

garch(formula.mean = ribv ~ ar(10), formula.var = ~ garch(1, 1))

Mean Equation: structure(.Data = ribv ~ ar(10), class = "formula")

Conditional Variance Equation: structure(.Data = ~ garch(1, 1), class = "formula")

Conditional Distribution: gaussian

Estimated Coefficients:

	Value	Std.Error	t value	Pr(> t)
C	0.00156078	3.241e-004	4.81549	1.530e-006
AR(1)	0.02791960	1.828e-002	1.52730	1.268e-001
AR(2)	-0.03120045	1.736e-002	-1.79717	7.239e-002
AR(3)	-0.01856952	1.693e-002	-1.09698	2.727e-001
AR(4)	-0.03879466	1.781e-002	-2.17861	2.943e-002
AR(5)	-0.02637589	1.685e-002	-1.56554	1.175e-001
AR(6)	0.00159741	1.751e-002	0.09123	9.273e-001
AR(7)	-0.00093239	1.661e-002	-0.05614	9.552e-001
AR(8)	0.01449845	1.718e-002	0.84387	3.988e-001
AR(9)	0.02034934	1.682e-002	1.20957	2.265e-001
AR(10)	0.03697867	1.619e-002	2.28352	2.246e-002
A	0.00001787	2.632e-006	6.78984	1.312e-011
ARCH(1)	0.13069702	8.710e-003	15.00528	0.000e+000
GARCH(1)	0.83700808	1.209e-002	69.24780	0.000e+000

AIC(14) = -17476.54

BIC(14) = -17390.11

Normality Test:

Jarque-Bera P-value Shapiro-Wilk P-value

367.9 0 0.9874 3.066e-017

Ljung-Box test for standardized residuals:

Statistic P-value Chi²-d.f.

5.859 0.923 12

Ljung-Box test for squared standardized residuals:

Statistic P-value Chi²-d.f.

16.25 0.18 12

Lagrange multiplier test:

Lag 1 Lag 2 Lag 3 Lag 4 Lag 5 Lag 6 Lag 7 Lag 8 Lag 9 Lag 10

2.973 0.6975 -0.3888 -0.2776 -1.2 -0.3138 -1.489 -0.6709 0.6235 -0.7425

Lag 11 Lag 12 C

0.4598 -0.05166 0.5026

TR² P-value F-stat P-value

15.8 0.2008 1.442 0.2538