580636	-7.573161
APARCH Skewed Norm MOR_Price (0,3)	0	3	-7.577801	-7.553983	-7.577843	-7.568865
APARCH Skewed Norm MOR_Price (0,4)	0	4	-7.575523	-7.547735	-7.57558	-7.565098
APARCH Skewed Norm MOR_Price (0,5)	0	5	-7.571917	-7.54016	-7.571992	-7.560003

APARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student MOR_Price (2,2)	2	2	-7.821896	-7.786169	-7.821991	-7.808493
APARCH T-Student MOR_Price (1,1)	1	1	-7.808831	-7.785013	-7.808873	-7.799895
APARCH T-Student MOR_Price (1,2)	1	2	-7.812589	-7.784802	-7.812647	-7.802165
APARCH T-Student MOR_Price (1,3)	1	3	-7.814953	-7.783196	-7.815028	-7.803039
APARCH T-Student MOR_Price (2,1)	2	1	-7.80948	-7.777723	-7.809555	-7.797566
APARCH T-Student MOR_Price (1,4)	1	4	-7.81248	-7.776753	-7.812574	-7.799077
APARCH T-Student MOR_Price (3,1)	3	1	-7.814764	-7.775067	-7.81488	-7.799871
APARCH T-Student MOR_Price (2,4)	2	4	-7.817152	-7.773486	-7.817293	-7.800771
APARCH T-Student MOR_Price (2,3)	2	3	-7.812992	-7.773295	-7.813108	-7.798099
APARCH T-Student MOR_Price (1,5)	1	5	-7.808799	-7.769103	-7.808916	-7.793907
APARCH T-Student MOR_Price (3,3)	3	3	-7.815566	-7.76793	-7.815733	-7.797695

APARCH T-Student MOR_Price (3,2)	3	2	-7.810958	-7.767292	-7.811099	-7.794577
APARCH T-Student MOR_Price (3,4)	3	4	-7.812744	-7.761138	-7.81294	-7.793383
APARCH T-Student MOR_Price (3,5)	3	5	-7.810993	-7.755419	-7.811221	-7.790144
APARCH T-Student MOR_Price (4,2)	4	2	-7.805375	-7.75377	-7.805571	-7.786015
APARCH T-Student MOR_Price (4,3)	4	3	-7.806478	-7.750903	-7.806705	-7.785628
APARCH T-Student MOR_Price (5,1)	5	1	-7.804556	-7.748981	-7.804783	-7.783706
APARCH T-Student MOR_Price (2,5)	2	5	-7.795552	-7.747917	-7.79572	-7.777681
APARCH T-Student MOR_Price (4,1)	4	1	-7.794181	-7.746546	-7.794349	-7.77631
APARCH T-Student MOR_Price (4,5)	4	5	-7.809869	-7.746355	-7.810166	-7.786041
APARCH T-Student MOR_Price (4,4)	4	4	-7.803591	-7.744046	-7.803852	-7.781252
APARCH T-Student MOR_Price (5,4)	5	4	-7.809389	-7.741906	-7.809724	-7.784072
APARCH T-Student MOR_Price (5,3)	5	3	-7.804538	-7.741024	-7.804835	-7.78071
APARCH T-Student MOR_Price (5,2)	5	2	-7.799091	-7.739546	-7.799352	-7.776752
APARCH T-Student MOR_Price (5,5)	5	5	-7.810169	-7.738715	-7.810543	-7.783362
APARCH T-Student MOR_Price (1,0)	1	0	-7.68269	-7.662841	-7.682719	-7.675243
APARCH T-Student MOR_Price (2,0)	2	0	-7.687255	-7.659467	-7.687312	-7.67683
APARCH T-Student MOR_Price (3,0)	3	0	-7.69104	-7.655314	-7.691135	-7.677637
APARCH T-Student MOR_Price (0,1)	0	1	-7.665306	-7.649428	-7.665325	-7.65935
APARCH T-Student MOR_Price (4,0)	4	0	-7.687766	-7.6441	-7.687907	-7.671384
APARCH T-Student MOR_Price (0,2)	0	2	-7.663325	-7.643477	-7.663354	-7.655879
APARCH T-Student MOR_Price (0,3)	0	3	-7.661589	-7.637771	-7.661631	-7.652654
APARCH T-Student MOR_Price (0,4)	0	4	-7.659547	-7.63176	-7.659605	-7.649123
APARCH T-Student MOR_Price (5,0)	5	0	-7.679429	-7.627823	-7.679625	-7.660068
APARCH T-Student MOR_Price (0,5)	0	5	-7.65735	-7.625593	-7.657425	-7.645436

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student MOR_Price (2,1)	2	1	-7.820352	-7.784625	-7.820446	-7.806948
APARCH Skewed T-Student MOR_Price (1,2)	1	2	-7.815466	-7.783709	-7.81554	-7.803552

APARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.809532	-7.781745	-7.809589	-7.799107
APARCH Skewed T-Student MOR_Price (2,2)	2	2	-7.820202	-7.780506	-7.820319	-7.80531
APARCH Skewed T-Student MOR_Price (1,3)	1	3	-7.811521	-7.775795	-7.811616	-7.798118
APARCH Skewed T-Student MOR_Price (3,1)	3	1	-7.816575	-7.772909	-7.816716	-7.800194
APARCH Skewed T-Student MOR_Price (1,4)	1	4	-7.808279	-7.768583	-7.808396	-7.793387
APARCH Skewed T-Student MOR_Price (1,5)	1	5	-7.809745	-7.766079	-7.809886	-7.793363
APARCH Skewed T-Student MOR_Price (3,3)	3	3	-7.8167	-7.765094	-7.816896	-7.797339
APARCH Skewed T-Student MOR_Price (2,5)	2	5	-7.816221	-7.764615	-7.816417	-7.79686
APARCH Skewed T-Student MOR_Price (3,2)	3	2	-7.811557	-7.763921	-7.811724	-7.793686
APARCH Skewed T-Student MOR_Price (2,3)	2	3	-7.807071	-7.763406	-7.807212	-7.79069
APARCH Skewed T-Student MOR_Price (4,1)	4	1	-7.814777	-7.763172	-7.814973	-7.795417
APARCH Skewed T-Student MOR_Price (3,4)	3	4	-7.813316	-7.757742	-7.813544	-7.792467
APARCH Skewed T-Student MOR_Price (2,4)	2	4	-7.801882	-7.754246	-7.802049	-7.784011
APARCH Skewed T-Student MOR_Price (4,2)	4	2	-7.804887	-7.749312	-7.805115	-7.784038
APARCH Skewed T-Student MOR_Price (4,3)	4	3	-7.806676	-7.747132	-7.806937	-7.784337
APARCH Skewed T-Student MOR_Price (3,5)	3	5	-7.805824	-7.746279	-7.806085	-7.783485
APARCH Skewed T-Student MOR_Price (4,4)	4	4	-7.809274	-7.74576	-7.80957	-7.785446
APARCH Skewed T-Student MOR_Price (4,5)	4	5	-7.811763	-7.744279	-7.812098	-7.786446
APARCH Skewed T-Student MOR_Price (5,3)	5	3	-7.810829	-7.743345	-7.811163	-7.785511
APARCH Skewed T-Student MOR_Price (5,4)	5	4	-7.810125	-7.738671	-7.810499	-7.783318
APARCH Skewed T-Student MOR_Price (5,1)	5	1	-7.796866	-7.737321	-7.797127	-7.774527
APARCH Skewed T-Student MOR_Price (5,2)	5	2	-7.800515	-7.737001	-7.800812	-7.776687
APARCH Skewed T-Student MOR_Price (5,5)	5	5	-7.796221	-7.720799	-7.796639	-7.767926
APARCH Skewed T-Student MOR_Price (2,0)	2	0	-7.689873	-7.658116	-7.689948	-7.677959
APARCH Skewed T-Student MOR_Price (1,0)	1	0	-7.681754	-7.657937	-7.681796	-7.672819
APARCH Skewed T-Student MOR_Price (0,1)	0	1	-7.663825	-7.643977	-7.663854	-7.656379
APARCH Skewed T-Student MOR_Price (3,0)	3	0	-7.682659	-7.642962	-7.682775	-7.667766
APARCH Skewed T-Student MOR_Price (4,0)	4	0	-7.686566	-7.63893	-7.686733	-7.668695

APARCH Skewed T-Student MOR_Price (0,2)	0	2	-7.66204	-7.638222	-7.662082	-7.653104
APARCH Skewed T-Student MOR_Price (0,3)	0	3	-7.659981	-7.632194	-7.660039	-7.649557
APARCH Skewed T-Student MOR_Price (5,0)	5	0	-7.687552	-7.631978	-7.68778	-7.666703
APARCH Skewed T-Student MOR_Price (0,4)	0	4	-7.657809	-7.626052	-7.657884	-7.645895
APARCH Skewed T-Student MOR_Price (0,5)	0	5	-7.655458	-7.619731	-7.655552	-7.642054
<i>TGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm MOR_Price (1,1)	1	1	-7.812872	-7.796994	-7.812891	-7.806915
TGARCH Norm MOR_Price (2,1)	2	1	-7.816124	-7.792307	-7.816167	-7.807189
TGARCH Norm MOR_Price (1,2)	1	2	-7.811048	-7.7912	-7.811077	-7.803601
TGARCH Norm MOR_Price (2,2)	2	2	-7.81459	-7.786802	-7.814647	-7.804165
TGARCH Norm MOR_Price (1,3)	1	3	-7.809648	-7.78583	-7.80969	-7.800712
TGARCH Norm MOR_Price (3,1)	3	1	-7.813566	-7.781809	-7.813641	-7.801652
TGARCH Norm MOR_Price (2,3)	2	3	-7.812762	-7.781005	-7.812837	-7.800848
TGARCH Norm MOR_Price (1,4)	1	4	-7.808028	-7.78024	-7.808085	-7.797603
TGARCH Norm MOR_Price (3,2)	3	2	-7.812024	-7.776297	-7.812119	-7.798621
TGARCH Norm MOR_Price (2,4)	2	4	-7.811182	-7.775455	-7.811276	-7.797778
TGARCH Norm MOR_Price (1,5)	1	5	-7.806353	-7.774596	-7.806428	-7.794439
TGARCH Norm MOR_Price (4,1)	4	1	-7.811315	-7.771619	-7.811431	-7.796422
TGARCH Norm MOR_Price (3,3)	3	3	-7.810487	-7.770791	-7.810603	-7.795594
TGARCH Norm MOR_Price (2,5)	2	5	-7.809624	-7.769928	-7.809741	-7.794732
TGARCH Norm MOR_Price (4,2)	4	2	-7.809786	-7.76612	-7.809927	-7.793404
TGARCH Norm MOR_Price (3,4)	3	4	-7.8089	-7.765234	-7.809041	-7.792518
TGARCH Norm MOR_Price (5,1)	5	1	-7.808343	-7.760708	-7.808511	-7.790472
TGARCH Norm MOR_Price (4,3)	4	3	-7.808251	-7.760615	-7.808418	-7.79038
TGARCH Norm MOR_Price (3,5)	3	5	-7.807365	-7.759729	-7.807532	-7.789494
TGARCH Norm MOR_Price (5,2)	5	2	-7.806808	-7.755203	-7.807005	-7.787448
TGARCH Norm MOR_Price (4,4)	4	4	-7.806713	-7.755108	-7.80691	-7.787353

TGARCH Norm MOR_Price (5,3)	5	3	-7.805273	-7.749698	-7.805501	-7.784424
TGARCH Norm MOR_Price (4,5)	4	5	-7.805236	-7.749661	-7.805463	-7.784386
TGARCH Norm MOR_Price (5,4)	5	4	-7.80373	-7.744186	-7.803991	-7.781392
TGARCH Norm MOR_Price (5,5)	5	5	-7.802203	-7.738689	-7.8025	-7.778375
TGARCH Norm MOR_Price (5,0)	5	0	-7.696383	-7.652717	-7.696524	-7.680001
TGARCH Norm MOR_Price (4,0)	4	0	-7.681279	-7.645552	-7.681374	-7.667876
TGARCH Norm MOR_Price (0,2)	0	2	-7.655786	-7.643877	-7.655796	-7.651318
TGARCH Norm MOR_Price (0,3)	0	3	-7.654233	-7.638354	-7.654252	-7.648276
TGARCH Norm MOR_Price (3,0)	3	0	-7.663783	-7.635996	-7.66384	-7.653358
TGARCH Norm MOR_Price (0,4)	0	4	-7.652716	-7.632868	-7.652745	-7.64527
TGARCH Norm MOR_Price (0,5)	0	5	-7.643135	-7.619317	-7.643177	-7.634199
TGARCH Norm MOR_Price (2,0)	2	0	-7.630188	-7.61034	-7.630217	-7.622741
TGARCH Norm MOR_Price (1,0)	1	0	14.499945	14.511854	14.499934	14.504413
TGARCH Norm MOR_Price (0,1)	0	1	70.19978	70.20772	70.199776	70.202759

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.811932	-7.792084	-7.811961	-7.804486
TGARCH Skewed Norm MOR_Price (2,1)	2	1	-7.815177	-7.787389	-7.815234	-7.804752
TGARCH Skewed Norm MOR_Price (1,2)	1	2	-7.810093	-7.786275	-7.810135	-7.801157
TGARCH Skewed Norm MOR_Price (2,2)	2	2	-7.813642	-7.781885	-7.813716	-7.801728
TGARCH Skewed Norm MOR_Price (1,3)	1	3	-7.8087	-7.780912	-7.808757	-7.798275
TGARCH Skewed Norm MOR_Price (3,1)	3	1	-7.812739	-7.777013	-7.812834	-7.799336
TGARCH Skewed Norm MOR_Price (2,3)	2	3	-7.8118	-7.776074	-7.811895	-7.798397
TGARCH Skewed Norm MOR_Price (1,4)	1	4	-7.807078	-7.775321	-7.807153	-7.795164
TGARCH Skewed Norm MOR_Price (3,2)	3	2	-7.811204	-7.771508	-7.811321	-7.796312
TGARCH Skewed Norm MOR_Price (2,4)	2	4	-7.810219	-7.770523	-7.810336	-7.795327
TGARCH Skewed Norm MOR_Price (1,5)	1	5	-7.80543	-7.769704	-7.805525	-7.792027
TGARCH Skewed Norm MOR_Price (4,1)	4	1	-7.810302	-7.766636	-7.810443	-7.79392

TGARCH Skewed Norm MOR_Price (3,3)	3	3	-7.809662	-7.765997	-7.809803	-7.793281
TGARCH Skewed Norm MOR_Price (2,5)	2	5	-7.808676	-7.76501	-7.808817	-7.792294
TGARCH Skewed Norm MOR_Price (4,2)	4	2	-7.8088	-7.761165	-7.808968	-7.790929
TGARCH Skewed Norm MOR_Price (3,4)	3	4	-7.808134	-7.760499	-7.808302	-7.790263
TGARCH Skewed Norm MOR_Price (5,1)	5	1	-7.808099	-7.756494	-7.808295	-7.788739
TGARCH Skewed Norm MOR_Price (4,3)	4	3	-7.807254	-7.755649	-7.80745	-7.787894
TGARCH Skewed Norm MOR_Price (3,5)	3	5	-7.806538	-7.754933	-7.806734	-7.787178
TGARCH Skewed Norm MOR_Price (5,2)	5	2	-7.806566	-7.750991	-7.806794	-7.785717
TGARCH Skewed Norm MOR_Price (4,4)	4	4	-7.80564	-7.750066	-7.805868	-7.784791
TGARCH Skewed Norm MOR_Price (5,3)	5	3	-7.805321	-7.745777	-7.805582	-7.782983
TGARCH Skewed Norm MOR_Price (4,5)	4	5	-7.804279	-7.744734	-7.80454	-7.78194
TGARCH Skewed Norm MOR_Price (5,4)	5	4	-7.803787	-7.740273	-7.804083	-7.779959
TGARCH Skewed Norm MOR_Price (5,5)	5	5	-7.802252	-7.734768	-7.802586	-7.776934
TGARCH Skewed Norm MOR_Price (5,0)	5	0	-7.695132	-7.647497	-7.6953	-7.677261
TGARCH Skewed Norm MOR_Price (4,0)	4	0	-7.68079	-7.641094	-7.680906	-7.665897
TGARCH Skewed Norm MOR_Price (2,0)	2	0	-7.660276	-7.636458	-7.660318	-7.65134
TGARCH Skewed Norm MOR_Price (3,0)	3	0	-7.662433	-7.630676	-7.662507	-7.650519
TGARCH Skewed Norm MOR_Price (0,5)	0	5	-7.642258	-7.614471	-7.642315	-7.631833
TGARCH Skewed Norm MOR_Price (1,0)	1	0	14.463893	14.479771	14.463874	14.46985
TGARCH Skewed Norm MOR_Price (0,4)	0	4	66.203427	66.227244	66.203384	66.212362
TGARCH Skewed Norm MOR_Price (0,1)	0	1	70.605989	70.617898	70.605978	70.610457

<i>TGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student MOR_Price (1,1)	1	1	-7.816158	-7.79631	-7.816187	-7.808712
TGARCH T-Student MOR_Price (2,1)	2	1	-7.819354	-7.791567	-7.819411	-7.808929
TGARCH T-Student MOR_Price (1,2)	1	2	-7.814329	-7.790511	-7.814371	-7.805393

TGARCH T-Student MOR_Price (2,2)	2	2	-7.817819	-7.786062	-7.817894	-7.805905
TGARCH T-Student MOR_Price (1,3)	1	3	-7.812925	-7.785137	-7.812982	-7.8025
TGARCH T-Student MOR_Price (3,1)	3	1	-7.816823	-7.781096	-7.816918	-7.80342
TGARCH T-Student MOR_Price (2,3)	2	3	-7.815952	-7.780225	-7.816047	-7.802549
TGARCH T-Student MOR_Price (1,4)	1	4	-7.811317	-7.77956	-7.811392	-7.799403
TGARCH T-Student MOR_Price (3,2)	3	2	-7.815289	-7.775593	-7.815406	-7.800397
TGARCH T-Student MOR_Price (2,4)	2	4	-7.814388	-7.774692	-7.814505	-7.799496
TGARCH T-Student MOR_Price (1,5)	1	5	-7.809624	-7.773897	-7.809719	-7.796221
TGARCH T-Student MOR_Price (4,1)	4	1	-7.814647	-7.770981	-7.814788	-7.798265
TGARCH T-Student MOR_Price (3,3)	3	3	-7.813753	-7.770088	-7.813894	-7.797372
TGARCH T-Student MOR_Price (2,5)	2	5	-7.812818	-7.769152	-7.812959	-7.796436
TGARCH T-Student MOR_Price (4,2)	4	2	-7.813112	-7.765477	-7.81328	-7.795241
TGARCH T-Student MOR_Price (3,4)	3	4	-7.81224	-7.764604	-7.812407	-7.794369
TGARCH T-Student MOR_Price (5,1)	5	1	-7.811716	-7.760111	-7.811912	-7.792356
TGARCH T-Student MOR_Price (4,3)	4	3	-7.811578	-7.759972	-7.811774	-7.792217
TGARCH T-Student MOR_Price (3,5)	3	5	-7.81062	-7.759014	-7.810816	-7.791259
TGARCH T-Student MOR_Price (5,2)	5	2	-7.810181	-7.754606	-7.810409	-7.789332
TGARCH T-Student MOR_Price (4,4)	4	4	-7.810043	-7.754468	-7.81027	-7.789193
TGARCH T-Student MOR_Price (5,3)	5	3	-7.808646	-7.749102	-7.808907	-7.786307
TGARCH T-Student MOR_Price (4,5)	4	5	-7.808524	-7.748979	-7.808785	-7.786185
TGARCH T-Student MOR_Price (5,4)	5	4	-7.807111	-7.743597	-7.807408	-7.783283
TGARCH T-Student MOR_Price (5,5)	5	5	-7.805576	-7.738093	-7.805911	-7.780259
TGARCH T-Student MOR_Price (0,1)	0	1	-7.691925	-7.680016	-7.691935	-7.687457
TGARCH T-Student MOR_Price (0,2)	0	2	-7.694539	-7.678661	-7.694558	-7.688582
TGARCH T-Student MOR_Price (2,0)	2	0	-7.699227	-7.675409	-7.699269	-7.690291
TGARCH T-Student MOR_Price (0,3)	0	3	-7.694432	-7.674583	-7.694461	-7.686985
TGARCH T-Student MOR_Price (4,0)	4	0	-7.713756	-7.67406	-7.713873	-7.698864
TGARCH T-Student MOR_Price (0,4)	0	4	-7.693581	-7.669764	-7.693624	-7.684646

TGARCH T-Student MOR_Price (3,0)	3	0	-7.701363	-7.669606	-7.701438	-7.689449
TGARCH T-Student MOR_Price (1,0)	1	0	-7.684372	-7.668493	-7.684391	-7.678415
TGARCH T-Student MOR_Price (0,5)	0	5	-7.692481	-7.664693	-7.692538	-7.682056
TGARCH T-Student MOR_Price (5,0)	5	0	-7.664804	-7.617169	-7.664972	-7.646933

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.815356	-7.791538	-7.815398	-7.80642
TGARCH Skewed T-Student MOR_Price (2,1)	2	1	-7.81853	-7.786773	-7.818605	-7.806616
TGARCH Skewed T-Student MOR_Price (1,2)	1	2	-7.813509	-7.785722	-7.813567	-7.803085
TGARCH Skewed T-Student MOR_Price (2,2)	2	2	-7.816995	-7.781269	-7.81709	-7.803592
TGARCH Skewed T-Student MOR_Price (1,3)	1	3	-7.812113	-7.780356	-7.812188	-7.800199
TGARCH Skewed T-Student MOR_Price (3,1)	3	1	-7.816096	-7.7764	-7.816213	-7.801204
TGARCH Skewed T-Student MOR_Price (2,3)	2	3	-7.815111	-7.775414	-7.815227	-7.800218
TGARCH Skewed T-Student MOR_Price (1,4)	1	4	-7.810504	-7.774778	-7.810599	-7.797101
TGARCH Skewed T-Student MOR_Price (3,2)	3	2	-7.814543	-7.770877	-7.814684	-7.798161
TGARCH Skewed T-Student MOR_Price (2,4)	2	4	-7.813547	-7.769881	-7.813688	-7.797166
TGARCH Skewed T-Student MOR_Price (1,5)	1	5	-7.808831	-7.769134	-7.808947	-7.793938
TGARCH Skewed T-Student MOR_Price (4,1)	4	1	-7.8138	-7.766165	-7.813968	-7.795929
TGARCH Skewed T-Student MOR_Price (3,3)	3	3	-7.813027	-7.765391	-7.813194	-7.795156
TGARCH Skewed T-Student MOR_Price (2,5)	2	5	-7.811986	-7.76435	-7.812153	-7.794115
TGARCH Skewed T-Student MOR_Price (4,2)	4	2	-7.812265	-7.76066	-7.812462	-7.792905
TGARCH Skewed T-Student MOR_Price (3,4)	3	4	-7.811542	-7.759937	-7.811738	-7.792182
TGARCH Skewed T-Student MOR_Price (5,1)	5	1	-7.811446	-7.755871	-7.811673	-7.790596
TGARCH Skewed T-Student MOR_Price (4,3)	4	3	-7.810731	-7.755156	-7.810958	-7.789881
TGARCH Skewed T-Student MOR_Price (3,5)	3	5	-7.809913	-7.754338	-7.81014	-7.789063
TGARCH Skewed T-Student MOR_Price (5,2)	5	2	-7.809897	-7.750353	-7.810158	-7.787559
TGARCH Skewed T-Student MOR_Price (4,4)	4	4	-7.809196	-7.749651	-7.809457	-7.786857
TGARCH Skewed T-Student MOR_Price (5,3)	5	3	-7.808372	-7.744858	-7.808669	-7.784544

TGARCH Skewed T-Student MOR_Price (4,5)	4	5	-7.807681	-7.744167	-7.807977	-7.783853
TGARCH Skewed T-Student MOR_Price (5,4)	5	4	-7.806502	-7.739018	-7.806836	-7.781184
TGARCH Skewed T-Student MOR_Price (5,5)	5	5	-7.805377	-7.733924	-7.805752	-7.778571
TGARCH Skewed T-Student MOR_Price (0,1)	0	1	-7.690494	-7.674616	-7.690513	-7.684537
TGARCH Skewed T-Student MOR_Price (0,2)	0	2	-7.693156	-7.673308	-7.693185	-7.68571
TGARCH Skewed T-Student MOR_Price (5,0)	5	0	-7.721963	-7.670358	-7.72216	-7.702603
TGARCH Skewed T-Student MOR_Price (0,3)	0	3	-7.693018	-7.6692	-7.69306	-7.684082
TGARCH Skewed T-Student MOR_Price (1,0)	1	0	-7.682885	-7.663037	-7.682914	-7.675439
TGARCH Skewed T-Student MOR_Price (0,5)	0	5	-7.691083	-7.659326	-7.691158	-7.679169
TGARCH Skewed T-Student MOR_Price (0,4)	0	4	-7.654	-7.626213	-7.654058	-7.643576
TGARCH Skewed T-Student MOR_Price (4,0)	4	0	-7.665336	-7.62167	-7.665477	-7.648954
TGARCH Skewed T-Student MOR_Price (3,0)	3	0	-7.653813	-7.618087	-7.653908	-7.64041
TGARCH Skewed T-Student MOR_Price (2,0)	2	0	-7.636393	-7.608606	-7.636451	-7.625969

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm MOR_Price (1,1)	1	1	-7.814515	-7.798637	-7.814534	-7.808558
EGARCH Norm MOR_Price (3,3)	3	3	-7.834779	-7.795082	-7.834895	-7.819886
EGARCH Norm MOR_Price (1,3)	1	3	-7.818698	-7.79488	-7.81874	-7.809762
EGARCH Norm MOR_Price (1,2)	1	2	-7.813615	-7.793766	-7.813644	-7.806168
EGARCH Norm MOR_Price (1,4)	1	4	-7.82117	-7.793383	-7.821227	-7.810745
EGARCH Norm MOR_Price (2,1)	2	1	-7.814963	-7.791145	-7.815005	-7.806028
EGARCH Norm MOR_Price (1,5)	1	5	-7.822207	-7.79045	-7.822282	-7.810293
EGARCH Norm MOR_Price (2,2)	2	2	-7.814195	-7.786407	-7.814252	-7.80377
EGARCH Norm MOR_Price (2,4)	2	4	-7.820926	-7.785199	-7.82102	-7.807523
EGARCH Norm MOR_Price (3,5)	3	5	-7.831867	-7.784232	-7.832035	-7.813996
EGARCH Norm MOR_Price (4,3)	4	3	-7.830378	-7.782742	-7.830546	-7.812507
EGARCH Norm MOR_Price (3,1)	3	1	-7.813787	-7.78203	-7.813862	-7.801873
EGARCH Norm MOR_Price (2,3)	2	3	-7.813613	-7.781856	-7.813688	-7.801699

EGARCH Norm MOR_Price (4,4)	4	4	-7.830116	-7.778511	-7.830312	-7.810756
EGARCH Norm MOR_Price (3,2)	3	2	-7.812257	-7.776531	-7.812352	-7.798854
EGARCH Norm MOR_Price (2,5)	2	5	-7.815137	-7.77544	-7.815253	-7.800244
EGARCH Norm MOR_Price (3,4)	3	4	-7.81867	-7.775004	-7.818811	-7.802289
EGARCH Norm MOR_Price (5,3)	5	3	-7.830366	-7.774791	-7.830593	-7.809516
EGARCH Norm MOR_Price (4,1)	4	1	-7.81104	-7.771343	-7.811156	-7.796147
EGARCH Norm MOR_Price (4,2)	4	2	-7.813046	-7.76938	-7.813186	-7.796664
EGARCH Norm MOR_Price (5,4)	5	4	-7.828237	-7.768692	-7.828498	-7.805898
EGARCH Norm MOR_Price (5,1)	5	1	-7.808334	-7.760698	-7.808501	-7.790463
EGARCH Norm MOR_Price (5,2)	5	2	-7.810134	-7.758529	-7.810331	-7.790774
EGARCH Norm MOR_Price (4,5)	4	5	-7.810475	-7.7549	-7.810702	-7.789625
EGARCH Norm MOR_Price (5,5)	5	5	-7.814913	-7.751399	-7.815209	-7.791085
EGARCH Norm MOR_Price (5,0)	5	0	-7.649413	-7.605747	-7.649553	-7.633031
EGARCH Norm MOR_Price (4,0)	4	0	-7.636109	-7.600382	-7.636203	-7.622706
EGARCH Norm MOR_Price (3,0)	3	0	-7.614912	-7.587125	-7.61497	-7.604488
EGARCH Norm MOR_Price (2,0)	2	0	-7.603715	-7.583867	-7.603744	-7.596269
EGARCH Norm MOR_Price (0,1)	0	1	-7.586364	-7.578425	-7.586369	-7.583386
EGARCH Norm MOR_Price (0,2)	0	2	-7.584827	-7.572918	-7.584838	-7.58036
EGARCH Norm MOR_Price (0,3)	0	3	-7.583292	-7.567414	-7.583311	-7.577335
EGARCH Norm MOR_Price (0,4)	0	4	-7.58176	-7.561912	-7.581789	-7.574314
EGARCH Norm MOR_Price (0,5)	0	5	-7.58013	-7.556312	-7.580172	-7.571194
EGARCH Norm MOR_Price (1,0)	1	0	-4.791005	-4.779096	-4.791016	-4.786538

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.813832	-7.793984	-7.813861	-7.806386
EGARCH Skewed Norm MOR_Price (3,3)	3	3	-7.835286	-7.79162	-7.835427	-7.818904
EGARCH Skewed Norm MOR_Price (1,4)	1	4	-7.822227	-7.79047	-7.822302	-7.810313
EGARCH Skewed Norm MOR_Price (1,3)	1	3	-7.817762	-7.789975	-7.817819	-7.807337

EGARCH Skewed Norm MOR_Price (1,2)	1	2	-7.81293	-7.789112	-7.812972	-7.803994
EGARCH Skewed Norm MOR_Price (2,1)	2	1	-7.814135	-7.786347	-7.814192	-7.80371
EGARCH Skewed Norm MOR_Price (1,5)	1	5	-7.821557	-7.78583	-7.821652	-7.808154
EGARCH Skewed Norm MOR_Price (2,2)	2	2	-7.813539	-7.781782	-7.813613	-7.801625
EGARCH Skewed Norm MOR_Price (4,3)	4	3	-7.831815	-7.78021	-7.832012	-7.812455
EGARCH Skewed Norm MOR_Price (2,4)	2	4	-7.819756	-7.780059	-7.819872	-7.804863
EGARCH Skewed Norm MOR_Price (3,1)	3	1	-7.813185	-7.777458	-7.813279	-7.799781
EGARCH Skewed Norm MOR_Price (2,3)	2	3	-7.813026	-7.777299	-7.813121	-7.799623
EGARCH Skewed Norm MOR_Price (3,5)	3	5	-7.827097	-7.775492	-7.827294	-7.807737
EGARCH Skewed Norm MOR_Price (4,4)	4	4	-7.829464	-7.773889	-7.829691	-7.808614
EGARCH Skewed Norm MOR_Price (3,2)	3	2	-7.811655	-7.771959	-7.811772	-7.796763
EGARCH Skewed Norm MOR_Price (3,4)	3	4	-7.819312	-7.771676	-7.81948	-7.801441
EGARCH Skewed Norm MOR_Price (2,5)	2	5	-7.814171	-7.770505	-7.814312	-7.797789
EGARCH Skewed Norm MOR_Price (5,5)	5	5	-7.836735	-7.769251	-7.837069	-7.811418
EGARCH Skewed Norm MOR_Price (4,1)	4	1	-7.810519	-7.766853	-7.81066	-7.794137
EGARCH Skewed Norm MOR_Price (4,2)	4	2	-7.812663	-7.765027	-7.81283	-7.794792
EGARCH Skewed Norm MOR_Price (5,4)	5	4	-7.827155	-7.763641	-7.827451	-7.803327
EGARCH Skewed Norm MOR_Price (5,1)	5	1	-7.807935	-7.756329	-7.808131	-7.788574
EGARCH Skewed Norm MOR_Price (5,2)	5	2	-7.809769	-7.754194	-7.809997	-7.78892
EGARCH Skewed Norm MOR_Price (5,3)	5	3	-7.810579	-7.751035	-7.81084	-7.78824
EGARCH Skewed Norm MOR_Price (4,5)	4	5	-7.810141	-7.750597	-7.810402	-7.787802
EGARCH Skewed Norm MOR_Price (5,0)	5	0	-7.64862	-7.600985	-7.648788	-7.630749
EGARCH Skewed Norm MOR_Price (4,0)	4	0	-7.635671	-7.595975	-7.635788	-7.620779
EGARCH Skewed Norm MOR_Price (3,0)	3	0	-7.613518	-7.581761	-7.613593	-7.601604
EGARCH Skewed Norm MOR_Price (2,0)	2	0	-7.602301	-7.578483	-7.602343	-7.593365
EGARCH Skewed Norm MOR_Price (0,1)	0	1	-7.585296	-7.573387	-7.585306	-7.580828
EGARCH Skewed Norm MOR_Price (0,2)	0	2	-7.58376	-7.567881	-7.583779	-7.577803
EGARCH Skewed Norm MOR_Price (0,4)	0	4	-7.580696	-7.556879	-7.580739	-7.571761

EGARCH Skewed Norm MOR_Price (1,0)	1	0	-7.557784	-7.541905	-7.557803	-7.551827
EGARCH Skewed Norm MOR_Price (0,3)	0	3	46.998144	47.017992	46.998115	47.005591
EGARCH Skewed Norm MOR_Price (0,5)	0	5	146.762038	146.789825	146.76198	146.772462

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student MOR_Price (1,1)	1	1	-7.817663	-7.797815	-7.817692	-7.810217
EGARCH T-Student MOR_Price (1,3)	1	3	-7.822292	-7.794504	-7.822349	-7.811867
EGARCH T-Student MOR_Price (1,4)	1	4	-7.82547	-7.793713	-7.825545	-7.813556
EGARCH T-Student MOR_Price (1,2)	1	2	-7.816649	-7.792831	-7.816691	-7.807713
EGARCH T-Student MOR_Price (2,1)	2	1	-7.817629	-7.789842	-7.817687	-7.807205
EGARCH T-Student MOR_Price (1,5)	1	5	-7.824752	-7.789025	-7.824847	-7.811349
EGARCH T-Student MOR_Price (2,2)	2	2	-7.816957	-7.7852	-7.817032	-7.805043
EGARCH T-Student MOR_Price (2,4)	2	4	-7.823812	-7.784116	-7.823928	-7.808919
EGARCH T-Student MOR_Price (3,1)	3	1	-7.816405	-7.780679	-7.8165	-7.803002
EGARCH T-Student MOR_Price (2,3)	2	3	-7.816262	-7.780536	-7.816357	-7.802859
EGARCH T-Student MOR_Price (5,5)	5	5	-7.845995	-7.778512	-7.84633	-7.820678
EGARCH T-Student MOR_Price (3,3)	3	3	-7.821291	-7.777626	-7.821432	-7.80491
EGARCH T-Student MOR_Price (3,2)	3	2	-7.814874	-7.775177	-7.81499	-7.799981
EGARCH T-Student MOR_Price (2,5)	2	5	-7.816832	-7.773167	-7.816973	-7.800451
EGARCH T-Student MOR_Price (3,4)	3	4	-7.820748	-7.773112	-7.820915	-7.802877
EGARCH T-Student MOR_Price (4,1)	4	1	-7.813595	-7.769929	-7.813736	-7.797213
EGARCH T-Student MOR_Price (4,2)	4	2	-7.815521	-7.767886	-7.815689	-7.79765
EGARCH T-Student MOR_Price (4,3)	4	3	-7.819346	-7.767741	-7.819542	-7.799986
EGARCH T-Student MOR_Price (3,5)	3	5	-7.817628	-7.766023	-7.817824	-7.798268
EGARCH T-Student MOR_Price (4,4)	4	4	-7.817709	-7.762135	-7.817937	-7.79686
EGARCH T-Student MOR_Price (5,1)	5	1	-7.810934	-7.759329	-7.811131	-7.791574
EGARCH T-Student MOR_Price (5,3)	5	3	-7.8174	-7.757855	-7.817661	-7.795061
EGARCH T-Student MOR_Price (5,2)	5	2	-7.81306	-7.757485	-7.813287	-7.79221

EGARCH T-Student MOR_Price (5,4)	5	4	-7.816162	-7.752648	-7.816459	-7.792335
EGARCH T-Student MOR_Price (4,5)	4	5	-7.812108	-7.752563	-7.812369	-7.789769
EGARCH T-Student MOR_Price (0,1)	0	1	-7.684825	-7.672916	-7.684835	-7.680357
EGARCH T-Student MOR_Price (0,3)	0	3	-7.681847	-7.661999	-7.681877	-7.674401
EGARCH T-Student MOR_Price (3,0)	3	0	-7.683768	-7.652011	-7.683843	-7.671854
EGARCH T-Student MOR_Price (5,0)	5	0	-7.698669	-7.651033	-7.698836	-7.680798
EGARCH T-Student MOR_Price (0,2)	0	2	-7.66385	-7.647971	-7.663868	-7.657893
EGARCH T-Student MOR_Price (0,4)	0	4	-7.663664	-7.639846	-7.663706	-7.654728
EGARCH T-Student MOR_Price (0,5)	0	5	-7.662158	-7.634371	-7.662216	-7.651734
EGARCH T-Student MOR_Price (4,0)	4	0	-6.656394	-6.616698	-6.656511	-6.641502
EGARCH T-Student MOR_Price (2,0)	2	0	-6.141694	-6.117876	-6.141736	-6.132758
EGARCH T-Student MOR_Price (1,0)	1	0	-4.839807	-4.823928	-4.839825	-4.83385

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.817075	-7.793257	-7.817117	-7.80814
EGARCH Skewed T-Student MOR_Price (1,3)	1	3	-7.821489	-7.789732	-7.821563	-7.809575
EGARCH Skewed T-Student MOR_Price (1,4)	1	4	-7.824824	-7.789097	-7.824918	-7.811421
EGARCH Skewed T-Student MOR_Price (1,2)	1	2	-7.816056	-7.788269	-7.816113	-7.805631
EGARCH Skewed T-Student MOR_Price (2,1)	2	1	-7.816966	-7.785209	-7.817041	-7.805052
EGARCH Skewed T-Student MOR_Price (1,5)	1	5	-7.82136	-7.781664	-7.821476	-7.806467
EGARCH Skewed T-Student MOR_Price (2,2)	2	2	-7.816469	-7.780742	-7.816563	-7.803066
EGARCH Skewed T-Student MOR_Price (2,4)	2	4	-7.822874	-7.779208	-7.823015	-7.806492
EGARCH Skewed T-Student MOR_Price (3,1)	3	1	-7.815966	-7.77627	-7.816083	-7.801074
EGARCH Skewed T-Student MOR_Price (2,3)	2	3	-7.815905	-7.776209	-7.816022	-7.801013
EGARCH Skewed T-Student MOR_Price (3,2)	3	2	-7.814434	-7.770769	-7.814575	-7.798053
EGARCH Skewed T-Student MOR_Price (3,3)	3	3	-7.818233	-7.770598	-7.818401	-7.800362
EGARCH Skewed T-Student MOR_Price (2,5)	2	5	-7.815943	-7.768307	-7.816111	-7.798072
EGARCH Skewed T-Student MOR_Price (3,4)	3	4	-7.818042	-7.766437	-7.818239	-7.798682

EGARCH Skewed T-Student MOR_Price (4,1)	4	1	-7.813231	-7.765595	-7.813398	-7.79536
EGARCH Skewed T-Student MOR_Price (3,5)	3	5	-7.8193	-7.763725	-7.819528	-7.798451
EGARCH Skewed T-Student MOR_Price (4,2)	4	2	-7.815246	-7.76364	-7.815442	-7.795885
EGARCH Skewed T-Student MOR_Price (4,3)	4	3	-7.819187	-7.763612	-7.819414	-7.798337
EGARCH Skewed T-Student MOR_Price (4,4)	4	4	-7.816794	-7.75725	-7.817055	-7.794456
EGARCH Skewed T-Student MOR_Price (5,1)	5	1	-7.810648	-7.755074	-7.810876	-7.789799
EGARCH Skewed T-Student MOR_Price (5,3)	5	3	-7.817299	-7.753785	-7.817596	-7.793472
EGARCH Skewed T-Student MOR_Price (5,2)	5	2	-7.81279	-7.753246	-7.813051	-7.790452
EGARCH Skewed T-Student MOR_Price (5,5)	5	5	-7.820844	-7.74939	-7.821218	-7.794037
EGARCH Skewed T-Student MOR_Price (4,5)	4	5	-7.811813	-7.748299	-7.81211	-7.787985
EGARCH Skewed T-Student MOR_Price (5,4)	5	4	-7.81387	-7.746386	-7.814204	-7.788552
EGARCH Skewed T-Student MOR_Price (0,1)	0	1	-7.683342	-7.667463	-7.68336	-7.677385
EGARCH Skewed T-Student MOR_Price (4,0)	4	0	-7.693125	-7.649459	-7.693266	-7.676744
EGARCH Skewed T-Student MOR_Price (3,0)	3	0	-7.682338	-7.646612	-7.682433	-7.668935
EGARCH Skewed T-Student MOR_Price (5,0)	5	0	-7.697499	-7.645894	-7.697696	-7.678139
EGARCH Skewed T-Student MOR_Price (0,2)	0	2	-7.662532	-7.642684	-7.662561	-7.655086
EGARCH Skewed T-Student MOR_Price (0,3)	0	3	-7.663756	-7.639939	-7.663799	-7.654821
EGARCH Skewed T-Student MOR_Price (0,4)	0	4	-7.662166	-7.634378	-7.662223	-7.651741
EGARCH Skewed T-Student MOR_Price (0,5)	0	5	-7.659308	-7.627551	-7.659383	-7.647394
EGARCH Skewed T-Student MOR_Price (2,0)	2	0	-4.946331	-4.918543	-4.946388	-4.935906
EGARCH Skewed T-Student MOR_Price (1,0)	1	0	-4.120164	-4.100316	-4.120193	-4.112717

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm MOR_Price (1,1)	1	1	-7.822174	-7.806296	-7.822193	-7.816217
NAGARCH Norm MOR_Price (1,2)	1	2	-7.82126	-7.801412	-7.821289	-7.813814
NAGARCH Norm MOR_Price (2,1)	2	1	-7.821469	-7.797652	-7.821511	-7.812534
NAGARCH Norm MOR_Price (1,3)	1	3	-7.819597	-7.79578	-7.81964	-7.810662
NAGARCH Norm MOR_Price (2,2)	2	2	-7.819969	-7.792182	-7.820027	-7.809545

NAGARCH Norm MOR_Price (1,4)	1	4	-7.817955	-7.790168	-7.818013	-7.807531
NAGARCH Norm MOR_Price (3,1)	3	1	-7.821146	-7.789389	-7.821221	-7.809232
NAGARCH Norm MOR_Price (1,5)	1	5	-7.816928	-7.785171	-7.817003	-7.805015
NAGARCH Norm MOR_Price (2,3)	2	3	-7.816551	-7.784794	-7.816626	-7.804637
NAGARCH Norm MOR_Price (3,2)	3	2	-7.819529	-7.783802	-7.819624	-7.806126
NAGARCH Norm MOR_Price (2,4)	2	4	-7.818301	-7.782575	-7.818396	-7.804898
NAGARCH Norm MOR_Price (3,3)	3	3	-7.81802	-7.778323	-7.818136	-7.803127
NAGARCH Norm MOR_Price (4,1)	4	1	-7.817911	-7.778215	-7.818028	-7.803018
NAGARCH Norm MOR_Price (2,5)	2	5	-7.81387	-7.774174	-7.813987	-7.798978
NAGARCH Norm MOR_Price (4,2)	4	2	-7.816865	-7.773199	-7.817006	-7.800483
NAGARCH Norm MOR_Price (4,0)	4	0	-7.805547	-7.76982	-7.805641	-7.792143
NAGARCH Norm MOR_Price (5,1)	5	1	-7.817088	-7.769452	-7.817255	-7.799217
NAGARCH Norm MOR_Price (4,3)	4	3	-7.81696	-7.769325	-7.817128	-7.799089
NAGARCH Norm MOR_Price (3,4)	3	4	-7.812981	-7.769315	-7.813122	-7.7966
NAGARCH Norm MOR_Price (3,5)	3	5	-7.814523	-7.766888	-7.814691	-7.796652
NAGARCH Norm MOR_Price (4,4)	4	4	-7.815366	-7.763761	-7.815563	-7.796006
NAGARCH Norm MOR_Price (5,2)	5	2	-7.814848	-7.763243	-7.815045	-7.795488
NAGARCH Norm MOR_Price (5,0)	5	0	-7.804047	-7.760381	-7.804188	-7.787665
NAGARCH Norm MOR_Price (4,5)	4	5	-7.811622	-7.756047	-7.81185	-7.790773
NAGARCH Norm MOR_Price (5,4)	5	4	-7.812997	-7.753452	-7.813258	-7.790658
NAGARCH Norm MOR_Price (3,0)	3	0	-7.769702	-7.741914	-7.769759	-7.759277
NAGARCH Norm MOR_Price (5,3)	5	3	-7.785634	-7.73006	-7.785862	-7.764785
NAGARCH Norm MOR_Price (5,5)	5	5	-7.766549	-7.703035	-7.766846	-7.742721
NAGARCH Norm MOR_Price (2,0)	2	0	-7.666883	-7.647035	-7.666913	-7.659437
NAGARCH Norm MOR_Price (0,1)	0	1	-7.592464	-7.584525	-7.592469	-7.589486
NAGARCH Norm MOR_Price (0,2)	0	2	-7.593525	-7.581616	-7.593536	-7.589057
NAGARCH Norm MOR_Price (0,3)	0	3	-7.593366	-7.577487	-7.593384	-7.587409
NAGARCH Norm MOR_Price (1,0)	1	0	-7.58483	-7.572921	-7.584841	-7.580363

NAGARCH Norm MOR_Price (0,4)	0	4	-7.592457	-7.572608	-7.592486	-7.58501
NAGARCH Norm MOR_Price (0,5)	0	5	-7.591874	-7.568056	-7.591916	-7.582938
<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm MOR_Price (1,1)	1	1	-7.821539	-7.801691	-7.821568	-7.814093
NAGARCH Skewed Norm MOR_Price (1,2)	1	2	-7.820628	-7.79681	-7.82067	-7.811692
NAGARCH Skewed Norm MOR_Price (2,1)	2	1	-7.820765	-7.792978	-7.820823	-7.810341
NAGARCH Skewed Norm MOR_Price (1,3)	1	3	-7.818949	-7.791161	-7.819006	-7.808524
NAGARCH Skewed Norm MOR_Price (2,2)	2	2	-7.817613	-7.785856	-7.817688	-7.805699
NAGARCH Skewed Norm MOR_Price (1,4)	1	4	-7.817372	-7.785615	-7.817447	-7.805458
NAGARCH Skewed Norm MOR_Price (3,1)	3	1	-7.821078	-7.785352	-7.821173	-7.807675
NAGARCH Skewed Norm MOR_Price (2,3)	2	3	-7.819391	-7.783664	-7.819485	-7.805988
NAGARCH Skewed Norm MOR_Price (1,5)	1	5	-7.816219	-7.780493	-7.816314	-7.802816
NAGARCH Skewed Norm MOR_Price (3,2)	3	2	-7.818957	-7.77926	-7.819073	-7.804064
NAGARCH Skewed Norm MOR_Price (4,1)	4	1	-7.819062	-7.775397	-7.819203	-7.802681
NAGARCH Skewed Norm MOR_Price (3,3)	3	3	-7.819045	-7.775379	-7.819186	-7.802663
NAGARCH Skewed Norm MOR_Price (2,4)	2	4	-7.814299	-7.774603	-7.814415	-7.799406
NAGARCH Skewed Norm MOR_Price (2,5)	2	5	-7.816599	-7.772933	-7.81674	-7.800217
NAGARCH Skewed Norm MOR_Price (4,2)	4	2	-7.816624	-7.768988	-7.816791	-7.798753
NAGARCH Skewed Norm MOR_Price (3,4)	3	4	-7.815067	-7.767431	-7.815235	-7.797196
NAGARCH Skewed Norm MOR_Price (5,1)	5	1	-7.816327	-7.764722	-7.816523	-7.796967
NAGARCH Skewed Norm MOR_Price (5,2)	5	2	-7.819465	-7.76389	-7.819693	-7.798616
NAGARCH Skewed Norm MOR_Price (4,3)	4	3	-7.815162	-7.763557	-7.815359	-7.795802
NAGARCH Skewed Norm MOR_Price (5,0)	5	0	-7.808468	-7.760833	-7.808636	-7.790597
NAGARCH Skewed Norm MOR_Price (3,5)	3	5	-7.810168	-7.758563	-7.810365	-7.790808
NAGARCH Skewed Norm MOR_Price (5,3)	5	3	-7.815472	-7.755928	-7.815733	-7.793133
NAGARCH Skewed Norm MOR_Price (4,4)	4	4	-7.811032	-7.755458	-7.81126	-7.790183
NAGARCH Skewed Norm MOR_Price (4,5)	4	5	-7.808662	-7.749118	-7.808923	-7.786323

NAGARCH Skewed Norm MOR_Price (5,5)	5	5	-7.81184	-7.744356	-7.812175	-7.786523
NAGARCH Skewed Norm MOR_Price (5,4)	5	4	-7.798679	-7.735165	-7.798976	-7.774852
NAGARCH Skewed Norm MOR_Price (4,0)	4	0	-7.739091	-7.699395	-7.739207	-7.724198
NAGARCH Skewed Norm MOR_Price (0,1)	0	1	-7.591271	-7.579362	-7.591282	-7.586803
NAGARCH Skewed Norm MOR_Price (0,2)	0	2	-7.588495	-7.572616	-7.588514	-7.582538
NAGARCH Skewed Norm MOR_Price (0,4)	0	4	-7.591967	-7.568149	-7.592009	-7.583031
NAGARCH Skewed Norm MOR_Price (0,3)	0	3	-7.58614	-7.566292	-7.586169	-7.578694
NAGARCH Skewed Norm MOR_Price (0,5)	0	5	-7.591444	-7.563657	-7.591501	-7.581019
NAGARCH Skewed Norm MOR_Price (1,0)	1	0	-7.564437	-7.548559	-7.564456	-7.558481
NAGARCH Skewed Norm MOR_Price (2,0)	2	0	-6.16129	-6.137472	-6.161332	-6.152354
NAGARCH Skewed Norm MOR_Price (3,0)	3	0	345.606693	345.63845	345.606618	345.618607

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student MOR_Price (1,1)	1	1	-7.824757	-7.804909	-7.824787	-7.817311
NAGARCH T-Student MOR_Price (1,2)	1	2	-7.823783	-7.799966	-7.823825	-7.814848
NAGARCH T-Student MOR_Price (2,1)	2	1	-7.823814	-7.796027	-7.823871	-7.813389
NAGARCH T-Student MOR_Price (1,3)	1	3	-7.821807	-7.79402	-7.821865	-7.811383
NAGARCH T-Student MOR_Price (2,2)	2	2	-7.822268	-7.790511	-7.822343	-7.810354
NAGARCH T-Student MOR_Price (3,1)	3	1	-7.823911	-7.788185	-7.824006	-7.810508
NAGARCH T-Student MOR_Price (1,4)	1	4	-7.819621	-7.787864	-7.819696	-7.807708
NAGARCH T-Student MOR_Price (2,3)	2	3	-7.821335	-7.785608	-7.82143	-7.807932
NAGARCH T-Student MOR_Price (3,2)	3	2	-7.822993	-7.783296	-7.823109	-7.8081
NAGARCH T-Student MOR_Price (1,5)	1	5	-7.81854	-7.782814	-7.818635	-7.805137
NAGARCH T-Student MOR_Price (3,0)	3	0	-7.809521	-7.777764	-7.809595	-7.797607
NAGARCH T-Student MOR_Price (2,4)	2	4	-7.817401	-7.777705	-7.817517	-7.802508
NAGARCH T-Student MOR_Price (3,3)	3	3	-7.820898	-7.777232	-7.821038	-7.804516
NAGARCH T-Student MOR_Price (4,1)	4	1	-7.820375	-7.776709	-7.820516	-7.803994
NAGARCH T-Student MOR_Price (2,5)	2	5	-7.817824	-7.774158	-7.817965	-7.801442

NAGARCH T-Student MOR_Price (3,4)	3	4	-7.819288	-7.771653	-7.819456	-7.801417
NAGARCH T-Student MOR_Price (4,2)	4	2	-7.818986	-7.771351	-7.819154	-7.801115
NAGARCH T-Student MOR_Price (5,1)	5	1	-7.822129	-7.770524	-7.822326	-7.802769
NAGARCH T-Student MOR_Price (3,5)	3	5	-7.817939	-7.766334	-7.818135	-7.798579
NAGARCH T-Student MOR_Price (4,3)	4	3	-7.816298	-7.764693	-7.816495	-7.796938
NAGARCH T-Student MOR_Price (5,2)	5	2	-7.817535	-7.76196	-7.817763	-7.796686
NAGARCH T-Student MOR_Price (4,4)	4	4	-7.816679	-7.761104	-7.816907	-7.795829
NAGARCH T-Student MOR_Price (5,3)	5	3	-7.818471	-7.758927	-7.818732	-7.796133
NAGARCH T-Student MOR_Price (5,4)	5	4	-7.816365	-7.752851	-7.816662	-7.792537
NAGARCH T-Student MOR_Price (4,5)	4	5	-7.802682	-7.743137	-7.802943	-7.780343
NAGARCH T-Student MOR_Price (5,5)	5	5	-7.81046	-7.742976	-7.810794	-7.785143
NAGARCH T-Student MOR_Price (5,0)	5	0	-7.762902	-7.715266	-7.763069	-7.745031
NAGARCH T-Student MOR_Price (4,0)	4	0	-7.753778	-7.714081	-7.753894	-7.738885
NAGARCH T-Student MOR_Price (2,0)	2	0	-7.721612	-7.697795	-7.721655	-7.712677
NAGARCH T-Student MOR_Price (0,2)	0	2	-7.676461	-7.660582	-7.67648	-7.670504
NAGARCH T-Student MOR_Price (0,1)	0	1	-7.671426	-7.659517	-7.671436	-7.666958
NAGARCH T-Student MOR_Price (0,3)	0	3	-7.674797	-7.654949	-7.674826	-7.667351
NAGARCH T-Student MOR_Price (0,4)	0	4	-7.675225	-7.651407	-7.675267	-7.666289
NAGARCH T-Student MOR_Price (1,0)	1	0	-7.666739	-7.650861	-7.666758	-7.660782
NAGARCH T-Student MOR_Price (0,5)	0	5	-7.67339	-7.645602	-7.673447	-7.662965

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student MOR_Price (1,1)	1	1	-7.824283	-7.800466	-7.824326	-7.815348
NAGARCH Skewed T-Student MOR_Price (1,2)	1	2	-7.823056	-7.795268	-7.823113	-7.812631
NAGARCH Skewed T-Student MOR_Price (2,1)	2	1	-7.823242	-7.791485	-7.823317	-7.811328
NAGARCH Skewed T-Student MOR_Price (1,3)	1	3	-7.821566	-7.789809	-7.821641	-7.809652
NAGARCH Skewed T-Student MOR_Price (2,2)	2	2	-7.821667	-7.78594	-7.821761	-7.808264
NAGARCH Skewed T-Student MOR_Price (1,4)	1	4	-7.820001	-7.784274	-7.820095	-7.806598

NAGARCH Skewed T-Student MOR_Price (3,1)	3	1	-7.823667	-7.78397	-7.823783	-7.808774
NAGARCH Skewed T-Student MOR_Price (1,5)	1	5	-7.818768	-7.779072	-7.818885	-7.803876
NAGARCH Skewed T-Student MOR_Price (3,2)	3	2	-7.822316	-7.77865	-7.822457	-7.805934
NAGARCH Skewed T-Student MOR_Price (3,0)	3	0	-7.812872	-7.777145	-7.812966	-7.799468
NAGARCH Skewed T-Student MOR_Price (2,4)	2	4	-7.819836	-7.77617	-7.819977	-7.803454
NAGARCH Skewed T-Student MOR_Price (2,0)	2	0	-7.802379	-7.774592	-7.802436	-7.791954
NAGARCH Skewed T-Student MOR_Price (3,3)	3	3	-7.820793	-7.773157	-7.820961	-7.802922
NAGARCH Skewed T-Student MOR_Price (4,1)	4	1	-7.819794	-7.772159	-7.819962	-7.801923
NAGARCH Skewed T-Student MOR_Price (2,5)	2	5	-7.818108	-7.770473	-7.818276	-7.800237
NAGARCH Skewed T-Student MOR_Price (3,4)	3	4	-7.818892	-7.767287	-7.819089	-7.799532
NAGARCH Skewed T-Student MOR_Price (4,0)	4	0	-7.809794	-7.766128	-7.809935	-7.793412
NAGARCH Skewed T-Student MOR_Price (5,1)	5	1	-7.818754	-7.763179	-7.818981	-7.797904
NAGARCH Skewed T-Student MOR_Price (3,5)	3	5	-7.81872	-7.763145	-7.818948	-7.797871
NAGARCH Skewed T-Student MOR_Price (4,2)	4	2	-7.814365	-7.76276	-7.814562	-7.795005
NAGARCH Skewed T-Student MOR_Price (4,3)	4	3	-7.818055	-7.76248	-7.818283	-7.797206
NAGARCH Skewed T-Student MOR_Price (4,4)	4	4	-7.818665	-7.759121	-7.818926	-7.796327
NAGARCH Skewed T-Student MOR_Price (5,2)	5	2	-7.815763	-7.756219	-7.816024	-7.793424
NAGARCH Skewed T-Student MOR_Price (4,5)	4	5	-7.816606	-7.753092	-7.816903	-7.792779
NAGARCH Skewed T-Student MOR_Price (5,3)	5	3	-7.815381	-7.751867	-7.815678	-7.791553
NAGARCH Skewed T-Student MOR_Price (5,5)	5	5	-7.82071	-7.749256	-7.821084	-7.793903
NAGARCH Skewed T-Student MOR_Price (5,4)	5	4	-7.811013	-7.743529	-7.811347	-7.785696
NAGARCH Skewed T-Student MOR_Price (5,0)	5	0	-7.763795	-7.71219	-7.763991	-7.744435
NAGARCH Skewed T-Student MOR_Price (1,0)	1	0	-7.689408	-7.66956	-7.689437	-7.681962
NAGARCH Skewed T-Student MOR_Price (0,2)	0	2	-7.673752	-7.653903	-7.673781	-7.666305
NAGARCH Skewed T-Student MOR_Price (0,1)	0	1	-7.66808	-7.652202	-7.668099	-7.662123
NAGARCH Skewed T-Student MOR_Price (0,3)	0	3	-7.6732	-7.649382	-7.673242	-7.664265
NAGARCH Skewed T-Student MOR_Price (0,4)	0	4	-7.671691	-7.643904	-7.671749	-7.661267
NAGARCH Skewed T-Student MOR_Price (0,5)	0	5	-7.671973	-7.640216	-7.672048	-7.660059

NAGARCH Skewed T-Student MOR_Price (2,3)	2	3	-7.412159	-7.372462	-7.412275	-7.397266
<i>NIG_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm NIG_Price (2,3)	2	3	-8.883386	-8.859569	-8.883429	-8.874451
SGARCH Norm NIG_Price (2,4)	2	4	-8.883233	-8.855446	-8.88329	-8.872808
SGARCH Norm NIG_Price (3,3)	3	3	-8.881851	-8.854064	-8.881909	-8.871427
SGARCH Norm NIG_Price (3,4)	3	4	-8.881698	-8.849941	-8.881773	-8.869784
SGARCH Norm NIG_Price (2,5)	2	5	-8.881687	-8.84993	-8.881762	-8.869773
SGARCH Norm NIG_Price (1,3)	1	3	-8.869363	-8.849515	-8.869392	-8.861917
SGARCH Norm NIG_Price (1,1)	1	1	-8.860826	-8.848917	-8.860837	-8.856358
SGARCH Norm NIG_Price (4,3)	4	3	-8.880204	-8.848447	-8.880279	-8.86829
SGARCH Norm NIG_Price (1,2)	1	2	-8.860425	-8.844547	-8.860444	-8.854468
SGARCH Norm NIG_Price (4,4)	4	4	-8.880163	-8.844437	-8.880258	-8.86676
SGARCH Norm NIG_Price (3,5)	3	5	-8.880152	-8.844426	-8.880247	-8.866749
SGARCH Norm NIG_Price (1,4)	1	4	-8.867683	-8.843866	-8.867726	-8.858748
SGARCH Norm NIG_Price (2,1)	2	1	-8.85914	-8.843261	-8.859158	-8.853183
SGARCH Norm NIG_Price (5,3)	5	3	-8.878346	-8.842619	-8.878441	-8.864943
SGARCH Norm NIG_Price (1,5)	1	5	-8.868162	-8.840374	-8.868219	-8.857737
SGARCH Norm NIG_Price (2,2)	2	2	-8.858942	-8.839093	-8.858971	-8.851495
SGARCH Norm NIG_Price (4,5)	4	5	-8.878617	-8.838921	-8.878734	-8.863725
SGARCH Norm NIG_Price (5,4)	5	4	-8.878354	-8.838658	-8.878471	-8.863462
SGARCH Norm NIG_Price (3,1)	3	1	-8.857344	-8.837496	-8.857374	-8.849898
SGARCH Norm NIG_Price (3,2)	3	2	-8.857243	-8.833425	-8.857285	-8.848308
SGARCH Norm NIG_Price (5,5)	5	5	-8.877082	-8.833417	-8.877223	-8.860701
SGARCH Norm NIG_Price (4,1)	4	1	-8.855665	-8.831848	-8.855708	-8.84673
SGARCH Norm NIG_Price (4,2)	4	2	-8.855499	-8.827712	-8.855556	-8.845074

SGARCH Norm NIG_Price (5,1)	5	1	-8.853941	-8.826153	-8.853998	-8.843516
SGARCH Norm NIG_Price (5,2)	5	2	-8.853849	-8.822092	-8.853924	-8.841935
SGARCH Norm NIG_Price (5,0)	5	0	-8.65083	-8.627012	-8.650872	-8.641894
SGARCH Norm NIG_Price (3,0)	3	0	-8.43247	-8.416592	-8.432489	-8.426513
SGARCH Norm NIG_Price (2,0)	2	0	-8.256786	-8.244877	-8.256797	-8.252318
SGARCH Norm NIG_Price (1,0)	1	0	-7.961991	-7.954051	-7.961995	-7.959012
SGARCH Norm NIG_Price (0,1)	0	1	-7.639628	-7.631689	-7.639633	-7.63665
SGARCH Norm NIG_Price (0,2)	0	2	-7.64027	-7.628362	-7.640281	-7.635803
SGARCH Norm NIG_Price (0,3)	0	3	-7.641468	-7.625589	-7.641486	-7.635511
SGARCH Norm NIG_Price (0,4)	0	4	-7.640615	-7.620767	-7.640644	-7.633169
SGARCH Norm NIG_Price (0,5)	0	5	-7.640412	-7.616594	-7.640454	-7.631477
SGARCH Norm NIG_Price (4,0)	4	0	17.908646	17.928494	17.908617	17.916092

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm NIG_Price (2,3)	2	3	-8.888887	-8.8611	-8.888945	-8.878463
SGARCH Skewed Norm NIG_Price (2,4)	2	4	-8.88877	-8.857013	-8.888845	-8.876856
SGARCH Skewed Norm NIG_Price (3,3)	3	3	-8.887369	-8.855612	-8.887444	-8.875455
SGARCH Skewed Norm NIG_Price (1,3)	1	3	-8.875572	-8.851754	-8.875614	-8.866637
SGARCH Skewed Norm NIG_Price (3,4)	3	4	-8.887235	-8.851509	-8.88733	-8.873832
SGARCH Skewed Norm NIG_Price (2,5)	2	5	-8.886968	-8.851242	-8.887063	-8.873565
SGARCH Skewed Norm NIG_Price (4,3)	4	3	-8.885697	-8.84997	-8.885791	-8.872293
SGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.865734	-8.849856	-8.865753	-8.859777
SGARCH Skewed Norm NIG_Price (1,4)	1	4	-8.873894	-8.846107	-8.873951	-8.863469
SGARCH Skewed Norm NIG_Price (4,4)	4	4	-8.885701	-8.846004	-8.885817	-8.870808
SGARCH Skewed Norm NIG_Price (1,2)	1	2	-8.865628	-8.84578	-8.865657	-8.858182
SGARCH Skewed Norm NIG_Price (3,5)	3	5	-8.885433	-8.845737	-8.88555	-8.87054
SGARCH Skewed Norm NIG_Price (5,3)	5	3	-8.883847	-8.844151	-8.883964	-8.868955
SGARCH Skewed Norm NIG_Price (2,1)	2	1	-8.863733	-8.843885	-8.863763	-8.856287

SGARCH Skewed Norm NIG_Price (1,5)	1	5	-8.874866	-8.843109	-8.874941	-8.862952
SGARCH Skewed Norm NIG_Price (2,2)	2	2	-8.864106	-8.840288	-8.864148	-8.855171
SGARCH Skewed Norm NIG_Price (5,4)	5	4	-8.883899	-8.840233	-8.88404	-8.867517
SGARCH Skewed Norm NIG_Price (4,5)	4	5	-8.883899	-8.840233	-8.88404	-8.867517
SGARCH Skewed Norm NIG_Price (3,1)	3	1	-8.862187	-8.838369	-8.862229	-8.853251
SGARCH Skewed Norm NIG_Price (3,2)	3	2	-8.862399	-8.834612	-8.862456	-8.851974
SGARCH Skewed Norm NIG_Price (4,1)	4	1	-8.860334	-8.832546	-8.860391	-8.849909
SGARCH Skewed Norm NIG_Price (5,5)	5	5	-8.878199	-8.830563	-8.878367	-8.860328
SGARCH Skewed Norm NIG_Price (4,2)	4	2	-8.860776	-8.829019	-8.86085	-8.848862
SGARCH Skewed Norm NIG_Price (5,1)	5	1	-8.858609	-8.826852	-8.858684	-8.846695
SGARCH Skewed Norm NIG_Price (5,2)	5	2	-8.859021	-8.823295	-8.859116	-8.845618
SGARCH Skewed Norm NIG_Price (4,0)	4	0	-8.593103	-8.569286	-8.593146	-8.584168
SGARCH Skewed Norm NIG_Price (5,0)	5	0	-8.449615	-8.421827	-8.449672	-8.43919
SGARCH Skewed Norm NIG_Price (2,0)	2	0	-8.26972	-8.253842	-8.269739	-8.263763
SGARCH Skewed Norm NIG_Price (0,3)	0	3	-7.652569	-7.63272	-7.652598	-7.645122
SGARCH Skewed Norm NIG_Price (0,1)	0	1	-7.644618	-7.632709	-7.644629	-7.640151
SGARCH Skewed Norm NIG_Price (0,2)	0	2	-7.646539	-7.63066	-7.646558	-7.640582
SGARCH Skewed Norm NIG_Price (0,4)	0	4	-7.652949	-7.629132	-7.652991	-7.644014
SGARCH Skewed Norm NIG_Price (0,5)	0	5	-7.652383	-7.624596	-7.652441	-7.641959
SGARCH Skewed Norm NIG_Price (3,0)	3	0	-2.796644	-2.776796	-2.796673	-2.789198
SGARCH Skewed Norm NIG_Price (1,0)	1	0	-2.228149	-2.216241	-2.22816	-2.223682

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student NIG_Price (1,3)	1	3	-9.275221	-9.251403	-9.275263	-9.266286
SGARCH T-Student NIG_Price (2,3)	2	3	-9.275539	-9.247752	-9.275597	-9.265114
SGARCH T-Student NIG_Price (1,1)	1	1	-9.263166	-9.247287	-9.263184	-9.257209
SGARCH T-Student NIG_Price (1,2)	1	2	-9.267053	-9.247204	-9.267082	-9.259606
SGARCH T-Student NIG_Price (1,4)	1	4	-9.273708	-9.245921	-9.273766	-9.263284

SGARCH T-Student NIG_Price (3,3)	3	3	-9.274149	-9.242392	-9.274224	-9.262235
SGARCH T-Student NIG_Price (2,4)	2	4	-9.274113	-9.242356	-9.274188	-9.262199
SGARCH T-Student NIG_Price (2,1)	2	1	-9.261727	-9.241879	-9.261756	-9.254281
SGARCH T-Student NIG_Price (2,2)	2	2	-9.265523	-9.241705	-9.265565	-9.256588
SGARCH T-Student NIG_Price (1,5)	1	5	-9.27237	-9.240613	-9.272445	-9.260456
SGARCH T-Student NIG_Price (4,3)	4	3	-9.272713	-9.236987	-9.272808	-9.25931
SGARCH T-Student NIG_Price (3,4)	3	4	-9.272704	-9.236977	-9.272799	-9.259301
SGARCH T-Student NIG_Price (2,5)	2	5	-9.272426	-9.2367	-9.272521	-9.259023
SGARCH T-Student NIG_Price (3,1)	3	1	-9.2602	-9.236382	-9.260242	-9.251265
SGARCH T-Student NIG_Price (3,2)	3	2	-9.264011	-9.236224	-9.264068	-9.253586
SGARCH T-Student NIG_Price (3,5)	3	5	-9.271205	-9.231509	-9.271322	-9.256313
SGARCH T-Student NIG_Price (4,4)	4	4	-9.271168	-9.231472	-9.271284	-9.256275
SGARCH T-Student NIG_Price (5,3)	5	3	-9.270937	-9.231241	-9.271054	-9.256044
SGARCH T-Student NIG_Price (4,1)	4	1	-9.258643	-9.230856	-9.2587	-9.248218
SGARCH T-Student NIG_Price (4,2)	4	2	-9.26246	-9.230703	-9.262535	-9.250546
SGARCH T-Student NIG_Price (4,5)	4	5	-9.26967	-9.226005	-9.269811	-9.253289
SGARCH T-Student NIG_Price (5,4)	5	4	-9.269391	-9.225725	-9.269532	-9.253009
SGARCH T-Student NIG_Price (5,1)	5	1	-9.257037	-9.22528	-9.257112	-9.245123
SGARCH T-Student NIG_Price (5,2)	5	2	-9.260895	-9.225169	-9.26099	-9.247492
SGARCH T-Student NIG_Price (5,5)	5	5	-9.268136	-9.2205	-9.268303	-9.250265
SGARCH T-Student NIG_Price (5,0)	5	0	-9.20882	-9.181032	-9.208877	-9.198395
SGARCH T-Student NIG_Price (4,0)	4	0	-9.204016	-9.180198	-9.204058	-9.195081
SGARCH T-Student NIG_Price (3,0)	3	0	-9.135644	-9.115796	-9.135673	-9.128198
SGARCH T-Student NIG_Price (2,0)	2	0	-9.098584	-9.082706	-9.098603	-9.092628
SGARCH T-Student NIG_Price (1,0)	1	0	-9.00366	-8.991751	-9.003671	-8.999192
SGARCH T-Student NIG_Price (0,1)	0	1	-8.794868	-8.782959	-8.794879	-8.7904
SGARCH T-Student NIG_Price (0,2)	0	2	-8.793288	-8.777409	-8.793307	-8.787331
SGARCH T-Student NIG_Price (0,3)	0	3	-8.792122	-8.772274	-8.792151	-8.784675

SGARCH T-Student NIG_Price (0,4)	0	4	-8.790613	-8.766795	-8.790655	-8.781677
SGARCH T-Student NIG_Price (0,5)	0	5	-8.789169	-8.761382	-8.789227	-8.778745

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student NIG_Price (1,3)	1	3	-9.273817	-9.24603	-9.273875	-9.263392
SGARCH Skewed T-Student NIG_Price (2,3)	2	3	-9.274146	-9.242389	-9.274221	-9.262232
SGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.261734	-9.241886	-9.261763	-9.254287
SGARCH Skewed T-Student NIG_Price (1,2)	1	2	-9.265643	-9.241825	-9.265685	-9.256708
SGARCH Skewed T-Student NIG_Price (1,4)	1	4	-9.272297	-9.24054	-9.272372	-9.260383
SGARCH Skewed T-Student NIG_Price (3,3)	3	3	-9.272751	-9.237024	-9.272845	-9.259348
SGARCH Skewed T-Student NIG_Price (2,4)	2	4	-9.272717	-9.236991	-9.272812	-9.259314
SGARCH Skewed T-Student NIG_Price (2,1)	2	1	-9.260299	-9.236481	-9.260341	-9.251363
SGARCH Skewed T-Student NIG_Price (2,2)	2	2	-9.264108	-9.236321	-9.264165	-9.253683
SGARCH Skewed T-Student NIG_Price (1,5)	1	5	-9.270966	-9.235239	-9.27106	-9.257563
SGARCH Skewed T-Student NIG_Price (4,3)	4	3	-9.271309	-9.231612	-9.271425	-9.256416
SGARCH Skewed T-Student NIG_Price (3,4)	3	4	-9.271309	-9.231612	-9.271425	-9.256416
SGARCH Skewed T-Student NIG_Price (2,5)	2	5	-9.271034	-9.231338	-9.27115	-9.256141
SGARCH Skewed T-Student NIG_Price (3,1)	3	1	-9.258772	-9.230985	-9.258829	-9.248347
SGARCH Skewed T-Student NIG_Price (3,2)	3	2	-9.262596	-9.230839	-9.262671	-9.250682
SGARCH Skewed T-Student NIG_Price (3,5)	3	5	-9.269817	-9.226151	-9.269958	-9.253435
SGARCH Skewed T-Student NIG_Price (4,4)	4	4	-9.269774	-9.226108	-9.269915	-9.253392
SGARCH Skewed T-Student NIG_Price (5,3)	5	3	-9.269545	-9.225879	-9.269686	-9.253163
SGARCH Skewed T-Student NIG_Price (4,1)	4	1	-9.257208	-9.225451	-9.257283	-9.245294
SGARCH Skewed T-Student NIG_Price (4,2)	4	2	-9.261059	-9.225333	-9.261154	-9.247656
SGARCH Skewed T-Student NIG_Price (4,0)	4	0	-9.248733	-9.220945	-9.24879	-9.238308
SGARCH Skewed T-Student NIG_Price (4,5)	4	5	-9.268282	-9.220646	-9.268449	-9.250411
SGARCH Skewed T-Student NIG_Price (5,4)	5	4	-9.26801	-9.220375	-9.268178	-9.250139
SGARCH Skewed T-Student NIG_Price (5,1)	5	1	-9.255608	-9.219881	-9.255702	-9.242205

SGARCH Skewed T-Student NIG_Price (5,2)	5	2	-9.259485	-9.219789	-9.259602	-9.244593
SGARCH Skewed T-Student NIG_Price (5,5)	5	5	-9.266747	-9.215142	-9.266943	-9.247386
SGARCH Skewed T-Student NIG_Price (5,0)	5	0	-9.207591	-9.175834	-9.207665	-9.195677
SGARCH Skewed T-Student NIG_Price (3,0)	3	0	-9.13436	-9.110542	-9.134402	-9.125424
SGARCH Skewed T-Student NIG_Price (2,0)	2	0	-9.097232	-9.077384	-9.097261	-9.089786
SGARCH Skewed T-Student NIG_Price (1,0)	1	0	-9.002192	-8.986314	-9.002211	-8.996235
SGARCH Skewed T-Student NIG_Price (0,1)	0	1	-8.79162	-8.775741	-8.791639	-8.785663
SGARCH Skewed T-Student NIG_Price (0,2)	0	2	-8.789514	-8.769666	-8.789544	-8.782068
SGARCH Skewed T-Student NIG_Price (0,3)	0	3	-8.790374	-8.766556	-8.790416	-8.781438
SGARCH Skewed T-Student NIG_Price (0,4)	0	4	-8.789206	-8.761418	-8.789263	-8.778781
SGARCH Skewed T-Student NIG_Price (0,5)	0	5	-8.787866	-8.756109	-8.787941	-8.775952

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm NIG_Price (1,1)	1	1	-8.883044	-8.863196	-8.883074	-8.875598
APARCH Norm NIG_Price (1,2)	1	2	-8.880357	-8.856539	-8.880399	-8.871422
APARCH Norm NIG_Price (1,3)	1	3	-8.883049	-8.855261	-8.883106	-8.872624
APARCH Norm NIG_Price (1,4)	1	4	-8.872081	-8.840324	-8.872156	-8.860167
APARCH Norm NIG_Price (2,1)	2	1	-8.857965	-8.830178	-8.858023	-8.847541
APARCH Norm NIG_Price (1,5)	1	5	-8.862706	-8.82698	-8.862801	-8.849303
APARCH Norm NIG_Price (2,3)	2	3	-8.861529	-8.825803	-8.861624	-8.848126
APARCH Norm NIG_Price (2,2)	2	2	-8.855819	-8.824062	-8.855894	-8.843905
APARCH Norm NIG_Price (2,4)	2	4	-8.85792	-8.818224	-8.858037	-8.843028
APARCH Norm NIG_Price (2,5)	2	5	-8.847811	-8.804145	-8.847952	-8.831429
APARCH Norm NIG_Price (3,1)	3	1	-8.8379	-8.802174	-8.837995	-8.824497
APARCH Norm NIG_Price (3,3)	3	3	-8.838639	-8.794973	-8.83878	-8.822257
APARCH Norm NIG_Price (3,2)	3	2	-8.827829	-8.788133	-8.827946	-8.812937
APARCH Norm NIG_Price (3,4)	3	4	-8.829377	-8.781741	-8.829544	-8.811506
APARCH Norm NIG_Price (3,5)	3	5	-8.826971	-8.775366	-8.827168	-8.807611

APARCH Norm NIG_Price (4,2)	4	2	-8.821657	-8.774021	-8.821824	-8.803786
APARCH Norm NIG_Price (4,1)	4	1	-8.812324	-8.768659	-8.812465	-8.795943
APARCH Norm NIG_Price (4,4)	4	4	-8.814911	-8.759336	-8.815138	-8.794061
APARCH Norm NIG_Price (4,3)	4	3	-8.809688	-8.758083	-8.809885	-8.790328
APARCH Norm NIG_Price (5,2)	5	2	-8.809254	-8.753679	-8.809481	-8.788404
APARCH Norm NIG_Price (5,1)	5	1	-8.79267	-8.741065	-8.792867	-8.77331
APARCH Norm NIG_Price (5,3)	5	3	-8.790351	-8.730807	-8.790612	-8.768012
APARCH Norm NIG_Price (4,5)	4	5	-8.788746	-8.729202	-8.789007	-8.766407
APARCH Norm NIG_Price (5,4)	5	4	-8.775227	-8.711713	-8.775523	-8.751399
APARCH Norm NIG_Price (5,5)	5	5	-8.775969	-8.708486	-8.776304	-8.750652
APARCH Norm NIG_Price (4,0)	4	0	-8.237264	-8.197568	-8.237381	-8.222371
APARCH Norm NIG_Price (5,0)	5	0	-8.202329	-8.154693	-8.202496	-8.184458
APARCH Norm NIG_Price (3,0)	3	0	-8.165041	-8.133284	-8.165116	-8.153128
APARCH Norm NIG_Price (2,0)	2	0	-8.133005	-8.109187	-8.133047	-8.124069
APARCH Norm NIG_Price (1,0)	1	0	-7.871019	-7.855141	-7.871038	-7.865062
APARCH Norm NIG_Price (0,1)	0	1	-7.617972	-7.606063	-7.617983	-7.613505
APARCH Norm NIG_Price (0,2)	0	2	-7.614431	-7.598553	-7.61445	-7.608474
APARCH Norm NIG_Price (0,3)	0	3	-7.609983	-7.590134	-7.610012	-7.602536
APARCH Norm NIG_Price (0,4)	0	4	-7.60837	-7.584553	-7.608413	-7.599435
APARCH Norm NIG_Price (0,5)	0	5	-7.607104	-7.579317	-7.607161	-7.596679

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm NIG_Price (1,1)	1	1	-8.882676	-8.858859	-8.882718	-8.873741
APARCH Skewed Norm NIG_Price (1,2)	1	2	-8.883576	-8.855789	-8.883634	-8.873152
APARCH Skewed Norm NIG_Price (1,3)	1	3	-8.886781	-8.855024	-8.886855	-8.874867
APARCH Skewed Norm NIG_Price (1,4)	1	4	-8.874827	-8.839101	-8.874922	-8.861424
APARCH Skewed Norm NIG_Price (2,2)	2	2	-8.867434	-8.831708	-8.867529	-8.854031
APARCH Skewed Norm NIG_Price (2,1)	2	1	-8.859799	-8.828042	-8.859874	-8.847885

APARCH Skewed Norm NIG_Price (1,5)	1	5	-8.867068	-8.827372	-8.867185	-8.852176
APARCH Skewed Norm NIG_Price (2,3)	2	3	-8.866648	-8.826952	-8.866765	-8.851756
APARCH Skewed Norm NIG_Price (2,4)	2	4	-8.864252	-8.820586	-8.864393	-8.847871
APARCH Skewed Norm NIG_Price (2,5)	2	5	-8.852053	-8.804417	-8.85222	-8.834182
APARCH Skewed Norm NIG_Price (3,1)	3	1	-8.83646	-8.796763	-8.836576	-8.821567
APARCH Skewed Norm NIG_Price (3,3)	3	3	-8.835074	-8.787439	-8.835242	-8.817203
APARCH Skewed Norm NIG_Price (3,2)	3	2	-8.830792	-8.787126	-8.830933	-8.81441
APARCH Skewed Norm NIG_Price (3,4)	3	4	-8.833378	-8.781773	-8.833574	-8.814018
APARCH Skewed Norm NIG_Price (4,2)	4	2	-8.822267	-8.770662	-8.822464	-8.802907
APARCH Skewed Norm NIG_Price (4,1)	4	1	-8.81514	-8.767504	-8.815307	-8.797269
APARCH Skewed Norm NIG_Price (3,5)	3	5	-8.819636	-8.764061	-8.819863	-8.798786
APARCH Skewed Norm NIG_Price (4,3)	4	3	-8.818756	-8.763181	-8.818983	-8.797906
APARCH Skewed Norm NIG_Price (5,1)	5	1	-8.808891	-8.753317	-8.809119	-8.788042
APARCH Skewed Norm NIG_Price (4,5)	4	5	-8.809707	-8.746193	-8.810004	-8.785879
APARCH Skewed Norm NIG_Price (4,4)	4	4	-8.803437	-8.743892	-8.803698	-8.781098
APARCH Skewed Norm NIG_Price (5,2)	5	2	-8.801938	-8.742393	-8.802199	-8.779599
APARCH Skewed Norm NIG_Price (5,3)	5	3	-8.805262	-8.741748	-8.805559	-8.781434
APARCH Skewed Norm NIG_Price (5,4)	5	4	-8.798895	-8.731411	-8.799229	-8.773578
APARCH Skewed Norm NIG_Price (5,5)	5	5	-8.79601	-8.724557	-8.796385	-8.769204
APARCH Skewed Norm NIG_Price (3,0)	3	0	-8.326527	-8.290801	-8.326622	-8.313124
APARCH Skewed Norm NIG_Price (4,0)	4	0	-8.292143	-8.248477	-8.292284	-8.275761
APARCH Skewed Norm NIG_Price (5,0)	5	0	-8.288416	-8.236811	-8.288613	-8.269056
APARCH Skewed Norm NIG_Price (2,0)	2	0	-8.155713	-8.127925	-8.15577	-8.145288
APARCH Skewed Norm NIG_Price (1,0)	1	0	-7.899672	-7.879824	-7.899702	-7.892226
APARCH Skewed Norm NIG_Price (0,1)	0	1	-7.633865	-7.617986	-7.633884	-7.627908
APARCH Skewed Norm NIG_Price (0,2)	0	2	-7.630862	-7.611014	-7.630891	-7.623416
APARCH Skewed Norm NIG_Price (0,3)	0	3	-7.627463	-7.603646	-7.627506	-7.618528
APARCH Skewed Norm NIG_Price (0,4)	0	4	-7.62533	-7.597542	-7.625387	-7.614905

APARCH Skewed Norm NIG_Price (0,5)	0	5	-7.622914	-7.591157	-7.622989	-7.611
<i>APARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student NIG_Price (1,3)	1	3	-9.302561	-9.270804	-9.302636	-9.290647
APARCH T-Student NIG_Price (1,1)	1	1	-9.291824	-9.268007	-9.291867	-9.282889
APARCH T-Student NIG_Price (1,2)	1	2	-9.293165	-9.265377	-9.293222	-9.28274
APARCH T-Student NIG_Price (1,4)	1	4	-9.299876	-9.264149	-9.29997	-9.286473
APARCH T-Student NIG_Price (1,5)	1	5	-9.297502	-9.257806	-9.297619	-9.28261
APARCH T-Student NIG_Price (2,1)	2	1	-9.288352	-9.256595	-9.288427	-9.276438
APARCH T-Student NIG_Price (2,4)	2	4	-9.299066	-9.2554	-9.299207	-9.282684
APARCH T-Student NIG_Price (3,3)	3	3	-9.298771	-9.251135	-9.298938	-9.2809
APARCH T-Student NIG_Price (2,5)	2	5	-9.296774	-9.249138	-9.296941	-9.278903
APARCH T-Student NIG_Price (2,3)	2	3	-9.28802	-9.248324	-9.288137	-9.273128
APARCH T-Student NIG_Price (3,4)	3	4	-9.293736	-9.242131	-9.293933	-9.274376
APARCH T-Student NIG_Price (3,1)	3	1	-9.279254	-9.239558	-9.279371	-9.264362
APARCH T-Student NIG_Price (3,5)	3	5	-9.293702	-9.238128	-9.29393	-9.272853
APARCH T-Student NIG_Price (4,3)	4	3	-9.292191	-9.236617	-9.292419	-9.271342
APARCH T-Student NIG_Price (4,2)	4	2	-9.284983	-9.233378	-9.28518	-9.265623
APARCH T-Student NIG_Price (4,1)	4	1	-9.279837	-9.232202	-9.280005	-9.261966
APARCH T-Student NIG_Price (5,3)	5	3	-9.292549	-9.229035	-9.292846	-9.268721
APARCH T-Student NIG_Price (4,4)	4	4	-9.277356	-9.217811	-9.277617	-9.255017
APARCH T-Student NIG_Price (5,1)	5	1	-9.264375	-9.2088	-9.264603	-9.243526
APARCH T-Student NIG_Price (4,5)	4	5	-9.26978	-9.206266	-9.270077	-9.245952
APARCH T-Student NIG_Price (4,0)	4	0	-9.247685	-9.204019	-9.247825	-9.231303
APARCH T-Student NIG_Price (5,0)	5	0	-9.25013	-9.198525	-9.250327	-9.23077
APARCH T-Student NIG_Price (5,5)	5	5	-9.267141	-9.195688	-9.267516	-9.240335
APARCH T-Student NIG_Price (2,2)	2	2	-9.208835	-9.173109	-9.20893	-9.195432
APARCH T-Student NIG_Price (5,2)	5	2	-9.227837	-9.168292	-9.228098	-9.205498

APARCH T-Student NIG_Price (3,2)	3	2	-9.206762	-9.163096	-9.206903	-9.190381
APARCH T-Student NIG_Price (3,0)	3	0	-9.17972	-9.143993	-9.179814	-9.166317
APARCH T-Student NIG_Price (5,4)	5	4	-9.200971	-9.133488	-9.201306	-9.175654
APARCH T-Student NIG_Price (2,0)	2	0	-9.13402	-9.106233	-9.134078	-9.123596
APARCH T-Student NIG_Price (1,0)	1	0	-9.030094	-9.010246	-9.030123	-9.022648
APARCH T-Student NIG_Price (0,1)	0	1	-8.84836	-8.832482	-8.848379	-8.842403
APARCH T-Student NIG_Price (0,2)	0	2	-8.84694	-8.827092	-8.846969	-8.839494
APARCH T-Student NIG_Price (0,3)	0	3	-8.845451	-8.821633	-8.845493	-8.836516
APARCH T-Student NIG_Price (0,4)	0	4	-8.843984	-8.816197	-8.844042	-8.83356

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student NIG_Price (1,3)	1	3	-9.301511	-9.265784	-9.301605	-9.288108
APARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.290753	-9.262965	-9.29081	-9.280328
APARCH Skewed T-Student NIG_Price (1,2)	1	2	-9.292597	-9.26084	-9.292671	-9.280683
APARCH Skewed T-Student NIG_Price (1,4)	1	4	-9.298846	-9.259149	-9.298962	-9.283953
APARCH Skewed T-Student NIG_Price (2,3)	2	3	-9.300995	-9.257329	-9.301136	-9.284613
APARCH Skewed T-Student NIG_Price (2,2)	2	2	-9.290769	-9.251073	-9.290886	-9.275877
APARCH Skewed T-Student NIG_Price (2,4)	2	4	-9.297924	-9.250288	-9.298092	-9.280053
APARCH Skewed T-Student NIG_Price (3,3)	3	3	-9.2977	-9.246095	-9.297897	-9.27834
APARCH Skewed T-Student NIG_Price (2,5)	2	5	-9.295697	-9.244092	-9.295893	-9.276337
APARCH Skewed T-Student NIG_Price (3,2)	3	2	-9.288006	-9.240371	-9.288174	-9.270135
APARCH Skewed T-Student NIG_Price (1,5)	1	5	-9.283379	-9.239713	-9.28352	-9.266997
APARCH Skewed T-Student NIG_Price (3,4)	3	4	-9.294806	-9.239231	-9.295033	-9.273956
APARCH Skewed T-Student NIG_Price (3,5)	3	5	-9.29113	-9.231585	-9.291391	-9.268791
APARCH Skewed T-Student NIG_Price (2,1)	2	1	-9.26565	-9.229923	-9.265744	-9.252247
APARCH Skewed T-Student NIG_Price (4,2)	4	2	-9.283941	-9.228367	-9.284169	-9.263092
APARCH Skewed T-Student NIG_Price (4,5)	4	5	-9.293717	-9.226233	-9.294051	-9.2684

APARCH Skewed T-Student NIG_Price (4,1)	4	1	-9.274628	-9.223023	-9.274825	-9.255268
APARCH Skewed T-Student NIG_Price (5,3)	5	3	-9.285624	-9.21814	-9.285958	-9.260306
APARCH Skewed T-Student NIG_Price (5,2)	5	2	-9.280108	-9.216594	-9.280404	-9.25628
APARCH Skewed T-Student NIG_Price (5,4)	5	4	-9.285151	-9.213697	-9.285525	-9.258344
APARCH Skewed T-Student NIG_Price (4,4)	4	4	-9.276217	-9.212703	-9.276513	-9.252389
APARCH Skewed T-Student NIG_Price (5,5)	5	5	-9.275504	-9.200081	-9.275921	-9.247208
APARCH Skewed T-Student NIG_Price (4,0)	4	0	-9.247108	-9.199472	-9.247275	-9.229237
APARCH Skewed T-Student NIG_Price (5,0)	5	0	-9.249407	-9.193832	-9.249635	-9.228557
APARCH Skewed T-Student NIG_Price (4,3)	4	3	-9.225672	-9.166127	-9.225933	-9.203333
APARCH Skewed T-Student NIG_Price (3,0)	3	0	-9.178777	-9.13908	-9.178893	-9.163884
APARCH Skewed T-Student NIG_Price (2,0)	2	0	-9.132926	-9.101169	-9.133001	-9.121012
APARCH Skewed T-Student NIG_Price (1,0)	1	0	-9.028688	-9.00487	-9.02873	-9.019753
APARCH Skewed T-Student NIG_Price (0,1)	0	1	-8.846911	-8.827063	-8.846941	-8.839465
APARCH Skewed T-Student NIG_Price (0,2)	0	2	-8.845492	-8.821674	-8.845534	-8.836556
APARCH Skewed T-Student NIG_Price (0,3)	0	3	-8.844003	-8.816215	-8.84406	-8.833578
APARCH Skewed T-Student NIG_Price (0,4)	0	4	-8.842543	-8.810786	-8.842618	-8.830629
APARCH Skewed T-Student NIG_Price (0,5)	0	5	-8.780736	-8.745009	-8.78083	-8.767333
APARCH Skewed T-Student NIG_Price (3,1)	3	1	-8.488722	-8.445056	-8.488863	-8.47234
APARCH Skewed T-Student NIG_Price (5,1)	5	1	-8.450933	-8.391389	-8.451194	-8.428594

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm NIG_Price (2,4)	2	4	-8.887971	-8.852244	-8.888065	-8.874567
TGARCH Norm NIG_Price (4,4)	4	4	-8.886077	-8.834471	-8.886273	-8.866716
TGARCH Norm NIG_Price (3,3)	3	3	-8.873345	-8.833648	-8.873461	-8.858452
TGARCH Norm NIG_Price (2,5)	2	5	-8.873324	-8.833628	-8.873441	-8.858432
TGARCH Norm NIG_Price (5,3)	5	3	-8.887648	-8.832073	-8.887876	-8.866799
TGARCH Norm NIG_Price (4,5)	4	5	-8.88603	-8.830455	-8.886257	-8.86518
TGARCH Norm NIG_Price (3,4)	3	4	-8.871596	-8.82793	-8.871737	-8.855214

TGARCH Norm NIG_Price (4,3)	4	3	-8.870987	-8.823351	-8.871154	-8.853116
TGARCH Norm NIG_Price (3,5)	3	5	-8.870254	-8.822619	-8.870422	-8.852383
TGARCH Norm NIG_Price (2,2)	2	2	-8.840815	-8.813027	-8.840872	-8.83039
TGARCH Norm NIG_Price (2,1)	2	1	-8.829863	-8.806045	-8.829905	-8.820928
TGARCH Norm NIG_Price (3,2)	3	2	-8.83924	-8.803514	-8.839335	-8.825837
TGARCH Norm NIG_Price (5,2)	5	2	-8.854522	-8.802917	-8.854719	-8.835162
TGARCH Norm NIG_Price (1,2)	1	2	-8.821283	-8.801435	-8.821312	-8.813836
TGARCH Norm NIG_Price (1,3)	1	3	-8.824531	-8.800713	-8.824573	-8.815595
TGARCH Norm NIG_Price (3,1)	3	1	-8.831692	-8.799935	-8.831767	-8.819778
TGARCH Norm NIG_Price (1,4)	1	4	-8.822775	-8.794987	-8.822832	-8.81235
TGARCH Norm NIG_Price (1,5)	1	5	-8.823509	-8.791752	-8.823584	-8.811595
TGARCH Norm NIG_Price (4,2)	4	2	-8.834207	-8.790541	-8.834348	-8.817826
TGARCH Norm NIG_Price (4,1)	4	1	-8.823326	-8.783629	-8.823442	-8.808433
TGARCH Norm NIG_Price (5,1)	5	1	-8.819655	-8.77202	-8.819823	-8.801784
TGARCH Norm NIG_Price (5,5)	5	5	-8.773334	-8.70982	-8.773631	-8.749506
TGARCH Norm NIG_Price (5,0)	5	0	-8.729356	-8.68569	-8.729497	-8.712974
TGARCH Norm NIG_Price (2,3)	2	3	-8.671465	-8.639708	-8.67154	-8.659551
TGARCH Norm NIG_Price (3,0)	3	0	-8.570049	-8.542261	-8.570106	-8.559624
TGARCH Norm NIG_Price (4,0)	4	0	-8.550988	-8.515261	-8.551082	-8.537585
TGARCH Norm NIG_Price (1,1)	1	1	-8.062447	-8.046569	-8.062466	-8.05649
TGARCH Norm NIG_Price (0,3)	0	3	-7.663895	-7.648016	-7.663914	-7.657938
TGARCH Norm NIG_Price (0,4)	0	4	-7.662084	-7.642236	-7.662113	-7.654638
TGARCH Norm NIG_Price (0,2)	0	2	-7.633083	-7.621174	-7.633094	-7.628616
TGARCH Norm NIG_Price (2,0)	2	0	-6.289193	-6.269345	-6.289222	-6.281747
TGARCH Norm NIG_Price (1,0)	1	0	16.172468	16.184377	16.172457	16.176936
TGARCH Norm NIG_Price (0,1)	0	1	52.340782	52.348721	52.340777	52.34376

<i>TGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm NIG_Price (2,3)	2	3	-8.88309	-8.847364	-8.883185	-8.869687
TGARCH Skewed Norm NIG_Price (4,3)	4	3	-8.893956	-8.842351	-8.894153	-8.874596
TGARCH Skewed Norm NIG_Price (2,4)	2	4	-8.881368	-8.841672	-8.881485	-8.866476
TGARCH Skewed Norm NIG_Price (2,5)	2	5	-8.880003	-8.836337	-8.880144	-8.863621
TGARCH Skewed Norm NIG_Price (3,3)	3	3	-8.879993	-8.836327	-8.880134	-8.863611
TGARCH Skewed Norm NIG_Price (5,4)	5	4	-8.898295	-8.834781	-8.898592	-8.874467
TGARCH Skewed Norm NIG_Price (4,4)	4	4	-8.889296	-8.833721	-8.889523	-8.868446
TGARCH Skewed Norm NIG_Price (3,4)	3	4	-8.878298	-8.830663	-8.878466	-8.860427
TGARCH Skewed Norm NIG_Price (3,5)	3	5	-8.876933	-8.825328	-8.87713	-8.857573
TGARCH Skewed Norm NIG_Price (5,1)	5	1	-8.874645	-8.82304	-8.874842	-8.855285
TGARCH Skewed Norm NIG_Price (5,5)	5	5	-8.887259	-8.819775	-8.887594	-8.861942
TGARCH Skewed Norm NIG_Price (5,2)	5	2	-8.874916	-8.819342	-8.875144	-8.854067
TGARCH Skewed Norm NIG_Price (4,5)	4	5	-8.875096	-8.815551	-8.875357	-8.852757
TGARCH Skewed Norm NIG_Price (5,3)	5	3	-8.873818	-8.814274	-8.874079	-8.85148
TGARCH Skewed Norm NIG_Price (2,2)	2	2	-8.844697	-8.81294	-8.844772	-8.832783
TGARCH Skewed Norm NIG_Price (2,1)	2	1	-8.834473	-8.806686	-8.83453	-8.824048
TGARCH Skewed Norm NIG_Price (1,2)	1	2	-8.828379	-8.804561	-8.828421	-8.819443
TGARCH Skewed Norm NIG_Price (3,2)	3	2	-8.842716	-8.80302	-8.842833	-8.827824
TGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.816018	-8.79617	-8.816047	-8.808572
TGARCH Skewed Norm NIG_Price (1,5)	1	5	-8.831807	-8.796081	-8.831902	-8.818404
TGARCH Skewed Norm NIG_Price (3,1)	3	1	-8.831208	-8.795481	-8.831302	-8.817805
TGARCH Skewed Norm NIG_Price (1,3)	1	3	-8.820407	-8.79262	-8.820465	-8.809983
TGARCH Skewed Norm NIG_Price (4,2)	4	2	-8.839494	-8.791858	-8.839661	-8.821623
TGARCH Skewed Norm NIG_Price (1,4)	1	4	-8.818684	-8.786927	-8.818759	-8.80677
TGARCH Skewed Norm NIG_Price (4,1)	4	1	-8.667452	-8.623786	-8.667593	-8.65107
TGARCH Skewed Norm NIG_Price (5,0)	5	0	-8.647514	-8.599879	-8.647682	-8.629643

TGARCH Skewed Norm NIG_Price (3,0)	3	0	-8.560761	-8.529004	-8.560836	-8.548847
TGARCH Skewed Norm NIG_Price (0,3)	0	3	-7.668249	-7.648401	-7.668279	-7.660803
TGARCH Skewed Norm NIG_Price (0,5)	0	5	-7.664522	-7.636734	-7.664579	-7.654097
TGARCH Skewed Norm NIG_Price (0,4)	0	4	-7.640021	-7.616204	-7.640064	-7.631086
TGARCH Skewed Norm NIG_Price (1,0)	1	0	15.57516	15.591039	15.575141	15.581117
TGARCH Skewed Norm NIG_Price (0,1)	0	1	52.28078	52.292689	52.28077	52.285248
TGARCH Skewed Norm NIG_Price (0,2)	0	2	63.811291	63.82717	63.811273	63.817248

<i>TGARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student NIG_Price (1,3)	1	3	-9.303594	-9.275807	-9.303652	-9.29317
TGARCH T-Student NIG_Price (1,2)	1	2	-9.298092	-9.274274	-9.298134	-9.289156
TGARCH T-Student NIG_Price (1,4)	1	4	-9.300564	-9.268807	-9.300639	-9.28865
TGARCH T-Student NIG_Price (2,3)	2	3	-9.300066	-9.264339	-9.300161	-9.286663
TGARCH T-Student NIG_Price (2,2)	2	2	-9.295315	-9.263558	-9.29539	-9.283401
TGARCH T-Student NIG_Price (2,1)	2	1	-9.289969	-9.262182	-9.290026	-9.279544
TGARCH T-Student NIG_Price (1,5)	1	5	-9.297829	-9.262102	-9.297923	-9.284426
TGARCH T-Student NIG_Price (1,1)	1	1	-9.277101	-9.257253	-9.27713	-9.269654
TGARCH T-Student NIG_Price (2,4)	2	4	-9.295635	-9.255939	-9.295752	-9.280743
TGARCH T-Student NIG_Price (3,3)	3	3	-9.296896	-9.25323	-9.297037	-9.280514
TGARCH T-Student NIG_Price (3,2)	3	2	-9.290549	-9.250853	-9.290666	-9.275657
TGARCH T-Student NIG_Price (3,1)	3	1	-9.285255	-9.249528	-9.285349	-9.271852
TGARCH T-Student NIG_Price (2,5)	2	5	-9.291995	-9.248329	-9.292136	-9.275613
TGARCH T-Student NIG_Price (3,4)	3	4	-9.29307	-9.245434	-9.293237	-9.275199
TGARCH T-Student NIG_Price (4,3)	4	3	-9.291712	-9.240107	-9.291909	-9.272352
TGARCH T-Student NIG_Price (3,5)	3	5	-9.289816	-9.238211	-9.290013	-9.270456
TGARCH T-Student NIG_Price (4,1)	4	1	-9.280224	-9.236558	-9.280364	-9.263842

TGARCH T-Student NIG_Price (4,2)	4	2	-9.282682	-9.235047	-9.28285	-9.264811
TGARCH T-Student NIG_Price (4,4)	4	4	-9.290003	-9.234428	-9.290231	-9.269154
TGARCH T-Student NIG_Price (3,0)	3	0	-9.26415	-9.232393	-9.264225	-9.252236
TGARCH T-Student NIG_Price (4,5)	4	5	-9.289322	-9.229778	-9.289583	-9.266984
TGARCH T-Student NIG_Price (5,3)	5	3	-9.286766	-9.227221	-9.287027	-9.264427
TGARCH T-Student NIG_Price (5,1)	5	1	-9.275729	-9.224124	-9.275925	-9.256369
TGARCH T-Student NIG_Price (4,0)	4	0	-9.262608	-9.222912	-9.262725	-9.247716
TGARCH T-Student NIG_Price (5,2)	5	2	-9.277642	-9.222067	-9.27787	-9.256793
TGARCH T-Student NIG_Price (5,4)	5	4	-9.285231	-9.221717	-9.285528	-9.261403
TGARCH T-Student NIG_Price (5,5)	5	5	-9.283695	-9.216212	-9.28403	-9.258378
TGARCH T-Student NIG_Price (5,0)	5	0	-9.258808	-9.211172	-9.258976	-9.240937
TGARCH T-Student NIG_Price (2,0)	2	0	-9.188684	-9.164866	-9.188726	-9.179749
TGARCH T-Student NIG_Price (1,0)	1	0	-9.029536	-9.013658	-9.029555	-9.023579
TGARCH T-Student NIG_Price (0,1)	0	1	-8.706879	-8.69497	-8.706889	-8.702411
TGARCH T-Student NIG_Price (0,2)	0	2	-8.709565	-8.693687	-8.709584	-8.703608
TGARCH T-Student NIG_Price (0,3)	0	3	-8.709765	-8.689917	-8.709795	-8.702319
TGARCH T-Student NIG_Price (0,4)	0	4	-8.709135	-8.685317	-8.709177	-8.7002
TGARCH T-Student NIG_Price (0,5)	0	5	-8.708195	-8.680408	-8.708252	-8.69777

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student NIG_Price (1,3)	1	3	-9.302569	-9.270812	-9.302644	-9.290655
TGARCH Skewed T-Student NIG_Price (1,2)	1	2	-9.297091	-9.269303	-9.297148	-9.286666
TGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.289723	-9.265905	-9.289765	-9.280788
TGARCH Skewed T-Student NIG_Price (1,4)	1	4	-9.299573	-9.263847	-9.299668	-9.28617
TGARCH Skewed T-Student NIG_Price (2,3)	2	3	-9.29894	-9.259243	-9.299056	-9.284047
TGARCH Skewed T-Student NIG_Price (2,2)	2	2	-9.293482	-9.257755	-9.293577	-9.280079
TGARCH Skewed T-Student NIG_Price (2,1)	2	1	-9.288979	-9.257222	-9.289054	-9.277065
TGARCH Skewed T-Student NIG_Price (1,5)	1	5	-9.296792	-9.257096	-9.296909	-9.2819

TGARCH Skewed T-Student NIG_Price (2,4)	2	4	-9.295241	-9.251576	-9.295382	-9.27886
TGARCH Skewed T-Student NIG_Price (3,2)	3	2	-9.288064	-9.244398	-9.288205	-9.271682
TGARCH Skewed T-Student NIG_Price (2,5)	2	5	-9.291987	-9.244351	-9.292154	-9.274116
TGARCH Skewed T-Student NIG_Price (3,1)	3	1	-9.283083	-9.243387	-9.2832	-9.268191
TGARCH Skewed T-Student NIG_Price (3,3)	3	3	-9.28938	-9.241745	-9.289548	-9.271509
TGARCH Skewed T-Student NIG_Price (4,3)	4	3	-9.290633	-9.235058	-9.290861	-9.269784
TGARCH Skewed T-Student NIG_Price (3,4)	3	4	-9.285132	-9.233527	-9.285328	-9.265772
TGARCH Skewed T-Student NIG_Price (4,1)	4	1	-9.277053	-9.229417	-9.277221	-9.259182
TGARCH Skewed T-Student NIG_Price (5,1)	5	1	-9.284102	-9.228527	-9.28433	-9.263253
TGARCH Skewed T-Student NIG_Price (5,2)	5	2	-9.283405	-9.223861	-9.283666	-9.261066
TGARCH Skewed T-Student NIG_Price (4,5)	4	5	-9.285647	-9.222133	-9.285943	-9.261819
TGARCH Skewed T-Student NIG_Price (4,2)	4	2	-9.27248	-9.220875	-9.272677	-9.25312
TGARCH Skewed T-Student NIG_Price (5,3)	5	3	-9.281065	-9.217551	-9.281362	-9.257237
TGARCH Skewed T-Student NIG_Price (4,0)	4	0	-9.260406	-9.216741	-9.260547	-9.244025
TGARCH Skewed T-Student NIG_Price (3,5)	3	5	-9.272286	-9.216711	-9.272513	-9.251436
TGARCH Skewed T-Student NIG_Price (5,0)	5	0	-9.267342	-9.215737	-9.267538	-9.247982
TGARCH Skewed T-Student NIG_Price (4,4)	4	4	-9.273115	-9.213571	-9.273376	-9.250777
TGARCH Skewed T-Student NIG_Price (5,4)	5	4	-9.279501	-9.212017	-9.279836	-9.254184
TGARCH Skewed T-Student NIG_Price (5,5)	5	5	-9.277997	-9.206543	-9.278371	-9.25119
TGARCH Skewed T-Student NIG_Price (3,0)	3	0	-9.241332	-9.205606	-9.241427	-9.227929
TGARCH Skewed T-Student NIG_Price (2,0)	2	0	-9.184276	-9.156489	-9.184333	-9.173851
TGARCH Skewed T-Student NIG_Price (1,0)	1	0	-9.028119	-9.008271	-9.028148	-9.020673
TGARCH Skewed T-Student NIG_Price (0,1)	0	1	-8.705345	-8.689466	-8.705363	-8.699388
TGARCH Skewed T-Student NIG_Price (0,2)	0	2	-8.70803	-8.688182	-8.708059	-8.700584
TGARCH Skewed T-Student NIG_Price (0,3)	0	3	-8.708245	-8.684427	-8.708287	-8.699309
TGARCH Skewed T-Student NIG_Price (0,4)	0	4	-8.707579	-8.679791	-8.707636	-8.697154
TGARCH Skewed T-Student NIG_Price (0,5)	0	5	-8.706661	-8.674904	-8.706735	-8.694747

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm NIG_Price (3,3)	3	3	-8.883384	-8.843688	-8.883501	-8.868492
EGARCH Norm NIG_Price (2,1)	2	1	-8.863986	-8.840168	-8.864028	-8.855051
EGARCH Norm NIG_Price (3,4)	3	4	-8.882137	-8.838471	-8.882278	-8.865755
EGARCH Norm NIG_Price (3,5)	3	5	-8.883708	-8.836073	-8.883876	-8.865837
EGARCH Norm NIG_Price (2,2)	2	2	-8.862638	-8.834851	-8.862695	-8.852213
EGARCH Norm NIG_Price (4,4)	4	4	-8.885867	-8.834261	-8.886063	-8.866506
EGARCH Norm NIG_Price (4,3)	4	3	-8.881444	-8.833809	-8.881612	-8.863573
EGARCH Norm NIG_Price (2,3)	2	3	-8.863117	-8.83136	-8.863192	-8.851203
EGARCH Norm NIG_Price (3,1)	3	1	-8.862297	-8.83054	-8.862371	-8.850383
EGARCH Norm NIG_Price (1,1)	1	1	-8.845382	-8.829503	-8.845401	-8.839425
EGARCH Norm NIG_Price (4,5)	4	5	-8.88451	-8.828935	-8.884738	-8.863661
EGARCH Norm NIG_Price (1,2)	1	2	-8.848705	-8.828857	-8.848735	-8.841259
EGARCH Norm NIG_Price (2,4)	2	4	-8.864025	-8.828298	-8.86412	-8.850622
EGARCH Norm NIG_Price (5,3)	5	3	-8.883124	-8.82755	-8.883352	-8.862275
EGARCH Norm NIG_Price (2,5)	2	5	-8.867187	-8.827491	-8.867304	-8.852295
EGARCH Norm NIG_Price (3,2)	3	2	-8.862296	-8.826569	-8.86239	-8.848892
EGARCH Norm NIG_Price (1,3)	1	3	-8.85021	-8.826392	-8.850252	-8.841274
EGARCH Norm NIG_Price (5,4)	5	4	-8.884998	-8.825454	-8.885259	-8.862659
EGARCH Norm NIG_Price (4,1)	4	1	-8.864162	-8.824465	-8.864278	-8.849269
EGARCH Norm NIG_Price (5,1)	5	1	-8.86876	-8.821125	-8.868928	-8.850889
EGARCH Norm NIG_Price (1,4)	1	4	-8.848591	-8.820804	-8.848649	-8.838167
EGARCH Norm NIG_Price (1,5)	1	5	-8.85234	-8.820583	-8.852415	-8.840426
EGARCH Norm NIG_Price (4,2)	4	2	-8.864226	-8.820561	-8.864367	-8.847845
EGARCH Norm NIG_Price (5,5)	5	5	-8.883463	-8.819949	-8.88376	-8.859635
EGARCH Norm NIG_Price (5,2)	5	2	-8.867475	-8.815869	-8.867671	-8.848114
EGARCH Norm NIG_Price (5,0)	5	0	-8.448812	-8.405146	-8.448953	-8.432431
EGARCH Norm NIG_Price (3,0)	3	0	-8.16973	-8.141943	-8.169787	-8.159305

EGARCH Norm NIG_Price (1,0)	1	0	-7.802775	-7.790866	-7.802785	-7.798307
EGARCH Norm NIG_Price (0,1)	0	1	-7.625744	-7.617804	-7.625748	-7.622765
EGARCH Norm NIG_Price (0,2)	0	2	-7.624211	-7.612302	-7.624221	-7.619743
EGARCH Norm NIG_Price (0,3)	0	3	-7.622677	-7.606798	-7.622696	-7.61672
EGARCH Norm NIG_Price (0,4)	0	4	-7.621143	-7.601295	-7.621172	-7.613697
EGARCH Norm NIG_Price (0,5)	0	5	-7.619609	-7.595791	-7.619651	-7.610674
EGARCH Norm NIG_Price (4,0)	4	0	-6.81229	-6.776564	-6.812385	-6.798887
EGARCH Norm NIG_Price (2,0)	2	0	-6.167446	-6.147598	-6.167475	-6.16

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm NIG_Price (3,3)	3	3	-8.891324	-8.847658	-8.891465	-8.874943
EGARCH Skewed Norm NIG_Price (3,4)	3	4	-8.890281	-8.842645	-8.890449	-8.87241
EGARCH Skewed Norm NIG_Price (3,5)	3	5	-8.892828	-8.841223	-8.893025	-8.873468
EGARCH Skewed Norm NIG_Price (2,1)	2	1	-8.868949	-8.841161	-8.869006	-8.858524
EGARCH Skewed Norm NIG_Price (4,4)	4	4	-8.894592	-8.839017	-8.894819	-8.873742
EGARCH Skewed Norm NIG_Price (4,3)	4	3	-8.88963	-8.838025	-8.889826	-8.87027
EGARCH Skewed Norm NIG_Price (2,2)	2	2	-8.867615	-8.835858	-8.867689	-8.855701
EGARCH Skewed Norm NIG_Price (4,5)	4	5	-8.893322	-8.833778	-8.893583	-8.870983
EGARCH Skewed Norm NIG_Price (2,3)	2	3	-8.868592	-8.832865	-8.868686	-8.855188
EGARCH Skewed Norm NIG_Price (5,3)	5	3	-8.891837	-8.832292	-8.892098	-8.869498
EGARCH Skewed Norm NIG_Price (3,1)	3	1	-8.867464	-8.831738	-8.867559	-8.854061
EGARCH Skewed Norm NIG_Price (1,2)	1	2	-8.855036	-8.831218	-8.855078	-8.846101
EGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.850537	-8.830689	-8.850567	-8.843091
EGARCH Skewed Norm NIG_Price (5,4)	5	4	-8.894159	-8.830645	-8.894456	-8.870331
EGARCH Skewed Norm NIG_Price (2,4)	2	4	-8.870231	-8.830535	-8.870348	-8.855339
EGARCH Skewed Norm NIG_Price (1,3)	1	3	-8.857871	-8.830084	-8.857929	-8.847447
EGARCH Skewed Norm NIG_Price (2,5)	2	5	-8.873685	-8.830019	-8.873826	-8.857303
EGARCH Skewed Norm NIG_Price (3,2)	3	2	-8.867583	-8.827887	-8.8677	-8.852691

EGARCH Skewed Norm NIG_Price (4,1)	4	1	-8.870837	-8.827171	-8.870978	-8.854455
EGARCH Skewed Norm NIG_Price (5,5)	5	5	-8.892628	-8.825145	-8.892963	-8.867311
EGARCH Skewed Norm NIG_Price (1,5)	1	5	-8.860718	-8.824992	-8.860813	-8.847315
EGARCH Skewed Norm NIG_Price (1,4)	1	4	-8.856482	-8.824725	-8.856556	-8.844568
EGARCH Skewed Norm NIG_Price (5,1)	5	1	-8.87579	-8.824185	-8.875987	-8.85643
EGARCH Skewed Norm NIG_Price (4,2)	4	2	-8.870828	-8.823192	-8.870995	-8.852957
EGARCH Skewed Norm NIG_Price (5,2)	5	2	-8.874463	-8.818888	-8.874691	-8.853614
EGARCH Skewed Norm NIG_Price (5,0)	5	0	-8.454767	-8.407131	-8.454934	-8.436896
EGARCH Skewed Norm NIG_Price (4,0)	4	0	-8.335552	-8.295856	-8.335669	-8.320659
EGARCH Skewed Norm NIG_Price (3,0)	3	0	-8.171156	-8.139399	-8.171231	-8.159242
EGARCH Skewed Norm NIG_Price (2,0)	2	0	-8.037764	-8.013946	-8.037806	-8.028828
EGARCH Skewed Norm NIG_Price (1,0)	1	0	-7.812193	-7.796315	-7.812212	-7.806236
EGARCH Skewed Norm NIG_Price (0,4)	0	4	-7.724476	-7.700658	-7.724518	-7.715541
EGARCH Skewed Norm NIG_Price (0,1)	0	1	-7.641791	-7.629883	-7.641802	-7.637324
EGARCH Skewed Norm NIG_Price (0,2)	0	2	-7.640247	-7.624369	-7.640266	-7.63429
EGARCH Skewed Norm NIG_Price (0,3)	0	3	-7.63871	-7.618862	-7.638739	-7.631264
EGARCH Skewed Norm NIG_Price (0,5)	0	5	-7.635517	-7.607729	-7.635574	-7.625092

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student NIG_Price (2,1)	2	1	-9.325248	-9.29746	-9.325305	-9.314823
EGARCH T-Student NIG_Price (1,3)	1	3	-9.323972	-9.296185	-9.324029	-9.313547
EGARCH T-Student NIG_Price (1,2)	1	2	-9.316625	-9.292808	-9.316668	-9.30769
EGARCH T-Student NIG_Price (2,2)	2	2	-9.324122	-9.292365	-9.324197	-9.312208
EGARCH T-Student NIG_Price (1,4)	1	4	-9.322339	-9.290582	-9.322414	-9.310425
EGARCH T-Student NIG_Price (3,1)	3	1	-9.322082	-9.286355	-9.322177	-9.308679
EGARCH T-Student NIG_Price (2,3)	2	3	-9.321268	-9.285541	-9.321362	-9.307865
EGARCH T-Student NIG_Price (1,5)	1	5	-9.320534	-9.284807	-9.320628	-9.307131
EGARCH T-Student NIG_Price (3,2)	3	2	-9.32137	-9.281673	-9.321486	-9.306477

EGARCH T-Student NIG_Price (2,4)	2	4	-9.32125	-9.281554	-9.321366	-9.306357
EGARCH T-Student NIG_Price (1,1)	1	1	-9.299259	-9.279411	-9.299288	-9.291813
EGARCH T-Student NIG_Price (2,5)	2	5	-9.321262	-9.277596	-9.321403	-9.304881
EGARCH T-Student NIG_Price (4,1)	4	1	-9.320704	-9.277038	-9.320845	-9.304322
EGARCH T-Student NIG_Price (3,3)	3	3	-9.319849	-9.276183	-9.319989	-9.303467
EGARCH T-Student NIG_Price (3,4)	3	4	-9.319432	-9.271796	-9.319599	-9.301561
EGARCH T-Student NIG_Price (4,2)	4	2	-9.319188	-9.271553	-9.319356	-9.301317
EGARCH T-Student NIG_Price (5,1)	5	1	-9.319425	-9.26782	-9.319621	-9.300065
EGARCH T-Student NIG_Price (4,3)	4	3	-9.318944	-9.267339	-9.31914	-9.299584
EGARCH T-Student NIG_Price (3,5)	3	5	-9.31829	-9.266685	-9.318487	-9.29893
EGARCH T-Student NIG_Price (4,4)	4	4	-9.320461	-9.264887	-9.320689	-9.299612
EGARCH T-Student NIG_Price (5,2)	5	2	-9.317893	-9.262319	-9.318121	-9.297044
EGARCH T-Student NIG_Price (4,5)	4	5	-9.318862	-9.259318	-9.319123	-9.296523
EGARCH T-Student NIG_Price (5,3)	5	3	-9.318216	-9.258672	-9.318477	-9.295877
EGARCH T-Student NIG_Price (5,4)	5	4	-9.317671	-9.254157	-9.317967	-9.293843
EGARCH T-Student NIG_Price (5,5)	5	5	-9.316051	-9.248567	-9.316386	-9.290734
EGARCH T-Student NIG_Price (5,0)	5	0	-9.136524	-9.088889	-9.136692	-9.118653
EGARCH T-Student NIG_Price (4,0)	4	0	-9.124363	-9.084667	-9.12448	-9.109471
EGARCH T-Student NIG_Price (3,0)	3	0	-9.064526	-9.032769	-9.064601	-9.052612
EGARCH T-Student NIG_Price (2,0)	2	0	-9.009037	-8.98522	-9.00908	-9.000102
EGARCH T-Student NIG_Price (0,1)	0	1	-8.791999	-8.78009	-8.79201	-8.787531
EGARCH T-Student NIG_Price (0,2)	0	2	-8.790462	-8.774583	-8.79048	-8.784505
EGARCH T-Student NIG_Price (0,3)	0	3	-8.789571	-8.769723	-8.7896	-8.782125
EGARCH T-Student NIG_Price (0,5)	0	5	-8.790227	-8.76244	-8.790284	-8.779802
EGARCH T-Student NIG_Price (0,4)	0	4	-8.786085	-8.762267	-8.786127	-8.777149
EGARCH T-Student NIG_Price (1,0)	1	0	-5.239652	-5.223774	-5.239671	-5.233695

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

EGARCH Skewed T-Student NIG_Price (2,1)	2	1	-9.324154	-9.292396	-9.324228	-9.31224
EGARCH Skewed T-Student NIG_Price (1,3)	1	3	-9.322845	-9.291088	-9.32292	-9.310931
EGARCH Skewed T-Student NIG_Price (1,2)	1	2	-9.315475	-9.287687	-9.315532	-9.30505
EGARCH Skewed T-Student NIG_Price (2,2)	2	2	-9.323001	-9.287274	-9.323095	-9.309597
EGARCH Skewed T-Student NIG_Price (1,4)	1	4	-9.321205	-9.285478	-9.321299	-9.307802
EGARCH Skewed T-Student NIG_Price (4,3)	4	3	-9.337257	-9.281683	-9.337485	-9.316408
EGARCH Skewed T-Student NIG_Price (2,3)	2	3	-9.321055	-9.281359	-9.321172	-9.306163
EGARCH Skewed T-Student NIG_Price (3,1)	3	1	-9.320902	-9.281206	-9.321019	-9.30601
EGARCH Skewed T-Student NIG_Price (1,5)	1	5	-9.319381	-9.279685	-9.319498	-9.304489
EGARCH Skewed T-Student NIG_Price (3,2)	3	2	-9.320178	-9.276512	-9.320319	-9.303796
EGARCH Skewed T-Student NIG_Price (2,4)	2	4	-9.320108	-9.276442	-9.320249	-9.303726
EGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.29807	-9.274252	-9.298112	-9.289134
EGARCH Skewed T-Student NIG_Price (4,1)	4	1	-9.319555	-9.27192	-9.319723	-9.301684
EGARCH Skewed T-Student NIG_Price (2,5)	2	5	-9.319532	-9.271896	-9.319699	-9.301661
EGARCH Skewed T-Student NIG_Price (3,3)	3	3	-9.318657	-9.271021	-9.318824	-9.300786
EGARCH Skewed T-Student NIG_Price (3,4)	3	4	-9.318334	-9.266729	-9.31853	-9.298974
EGARCH Skewed T-Student NIG_Price (4,2)	4	2	-9.31804	-9.266435	-9.318237	-9.29868
EGARCH Skewed T-Student NIG_Price (5,1)	5	1	-9.318283	-9.262708	-9.318511	-9.297433
EGARCH Skewed T-Student NIG_Price (3,5)	3	5	-9.316934	-9.261359	-9.317161	-9.296084
EGARCH Skewed T-Student NIG_Price (4,4)	4	4	-9.319466	-9.259921	-9.319727	-9.297127
EGARCH Skewed T-Student NIG_Price (5,2)	5	2	-9.316753	-9.257209	-9.317014	-9.294414
EGARCH Skewed T-Student NIG_Price (4,5)	4	5	-9.317882	-9.254368	-9.318179	-9.294054
EGARCH Skewed T-Student NIG_Price (5,3)	5	3	-9.317187	-9.253673	-9.317483	-9.293359
EGARCH Skewed T-Student NIG_Price (5,4)	5	4	-9.317863	-9.25038	-9.318198	-9.292546
EGARCH Skewed T-Student NIG_Price (5,5)	5	5	-9.315021	-9.243567	-9.315396	-9.288214
EGARCH Skewed T-Student NIG_Price (4,0)	4	0	-9.13435	-9.090684	-9.134491	-9.117968
EGARCH Skewed T-Student NIG_Price (5,0)	5	0	-9.141547	-9.089942	-9.141744	-9.122187
EGARCH Skewed T-Student NIG_Price (0,4)	0	4	-8.884588	-8.8568	-8.884645	-8.874163

EGARCH Skewed T-Student NIG_Price (0,1)	0	1	-8.804333	-8.788454	-8.804351	-8.798376
EGARCH Skewed T-Student NIG_Price (0,2)	0	2	-8.800802	-8.780954	-8.800831	-8.793356
EGARCH Skewed T-Student NIG_Price (0,3)	0	3	-8.79725	-8.773432	-8.797292	-8.788315
EGARCH Skewed T-Student NIG_Price (0,5)	0	5	-8.790833	-8.759076	-8.790907	-8.778919
EGARCH Skewed T-Student NIG_Price (3,0)	3	0	-7.394261	-7.358534	-7.394356	-7.380858
EGARCH Skewed T-Student NIG_Price (1,0)	1	0	-5.27072	-5.250872	-5.270749	-5.263274

<i>NAGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm NIG_Price (3,3)	3	3	-8.920388	-8.880692	-8.920505	-8.905496
NAGARCH Norm NIG_Price (2,1)	2	1	-8.903074	-8.879256	-8.903116	-8.894138
NAGARCH Norm NIG_Price (3,4)	3	4	-8.922388	-8.878722	-8.922529	-8.906006
NAGARCH Norm NIG_Price (4,2)	4	2	-8.922342	-8.878676	-8.922483	-8.90596
NAGARCH Norm NIG_Price (3,2)	3	2	-8.912535	-8.876809	-8.91263	-8.899132
NAGARCH Norm NIG_Price (5,1)	5	1	-8.922752	-8.875116	-8.922919	-8.904881
NAGARCH Norm NIG_Price (3,5)	3	5	-8.9207	-8.873064	-8.920867	-8.902829
NAGARCH Norm NIG_Price (2,3)	2	3	-8.892478	-8.860721	-8.892552	-8.880564
NAGARCH Norm NIG_Price (1,1)	1	1	-8.87301	-8.857131	-8.873028	-8.867053
NAGARCH Norm NIG_Price (1,3)	1	3	-8.880058	-8.85624	-8.8801	-8.871123
NAGARCH Norm NIG_Price (3,1)	3	1	-8.887167	-8.85541	-8.887242	-8.875253
NAGARCH Norm NIG_Price (2,5)	2	5	-8.893929	-8.854233	-8.894045	-8.879036
NAGARCH Norm NIG_Price (1,2)	1	2	-8.873337	-8.853489	-8.873366	-8.86589
NAGARCH Norm NIG_Price (2,4)	2	4	-8.887478	-8.851751	-8.887572	-8.874075
NAGARCH Norm NIG_Price (1,5)	1	5	-8.882953	-8.851196	-8.883028	-8.871039
NAGARCH Norm NIG_Price (1,4)	1	4	-8.878937	-8.85115	-8.878995	-8.868513
NAGARCH Norm NIG_Price (4,3)	4	3	-8.897821	-8.850185	-8.897988	-8.87995
NAGARCH Norm NIG_Price (2,2)	2	2	-8.877066	-8.849279	-8.877124	-8.866642
NAGARCH Norm NIG_Price (5,3)	5	3	-8.893919	-8.838344	-8.894147	-8.87307

NAGARCH Norm NIG_Price (5,5)	5	5	-8.900986	-8.837472	-8.901283	-8.877158
NAGARCH Norm NIG_Price (5,2)	5	2	-8.88739	-8.835784	-8.887586	-8.868029
NAGARCH Norm NIG_Price (4,1)	4	1	-8.874774	-8.835078	-8.874891	-8.859882
NAGARCH Norm NIG_Price (5,4)	5	4	-8.892384	-8.83284	-8.892645	-8.870045
NAGARCH Norm NIG_Price (4,4)	4	4	-8.875376	-8.823771	-8.875573	-8.856016
NAGARCH Norm NIG_Price (4,5)	4	5	-8.871378	-8.815803	-8.871606	-8.850529
NAGARCH Norm NIG_Price (3,0)	3	0	-8.839659	-8.811872	-8.839717	-8.829235
NAGARCH Norm NIG_Price (4,0)	4	0	-8.844582	-8.808856	-8.844677	-8.831179
NAGARCH Norm NIG_Price (5,0)	5	0	-8.785747	-8.742081	-8.785888	-8.769365
NAGARCH Norm NIG_Price (2,0)	2	0	-8.72632	-8.706472	-8.726349	-8.718873
NAGARCH Norm NIG_Price (0,1)	0	1	-7.638352	-7.630413	-7.638357	-7.635374
NAGARCH Norm NIG_Price (0,2)	0	2	-7.640235	-7.628326	-7.640245	-7.635767
NAGARCH Norm NIG_Price (0,3)	0	3	-7.641451	-7.625573	-7.64147	-7.635494
NAGARCH Norm NIG_Price (0,4)	0	4	-7.640644	-7.620796	-7.640673	-7.633198
NAGARCH Norm NIG_Price (0,5)	0	5	-7.640389	-7.616572	-7.640432	-7.631454
NAGARCH Norm NIG_Price (1,0)	1	0	28.336201	28.34811	28.336191	28.340669

NAGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm NIG_Price (3,4)	3	4	-8.927204	-8.879569	-8.927372	-8.909333
NAGARCH Skewed Norm NIG_Price (5,1)	5	1	-8.916125	-8.86452	-8.916322	-8.896765
NAGARCH Skewed Norm NIG_Price (5,4)	5	4	-8.925119	-8.861605	-8.925416	-8.901291
NAGARCH Skewed Norm NIG_Price (2,3)	2	3	-8.896539	-8.860812	-8.896634	-8.883136
NAGARCH Skewed Norm NIG_Price (4,2)	4	2	-8.907892	-8.860256	-8.908059	-8.890021
NAGARCH Skewed Norm NIG_Price (5,5)	5	5	-8.927469	-8.859985	-8.927804	-8.902152
NAGARCH Skewed Norm NIG_Price (1,3)	1	3	-8.885041	-8.857254	-8.885099	-8.874617
NAGARCH Skewed Norm NIG_Price (1,1)	1	1	-8.876882	-8.857034	-8.876912	-8.869436
NAGARCH Skewed Norm NIG_Price (3,2)	3	2	-8.895015	-8.855318	-8.895131	-8.880122
NAGARCH Skewed Norm NIG_Price (3,1)	3	1	-8.890941	-8.855215	-8.891036	-8.877538

NAGARCH Skewed Norm NIG_Price (2,4)	2	4	-8.894879	-8.855183	-8.894995	-8.879986
NAGARCH Skewed Norm NIG_Price (1,2)	1	2	-8.877659	-8.853841	-8.877701	-8.868723
NAGARCH Skewed Norm NIG_Price (1,5)	1	5	-8.888349	-8.852622	-8.888443	-8.874946
NAGARCH Skewed Norm NIG_Price (4,4)	4	4	-8.907944	-8.852369	-8.908172	-8.887095
NAGARCH Skewed Norm NIG_Price (1,4)	1	4	-8.88398	-8.852223	-8.884055	-8.872066
NAGARCH Skewed Norm NIG_Price (2,2)	2	2	-8.880273	-8.848516	-8.880348	-8.868359
NAGARCH Skewed Norm NIG_Price (2,1)	2	1	-8.874266	-8.846479	-8.874323	-8.863841
NAGARCH Skewed Norm NIG_Price (2,5)	2	5	-8.88528	-8.841614	-8.885421	-8.868899
NAGARCH Skewed Norm NIG_Price (4,5)	4	5	-8.899866	-8.840322	-8.900127	-8.877527
NAGARCH Skewed Norm NIG_Price (4,3)	4	3	-8.886707	-8.835102	-8.886904	-8.867347
NAGARCH Skewed Norm NIG_Price (3,5)	3	5	-8.883542	-8.831937	-8.883738	-8.864182
NAGARCH Skewed Norm NIG_Price (5,3)	5	3	-8.891032	-8.831488	-8.891293	-8.868693
NAGARCH Skewed Norm NIG_Price (4,0)	4	0	-8.863632	-8.823936	-8.863748	-8.848739
NAGARCH Skewed Norm NIG_Price (5,2)	5	2	-8.878749	-8.823174	-8.878977	-8.8579
NAGARCH Skewed Norm NIG_Price (3,3)	3	3	-8.85918	-8.815514	-8.859321	-8.842799
NAGARCH Skewed Norm NIG_Price (3,0)	3	0	-8.828736	-8.796979	-8.828811	-8.816822
NAGARCH Skewed Norm NIG_Price (4,1)	4	1	-8.831068	-8.787402	-8.831209	-8.814686
NAGARCH Skewed Norm NIG_Price (2,0)	2	0	-8.771978	-8.74816	-8.77202	-8.763042
NAGARCH Skewed Norm NIG_Price (5,0)	5	0	-8.748878	-8.701242	-8.749045	-8.731007
NAGARCH Skewed Norm NIG_Price (0,2)	0	2	-7.65298	-7.637101	-7.652999	-7.647023
NAGARCH Skewed Norm NIG_Price (0,3)	0	3	-7.652685	-7.632837	-7.652715	-7.645239
NAGARCH Skewed Norm NIG_Price (0,1)	0	1	-7.644487	-7.632578	-7.644497	-7.640019
NAGARCH Skewed Norm NIG_Price (0,4)	0	4	-7.652915	-7.629097	-7.652957	-7.643979
NAGARCH Skewed Norm NIG_Price (0,5)	0	5	-7.652145	-7.624357	-7.652202	-7.64172
NAGARCH Skewed Norm NIG_Price (1,0)	1	0	10.485063	10.500941	10.485044	10.49102

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student NIG_Price (3,0)	3	0	-9.302365	-9.270608	-9.30244	-9.290451

NAGARCH T-Student NIG_Price (2,1)	2	1	-9.293686	-9.265899	-9.293744	-9.283262
NAGARCH T-Student NIG_Price (3,2)	3	2	-9.300192	-9.260496	-9.300309	-9.2853
NAGARCH T-Student NIG_Price (4,0)	4	0	-9.299231	-9.259534	-9.299347	-9.284338
NAGARCH T-Student NIG_Price (2,4)	2	4	-9.298555	-9.258859	-9.298672	-9.283663
NAGARCH T-Student NIG_Price (3,3)	3	3	-9.295624	-9.251959	-9.295765	-9.279243
NAGARCH T-Student NIG_Price (3,4)	3	4	-9.297245	-9.249609	-9.297413	-9.279374
NAGARCH T-Student NIG_Price (4,1)	4	1	-9.289746	-9.24608	-9.289887	-9.273364
NAGARCH T-Student NIG_Price (1,3)	1	3	-9.273789	-9.246002	-9.273846	-9.263364
NAGARCH T-Student NIG_Price (2,3)	2	3	-9.27998	-9.244254	-9.280075	-9.266577
NAGARCH T-Student NIG_Price (3,5)	3	5	-9.295673	-9.244068	-9.29587	-9.276313
NAGARCH T-Student NIG_Price (1,1)	1	1	-9.262168	-9.24232	-9.262197	-9.254722
NAGARCH T-Student NIG_Price (1,2)	1	2	-9.265924	-9.242107	-9.265966	-9.256989
NAGARCH T-Student NIG_Price (5,1)	5	1	-9.29286	-9.241255	-9.293056	-9.2735
NAGARCH T-Student NIG_Price (1,4)	1	4	-9.272276	-9.240519	-9.272351	-9.260362
NAGARCH T-Student NIG_Price (4,2)	4	2	-9.287113	-9.239478	-9.287281	-9.269242
NAGARCH T-Student NIG_Price (1,5)	1	5	-9.268939	-9.233212	-9.269033	-9.255536
NAGARCH T-Student NIG_Price (5,2)	5	2	-9.288067	-9.232492	-9.288294	-9.267217
NAGARCH T-Student NIG_Price (4,4)	4	4	-9.284299	-9.228724	-9.284527	-9.26345
NAGARCH T-Student NIG_Price (5,3)	5	3	-9.287853	-9.228309	-9.288114	-9.265514
NAGARCH T-Student NIG_Price (4,5)	4	5	-9.286764	-9.227219	-9.287025	-9.264425
NAGARCH T-Student NIG_Price (5,4)	5	4	-9.288567	-9.225053	-9.288864	-9.264739
NAGARCH T-Student NIG_Price (4,3)	4	3	-9.274097	-9.222492	-9.274293	-9.254737
NAGARCH T-Student NIG_Price (2,5)	2	5	-9.265554	-9.221889	-9.265695	-9.249173
NAGARCH T-Student NIG_Price (5,5)	5	5	-9.285653	-9.218169	-9.285987	-9.260336
NAGARCH T-Student NIG_Price (2,2)	2	2	-9.240187	-9.20843	-9.240262	-9.228273
NAGARCH T-Student NIG_Price (5,0)	5	0	-9.239663	-9.192027	-9.23983	-9.221792
NAGARCH T-Student NIG_Price (2,0)	2	0	-9.179336	-9.155518	-9.179378	-9.170401
NAGARCH T-Student NIG_Price (1,0)	1	0	-9.053271	-9.037393	-9.05329	-9.047314

NAGARCH T-Student NIG_Price (0,1)	0	1	-8.794951	-8.783042	-8.794961	-8.790483
NAGARCH T-Student NIG_Price (0,2)	0	2	-8.793353	-8.777475	-8.793372	-8.787396
NAGARCH T-Student NIG_Price (0,3)	0	3	-8.792181	-8.772333	-8.79221	-8.784735
NAGARCH T-Student NIG_Price (0,4)	0	4	-8.790628	-8.76681	-8.79067	-8.781693
NAGARCH T-Student NIG_Price (0,5)	0	5	-8.789162	-8.761375	-8.789219	-8.778737
NAGARCH T-Student NIG_Price (3,1)	3	1	161.827529	161.863255	161.827434	161.840932

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student NIG_Price (2,1)	2	1	-9.292846	-9.261089	-9.292921	-9.280932
NAGARCH Skewed T-Student NIG_Price (2,3)	2	3	-9.299208	-9.259512	-9.299325	-9.284316
NAGARCH Skewed T-Student NIG_Price (5,0)	5	0	-9.297821	-9.246216	-9.298018	-9.278461
NAGARCH Skewed T-Student NIG_Price (3,4)	3	4	-9.296295	-9.244689	-9.296491	-9.276934
NAGARCH Skewed T-Student NIG_Price (3,1)	3	1	-9.282535	-9.242838	-9.282651	-9.267642
NAGARCH Skewed T-Student NIG_Price (4,2)	4	2	-9.293287	-9.241682	-9.293483	-9.273927
NAGARCH Skewed T-Student NIG_Price (1,3)	1	3	-9.272439	-9.240682	-9.272513	-9.260525
NAGARCH Skewed T-Student NIG_Price (3,3)	3	3	-9.287683	-9.240048	-9.287851	-9.269812
NAGARCH Skewed T-Student NIG_Price (4,3)	4	3	-9.294783	-9.239208	-9.29501	-9.273933
NAGARCH Skewed T-Student NIG_Price (1,1)	1	1	-9.260862	-9.237044	-9.260904	-9.251926
NAGARCH Skewed T-Student NIG_Price (1,2)	1	2	-9.2646	-9.236812	-9.264657	-9.254175
NAGARCH Skewed T-Student NIG_Price (2,0)	2	0	-9.264029	-9.236242	-9.264087	-9.253605
NAGARCH Skewed T-Student NIG_Price (1,4)	1	4	-9.270918	-9.235192	-9.271013	-9.257515
NAGARCH Skewed T-Student NIG_Price (3,5)	3	5	-9.288907	-9.233332	-9.289135	-9.268058
NAGARCH Skewed T-Student NIG_Price (2,2)	2	2	-9.268342	-9.232615	-9.268437	-9.254939
NAGARCH Skewed T-Student NIG_Price (5,2)	5	2	-9.288023	-9.228479	-9.288284	-9.265684
NAGARCH Skewed T-Student NIG_Price (1,5)	1	5	-9.267671	-9.227975	-9.267787	-9.252778
NAGARCH Skewed T-Student NIG_Price (4,4)	4	4	-9.286299	-9.226754	-9.28656	-9.26396
NAGARCH Skewed T-Student NIG_Price (5,3)	5	3	-9.288695	-9.225181	-9.288992	-9.264867
NAGARCH Skewed T-Student NIG_Price (4,1)	4	1	-9.270793	-9.223158	-9.270961	-9.252922

NAGARCH Skewed T-Student NIG_Price (4,5)	4	5	-9.286631	-9.223117	-9.286927	-9.262803
NAGARCH Skewed T-Student NIG_Price (5,4)	5	4	-9.284934	-9.21745	-9.285269	-9.259617
NAGARCH Skewed T-Student NIG_Price (2,5)	2	5	-9.262893	-9.215257	-9.26306	-9.245022
NAGARCH Skewed T-Student NIG_Price (5,5)	5	5	-9.282689	-9.211236	-9.283064	-9.255883
NAGARCH Skewed T-Student NIG_Price (3,0)	3	0	-9.237533	-9.201806	-9.237627	-9.224129
NAGARCH Skewed T-Student NIG_Price (4,0)	4	0	-9.233059	-9.189393	-9.2332	-9.216677
NAGARCH Skewed T-Student NIG_Price (1,0)	1	0	-9.049183	-9.029335	-9.049213	-9.041737
NAGARCH Skewed T-Student NIG_Price (0,1)	0	1	-8.792394	-8.776515	-8.792413	-8.786437
NAGARCH Skewed T-Student NIG_Price (0,2)	0	2	-8.790356	-8.770508	-8.790385	-8.782909
NAGARCH Skewed T-Student NIG_Price (0,3)	0	3	-8.790411	-8.766594	-8.790454	-8.781476
NAGARCH Skewed T-Student NIG_Price (0,4)	0	4	-8.789099	-8.761311	-8.789156	-8.778674
NAGARCH Skewed T-Student NIG_Price (0,5)	0	5	-8.787717	-8.75596	-8.787792	-8.775803

<i>SOUTHAFR_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.125422	-6.113513	-6.125432	-6.120954
SGARCH Norm SOUTHAFR_Price (2,1)	2	1	-6.127215	-6.111336	-6.127234	-6.121258
SGARCH Norm SOUTHAFR_Price (1,2)	1	2	-6.124159	-6.108281	-6.124178	-6.118202
SGARCH Norm SOUTHAFR_Price (2,2)	2	2	-6.127287	-6.107439	-6.127317	-6.119841
SGARCH Norm SOUTHAFR_Price (3,1)	3	1	-6.125809	-6.105961	-6.125838	-6.118363
SGARCH Norm SOUTHAFR_Price (2,3)	2	3	-6.128359	-6.104541	-6.128401	-6.119424
SGARCH Norm SOUTHAFR_Price (1,3)	1	3	-6.122641	-6.102793	-6.122671	-6.115195
SGARCH Norm SOUTHAFR_Price (2,4)	2	4	-6.129832	-6.102045	-6.129889	-6.119407
SGARCH Norm SOUTHAFR_Price (3,2)	3	2	-6.125684	-6.101866	-6.125726	-6.116748

SGARCH Norm SOUTHAFR_Price (4,1)	4	1	-6.125109	-6.101292	-6.125152	-6.116174
SGARCH Norm SOUTHAFR_Price (2,5)	2	5	-6.131732	-6.099975	-6.131807	-6.119818
SGARCH Norm SOUTHAFR_Price (3,3)	3	3	-6.126824	-6.099037	-6.126882	-6.1164
SGARCH Norm SOUTHAFR_Price (1,4)	1	4	-6.122697	-6.098879	-6.122739	-6.113761
SGARCH Norm SOUTHAFR_Price (4,2)	4	2	-6.124794	-6.097007	-6.124852	-6.11437
SGARCH Norm SOUTHAFR_Price (5,1)	5	1	-6.124385	-6.096598	-6.124442	-6.11396
SGARCH Norm SOUTHAFR_Price (3,4)	3	4	-6.128307	-6.09655	-6.128381	-6.116393
SGARCH Norm SOUTHAFR_Price (3,5)	3	5	-6.131616	-6.09589	-6.131711	-6.118213
SGARCH Norm SOUTHAFR_Price (4,3)	4	3	-6.125864	-6.094107	-6.125939	-6.11395
SGARCH Norm SOUTHAFR_Price (1,5)	1	5	-6.120865	-6.093077	-6.120922	-6.11044
SGARCH Norm SOUTHAFR_Price (5,2)	5	2	-6.124253	-6.092496	-6.124328	-6.112339
SGARCH Norm SOUTHAFR_Price (4,4)	4	4	-6.126772	-6.091045	-6.126866	-6.113368
SGARCH Norm SOUTHAFR_Price (4,5)	4	5	-6.130081	-6.090385	-6.130198	-6.115189
SGARCH Norm SOUTHAFR_Price (5,3)	5	3	-6.125334	-6.089608	-6.125429	-6.111931
SGARCH Norm SOUTHAFR_Price (5,5)	5	5	-6.130248	-6.086582	-6.130389	-6.113866
SGARCH Norm SOUTHAFR_Price (5,4)	5	4	-6.126238	-6.086542	-6.126354	-6.111345
SGARCH Norm SOUTHAFR_Price (5,0)	5	0	-6.091501	-6.067684	-6.091543	-6.082566
SGARCH Norm SOUTHAFR_Price (4,0)	4	0	-6.080979	-6.061131	-6.081008	-6.073533
SGARCH Norm SOUTHAFR_Price (3,0)	3	0	-6.06532	-6.049442	-6.065339	-6.059363
SGARCH Norm SOUTHAFR_Price (2,0)	2	0	-6.018465	-6.006556	-6.018475	-6.013997
SGARCH Norm SOUTHAFR_Price (1,0)	1	0	-5.853194	-5.845255	-5.853199	-5.850215
SGARCH Norm SOUTHAFR_Price (0,1)	0	1	-5.773151	-5.765212	-5.773155	-5.770172
SGARCH Norm SOUTHAFR_Price (0,2)	0	2	-5.774842	-5.762933	-5.774853	-5.770374
SGARCH Norm SOUTHAFR_Price (0,3)	0	3	-5.774457	-5.758579	-5.774476	-5.7685
SGARCH Norm SOUTHAFR_Price (0,4)	0	4	-5.773524	-5.753676	-5.773553	-5.766077
SGARCH Norm SOUTHAFR_Price (0,5)	0	5	-5.772398	-5.74858	-5.77244	-5.763462

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

SGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.144932	-6.129054	-6.144951	-6.138975
SGARCH Skewed Norm SOUTHAFR_Price (2,1)	2	1	-6.14502	-6.125172	-6.145049	-6.137574
SGARCH Skewed Norm SOUTHAFR_Price (1,2)	1	2	-6.143804	-6.123956	-6.143834	-6.136358
SGARCH Skewed Norm SOUTHAFR_Price (2,2)	2	2	-6.144457	-6.120639	-6.144499	-6.135522
SGARCH Skewed Norm SOUTHAFR_Price (3,1)	3	1	-6.14368	-6.119862	-6.143722	-6.134744
SGARCH Skewed Norm SOUTHAFR_Price (1,3)	1	3	-6.142318	-6.1185	-6.14236	-6.133382
SGARCH Skewed Norm SOUTHAFR_Price (2,3)	2	3	-6.145549	-6.117762	-6.145607	-6.135125
SGARCH Skewed Norm SOUTHAFR_Price (2,4)	2	4	-6.147256	-6.115499	-6.147331	-6.135342
SGARCH Skewed Norm SOUTHAFR_Price (4,1)	4	1	-6.143134	-6.115346	-6.143191	-6.132709
SGARCH Skewed Norm SOUTHAFR_Price (3,2)	3	2	-6.14302	-6.115233	-6.143077	-6.132595
SGARCH Skewed Norm SOUTHAFR_Price (1,4)	1	4	-6.142221	-6.114434	-6.142279	-6.131797
SGARCH Skewed Norm SOUTHAFR_Price (3,3)	3	3	-6.144014	-6.112257	-6.144089	-6.1321
SGARCH Skewed Norm SOUTHAFR_Price (2,5)	2	5	-6.147719	-6.111992	-6.147813	-6.134315
SGARCH Skewed Norm SOUTHAFR_Price (4,2)	4	2	-6.142243	-6.110486	-6.142318	-6.130329
SGARCH Skewed Norm SOUTHAFR_Price (5,1)	5	1	-6.14201	-6.110253	-6.142085	-6.130096
SGARCH Skewed Norm SOUTHAFR_Price (3,4)	3	4	-6.145861	-6.110134	-6.145955	-6.132458
SGARCH Skewed Norm SOUTHAFR_Price (1,5)	1	5	-6.140432	-6.108675	-6.140507	-6.128518
SGARCH Skewed Norm SOUTHAFR_Price (3,5)	3	5	-6.147243	-6.107546	-6.147359	-6.13235
SGARCH Skewed Norm SOUTHAFR_Price (4,3)	4	3	-6.143108	-6.107382	-6.143203	-6.129705
SGARCH Skewed Norm SOUTHAFR_Price (5,2)	5	2	-6.14139	-6.105663	-6.141484	-6.127987
SGARCH Skewed Norm SOUTHAFR_Price (4,4)	4	4	-6.144326	-6.10463	-6.144442	-6.129433
SGARCH Skewed Norm SOUTHAFR_Price (5,3)	5	3	-6.142318	-6.102622	-6.142435	-6.127425
SGARCH Skewed Norm SOUTHAFR_Price (4,5)	4	5	-6.145708	-6.102042	-6.145849	-6.129326
SGARCH Skewed Norm SOUTHAFR_Price (5,4)	5	4	-6.143362	-6.099696	-6.143503	-6.12698
SGARCH Skewed Norm SOUTHAFR_Price (5,5)	5	5	-6.145329	-6.097693	-6.145496	-6.127458
SGARCH Skewed Norm SOUTHAFR_Price (5,0)	5	0	-6.105733	-6.077946	-6.10579	-6.095308
SGARCH Skewed Norm SOUTHAFR_Price (4,0)	4	0	-6.094288	-6.07047	-6.09433	-6.085352
SGARCH Skewed Norm SOUTHAFR_Price (3,0)	3	0	-6.081772	-6.061924	-6.081802	-6.074326

SGARCH Skewed Norm SOUTHAFR_Price (1,0)	1	0	-5.890492	-5.878583	-5.890503	-5.886024
SGARCH Skewed Norm SOUTHAFR_Price (0,1)	0	1	-5.785808	-5.773899	-5.785819	-5.78134
SGARCH Skewed Norm SOUTHAFR_Price (0,2)	0	2	-5.787265	-5.771387	-5.787284	-5.781308
SGARCH Skewed Norm SOUTHAFR_Price (0,3)	0	3	-5.786808	-5.76696	-5.786837	-5.779362
SGARCH Skewed Norm SOUTHAFR_Price (0,4)	0	4	-5.785837	-5.762019	-5.785879	-5.776901
SGARCH Skewed Norm SOUTHAFR_Price (0,5)	0	5	-5.784684	-5.756896	-5.784741	-5.774259
SGARCH Skewed Norm SOUTHAFR_Price (2,0)	2	0	39.117444	39.133322	39.117425	39.123401

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.158953	-6.143075	-6.158972	-6.152996
SGARCH T-Student SOUTHAFR_Price (2,1)	2	1	-6.157817	-6.137969	-6.157846	-6.150371
SGARCH T-Student SOUTHAFR_Price (1,2)	1	2	-6.157726	-6.137878	-6.157756	-6.15028
SGARCH T-Student SOUTHAFR_Price (3,1)	3	1	-6.156406	-6.132588	-6.156448	-6.14747
SGARCH T-Student SOUTHAFR_Price (2,2)	2	2	-6.156339	-6.132521	-6.156381	-6.147403
SGARCH T-Student SOUTHAFR_Price (1,3)	1	3	-6.156245	-6.132427	-6.156287	-6.14731
SGARCH T-Student SOUTHAFR_Price (1,4)	1	4	-6.156004	-6.128217	-6.156062	-6.14558
SGARCH T-Student SOUTHAFR_Price (4,1)	4	1	-6.15588	-6.128093	-6.155938	-6.145456
SGARCH T-Student SOUTHAFR_Price (2,3)	2	3	-6.155674	-6.127887	-6.155732	-6.14525
SGARCH T-Student SOUTHAFR_Price (3,2)	3	2	-6.154927	-6.12714	-6.154984	-6.144502
SGARCH T-Student SOUTHAFR_Price (2,4)	2	4	-6.156144	-6.124387	-6.156219	-6.14423
SGARCH T-Student SOUTHAFR_Price (5,1)	5	1	-6.154381	-6.122624	-6.154456	-6.142467
SGARCH T-Student SOUTHAFR_Price (4,2)	4	2	-6.154345	-6.122588	-6.154419	-6.142431
SGARCH T-Student SOUTHAFR_Price (1,5)	1	5	-6.15428	-6.122523	-6.154355	-6.142366
SGARCH T-Student SOUTHAFR_Price (3,3)	3	3	-6.154139	-6.122382	-6.154214	-6.142225
SGARCH T-Student SOUTHAFR_Price (3,4)	3	4	-6.156913	-6.121186	-6.157007	-6.14351
SGARCH T-Student SOUTHAFR_Price (2,5)	2	5	-6.155149	-6.119422	-6.155244	-6.141746
SGARCH T-Student SOUTHAFR_Price (4,3)	4	3	-6.153207	-6.11748	-6.153301	-6.139804
SGARCH T-Student SOUTHAFR_Price (5,2)	5	2	-6.152955	-6.117229	-6.15305	-6.139552

SGARCH T-Student SOUTHAFR_Price (3,5)	3	5	-6.155837	-6.116141	-6.155954	-6.140945
SGARCH T-Student SOUTHAFR_Price (4,4)	4	4	-6.155378	-6.115682	-6.155495	-6.140486
SGARCH T-Student SOUTHAFR_Price (5,3)	5	3	-6.15219	-6.112494	-6.152307	-6.137298
SGARCH T-Student SOUTHAFR_Price (4,5)	4	5	-6.154302	-6.110637	-6.154443	-6.137921
SGARCH T-Student SOUTHAFR_Price (5,4)	5	4	-6.154235	-6.110569	-6.154376	-6.137853
SGARCH T-Student SOUTHAFR_Price (5,5)	5	5	-6.152768	-6.105132	-6.152935	-6.134897
SGARCH T-Student SOUTHAFR_Price (5,0)	5	0	-6.121218	-6.093431	-6.121275	-6.110793
SGARCH T-Student SOUTHAFR_Price (4,0)	4	0	-6.115489	-6.091671	-6.115531	-6.106553
SGARCH T-Student SOUTHAFR_Price (3,0)	3	0	-6.107662	-6.087814	-6.107691	-6.100216
SGARCH T-Student SOUTHAFR_Price (2,0)	2	0	-6.074186	-6.058308	-6.074205	-6.068229
SGARCH T-Student SOUTHAFR_Price (1,0)	1	0	-6.039033	-6.027124	-6.039044	-6.034565
SGARCH T-Student SOUTHAFR_Price (0,1)	0	1	-6.01773	-6.005821	-6.017741	-6.013263
SGARCH T-Student SOUTHAFR_Price (0,2)	0	2	-6.020087	-6.004208	-6.020106	-6.01413
SGARCH T-Student SOUTHAFR_Price (0,3)	0	3	-6.019853	-6.000004	-6.019882	-6.012406
SGARCH T-Student SOUTHAFR_Price (0,4)	0	4	-6.018992	-5.995174	-6.019034	-6.010056
SGARCH T-Student SOUTHAFR_Price (0,5)	0	5	-6.017927	-5.990139	-6.017984	-6.007502

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.168397	-6.148549	-6.168426	-6.160951
SGARCH Skewed T-Student SOUTHAFR_Price (2,1)	2	1	-6.16724	-6.143422	-6.167282	-6.158305
SGARCH Skewed T-Student SOUTHAFR_Price (1,2)	1	2	-6.16724	-6.143422	-6.167282	-6.158304
SGARCH Skewed T-Student SOUTHAFR_Price (1,3)	1	3	-6.165796	-6.138009	-6.165853	-6.155371
SGARCH Skewed T-Student SOUTHAFR_Price (3,1)	3	1	-6.165774	-6.137987	-6.165832	-6.15535
SGARCH Skewed T-Student SOUTHAFR_Price (2,2)	2	2	-6.165705	-6.137918	-6.165763	-6.155281
SGARCH Skewed T-Student SOUTHAFR_Price (1,4)	1	4	-6.165765	-6.134008	-6.16584	-6.153851
SGARCH Skewed T-Student SOUTHAFR_Price (4,1)	4	1	-6.165331	-6.133574	-6.165406	-6.153417
SGARCH Skewed T-Student SOUTHAFR_Price (2,3)	2	3	-6.164997	-6.13324	-6.165072	-6.153083
SGARCH Skewed T-Student SOUTHAFR_Price (3,2)	3	2	-6.164243	-6.132486	-6.164318	-6.152329

SGARCH Skewed T-Student SOUTHAFR_Price (2,4)	2	4	-6.16603	-6.130304	-6.166125	-6.152627
SGARCH Skewed T-Student SOUTHAFR_Price (1,5)	1	5	-6.164051	-6.128324	-6.164145	-6.150647
SGARCH Skewed T-Student SOUTHAFR_Price (4,2)	4	2	-6.163796	-6.128069	-6.16389	-6.150393
SGARCH Skewed T-Student SOUTHAFR_Price (5,1)	5	1	-6.163644	-6.127917	-6.163738	-6.150241
SGARCH Skewed T-Student SOUTHAFR_Price (3,3)	3	3	-6.163462	-6.127735	-6.163557	-6.150059
SGARCH Skewed T-Student SOUTHAFR_Price (3,4)	3	4	-6.16636	-6.126663	-6.166476	-6.151467
SGARCH Skewed T-Student SOUTHAFR_Price (2,5)	2	5	-6.164886	-6.125189	-6.165002	-6.149993
SGARCH Skewed T-Student SOUTHAFR_Price (4,3)	4	3	-6.162577	-6.12288	-6.162693	-6.147684
SGARCH Skewed T-Student SOUTHAFR_Price (5,2)	5	2	-6.162206	-6.122509	-6.162322	-6.147313
SGARCH Skewed T-Student SOUTHAFR_Price (3,5)	3	5	-6.165436	-6.12177	-6.165577	-6.149055
SGARCH Skewed T-Student SOUTHAFR_Price (4,4)	4	4	-6.164825	-6.121159	-6.164966	-6.148443
SGARCH Skewed T-Student SOUTHAFR_Price (5,3)	5	3	-6.161432	-6.117766	-6.161573	-6.14505
SGARCH Skewed T-Student SOUTHAFR_Price (4,5)	4	5	-6.163901	-6.116266	-6.164069	-6.14603
SGARCH Skewed T-Student SOUTHAFR_Price (5,4)	5	4	-6.163556	-6.115921	-6.163724	-6.145685
SGARCH Skewed T-Student SOUTHAFR_Price (5,5)	5	5	-6.162366	-6.110761	-6.162563	-6.143006
SGARCH Skewed T-Student SOUTHAFR_Price (5,0)	5	0	-6.128744	-6.096987	-6.128819	-6.11683
SGARCH Skewed T-Student SOUTHAFR_Price (4,0)	4	0	-6.121941	-6.094154	-6.121998	-6.111516
SGARCH Skewed T-Student SOUTHAFR_Price (3,0)	3	0	-6.114627	-6.09081	-6.11467	-6.105692
SGARCH Skewed T-Student SOUTHAFR_Price (2,0)	2	0	-6.081848	-6.062	-6.081878	-6.074402
SGARCH Skewed T-Student SOUTHAFR_Price (1,0)	1	0	-6.046068	-6.030189	-6.046086	-6.040111
SGARCH Skewed T-Student SOUTHAFR_Price (0,1)	0	1	-6.02119	-6.005312	-6.021209	-6.015233
SGARCH Skewed T-Student SOUTHAFR_Price (0,2)	0	2	-6.023506	-6.003658	-6.023535	-6.01606
SGARCH Skewed T-Student SOUTHAFR_Price (0,3)	0	3	-6.023301	-5.999483	-6.023343	-6.014365
SGARCH Skewed T-Student SOUTHAFR_Price (0,4)	0	4	-6.022453	-5.994665	-6.02251	-6.012028
SGARCH Skewed T-Student SOUTHAFR_Price (0,5)	0	5	-6.021398	-5.989641	-6.021473	-6.009484

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.124535	-6.104687	-6.124564	-6.117088

APARCH Norm SOUTHAFR_Price (1,2)	1	2	-6.123098	-6.09928	-6.12314	-6.114162
APARCH Norm SOUTHAFR_Price (2,1)	2	1	-6.126997	-6.09921	-6.127054	-6.116572
APARCH Norm SOUTHAFR_Price (2,2)	2	2	-6.127948	-6.096191	-6.128023	-6.116034
APARCH Norm SOUTHAFR_Price (2,3)	2	3	-6.131789	-6.096063	-6.131884	-6.118386
APARCH Norm SOUTHAFR_Price (1,3)	1	3	-6.121443	-6.093656	-6.1215	-6.111018
APARCH Norm SOUTHAFR_Price (2,4)	2	4	-6.132761	-6.093065	-6.132877	-6.117868
APARCH Norm SOUTHAFR_Price (2,5)	2	5	-6.136458	-6.092792	-6.136599	-6.120076
APARCH Norm SOUTHAFR_Price (1,4)	1	4	-6.124134	-6.092377	-6.124209	-6.11222
APARCH Norm SOUTHAFR_Price (3,1)	3	1	-6.123335	-6.087608	-6.123429	-6.109932
APARCH Norm SOUTHAFR_Price (1,5)	1	5	-6.122339	-6.086612	-6.122433	-6.108935
APARCH Norm SOUTHAFR_Price (3,3)	3	3	-6.129863	-6.086197	-6.130004	-6.113481
APARCH Norm SOUTHAFR_Price (3,2)	3	2	-6.124354	-6.084657	-6.12447	-6.109461
APARCH Norm SOUTHAFR_Price (3,4)	3	4	-6.130646	-6.08301	-6.130814	-6.112775
APARCH Norm SOUTHAFR_Price (3,5)	3	5	-6.130553	-6.078948	-6.130749	-6.111193
APARCH Norm SOUTHAFR_Price (4,1)	4	1	-6.121581	-6.077916	-6.121722	-6.1052
APARCH Norm SOUTHAFR_Price (4,3)	4	3	-6.127014	-6.075409	-6.12721	-6.107654
APARCH Norm SOUTHAFR_Price (4,2)	4	2	-6.122876	-6.07524	-6.123043	-6.105005
APARCH Norm SOUTHAFR_Price (4,4)	4	4	-6.128699	-6.073124	-6.128927	-6.10785
APARCH Norm SOUTHAFR_Price (4,5)	4	5	-6.131799	-6.072255	-6.13206	-6.109461
APARCH Norm SOUTHAFR_Price (5,3)	5	3	-6.126622	-6.067078	-6.126883	-6.104284
APARCH Norm SOUTHAFR_Price (5,1)	5	1	-6.116834	-6.065229	-6.117031	-6.097474
APARCH Norm SOUTHAFR_Price (5,2)	5	2	-6.120148	-6.064573	-6.120376	-6.099299
APARCH Norm SOUTHAFR_Price (5,5)	5	5	-6.129648	-6.062165	-6.129983	-6.104331
APARCH Norm SOUTHAFR_Price (5,4)	5	4	-6.125547	-6.062033	-6.125844	-6.101719
APARCH Norm SOUTHAFR_Price (3,0)	3	0	-6.084128	-6.052371	-6.084202	-6.072214
APARCH Norm SOUTHAFR_Price (5,0)	5	0	-6.09165	-6.044015	-6.091818	-6.073779
APARCH Norm SOUTHAFR_Price (4,0)	4	0	-6.072427	-6.03273	-6.072543	-6.057534
APARCH Norm SOUTHAFR_Price (2,0)	2	0	-6.025602	-6.001784	-6.025644	-6.016667

APARCH Norm SOUTHAFR_Price (1,0)	1	0	-5.857036	-5.841158	-5.857055	-5.851079
APARCH Norm SOUTHAFR_Price (0,1)	0	1	-5.754704	-5.742795	-5.754714	-5.750236
APARCH Norm SOUTHAFR_Price (0,2)	0	2	-5.750992	-5.735114	-5.751011	-5.745035
APARCH Norm SOUTHAFR_Price (0,3)	0	3	-5.749832	-5.729984	-5.749862	-5.742386
APARCH Norm SOUTHAFR_Price (0,4)	0	4	-5.744657	-5.720839	-5.744699	-5.735721

<i>APARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.144451	-6.120633	-6.144493	-6.135516
APARCH Skewed Norm SOUTHAFR_Price (1,2)	1	2	-6.142555	-6.114768	-6.142613	-6.13213
APARCH Skewed Norm SOUTHAFR_Price (2,1)	2	1	-6.145	-6.113243	-6.145075	-6.133086
APARCH Skewed Norm SOUTHAFR_Price (1,3)	1	3	-6.141259	-6.109502	-6.141334	-6.129345
APARCH Skewed Norm SOUTHAFR_Price (2,2)	2	2	-6.144925	-6.109199	-6.14502	-6.131522
APARCH Skewed Norm SOUTHAFR_Price (2,3)	2	3	-6.148109	-6.108413	-6.148226	-6.133217
APARCH Skewed Norm SOUTHAFR_Price (1,4)	1	4	-6.141781	-6.106055	-6.141876	-6.128378
APARCH Skewed Norm SOUTHAFR_Price (2,5)	2	5	-6.15313	-6.105494	-6.153297	-6.135259
APARCH Skewed Norm SOUTHAFR_Price (2,4)	2	4	-6.14907	-6.105404	-6.149211	-6.132688
APARCH Skewed Norm SOUTHAFR_Price (3,1)	3	1	-6.140709	-6.101013	-6.140826	-6.125817
APARCH Skewed Norm SOUTHAFR_Price (1,5)	1	5	-6.140251	-6.100555	-6.140368	-6.125359
APARCH Skewed Norm SOUTHAFR_Price (3,5)	3	5	-6.153768	-6.098193	-6.153995	-6.132918
APARCH Skewed Norm SOUTHAFR_Price (3,2)	3	2	-6.141226	-6.09756	-6.141367	-6.124844
APARCH Skewed Norm SOUTHAFR_Price (3,3)	3	3	-6.145146	-6.09751	-6.145314	-6.127275
APARCH Skewed Norm SOUTHAFR_Price (3,4)	3	4	-6.147742	-6.096136	-6.147938	-6.128381
APARCH Skewed Norm SOUTHAFR_Price (4,1)	4	1	-6.138227	-6.090592	-6.138395	-6.120356
APARCH Skewed Norm SOUTHAFR_Price (4,3)	4	3	-6.143771	-6.088196	-6.143999	-6.122922
APARCH Skewed Norm SOUTHAFR_Price (4,2)	4	2	-6.139091	-6.087486	-6.139288	-6.119731
APARCH Skewed Norm SOUTHAFR_Price (4,4)	4	4	-6.144131	-6.084586	-6.144392	-6.121792
APARCH Skewed Norm SOUTHAFR_Price (4,5)	4	5	-6.143993	-6.080479	-6.14429	-6.120165

APARCH Skewed Norm SOUTHAFR_Price (5,3)	5	3	-6.142744	-6.07923	-6.143041	-6.118916
APARCH Skewed Norm SOUTHAFR_Price (5,1)	5	1	-6.133679	-6.078104	-6.133906	-6.112829
APARCH Skewed Norm SOUTHAFR_Price (5,2)	5	2	-6.134638	-6.075093	-6.134899	-6.112299
APARCH Skewed Norm SOUTHAFR_Price (5,5)	5	5	-6.146536	-6.075083	-6.146911	-6.11973
APARCH Skewed Norm SOUTHAFR_Price (5,4)	5	4	-6.139632	-6.072149	-6.139967	-6.114315
APARCH Skewed Norm SOUTHAFR_Price (3,0)	3	0	-6.096385	-6.060659	-6.09648	-6.082982
APARCH Skewed Norm SOUTHAFR_Price (4,0)	4	0	-6.102686	-6.05902	-6.102827	-6.086304
APARCH Skewed Norm SOUTHAFR_Price (5,0)	5	0	-6.099925	-6.04832	-6.100121	-6.080565
APARCH Skewed Norm SOUTHAFR_Price (2,0)	2	0	-6.039203	-6.011416	-6.03926	-6.028778
APARCH Skewed Norm SOUTHAFR_Price (1,0)	1	0	-5.891491	-5.871643	-5.891521	-5.884045
APARCH Skewed Norm SOUTHAFR_Price (0,1)	0	1	-5.770267	-5.754388	-5.770285	-5.76431
APARCH Skewed Norm SOUTHAFR_Price (0,2)	0	2	-5.767642	-5.747794	-5.767671	-5.760196
APARCH Skewed Norm SOUTHAFR_Price (0,3)	0	3	-5.763341	-5.739523	-5.763383	-5.754406
APARCH Skewed Norm SOUTHAFR_Price (0,4)	0	4	-5.759351	-5.731563	-5.759408	-5.748926
APARCH Skewed Norm SOUTHAFR_Price (0,5)	0	5	-5.755361	-5.723604	-5.755435	-5.743447

APARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.15669	-6.132873	-6.156733	-6.147755
APARCH T-Student SOUTHAFR_Price (1,2)	1	2	-6.156655	-6.128868	-6.156712	-6.14623
APARCH T-Student SOUTHAFR_Price (2,1)	2	1	-6.156546	-6.124789	-6.156621	-6.144632
APARCH T-Student SOUTHAFR_Price (1,3)	1	3	-6.156373	-6.124616	-6.156448	-6.144459
APARCH T-Student SOUTHAFR_Price (1,4)	1	4	-6.157022	-6.121295	-6.157116	-6.143619
APARCH T-Student SOUTHAFR_Price (2,2)	2	2	-6.155177	-6.11945	-6.155271	-6.141774
APARCH T-Student SOUTHAFR_Price (2,3)	2	3	-6.156483	-6.116787	-6.1566	-6.141591
APARCH T-Student SOUTHAFR_Price (1,5)	1	5	-6.155383	-6.115686	-6.155499	-6.14049
APARCH T-Student SOUTHAFR_Price (2,4)	2	4	-6.15789	-6.114224	-6.158031	-6.141508
APARCH T-Student SOUTHAFR_Price (3,1)	3	1	-6.153742	-6.114045	-6.153858	-6.138849
APARCH T-Student SOUTHAFR_Price (3,2)	3	2	-6.153847	-6.110181	-6.153988	-6.137465

APARCH T-Student SOUTHAFR_Price (2,5)	2	5	-6.156641	-6.109005	-6.156808	-6.13877
APARCH T-Student SOUTHAFR_Price (3,3)	3	3	-6.153907	-6.106272	-6.154075	-6.136036
APARCH T-Student SOUTHAFR_Price (3,4)	3	4	-6.15762	-6.106015	-6.157816	-6.13826
APARCH T-Student SOUTHAFR_Price (4,1)	4	1	-6.153445	-6.105809	-6.153612	-6.135574
APARCH T-Student SOUTHAFR_Price (3,5)	3	5	-6.156587	-6.101012	-6.156814	-6.135737
APARCH T-Student SOUTHAFR_Price (4,2)	4	2	-6.152355	-6.10075	-6.152551	-6.132995
APARCH T-Student SOUTHAFR_Price (4,3)	4	3	-6.151754	-6.09618	-6.151982	-6.130905
APARCH T-Student SOUTHAFR_Price (4,4)	4	4	-6.154545	-6.095	-6.154806	-6.132206
APARCH T-Student SOUTHAFR_Price (5,1)	5	1	-6.150132	-6.094558	-6.15036	-6.129283
APARCH T-Student SOUTHAFR_Price (4,5)	4	5	-6.153761	-6.090247	-6.154058	-6.129934
APARCH T-Student SOUTHAFR_Price (5,2)	5	2	-6.149057	-6.089512	-6.149318	-6.126718
APARCH T-Student SOUTHAFR_Price (5,3)	5	3	-6.148546	-6.085032	-6.148843	-6.124718
APARCH T-Student SOUTHAFR_Price (5,4)	5	4	-6.151935	-6.084451	-6.152269	-6.126618
APARCH T-Student SOUTHAFR_Price (5,5)	5	5	-6.151031	-6.079578	-6.151406	-6.124224
APARCH T-Student SOUTHAFR_Price (3,0)	3	0	-6.110591	-6.074864	-6.110686	-6.097188
APARCH T-Student SOUTHAFR_Price (4,0)	4	0	-6.105546	-6.06188	-6.105687	-6.089164
APARCH T-Student SOUTHAFR_Price (5,0)	5	0	-6.103347	-6.051742	-6.103543	-6.083986
APARCH T-Student SOUTHAFR_Price (2,0)	2	0	-6.0756	-6.047813	-6.075658	-6.065176
APARCH T-Student SOUTHAFR_Price (1,0)	1	0	-6.040022	-6.020174	-6.040051	-6.032576
APARCH T-Student SOUTHAFR_Price (0,1)	0	1	-5.997648	-5.981769	-5.997666	-5.991691
APARCH T-Student SOUTHAFR_Price (0,2)	0	2	-5.995703	-5.975855	-5.995733	-5.988257
APARCH T-Student SOUTHAFR_Price (0,3)	0	3	-5.992757	-5.96894	-5.9928	-5.983822
APARCH T-Student SOUTHAFR_Price (0,4)	0	4	-5.989776	-5.961989	-5.989833	-5.979351
APARCH T-Student SOUTHAFR_Price (0,5)	0	5	-5.987408	-5.955651	-5.987482	-5.975494

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.166926	-6.139138	-6.166983	-6.156501
APARCH Skewed T-Student SOUTHAFR_Price (1,2)	1	2	-6.166358	-6.134601	-6.166433	-6.154444

APARCH Skewed T-Student SOUTHAFR_Price (1,3)	1	3	-6.166681	-6.130955	-6.166776	-6.153278
APARCH Skewed T-Student SOUTHAFR_Price (2,1)	2	1	-6.165649	-6.129922	-6.165744	-6.152246
APARCH Skewed T-Student SOUTHAFR_Price (1,4)	1	4	-6.16774	-6.128043	-6.167856	-6.152847
APARCH Skewed T-Student SOUTHAFR_Price (2,2)	2	2	-6.16477	-6.125074	-6.164887	-6.149878
APARCH Skewed T-Student SOUTHAFR_Price (2,3)	2	3	-6.166423	-6.122757	-6.166564	-6.150041
APARCH Skewed T-Student SOUTHAFR_Price (1,5)	1	5	-6.166056	-6.12239	-6.166197	-6.149675
APARCH Skewed T-Student SOUTHAFR_Price (2,4)	2	4	-6.168409	-6.120774	-6.168577	-6.150538
APARCH Skewed T-Student SOUTHAFR_Price (3,1)	3	1	-6.163217	-6.119551	-6.163358	-6.146835
APARCH Skewed T-Student SOUTHAFR_Price (3,2)	3	2	-6.163695	-6.116059	-6.163862	-6.145824
APARCH Skewed T-Student SOUTHAFR_Price (2,5)	2	5	-6.167117	-6.115512	-6.167314	-6.147757
APARCH Skewed T-Student SOUTHAFR_Price (3,3)	3	3	-6.163287	-6.111682	-6.163484	-6.143927
APARCH Skewed T-Student SOUTHAFR_Price (4,1)	4	1	-6.163087	-6.111482	-6.163284	-6.143727
APARCH Skewed T-Student SOUTHAFR_Price (3,4)	3	4	-6.165532	-6.109957	-6.165759	-6.144682
APARCH Skewed T-Student SOUTHAFR_Price (3,5)	3	5	-6.167431	-6.107887	-6.167692	-6.145092
APARCH Skewed T-Student SOUTHAFR_Price (4,2)	4	2	-6.162136	-6.106561	-6.162364	-6.141286
APARCH Skewed T-Student SOUTHAFR_Price (4,3)	4	3	-6.161599	-6.102054	-6.16186	-6.13926
APARCH Skewed T-Student SOUTHAFR_Price (5,1)	5	1	-6.15984	-6.100295	-6.160101	-6.137501
APARCH Skewed T-Student SOUTHAFR_Price (4,4)	4	4	-6.163718	-6.100204	-6.164015	-6.13989
APARCH Skewed T-Student SOUTHAFR_Price (4,5)	4	5	-6.164324	-6.09684	-6.164658	-6.139006
APARCH Skewed T-Student SOUTHAFR_Price (5,2)	5	2	-6.158878	-6.095364	-6.159175	-6.13505
APARCH Skewed T-Student SOUTHAFR_Price (5,3)	5	3	-6.15973	-6.092246	-6.160064	-6.134412
APARCH Skewed T-Student SOUTHAFR_Price (5,4)	5	4	-6.161182	-6.089729	-6.161557	-6.134376
APARCH Skewed T-Student SOUTHAFR_Price (5,5)	5	5	-6.161335	-6.085912	-6.161752	-6.133039
APARCH Skewed T-Student SOUTHAFR_Price (3,0)	3	0	-6.117122	-6.077425	-6.117238	-6.102229
APARCH Skewed T-Student SOUTHAFR_Price (4,0)	4	0	-6.112148	-6.064513	-6.112316	-6.094277
APARCH Skewed T-Student SOUTHAFR_Price (5,0)	5	0	-6.114375	-6.0588	-6.114603	-6.093526
APARCH Skewed T-Student SOUTHAFR_Price (2,0)	2	0	-6.083352	-6.051595	-6.083426	-6.071438
APARCH Skewed T-Student SOUTHAFR_Price (1,0)	1	0	-6.047395	-6.023577	-6.047437	-6.038459

APARCH Skewed T-Student SOUTHAFR_Price (0,1)	0	1	-6.000429	-5.980581	-6.000458	-5.992983
APARCH Skewed T-Student SOUTHAFR_Price (0,2)	0	2	-5.998328	-5.97451	-5.99837	-5.989392
APARCH Skewed T-Student SOUTHAFR_Price (0,3)	0	3	-5.995592	-5.967804	-5.995649	-5.985167
APARCH Skewed T-Student SOUTHAFR_Price (0,4)	0	4	-5.992577	-5.96082	-5.992652	-5.980663
APARCH Skewed T-Student SOUTHAFR_Price (0,5)	0	5	-5.990314	-5.954588	-5.990409	-5.976911

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.121882	-6.106003	-6.1219	-6.115925
TGARCH Norm SOUTHAFR_Price (2,1)	2	1	-6.125854	-6.102036	-6.125896	-6.116919
TGARCH Norm SOUTHAFR_Price (1,2)	1	2	-6.119718	-6.09987	-6.119747	-6.112272
TGARCH Norm SOUTHAFR_Price (2,2)	2	2	-6.124603	-6.096816	-6.12466	-6.114178
TGARCH Norm SOUTHAFR_Price (1,3)	1	3	-6.11746	-6.093643	-6.117503	-6.108525
TGARCH Norm SOUTHAFR_Price (2,3)	2	3	-6.123418	-6.091661	-6.123492	-6.111504
TGARCH Norm SOUTHAFR_Price (3,1)	3	1	-6.121171	-6.089414	-6.121245	-6.109257
TGARCH Norm SOUTHAFR_Price (1,4)	1	4	-6.116835	-6.089048	-6.116893	-6.106411
TGARCH Norm SOUTHAFR_Price (2,4)	2	4	-6.123121	-6.087394	-6.123215	-6.109718
TGARCH Norm SOUTHAFR_Price (3,2)	3	2	-6.120151	-6.084425	-6.120246	-6.106748
TGARCH Norm SOUTHAFR_Price (1,5)	1	5	-6.115504	-6.083747	-6.115579	-6.10359
TGARCH Norm SOUTHAFR_Price (2,5)	2	5	-6.121524	-6.081828	-6.12164	-6.106631
TGARCH Norm SOUTHAFR_Price (3,3)	3	3	-6.121083	-6.081387	-6.1212	-6.106191
TGARCH Norm SOUTHAFR_Price (4,1)	4	1	-6.119457	-6.07976	-6.119573	-6.104564
TGARCH Norm SOUTHAFR_Price (3,4)	3	4	-6.121209	-6.077544	-6.12135	-6.104828
TGARCH Norm SOUTHAFR_Price (4,2)	4	2	-6.118683	-6.075017	-6.118824	-6.102301
TGARCH Norm SOUTHAFR_Price (4,3)	4	3	-6.119724	-6.072089	-6.119892	-6.101853
TGARCH Norm SOUTHAFR_Price (3,5)	3	5	-6.119668	-6.072032	-6.119835	-6.101797
TGARCH Norm SOUTHAFR_Price (5,1)	5	1	-6.116928	-6.069292	-6.117095	-6.099057
TGARCH Norm SOUTHAFR_Price (4,4)	4	4	-6.11819	-6.066585	-6.118386	-6.09883
TGARCH Norm SOUTHAFR_Price (5,2)	5	2	-6.115531	-6.063926	-6.115727	-6.096171

TGARCH Norm SOUTHAFR_Price (4,5)	4	5	-6.116627	-6.061053	-6.116855	-6.095778
TGARCH Norm SOUTHAFR_Price (5,3)	5	3	-6.116532	-6.060957	-6.11676	-6.095683
TGARCH Norm SOUTHAFR_Price (5,4)	5	4	-6.115094	-6.05555	-6.115355	-6.092755
TGARCH Norm SOUTHAFR_Price (5,5)	5	5	-6.113397	-6.049883	-6.113694	-6.089569
TGARCH Norm SOUTHAFR_Price (5,0)	5	0	-6.046249	-6.002583	-6.04639	-6.029868
TGARCH Norm SOUTHAFR_Price (4,0)	4	0	-6.007725	-5.971998	-6.007819	-5.994322
TGARCH Norm SOUTHAFR_Price (3,0)	3	0	-5.985221	-5.957434	-5.985278	-5.974796
TGARCH Norm SOUTHAFR_Price (2,0)	2	0	-5.953203	-5.933355	-5.953233	-5.945757
TGARCH Norm SOUTHAFR_Price (0,2)	0	2	-5.883938	-5.872029	-5.883949	-5.87947
TGARCH Norm SOUTHAFR_Price (0,3)	0	3	-5.882482	-5.866604	-5.882501	-5.876525
TGARCH Norm SOUTHAFR_Price (0,4)	0	4	-5.880993	-5.861145	-5.881022	-5.873547
TGARCH Norm SOUTHAFR_Price (0,5)	0	5	-5.879614	-5.855797	-5.879656	-5.870679
TGARCH Norm SOUTHAFR_Price (1,0)	1	0	16.185224	16.197133	16.185213	16.189692
TGARCH Norm SOUTHAFR_Price (0,1)	0	1	69.659208	69.667147	69.659203	69.662186

TGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.140652	-6.120804	-6.140681	-6.133205
TGARCH Skewed Norm SOUTHAFR_Price (2,1)	2	1	-6.145181	-6.117394	-6.145239	-6.134756
TGARCH Skewed Norm SOUTHAFR_Price (1,2)	1	2	-6.139528	-6.11571	-6.13957	-6.130593
TGARCH Skewed Norm SOUTHAFR_Price (2,2)	2	2	-6.143936	-6.112179	-6.144011	-6.132022
TGARCH Skewed Norm SOUTHAFR_Price (1,3)	1	3	-6.137969	-6.110181	-6.138026	-6.127544
TGARCH Skewed Norm SOUTHAFR_Price (2,3)	2	3	-6.142929	-6.107203	-6.143024	-6.129526
TGARCH Skewed Norm SOUTHAFR_Price (3,1)	3	1	-6.141286	-6.10556	-6.141381	-6.127883
TGARCH Skewed Norm SOUTHAFR_Price (1,4)	1	4	-6.136872	-6.105115	-6.136947	-6.124958
TGARCH Skewed Norm SOUTHAFR_Price (2,4)	2	4	-6.142361	-6.102664	-6.142477	-6.127468
TGARCH Skewed Norm SOUTHAFR_Price (3,2)	3	2	-6.140204	-6.100508	-6.140321	-6.125312
TGARCH Skewed Norm SOUTHAFR_Price (1,5)	1	5	-6.13556	-6.099833	-6.135654	-6.122157
TGARCH Skewed Norm SOUTHAFR_Price (2,5)	2	5	-6.140656	-6.09699	-6.140797	-6.124274

TGARCH Skewed Norm SOUTHAFR_Price (3,3)	3	3	-6.140395	-6.096729	-6.140536	-6.124013
TGARCH Skewed Norm SOUTHAFR_Price (4,1)	4	1	-6.139233	-6.095567	-6.139374	-6.122851
TGARCH Skewed Norm SOUTHAFR_Price (4,2)	4	2	-6.14081	-6.093175	-6.140978	-6.122939
TGARCH Skewed Norm SOUTHAFR_Price (3,4)	3	4	-6.140089	-6.092454	-6.140257	-6.122218
TGARCH Skewed Norm SOUTHAFR_Price (5,1)	5	1	-6.139483	-6.087878	-6.13968	-6.120123
TGARCH Skewed Norm SOUTHAFR_Price (3,5)	3	5	-6.138455	-6.08685	-6.138651	-6.119094
TGARCH Skewed Norm SOUTHAFR_Price (4,3)	4	3	-6.138209	-6.086604	-6.138406	-6.118849
TGARCH Skewed Norm SOUTHAFR_Price (5,2)	5	2	-6.138134	-6.082559	-6.138361	-6.117284
TGARCH Skewed Norm SOUTHAFR_Price (4,4)	4	4	-6.136725	-6.08115	-6.136952	-6.115875
TGARCH Skewed Norm SOUTHAFR_Price (5,3)	5	3	-6.137264	-6.077719	-6.137525	-6.114925
TGARCH Skewed Norm SOUTHAFR_Price (4,5)	4	5	-6.135311	-6.075767	-6.135572	-6.112972
TGARCH Skewed Norm SOUTHAFR_Price (5,4)	5	4	-6.135865	-6.072351	-6.136162	-6.112037
TGARCH Skewed Norm SOUTHAFR_Price (5,5)	5	5	-6.134268	-6.066784	-6.134602	-6.108951
TGARCH Skewed Norm SOUTHAFR_Price (5,0)	5	0	-6.068712	-6.021076	-6.068879	-6.050841
TGARCH Skewed Norm SOUTHAFR_Price (4,0)	4	0	-6.025746	-5.98605	-6.025863	-6.010854
TGARCH Skewed Norm SOUTHAFR_Price (3,0)	3	0	-6.005327	-5.97357	-6.005401	-5.993413
TGARCH Skewed Norm SOUTHAFR_Price (2,0)	2	0	-5.977883	-5.954066	-5.977926	-5.968948
TGARCH Skewed Norm SOUTHAFR_Price (0,5)	0	5	-5.894866	-5.867079	-5.894924	-5.884442
TGARCH Skewed Norm SOUTHAFR_Price (0,3)	0	3	-5.882221	-5.862373	-5.88225	-5.874775
TGARCH Skewed Norm SOUTHAFR_Price (0,4)	0	4	-5.88238	-5.858562	-5.882422	-5.873444
TGARCH Skewed Norm SOUTHAFR_Price (0,2)	0	2	-5.824417	-5.808538	-5.824435	-5.81846
TGARCH Skewed Norm SOUTHAFR_Price (1,0)	1	0	16.711554	16.727433	16.711535	16.717511
TGARCH Skewed Norm SOUTHAFR_Price (0,1)	0	1	83.329539	83.341447	83.329528	83.334006

TGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.155206	-6.135358	-6.155235	-6.14776
TGARCH T-Student SOUTHAFR_Price (1,2)	1	2	-6.153921	-6.130103	-6.153963	-6.144985
TGARCH T-Student SOUTHAFR_Price (2,1)	2	1	-6.156879	-6.129091	-6.156936	-6.146454

TGARCH T-Student SOUTHAFR_Price (1,3)	1	3	-6.152289	-6.124501	-6.152346	-6.141864
TGARCH T-Student SOUTHAFR_Price (2,2)	2	2	-6.155344	-6.123587	-6.155419	-6.14343
TGARCH T-Student SOUTHAFR_Price (1,4)	1	4	-6.151902	-6.120145	-6.151977	-6.139988
TGARCH T-Student SOUTHAFR_Price (3,1)	3	1	-6.155249	-6.119522	-6.155343	-6.141845
TGARCH T-Student SOUTHAFR_Price (2,3)	2	3	-6.15366	-6.117934	-6.153755	-6.140257
TGARCH T-Student SOUTHAFR_Price (3,2)	3	2	-6.154899	-6.115203	-6.155016	-6.140007
TGARCH T-Student SOUTHAFR_Price (1,5)	1	5	-6.150808	-6.115081	-6.150902	-6.137405
TGARCH T-Student SOUTHAFR_Price (2,4)	2	4	-6.152823	-6.113127	-6.15294	-6.137931
TGARCH T-Student SOUTHAFR_Price (3,3)	3	3	-6.153364	-6.109698	-6.153505	-6.136983
TGARCH T-Student SOUTHAFR_Price (4,1)	4	1	-6.152817	-6.109151	-6.152958	-6.136435
TGARCH T-Student SOUTHAFR_Price (2,5)	2	5	-6.15151	-6.107845	-6.151651	-6.135129
TGARCH T-Student SOUTHAFR_Price (3,4)	3	4	-6.153374	-6.105739	-6.153542	-6.135503
TGARCH T-Student SOUTHAFR_Price (4,2)	4	2	-6.153106	-6.105471	-6.153274	-6.135235
TGARCH T-Student SOUTHAFR_Price (4,3)	4	3	-6.151897	-6.100292	-6.152094	-6.132537
TGARCH T-Student SOUTHAFR_Price (3,5)	3	5	-6.151881	-6.100276	-6.152077	-6.132521
TGARCH T-Student SOUTHAFR_Price (5,1)	5	1	-6.149802	-6.098196	-6.149998	-6.130441
TGARCH T-Student SOUTHAFR_Price (4,4)	4	4	-6.150618	-6.095043	-6.150845	-6.129768
TGARCH T-Student SOUTHAFR_Price (5,2)	5	2	-6.150077	-6.094502	-6.150304	-6.129227
TGARCH T-Student SOUTHAFR_Price (4,5)	4	5	-6.148811	-6.089266	-6.149072	-6.126472
TGARCH T-Student SOUTHAFR_Price (5,3)	5	3	-6.148542	-6.088997	-6.148803	-6.126203
TGARCH T-Student SOUTHAFR_Price (5,4)	5	4	-6.147514	-6.084	-6.147811	-6.123686
TGARCH T-Student SOUTHAFR_Price (5,5)	5	5	-6.145719	-6.078235	-6.146053	-6.120402
TGARCH T-Student SOUTHAFR_Price (0,1)	0	1	-6.038504	-6.026595	-6.038515	-6.034036
TGARCH T-Student SOUTHAFR_Price (0,2)	0	2	-6.041643	-6.025764	-6.041661	-6.035686
TGARCH T-Student SOUTHAFR_Price (2,0)	2	0	-6.048649	-6.024831	-6.048691	-6.039714
TGARCH T-Student SOUTHAFR_Price (0,3)	0	3	-6.04159	-6.021742	-6.04162	-6.034144
TGARCH T-Student SOUTHAFR_Price (1,0)	1	0	-6.034212	-6.018333	-6.034231	-6.028255
TGARCH T-Student SOUTHAFR_Price (0,4)	0	4	-6.040796	-6.016979	-6.040838	-6.031861

TGARCH T-Student SOUTHAFR_Price (0,5)	0	5	-6.039783	-6.011996	-6.03984	-6.029358
TGARCH T-Student SOUTHAFR_Price (3,0)	3	0	-6.004192	-5.972435	-6.004266	-5.992278
TGARCH T-Student SOUTHAFR_Price (4,0)	4	0	-6.004544	-5.964847	-6.00466	-5.989651
TGARCH T-Student SOUTHAFR_Price (5,0)	5	0	-6.007185	-5.959549	-6.007352	-5.989314

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.164379	-6.140561	-6.164421	-6.155444
TGARCH Skewed T-Student SOUTHAFR_Price (1,2)	1	2	-6.163737	-6.135949	-6.163794	-6.153312
TGARCH Skewed T-Student SOUTHAFR_Price (2,1)	2	1	-6.166484	-6.134727	-6.166558	-6.15457
TGARCH Skewed T-Student SOUTHAFR_Price (1,3)	1	3	-6.162261	-6.130504	-6.162336	-6.150347
TGARCH Skewed T-Student SOUTHAFR_Price (2,2)	2	2	-6.164952	-6.129225	-6.165046	-6.151548
TGARCH Skewed T-Student SOUTHAFR_Price (1,4)	1	4	-6.162213	-6.126486	-6.162307	-6.148809
TGARCH Skewed T-Student SOUTHAFR_Price (3,1)	3	1	-6.165176	-6.125479	-6.165292	-6.150283
TGARCH Skewed T-Student SOUTHAFR_Price (2,3)	2	3	-6.163511	-6.123815	-6.163628	-6.148619
TGARCH Skewed T-Student SOUTHAFR_Price (1,5)	1	5	-6.161041	-6.121344	-6.161157	-6.146148
TGARCH Skewed T-Student SOUTHAFR_Price (3,2)	3	2	-6.164703	-6.121037	-6.164844	-6.148322
TGARCH Skewed T-Student SOUTHAFR_Price (2,4)	2	4	-6.162776	-6.11911	-6.162917	-6.146395
TGARCH Skewed T-Student SOUTHAFR_Price (3,3)	3	3	-6.163168	-6.115533	-6.163336	-6.145297
TGARCH Skewed T-Student SOUTHAFR_Price (4,1)	4	1	-6.162524	-6.114888	-6.162691	-6.144653
TGARCH Skewed T-Student SOUTHAFR_Price (2,5)	2	5	-6.161357	-6.113721	-6.161524	-6.143486
TGARCH Skewed T-Student SOUTHAFR_Price (3,4)	3	4	-6.163286	-6.11168	-6.163482	-6.143925
TGARCH Skewed T-Student SOUTHAFR_Price (4,2)	4	2	-6.162711	-6.111106	-6.162908	-6.143351
TGARCH Skewed T-Student SOUTHAFR_Price (4,3)	4	3	-6.161577	-6.106003	-6.161805	-6.140728
TGARCH Skewed T-Student SOUTHAFR_Price (3,5)	3	5	-6.161446	-6.105871	-6.161674	-6.140596
TGARCH Skewed T-Student SOUTHAFR_Price (5,1)	5	1	-6.160461	-6.104886	-6.160689	-6.139611
TGARCH Skewed T-Student SOUTHAFR_Price (4,4)	4	4	-6.160216	-6.100672	-6.160477	-6.137877
TGARCH Skewed T-Student SOUTHAFR_Price (5,2)	5	2	-6.160184	-6.10064	-6.160445	-6.137845
TGARCH Skewed T-Student SOUTHAFR_Price (5,3)	5	3	-6.158644	-6.09513	-6.158941	-6.134816

TGARCH Skewed T-Student SOUTHAFR_Price (4,5)	4	5	-6.158357	-6.094843	-6.158654	-6.134529
TGARCH Skewed T-Student SOUTHAFR_Price (5,4)	5	4	-6.157721	-6.090237	-6.158056	-6.132404
TGARCH Skewed T-Student SOUTHAFR_Price (5,5)	5	5	-6.15606	-6.084607	-6.156435	-6.129254
TGARCH Skewed T-Student SOUTHAFR_Price (5,0)	5	0	-6.098697	-6.047092	-6.098893	-6.079337
TGARCH Skewed T-Student SOUTHAFR_Price (3,0)	3	0	-6.077117	-6.041391	-6.077212	-6.063714
TGARCH Skewed T-Student SOUTHAFR_Price (0,1)	0	1	-6.042464	-6.026585	-6.042482	-6.036507
TGARCH Skewed T-Student SOUTHAFR_Price (0,2)	0	2	-6.045693	-6.025844	-6.045722	-6.038246
TGARCH Skewed T-Student SOUTHAFR_Price (0,3)	0	3	-6.045674	-6.021856	-6.045716	-6.036738
TGARCH Skewed T-Student SOUTHAFR_Price (1,0)	1	0	-6.04075	-6.020902	-6.04078	-6.033304
TGARCH Skewed T-Student SOUTHAFR_Price (0,4)	0	4	-6.044855	-6.017068	-6.044913	-6.034431
TGARCH Skewed T-Student SOUTHAFR_Price (0,5)	0	5	-6.043901	-6.012144	-6.043976	-6.031987
TGARCH Skewed T-Student SOUTHAFR_Price (4,0)	4	0	-6.03216	-5.988494	-6.032301	-6.015778
TGARCH Skewed T-Student SOUTHAFR_Price (2,0)	2	0	-6.004937	-5.97715	-6.004994	-5.994512

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.12328	-6.107402	-6.123299	-6.117324
EGARCH Norm SOUTHAFR_Price (2,1)	2	1	-6.129909	-6.106091	-6.129951	-6.120974
EGARCH Norm SOUTHAFR_Price (1,4)	1	4	-6.133088	-6.1053	-6.133145	-6.122663
EGARCH Norm SOUTHAFR_Price (1,2)	1	2	-6.122812	-6.102964	-6.122841	-6.115366
EGARCH Norm SOUTHAFR_Price (2,2)	2	2	-6.129883	-6.102095	-6.12994	-6.119458
EGARCH Norm SOUTHAFR_Price (2,3)	2	3	-6.133338	-6.101581	-6.133412	-6.121424
EGARCH Norm SOUTHAFR_Price (2,5)	2	5	-6.140339	-6.100642	-6.140455	-6.125446
EGARCH Norm SOUTHAFR_Price (3,1)	3	1	-6.132127	-6.10037	-6.132202	-6.120213
EGARCH Norm SOUTHAFR_Price (3,3)	3	3	-6.13936	-6.099664	-6.139477	-6.124468
EGARCH Norm SOUTHAFR_Price (4,5)	4	5	-6.155118	-6.099544	-6.155346	-6.134269
EGARCH Norm SOUTHAFR_Price (3,4)	3	4	-6.142867	-6.099201	-6.143008	-6.126485
EGARCH Norm SOUTHAFR_Price (2,4)	2	4	-6.133937	-6.098211	-6.134032	-6.120534
EGARCH Norm SOUTHAFR_Price (1,3)	1	3	-6.121653	-6.097835	-6.121695	-6.112717

EGARCH Norm SOUTHAFR_Price (1,5)	1	5	-6.12697	-6.095213	-6.127045	-6.115056
EGARCH Norm SOUTHAFR_Price (4,3)	4	3	-6.142626	-6.09499	-6.142793	-6.124755
EGARCH Norm SOUTHAFR_Price (3,2)	3	2	-6.130624	-6.094897	-6.130718	-6.11722
EGARCH Norm SOUTHAFR_Price (3,5)	3	5	-6.141363	-6.093728	-6.141531	-6.123492
EGARCH Norm SOUTHAFR_Price (4,1)	4	1	-6.131546	-6.09185	-6.131663	-6.116654
EGARCH Norm SOUTHAFR_Price (5,5)	5	5	-6.152317	-6.088803	-6.152614	-6.128489
EGARCH Norm SOUTHAFR_Price (4,2)	4	2	-6.132398	-6.088732	-6.132539	-6.116016
EGARCH Norm SOUTHAFR_Price (5,3)	5	3	-6.141299	-6.085724	-6.141526	-6.120449
EGARCH Norm SOUTHAFR_Price (5,1)	5	1	-6.131114	-6.083478	-6.131281	-6.113243
EGARCH Norm SOUTHAFR_Price (5,2)	5	2	-6.130402	-6.078797	-6.130599	-6.111042
EGARCH Norm SOUTHAFR_Price (4,4)	4	4	-6.130203	-6.078598	-6.1304	-6.110843
EGARCH Norm SOUTHAFR_Price (5,4)	5	4	-6.131759	-6.072215	-6.13202	-6.10942
EGARCH Norm SOUTHAFR_Price (5,0)	5	0	-6.024359	-5.980693	-6.024499	-6.007977
EGARCH Norm SOUTHAFR_Price (4,0)	4	0	-6.002855	-5.967128	-6.002949	-5.989451
EGARCH Norm SOUTHAFR_Price (2,0)	2	0	-5.969804	-5.949956	-5.969834	-5.962358
EGARCH Norm SOUTHAFR_Price (1,0)	1	0	-5.850866	-5.838957	-5.850876	-5.846398
EGARCH Norm SOUTHAFR_Price (0,1)	0	1	-5.75838	-5.750441	-5.758385	-5.755402
EGARCH Norm SOUTHAFR_Price (0,2)	0	2	-5.756848	-5.744939	-5.756858	-5.75238
EGARCH Norm SOUTHAFR_Price (0,3)	0	3	-5.755319	-5.739441	-5.755338	-5.749362
EGARCH Norm SOUTHAFR_Price (0,4)	0	4	-5.753789	-5.733941	-5.753819	-5.746343
EGARCH Norm SOUTHAFR_Price (0,5)	0	5	-5.752241	-5.728423	-5.752283	-5.743305

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.141064	-6.121216	-6.141093	-6.133618
EGARCH Skewed Norm SOUTHAFR_Price (2,1)	2	1	-6.146883	-6.119095	-6.14694	-6.136458
EGARCH Skewed Norm SOUTHAFR_Price (1,2)	1	2	-6.141305	-6.117487	-6.141347	-6.13237
EGARCH Skewed Norm SOUTHAFR_Price (2,2)	2	2	-6.145695	-6.113938	-6.14577	-6.133781

EGARCH Skewed Norm SOUTHAFR_Price (1,3)	1	3	-6.140573	-6.112786	-6.14063	-6.130148
EGARCH Skewed Norm SOUTHAFR_Price (2,3)	2	3	-6.147493	-6.111766	-6.147588	-6.13409
EGARCH Skewed Norm SOUTHAFR_Price (3,1)	3	1	-6.147047	-6.11132	-6.147141	-6.133643
EGARCH Skewed Norm SOUTHAFR_Price (2,5)	2	5	-6.15379	-6.110124	-6.153931	-6.137408
EGARCH Skewed Norm SOUTHAFR_Price (1,4)	1	4	-6.14171	-6.109953	-6.141784	-6.129796
EGARCH Skewed Norm SOUTHAFR_Price (2,4)	2	4	-6.14887	-6.109173	-6.148986	-6.133977
EGARCH Skewed Norm SOUTHAFR_Price (3,3)	3	3	-6.151374	-6.107708	-6.151515	-6.134992
EGARCH Skewed Norm SOUTHAFR_Price (3,4)	3	4	-6.154824	-6.107188	-6.154991	-6.136953
EGARCH Skewed Norm SOUTHAFR_Price (5,5)	5	5	-6.173393	-6.105909	-6.173728	-6.148076
EGARCH Skewed Norm SOUTHAFR_Price (3,2)	3	2	-6.145532	-6.105836	-6.145649	-6.13064
EGARCH Skewed Norm SOUTHAFR_Price (4,5)	4	5	-6.16453	-6.104986	-6.164791	-6.142192
EGARCH Skewed Norm SOUTHAFR_Price (1,5)	1	5	-6.140377	-6.104651	-6.140472	-6.126974
EGARCH Skewed Norm SOUTHAFR_Price (4,3)	4	3	-6.15379	-6.102185	-6.153987	-6.13443
EGARCH Skewed Norm SOUTHAFR_Price (4,1)	4	1	-6.145822	-6.102156	-6.145963	-6.129441
EGARCH Skewed Norm SOUTHAFR_Price (3,5)	3	5	-6.153602	-6.101997	-6.153798	-6.134242
EGARCH Skewed Norm SOUTHAFR_Price (4,2)	4	2	-6.146857	-6.099222	-6.147025	-6.128986
EGARCH Skewed Norm SOUTHAFR_Price (5,1)	5	1	-6.145331	-6.093726	-6.145527	-6.125971
EGARCH Skewed Norm SOUTHAFR_Price (5,3)	5	3	-6.151905	-6.092361	-6.152166	-6.129566
EGARCH Skewed Norm SOUTHAFR_Price (5,2)	5	2	-6.144485	-6.08891	-6.144713	-6.123636
EGARCH Skewed Norm SOUTHAFR_Price (4,4)	4	4	-6.144478	-6.088903	-6.144705	-6.123628
EGARCH Skewed Norm SOUTHAFR_Price (5,4)	5	4	-6.143472	-6.079958	-6.143768	-6.119644
EGARCH Skewed Norm SOUTHAFR_Price (5,0)	5	0	-6.035624	-5.987988	-6.035791	-6.017753
EGARCH Skewed Norm SOUTHAFR_Price (4,0)	4	0	-6.014493	-5.974797	-6.01461	-5.999601
EGARCH Skewed Norm SOUTHAFR_Price (3,0)	3	0	-5.998068	-5.966311	-5.998143	-5.986154
EGARCH Skewed Norm SOUTHAFR_Price (2,0)	2	0	-5.979996	-5.956178	-5.980038	-5.97106
EGARCH Skewed Norm SOUTHAFR_Price (1,0)	1	0	-5.878575	-5.862696	-5.878593	-5.872618
EGARCH Skewed Norm SOUTHAFR_Price (0,1)	0	1	-5.773955	-5.762046	-5.773965	-5.769487
EGARCH Skewed Norm SOUTHAFR_Price (0,2)	0	2	-5.772441	-5.756563	-5.77246	-5.766484

EGARCH Skewed Norm SOUTHAFR_Price (0,3)	0	3	-5.770941	-5.751093	-5.77097	-5.763494
EGARCH Skewed Norm SOUTHAFR_Price (0,4)	0	4	-5.772553	-5.748735	-5.772595	-5.763617
EGARCH Skewed Norm SOUTHAFR_Price (0,5)	0	5	-5.774741	-5.746954	-5.774798	-5.764316

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.156784	-6.136936	-6.156813	-6.149338
EGARCH T-Student SOUTHAFR_Price (1,2)	1	2	-6.156593	-6.132775	-6.156635	-6.147657
EGARCH T-Student SOUTHAFR_Price (2,1)	2	1	-6.160498	-6.13271	-6.160555	-6.150073
EGARCH T-Student SOUTHAFR_Price (1,3)	1	3	-6.155902	-6.128115	-6.15596	-6.145477
EGARCH T-Student SOUTHAFR_Price (2,2)	2	2	-6.159011	-6.127254	-6.159086	-6.147097
EGARCH T-Student SOUTHAFR_Price (2,3)	2	3	-6.16149	-6.125764	-6.161585	-6.148087
EGARCH T-Student SOUTHAFR_Price (1,4)	1	4	-6.156566	-6.124809	-6.156641	-6.144652
EGARCH T-Student SOUTHAFR_Price (2,5)	2	5	-6.167872	-6.124206	-6.168013	-6.151491
EGARCH T-Student SOUTHAFR_Price (3,1)	3	1	-6.159199	-6.123473	-6.159294	-6.145796
EGARCH T-Student SOUTHAFR_Price (2,4)	2	4	-6.162715	-6.123019	-6.162832	-6.147823
EGARCH T-Student SOUTHAFR_Price (1,5)	1	5	-6.154813	-6.119087	-6.154908	-6.14141
EGARCH T-Student SOUTHAFR_Price (3,2)	3	2	-6.15783	-6.118134	-6.157947	-6.142938
EGARCH T-Student SOUTHAFR_Price (3,4)	3	4	-6.164868	-6.117232	-6.165035	-6.146997
EGARCH T-Student SOUTHAFR_Price (4,1)	4	1	-6.159103	-6.115437	-6.159244	-6.142721
EGARCH T-Student SOUTHAFR_Price (3,5)	3	5	-6.166416	-6.114811	-6.166612	-6.147056
EGARCH T-Student SOUTHAFR_Price (3,3)	3	3	-6.156003	-6.112337	-6.156144	-6.139622
EGARCH T-Student SOUTHAFR_Price (4,2)	4	2	-6.15897	-6.111335	-6.159138	-6.141099
EGARCH T-Student SOUTHAFR_Price (5,1)	5	1	-6.15771	-6.106105	-6.157907	-6.13835
EGARCH T-Student SOUTHAFR_Price (4,3)	4	3	-6.157683	-6.106078	-6.15788	-6.138323
EGARCH T-Student SOUTHAFR_Price (4,4)	4	4	-6.160941	-6.105366	-6.161169	-6.140092
EGARCH T-Student SOUTHAFR_Price (5,5)	5	5	-6.169543	-6.102059	-6.169878	-6.144226
EGARCH T-Student SOUTHAFR_Price (5,2)	5	2	-6.156203	-6.100628	-6.15643	-6.135353
EGARCH T-Student SOUTHAFR_Price (5,4)	5	4	-6.161899	-6.098385	-6.162195	-6.138071

EGARCH T-Student SOUTHAFR_Price (4,5)	4	5	-6.156655	-6.09711	-6.156916	-6.134316
EGARCH T-Student SOUTHAFR_Price (5,3)	5	3	-6.154431	-6.094886	-6.154692	-6.132092
EGARCH T-Student SOUTHAFR_Price (3,0)	3	0	-6.064936	-6.033179	-6.065011	-6.053022
EGARCH T-Student SOUTHAFR_Price (5,0)	5	0	-6.078822	-6.031186	-6.078989	-6.060951
EGARCH T-Student SOUTHAFR_Price (4,0)	4	0	-6.070801	-6.031105	-6.070918	-6.055909
EGARCH T-Student SOUTHAFR_Price (2,0)	2	0	-6.05017	-6.026352	-6.050212	-6.041234
EGARCH T-Student SOUTHAFR_Price (1,0)	1	0	-6.030146	-6.014267	-6.030165	-6.024189
EGARCH T-Student SOUTHAFR_Price (0,1)	0	1	-5.998838	-5.98693	-5.998849	-5.994371
EGARCH T-Student SOUTHAFR_Price (0,2)	0	2	-5.99734	-5.981461	-5.997359	-5.991383
EGARCH T-Student SOUTHAFR_Price (0,3)	0	3	-5.998638	-5.97879	-5.998667	-5.991192
EGARCH T-Student SOUTHAFR_Price (0,4)	0	4	-5.997075	-5.973258	-5.997118	-5.98814
EGARCH T-Student SOUTHAFR_Price (0,5)	0	5	-5.992724	-5.964937	-5.992781	-5.982299

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.165274	-6.141456	-6.165316	-6.156338
EGARCH Skewed T-Student SOUTHAFR_Price (1,2)	1	2	-6.165731	-6.137943	-6.165788	-6.155306
EGARCH Skewed T-Student SOUTHAFR_Price (2,1)	2	1	-6.169261	-6.137504	-6.169336	-6.157347
EGARCH Skewed T-Student SOUTHAFR_Price (1,3)	1	3	-6.166	-6.134243	-6.166075	-6.154086
EGARCH Skewed T-Student SOUTHAFR_Price (2,2)	2	2	-6.167788	-6.132061	-6.167882	-6.154385
EGARCH Skewed T-Student SOUTHAFR_Price (1,4)	1	4	-6.166448	-6.130722	-6.166543	-6.153045
EGARCH Skewed T-Student SOUTHAFR_Price (2,3)	2	3	-6.16908	-6.129383	-6.169196	-6.154187
EGARCH Skewed T-Student SOUTHAFR_Price (3,1)	3	1	-6.168185	-6.128489	-6.168302	-6.153293
EGARCH Skewed T-Student SOUTHAFR_Price (2,5)	2	5	-6.175087	-6.127452	-6.175255	-6.157216
EGARCH Skewed T-Student SOUTHAFR_Price (2,4)	2	4	-6.169002	-6.125336	-6.169143	-6.15262
EGARCH Skewed T-Student SOUTHAFR_Price (1,5)	1	5	-6.164874	-6.125177	-6.16499	-6.149981
EGARCH Skewed T-Student SOUTHAFR_Price (3,2)	3	2	-6.166332	-6.122666	-6.166473	-6.14995
EGARCH Skewed T-Student SOUTHAFR_Price (4,1)	4	1	-6.167875	-6.12024	-6.168043	-6.150004
EGARCH Skewed T-Student SOUTHAFR_Price (3,5)	3	5	-6.175267	-6.119692	-6.175495	-6.154418

EGARCH Skewed T-Student SOUTHAFR_Price (3,3)	3	3	-6.166006	-6.11837	-6.166173	-6.148135
EGARCH Skewed T-Student SOUTHAFR_Price (4,2)	4	2	-6.167985	-6.11638	-6.168181	-6.148625
EGARCH Skewed T-Student SOUTHAFR_Price (3,4)	3	4	-6.164715	-6.11311	-6.164912	-6.145355
EGARCH Skewed T-Student SOUTHAFR_Price (5,1)	5	1	-6.16668	-6.111105	-6.166908	-6.14583
EGARCH Skewed T-Student SOUTHAFR_Price (4,3)	4	3	-6.166466	-6.110891	-6.166693	-6.145616
EGARCH Skewed T-Student SOUTHAFR_Price (5,5)	5	5	-6.179111	-6.107657	-6.179486	-6.152304
EGARCH Skewed T-Student SOUTHAFR_Price (5,2)	5	2	-6.165312	-6.105768	-6.165574	-6.142974
EGARCH Skewed T-Student SOUTHAFR_Price (4,4)	4	4	-6.164784	-6.10524	-6.165045	-6.142445
EGARCH Skewed T-Student SOUTHAFR_Price (5,4)	5	4	-6.17077	-6.103286	-6.171104	-6.145452
EGARCH Skewed T-Student SOUTHAFR_Price (4,5)	4	5	-6.165371	-6.101857	-6.165668	-6.141543
EGARCH Skewed T-Student SOUTHAFR_Price (5,3)	5	3	-6.163879	-6.100365	-6.164176	-6.140051
EGARCH Skewed T-Student SOUTHAFR_Price (3,0)	3	0	-6.071215	-6.035488	-6.071309	-6.057812
EGARCH Skewed T-Student SOUTHAFR_Price (4,0)	4	0	-6.076149	-6.032483	-6.07629	-6.059768
EGARCH Skewed T-Student SOUTHAFR_Price (5,0)	5	0	-6.083923	-6.032318	-6.084119	-6.064563
EGARCH Skewed T-Student SOUTHAFR_Price (2,0)	2	0	-6.056758	-6.028971	-6.056815	-6.046333
EGARCH Skewed T-Student SOUTHAFR_Price (1,0)	1	0	-6.035971	-6.016123	-6.036	-6.028525
EGARCH Skewed T-Student SOUTHAFR_Price (0,1)	0	1	-6.002097	-5.986219	-6.002116	-5.99614
EGARCH Skewed T-Student SOUTHAFR_Price (0,2)	0	2	-6.000598	-5.980749	-6.000627	-5.993151
EGARCH Skewed T-Student SOUTHAFR_Price (0,3)	0	3	-6.002296	-5.978478	-6.002338	-5.993361
EGARCH Skewed T-Student SOUTHAFR_Price (0,4)	0	4	-5.997589	-5.969801	-5.997646	-5.987164
EGARCH Skewed T-Student SOUTHAFR_Price (0,5)	0	5	-5.996158	-5.964401	-5.996233	-5.984244

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm SOUTHAFR_Price (1,1)	1	1	-6.132467	-6.116588	-6.132486	-6.12651
NAGARCH Norm SOUTHAFR_Price (1,2)	1	2	-6.131792	-6.111943	-6.131821	-6.124345
NAGARCH Norm SOUTHAFR_Price (1,3)	1	3	-6.131165	-6.107347	-6.131207	-6.122229
NAGARCH Norm SOUTHAFR_Price (2,1)	2	1	-6.130633	-6.106816	-6.130676	-6.121698
NAGARCH Norm SOUTHAFR_Price (2,2)	2	2	-6.133508	-6.105721	-6.133565	-6.123083

NAGARCH Norm SOUTHAFR_Price (1,4)	1	4	-6.131923	-6.104136	-6.13198	-6.121498
NAGARCH Norm SOUTHAFR_Price (1,5)	1	5	-6.130166	-6.098408	-6.13024	-6.118252
NAGARCH Norm SOUTHAFR_Price (3,3)	3	3	-6.136479	-6.096783	-6.136596	-6.121587
NAGARCH Norm SOUTHAFR_Price (4,0)	4	0	-6.131999	-6.096272	-6.132093	-6.118596
NAGARCH Norm SOUTHAFR_Price (2,3)	2	3	-6.127494	-6.095737	-6.127569	-6.11558
NAGARCH Norm SOUTHAFR_Price (3,2)	3	2	-6.131344	-6.095617	-6.131438	-6.117941
NAGARCH Norm SOUTHAFR_Price (2,4)	2	4	-6.128255	-6.092528	-6.128349	-6.114851
NAGARCH Norm SOUTHAFR_Price (3,4)	3	4	-6.136159	-6.092493	-6.1363	-6.119777
NAGARCH Norm SOUTHAFR_Price (3,5)	3	5	-6.137438	-6.089803	-6.137606	-6.119567
NAGARCH Norm SOUTHAFR_Price (5,0)	5	0	-6.133103	-6.089437	-6.133244	-6.116721
NAGARCH Norm SOUTHAFR_Price (2,5)	2	5	-6.127096	-6.087399	-6.127212	-6.112203
NAGARCH Norm SOUTHAFR_Price (4,3)	4	3	-6.13473	-6.087095	-6.134898	-6.116859
NAGARCH Norm SOUTHAFR_Price (4,1)	4	1	-6.126425	-6.086729	-6.126542	-6.111533
NAGARCH Norm SOUTHAFR_Price (4,2)	4	2	-6.128662	-6.084996	-6.128803	-6.11228
NAGARCH Norm SOUTHAFR_Price (4,4)	4	4	-6.133299	-6.081694	-6.133495	-6.113939
NAGARCH Norm SOUTHAFR_Price (4,5)	4	5	-6.135489	-6.079914	-6.135717	-6.11464
NAGARCH Norm SOUTHAFR_Price (2,0)	2	0	-6.098948	-6.0791	-6.098977	-6.091502
NAGARCH Norm SOUTHAFR_Price (5,3)	5	3	-6.127716	-6.072141	-6.127944	-6.106867
NAGARCH Norm SOUTHAFR_Price (5,4)	5	4	-6.130781	-6.071237	-6.131042	-6.108443
NAGARCH Norm SOUTHAFR_Price (5,2)	5	2	-6.122262	-6.070656	-6.122458	-6.102901
NAGARCH Norm SOUTHAFR_Price (5,5)	5	5	-6.125918	-6.062404	-6.126215	-6.10209
NAGARCH Norm SOUTHAFR_Price (1,0)	1	0	-5.904902	-5.892993	-5.904912	-5.900434
NAGARCH Norm SOUTHAFR_Price (0,1)	0	1	-5.773151	-5.765211	-5.773155	-5.770172
NAGARCH Norm SOUTHAFR_Price (0,2)	0	2	-5.774842	-5.762933	-5.774853	-5.770374
NAGARCH Norm SOUTHAFR_Price (0,3)	0	3	-5.774457	-5.758579	-5.774476	-5.7685
NAGARCH Norm SOUTHAFR_Price (0,4)	0	4	-5.773524	-5.753676	-5.773553	-5.766077
NAGARCH Norm SOUTHAFR_Price (0,5)	0	5	-5.772398	-5.748581	-5.772441	-5.763463
NAGARCH Norm SOUTHAFR_Price (3,0)	3	0	-5.77616	-5.748372	-5.776217	-5.765735

<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm SOUTHAFR_Price (1,1)	1	1	-6.151037	-6.131189	-6.151066	-6.143591
NAGARCH Skewed Norm SOUTHAFR_Price (1,2)	1	2	-6.150537	-6.126719	-6.150579	-6.141602
NAGARCH Skewed Norm SOUTHAFR_Price (1,3)	1	3	-6.150184	-6.122397	-6.150241	-6.139759
NAGARCH Skewed Norm SOUTHAFR_Price (2,1)	2	1	-6.149368	-6.121581	-6.149426	-6.138944
NAGARCH Skewed Norm SOUTHAFR_Price (1,4)	1	4	-6.151328	-6.119571	-6.151402	-6.139414
NAGARCH Skewed Norm SOUTHAFR_Price (2,2)	2	2	-6.14747	-6.115713	-6.147545	-6.135556
NAGARCH Skewed Norm SOUTHAFR_Price (1,5)	1	5	-6.149679	-6.113953	-6.149774	-6.136276
NAGARCH Skewed Norm SOUTHAFR_Price (3,2)	3	2	-6.153387	-6.113691	-6.153504	-6.138495
NAGARCH Skewed Norm SOUTHAFR_Price (2,5)	2	5	-6.156002	-6.112336	-6.156143	-6.13962
NAGARCH Skewed Norm SOUTHAFR_Price (2,3)	2	3	-6.14716	-6.111433	-6.147254	-6.133757
NAGARCH Skewed Norm SOUTHAFR_Price (3,3)	3	3	-6.150848	-6.107182	-6.150988	-6.134466
NAGARCH Skewed Norm SOUTHAFR_Price (4,0)	4	0	-6.144886	-6.105189	-6.145002	-6.129993
NAGARCH Skewed Norm SOUTHAFR_Price (2,4)	2	4	-6.144693	-6.104997	-6.14481	-6.129801
NAGARCH Skewed Norm SOUTHAFR_Price (4,2)	4	2	-6.150818	-6.103182	-6.150986	-6.132947
NAGARCH Skewed Norm SOUTHAFR_Price (3,5)	3	5	-6.154029	-6.102424	-6.154225	-6.134669
NAGARCH Skewed Norm SOUTHAFR_Price (4,1)	4	1	-6.14484	-6.101174	-6.144981	-6.128459
NAGARCH Skewed Norm SOUTHAFR_Price (3,4)	3	4	-6.148345	-6.100709	-6.148512	-6.130474
NAGARCH Skewed Norm SOUTHAFR_Price (4,3)	4	3	-6.150695	-6.09909	-6.150891	-6.131335
NAGARCH Skewed Norm SOUTHAFR_Price (3,1)	3	1	-6.133902	-6.098176	-6.133997	-6.120499
NAGARCH Skewed Norm SOUTHAFR_Price (4,4)	4	4	-6.149469	-6.093894	-6.149696	-6.128619
NAGARCH Skewed Norm SOUTHAFR_Price (5,1)	5	1	-6.144579	-6.092973	-6.144775	-6.125218
NAGARCH Skewed Norm SOUTHAFR_Price (4,5)	4	5	-6.149508	-6.089964	-6.14977	-6.12717
NAGARCH Skewed Norm SOUTHAFR_Price (2,0)	2	0	-6.113279	-6.089461	-6.113321	-6.104343
NAGARCH Skewed Norm SOUTHAFR_Price (5,3)	5	3	-6.148192	-6.088648	-6.148454	-6.125854

NAGARCH Skewed Norm SOUTHAFR_Price (5,2)	5	2	-6.142577	-6.087003	-6.142805	-6.121728
NAGARCH Skewed Norm SOUTHAFR_Price (3,0)	3	0	-6.1088	-6.077043	-6.108875	-6.096886
NAGARCH Skewed Norm SOUTHAFR_Price (5,5)	5	5	-6.122519	-6.055035	-6.122853	-6.097202
NAGARCH Skewed Norm SOUTHAFR_Price (5,4)	5	4	-6.117007	-6.053493	-6.117303	-6.093179
NAGARCH Skewed Norm SOUTHAFR_Price (5,0)	5	0	-6.100389	-6.052754	-6.100557	-6.082518
NAGARCH Skewed Norm SOUTHAFR_Price (0,1)	0	1	-5.78581	-5.773901	-5.78582	-5.781342
NAGARCH Skewed Norm SOUTHAFR_Price (0,2)	0	2	-5.787265	-5.771387	-5.787284	-5.781308
NAGARCH Skewed Norm SOUTHAFR_Price (0,3)	0	3	-5.786807	-5.766959	-5.786836	-5.779361
NAGARCH Skewed Norm SOUTHAFR_Price (0,4)	0	4	-5.785765	-5.761947	-5.785807	-5.77683
NAGARCH Skewed Norm SOUTHAFR_Price (0,5)	0	5	-5.784683	-5.756896	-5.784741	-5.774259
NAGARCH Skewed Norm SOUTHAFR_Price (1,0)	1	0	63.195974	63.211852	63.195955	63.201931

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student SOUTHAFR_Price (1,1)	1	1	-6.161025	-6.141177	-6.161054	-6.153578
NAGARCH T-Student SOUTHAFR_Price (1,2)	1	2	-6.160447	-6.136629	-6.160489	-6.151512
NAGARCH T-Student SOUTHAFR_Price (1,3)	1	3	-6.159654	-6.131866	-6.159711	-6.149229
NAGARCH T-Student SOUTHAFR_Price (2,1)	2	1	-6.159013	-6.131226	-6.15907	-6.148588
NAGARCH T-Student SOUTHAFR_Price (1,4)	1	4	-6.160809	-6.129052	-6.160884	-6.148895
NAGARCH T-Student SOUTHAFR_Price (3,1)	3	1	-6.161651	-6.125924	-6.161745	-6.148248
NAGARCH T-Student SOUTHAFR_Price (2,2)	2	2	-6.157478	-6.125721	-6.157553	-6.145564
NAGARCH T-Student SOUTHAFR_Price (1,5)	1	5	-6.159466	-6.12374	-6.159561	-6.146063
NAGARCH T-Student SOUTHAFR_Price (3,2)	3	2	-6.161889	-6.122193	-6.162006	-6.146997
NAGARCH T-Student SOUTHAFR_Price (2,3)	2	3	-6.155985	-6.120259	-6.15608	-6.142582
NAGARCH T-Student SOUTHAFR_Price (2,4)	2	4	-6.157741	-6.118045	-6.157858	-6.142849
NAGARCH T-Student SOUTHAFR_Price (3,3)	3	3	-6.160127	-6.116461	-6.160268	-6.143745
NAGARCH T-Student SOUTHAFR_Price (4,1)	4	1	-6.160018	-6.116352	-6.160159	-6.143636
NAGARCH T-Student SOUTHAFR_Price (2,5)	2	5	-6.156396	-6.112731	-6.156537	-6.140015
NAGARCH T-Student SOUTHAFR_Price (4,2)	4	2	-6.159394	-6.111759	-6.159562	-6.141524

NAGARCH T-Student SOUTHAFR_Price (3,4)	3	4	-6.159206	-6.11157	-6.159373	-6.141335
NAGARCH T-Student SOUTHAFR_Price (3,5)	3	5	-6.159069	-6.107464	-6.159265	-6.139709
NAGARCH T-Student SOUTHAFR_Price (3,0)	3	0	-6.138979	-6.107222	-6.139054	-6.127065
NAGARCH T-Student SOUTHAFR_Price (4,0)	4	0	-6.145743	-6.106047	-6.145859	-6.13085
NAGARCH T-Student SOUTHAFR_Price (4,3)	4	3	-6.157627	-6.106022	-6.157824	-6.138267
NAGARCH T-Student SOUTHAFR_Price (5,1)	5	1	-6.156848	-6.105243	-6.157044	-6.137488
NAGARCH T-Student SOUTHAFR_Price (4,4)	4	4	-6.155918	-6.100344	-6.156146	-6.135069
NAGARCH T-Student SOUTHAFR_Price (2,0)	2	0	-6.123286	-6.099468	-6.123328	-6.11435
NAGARCH T-Student SOUTHAFR_Price (4,5)	4	5	-6.15598	-6.096435	-6.156241	-6.133641
NAGARCH T-Student SOUTHAFR_Price (5,3)	5	3	-6.15576	-6.096216	-6.156021	-6.133421
NAGARCH T-Student SOUTHAFR_Price (5,0)	5	0	-6.141236	-6.0936	-6.141403	-6.123365
NAGARCH T-Student SOUTHAFR_Price (5,5)	5	5	-6.151322	-6.083838	-6.151656	-6.126005
NAGARCH T-Student SOUTHAFR_Price (5,4)	5	4	-6.145429	-6.081915	-6.145726	-6.121601
NAGARCH T-Student SOUTHAFR_Price (1,0)	1	0	-6.044302	-6.028424	-6.044321	-6.038345
NAGARCH T-Student SOUTHAFR_Price (0,1)	0	1	-6.01773	-6.005821	-6.017741	-6.013263
NAGARCH T-Student SOUTHAFR_Price (0,2)	0	2	-6.020076	-6.004198	-6.020095	-6.014119
NAGARCH T-Student SOUTHAFR_Price (0,3)	0	3	-6.019853	-6.000005	-6.019882	-6.012406
NAGARCH T-Student SOUTHAFR_Price (0,4)	0	4	-6.018991	-5.995173	-6.019033	-6.010056
NAGARCH T-Student SOUTHAFR_Price (0,5)	0	5	-6.017927	-5.99014	-6.017984	-6.007502

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student SOUTHAFR_Price (1,1)	1	1	-6.170626	-6.146808	-6.170668	-6.16169
NAGARCH Skewed T-Student SOUTHAFR_Price (1,2)	1	2	-6.170308	-6.14252	-6.170365	-6.159883
NAGARCH Skewed T-Student SOUTHAFR_Price (1,3)	1	3	-6.169706	-6.137949	-6.169781	-6.157792
NAGARCH Skewed T-Student SOUTHAFR_Price (2,1)	2	1	-6.168727	-6.13697	-6.168801	-6.156813
NAGARCH Skewed T-Student SOUTHAFR_Price (1,4)	1	4	-6.17131	-6.135583	-6.171405	-6.157907
NAGARCH Skewed T-Student SOUTHAFR_Price (2,2)	2	2	-6.167324	-6.131598	-6.167419	-6.153921

NAGARCH Skewed T-Student SOUTHAFR_Price (1,5)	1	5	-6.170068	-6.130372	-6.170185	-6.155176
NAGARCH Skewed T-Student SOUTHAFR_Price (4,0)	4	0	-6.17104	-6.127374	-6.171181	-6.154658
NAGARCH Skewed T-Student SOUTHAFR_Price (3,2)	3	2	-6.170883	-6.127217	-6.171024	-6.154502
NAGARCH Skewed T-Student SOUTHAFR_Price (2,3)	2	3	-6.166637	-6.126941	-6.166754	-6.151745
NAGARCH Skewed T-Student SOUTHAFR_Price (3,1)	3	1	-6.165429	-6.125733	-6.165545	-6.150536
NAGARCH Skewed T-Student SOUTHAFR_Price (2,4)	2	4	-6.16824	-6.124574	-6.168381	-6.151859
NAGARCH Skewed T-Student SOUTHAFR_Price (3,3)	3	3	-6.168973	-6.121338	-6.169141	-6.151102
NAGARCH Skewed T-Student SOUTHAFR_Price (4,1)	4	1	-6.167844	-6.120208	-6.168011	-6.149973
NAGARCH Skewed T-Student SOUTHAFR_Price (2,5)	2	5	-6.166999	-6.119363	-6.167166	-6.149128
NAGARCH Skewed T-Student SOUTHAFR_Price (3,4)	3	4	-6.168996	-6.117391	-6.169193	-6.149636
NAGARCH Skewed T-Student SOUTHAFR_Price (4,2)	4	2	-6.168588	-6.116983	-6.168785	-6.149228
NAGARCH Skewed T-Student SOUTHAFR_Price (3,5)	3	5	-6.167866	-6.112292	-6.168094	-6.147017
NAGARCH Skewed T-Student SOUTHAFR_Price (5,1)	5	1	-6.167074	-6.111499	-6.167302	-6.146225
NAGARCH Skewed T-Student SOUTHAFR_Price (4,3)	4	3	-6.164761	-6.109186	-6.164989	-6.143912
NAGARCH Skewed T-Student SOUTHAFR_Price (5,2)	5	2	-6.165271	-6.105727	-6.165532	-6.142933
NAGARCH Skewed T-Student SOUTHAFR_Price (4,4)	4	4	-6.164695	-6.105151	-6.164956	-6.142356
NAGARCH Skewed T-Student SOUTHAFR_Price (4,5)	4	5	-6.163934	-6.10042	-6.164231	-6.140106
NAGARCH Skewed T-Student SOUTHAFR_Price (5,0)	5	0	-6.148152	-6.096547	-6.148348	-6.128792
NAGARCH Skewed T-Student SOUTHAFR_Price (5,3)	5	3	-6.151602	-6.088088	-6.151899	-6.127774
NAGARCH Skewed T-Student SOUTHAFR_Price (2,0)	2	0	-6.090697	-6.06291	-6.090754	-6.080272
NAGARCH Skewed T-Student SOUTHAFR_Price (5,5)	5	5	-6.133207	-6.061753	-6.133581	-6.1064
NAGARCH Skewed T-Student SOUTHAFR_Price (1,0)	1	0	-6.051858	-6.03201	-6.051887	-6.044412
NAGARCH Skewed T-Student SOUTHAFR_Price (0,1)	0	1	-6.021156	-6.005277	-6.021175	-6.015199
NAGARCH Skewed T-Student SOUTHAFR_Price (0,2)	0	2	-6.023506	-6.003658	-6.023535	-6.01606
NAGARCH Skewed T-Student SOUTHAFR_Price (0,3)	0	3	-6.023302	-5.999484	-6.023344	-6.014366
NAGARCH Skewed T-Student SOUTHAFR_Price (0,4)	0	4	-6.022452	-5.994665	-6.022509	-6.012027
NAGARCH Skewed T-Student SOUTHAFR_Price (0,5)	0	5	-6.021398	-5.989641	-6.021473	-6.009484
NAGARCH Skewed T-Student SOUTHAFR_Price (3,0)	3	0	381.701804	381.737531	381.70171	381.715208

<i>TAN_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm TAN_Price (1,2)	1	2	-7.535382	-7.519503	-7.5354	-7.529425
SGARCH Norm TAN_Price (1,3)	1	3	-7.536159	-7.516311	-7.536188	-7.528713
SGARCH Norm TAN_Price (2,2)	2	2	-7.533845	-7.513997	-7.533874	-7.526399
SGARCH Norm TAN_Price (1,1)	1	1	-7.525853	-7.513944	-7.525864	-7.521386
SGARCH Norm TAN_Price (1,4)	1	4	-7.535921	-7.512103	-7.535963	-7.526985
SGARCH Norm TAN_Price (2,3)	2	3	-7.534624	-7.510806	-7.534666	-7.525688
SGARCH Norm TAN_Price (3,2)	3	2	-7.532937	-7.509119	-7.532979	-7.524001
SGARCH Norm TAN_Price (2,1)	2	1	-7.524414	-7.508535	-7.524432	-7.518457
SGARCH Norm TAN_Price (1,5)	1	5	-7.536312	-7.508525	-7.53637	-7.525888
SGARCH Norm TAN_Price (2,4)	2	4	-7.534386	-7.506599	-7.534443	-7.523961
SGARCH Norm TAN_Price (3,3)	3	3	-7.533089	-7.505301	-7.533146	-7.522664
SGARCH Norm TAN_Price (4,2)	4	2	-7.531578	-7.50379	-7.531635	-7.521153
SGARCH Norm TAN_Price (3,1)	3	1	-7.523229	-7.503381	-7.523258	-7.515783
SGARCH Norm TAN_Price (2,5)	2	5	-7.534777	-7.50302	-7.534852	-7.522863
SGARCH Norm TAN_Price (3,4)	3	4	-7.532851	-7.501094	-7.532926	-7.520937
SGARCH Norm TAN_Price (4,3)	4	3	-7.531716	-7.499959	-7.531791	-7.519802
SGARCH Norm TAN_Price (5,2)	5	2	-7.5308	-7.499043	-7.530875	-7.518886
SGARCH Norm TAN_Price (4,1)	4	1	-7.521993	-7.498176	-7.522036	-7.513058
SGARCH Norm TAN_Price (3,5)	3	5	-7.533242	-7.497516	-7.533337	-7.519839
SGARCH Norm TAN_Price (4,4)	4	4	-7.531316	-7.495589	-7.531411	-7.517913
SGARCH Norm TAN_Price (5,3)	5	3	-7.530803	-7.495076	-7.530898	-7.5174
SGARCH Norm TAN_Price (5,1)	5	1	-7.520884	-7.493096	-7.520941	-7.510459
SGARCH Norm TAN_Price (4,5)	4	5	-7.531707	-7.492011	-7.531824	-7.516815

SGARCH Norm TAN_Price (5,4)	5	4	-7.530675	-7.490979	-7.530791	-7.515782
SGARCH Norm TAN_Price (5,5)	5	5	-7.530173	-7.486507	-7.530314	-7.513791
SGARCH Norm TAN_Price (4,0)	4	0	-7.485536	-7.465688	-7.485565	-7.478089
SGARCH Norm TAN_Price (5,0)	5	0	-7.485854	-7.462036	-7.485896	-7.476918
SGARCH Norm TAN_Price (3,0)	3	0	-7.472271	-7.456393	-7.47229	-7.466314
SGARCH Norm TAN_Price (2,0)	2	0	-7.407187	-7.395278	-7.407198	-7.402719
SGARCH Norm TAN_Price (1,0)	1	0	-7.311522	-7.303583	-7.311527	-7.308543
SGARCH Norm TAN_Price (0,1)	0	1	-7.211884	-7.203945	-7.211889	-7.208906
SGARCH Norm TAN_Price (0,2)	0	2	-7.210271	-7.198362	-7.210281	-7.205803
SGARCH Norm TAN_Price (0,3)	0	3	-7.208939	-7.19306	-7.208958	-7.202982
SGARCH Norm TAN_Price (0,4)	0	4	-7.207317	-7.187468	-7.207346	-7.19987
SGARCH Norm TAN_Price (0,5)	0	5	-7.205895	-7.182077	-7.205937	-7.196959

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm TAN_Price (1,2)	1	2	-7.535856	-7.516008	-7.535886	-7.52841
SGARCH Skewed Norm TAN_Price (1,3)	1	3	-7.53655	-7.512732	-7.536592	-7.527614
SGARCH Skewed Norm TAN_Price (2,2)	2	2	-7.53432	-7.510502	-7.534362	-7.525385
SGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.526293	-7.510414	-7.526312	-7.520336
SGARCH Skewed Norm TAN_Price (1,4)	1	4	-7.536538	-7.508751	-7.536595	-7.526113
SGARCH Skewed Norm TAN_Price (2,3)	2	3	-7.535014	-7.507226	-7.535071	-7.524589
SGARCH Skewed Norm TAN_Price (3,2)	3	2	-7.533364	-7.505576	-7.533421	-7.522939
SGARCH Skewed Norm TAN_Price (1,5)	1	5	-7.536989	-7.505232	-7.537063	-7.525075
SGARCH Skewed Norm TAN_Price (2,1)	2	1	-7.52484	-7.504992	-7.52487	-7.517394
SGARCH Skewed Norm TAN_Price (2,4)	2	4	-7.535004	-7.503247	-7.535078	-7.52309
SGARCH Skewed Norm TAN_Price (3,3)	3	3	-7.533479	-7.501722	-7.533553	-7.521565
SGARCH Skewed Norm TAN_Price (4,2)	4	2	-7.531982	-7.500225	-7.532057	-7.520068
SGARCH Skewed Norm TAN_Price (3,1)	3	1	-7.523616	-7.499798	-7.523658	-7.51468
SGARCH Skewed Norm TAN_Price (2,5)	2	5	-7.535454	-7.499727	-7.535548	-7.52205

SGARCH Skewed Norm TAN_Price (3,4)	3	4	-7.533469	-7.497742	-7.533563	-7.520065
SGARCH Skewed Norm TAN_Price (4,3)	4	3	-7.532088	-7.496361	-7.532182	-7.518684
SGARCH Skewed Norm TAN_Price (5,2)	5	2	-7.531165	-7.495438	-7.53126	-7.517762
SGARCH Skewed Norm TAN_Price (4,1)	4	1	-7.522355	-7.494568	-7.522412	-7.51193
SGARCH Skewed Norm TAN_Price (3,5)	3	5	-7.533919	-7.494222	-7.534035	-7.519026
SGARCH Skewed Norm TAN_Price (4,4)	4	4	-7.531934	-7.492238	-7.53205	-7.517041
SGARCH Skewed Norm TAN_Price (5,3)	5	3	-7.531139	-7.491443	-7.531256	-7.516247
SGARCH Skewed Norm TAN_Price (5,1)	5	1	-7.521215	-7.489458	-7.52129	-7.509302
SGARCH Skewed Norm TAN_Price (4,5)	4	5	-7.532384	-7.488718	-7.532525	-7.516002
SGARCH Skewed Norm TAN_Price (5,4)	5	4	-7.531247	-7.487581	-7.531388	-7.514865
SGARCH Skewed Norm TAN_Price (5,5)	5	5	-7.530849	-7.483213	-7.531016	-7.512978
SGARCH Skewed Norm TAN_Price (4,0)	4	0	-7.488518	-7.4647	-7.48856	-7.479582
SGARCH Skewed Norm TAN_Price (3,0)	3	0	-7.475059	-7.455211	-7.475088	-7.467612
SGARCH Skewed Norm TAN_Price (2,0)	2	0	-7.413408	-7.397529	-7.413426	-7.407451
SGARCH Skewed Norm TAN_Price (1,0)	1	0	-7.316131	-7.304222	-7.316142	-7.311664
SGARCH Skewed Norm TAN_Price (0,1)	0	1	-7.210775	-7.198867	-7.210786	-7.206308
SGARCH Skewed Norm TAN_Price (0,2)	0	2	-7.209578	-7.193699	-7.209596	-7.203621
SGARCH Skewed Norm TAN_Price (0,3)	0	3	-7.208183	-7.188335	-7.208213	-7.200737
SGARCH Skewed Norm TAN_Price (0,4)	0	4	-7.207047	-7.183229	-7.207089	-7.198112
SGARCH Skewed Norm TAN_Price (0,5)	0	5	-7.20551	-7.177722	-7.205567	-7.195085
SGARCH Skewed Norm TAN_Price (5,0)	5	0	-7.086019	-7.058231	-7.086076	-7.075594

SGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student TAN_Price (1,1)	1	1	-7.64658	-7.630701	-7.646599	-7.640623
SGARCH T-Student TAN_Price (1,2)	1	2	-7.649828	-7.62998	-7.649857	-7.642382
SGARCH T-Student TAN_Price (2,1)	2	1	-7.645029	-7.625181	-7.645058	-7.637583
SGARCH T-Student TAN_Price (2,2)	2	2	-7.648902	-7.625085	-7.648945	-7.639967
SGARCH T-Student TAN_Price (1,3)	1	3	-7.648746	-7.624928	-7.648788	-7.63981

SGARCH T-Student TAN_Price (1,4)	1	4	-7.648153	-7.620366	-7.648211	-7.637729
SGARCH T-Student TAN_Price (2,3)	2	3	-7.648009	-7.620221	-7.648066	-7.637584
SGARCH T-Student TAN_Price (3,2)	3	2	-7.648009	-7.620221	-7.648066	-7.637584
SGARCH T-Student TAN_Price (3,1)	3	1	-7.643699	-7.619881	-7.643741	-7.634763
SGARCH T-Student TAN_Price (3,0)	3	0	-7.638466	-7.618618	-7.638496	-7.63102
SGARCH T-Student TAN_Price (4,0)	4	0	-7.640402	-7.616584	-7.640444	-7.631466
SGARCH T-Student TAN_Price (2,4)	2	4	-7.647474	-7.615717	-7.647548	-7.63556
SGARCH T-Student TAN_Price (1,5)	1	5	-7.647435	-7.615678	-7.64751	-7.635521
SGARCH T-Student TAN_Price (3,3)	3	3	-7.646474	-7.614717	-7.646548	-7.63456
SGARCH T-Student TAN_Price (4,1)	4	1	-7.642337	-7.61455	-7.642395	-7.631912
SGARCH T-Student TAN_Price (5,0)	5	0	-7.642304	-7.614517	-7.642362	-7.631879
SGARCH T-Student TAN_Price (4,2)	4	2	-7.646261	-7.614504	-7.646336	-7.634347
SGARCH T-Student TAN_Price (2,5)	2	5	-7.646968	-7.611241	-7.647062	-7.633565
SGARCH T-Student TAN_Price (5,1)	5	1	-7.642868	-7.611111	-7.642942	-7.630954
SGARCH T-Student TAN_Price (3,4)	3	4	-7.645939	-7.610212	-7.646033	-7.632535
SGARCH T-Student TAN_Price (5,2)	5	2	-7.645674	-7.609947	-7.645768	-7.632271
SGARCH T-Student TAN_Price (4,3)	4	3	-7.644726	-7.609	-7.644821	-7.631323
SGARCH T-Student TAN_Price (3,5)	3	5	-7.645433	-7.605737	-7.64555	-7.63054
SGARCH T-Student TAN_Price (4,4)	4	4	-7.644404	-7.604708	-7.64452	-7.629511
SGARCH T-Student TAN_Price (5,3)	5	3	-7.644139	-7.604443	-7.644255	-7.629246
SGARCH T-Student TAN_Price (2,0)	2	0	-7.618277	-7.602398	-7.618295	-7.61232
SGARCH T-Student TAN_Price (4,5)	4	5	-7.643898	-7.600232	-7.644039	-7.627516
SGARCH T-Student TAN_Price (5,4)	5	4	-7.643898	-7.600232	-7.644039	-7.627516
SGARCH T-Student TAN_Price (5,5)	5	5	-7.642363	-7.594728	-7.642531	-7.624492
SGARCH T-Student TAN_Price (1,0)	1	0	-7.584636	-7.572727	-7.584647	-7.580168
SGARCH T-Student TAN_Price (0,1)	0	1	-7.500517	-7.488608	-7.500528	-7.49605
SGARCH T-Student TAN_Price (0,2)	0	2	-7.498787	-7.482909	-7.498806	-7.49283
SGARCH T-Student TAN_Price (0,3)	0	3	-7.49699	-7.477142	-7.49702	-7.489544

SGARCH T-Student TAN_Price (0,4)	0	4	-7.495503	-7.471685	-7.495545	-7.486568
SGARCH T-Student TAN_Price (0,5)	0	5	-7.493672	-7.465885	-7.493729	-7.483247
<i>SGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.645511	-7.625663	-7.64554	-7.638065
SGARCH Skewed T-Student TAN_Price (1,2)	1	2	-7.64871	-7.624892	-7.648752	-7.639774
SGARCH Skewed T-Student TAN_Price (2,1)	2	1	-7.64396	-7.620142	-7.644002	-7.635025
SGARCH Skewed T-Student TAN_Price (2,2)	2	2	-7.647774	-7.619987	-7.647831	-7.637349
SGARCH Skewed T-Student TAN_Price (1,3)	1	3	-7.64762	-7.619833	-7.647677	-7.637195
SGARCH Skewed T-Student TAN_Price (1,4)	1	4	-7.647024	-7.615267	-7.647099	-7.63511
SGARCH Skewed T-Student TAN_Price (2,3)	2	3	-7.646872	-7.615115	-7.646947	-7.634958
SGARCH Skewed T-Student TAN_Price (3,2)	3	2	-7.646872	-7.615115	-7.646947	-7.634958
SGARCH Skewed T-Student TAN_Price (3,1)	3	1	-7.642614	-7.614826	-7.642671	-7.632189
SGARCH Skewed T-Student TAN_Price (3,0)	3	0	-7.63733	-7.613512	-7.637372	-7.628394
SGARCH Skewed T-Student TAN_Price (4,0)	4	0	-7.639265	-7.611477	-7.639322	-7.62884
SGARCH Skewed T-Student TAN_Price (2,4)	2	4	-7.64634	-7.610613	-7.646434	-7.632936
SGARCH Skewed T-Student TAN_Price (1,5)	1	5	-7.646288	-7.610562	-7.646383	-7.632885
SGARCH Skewed T-Student TAN_Price (3,3)	3	3	-7.645337	-7.60961	-7.645431	-7.631934
SGARCH Skewed T-Student TAN_Price (4,1)	4	1	-7.64125	-7.609493	-7.641324	-7.629336
SGARCH Skewed T-Student TAN_Price (4,2)	4	2	-7.645127	-7.6094	-7.645221	-7.631723
SGARCH Skewed T-Student TAN_Price (5,0)	5	0	-7.641102	-7.609345	-7.641177	-7.629188
SGARCH Skewed T-Student TAN_Price (2,5)	2	5	-7.645815	-7.606119	-7.645932	-7.630923
SGARCH Skewed T-Student TAN_Price (5,1)	5	1	-7.641716	-7.605989	-7.64181	-7.628312
SGARCH Skewed T-Student TAN_Price (3,4)	3	4	-7.644805	-7.605108	-7.644921	-7.629912
SGARCH Skewed T-Student TAN_Price (5,2)	5	2	-7.644524	-7.604828	-7.644641	-7.629632
SGARCH Skewed T-Student TAN_Price (4,3)	4	3	-7.643592	-7.603895	-7.643708	-7.628699
SGARCH Skewed T-Student TAN_Price (3,5)	3	5	-7.64428	-7.600614	-7.644421	-7.627899
SGARCH Skewed T-Student TAN_Price (4,4)	4	4	-7.64327	-7.599604	-7.643411	-7.626888

SGARCH Skewed T-Student TAN_Price (5,3)	5	3	-7.642989	-7.599323	-7.64313	-7.626608
SGARCH Skewed T-Student TAN_Price (2,0)	2	0	-7.617094	-7.597246	-7.617124	-7.609648
SGARCH Skewed T-Student TAN_Price (4,5)	4	5	-7.642745	-7.59511	-7.642913	-7.624875
SGARCH Skewed T-Student TAN_Price (5,4)	5	4	-7.642745	-7.59511	-7.642913	-7.624875
SGARCH Skewed T-Student TAN_Price (5,5)	5	5	-7.641211	-7.589605	-7.641407	-7.62185
SGARCH Skewed T-Student TAN_Price (1,0)	1	0	-7.583444	-7.567566	-7.583463	-7.577487
SGARCH Skewed T-Student TAN_Price (0,1)	0	1	-7.499888	-7.48401	-7.499907	-7.493931
SGARCH Skewed T-Student TAN_Price (0,2)	0	2	-7.497599	-7.477751	-7.497629	-7.490153
SGARCH Skewed T-Student TAN_Price (0,3)	0	3	-7.495754	-7.471936	-7.495796	-7.486818
SGARCH Skewed T-Student TAN_Price (0,4)	0	4	-7.493917	-7.466129	-7.493974	-7.483492
SGARCH Skewed T-Student TAN_Price (0,5)	0	5	-7.492499	-7.460742	-7.492574	-7.480585

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Norm TAN_Price (1,2)	1	2	-7.537167	-7.513349	-7.537209	-7.528232
APARCH Norm TAN_Price (1,1)	1	1	-7.525835	-7.505987	-7.525864	-7.518389
APARCH Norm TAN_Price (1,3)	1	3	-7.528509	-7.500722	-7.528567	-7.518085
APARCH Norm TAN_Price (1,4)	1	4	-7.528991	-7.497234	-7.529065	-7.517077
APARCH Norm TAN_Price (2,3)	2	3	-7.531671	-7.495944	-7.531765	-7.518268
APARCH Norm TAN_Price (2,2)	2	2	-7.527347	-7.49559	-7.527421	-7.515433
APARCH Norm TAN_Price (1,5)	1	5	-7.53107	-7.495343	-7.531165	-7.517667
APARCH Norm TAN_Price (2,1)	2	1	-7.515322	-7.487534	-7.515379	-7.504897
APARCH Norm TAN_Price (2,4)	2	4	-7.524325	-7.484629	-7.524442	-7.509432
APARCH Norm TAN_Price (2,5)	2	5	-7.525533	-7.481867	-7.525674	-7.509151
APARCH Norm TAN_Price (3,2)	3	2	-7.516162	-7.476466	-7.516279	-7.50127
APARCH Norm TAN_Price (3,1)	3	1	-7.512088	-7.476361	-7.512183	-7.498685
APARCH Norm TAN_Price (3,4)	3	4	-7.513369	-7.465733	-7.513536	-7.495498
APARCH Norm TAN_Price (3,5)	3	5	-7.516339	-7.464734	-7.516535	-7.496979
APARCH Norm TAN_Price (4,1)	4	1	-7.508041	-7.464375	-7.508182	-7.49166

APARCH Norm TAN_Price (3,3)	3	3	-7.505338	-7.461672	-7.505479	-7.488956
APARCH Norm TAN_Price (4,3)	4	3	-7.507368	-7.455763	-7.507564	-7.488008
APARCH Norm TAN_Price (4,2)	4	2	-7.501223	-7.453588	-7.501391	-7.483352
APARCH Norm TAN_Price (5,1)	5	1	-7.50246	-7.450854	-7.502656	-7.483099
APARCH Norm TAN_Price (5,2)	5	2	-7.504052	-7.448477	-7.50428	-7.483203
APARCH Norm TAN_Price (4,4)	4	4	-7.498592	-7.443017	-7.49882	-7.477742
APARCH Norm TAN_Price (5,4)	5	4	-7.503424	-7.43991	-7.503721	-7.479596
APARCH Norm TAN_Price (4,5)	4	5	-7.498884	-7.439339	-7.499145	-7.476545
APARCH Norm TAN_Price (5,3)	5	3	-7.497974	-7.438429	-7.498235	-7.475635
APARCH Norm TAN_Price (5,5)	5	5	-7.49224	-7.424756	-7.492575	-7.466923
APARCH Norm TAN_Price (4,0)	4	0	-7.446275	-7.406579	-7.446392	-7.431383
APARCH Norm TAN_Price (3,0)	3	0	-7.409779	-7.378022	-7.409854	-7.397865
APARCH Norm TAN_Price (5,0)	5	0	-7.42442	-7.376785	-7.424588	-7.40655
APARCH Norm TAN_Price (2,0)	2	0	-7.355681	-7.331863	-7.355723	-7.346746
APARCH Norm TAN_Price (1,0)	1	0	-7.292168	-7.276289	-7.292187	-7.286211
APARCH Norm TAN_Price (0,1)	0	1	-7.209261	-7.197352	-7.209272	-7.204794
APARCH Norm TAN_Price (0,2)	0	2	-7.20916	-7.193282	-7.209179	-7.203203
APARCH Norm TAN_Price (0,3)	0	3	-7.206871	-7.187023	-7.2069	-7.199425
APARCH Norm TAN_Price (0,4)	0	4	-7.203647	-7.17983	-7.20369	-7.194712
APARCH Norm TAN_Price (0,5)	0	5	-7.200185	-7.172397	-7.200242	-7.18976

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm TAN_Price (1,1)	1	1	-7.533318	-7.5095	-7.53336	-7.524383
APARCH Skewed Norm TAN_Price (1,2)	1	2	-7.537037	-7.50925	-7.537095	-7.526613
APARCH Skewed Norm TAN_Price (1,4)	1	4	-7.538449	-7.502722	-7.538543	-7.525046
APARCH Skewed Norm TAN_Price (1,5)	1	5	-7.539494	-7.499798	-7.539611	-7.524602
APARCH Skewed Norm TAN_Price (1,3)	1	3	-7.530876	-7.499119	-7.530951	-7.518962
APARCH Skewed Norm TAN_Price (2,2)	2	2	-7.527594	-7.491868	-7.527689	-7.514191

APARCH Skewed Norm TAN_Price (2,1)	2	1	-7.522725	-7.490968	-7.5228	-7.510811
APARCH Skewed Norm TAN_Price (2,3)	2	3	-7.529168	-7.489472	-7.529285	-7.514276
APARCH Skewed Norm TAN_Price (2,4)	2	4	-7.526589	-7.482923	-7.52673	-7.510207
APARCH Skewed Norm TAN_Price (2,5)	2	5	-7.527555	-7.47992	-7.527723	-7.509684
APARCH Skewed Norm TAN_Price (3,2)	3	2	-7.517194	-7.473529	-7.517335	-7.500813
APARCH Skewed Norm TAN_Price (3,1)	3	1	-7.509288	-7.469592	-7.509405	-7.494396
APARCH Skewed Norm TAN_Price (3,4)	3	4	-7.518712	-7.467106	-7.518908	-7.499351
APARCH Skewed Norm TAN_Price (3,3)	3	3	-7.5147	-7.467065	-7.514868	-7.496829
APARCH Skewed Norm TAN_Price (4,1)	4	1	-7.509763	-7.462127	-7.509931	-7.491892
APARCH Skewed Norm TAN_Price (3,5)	3	5	-7.511966	-7.456391	-7.512193	-7.491116
APARCH Skewed Norm TAN_Price (4,2)	4	2	-7.505402	-7.453797	-7.505599	-7.486042
APARCH Skewed Norm TAN_Price (4,3)	4	3	-7.506243	-7.450669	-7.506471	-7.485394
APARCH Skewed Norm TAN_Price (5,1)	5	1	-7.503648	-7.448073	-7.503876	-7.482798
APARCH Skewed Norm TAN_Price (4,5)	4	5	-7.510743	-7.447229	-7.51104	-7.486916
APARCH Skewed Norm TAN_Price (4,4)	4	4	-7.505615	-7.446071	-7.505876	-7.483276
APARCH Skewed Norm TAN_Price (5,2)	5	2	-7.497805	-7.43826	-7.498066	-7.475466
APARCH Skewed Norm TAN_Price (5,4)	5	4	-7.502778	-7.435294	-7.503112	-7.47746
APARCH Skewed Norm TAN_Price (5,3)	5	3	-7.497994	-7.43448	-7.498291	-7.474166
APARCH Skewed Norm TAN_Price (5,5)	5	5	-7.492658	-7.421205	-7.493033	-7.465852
APARCH Skewed Norm TAN_Price (3,0)	3	0	-7.451238	-7.415511	-7.451333	-7.437835
APARCH Skewed Norm TAN_Price (4,0)	4	0	-7.442733	-7.399067	-7.442874	-7.426351
APARCH Skewed Norm TAN_Price (5,0)	5	0	-7.442266	-7.390661	-7.442462	-7.422906
APARCH Skewed Norm TAN_Price (2,0)	2	0	-7.377064	-7.349277	-7.377121	-7.366639
APARCH Skewed Norm TAN_Price (1,0)	1	0	-7.296775	-7.276927	-7.296804	-7.289329
APARCH Skewed Norm TAN_Price (0,1)	0	1	-7.210474	-7.194595	-7.210493	-7.204517
APARCH Skewed Norm TAN_Price (0,2)	0	2	-7.208986	-7.189138	-7.209015	-7.20154
APARCH Skewed Norm TAN_Price (0,3)	0	3	-7.206398	-7.182581	-7.206441	-7.197463
APARCH Skewed Norm TAN_Price (0,4)	0	4	-7.203705	-7.175918	-7.203762	-7.19328

APARCH Skewed Norm TAN_Price (0,5)	0	5	-7.200721	-7.168964	-7.200796	-7.188807
<i>APARCH T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student TAN_Price (1,2)	1	2	-7.630747	-7.60296	-7.630804	-7.620322
APARCH T-Student TAN_Price (1,1)	1	1	-7.622857	-7.599039	-7.622899	-7.613922
APARCH T-Student TAN_Price (2,2)	2	2	-7.626393	-7.590666	-7.626487	-7.61299
APARCH T-Student TAN_Price (1,5)	1	5	-7.629771	-7.590075	-7.629888	-7.614879
APARCH T-Student TAN_Price (1,3)	1	3	-7.615893	-7.584136	-7.615968	-7.603979
APARCH T-Student TAN_Price (1,4)	1	4	-7.619432	-7.583705	-7.619526	-7.606029
APARCH T-Student TAN_Price (2,3)	2	3	-7.613287	-7.573591	-7.613404	-7.598395
APARCH T-Student TAN_Price (2,5)	2	5	-7.618058	-7.570423	-7.618226	-7.600187
APARCH T-Student TAN_Price (2,1)	2	1	-7.601077	-7.56932	-7.601152	-7.589163
APARCH T-Student TAN_Price (3,5)	3	5	-7.623816	-7.568241	-7.624044	-7.602966
APARCH T-Student TAN_Price (4,2)	4	2	-7.618969	-7.567364	-7.619166	-7.599609
APARCH T-Student TAN_Price (4,1)	4	1	-7.612563	-7.564927	-7.61273	-7.594692
APARCH T-Student TAN_Price (3,2)	3	2	-7.607317	-7.563651	-7.607458	-7.590936
APARCH T-Student TAN_Price (3,1)	3	1	-7.603046	-7.56335	-7.603163	-7.588154
APARCH T-Student TAN_Price (3,0)	3	0	-7.597434	-7.561707	-7.597529	-7.584031
APARCH T-Student TAN_Price (3,4)	3	4	-7.604327	-7.552721	-7.604523	-7.584966
APARCH T-Student TAN_Price (5,3)	5	3	-7.615924	-7.55241	-7.616221	-7.592096
APARCH T-Student TAN_Price (3,3)	3	3	-7.599794	-7.552158	-7.599962	-7.581923
APARCH T-Student TAN_Price (2,4)	2	4	-7.593232	-7.549566	-7.593373	-7.57685
APARCH T-Student TAN_Price (4,3)	4	3	-7.604204	-7.54863	-7.604432	-7.583355
APARCH T-Student TAN_Price (2,0)	2	0	-7.570992	-7.543204	-7.571049	-7.560567
APARCH T-Student TAN_Price (5,5)	5	5	-7.613522	-7.542069	-7.613897	-7.586716
APARCH T-Student TAN_Price (4,0)	4	0	-7.58562	-7.541954	-7.585761	-7.569239
APARCH T-Student TAN_Price (4,4)	4	4	-7.598155	-7.53861	-7.598416	-7.575816
APARCH T-Student TAN_Price (4,5)	4	5	-7.59844	-7.534926	-7.598737	-7.574612

APARCH T-Student TAN_Price (5,2)	5	2	-7.594047	-7.534502	-7.594308	-7.571708
APARCH T-Student TAN_Price (5,4)	5	4	-7.597576	-7.530093	-7.597911	-7.572259
APARCH T-Student TAN_Price (1,0)	1	0	-7.5466	-7.526752	-7.546629	-7.539153
APARCH T-Student TAN_Price (5,1)	5	1	-7.54502	-7.489445	-7.545247	-7.52417
APARCH T-Student TAN_Price (5,0)	5	0	-7.539654	-7.488049	-7.53985	-7.520294
APARCH T-Student TAN_Price (0,2)	0	2	-7.504921	-7.485072	-7.50495	-7.497474
APARCH T-Student TAN_Price (0,3)	0	3	-7.503185	-7.479367	-7.503227	-7.49425
APARCH T-Student TAN_Price (0,1)	0	1	-7.489838	-7.473959	-7.489856	-7.483881
APARCH T-Student TAN_Price (0,5)	0	5	-7.500699	-7.468942	-7.500774	-7.488785

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student TAN_Price (1,2)	1	2	-7.639637	-7.60788	-7.639712	-7.627723
APARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.629796	-7.602009	-7.629854	-7.619372
APARCH Skewed T-Student TAN_Price (1,4)	1	4	-7.627621	-7.587925	-7.627738	-7.612729
APARCH Skewed T-Student TAN_Price (5,2)	5	2	-7.64946	-7.585946	-7.649757	-7.625632
APARCH Skewed T-Student TAN_Price (1,5)	1	5	-7.62621	-7.582544	-7.626351	-7.609828
APARCH Skewed T-Student TAN_Price (2,1)	2	1	-7.617754	-7.582027	-7.617848	-7.60435
APARCH Skewed T-Student TAN_Price (1,3)	1	3	-7.616604	-7.580878	-7.616699	-7.603201
APARCH Skewed T-Student TAN_Price (2,2)	2	2	-7.62018	-7.580484	-7.620297	-7.605288
APARCH Skewed T-Student TAN_Price (2,4)	2	4	-7.620894	-7.573258	-7.621061	-7.603023
APARCH Skewed T-Student TAN_Price (2,5)	2	5	-7.624714	-7.573109	-7.62491	-7.605354
APARCH Skewed T-Student TAN_Price (3,4)	3	4	-7.6212	-7.565626	-7.621428	-7.600351
APARCH Skewed T-Student TAN_Price (4,2)	4	2	-7.619531	-7.563957	-7.619759	-7.598682
APARCH Skewed T-Student TAN_Price (3,0)	3	0	-7.598832	-7.559135	-7.598948	-7.583939
APARCH Skewed T-Student TAN_Price (2,3)	2	3	-7.598646	-7.55498	-7.598787	-7.582264
APARCH Skewed T-Student TAN_Price (3,1)	3	1	-7.596098	-7.552432	-7.596239	-7.579716
APARCH Skewed T-Student TAN_Price (4,0)	4	0	-7.599882	-7.552247	-7.60005	-7.582011

APARCH Skewed T-Student TAN_Price (3,3)	3	3	-7.603741	-7.552136	-7.603938	-7.584381
APARCH Skewed T-Student TAN_Price (4,1)	4	1	-7.600412	-7.548807	-7.600609	-7.581052
APARCH Skewed T-Student TAN_Price (4,5)	4	5	-7.615458	-7.547974	-7.615792	-7.590141
APARCH Skewed T-Student TAN_Price (4,3)	4	3	-7.604861	-7.545316	-7.605122	-7.582522
APARCH Skewed T-Student TAN_Price (3,2)	3	2	-7.591186	-7.543551	-7.591354	-7.573315
APARCH Skewed T-Student TAN_Price (3,5)	3	5	-7.597239	-7.537695	-7.5975	-7.574901
APARCH Skewed T-Student TAN_Price (5,1)	5	1	-7.5964	-7.536855	-7.596661	-7.574061
APARCH Skewed T-Student TAN_Price (5,0)	5	0	-7.592298	-7.536723	-7.592526	-7.571449
APARCH Skewed T-Student TAN_Price (2,0)	2	0	-7.566723	-7.534966	-7.566797	-7.554809
APARCH Skewed T-Student TAN_Price (5,3)	5	3	-7.598193	-7.53071	-7.598528	-7.572876
APARCH Skewed T-Student TAN_Price (4,4)	4	4	-7.589764	-7.52625	-7.590061	-7.565936
APARCH Skewed T-Student TAN_Price (1,0)	1	0	-7.545792	-7.521974	-7.545834	-7.536856
APARCH Skewed T-Student TAN_Price (5,5)	5	5	-7.580536	-7.505113	-7.580953	-7.55224
APARCH Skewed T-Student TAN_Price (5,4)	5	4	-7.561348	-7.489895	-7.561723	-7.534542
APARCH Skewed T-Student TAN_Price (0,1)	0	1	-7.504998	-7.48515	-7.505027	-7.497552
APARCH Skewed T-Student TAN_Price (0,2)	0	2	-7.491763	-7.467946	-7.491806	-7.482828
APARCH Skewed T-Student TAN_Price (0,4)	0	4	-7.490551	-7.458794	-7.490626	-7.478637
APARCH Skewed T-Student TAN_Price (0,3)	0	3	-7.485952	-7.458165	-7.486009	-7.475527
APARCH Skewed T-Student TAN_Price (0,5)	0	5	-7.485264	-7.449537	-7.485358	-7.471861

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm TAN_Price (2,2)	2	2	-7.53405	-7.506262	-7.534107	-7.523625
TGARCH Norm TAN_Price (1,2)	1	2	-7.523847	-7.503999	-7.523877	-7.516401
TGARCH Norm TAN_Price (2,3)	2	3	-7.534702	-7.502945	-7.534777	-7.522788
TGARCH Norm TAN_Price (1,3)	1	3	-7.524484	-7.500667	-7.524527	-7.515549
TGARCH Norm TAN_Price (1,1)	1	1	-7.515366	-7.499487	-7.515385	-7.509409
TGARCH Norm TAN_Price (2,4)	2	4	-7.535099	-7.499372	-7.535193	-7.521695
TGARCH Norm TAN_Price (3,2)	3	2	-7.533167	-7.497441	-7.533262	-7.519764

TGARCH Norm TAN_Price (1,4)	1	4	-7.523473	-7.495686	-7.523531	-7.513049
TGARCH Norm TAN_Price (1,5)	1	5	-7.525896	-7.494138	-7.52597	-7.513982
TGARCH Norm TAN_Price (2,5)	2	5	-7.533359	-7.493663	-7.533476	-7.518467
TGARCH Norm TAN_Price (2,1)	2	1	-7.515922	-7.492104	-7.515964	-7.506986
TGARCH Norm TAN_Price (3,3)	3	3	-7.531636	-7.49194	-7.531753	-7.516744
TGARCH Norm TAN_Price (3,4)	3	4	-7.532046	-7.48838	-7.532187	-7.515664
TGARCH Norm TAN_Price (4,2)	4	2	-7.530791	-7.487126	-7.530932	-7.51441
TGARCH Norm TAN_Price (3,1)	3	1	-7.517926	-7.486169	-7.518	-7.506012
TGARCH Norm TAN_Price (3,5)	3	5	-7.529401	-7.481766	-7.529569	-7.51153
TGARCH Norm TAN_Price (4,3)	4	3	-7.529279	-7.481644	-7.529447	-7.511408
TGARCH Norm TAN_Price (4,4)	4	4	-7.529955	-7.47835	-7.530152	-7.510595
TGARCH Norm TAN_Price (5,2)	5	2	-7.52722	-7.475615	-7.527417	-7.50786
TGARCH Norm TAN_Price (4,1)	4	1	-7.513786	-7.47409	-7.513903	-7.498894
TGARCH Norm TAN_Price (4,5)	4	5	-7.526778	-7.471203	-7.527006	-7.505929
TGARCH Norm TAN_Price (5,3)	5	3	-7.525656	-7.470081	-7.525884	-7.504807
TGARCH Norm TAN_Price (5,4)	5	4	-7.526289	-7.466745	-7.52655	-7.50395
TGARCH Norm TAN_Price (5,1)	5	1	-7.511435	-7.463799	-7.511603	-7.493564
TGARCH Norm TAN_Price (5,5)	5	5	-7.523864	-7.46035	-7.52416	-7.500036
TGARCH Norm TAN_Price (4,0)	4	0	-7.466161	-7.430435	-7.466256	-7.452758
TGARCH Norm TAN_Price (5,0)	5	0	-7.467896	-7.42423	-7.468037	-7.451515
TGARCH Norm TAN_Price (3,0)	3	0	-7.44799	-7.420203	-7.448047	-7.437565
TGARCH Norm TAN_Price (0,3)	0	3	-7.197652	-7.181773	-7.19767	-7.191695
TGARCH Norm TAN_Price (0,5)	0	5	-7.193964	-7.170146	-7.194006	-7.185028
TGARCH Norm TAN_Price (0,2)	0	2	-7.15726	-7.145352	-7.157271	-7.152793
TGARCH Norm TAN_Price (2,0)	2	0	-6.754237	-6.734388	-6.754266	-6.74679
TGARCH Norm TAN_Price (1,0)	1	0	7.732905	7.744814	7.732895	7.737373
TGARCH Norm TAN_Price (0,1)	0	1	62.437989	62.445928	62.437984	62.440967

<i>TGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm TAN_Price (2,2)	2	2	-7.53456	-7.502803	-7.534634	-7.522646
TGARCH Skewed Norm TAN_Price (1,2)	1	2	-7.525008	-7.50119	-7.52505	-7.516072
TGARCH Skewed Norm TAN_Price (2,3)	2	3	-7.535045	-7.499318	-7.535139	-7.521641
TGARCH Skewed Norm TAN_Price (1,3)	1	3	-7.525577	-7.49779	-7.525635	-7.515153
TGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.516319	-7.496471	-7.516348	-7.508873
TGARCH Skewed Norm TAN_Price (2,4)	2	4	-7.53561	-7.495914	-7.535727	-7.520718
TGARCH Skewed Norm TAN_Price (3,2)	3	2	-7.53351	-7.493813	-7.533626	-7.518617
TGARCH Skewed Norm TAN_Price (1,4)	1	4	-7.524636	-7.492879	-7.524711	-7.512722
TGARCH Skewed Norm TAN_Price (1,5)	1	5	-7.527169	-7.491442	-7.527264	-7.513766
TGARCH Skewed Norm TAN_Price (2,5)	2	5	-7.533087	-7.489421	-7.533228	-7.516705
TGARCH Skewed Norm TAN_Price (2,1)	2	1	-7.516874	-7.489086	-7.516931	-7.506449
TGARCH Skewed Norm TAN_Price (3,3)	3	3	-7.531979	-7.488313	-7.53212	-7.515597
TGARCH Skewed Norm TAN_Price (3,4)	3	4	-7.532541	-7.484905	-7.532708	-7.51467
TGARCH Skewed Norm TAN_Price (4,2)	4	2	-7.53128	-7.483644	-7.531447	-7.513409
TGARCH Skewed Norm TAN_Price (3,1)	3	1	-7.518452	-7.482726	-7.518547	-7.505049
TGARCH Skewed Norm TAN_Price (3,5)	3	5	-7.530873	-7.479268	-7.53107	-7.511513
TGARCH Skewed Norm TAN_Price (4,3)	4	3	-7.529745	-7.47814	-7.529941	-7.510385
TGARCH Skewed Norm TAN_Price (4,4)	4	4	-7.530539	-7.474964	-7.530766	-7.509689
TGARCH Skewed Norm TAN_Price (5,2)	5	2	-7.528224	-7.472649	-7.528451	-7.507374
TGARCH Skewed Norm TAN_Price (4,1)	4	1	-7.514728	-7.471062	-7.514869	-7.498346
TGARCH Skewed Norm TAN_Price (5,3)	5	3	-7.526689	-7.467144	-7.52695	-7.50435
TGARCH Skewed Norm TAN_Price (4,5)	4	5	-7.525479	-7.465934	-7.52574	-7.50314
TGARCH Skewed Norm TAN_Price (5,1)	5	1	-7.516905	-7.4653	-7.517101	-7.497545
TGARCH Skewed Norm TAN_Price (5,4)	5	4	-7.527447	-7.463933	-7.527744	-7.503619
TGARCH Skewed Norm TAN_Price (5,5)	5	5	-7.526206	-7.458722	-7.526541	-7.500889
TGARCH Skewed Norm TAN_Price (4,0)	4	0	-7.470018	-7.430321	-7.470134	-7.455125

TGARCH Skewed Norm TAN_Price (5,0)	5	0	-7.47764	-7.430004	-7.477808	-7.459769
TGARCH Skewed Norm TAN_Price (3,0)	3	0	-7.451645	-7.419888	-7.451719	-7.439731
TGARCH Skewed Norm TAN_Price (2,0)	2	0	-7.389809	-7.365992	-7.389851	-7.380874
TGARCH Skewed Norm TAN_Price (0,3)	0	3	-7.197978	-7.178129	-7.198007	-7.190531
TGARCH Skewed Norm TAN_Price (0,4)	0	4	-7.197009	-7.173192	-7.197051	-7.188074
TGARCH Skewed Norm TAN_Price (0,5)	0	5	-7.194826	-7.167039	-7.194883	-7.184401
TGARCH Skewed Norm TAN_Price (1,0)	1	0	7.718881	7.73476	7.718862	7.724838
TGARCH Skewed Norm TAN_Price (0,1)	0	1	56.509121	56.52103	56.50911	56.513588
TGARCH Skewed Norm TAN_Price (0,2)	0	2	71.721212	71.737091	71.721194	71.727169

TGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student TAN_Price (1,1)	1	1	-7.647528	-7.62768	-7.647557	-7.640081
TGARCH T-Student TAN_Price (1,2)	1	2	-7.648695	-7.624878	-7.648737	-7.63976
TGARCH T-Student TAN_Price (2,2)	2	2	-7.653112	-7.621355	-7.653187	-7.641198
TGARCH T-Student TAN_Price (1,3)	1	3	-7.647709	-7.619922	-7.647767	-7.637285
TGARCH T-Student TAN_Price (2,1)	2	1	-7.646844	-7.619056	-7.646901	-7.636419
TGARCH T-Student TAN_Price (2,3)	2	3	-7.652246	-7.616519	-7.65234	-7.638843
TGARCH T-Student TAN_Price (1,4)	1	4	-7.646022	-7.614265	-7.646097	-7.634108
TGARCH T-Student TAN_Price (3,1)	3	1	-7.647158	-7.611431	-7.647252	-7.633754
TGARCH T-Student TAN_Price (3,2)	3	2	-7.650936	-7.611239	-7.651052	-7.636043
TGARCH T-Student TAN_Price (2,4)	2	4	-7.650917	-7.611221	-7.651034	-7.636025
TGARCH T-Student TAN_Price (1,5)	1	5	-7.64464	-7.608914	-7.644735	-7.631237
TGARCH T-Student TAN_Price (3,3)	3	3	-7.649401	-7.605735	-7.649542	-7.633019
TGARCH T-Student TAN_Price (2,5)	2	5	-7.649299	-7.605633	-7.64944	-7.632917
TGARCH T-Student TAN_Price (3,0)	3	0	-7.636745	-7.604988	-7.63682	-7.624831
TGARCH T-Student TAN_Price (4,2)	4	2	-7.648042	-7.600406	-7.648209	-7.630171
TGARCH T-Student TAN_Price (4,1)	4	1	-7.643981	-7.600315	-7.644122	-7.627599
TGARCH T-Student TAN_Price (3,4)	3	4	-7.647847	-7.600212	-7.648015	-7.629976

TGARCH T-Student TAN_Price (2,0)	2	0	-7.62166	-7.597842	-7.621702	-7.612724
TGARCH T-Student TAN_Price (4,0)	4	0	-7.635302	-7.595606	-7.635419	-7.62041
TGARCH T-Student TAN_Price (3,5)	3	5	-7.646492	-7.594887	-7.646689	-7.627132
TGARCH T-Student TAN_Price (4,3)	4	3	-7.64626	-7.594655	-7.646457	-7.6269
TGARCH T-Student TAN_Price (5,1)	5	1	-7.642459	-7.590854	-7.642656	-7.623099
TGARCH T-Student TAN_Price (5,2)	5	2	-7.644876	-7.589301	-7.645104	-7.624027
TGARCH T-Student TAN_Price (4,4)	4	4	-7.644777	-7.589203	-7.645005	-7.623928
TGARCH T-Student TAN_Price (5,0)	5	0	-7.633716	-7.586081	-7.633884	-7.615845
TGARCH T-Student TAN_Price (4,5)	4	5	-7.643424	-7.583879	-7.643685	-7.621085
TGARCH T-Student TAN_Price (5,3)	5	3	-7.643341	-7.583797	-7.643602	-7.621002
TGARCH T-Student TAN_Price (5,4)	5	4	-7.64185	-7.578336	-7.642146	-7.618022
TGARCH T-Student TAN_Price (1,0)	1	0	-7.593813	-7.577935	-7.593832	-7.587856
TGARCH T-Student TAN_Price (5,5)	5	5	-7.640466	-7.572983	-7.640801	-7.615149
TGARCH T-Student TAN_Price (0,1)	0	1	-7.506629	-7.49472	-7.50664	-7.502162
TGARCH T-Student TAN_Price (0,4)	0	4	-7.50197	-7.478152	-7.502012	-7.493035
TGARCH T-Student TAN_Price (0,2)	0	2	-7.493775	-7.477896	-7.493794	-7.487818
TGARCH T-Student TAN_Price (0,3)	0	3	-7.495469	-7.475621	-7.495499	-7.488023
TGARCH T-Student TAN_Price (0,5)	0	5	-7.495458	-7.46767	-7.495515	-7.485033

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.646373	-7.622555	-7.646415	-7.637438
TGARCH Skewed T-Student TAN_Price (1,2)	1	2	-7.647543	-7.619756	-7.647601	-7.637119
TGARCH Skewed T-Student TAN_Price (2,2)	2	2	-7.65193	-7.616203	-7.652024	-7.638527
TGARCH Skewed T-Student TAN_Price (1,3)	1	3	-7.646563	-7.614806	-7.646638	-7.634649
TGARCH Skewed T-Student TAN_Price (2,1)	2	1	-7.645696	-7.613939	-7.64577	-7.633782
TGARCH Skewed T-Student TAN_Price (2,3)	2	3	-7.651063	-7.611367	-7.65118	-7.636171
TGARCH Skewed T-Student TAN_Price (1,4)	1	4	-7.644874	-7.609147	-7.644969	-7.631471
TGARCH Skewed T-Student TAN_Price (3,1)	3	1	-7.646065	-7.606368	-7.646181	-7.631172

TGARCH Skewed T-Student TAN_Price (3,2)	3	2	-7.649761	-7.606095	-7.649902	-7.633379
TGARCH Skewed T-Student TAN_Price (2,4)	2	4	-7.649735	-7.606069	-7.649876	-7.633353
TGARCH Skewed T-Student TAN_Price (1,5)	1	5	-7.643505	-7.603808	-7.643621	-7.628612
TGARCH Skewed T-Student TAN_Price (2,5)	2	5	-7.648121	-7.600485	-7.648288	-7.63025
TGARCH Skewed T-Student TAN_Price (3,3)	3	3	-7.647994	-7.600358	-7.648161	-7.630123
TGARCH Skewed T-Student TAN_Price (3,0)	3	0	-7.635533	-7.599806	-7.635627	-7.622129
TGARCH Skewed T-Student TAN_Price (4,1)	4	1	-7.643002	-7.595367	-7.64317	-7.625131
TGARCH Skewed T-Student TAN_Price (4,2)	4	2	-7.64686	-7.595255	-7.647057	-7.6275
TGARCH Skewed T-Student TAN_Price (3,4)	3	4	-7.646665	-7.59506	-7.646861	-7.627305
TGARCH Skewed T-Student TAN_Price (2,0)	2	0	-7.620023	-7.592236	-7.620081	-7.609599
TGARCH Skewed T-Student TAN_Price (4,0)	4	0	-7.634104	-7.590438	-7.634245	-7.617722
TGARCH Skewed T-Student TAN_Price (5,1)	5	1	-7.645459	-7.589885	-7.645687	-7.62461
TGARCH Skewed T-Student TAN_Price (4,3)	4	3	-7.645085	-7.58951	-7.645312	-7.624235
TGARCH Skewed T-Student TAN_Price (3,5)	3	5	-7.645051	-7.589476	-7.645279	-7.624202
TGARCH Skewed T-Student TAN_Price (5,2)	5	2	-7.645044	-7.5855	-7.645305	-7.622706
TGARCH Skewed T-Student TAN_Price (5,0)	5	0	-7.635403	-7.583798	-7.635599	-7.616042
TGARCH Skewed T-Student TAN_Price (4,4)	4	4	-7.641669	-7.582125	-7.641931	-7.619331
TGARCH Skewed T-Student TAN_Price (5,3)	5	3	-7.643509	-7.579995	-7.643806	-7.619681
TGARCH Skewed T-Student TAN_Price (4,5)	4	5	-7.642256	-7.578742	-7.642552	-7.618428
TGARCH Skewed T-Student TAN_Price (5,4)	5	4	-7.642001	-7.574517	-7.642336	-7.616684
TGARCH Skewed T-Student TAN_Price (1,0)	1	0	-7.592538	-7.57269	-7.592568	-7.585092
TGARCH Skewed T-Student TAN_Price (5,5)	5	5	-7.640479	-7.569025	-7.640854	-7.613672
TGARCH Skewed T-Student TAN_Price (0,1)	0	1	-7.505321	-7.489443	-7.50534	-7.499364
TGARCH Skewed T-Student TAN_Price (0,2)	0	2	-7.504465	-7.484617	-7.504494	-7.497019
TGARCH Skewed T-Student TAN_Price (0,3)	0	3	-7.502303	-7.478485	-7.502345	-7.493368
TGARCH Skewed T-Student TAN_Price (0,4)	0	4	-7.500653	-7.472866	-7.500711	-7.490229
TGARCH Skewed T-Student TAN_Price (0,5)	0	5	-7.48692	-7.455163	-7.486994	-7.475006

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm TAN_Price (1,2)	1	2	-7.536118	-7.51627	-7.536147	-7.528672
EGARCH Norm TAN_Price (1,3)	1	3	-7.535594	-7.511776	-7.535636	-7.526658
EGARCH Norm TAN_Price (2,1)	2	1	-7.535323	-7.511505	-7.535365	-7.526388
EGARCH Norm TAN_Price (1,1)	1	1	-7.525668	-7.50979	-7.525687	-7.519711
EGARCH Norm TAN_Price (1,4)	1	4	-7.535688	-7.507901	-7.535746	-7.525264
EGARCH Norm TAN_Price (2,2)	2	2	-7.534033	-7.506246	-7.53409	-7.523608
EGARCH Norm TAN_Price (1,5)	1	5	-7.537801	-7.506044	-7.537876	-7.525887
EGARCH Norm TAN_Price (3,1)	3	1	-7.53583	-7.504073	-7.535905	-7.523916
EGARCH Norm TAN_Price (3,3)	3	3	-7.54346	-7.503763	-7.543576	-7.528567
EGARCH Norm TAN_Price (2,3)	2	3	-7.535065	-7.503308	-7.53514	-7.523152
EGARCH Norm TAN_Price (4,1)	4	1	-7.540717	-7.501021	-7.540834	-7.525825
EGARCH Norm TAN_Price (3,2)	3	2	-7.536262	-7.500536	-7.536357	-7.522859
EGARCH Norm TAN_Price (2,4)	2	4	-7.534423	-7.498696	-7.534518	-7.52102
EGARCH Norm TAN_Price (5,5)	5	5	-7.559254	-7.49574	-7.559551	-7.535426
EGARCH Norm TAN_Price (4,2)	4	2	-7.539357	-7.495691	-7.539498	-7.522975
EGARCH Norm TAN_Price (2,5)	2	5	-7.53472	-7.495023	-7.534836	-7.519827
EGARCH Norm TAN_Price (5,4)	5	4	-7.553485	-7.49394	-7.553746	-7.531146
EGARCH Norm TAN_Price (5,1)	5	1	-7.540994	-7.493358	-7.541161	-7.523123
EGARCH Norm TAN_Price (3,4)	3	4	-7.536783	-7.493117	-7.536924	-7.520401
EGARCH Norm TAN_Price (4,3)	4	3	-7.539268	-7.491632	-7.539435	-7.521397
EGARCH Norm TAN_Price (3,5)	3	5	-7.537003	-7.489367	-7.53717	-7.519132
EGARCH Norm TAN_Price (5,2)	5	2	-7.539509	-7.487904	-7.539706	-7.520149
EGARCH Norm TAN_Price (5,3)	5	3	-7.540961	-7.485386	-7.541189	-7.520111
EGARCH Norm TAN_Price (4,4)	4	4	-7.536179	-7.484574	-7.536376	-7.516819
EGARCH Norm TAN_Price (4,5)	4	5	-7.538415	-7.482841	-7.538643	-7.517566
EGARCH Norm TAN_Price (5,0)	5	0	-7.454114	-7.410448	-7.454255	-7.437732
EGARCH Norm TAN_Price (4,0)	4	0	-7.443412	-7.407685	-7.443506	-7.430009

EGARCH Norm TAN_Price (3,0)	3	0	-7.414971	-7.387184	-7.415028	-7.404546
EGARCH Norm TAN_Price (2,0)	2	0	-7.350057	-7.330209	-7.350086	-7.342611
EGARCH Norm TAN_Price (1,0)	1	0	-7.289271	-7.277362	-7.289281	-7.284803
EGARCH Norm TAN_Price (0,1)	0	1	-7.210825	-7.202886	-7.21083	-7.207847
EGARCH Norm TAN_Price (0,2)	0	2	-7.209291	-7.197382	-7.209302	-7.204824
EGARCH Norm TAN_Price (0,3)	0	3	-7.207758	-7.191879	-7.207776	-7.201801
EGARCH Norm TAN_Price (0,4)	0	4	-7.206224	-7.186376	-7.206253	-7.198778
EGARCH Norm TAN_Price (0,5)	0	5	-7.204692	-7.180874	-7.204734	-7.195756

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm TAN_Price (1,2)	1	2	-7.53631	-7.512492	-7.536352	-7.527375
EGARCH Skewed Norm TAN_Price (3,5)	3	5	-7.561125	-7.50952	-7.561322	-7.541765
EGARCH Skewed Norm TAN_Price (1,3)	1	3	-7.535724	-7.507936	-7.535781	-7.525299
EGARCH Skewed Norm TAN_Price (2,1)	2	1	-7.535603	-7.507816	-7.53566	-7.525178
EGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.526148	-7.5063	-7.526177	-7.518701
EGARCH Skewed Norm TAN_Price (1,4)	1	4	-7.536186	-7.504429	-7.53626	-7.524272
EGARCH Skewed Norm TAN_Price (2,2)	2	2	-7.534162	-7.502405	-7.534236	-7.522248
EGARCH Skewed Norm TAN_Price (1,5)	1	5	-7.537882	-7.502156	-7.537977	-7.524479
EGARCH Skewed Norm TAN_Price (2,3)	2	3	-7.536382	-7.500656	-7.536477	-7.522979
EGARCH Skewed Norm TAN_Price (3,1)	3	1	-7.535968	-7.500241	-7.536062	-7.522565
EGARCH Skewed Norm TAN_Price (3,3)	3	3	-7.543885	-7.500219	-7.544026	-7.527503
EGARCH Skewed Norm TAN_Price (4,1)	4	1	-7.541074	-7.497408	-7.541215	-7.524692
EGARCH Skewed Norm TAN_Price (3,2)	3	2	-7.536493	-7.496797	-7.53661	-7.521601
EGARCH Skewed Norm TAN_Price (3,4)	3	4	-7.542704	-7.495068	-7.542871	-7.524833
EGARCH Skewed Norm TAN_Price (2,4)	2	4	-7.534631	-7.494934	-7.534747	-7.519738
EGARCH Skewed Norm TAN_Price (5,5)	5	5	-7.559622	-7.492139	-7.559957	-7.534305
EGARCH Skewed Norm TAN_Price (4,2)	4	2	-7.539741	-7.492106	-7.539909	-7.52187
EGARCH Skewed Norm TAN_Price (2,5)	2	5	-7.534818	-7.491152	-7.534959	-7.518436

EGARCH Skewed Norm TAN_Price (4,3)	4	3	-7.54157	-7.489965	-7.541766	-7.52221
EGARCH Skewed Norm TAN_Price (5,1)	5	1	-7.54148	-7.489875	-7.541677	-7.52212
EGARCH Skewed Norm TAN_Price (5,4)	5	4	-7.553375	-7.489861	-7.553672	-7.529547
EGARCH Skewed Norm TAN_Price (5,2)	5	2	-7.540262	-7.484687	-7.54049	-7.519413
EGARCH Skewed Norm TAN_Price (5,3)	5	3	-7.541603	-7.482059	-7.541864	-7.519264
EGARCH Skewed Norm TAN_Price (4,4)	4	4	-7.535779	-7.480204	-7.536007	-7.51493
EGARCH Skewed Norm TAN_Price (4,5)	4	5	-7.53796	-7.478415	-7.538221	-7.515621
EGARCH Skewed Norm TAN_Price (5,0)	5	0	-7.45676	-7.409124	-7.456927	-7.438889
EGARCH Skewed Norm TAN_Price (4,0)	4	0	-7.446378	-7.406681	-7.446494	-7.431485
EGARCH Skewed Norm TAN_Price (3,0)	3	0	-7.4182	-7.386443	-7.418275	-7.406286
EGARCH Skewed Norm TAN_Price (2,0)	2	0	-7.353913	-7.330095	-7.353955	-7.344978
EGARCH Skewed Norm TAN_Price (1,0)	1	0	-7.291751	-7.275872	-7.29177	-7.285794
EGARCH Skewed Norm TAN_Price (0,1)	0	1	-7.210724	-7.198815	-7.210735	-7.206256
EGARCH Skewed Norm TAN_Price (0,2)	0	2	-7.20919	-7.193312	-7.209209	-7.203233
EGARCH Skewed Norm TAN_Price (0,3)	0	3	-7.207657	-7.187809	-7.207686	-7.200211
EGARCH Skewed Norm TAN_Price (0,4)	0	4	-7.206121	-7.182303	-7.206163	-7.197185
EGARCH Skewed Norm TAN_Price (0,5)	0	5	-7.204593	-7.176806	-7.20465	-7.194168

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student TAN_Price (1,2)	1	2	-7.655977	-7.632159	-7.656019	-7.647041
EGARCH T-Student TAN_Price (1,1)	1	1	-7.651728	-7.63188	-7.651758	-7.644282
EGARCH T-Student TAN_Price (1,3)	1	3	-7.655963	-7.628176	-7.656021	-7.645539
EGARCH T-Student TAN_Price (2,1)	2	1	-7.653019	-7.625232	-7.653077	-7.642595
EGARCH T-Student TAN_Price (1,4)	1	4	-7.656224	-7.624467	-7.656298	-7.64431
EGARCH T-Student TAN_Price (2,2)	2	2	-7.655492	-7.623735	-7.655566	-7.643578
EGARCH T-Student TAN_Price (2,3)	2	3	-7.656583	-7.620856	-7.656678	-7.64318
EGARCH T-Student TAN_Price (1,5)	1	5	-7.655584	-7.619858	-7.655679	-7.642181
EGARCH T-Student TAN_Price (3,1)	3	1	-7.651206	-7.615479	-7.6513	-7.637802

EGARCH T-Student TAN_Price (3,2)	3	2	-7.654891	-7.615195	-7.655008	-7.639999
EGARCH T-Student TAN_Price (2,4)	2	4	-7.654723	-7.615027	-7.654839	-7.63983
EGARCH T-Student TAN_Price (3,3)	3	3	-7.65781	-7.614144	-7.657951	-7.641429
EGARCH T-Student TAN_Price (2,5)	2	5	-7.654359	-7.610693	-7.6545	-7.637978
EGARCH T-Student TAN_Price (3,4)	3	4	-7.655956	-7.608321	-7.656124	-7.638085
EGARCH T-Student TAN_Price (4,1)	4	1	-7.651781	-7.608115	-7.651922	-7.635399
EGARCH T-Student TAN_Price (3,5)	3	5	-7.655479	-7.603874	-7.655676	-7.636119
EGARCH T-Student TAN_Price (4,3)	4	3	-7.654409	-7.602803	-7.654605	-7.635048
EGARCH T-Student TAN_Price (4,2)	4	2	-7.650417	-7.602782	-7.650585	-7.632546
EGARCH T-Student TAN_Price (5,5)	5	5	-7.668979	-7.601496	-7.669314	-7.643662
EGARCH T-Student TAN_Price (4,5)	4	5	-7.659326	-7.599781	-7.659587	-7.636987
EGARCH T-Student TAN_Price (5,1)	5	1	-7.650376	-7.598771	-7.650573	-7.631016
EGARCH T-Student TAN_Price (4,4)	4	4	-7.653108	-7.597533	-7.653335	-7.632258
EGARCH T-Student TAN_Price (5,2)	5	2	-7.651652	-7.596077	-7.65188	-7.630803
EGARCH T-Student TAN_Price (5,3)	5	3	-7.652765	-7.59322	-7.653026	-7.630426
EGARCH T-Student TAN_Price (5,4)	5	4	-7.651547	-7.588033	-7.651844	-7.627719
EGARCH T-Student TAN_Price (0,1)	0	1	-7.507476	-7.495567	-7.507486	-7.503008
EGARCH T-Student TAN_Price (0,2)	0	2	-7.507691	-7.491813	-7.50771	-7.501734
EGARCH T-Student TAN_Price (0,3)	0	3	-7.508809	-7.48896	-7.508838	-7.501362
EGARCH T-Student TAN_Price (0,5)	0	5	-7.512037	-7.484249	-7.512094	-7.501612
EGARCH T-Student TAN_Price (0,4)	0	4	-7.498113	-7.474295	-7.498155	-7.489177
EGARCH T-Student TAN_Price (5,0)	5	0	-6.776052	-6.728417	-6.77622	-6.758181
EGARCH T-Student TAN_Price (4,0)	4	0	-6.630759	-6.591063	-6.630876	-6.615867
EGARCH T-Student TAN_Price (3,0)	3	0	-6.431163	-6.399406	-6.431238	-6.419249
EGARCH T-Student TAN_Price (2,0)	2	0	-6.057512	-6.033695	-6.057555	-6.048577
EGARCH T-Student TAN_Price (1,0)	1	0	-4.818179	-4.802301	-4.818198	-4.812222

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

EGARCH Skewed T-Student TAN_Price (1,2)	1	2	-7.654678	-7.62689	-7.654735	-7.644253
EGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.650565	-7.626747	-7.650607	-7.641629
EGARCH Skewed T-Student TAN_Price (1,3)	1	3	-7.654681	-7.622924	-7.654756	-7.642767
EGARCH Skewed T-Student TAN_Price (2,1)	2	1	-7.651742	-7.619985	-7.651817	-7.639828
EGARCH Skewed T-Student TAN_Price (1,4)	1	4	-7.655009	-7.619282	-7.655103	-7.641606
EGARCH Skewed T-Student TAN_Price (2,2)	2	2	-7.654311	-7.618584	-7.654405	-7.640907
EGARCH Skewed T-Student TAN_Price (2,3)	2	3	-7.65537	-7.615674	-7.655487	-7.640478
EGARCH Skewed T-Student TAN_Price (1,5)	1	5	-7.654374	-7.614678	-7.654491	-7.639482
EGARCH Skewed T-Student TAN_Price (3,1)	3	1	-7.649933	-7.610237	-7.65005	-7.635041
EGARCH Skewed T-Student TAN_Price (3,2)	3	2	-7.653679	-7.610013	-7.65382	-7.637297
EGARCH Skewed T-Student TAN_Price (2,4)	2	4	-7.653509	-7.609843	-7.65365	-7.637127
EGARCH Skewed T-Student TAN_Price (3,3)	3	3	-7.656581	-7.608946	-7.656749	-7.63871
EGARCH Skewed T-Student TAN_Price (2,5)	2	5	-7.653119	-7.605483	-7.653286	-7.635248
EGARCH Skewed T-Student TAN_Price (3,4)	3	4	-7.654743	-7.603138	-7.654939	-7.635383
EGARCH Skewed T-Student TAN_Price (4,1)	4	1	-7.650574	-7.602939	-7.650742	-7.632703
EGARCH Skewed T-Student TAN_Price (3,5)	3	5	-7.654282	-7.598707	-7.654509	-7.633432
EGARCH Skewed T-Student TAN_Price (4,3)	4	3	-7.653201	-7.597627	-7.653429	-7.632352
EGARCH Skewed T-Student TAN_Price (4,2)	4	2	-7.649219	-7.597614	-7.649416	-7.629859
EGARCH Skewed T-Student TAN_Price (5,5)	5	5	-7.668232	-7.596779	-7.668607	-7.641426
EGARCH Skewed T-Student TAN_Price (4,5)	4	5	-7.658242	-7.594728	-7.658539	-7.634414
EGARCH Skewed T-Student TAN_Price (5,1)	5	1	-7.6492	-7.593625	-7.649428	-7.628351
EGARCH Skewed T-Student TAN_Price (4,4)	4	4	-7.651889	-7.592344	-7.65215	-7.62955
EGARCH Skewed T-Student TAN_Price (5,2)	5	2	-7.650449	-7.590905	-7.65071	-7.628111
EGARCH Skewed T-Student TAN_Price (5,3)	5	3	-7.651576	-7.588062	-7.651873	-7.627748
EGARCH Skewed T-Student TAN_Price (5,4)	5	4	-7.650355	-7.582872	-7.65069	-7.625038
EGARCH Skewed T-Student TAN_Price (3,0)	3	0	-7.618154	-7.582427	-7.618248	-7.604751
EGARCH Skewed T-Student TAN_Price (5,0)	5	0	-7.629088	-7.577482	-7.629284	-7.609727
EGARCH Skewed T-Student TAN_Price (2,0)	2	0	-7.59709	-7.569303	-7.597148	-7.586666

EGARCH Skewed T-Student TAN_Price (0,1)	0	1	-7.50615	-7.490271	-7.506168	-7.500193
EGARCH Skewed T-Student TAN_Price (0,3)	0	3	-7.513599	-7.489781	-7.513641	-7.504664
EGARCH Skewed T-Student TAN_Price (0,2)	0	2	-7.506344	-7.486496	-7.506374	-7.498898
EGARCH Skewed T-Student TAN_Price (0,4)	0	4	-7.50493	-7.477143	-7.504987	-7.494505
EGARCH Skewed T-Student TAN_Price (4,0)	4	0	-6.715588	-6.671922	-6.715729	-6.699206
EGARCH Skewed T-Student TAN_Price (1,0)	1	0	-4.099291	-4.079443	-4.09932	-4.091844
EGARCH Skewed T-Student TAN_Price (0,5)	0	5	9.601847	9.633604	9.601773	9.613761

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm TAN_Price (1,2)	1	2	-7.541301	-7.521453	-7.54133	-7.533855
NAGARCH Norm TAN_Price (1,1)	1	1	-7.536674	-7.520795	-7.536693	-7.530717
NAGARCH Norm TAN_Price (1,3)	1	3	-7.54151	-7.517692	-7.541552	-7.532575
NAGARCH Norm TAN_Price (1,5)	1	5	-7.545423	-7.513666	-7.545498	-7.53351
NAGARCH Norm TAN_Price (1,4)	1	4	-7.541326	-7.513539	-7.541383	-7.530901
NAGARCH Norm TAN_Price (2,2)	2	2	-7.53823	-7.510443	-7.538288	-7.527806
NAGARCH Norm TAN_Price (2,1)	2	1	-7.533922	-7.510104	-7.533964	-7.524987
NAGARCH Norm TAN_Price (2,4)	2	4	-7.542655	-7.506928	-7.542749	-7.529251
NAGARCH Norm TAN_Price (2,3)	2	3	-7.538441	-7.506684	-7.538516	-7.526527
NAGARCH Norm TAN_Price (2,5)	2	5	-7.544162	-7.504466	-7.544279	-7.52927
NAGARCH Norm TAN_Price (3,1)	3	1	-7.536149	-7.504392	-7.536224	-7.524235
NAGARCH Norm TAN_Price (4,1)	4	1	-7.539748	-7.500051	-7.539864	-7.524855
NAGARCH Norm TAN_Price (3,2)	3	2	-7.535713	-7.499986	-7.535807	-7.52231
NAGARCH Norm TAN_Price (3,3)	3	3	-7.535388	-7.495691	-7.535504	-7.520495
NAGARCH Norm TAN_Price (3,5)	3	5	-7.540852	-7.493216	-7.54102	-7.522981
NAGARCH Norm TAN_Price (3,4)	3	4	-7.535128	-7.491463	-7.535269	-7.518747
NAGARCH Norm TAN_Price (4,3)	4	3	-7.538652	-7.491016	-7.538819	-7.520781
NAGARCH Norm TAN_Price (5,0)	5	0	-7.532818	-7.489152	-7.532959	-7.516436
NAGARCH Norm TAN_Price (4,2)	4	2	-7.532816	-7.48915	-7.532956	-7.516434

NAGARCH Norm TAN_Price (4,4)	4	4	-7.537335	-7.48573	-7.537532	-7.517975
NAGARCH Norm TAN_Price (4,5)	4	5	-7.539884	-7.484309	-7.540112	-7.519034
NAGARCH Norm TAN_Price (5,3)	5	3	-7.539292	-7.483718	-7.53952	-7.518443
NAGARCH Norm TAN_Price (5,4)	5	4	-7.53878	-7.479235	-7.539041	-7.516441
NAGARCH Norm TAN_Price (5,2)	5	2	-7.530631	-7.479026	-7.530828	-7.511271
NAGARCH Norm TAN_Price (5,1)	5	1	-7.525973	-7.478338	-7.526141	-7.508103
NAGARCH Norm TAN_Price (5,5)	5	5	-7.533694	-7.47018	-7.53399	-7.509866
NAGARCH Norm TAN_Price (2,0)	2	0	-7.480607	-7.460759	-7.480636	-7.473161
NAGARCH Norm TAN_Price (4,0)	4	0	-7.491801	-7.456074	-7.491895	-7.478397
NAGARCH Norm TAN_Price (3,0)	3	0	-7.477939	-7.450152	-7.477996	-7.467514
NAGARCH Norm TAN_Price (1,0)	1	0	-7.311847	-7.299938	-7.311858	-7.307379
NAGARCH Norm TAN_Price (0,1)	0	1	-7.211886	-7.203947	-7.211891	-7.208908
NAGARCH Norm TAN_Price (0,2)	0	2	-7.210263	-7.198354	-7.210274	-7.205795
NAGARCH Norm TAN_Price (0,3)	0	3	-7.20893	-7.193052	-7.208949	-7.202973
NAGARCH Norm TAN_Price (0,4)	0	4	-7.207316	-7.187468	-7.207345	-7.19987
NAGARCH Norm TAN_Price (0,5)	0	5	-7.205894	-7.182076	-7.205936	-7.196959

NAGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm TAN_Price (1,2)	1	2	-7.54072	-7.516903	-7.540762	-7.531785
NAGARCH Skewed Norm TAN_Price (1,1)	1	1	-7.53597	-7.516122	-7.535999	-7.528523
NAGARCH Skewed Norm TAN_Price (1,3)	1	3	-7.540986	-7.513199	-7.541043	-7.530561
NAGARCH Skewed Norm TAN_Price (1,5)	1	5	-7.545009	-7.509283	-7.545104	-7.531606
NAGARCH Skewed Norm TAN_Price (1,4)	1	4	-7.540846	-7.509089	-7.540921	-7.528932
NAGARCH Skewed Norm TAN_Price (2,2)	2	2	-7.537649	-7.505892	-7.537724	-7.525735
NAGARCH Skewed Norm TAN_Price (2,1)	2	1	-7.533178	-7.50539	-7.533235	-7.522753
NAGARCH Skewed Norm TAN_Price (2,4)	2	4	-7.542132	-7.502435	-7.542248	-7.527239
NAGARCH Skewed Norm TAN_Price (2,3)	2	3	-7.537916	-7.502189	-7.53801	-7.524512
NAGARCH Skewed Norm TAN_Price (2,5)	2	5	-7.54348	-7.499815	-7.543621	-7.527099

NAGARCH Skewed Norm TAN_Price (3,1)	3	1	-7.534361	-7.498634	-7.534455	-7.520958
NAGARCH Skewed Norm TAN_Price (3,2)	3	2	-7.535977	-7.49628	-7.536093	-7.521084
NAGARCH Skewed Norm TAN_Price (4,1)	4	1	-7.538898	-7.495232	-7.539039	-7.522516
NAGARCH Skewed Norm TAN_Price (4,2)	4	2	-7.539452	-7.491817	-7.53962	-7.521581
NAGARCH Skewed Norm TAN_Price (3,3)	3	3	-7.534858	-7.491192	-7.534999	-7.518476
NAGARCH Skewed Norm TAN_Price (5,1)	5	1	-7.540945	-7.48934	-7.541142	-7.521585
NAGARCH Skewed Norm TAN_Price (4,0)	4	0	-7.528777	-7.489081	-7.528893	-7.513884
NAGARCH Skewed Norm TAN_Price (3,5)	3	5	-7.539957	-7.488352	-7.540153	-7.520597
NAGARCH Skewed Norm TAN_Price (3,4)	3	4	-7.534306	-7.48667	-7.534473	-7.516435
NAGARCH Skewed Norm TAN_Price (4,3)	4	3	-7.53635	-7.484744	-7.536546	-7.516989
NAGARCH Skewed Norm TAN_Price (5,2)	5	2	-7.537777	-7.482203	-7.538005	-7.516928
NAGARCH Skewed Norm TAN_Price (4,4)	4	4	-7.536486	-7.480911	-7.536714	-7.515636
NAGARCH Skewed Norm TAN_Price (5,3)	5	3	-7.540047	-7.480503	-7.540308	-7.517708
NAGARCH Skewed Norm TAN_Price (4,5)	4	5	-7.537924	-7.47838	-7.538186	-7.515586
NAGARCH Skewed Norm TAN_Price (5,4)	5	4	-7.534977	-7.471463	-7.535274	-7.511149
NAGARCH Skewed Norm TAN_Price (5,5)	5	5	-7.536523	-7.469039	-7.536858	-7.511206
NAGARCH Skewed Norm TAN_Price (5,0)	5	0	-7.51631	-7.468674	-7.516477	-7.498439
NAGARCH Skewed Norm TAN_Price (3,0)	3	0	-7.476071	-7.444314	-7.476146	-7.464157
NAGARCH Skewed Norm TAN_Price (2,0)	2	0	-7.442236	-7.418419	-7.442278	-7.433301
NAGARCH Skewed Norm TAN_Price (0,1)	0	1	-7.211894	-7.199985	-7.211904	-7.207426
NAGARCH Skewed Norm TAN_Price (1,0)	1	0	-7.211322	-7.195444	-7.211341	-7.205365
NAGARCH Skewed Norm TAN_Price (0,2)	0	2	-7.209567	-7.193689	-7.209586	-7.20361
NAGARCH Skewed Norm TAN_Price (0,3)	0	3	-7.208191	-7.188342	-7.20822	-7.200744
NAGARCH Skewed Norm TAN_Price (0,4)	0	4	-7.207063	-7.183245	-7.207105	-7.198127
NAGARCH Skewed Norm TAN_Price (0,5)	0	5	-7.205532	-7.177745	-7.20559	-7.195108

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student TAN_Price (1,1)	1	1	-7.651932	-7.632083	-7.651961	-7.644485

NAGARCH T-Student TAN_Price (1,2)	1	2	-7.653455	-7.629637	-7.653497	-7.644519
NAGARCH T-Student TAN_Price (1,3)	1	3	-7.652304	-7.624516	-7.652361	-7.641879
NAGARCH T-Student TAN_Price (2,1)	2	1	-7.651361	-7.623573	-7.651418	-7.640936
NAGARCH T-Student TAN_Price (1,4)	1	4	-7.6511	-7.619343	-7.651175	-7.639186
NAGARCH T-Student TAN_Price (1,5)	1	5	-7.650846	-7.615119	-7.65094	-7.637443
NAGARCH T-Student TAN_Price (2,3)	2	3	-7.649234	-7.613507	-7.649329	-7.635831
NAGARCH T-Student TAN_Price (3,1)	3	1	-7.648704	-7.612977	-7.648798	-7.635301
NAGARCH T-Student TAN_Price (3,0)	3	0	-7.64397	-7.612213	-7.644045	-7.632056
NAGARCH T-Student TAN_Price (2,4)	2	4	-7.648031	-7.608334	-7.648147	-7.633138
NAGARCH T-Student TAN_Price (3,2)	3	2	-7.647741	-7.608045	-7.647858	-7.632849
NAGARCH T-Student TAN_Price (2,5)	2	5	-7.647776	-7.60411	-7.647917	-7.631394
NAGARCH T-Student TAN_Price (4,1)	4	1	-7.642729	-7.599063	-7.64287	-7.626348
NAGARCH T-Student TAN_Price (2,0)	2	0	-7.621896	-7.598078	-7.621938	-7.61296
NAGARCH T-Student TAN_Price (3,3)	3	3	-7.641558	-7.597892	-7.641699	-7.625177
NAGARCH T-Student TAN_Price (4,2)	4	2	-7.64424	-7.596604	-7.644407	-7.626369
NAGARCH T-Student TAN_Price (3,5)	3	5	-7.644704	-7.593099	-7.6449	-7.625344
NAGARCH T-Student TAN_Price (5,0)	5	0	-7.639449	-7.591814	-7.639617	-7.621578
NAGARCH T-Student TAN_Price (4,3)	4	3	-7.643168	-7.591563	-7.643365	-7.623808
NAGARCH T-Student TAN_Price (4,4)	4	4	-7.642213	-7.586638	-7.64244	-7.621363
NAGARCH T-Student TAN_Price (5,1)	5	1	-7.637973	-7.586368	-7.638169	-7.618613
NAGARCH T-Student TAN_Price (4,5)	4	5	-7.64252	-7.582975	-7.642781	-7.620181
NAGARCH T-Student TAN_Price (5,2)	5	2	-7.638476	-7.582901	-7.638704	-7.617627
NAGARCH T-Student TAN_Price (5,3)	5	3	-7.638215	-7.57867	-7.638476	-7.615876
NAGARCH T-Student TAN_Price (5,4)	5	4	-7.638333	-7.574819	-7.63863	-7.614505
NAGARCH T-Student TAN_Price (1,0)	1	0	-7.590477	-7.574598	-7.590495	-7.58452
NAGARCH T-Student TAN_Price (5,5)	5	5	-7.633642	-7.566158	-7.633977	-7.608325
NAGARCH T-Student TAN_Price (4,0)	4	0	-7.589787	-7.55009	-7.589903	-7.574894
NAGARCH T-Student TAN_Price (3,4)	3	4	-7.59494	-7.547305	-7.595108	-7.577069

NAGARCH T-Student TAN_Price (0,1)	0	1	-7.500552	-7.488643	-7.500563	-7.496084
NAGARCH T-Student TAN_Price (0,2)	0	2	-7.498763	-7.482885	-7.498782	-7.492806
NAGARCH T-Student TAN_Price (0,3)	0	3	-7.496968	-7.47712	-7.496997	-7.489521
NAGARCH T-Student TAN_Price (0,4)	0	4	-7.495483	-7.471665	-7.495525	-7.486548
NAGARCH T-Student TAN_Price (0,5)	0	5	-7.493721	-7.465934	-7.493778	-7.483296

<i>NAGARCH Skewed T-Student</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student TAN_Price (1,1)	1	1	-7.650773	-7.626955	-7.650815	-7.641837
NAGARCH Skewed T-Student TAN_Price (1,2)	1	2	-7.652279	-7.624491	-7.652336	-7.641854
NAGARCH Skewed T-Student TAN_Price (1,3)	1	3	-7.651122	-7.619365	-7.651197	-7.639208
NAGARCH Skewed T-Student TAN_Price (2,1)	2	1	-7.647652	-7.615895	-7.647727	-7.635738
NAGARCH Skewed T-Student TAN_Price (1,4)	1	4	-7.649917	-7.614191	-7.650012	-7.636514
NAGARCH Skewed T-Student TAN_Price (2,2)	2	2	-7.649209	-7.613482	-7.649303	-7.635806
NAGARCH Skewed T-Student TAN_Price (1,5)	1	5	-7.649665	-7.609968	-7.649781	-7.634772
NAGARCH Skewed T-Student TAN_Price (2,3)	2	3	-7.648052	-7.608356	-7.648169	-7.63316
NAGARCH Skewed T-Student TAN_Price (3,2)	3	2	-7.647013	-7.603347	-7.647154	-7.630631
NAGARCH Skewed T-Student TAN_Price (2,4)	2	4	-7.646875	-7.603209	-7.647016	-7.630494
NAGARCH Skewed T-Student TAN_Price (3,1)	3	1	-7.641404	-7.601707	-7.64152	-7.626511
NAGARCH Skewed T-Student TAN_Price (2,5)	2	5	-7.646095	-7.59846	-7.646263	-7.628224
NAGARCH Skewed T-Student TAN_Price (4,0)	4	0	-7.641786	-7.59812	-7.641927	-7.625404
NAGARCH Skewed T-Student TAN_Price (3,3)	3	3	-7.644982	-7.597347	-7.64515	-7.627111
NAGARCH Skewed T-Student TAN_Price (4,1)	4	1	-7.642753	-7.595118	-7.642921	-7.624882
NAGARCH Skewed T-Student TAN_Price (2,0)	2	0	-7.620726	-7.592939	-7.620783	-7.610301
NAGARCH Skewed T-Student TAN_Price (3,4)	3	4	-7.643778	-7.592172	-7.643974	-7.624417
NAGARCH Skewed T-Student TAN_Price (4,2)	4	2	-7.64353	-7.591925	-7.643727	-7.62417
NAGARCH Skewed T-Student TAN_Price (3,5)	3	5	-7.643525	-7.58795	-7.643752	-7.622675
NAGARCH Skewed T-Student TAN_Price (4,3)	4	3	-7.642516	-7.586942	-7.642744	-7.621667

NAGARCH Skewed T-Student TAN_Price (5,2)	5	2	-7.644073	-7.584528	-7.644334	-7.621734
NAGARCH Skewed T-Student TAN_Price (4,4)	4	4	-7.641028	-7.581484	-7.641289	-7.61869
NAGARCH Skewed T-Student TAN_Price (5,3)	5	3	-7.643529	-7.580015	-7.643825	-7.619701
NAGARCH Skewed T-Student TAN_Price (4,5)	4	5	-7.641441	-7.577927	-7.641738	-7.617613
NAGARCH Skewed T-Student TAN_Price (5,4)	5	4	-7.637003	-7.569519	-7.637337	-7.611685
NAGARCH Skewed T-Student TAN_Price (5,5)	5	5	-7.637924	-7.566471	-7.638299	-7.611117
NAGARCH Skewed T-Student TAN_Price (3,0)	3	0	-7.588822	-7.553095	-7.588916	-7.575418
NAGARCH Skewed T-Student TAN_Price (5,0)	5	0	-7.59333	-7.541724	-7.593526	-7.573969
NAGARCH Skewed T-Student TAN_Price (0,1)	0	1	-7.506093	-7.490214	-7.506112	-7.500136
NAGARCH Skewed T-Student TAN_Price (0,2)	0	2	-7.505093	-7.485244	-7.505122	-7.497646
NAGARCH Skewed T-Student TAN_Price (1,0)	1	0	-7.504286	-7.484438	-7.504316	-7.49684
NAGARCH Skewed T-Student TAN_Price (0,3)	0	3	-7.495688	-7.47187	-7.49573	-7.486753
NAGARCH Skewed T-Student TAN_Price (0,4)	0	4	-7.493954	-7.466167	-7.494012	-7.48353
NAGARCH Skewed T-Student TAN_Price (0,5)	0	5	-7.492496	-7.460739	-7.49257	-7.480582

<i>TUN_Price</i>						
<i>SGARCH Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Norm TUN_Price (1,1)	1	1	-7.979287	-7.967378	-7.979298	-7.97482
SGARCH Norm TUN_Price (1,2)	1	2	-7.978249	-7.962371	-7.978268	-7.972292
SGARCH Norm TUN_Price (2,1)	2	1	-7.977889	-7.96201	-7.977908	-7.971932
SGARCH Norm TUN_Price (2,2)	2	2	-7.976717	-7.956869	-7.976746	-7.969271
SGARCH Norm TUN_Price (1,3)	1	3	-7.97652	-7.956672	-7.97655	-7.969074
SGARCH Norm TUN_Price (3,1)	3	1	-7.976318	-7.95647	-7.976347	-7.968872
SGARCH Norm TUN_Price (2,3)	2	3	-7.975191	-7.951374	-7.975234	-7.966256
SGARCH Norm TUN_Price (1,4)	1	4	-7.975137	-7.951319	-7.975179	-7.966201

SGARCH Norm TUN_Price (3,2)	3	2	-7.975009	-7.951191	-7.975051	-7.966073
SGARCH Norm TUN_Price (3,3)	3	3	-7.978812	-7.951024	-7.978869	-7.968387
SGARCH Norm TUN_Price (4,1)	4	1	-7.974765	-7.950947	-7.974807	-7.965829
SGARCH Norm TUN_Price (2,4)	2	4	-7.973606	-7.945819	-7.973663	-7.963181
SGARCH Norm TUN_Price (4,2)	4	2	-7.973555	-7.945768	-7.973612	-7.96313
SGARCH Norm TUN_Price (1,5)	1	5	-7.973483	-7.945695	-7.97354	-7.963058
SGARCH Norm TUN_Price (4,3)	4	3	-7.977302	-7.945545	-7.977377	-7.965388
SGARCH Norm TUN_Price (3,4)	3	4	-7.97729	-7.945533	-7.977365	-7.965376
SGARCH Norm TUN_Price (5,1)	5	1	-7.973162	-7.945374	-7.973219	-7.962737
SGARCH Norm TUN_Price (2,5)	2	5	-7.972022	-7.940265	-7.972096	-7.960108
SGARCH Norm TUN_Price (5,2)	5	2	-7.971965	-7.940208	-7.972039	-7.960051
SGARCH Norm TUN_Price (4,4)	4	4	-7.975767	-7.94004	-7.975861	-7.962364
SGARCH Norm TUN_Price (5,3)	5	3	-7.975662	-7.939935	-7.975757	-7.962259
SGARCH Norm TUN_Price (3,5)	3	5	-7.975633	-7.939906	-7.975727	-7.96223
SGARCH Norm TUN_Price (4,5)	4	5	-7.974127	-7.934431	-7.974244	-7.959235
SGARCH Norm TUN_Price (5,4)	5	4	-7.968952	-7.929256	-7.969068	-7.954059
SGARCH Norm TUN_Price (5,5)	5	5	-7.96797	-7.924304	-7.968111	-7.951588
SGARCH Norm TUN_Price (4,0)	4	0	-7.890441	-7.870593	-7.89047	-7.882995
SGARCH Norm TUN_Price (5,0)	5	0	-7.893592	-7.869774	-7.893634	-7.884656
SGARCH Norm TUN_Price (3,0)	3	0	-7.872937	-7.857058	-7.872955	-7.86698
SGARCH Norm TUN_Price (2,0)	2	0	-7.866601	-7.854692	-7.866612	-7.862133
SGARCH Norm TUN_Price (1,0)	1	0	-7.843609	-7.83567	-7.843614	-7.840631
SGARCH Norm TUN_Price (0,1)	0	1	-7.792788	-7.784849	-7.792793	-7.789809
SGARCH Norm TUN_Price (0,2)	0	2	-7.795368	-7.783459	-7.795379	-7.790901
SGARCH Norm TUN_Price (0,3)	0	3	-7.794419	-7.778541	-7.794438	-7.788462
SGARCH Norm TUN_Price (0,4)	0	4	-7.794203	-7.774355	-7.794232	-7.786757
SGARCH Norm TUN_Price (0,5)	0	5	-7.792963	-7.769145	-7.793005	-7.784028

SGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.978375	-7.962497	-7.978394	-7.972418
SGARCH Skewed Norm TUN_Price (1,2)	1	2	-7.977733	-7.957482	-7.977359	-7.969884
SGARCH Skewed Norm TUN_Price (2,1)	2	1	-7.976962	-7.957114	-7.976991	-7.969516
SGARCH Skewed Norm TUN_Price (2,2)	2	2	-7.975716	-7.951898	-7.975758	-7.96678
SGARCH Skewed Norm TUN_Price (1,3)	1	3	-7.97566	-7.951842	-7.975702	-7.966725
SGARCH Skewed Norm TUN_Price (3,1)	3	1	-7.975302	-7.951484	-7.975344	-7.966367
SGARCH Skewed Norm TUN_Price (2,3)	2	3	-7.974248	-7.94646	-7.974305	-7.963823
SGARCH Skewed Norm TUN_Price (1,4)	1	4	-7.974136	-7.946348	-7.974193	-7.963711
SGARCH Skewed Norm TUN_Price (3,2)	3	2	-7.974045	-7.946258	-7.974102	-7.96362
SGARCH Skewed Norm TUN_Price (3,3)	3	3	-7.977855	-7.946098	-7.97793	-7.965941
SGARCH Skewed Norm TUN_Price (4,1)	4	1	-7.973823	-7.946036	-7.973881	-7.963398
SGARCH Skewed Norm TUN_Price (4,2)	4	2	-7.97263	-7.940873	-7.972705	-7.960716
SGARCH Skewed Norm TUN_Price (2,4)	2	4	-7.972588	-7.940831	-7.972663	-7.960674
SGARCH Skewed Norm TUN_Price (1,5)	1	5	-7.972484	-7.940727	-7.972559	-7.96057
SGARCH Skewed Norm TUN_Price (4,3)	4	3	-7.976345	-7.940618	-7.976439	-7.962941
SGARCH Skewed Norm TUN_Price (3,4)	3	4	-7.976303	-7.940576	-7.976397	-7.9629
SGARCH Skewed Norm TUN_Price (5,1)	5	1	-7.972247	-7.94049	-7.972322	-7.960333
SGARCH Skewed Norm TUN_Price (2,5)	2	5	-7.971074	-7.935347	-7.971168	-7.95767
SGARCH Skewed Norm TUN_Price (5,2)	5	2	-7.971035	-7.935308	-7.971129	-7.957632
SGARCH Skewed Norm TUN_Price (4,4)	4	4	-7.97481	-7.935114	-7.974927	-7.959918
SGARCH Skewed Norm TUN_Price (5,3)	5	3	-7.974701	-7.935005	-7.974818	-7.959809
SGARCH Skewed Norm TUN_Price (3,5)	3	5	-7.974668	-7.934972	-7.974785	-7.959776
SGARCH Skewed Norm TUN_Price (4,5)	4	5	-7.973166	-7.9295	-7.973307	-7.956784
SGARCH Skewed Norm TUN_Price (5,4)	5	4	-7.973166	-7.9295	-7.973307	-7.956784
SGARCH Skewed Norm TUN_Price (5,5)	5	5	-7.967037	-7.919401	-7.967204	-7.949166
SGARCH Skewed Norm TUN_Price (4,0)	4	0	-7.890141	-7.866323	-7.890183	-7.881206
SGARCH Skewed Norm TUN_Price (5,0)	5	0	-7.892974	-7.865187	-7.893032	-7.88255

SGARCH Skewed Norm TUN_Price (3,0)	3	0	-7.871899	-7.852051	-7.871928	-7.864453
SGARCH Skewed Norm TUN_Price (0,2)	0	2	-7.793942	-7.778063	-7.79396	-7.787985
SGARCH Skewed Norm TUN_Price (0,1)	0	1	-7.787825	-7.775917	-7.787836	-7.783358
SGARCH Skewed Norm TUN_Price (0,4)	0	4	-7.793922	-7.770104	-7.793964	-7.784987
SGARCH Skewed Norm TUN_Price (0,3)	0	3	-7.786571	-7.766722	-7.7866	-7.779124
SGARCH Skewed Norm TUN_Price (0,5)	0	5	-7.79221	-7.764422	-7.792267	-7.781785
SGARCH Skewed Norm TUN_Price (1,0)	1	0	34.226709	34.238618	34.226699	34.231177

SGARCH T-Student						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH T-Student TUN_Price (1,1)	1	1	-7.988539	-7.97266	-7.988558	-7.982582
SGARCH T-Student TUN_Price (1,2)	1	2	-7.987652	-7.967804	-7.987681	-7.980206
SGARCH T-Student TUN_Price (2,1)	2	1	-7.98709	-7.967241	-7.987119	-7.979643
SGARCH T-Student TUN_Price (1,3)	1	3	-7.987432	-7.963614	-7.987474	-7.978496
SGARCH T-Student TUN_Price (2,2)	2	2	-7.986098	-7.962281	-7.986141	-7.977163
SGARCH T-Student TUN_Price (3,1)	3	1	-7.985511	-7.961693	-7.985553	-7.976575
SGARCH T-Student TUN_Price (2,3)	2	3	-7.986867	-7.95908	-7.986924	-7.976442
SGARCH T-Student TUN_Price (1,4)	1	4	-7.984802	-7.957015	-7.98486	-7.974378
SGARCH T-Student TUN_Price (3,2)	3	2	-7.984512	-7.956725	-7.984569	-7.974087
SGARCH T-Student TUN_Price (4,1)	4	1	-7.984016	-7.956229	-7.984074	-7.973592
SGARCH T-Student TUN_Price (3,3)	3	3	-7.987146	-7.955389	-7.987221	-7.975232
SGARCH T-Student TUN_Price (2,4)	2	4	-7.98533	-7.953573	-7.985404	-7.973416
SGARCH T-Student TUN_Price (1,5)	1	5	-7.983441	-7.951684	-7.983516	-7.971527
SGARCH T-Student TUN_Price (4,2)	4	2	-7.982977	-7.95122	-7.983052	-7.971063
SGARCH T-Student TUN_Price (5,1)	5	1	-7.982424	-7.950667	-7.982499	-7.97051
SGARCH T-Student TUN_Price (3,4)	3	4	-7.985579	-7.949852	-7.985674	-7.972176
SGARCH T-Student TUN_Price (4,3)	4	3	-7.985572	-7.949845	-7.985666	-7.972169
SGARCH T-Student TUN_Price (2,5)	2	5	-7.981974	-7.946247	-7.982068	-7.968571

SGARCH T-Student TUN_Price (5,2)	5	2	-7.981415	-7.945688	-7.981509	-7.968012
SGARCH T-Student TUN_Price (4,4)	4	4	-7.984044	-7.944348	-7.984161	-7.969152
SGARCH T-Student TUN_Price (5,3)	5	3	-7.983952	-7.944256	-7.984069	-7.96906
SGARCH T-Student TUN_Price (3,5)	3	5	-7.980532	-7.940836	-7.980649	-7.96564
SGARCH T-Student TUN_Price (5,4)	5	4	-7.982417	-7.938752	-7.982558	-7.966036
SGARCH T-Student TUN_Price (4,5)	4	5	-7.980134	-7.936468	-7.980275	-7.963752
SGARCH T-Student TUN_Price (5,5)	5	5	-7.978807	-7.931172	-7.978975	-7.960936
SGARCH T-Student TUN_Price (4,0)	4	0	-7.929074	-7.905256	-7.929116	-7.920138
SGARCH T-Student TUN_Price (5,0)	5	0	-7.929301	-7.901513	-7.929358	-7.918876
SGARCH T-Student TUN_Price (3,0)	3	0	-7.917927	-7.898079	-7.917956	-7.91048
SGARCH T-Student TUN_Price (2,0)	2	0	-7.912841	-7.896962	-7.91286	-7.906884
SGARCH T-Student TUN_Price (1,0)	1	0	-7.894759	-7.88285	-7.894769	-7.890291
SGARCH T-Student TUN_Price (0,1)	0	1	-7.857829	-7.84592	-7.85784	-7.853362
SGARCH T-Student TUN_Price (0,2)	0	2	-7.860024	-7.844146	-7.860043	-7.854067
SGARCH T-Student TUN_Price (0,3)	0	3	-7.858676	-7.838828	-7.858705	-7.851229
SGARCH T-Student TUN_Price (0,4)	0	4	-7.857822	-7.834004	-7.857864	-7.848886
SGARCH T-Student TUN_Price (0,5)	0	5	-7.856802	-7.829014	-7.856859	-7.846377

SGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
SGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.987873	-7.968025	-7.987902	-7.980427
SGARCH Skewed T-Student TUN_Price (1,2)	1	2	-7.986977	-7.963159	-7.987019	-7.978041
SGARCH Skewed T-Student TUN_Price (2,1)	2	1	-7.986427	-7.962609	-7.986469	-7.977491
SGARCH Skewed T-Student TUN_Price (1,3)	1	3	-7.986907	-7.95912	-7.986965	-7.976483
SGARCH Skewed T-Student TUN_Price (2,2)	2	2	-7.985433	-7.957645	-7.98549	-7.975008
SGARCH Skewed T-Student TUN_Price (3,1)	3	1	-7.984801	-7.957014	-7.984859	-7.974376
SGARCH Skewed T-Student TUN_Price (2,3)	2	3	-7.986342	-7.954585	-7.986416	-7.974428
SGARCH Skewed T-Student TUN_Price (1,4)	1	4	-7.985374	-7.953617	-7.985449	-7.97346
SGARCH Skewed T-Student TUN_Price (3,2)	3	2	-7.983802	-7.952045	-7.983877	-7.971888

SGARCH Skewed T-Student TUN_Price (4,1)	4	1	-7.983179	-7.951422	-7.983253	-7.971265
SGARCH Skewed T-Student TUN_Price (3,3)	3	3	-7.986544	-7.950817	-7.986638	-7.97314
SGARCH Skewed T-Student TUN_Price (2,4)	2	4	-7.984829	-7.949102	-7.984923	-7.971425
SGARCH Skewed T-Student TUN_Price (1,5)	1	5	-7.982739	-7.947012	-7.982834	-7.969336
SGARCH Skewed T-Student TUN_Price (4,2)	4	2	-7.982303	-7.946576	-7.982397	-7.968899
SGARCH Skewed T-Student TUN_Price (5,1)	5	1	-7.981679	-7.945952	-7.981773	-7.968275
SGARCH Skewed T-Student TUN_Price (4,3)	4	3	-7.984974	-7.945278	-7.985091	-7.970082
SGARCH Skewed T-Student TUN_Price (3,4)	3	4	-7.984973	-7.945276	-7.985089	-7.97008
SGARCH Skewed T-Student TUN_Price (2,5)	2	5	-7.981294	-7.941598	-7.981411	-7.966402
SGARCH Skewed T-Student TUN_Price (5,2)	5	2	-7.980699	-7.941002	-7.980815	-7.965806
SGARCH Skewed T-Student TUN_Price (4,4)	4	4	-7.983438	-7.939772	-7.983579	-7.967056
SGARCH Skewed T-Student TUN_Price (5,3)	5	3	-7.983338	-7.939672	-7.983479	-7.966956
SGARCH Skewed T-Student TUN_Price (3,5)	3	5	-7.979845	-7.936179	-7.979986	-7.963463
SGARCH Skewed T-Student TUN_Price (5,4)	5	4	-7.981803	-7.934168	-7.981971	-7.963932
SGARCH Skewed T-Student TUN_Price (4,5)	4	5	-7.978593	-7.930958	-7.978761	-7.960722
SGARCH Skewed T-Student TUN_Price (5,5)	5	5	-7.977056	-7.92545	-7.977252	-7.957695
SGARCH Skewed T-Student TUN_Price (4,0)	4	0	-7.92849	-7.900703	-7.928548	-7.918066
SGARCH Skewed T-Student TUN_Price (5,0)	5	0	-7.928808	-7.897051	-7.928883	-7.916894
SGARCH Skewed T-Student TUN_Price (3,0)	3	0	-7.916741	-7.892924	-7.916783	-7.907806
SGARCH Skewed T-Student TUN_Price (2,0)	2	0	-7.911752	-7.891904	-7.911781	-7.904306
SGARCH Skewed T-Student TUN_Price (1,0)	1	0	-7.893453	-7.877575	-7.893472	-7.887496
SGARCH Skewed T-Student TUN_Price (0,1)	0	1	-7.85482	-7.838941	-7.854839	-7.848863
SGARCH Skewed T-Student TUN_Price (0,2)	0	2	-7.856729	-7.836881	-7.856759	-7.849283
SGARCH Skewed T-Student TUN_Price (0,3)	0	3	-7.857158	-7.83334	-7.8572	-7.848222
SGARCH Skewed T-Student TUN_Price (0,4)	0	4	-7.857546	-7.829759	-7.857604	-7.847122
SGARCH Skewed T-Student TUN_Price (0,5)	0	5	-7.855726	-7.823969	-7.8558	-7.843812

APARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>

APARCH Norm TUN_Price (1,2)	1	2	-7.973385	-7.949567	-7.973427	-7.964449
APARCH Norm TUN_Price (1,3)	1	3	-7.97515	-7.947363	-7.975208	-7.964726
APARCH Norm TUN_Price (1,1)	1	1	-7.963843	-7.943995	-7.963872	-7.956396
APARCH Norm TUN_Price (1,4)	1	4	-7.972576	-7.940819	-7.972651	-7.960662
APARCH Norm TUN_Price (2,2)	2	2	-7.971353	-7.939596	-7.971428	-7.95944
APARCH Norm TUN_Price (2,3)	2	3	-7.973331	-7.937604	-7.973425	-7.959927
APARCH Norm TUN_Price (1,5)	1	5	-7.971037	-7.93531	-7.971131	-7.957634
APARCH Norm TUN_Price (2,1)	2	1	-7.962961	-7.935173	-7.963018	-7.952536
APARCH Norm TUN_Price (2,4)	2	4	-7.972324	-7.932628	-7.972441	-7.957432
APARCH Norm TUN_Price (2,5)	2	5	-7.972302	-7.928636	-7.972443	-7.95592
APARCH Norm TUN_Price (3,2)	3	2	-7.966459	-7.926763	-7.966576	-7.951567
APARCH Norm TUN_Price (3,3)	3	3	-7.969714	-7.926048	-7.969854	-7.953332
APARCH Norm TUN_Price (3,1)	3	1	-7.957743	-7.922016	-7.957837	-7.944339
APARCH Norm TUN_Price (3,4)	3	4	-7.969122	-7.921487	-7.96929	-7.951251
APARCH Norm TUN_Price (3,5)	3	5	-7.968421	-7.916816	-7.968618	-7.949061
APARCH Norm TUN_Price (4,2)	4	2	-7.964299	-7.916663	-7.964467	-7.946428
APARCH Norm TUN_Price (4,3)	4	3	-7.965944	-7.914339	-7.966141	-7.946584
APARCH Norm TUN_Price (4,4)	4	4	-7.966059	-7.910484	-7.966287	-7.94521
APARCH Norm TUN_Price (4,1)	4	1	-7.953602	-7.909936	-7.953743	-7.937221
APARCH Norm TUN_Price (4,5)	4	5	-7.964742	-7.905198	-7.965003	-7.942404
APARCH Norm TUN_Price (5,2)	5	2	-7.958955	-7.903381	-7.959183	-7.938106
APARCH Norm TUN_Price (5,3)	5	3	-7.962401	-7.902857	-7.962662	-7.940062
APARCH Norm TUN_Price (5,1)	5	1	-7.951244	-7.899639	-7.951441	-7.931884
APARCH Norm TUN_Price (5,4)	5	4	-7.961249	-7.897734	-7.961545	-7.937421
APARCH Norm TUN_Price (5,5)	5	5	-7.959869	-7.892385	-7.960204	-7.934552
APARCH Norm TUN_Price (2,0)	2	0	-7.832736	-7.808918	-7.832778	-7.8238
APARCH Norm TUN_Price (1,0)	1	0	-7.822679	-7.8068	-7.822697	-7.816722
APARCH Norm TUN_Price (3,0)	3	0	-7.835837	-7.80408	-7.835912	-7.823923

APARCH Norm TUN_Price (4,0)	4	0	-7.838716	-7.79902	-7.838833	-7.823824
APARCH Norm TUN_Price (5,0)	5	0	-7.836856	-7.78922	-7.837024	-7.818985
APARCH Norm TUN_Price (0,1)	0	1	-7.783802	-7.771893	-7.783813	-7.779334
APARCH Norm TUN_Price (0,2)	0	2	-7.779226	-7.763348	-7.779245	-7.773269
APARCH Norm TUN_Price (0,3)	0	3	-7.781154	-7.761306	-7.781184	-7.773708
APARCH Norm TUN_Price (0,4)	0	4	-7.777467	-7.75365	-7.777509	-7.768532
APARCH Norm TUN_Price (0,5)	0	5	-7.776121	-7.748333	-7.776178	-7.765696

APARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed Norm TUN_Price (1,2)	1	2	-7.973073	-7.945286	-7.973131	-7.962649
APARCH Skewed Norm TUN_Price (1,3)	1	3	-7.97381	-7.942053	-7.973885	-7.961896
APARCH Skewed Norm TUN_Price (1,1)	1	1	-7.964544	-7.940726	-7.964586	-7.955608
APARCH Skewed Norm TUN_Price (1,4)	1	4	-7.972224	-7.936498	-7.972319	-7.958821
APARCH Skewed Norm TUN_Price (2,2)	2	2	-7.97046	-7.934734	-7.970555	-7.957057
APARCH Skewed Norm TUN_Price (2,3)	2	3	-7.973019	-7.933323	-7.973136	-7.958127
APARCH Skewed Norm TUN_Price (2,1)	2	1	-7.963434	-7.931677	-7.963509	-7.95152
APARCH Skewed Norm TUN_Price (1,5)	1	5	-7.970012	-7.930315	-7.970128	-7.955119
APARCH Skewed Norm TUN_Price (2,4)	2	4	-7.971617	-7.927951	-7.971758	-7.955235
APARCH Skewed Norm TUN_Price (2,5)	2	5	-7.971283	-7.923648	-7.971451	-7.953412
APARCH Skewed Norm TUN_Price (3,2)	3	2	-7.966057	-7.922391	-7.966198	-7.949675
APARCH Skewed Norm TUN_Price (3,3)	3	3	-7.968604	-7.920968	-7.968772	-7.950733
APARCH Skewed Norm TUN_Price (3,1)	3	1	-7.957106	-7.91741	-7.957223	-7.942214
APARCH Skewed Norm TUN_Price (3,4)	3	4	-7.968482	-7.916877	-7.968679	-7.949122
APARCH Skewed Norm TUN_Price (3,5)	3	5	-7.967789	-7.912214	-7.968016	-7.946939
APARCH Skewed Norm TUN_Price (4,2)	4	2	-7.963471	-7.911866	-7.963668	-7.944111
APARCH Skewed Norm TUN_Price (4,3)	4	3	-7.965274	-7.9097	-7.965502	-7.944425
APARCH Skewed Norm TUN_Price (4,4)	4	4	-7.965888	-7.906343	-7.966149	-7.943549
APARCH Skewed Norm TUN_Price (4,1)	4	1	-7.953566	-7.905931	-7.953734	-7.935695

APARCH Skewed Norm TUN_Price (4,5)	4	5	-7.964818	-7.901304	-7.965115	-7.94099
APARCH Skewed Norm TUN_Price (5,2)	5	2	-7.960148	-7.900604	-7.960409	-7.937809
APARCH Skewed Norm TUN_Price (5,3)	5	3	-7.962151	-7.898637	-7.962448	-7.938323
APARCH Skewed Norm TUN_Price (5,1)	5	1	-7.950706	-7.895132	-7.950934	-7.929857
APARCH Skewed Norm TUN_Price (5,4)	5	4	-7.960702	-7.893218	-7.961036	-7.935385
APARCH Skewed Norm TUN_Price (5,5)	5	5	-7.959922	-7.888469	-7.960297	-7.933116
APARCH Skewed Norm TUN_Price (2,0)	2	0	-7.83997	-7.812183	-7.840027	-7.829545
APARCH Skewed Norm TUN_Price (1,0)	1	0	-7.827783	-7.807935	-7.827813	-7.820337
APARCH Skewed Norm TUN_Price (3,0)	3	0	-7.839152	-7.803425	-7.839246	-7.825749
APARCH Skewed Norm TUN_Price (4,0)	4	0	-7.839953	-7.796288	-7.840094	-7.823572
APARCH Skewed Norm TUN_Price (5,0)	5	0	-7.839092	-7.787487	-7.839289	-7.819732
APARCH Skewed Norm TUN_Price (0,1)	0	1	-7.784454	-7.768576	-7.784473	-7.778497
APARCH Skewed Norm TUN_Price (0,2)	0	2	-7.781874	-7.762026	-7.781903	-7.774428
APARCH Skewed Norm TUN_Price (0,3)	0	3	-7.779663	-7.755845	-7.779705	-7.770727
APARCH Skewed Norm TUN_Price (0,4)	0	4	-7.777035	-7.749248	-7.777093	-7.766611
APARCH Skewed Norm TUN_Price (0,5)	0	5	-7.774677	-7.74292	-7.774752	-7.762763

APARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH T-Student TUN_Price (1,1)	1	1	-7.971524	-7.947706	-7.971566	-7.962588
APARCH T-Student TUN_Price (1,2)	1	2	-7.975457	-7.947669	-7.975514	-7.965032
APARCH T-Student TUN_Price (1,3)	1	3	-7.97557	-7.943813	-7.975645	-7.963656
APARCH T-Student TUN_Price (2,1)	2	1	-7.969229	-7.937472	-7.969304	-7.957315
APARCH T-Student TUN_Price (1,5)	1	5	-7.97484	-7.935144	-7.974957	-7.959948
APARCH T-Student TUN_Price (1,4)	1	4	-7.969244	-7.933517	-7.969338	-7.95584
APARCH T-Student TUN_Price (2,3)	2	3	-7.972673	-7.932977	-7.97279	-7.957781
APARCH T-Student TUN_Price (2,2)	2	2	-7.967808	-7.932081	-7.967902	-7.954404
APARCH T-Student TUN_Price (2,4)	2	4	-7.9736	-7.929934	-7.973741	-7.957218
APARCH T-Student TUN_Price (2,5)	2	5	-7.977527	-7.929892	-7.977695	-7.959656

APARCH T-Student TUN_Price (3,2)	3	2	-7.965339	-7.921673	-7.96548	-7.948957
APARCH T-Student TUN_Price (3,1)	3	1	-7.960506	-7.92081	-7.960623	-7.945614
APARCH T-Student TUN_Price (3,3)	3	3	-7.967143	-7.919507	-7.96731	-7.949272
APARCH T-Student TUN_Price (3,4)	3	4	-7.970493	-7.918888	-7.97069	-7.951133
APARCH T-Student TUN_Price (4,2)	4	2	-7.968257	-7.916652	-7.968453	-7.948897
APARCH T-Student TUN_Price (4,3)	4	3	-7.971951	-7.916376	-7.972179	-7.951102
APARCH T-Student TUN_Price (4,1)	4	1	-7.958779	-7.911143	-7.958946	-7.940908
APARCH T-Student TUN_Price (4,4)	4	4	-7.963999	-7.904455	-7.96426	-7.94166
APARCH T-Student TUN_Price (4,5)	4	5	-7.966789	-7.903275	-7.967086	-7.942961
APARCH T-Student TUN_Price (5,4)	5	4	-7.968417	-7.900933	-7.968752	-7.9431
APARCH T-Student TUN_Price (3,5)	3	5	-7.954926	-7.899351	-7.955153	-7.934076
APARCH T-Student TUN_Price (5,2)	5	2	-7.95733	-7.897786	-7.957591	-7.934991
APARCH T-Student TUN_Price (5,1)	5	1	-7.951006	-7.895432	-7.951234	-7.930157
APARCH T-Student TUN_Price (5,3)	5	3	-7.955656	-7.892142	-7.955953	-7.931828
APARCH T-Student TUN_Price (5,5)	5	5	-7.956562	-7.885109	-7.956937	-7.929756
APARCH T-Student TUN_Price (1,0)	1	0	-7.877045	-7.857197	-7.877074	-7.869599
APARCH T-Student TUN_Price (2,0)	2	0	-7.879178	-7.851391	-7.879235	-7.868753
APARCH T-Student TUN_Price (3,0)	3	0	-7.874883	-7.839156	-7.874978	-7.86148
APARCH T-Student TUN_Price (0,1)	0	1	-7.850585	-7.834706	-7.850603	-7.844628
APARCH T-Student TUN_Price (4,0)	4	0	-7.876134	-7.832468	-7.876275	-7.859752
APARCH T-Student TUN_Price (0,2)	0	2	-7.848881	-7.829033	-7.84891	-7.841435
APARCH T-Student TUN_Price (0,3)	0	3	-7.847417	-7.823599	-7.847459	-7.838481
APARCH T-Student TUN_Price (0,4)	0	4	-7.845524	-7.817737	-7.845581	-7.835099
APARCH T-Student TUN_Price (5,0)	5	0	-7.866339	-7.814734	-7.866535	-7.846979
APARCH T-Student TUN_Price (0,5)	0	5	-7.843367	-7.81161	-7.843441	-7.831453

APARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
APARCH Skewed T-Student TUN_Price (1,2)	1	2	-7.983144	-7.951387	-7.983218	-7.97123

APARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.968834	-7.941046	-7.968891	-7.958409
APARCH Skewed T-Student TUN_Price (1,3)	1	3	-7.976339	-7.940612	-7.976433	-7.962935
APARCH Skewed T-Student TUN_Price (1,4)	1	4	-7.978152	-7.938455	-7.978268	-7.963259
APARCH Skewed T-Student TUN_Price (2,4)	2	4	-7.982926	-7.935291	-7.983094	-7.965055
APARCH Skewed T-Student TUN_Price (2,2)	2	2	-7.970611	-7.930914	-7.970727	-7.955718
APARCH Skewed T-Student TUN_Price (2,1)	2	1	-7.966004	-7.930278	-7.966099	-7.952601
APARCH Skewed T-Student TUN_Price (1,5)	1	5	-7.973708	-7.930042	-7.973849	-7.957326
APARCH Skewed T-Student TUN_Price (2,3)	2	3	-7.972612	-7.928946	-7.972753	-7.956231
APARCH Skewed T-Student TUN_Price (2,5)	2	5	-7.975012	-7.923407	-7.975208	-7.955651
APARCH Skewed T-Student TUN_Price (3,3)	3	3	-7.97068	-7.919075	-7.970877	-7.95132
APARCH Skewed T-Student TUN_Price (3,1)	3	1	-7.961662	-7.917996	-7.961803	-7.94528
APARCH Skewed T-Student TUN_Price (3,4)	3	4	-7.973164	-7.917589	-7.973392	-7.952315
APARCH Skewed T-Student TUN_Price (3,2)	3	2	-7.960417	-7.912782	-7.960585	-7.942546
APARCH Skewed T-Student TUN_Price (4,1)	4	1	-7.963039	-7.911434	-7.963235	-7.943679
APARCH Skewed T-Student TUN_Price (3,5)	3	5	-7.9699	-7.910356	-7.970161	-7.947561
APARCH Skewed T-Student TUN_Price (4,2)	4	2	-7.959729	-7.904155	-7.959957	-7.93888
APARCH Skewed T-Student TUN_Price (4,4)	4	4	-7.966337	-7.902823	-7.966633	-7.942509
APARCH Skewed T-Student TUN_Price (4,3)	4	3	-7.961766	-7.902222	-7.962027	-7.939428
APARCH Skewed T-Student TUN_Price (4,5)	4	5	-7.968297	-7.900814	-7.968632	-7.94298
APARCH Skewed T-Student TUN_Price (5,4)	5	4	-7.963964	-7.89251	-7.964338	-7.937157
APARCH Skewed T-Student TUN_Price (5,1)	5	1	-7.950797	-7.891252	-7.951058	-7.928458
APARCH Skewed T-Student TUN_Price (5,2)	5	2	-7.952041	-7.888527	-7.952338	-7.928213
APARCH Skewed T-Student TUN_Price (5,3)	5	3	-7.954206	-7.886722	-7.95454	-7.928888
APARCH Skewed T-Student TUN_Price (5,5)	5	5	-7.960524	-7.885101	-7.960941	-7.932228
APARCH Skewed T-Student TUN_Price (1,0)	1	0	-7.878321	-7.854504	-7.878363	-7.869386
APARCH Skewed T-Student TUN_Price (2,0)	2	0	-7.880687	-7.84893	-7.880762	-7.868773
APARCH Skewed T-Student TUN_Price (3,0)	3	0	-7.877658	-7.837962	-7.877775	-7.862766
APARCH Skewed T-Student TUN_Price (4,0)	4	0	-7.877523	-7.829887	-7.87769	-7.859652

APARCH Skewed T-Student TUN_Price (0,1)	0	1	-7.84931	-7.829462	-7.849339	-7.841864
APARCH Skewed T-Student TUN_Price (0,2)	0	2	-7.847714	-7.823897	-7.847757	-7.838779
APARCH Skewed T-Student TUN_Price (0,3)	0	3	-7.845654	-7.817866	-7.845711	-7.835229
APARCH Skewed T-Student TUN_Price (5,0)	5	0	-7.871649	-7.816074	-7.871876	-7.850799
APARCH Skewed T-Student TUN_Price (0,4)	0	4	-7.843739	-7.811982	-7.843814	-7.831825
APARCH Skewed T-Student TUN_Price (0,5)	0	5	-7.841572	-7.805845	-7.841666	-7.828168

TGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Norm TUN_Price (1,1)	1	1	-7.968784	-7.952906	-7.968803	-7.962827
TGARCH Norm TUN_Price (2,1)	2	1	-7.973029	-7.949212	-7.973072	-7.964094
TGARCH Norm TUN_Price (1,2)	1	2	-7.967341	-7.947493	-7.96737	-7.959895
TGARCH Norm TUN_Price (2,2)	2	2	-7.971494	-7.943707	-7.971552	-7.96107
TGARCH Norm TUN_Price (1,3)	1	3	-7.96715	-7.943332	-7.967192	-7.958215
TGARCH Norm TUN_Price (3,1)	3	1	-7.970133	-7.938375	-7.970207	-7.958219
TGARCH Norm TUN_Price (2,3)	2	3	-7.969795	-7.938038	-7.969869	-7.957881
TGARCH Norm TUN_Price (1,4)	1	4	-7.964396	-7.936608	-7.964453	-7.953971
TGARCH Norm TUN_Price (3,2)	3	2	-7.968782	-7.933055	-7.968876	-7.955379
TGARCH Norm TUN_Price (2,4)	2	4	-7.968213	-7.932486	-7.968307	-7.954809
TGARCH Norm TUN_Price (1,5)	1	5	-7.96302	-7.931263	-7.963094	-7.951106
TGARCH Norm TUN_Price (4,1)	4	1	-7.967376	-7.92768	-7.967493	-7.952484
TGARCH Norm TUN_Price (3,3)	3	3	-7.967246	-7.92755	-7.967363	-7.952354
TGARCH Norm TUN_Price (2,5)	2	5	-7.966608	-7.926911	-7.966724	-7.951715
TGARCH Norm TUN_Price (4,2)	4	2	-7.965806	-7.92214	-7.965946	-7.949424
TGARCH Norm TUN_Price (3,4)	3	4	-7.96562	-7.921954	-7.965761	-7.949239
TGARCH Norm TUN_Price (5,1)	5	1	-7.964311	-7.916675	-7.964478	-7.94644
TGARCH Norm TUN_Price (4,3)	4	3	-7.964303	-7.916668	-7.964471	-7.946432
TGARCH Norm TUN_Price (3,5)	3	5	-7.963994	-7.916358	-7.964161	-7.946123
TGARCH Norm TUN_Price (5,2)	5	2	-7.962802	-7.911197	-7.962999	-7.943442

TGARCH Norm TUN_Price (4,4)	4	4	-7.962763	-7.911158	-7.96296	-7.943403
TGARCH Norm TUN_Price (5,3)	5	3	-7.961261	-7.905687	-7.961489	-7.940412
TGARCH Norm TUN_Price (4,5)	4	5	-7.96106	-7.905485	-7.961287	-7.94021
TGARCH Norm TUN_Price (5,4)	5	4	-7.959732	-7.900188	-7.959993	-7.937394
TGARCH Norm TUN_Price (5,5)	5	5	-7.958194	-7.89468	-7.95849	-7.934366
TGARCH Norm TUN_Price (0,3)	0	3	-7.852542	-7.836664	-7.852561	-7.846585
TGARCH Norm TUN_Price (0,2)	0	2	-7.843922	-7.832014	-7.843933	-7.839455
TGARCH Norm TUN_Price (5,0)	5	0	-7.874979	-7.831313	-7.87512	-7.858597
TGARCH Norm TUN_Price (4,0)	4	0	-7.866443	-7.830716	-7.866537	-7.85304
TGARCH Norm TUN_Price (2,0)	2	0	-7.845988	-7.82614	-7.846018	-7.838542
TGARCH Norm TUN_Price (0,4)	0	4	-7.842919	-7.823071	-7.842948	-7.835473
TGARCH Norm TUN_Price (3,0)	3	0	-7.842868	-7.81508	-7.842925	-7.832443
TGARCH Norm TUN_Price (1,0)	1	0	16.969449	16.981358	16.969439	16.973917
TGARCH Norm TUN_Price (0,1)	0	1	70.613659	70.621599	70.613655	70.616638

<i>TGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.967808	-7.94796	-7.967837	-7.960362
TGARCH Skewed Norm TUN_Price (2,1)	2	1	-7.971932	-7.944144	-7.971989	-7.961507
TGARCH Skewed Norm TUN_Price (1,2)	1	2	-7.966358	-7.94254	-7.9664	-7.957422
TGARCH Skewed Norm TUN_Price (2,2)	2	2	-7.970397	-7.93864	-7.970471	-7.958483
TGARCH Skewed Norm TUN_Price (1,3)	1	3	-7.966168	-7.938381	-7.966226	-7.955744
TGARCH Skewed Norm TUN_Price (3,1)	3	1	-7.96932	-7.933593	-7.969414	-7.955917
TGARCH Skewed Norm TUN_Price (2,3)	2	3	-7.968699	-7.932972	-7.968794	-7.955296
TGARCH Skewed Norm TUN_Price (1,4)	1	4	-7.964301	-7.932544	-7.964376	-7.952387
TGARCH Skewed Norm TUN_Price (3,2)	3	2	-7.967788	-7.928091	-7.967904	-7.952895
TGARCH Skewed Norm TUN_Price (2,4)	2	4	-7.967118	-7.927422	-7.967235	-7.952226
TGARCH Skewed Norm TUN_Price (1,5)	1	5	-7.96209	-7.926363	-7.962184	-7.948686

TGARCH Skewed Norm TUN_Price (4,1)	4	1	-7.966327	-7.922661	-7.966468	-7.949945
TGARCH Skewed Norm TUN_Price (3,3)	3	3	-7.966247	-7.922581	-7.966388	-7.949865
TGARCH Skewed Norm TUN_Price (2,5)	2	5	-7.965516	-7.92185	-7.965657	-7.949134
TGARCH Skewed Norm TUN_Price (4,2)	4	2	-7.964751	-7.917115	-7.964918	-7.94688
TGARCH Skewed Norm TUN_Price (3,4)	3	4	-7.964627	-7.916992	-7.964795	-7.946756
TGARCH Skewed Norm TUN_Price (5,1)	5	1	-7.963598	-7.911993	-7.963794	-7.944238
TGARCH Skewed Norm TUN_Price (4,3)	4	3	-7.96327	-7.911665	-7.963466	-7.94391
TGARCH Skewed Norm TUN_Price (3,5)	3	5	-7.963015	-7.91141	-7.963211	-7.943655
TGARCH Skewed Norm TUN_Price (5,2)	5	2	-7.962093	-7.906518	-7.962321	-7.941244
TGARCH Skewed Norm TUN_Price (4,4)	4	4	-7.961714	-7.906139	-7.961942	-7.940865
TGARCH Skewed Norm TUN_Price (5,3)	5	3	-7.960526	-7.900982	-7.960787	-7.938188
TGARCH Skewed Norm TUN_Price (4,5)	4	5	-7.960063	-7.900519	-7.960324	-7.937725
TGARCH Skewed Norm TUN_Price (5,4)	5	4	-7.959109	-7.895595	-7.959406	-7.935281
TGARCH Skewed Norm TUN_Price (5,5)	5	5	-7.961817	-7.894333	-7.962152	-7.9365
TGARCH Skewed Norm TUN_Price (0,2)	0	2	-7.852699	-7.836821	-7.852718	-7.846742
TGARCH Skewed Norm TUN_Price (0,3)	0	3	-7.851154	-7.831306	-7.851183	-7.843708
TGARCH Skewed Norm TUN_Price (4,0)	4	0	-7.865986	-7.82629	-7.866103	-7.851094
TGARCH Skewed Norm TUN_Price (0,4)	0	4	-7.84967	-7.825852	-7.849712	-7.840735
TGARCH Skewed Norm TUN_Price (5,0)	5	0	-7.872216	-7.824581	-7.872384	-7.854345
TGARCH Skewed Norm TUN_Price (0,5)	0	5	-7.841561	-7.813774	-7.841619	-7.831137
TGARCH Skewed Norm TUN_Price (2,0)	2	0	-7.831341	-7.807523	-7.831383	-7.822405
TGARCH Skewed Norm TUN_Price (3,0)	3	0	-7.833963	-7.802206	-7.834038	-7.822049
TGARCH Skewed Norm TUN_Price (0,1)	0	1	70.856884	70.868792	70.856873	70.861351

TGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH T-Student TUN_Price (1,1)	1	1	-7.977948	-7.9581	-7.977977	-7.970502
TGARCH T-Student TUN_Price (1,2)	1	2	-7.976596	-7.952778	-7.976638	-7.967661

TGARCH T-Student TUN_Price (2,1)	2	1	-7.979594	-7.951807	-7.979651	-7.969169
TGARCH T-Student TUN_Price (1,3)	1	3	-7.977038	-7.949251	-7.977095	-7.966613
TGARCH T-Student TUN_Price (2,2)	2	2	-7.978059	-7.946302	-7.978134	-7.966145
TGARCH T-Student TUN_Price (1,4)	1	4	-7.973657	-7.9419	-7.973731	-7.961743
TGARCH T-Student TUN_Price (3,1)	3	1	-7.976501	-7.940774	-7.976595	-7.963097
TGARCH T-Student TUN_Price (2,3)	2	3	-7.976287	-7.94056	-7.976381	-7.962884
TGARCH T-Student TUN_Price (1,5)	1	5	-7.97231	-7.936583	-7.972405	-7.958907
TGARCH T-Student TUN_Price (3,2)	3	2	-7.976015	-7.936318	-7.976131	-7.961122
TGARCH T-Student TUN_Price (2,4)	2	4	-7.975982	-7.936286	-7.976098	-7.961089
TGARCH T-Student TUN_Price (3,3)	3	3	-7.978049	-7.934383	-7.97819	-7.961667
TGARCH T-Student TUN_Price (2,5)	2	5	-7.974435	-7.930769	-7.974576	-7.958054
TGARCH T-Student TUN_Price (4,1)	4	1	-7.97353	-7.929864	-7.973671	-7.957148
TGARCH T-Student TUN_Price (3,4)	3	4	-7.975853	-7.928217	-7.97602	-7.957982
TGARCH T-Student TUN_Price (4,2)	4	2	-7.972343	-7.924707	-7.97251	-7.954472
TGARCH T-Student TUN_Price (3,5)	3	5	-7.974319	-7.922713	-7.974515	-7.954958
TGARCH T-Student TUN_Price (4,3)	4	3	-7.97358	-7.921975	-7.973776	-7.95422
TGARCH T-Student TUN_Price (5,1)	5	1	-7.970368	-7.918763	-7.970565	-7.951008
TGARCH T-Student TUN_Price (4,4)	4	4	-7.972045	-7.91647	-7.972273	-7.951196
TGARCH T-Student TUN_Price (5,2)	5	2	-7.970916	-7.915342	-7.971144	-7.950067
TGARCH T-Student TUN_Price (5,3)	5	3	-7.971382	-7.911838	-7.971643	-7.949043
TGARCH T-Student TUN_Price (4,5)	4	5	-7.971382	-7.911838	-7.971643	-7.949043
TGARCH T-Student TUN_Price (5,4)	5	4	-7.968951	-7.905437	-7.969248	-7.945123
TGARCH T-Student TUN_Price (5,5)	5	5	-7.967416	-7.899932	-7.967751	-7.942099
TGARCH T-Student TUN_Price (2,0)	2	0	-7.896789	-7.872971	-7.896831	-7.887853
TGARCH T-Student TUN_Price (1,0)	1	0	-7.885586	-7.869707	-7.885605	-7.879629
TGARCH T-Student TUN_Price (4,0)	4	0	-7.907126	-7.867429	-7.907242	-7.892233
TGARCH T-Student TUN_Price (5,0)	5	0	-7.912067	-7.864431	-7.912234	-7.894196
TGARCH T-Student TUN_Price (0,1)	0	1	-7.874875	-7.862966	-7.874886	-7.870408

TGARCH T-Student TUN_Price (0,3)	0	3	-7.881296	-7.861447	-7.881325	-7.873849
TGARCH T-Student TUN_Price (0,2)	0	2	-7.87686	-7.860982	-7.876879	-7.870903
TGARCH T-Student TUN_Price (0,4)	0	4	-7.875489	-7.851672	-7.875532	-7.866554
TGARCH T-Student TUN_Price (0,5)	0	5	-7.87438	-7.846592	-7.874437	-7.863955
TGARCH T-Student TUN_Price (3,0)	3	0	-7.830235	-7.798478	-7.83031	-7.818321

TGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
TGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.977231	-7.953414	-7.977274	-7.968296
TGARCH Skewed T-Student TUN_Price (1,2)	1	2	-7.975853	-7.948066	-7.97591	-7.965428
TGARCH Skewed T-Student TUN_Price (2,1)	2	1	-7.978673	-7.946916	-7.978748	-7.966759
TGARCH Skewed T-Student TUN_Price (1,3)	1	3	-7.976412	-7.944655	-7.976486	-7.964498
TGARCH Skewed T-Student TUN_Price (2,2)	2	2	-7.977145	-7.941419	-7.97724	-7.963742
TGARCH Skewed T-Student TUN_Price (1,4)	1	4	-7.972941	-7.937215	-7.973036	-7.959538
TGARCH Skewed T-Student TUN_Price (3,1)	3	1	-7.975684	-7.935988	-7.975801	-7.960792
TGARCH Skewed T-Student TUN_Price (2,3)	2	3	-7.975379	-7.935682	-7.975495	-7.960486
TGARCH Skewed T-Student TUN_Price (1,5)	1	5	-7.971643	-7.931947	-7.97176	-7.956751
TGARCH Skewed T-Student TUN_Price (3,2)	3	2	-7.975108	-7.931442	-7.975249	-7.958726
TGARCH Skewed T-Student TUN_Price (2,4)	2	4	-7.973785	-7.930119	-7.973926	-7.957403
TGARCH Skewed T-Student TUN_Price (3,3)	3	3	-7.977214	-7.929579	-7.977382	-7.959343
TGARCH Skewed T-Student TUN_Price (2,5)	2	5	-7.973521	-7.925886	-7.973689	-7.95565
TGARCH Skewed T-Student TUN_Price (4,1)	4	1	-7.972748	-7.925112	-7.972915	-7.954877
TGARCH Skewed T-Student TUN_Price (3,4)	3	4	-7.975001	-7.923395	-7.975197	-7.95564
TGARCH Skewed T-Student TUN_Price (4,2)	4	2	-7.971636	-7.920031	-7.971832	-7.952276
TGARCH Skewed T-Student TUN_Price (3,5)	3	5	-7.973468	-7.917893	-7.973696	-7.952619
TGARCH Skewed T-Student TUN_Price (4,3)	4	3	-7.973094	-7.917519	-7.973321	-7.952244
TGARCH Skewed T-Student TUN_Price (5,1)	5	1	-7.969731	-7.914156	-7.969959	-7.948882
TGARCH Skewed T-Student TUN_Price (4,4)	4	4	-7.971559	-7.912015	-7.97182	-7.94922
TGARCH Skewed T-Student TUN_Price (5,2)	5	2	-7.969513	-7.909969	-7.969774	-7.947174

TGARCH Skewed T-Student TUN_Price (4,5)	4	5	-7.970568	-7.907054	-7.970865	-7.94674
TGARCH Skewed T-Student TUN_Price (5,3)	5	3	-7.970003	-7.906489	-7.970299	-7.946175
TGARCH Skewed T-Student TUN_Price (5,4)	5	4	-7.965545	-7.898061	-7.965879	-7.940227
TGARCH Skewed T-Student TUN_Price (5,5)	5	5	-7.966857	-7.895404	-7.967232	-7.940051
TGARCH Skewed T-Student TUN_Price (2,0)	2	0	-7.895444	-7.867656	-7.895501	-7.885019
TGARCH Skewed T-Student TUN_Price (1,0)	1	0	-7.884292	-7.864444	-7.884321	-7.876846
TGARCH Skewed T-Student TUN_Price (0,1)	0	1	-7.873362	-7.857483	-7.87338	-7.867405
TGARCH Skewed T-Student TUN_Price (0,2)	0	2	-7.875289	-7.855441	-7.875318	-7.867843
TGARCH Skewed T-Student TUN_Price (0,3)	0	3	-7.874975	-7.851157	-7.875017	-7.866039
TGARCH Skewed T-Student TUN_Price (0,4)	0	4	-7.874015	-7.846228	-7.874073	-7.863591
TGARCH Skewed T-Student TUN_Price (0,5)	0	5	-7.872867	-7.84111	-7.872942	-7.860953
TGARCH Skewed T-Student TUN_Price (3,0)	3	0	-7.837058	-7.801331	-7.837152	-7.823655
TGARCH Skewed T-Student TUN_Price (4,0)	4	0	-7.833217	-7.789551	-7.833358	-7.816835
TGARCH Skewed T-Student TUN_Price (5,0)	5	0	-7.834031	-7.782426	-7.834228	-7.814671

EGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Norm TUN_Price (1,1)	1	1	-7.96723	-7.951352	-7.967249	-7.961273
EGARCH Norm TUN_Price (1,4)	1	4	-7.978403	-7.950616	-7.97846	-7.967978
EGARCH Norm TUN_Price (1,2)	1	2	-7.966178	-7.94633	-7.966207	-7.958732
EGARCH Norm TUN_Price (3,3)	3	3	-7.985802	-7.946106	-7.985919	-7.97091
EGARCH Norm TUN_Price (2,1)	2	1	-7.966411	-7.942593	-7.966453	-7.957475
EGARCH Norm TUN_Price (1,3)	1	3	-7.964575	-7.940757	-7.964617	-7.95564
EGARCH Norm TUN_Price (3,4)	3	4	-7.983003	-7.939337	-7.983144	-7.966621
EGARCH Norm TUN_Price (2,4)	2	4	-7.974727	-7.939	-7.974821	-7.961323
EGARCH Norm TUN_Price (2,2)	2	2	-7.965251	-7.937464	-7.965308	-7.954826
EGARCH Norm TUN_Price (1,5)	1	5	-7.967164	-7.935407	-7.967239	-7.95525
EGARCH Norm TUN_Price (2,3)	2	3	-7.966163	-7.934406	-7.966238	-7.954249
EGARCH Norm TUN_Price (3,1)	3	1	-7.964275	-7.932518	-7.96435	-7.952361

EGARCH Norm TUN_Price (3,2)	3	2	-7.962741	-7.927015	-7.962836	-7.949338
EGARCH Norm TUN_Price (4,4)	4	4	-7.976962	-7.925357	-7.977159	-7.957602
EGARCH Norm TUN_Price (5,4)	5	4	-7.984783	-7.925239	-7.985044	-7.962444
EGARCH Norm TUN_Price (2,5)	2	5	-7.962959	-7.923263	-7.963076	-7.948067
EGARCH Norm TUN_Price (4,1)	4	1	-7.961191	-7.921495	-7.961308	-7.946299
EGARCH Norm TUN_Price (3,5)	3	5	-7.968649	-7.921013	-7.968816	-7.950778
EGARCH Norm TUN_Price (4,3)	4	3	-7.967164	-7.919528	-7.967331	-7.949293
EGARCH Norm TUN_Price (4,2)	4	2	-7.962414	-7.918748	-7.962555	-7.946032
EGARCH Norm TUN_Price (4,5)	4	5	-7.968254	-7.912679	-7.968482	-7.947405
EGARCH Norm TUN_Price (5,5)	5	5	-7.974576	-7.911062	-7.974873	-7.950748
EGARCH Norm TUN_Price (5,1)	5	1	-7.958186	-7.910551	-7.958354	-7.940315
EGARCH Norm TUN_Price (5,3)	5	3	-7.964531	-7.908956	-7.964759	-7.943682
EGARCH Norm TUN_Price (5,2)	5	2	-7.959734	-7.908128	-7.95993	-7.940373
EGARCH Norm TUN_Price (0,1)	0	1	-7.78863	-7.780691	-7.788635	-7.785652
EGARCH Norm TUN_Price (0,2)	0	2	-7.787094	-7.775185	-7.787105	-7.782626
EGARCH Norm TUN_Price (0,3)	0	3	-7.785592	-7.769714	-7.785611	-7.779635
EGARCH Norm TUN_Price (0,5)	0	5	-7.782489	-7.758672	-7.782531	-7.773554
EGARCH Norm TUN_Price (5,0)	5	0	-7.793507	-7.749841	-7.793648	-7.777125
EGARCH Norm TUN_Price (4,0)	4	0	-7.780678	-7.744951	-7.780773	-7.767275
EGARCH Norm TUN_Price (3,0)	3	0	-7.754314	-7.726526	-7.754371	-7.743889
EGARCH Norm TUN_Price (2,0)	2	0	-7.739406	-7.719558	-7.739435	-7.73196
EGARCH Norm TUN_Price (1,0)	1	0	-7.705379	-7.69347	-7.70539	-7.700912
EGARCH Norm TUN_Price (0,4)	0	4	2.185212	2.20506	2.185183	2.192658

EGARCH Skewed Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.966427	-7.946579	-7.966457	-7.958981
EGARCH Skewed Norm TUN_Price (1,4)	1	4	-7.977298	-7.945541	-7.977373	-7.965384
EGARCH Skewed Norm TUN_Price (1,5)	1	5	-7.977866	-7.942139	-7.97796	-7.964463

EGARCH Skewed Norm TUN_Price (1,2)	1	2	-7.96537	-7.941552	-7.965412	-7.956435
EGARCH Skewed Norm TUN_Price (2,1)	2	1	-7.965742	-7.937954	-7.965799	-7.955317
EGARCH Skewed Norm TUN_Price (1,3)	1	3	-7.963792	-7.936005	-7.963849	-7.953367
EGARCH Skewed Norm TUN_Price (2,4)	2	4	-7.973705	-7.934009	-7.973822	-7.958813
EGARCH Skewed Norm TUN_Price (2,2)	2	2	-7.964709	-7.932952	-7.964784	-7.952795
EGARCH Skewed Norm TUN_Price (4,4)	4	4	-7.987042	-7.931467	-7.987269	-7.966192
EGARCH Skewed Norm TUN_Price (2,3)	2	3	-7.965748	-7.930022	-7.965843	-7.952345
EGARCH Skewed Norm TUN_Price (3,1)	3	1	-7.963949	-7.928222	-7.964043	-7.950546
EGARCH Skewed Norm TUN_Price (3,4)	3	4	-7.97071	-7.923074	-7.970877	-7.952839
EGARCH Skewed Norm TUN_Price (3,2)	3	2	-7.962416	-7.922719	-7.962532	-7.947523
EGARCH Skewed Norm TUN_Price (5,4)	5	4	-7.984809	-7.921295	-7.985106	-7.960981
EGARCH Skewed Norm TUN_Price (5,5)	5	5	-7.986784	-7.9193	-7.987118	-7.961466
EGARCH Skewed Norm TUN_Price (2,5)	2	5	-7.962951	-7.919285	-7.963092	-7.946569
EGARCH Skewed Norm TUN_Price (3,3)	3	3	-7.961702	-7.918037	-7.961843	-7.945321
EGARCH Skewed Norm TUN_Price (4,1)	4	1	-7.960775	-7.917109	-7.960916	-7.944393
EGARCH Skewed Norm TUN_Price (3,5)	3	5	-7.96814	-7.916535	-7.968336	-7.94878
EGARCH Skewed Norm TUN_Price (4,2)	4	2	-7.962048	-7.914412	-7.962215	-7.944177
EGARCH Skewed Norm TUN_Price (4,3)	4	3	-7.960828	-7.909223	-7.961025	-7.941468
EGARCH Skewed Norm TUN_Price (5,1)	5	1	-7.957804	-7.906198	-7.958	-7.938443
EGARCH Skewed Norm TUN_Price (5,3)	5	3	-7.964753	-7.905209	-7.965014	-7.942414
EGARCH Skewed Norm TUN_Price (4,5)	4	5	-7.964487	-7.904943	-7.964748	-7.942149
EGARCH Skewed Norm TUN_Price (5,2)	5	2	-7.959315	-7.90374	-7.959543	-7.938466
EGARCH Skewed Norm TUN_Price (0,3)	0	3	-7.798179	-7.77833	-7.798208	-7.790732
EGARCH Skewed Norm TUN_Price (0,1)	0	1	-7.787297	-7.775389	-7.787308	-7.78283
EGARCH Skewed Norm TUN_Price (0,2)	0	2	-7.78498	-7.769101	-7.784999	-7.779023
EGARCH Skewed Norm TUN_Price (0,5)	0	5	-7.781157	-7.75337	-7.781214	-7.770732
EGARCH Skewed Norm TUN_Price (0,4)	0	4	-7.772424	-7.748606	-7.772466	-7.763488
EGARCH Skewed Norm TUN_Price (5,0)	5	0	-7.79309	-7.745455	-7.793258	-7.775219

EGARCH Skewed Norm TUN_Price (4,0)	4	0	-7.781011	-7.741315	-7.781127	-7.766118
EGARCH Skewed Norm TUN_Price (3,0)	3	0	-7.753113	-7.721356	-7.753188	-7.741199
EGARCH Skewed Norm TUN_Price (2,0)	2	0	-7.738316	-7.714499	-7.738358	-7.729381
EGARCH Skewed Norm TUN_Price (1,0)	1	0	-7.703958	-7.688079	-7.703976	-7.698001

EGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH T-Student TUN_Price (1,1)	1	1	-7.978038	-7.95819	-7.978067	-7.970592
EGARCH T-Student TUN_Price (2,3)	2	3	-7.99276	-7.957033	-7.992855	-7.979357
EGARCH T-Student TUN_Price (2,4)	2	4	-7.994173	-7.954476	-7.994289	-7.97928
EGARCH T-Student TUN_Price (1,2)	1	2	-7.977128	-7.95331	-7.97717	-7.968192
EGARCH T-Student TUN_Price (2,1)	2	1	-7.977332	-7.949544	-7.977389	-7.966907
EGARCH T-Student TUN_Price (1,3)	1	3	-7.975562	-7.947774	-7.975619	-7.965137
EGARCH T-Student TUN_Price (1,4)	1	4	-7.97814	-7.946383	-7.978214	-7.966226
EGARCH T-Student TUN_Price (2,2)	2	2	-7.976036	-7.944279	-7.97611	-7.964122
EGARCH T-Student TUN_Price (3,4)	3	4	-7.991905	-7.944269	-7.992072	-7.974034
EGARCH T-Student TUN_Price (2,5)	2	5	-7.986421	-7.942755	-7.986562	-7.970039
EGARCH T-Student TUN_Price (3,1)	3	1	-7.974813	-7.939087	-7.974908	-7.96141
EGARCH T-Student TUN_Price (4,5)	4	5	-7.998485	-7.938941	-7.998746	-7.976147
EGARCH T-Student TUN_Price (3,5)	3	5	-7.989891	-7.938286	-7.990087	-7.970531
EGARCH T-Student TUN_Price (1,5)	1	5	-7.973024	-7.937297	-7.973118	-7.959621
EGARCH T-Student TUN_Price (4,3)	4	3	-7.986191	-7.934585	-7.986387	-7.96683
EGARCH T-Student TUN_Price (3,2)	3	2	-7.973306	-7.93361	-7.973423	-7.958414
EGARCH T-Student TUN_Price (4,1)	4	1	-7.971937	-7.928271	-7.972078	-7.955556
EGARCH T-Student TUN_Price (3,3)	3	3	-7.971823	-7.928157	-7.971964	-7.955441
EGARCH T-Student TUN_Price (5,4)	5	4	-7.991149	-7.927634	-7.991445	-7.967321
EGARCH T-Student TUN_Price (4,4)	4	4	-7.981237	-7.925662	-7.981465	-7.960388
EGARCH T-Student TUN_Price (4,2)	4	2	-7.970403	-7.922767	-7.97057	-7.952532
EGARCH T-Student TUN_Price (5,3)	5	3	-7.978505	-7.91896	-7.978766	-7.956166

EGARCH T-Student TUN_Price (5,5)	5	5	-7.986143	-7.918659	-7.986478	-7.960826
EGARCH T-Student TUN_Price (5,1)	5	1	-7.968845	-7.91724	-7.969042	-7.949485
EGARCH T-Student TUN_Price (5,2)	5	2	-7.969735	-7.91416	-7.969963	-7.948886
EGARCH T-Student TUN_Price (0,1)	0	1	-7.866969	-7.85506	-7.866979	-7.862501
EGARCH T-Student TUN_Price (0,2)	0	2	-7.865443	-7.849564	-7.865461	-7.859486
EGARCH T-Student TUN_Price (3,0)	3	0	-7.867435	-7.835678	-7.867509	-7.855521
EGARCH T-Student TUN_Price (0,5)	0	5	-7.860904	-7.833116	-7.860961	-7.850479
EGARCH T-Student TUN_Price (0,3)	0	3	-7.852123	-7.832274	-7.852152	-7.844676
EGARCH T-Student TUN_Price (0,4)	0	4	-7.850468	-7.82665	-7.85051	-7.841532
EGARCH T-Student TUN_Price (5,0)	5	0	-6.982614	-6.934979	-6.982782	-6.964743
EGARCH T-Student TUN_Price (4,0)	4	0	-6.820897	-6.7812	-6.821013	-6.806004
EGARCH T-Student TUN_Price (2,0)	2	0	-6.285251	-6.261433	-6.285293	-6.276315
EGARCH T-Student TUN_Price (1,0)	1	0	-5.638211	-5.622332	-5.638229	-5.632254

EGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
EGARCH Skewed T-Student TUN_Price (2,3)	2	3	-7.996965	-7.957269	-7.997082	-7.982073
EGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.97748	-7.953662	-7.977522	-7.968545
EGARCH Skewed T-Student TUN_Price (2,4)	2	4	-7.994995	-7.951329	-7.995136	-7.978613
EGARCH Skewed T-Student TUN_Price (1,2)	1	2	-7.976545	-7.948757	-7.976602	-7.96612
EGARCH Skewed T-Student TUN_Price (2,1)	2	1	-7.976925	-7.945168	-7.977	-7.965012
EGARCH Skewed T-Student TUN_Price (1,3)	1	3	-7.975007	-7.94325	-7.975082	-7.963093
EGARCH Skewed T-Student TUN_Price (1,4)	1	4	-7.977859	-7.942132	-7.977953	-7.964456
EGARCH Skewed T-Student TUN_Price (2,2)	2	2	-7.975733	-7.940006	-7.975827	-7.96233
EGARCH Skewed T-Student TUN_Price (1,5)	1	5	-7.979447	-7.939751	-7.979563	-7.964554
EGARCH Skewed T-Student TUN_Price (3,4)	3	4	-7.991189	-7.939583	-7.991385	-7.971828
EGARCH Skewed T-Student TUN_Price (2,5)	2	5	-7.9861	-7.938465	-7.986268	-7.968229
EGARCH Skewed T-Student TUN_Price (3,1)	3	1	-7.974658	-7.934962	-7.974775	-7.959766
EGARCH Skewed T-Student TUN_Price (3,5)	3	5	-7.990105	-7.934531	-7.990333	-7.969256

EGARCH Skewed T-Student TUN_Price (4,3)	4	3	-7.988529	-7.932955	-7.988757	-7.96768
EGARCH Skewed T-Student TUN_Price (3,2)	3	2	-7.973157	-7.929491	-7.973298	-7.956776
EGARCH Skewed T-Student TUN_Price (4,4)	4	4	-7.987744	-7.928199	-7.988005	-7.965405
EGARCH Skewed T-Student TUN_Price (4,5)	4	5	-7.990771	-7.927256	-7.991067	-7.966943
EGARCH Skewed T-Student TUN_Price (4,1)	4	1	-7.97173	-7.924094	-7.971897	-7.953859
EGARCH Skewed T-Student TUN_Price (3,3)	3	3	-7.971681	-7.924045	-7.971848	-7.95381
EGARCH Skewed T-Student TUN_Price (5,5)	5	5	-7.992737	-7.921284	-7.993112	-7.965931
EGARCH Skewed T-Student TUN_Price (4,2)	4	2	-7.970195	-7.91859	-7.970391	-7.950835
EGARCH Skewed T-Student TUN_Price (5,4)	5	4	-7.984972	-7.917488	-7.985306	-7.959655
EGARCH Skewed T-Student TUN_Price (5,3)	5	3	-7.977816	-7.914302	-7.978112	-7.953988
EGARCH Skewed T-Student TUN_Price (5,1)	5	1	-7.96869	-7.913115	-7.968918	-7.947841
EGARCH Skewed T-Student TUN_Price (5,2)	5	2	-7.969644	-7.910099	-7.969905	-7.947305
EGARCH Skewed T-Student TUN_Price (0,1)	0	1	-7.865523	-7.849644	-7.865541	-7.859566
EGARCH Skewed T-Student TUN_Price (0,2)	0	2	-7.864006	-7.844158	-7.864035	-7.85656
EGARCH Skewed T-Student TUN_Price (0,4)	0	4	-7.867987	-7.8402	-7.868045	-7.857563
EGARCH Skewed T-Student TUN_Price (0,5)	0	5	-7.859423	-7.827666	-7.859498	-7.847509
EGARCH Skewed T-Student TUN_Price (0,3)	0	3	-7.845992	-7.822174	-7.846034	-7.837056
EGARCH Skewed T-Student TUN_Price (5,0)	5	0	-7.04855	-6.996945	-7.048747	-7.02919
EGARCH Skewed T-Student TUN_Price (4,0)	4	0	-6.884641	-6.840975	-6.884782	-6.868259
EGARCH Skewed T-Student TUN_Price (3,0)	3	0	-6.666278	-6.630551	-6.666373	-6.652875
EGARCH Skewed T-Student TUN_Price (2,0)	2	0	-4.978723	-4.950936	-4.97878	-4.968298
EGARCH Skewed T-Student TUN_Price (1,0)	1	0	-4.131322	-4.111474	-4.131351	-4.123876

NAGARCH Normal

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Norm TUN_Price (1,1)	1	1	-7.978276	-7.962398	-7.978295	-7.972319
NAGARCH Norm TUN_Price (1,2)	1	2	-7.977281	-7.957433	-7.97731	-7.969835
NAGARCH Norm TUN_Price (2,1)	2	1	-7.977385	-7.953567	-7.977427	-7.96845
NAGARCH Norm TUN_Price (1,3)	1	3	-7.975523	-7.951705	-7.975565	-7.966587

NAGARCH Norm TUN_Price (2,2)	2	2	-7.975825	-7.948038	-7.975882	-7.9654
NAGARCH Norm TUN_Price (3,1)	3	1	-7.978694	-7.946937	-7.978769	-7.96678
NAGARCH Norm TUN_Price (1,4)	1	4	-7.974111	-7.946324	-7.974169	-7.963687
NAGARCH Norm TUN_Price (2,3)	2	3	-7.975837	-7.94408	-7.975912	-7.963923
NAGARCH Norm TUN_Price (3,2)	3	2	-7.977258	-7.941532	-7.977353	-7.963855
NAGARCH Norm TUN_Price (1,5)	1	5	-7.972527	-7.94077	-7.972602	-7.960613
NAGARCH Norm TUN_Price (2,4)	2	4	-7.973841	-7.938115	-7.973936	-7.960438
NAGARCH Norm TUN_Price (4,1)	4	1	-7.97562	-7.935924	-7.975737	-7.960728
NAGARCH Norm TUN_Price (2,5)	2	5	-7.97556	-7.935864	-7.975677	-7.960668
NAGARCH Norm TUN_Price (3,3)	3	3	-7.975266	-7.93557	-7.975383	-7.960373
NAGARCH Norm TUN_Price (4,2)	4	2	-7.973837	-7.930171	-7.973978	-7.957455
NAGARCH Norm TUN_Price (3,4)	3	4	-7.971967	-7.928302	-7.972108	-7.955586
NAGARCH Norm TUN_Price (5,0)	5	0	-7.970545	-7.92688	-7.970686	-7.954164
NAGARCH Norm TUN_Price (4,3)	4	3	-7.972597	-7.924961	-7.972764	-7.954726
NAGARCH Norm TUN_Price (5,1)	5	1	-7.972459	-7.924824	-7.972627	-7.954588
NAGARCH Norm TUN_Price (3,5)	3	5	-7.972292	-7.924656	-7.972459	-7.954421
NAGARCH Norm TUN_Price (4,0)	4	0	-7.955603	-7.919876	-7.955697	-7.9422
NAGARCH Norm TUN_Price (5,2)	5	2	-7.970961	-7.919356	-7.971158	-7.951601
NAGARCH Norm TUN_Price (4,4)	4	4	-7.97082	-7.919215	-7.971016	-7.951459
NAGARCH Norm TUN_Price (4,5)	4	5	-7.972504	-7.916929	-7.972732	-7.951655
NAGARCH Norm TUN_Price (5,3)	5	3	-7.969163	-7.913588	-7.969391	-7.948314
NAGARCH Norm TUN_Price (5,4)	5	4	-7.966359	-7.906815	-7.96662	-7.944021
NAGARCH Norm TUN_Price (5,5)	5	5	-7.966699	-7.903185	-7.966996	-7.942871
NAGARCH Norm TUN_Price (2,0)	2	0	-7.85713	-7.837282	-7.857159	-7.849684
NAGARCH Norm TUN_Price (1,0)	1	0	-7.84222	-7.830311	-7.84223	-7.837752
NAGARCH Norm TUN_Price (0,1)	0	1	-7.792828	-7.784888	-7.792832	-7.789849
NAGARCH Norm TUN_Price (0,2)	0	2	-7.79534	-7.783432	-7.795351	-7.790873
NAGARCH Norm TUN_Price (0,3)	0	3	-7.794314	-7.778435	-7.794333	-7.788357

NAGARCH Norm TUN_Price (0,4)	0	4	-7.794185	-7.774337	-7.794214	-7.786739
NAGARCH Norm TUN_Price (0,5)	0	5	-7.792965	-7.769147	-7.793007	-7.784029
NAGARCH Norm TUN_Price (3,0)	3	0	341.776385	341.804172	341.776327	341.786809
<i>NAGARCH Skewed Normal</i>						
<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed Norm TUN_Price (1,1)	1	1	-7.977481	-7.957633	-7.977511	-7.970035
NAGARCH Skewed Norm TUN_Price (1,2)	1	2	-7.97625	-7.952432	-7.976292	-7.967314
NAGARCH Skewed Norm TUN_Price (2,1)	2	1	-7.976343	-7.948556	-7.976401	-7.965919
NAGARCH Skewed Norm TUN_Price (1,3)	1	3	-7.975973	-7.948185	-7.97603	-7.965548
NAGARCH Skewed Norm TUN_Price (2,2)	2	2	-7.975523	-7.943766	-7.975598	-7.963609
NAGARCH Skewed Norm TUN_Price (1,4)	1	4	-7.973192	-7.941435	-7.973267	-7.961278
NAGARCH Skewed Norm TUN_Price (3,1)	3	1	-7.976987	-7.94126	-7.977081	-7.963583
NAGARCH Skewed Norm TUN_Price (3,0)	3	0	-7.971888	-7.940131	-7.971963	-7.959974
NAGARCH Skewed Norm TUN_Price (1,5)	1	5	-7.971629	-7.935902	-7.971723	-7.958226
NAGARCH Skewed Norm TUN_Price (2,3)	2	3	-7.971467	-7.93574	-7.971562	-7.958064
NAGARCH Skewed Norm TUN_Price (3,2)	3	2	-7.973471	-7.933775	-7.973588	-7.958579
NAGARCH Skewed Norm TUN_Price (3,3)	3	3	-7.974635	-7.930969	-7.974776	-7.958253
NAGARCH Skewed Norm TUN_Price (4,1)	4	1	-7.97446	-7.930794	-7.974601	-7.958078
NAGARCH Skewed Norm TUN_Price (2,4)	2	4	-7.969974	-7.930277	-7.97009	-7.955081
NAGARCH Skewed Norm TUN_Price (2,5)	2	5	-7.97268	-7.929014	-7.972821	-7.956298
NAGARCH Skewed Norm TUN_Price (3,4)	3	4	-7.972201	-7.924565	-7.972368	-7.95433
NAGARCH Skewed Norm TUN_Price (4,0)	4	0	-7.963872	-7.924176	-7.963989	-7.94898
NAGARCH Skewed Norm TUN_Price (4,2)	4	2	-7.970999	-7.923364	-7.971167	-7.953128
NAGARCH Skewed Norm TUN_Price (3,5)	3	5	-7.97151	-7.919905	-7.971706	-7.95215
NAGARCH Skewed Norm TUN_Price (4,4)	4	4	-7.974196	-7.918621	-7.974423	-7.953346
NAGARCH Skewed Norm TUN_Price (5,0)	5	0	-7.962075	-7.91444	-7.962243	-7.944204
NAGARCH Skewed Norm TUN_Price (5,2)	5	2	-7.969791	-7.914217	-7.970019	-7.948942
NAGARCH Skewed Norm TUN_Price (4,3)	4	3	-7.964011	-7.912406	-7.964208	-7.944651

NAGARCH Skewed Norm TUN_Price (5,3)	5	3	-7.968401	-7.908857	-7.968662	-7.946063
NAGARCH Skewed Norm TUN_Price (4,5)	4	5	-7.968276	-7.908731	-7.968537	-7.945937
NAGARCH Skewed Norm TUN_Price (5,4)	5	4	-7.966722	-7.903208	-7.967019	-7.942894
NAGARCH Skewed Norm TUN_Price (5,5)	5	5	-7.965318	-7.897834	-7.965652	-7.940001
NAGARCH Skewed Norm TUN_Price (5,1)	5	1	-7.925253	-7.873647	-7.925449	-7.905892
NAGARCH Skewed Norm TUN_Price (0,1)	0	1	-7.800092	-7.788183	-7.800103	-7.795624
NAGARCH Skewed Norm TUN_Price (1,0)	1	0	-7.797723	-7.781844	-7.797741	-7.791766
NAGARCH Skewed Norm TUN_Price (0,2)	0	2	-7.792787	-7.776908	-7.792806	-7.78683
NAGARCH Skewed Norm TUN_Price (0,3)	0	3	-7.787105	-7.767257	-7.787134	-7.779658
NAGARCH Skewed Norm TUN_Price (0,4)	0	4	-7.78933	-7.765512	-7.789372	-7.780394
NAGARCH Skewed Norm TUN_Price (0,5)	0	5	-7.788821	-7.761033	-7.788878	-7.778396
NAGARCH Skewed Norm TUN_Price (2,0)	2	0	-7.264259	-7.240441	-7.264301	-7.255324

NAGARCH T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH T-Student TUN_Price (1,1)	1	1	-7.98703	-7.967182	-7.98706	-7.979584
NAGARCH T-Student TUN_Price (1,2)	1	2	-7.986154	-7.962336	-7.986196	-7.977219
NAGARCH T-Student TUN_Price (1,3)	1	3	-7.9859	-7.958112	-7.985957	-7.975475
NAGARCH T-Student TUN_Price (2,1)	2	1	-7.984261	-7.956474	-7.984318	-7.973836
NAGARCH T-Student TUN_Price (1,4)	1	4	-7.984367	-7.95261	-7.984442	-7.972453
NAGARCH T-Student TUN_Price (2,2)	2	2	-7.98403	-7.952273	-7.984104	-7.972116
NAGARCH T-Student TUN_Price (2,3)	2	3	-7.984759	-7.949032	-7.984853	-7.971356
NAGARCH T-Student TUN_Price (3,1)	3	1	-7.983224	-7.947497	-7.983319	-7.969821
NAGARCH T-Student TUN_Price (1,5)	1	5	-7.981954	-7.946227	-7.982049	-7.968551
NAGARCH T-Student TUN_Price (3,3)	3	3	-7.985781	-7.942115	-7.985922	-7.969399
NAGARCH T-Student TUN_Price (2,4)	2	4	-7.981365	-7.941669	-7.981482	-7.966472
NAGARCH T-Student TUN_Price (3,2)	3	2	-7.980087	-7.940391	-7.980204	-7.965195
NAGARCH T-Student TUN_Price (2,0)	2	0	-7.963854	-7.940036	-7.963896	-7.954919
NAGARCH T-Student TUN_Price (4,1)	4	1	-7.983052	-7.939386	-7.983193	-7.96667

NAGARCH T-Student TUN_Price (3,4)	3	4	-7.984244	-7.936608	-7.984411	-7.966373
NAGARCH T-Student TUN_Price (2,5)	2	5	-7.978872	-7.935206	-7.979013	-7.96249
NAGARCH T-Student TUN_Price (4,2)	4	2	-7.982261	-7.934626	-7.982429	-7.96439
NAGARCH T-Student TUN_Price (5,1)	5	1	-7.978401	-7.926796	-7.978597	-7.959041
NAGARCH T-Student TUN_Price (3,5)	3	5	-7.975561	-7.923956	-7.975758	-7.956201
NAGARCH T-Student TUN_Price (4,3)	4	3	-7.974656	-7.92305	-7.974852	-7.955295
NAGARCH T-Student TUN_Price (5,0)	5	0	-7.968839	-7.921203	-7.969006	-7.950968
NAGARCH T-Student TUN_Price (5,2)	5	2	-7.975217	-7.919642	-7.975445	-7.954368
NAGARCH T-Student TUN_Price (5,3)	5	3	-7.978377	-7.918833	-7.978638	-7.956039
NAGARCH T-Student TUN_Price (4,5)	4	5	-7.972362	-7.912817	-7.972623	-7.950023
NAGARCH T-Student TUN_Price (5,4)	5	4	-7.970246	-7.906732	-7.970542	-7.946418
NAGARCH T-Student TUN_Price (5,5)	5	5	-7.970771	-7.903287	-7.971105	-7.945453
NAGARCH T-Student TUN_Price (4,0)	4	0	-7.925486	-7.88579	-7.925603	-7.910593
NAGARCH T-Student TUN_Price (1,0)	1	0	-7.893276	-7.877398	-7.893295	-7.887319
NAGARCH T-Student TUN_Price (3,0)	3	0	-7.901239	-7.869482	-7.901314	-7.889325
NAGARCH T-Student TUN_Price (0,1)	0	1	-7.856726	-7.844817	-7.856737	-7.852259
NAGARCH T-Student TUN_Price (0,2)	0	2	-7.860078	-7.8442	-7.860097	-7.854121
NAGARCH T-Student TUN_Price (0,3)	0	3	-7.858751	-7.838903	-7.858781	-7.851305
NAGARCH T-Student TUN_Price (0,4)	0	4	-7.857828	-7.834011	-7.857871	-7.848893
NAGARCH T-Student TUN_Price (0,5)	0	5	-7.856793	-7.829006	-7.85685	-7.846368
NAGARCH T-Student TUN_Price (4,4)	4	4	-7.143912	-7.088337	-7.144139	-7.123062

NAGARCH Skewed T-Student

<i>Modelo</i>	<i>p</i>	<i>q</i>	<i>AIC</i>	<i>BIC</i>	<i>Shibata</i>	<i>Hannan-Quinn</i>
NAGARCH Skewed T-Student TUN_Price (1,1)	1	1	-7.986054	-7.962237	-7.986097	-7.977119
NAGARCH Skewed T-Student TUN_Price (1,2)	1	2	-7.985364	-7.957577	-7.985422	-7.97494
NAGARCH Skewed T-Student TUN_Price (1,3)	1	3	-7.98536	-7.953603	-7.985434	-7.973446
NAGARCH Skewed T-Student TUN_Price (2,1)	2	1	-7.983441	-7.951684	-7.983516	-7.971527
NAGARCH Skewed T-Student TUN_Price (2,2)	2	2	-7.983586	-7.94786	-7.983681	-7.970183

NAGARCH Skewed T-Student TUN_Price (1,4)	1	4	-7.982566	-7.946839	-7.98266	-7.969163
NAGARCH Skewed T-Student TUN_Price (2,3)	2	3	-7.9823	-7.942604	-7.982417	-7.967408
NAGARCH Skewed T-Student TUN_Price (3,1)	3	1	-7.982193	-7.942497	-7.982309	-7.9673
NAGARCH Skewed T-Student TUN_Price (1,5)	1	5	-7.981232	-7.941536	-7.981349	-7.96634
NAGARCH Skewed T-Student TUN_Price (3,3)	3	3	-7.985005	-7.937369	-7.985172	-7.967134
NAGARCH Skewed T-Student TUN_Price (2,4)	2	4	-7.979378	-7.935713	-7.979519	-7.962997
NAGARCH Skewed T-Student TUN_Price (3,2)	3	2	-7.979063	-7.935397	-7.979204	-7.962681
NAGARCH Skewed T-Student TUN_Price (2,0)	2	0	-7.962561	-7.934774	-7.962618	-7.952136
NAGARCH Skewed T-Student TUN_Price (2,5)	2	5	-7.980698	-7.933062	-7.980865	-7.962827
NAGARCH Skewed T-Student TUN_Price (4,1)	4	1	-7.979232	-7.931596	-7.979399	-7.961361
NAGARCH Skewed T-Student TUN_Price (3,4)	3	4	-7.977778	-7.926173	-7.977975	-7.958418
NAGARCH Skewed T-Student TUN_Price (4,2)	4	2	-7.977617	-7.926012	-7.977813	-7.958257
NAGARCH Skewed T-Student TUN_Price (4,0)	4	0	-7.969337	-7.925671	-7.969478	-7.952956
NAGARCH Skewed T-Student TUN_Price (5,0)	5	0	-7.975952	-7.924347	-7.976149	-7.956592
NAGARCH Skewed T-Student TUN_Price (5,1)	5	1	-7.979859	-7.924285	-7.980087	-7.95901
NAGARCH Skewed T-Student TUN_Price (3,0)	3	0	-7.959286	-7.923559	-7.95938	-7.945882
NAGARCH Skewed T-Student TUN_Price (4,3)	4	3	-7.976457	-7.920882	-7.976684	-7.955607
NAGARCH Skewed T-Student TUN_Price (3,5)	3	5	-7.976358	-7.920783	-7.976586	-7.955509
NAGARCH Skewed T-Student TUN_Price (4,5)	4	5	-7.978433	-7.914919	-7.97873	-7.954605
NAGARCH Skewed T-Student TUN_Price (5,2)	5	2	-7.974461	-7.914917	-7.974722	-7.952123
NAGARCH Skewed T-Student TUN_Price (4,4)	4	4	-7.974438	-7.914893	-7.974699	-7.952099
NAGARCH Skewed T-Student TUN_Price (5,4)	5	4	-7.975888	-7.908405	-7.976223	-7.950571
NAGARCH Skewed T-Student TUN_Price (5,3)	5	3	-7.970772	-7.907258	-7.971068	-7.946944
NAGARCH Skewed T-Student TUN_Price (5,5)	5	5	-7.970338	-7.898885	-7.970713	-7.943532
NAGARCH Skewed T-Student TUN_Price (1,0)	1	0	-7.891369	-7.871521	-7.891399	-7.883923
NAGARCH Skewed T-Student TUN_Price (0,1)	0	1	-7.85505	-7.839171	-7.855068	-7.849093
NAGARCH Skewed T-Student TUN_Price (0,2)	0	2	-7.856798	-7.83695	-7.856827	-7.849352
NAGARCH Skewed T-Student TUN_Price (0,3)	0	3	-7.857171	-7.833353	-7.857213	-7.848236

NAGARCH Skewed T-Student TUN_Price (0,4)	0	4	-7.857597	-7.829809	-7.857654	-7.847172
NAGARCH Skewed T-Student TUN_Price (0,5)	0	5	-7.855992	-7.824235	-7.856067	-7.844078
