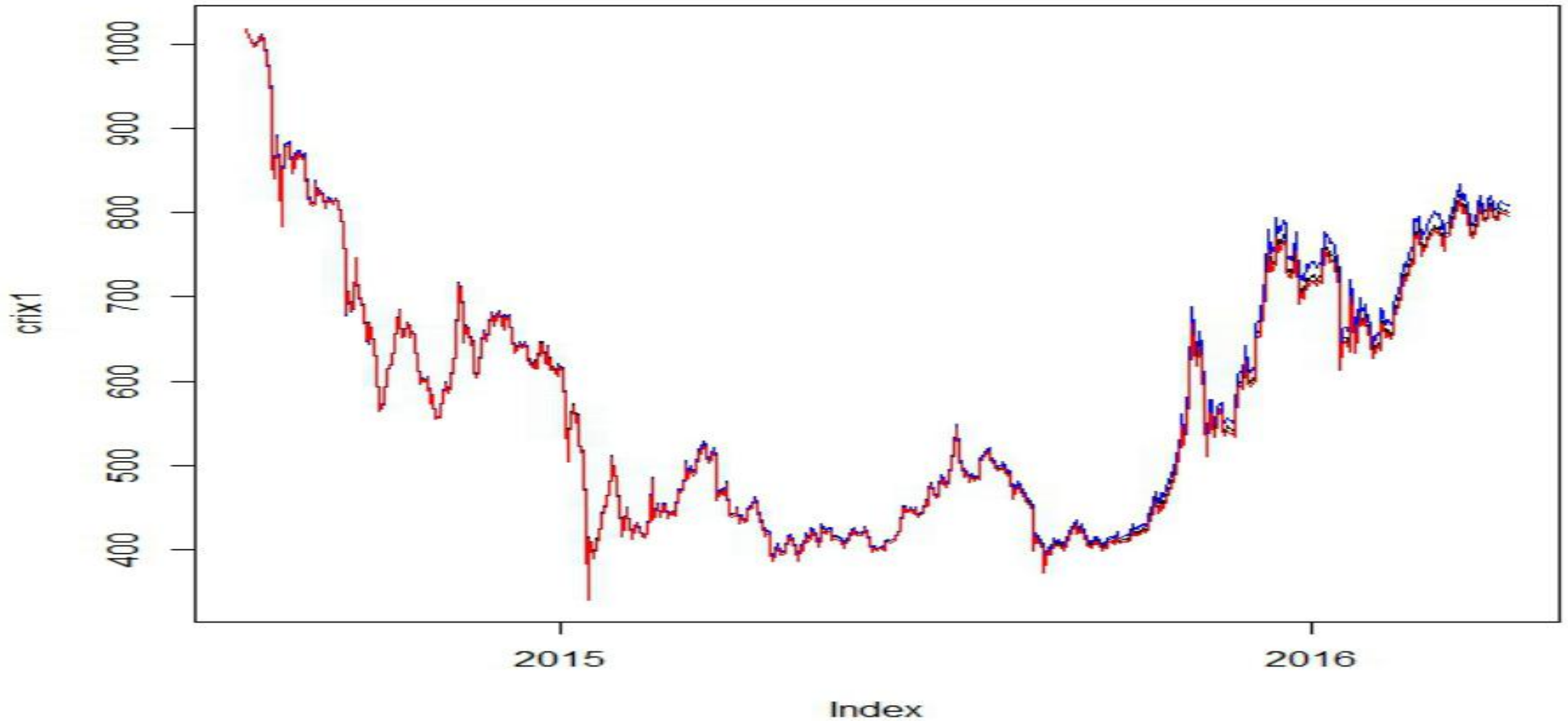
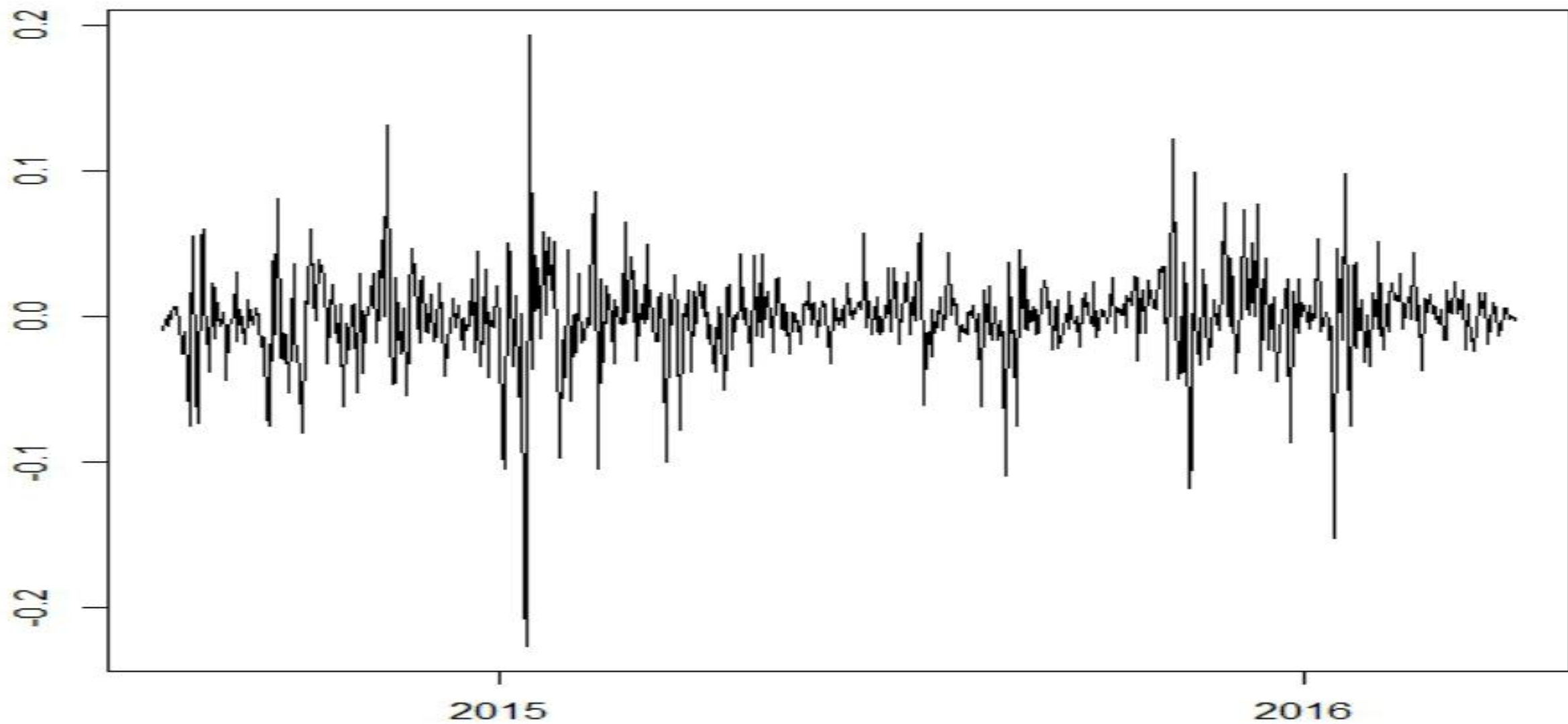


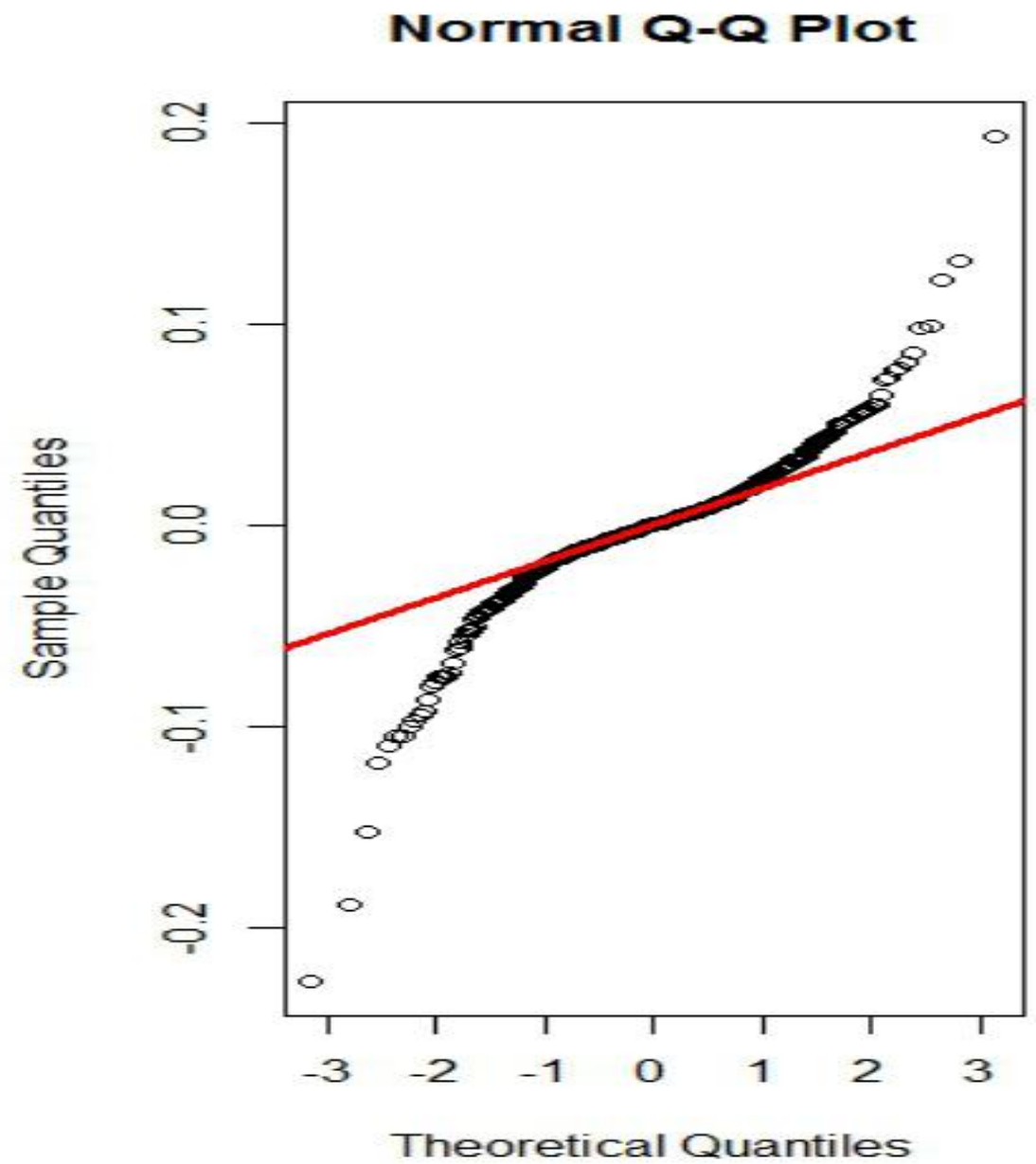
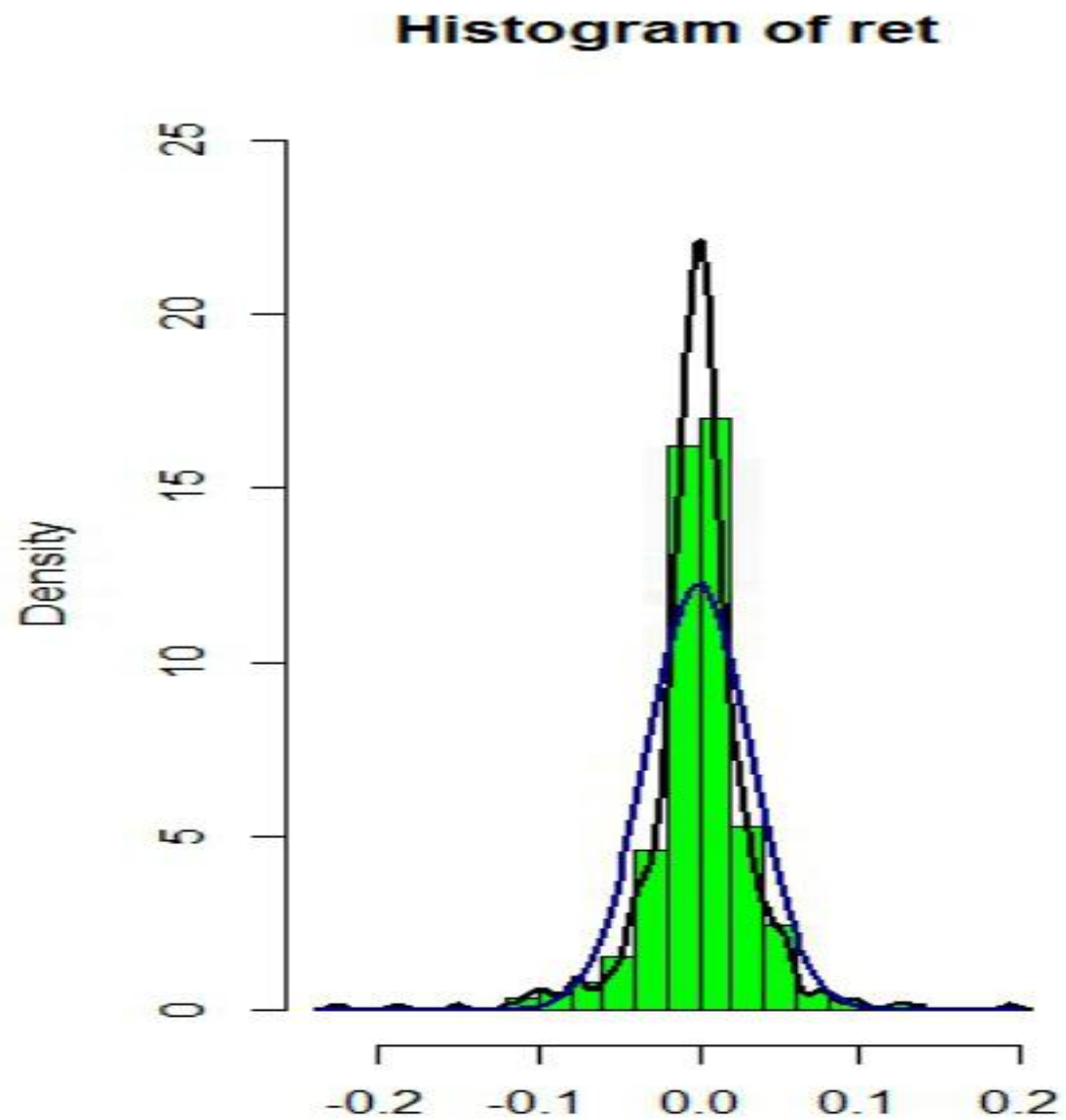
Three Indices in the CRIX family



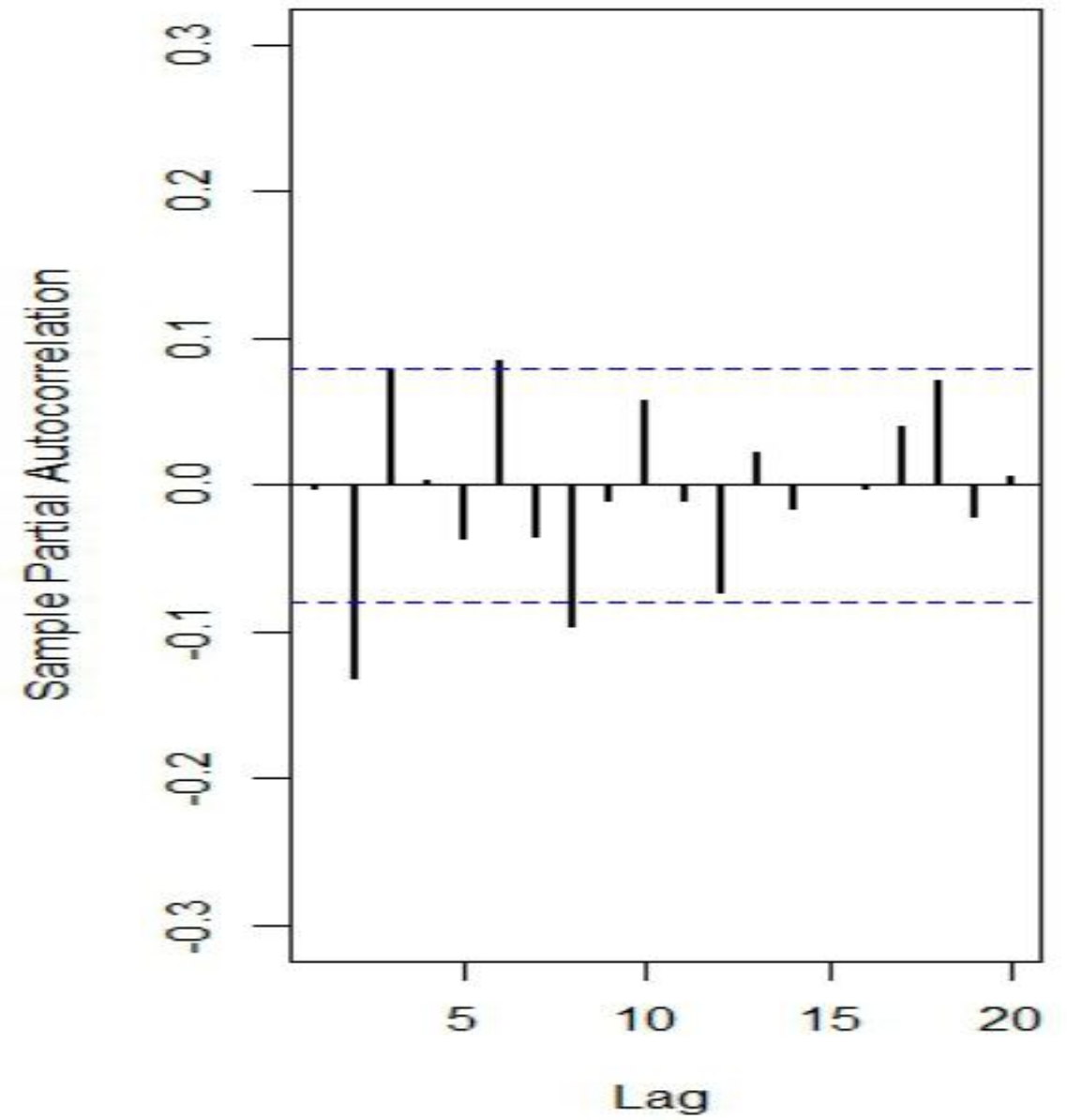
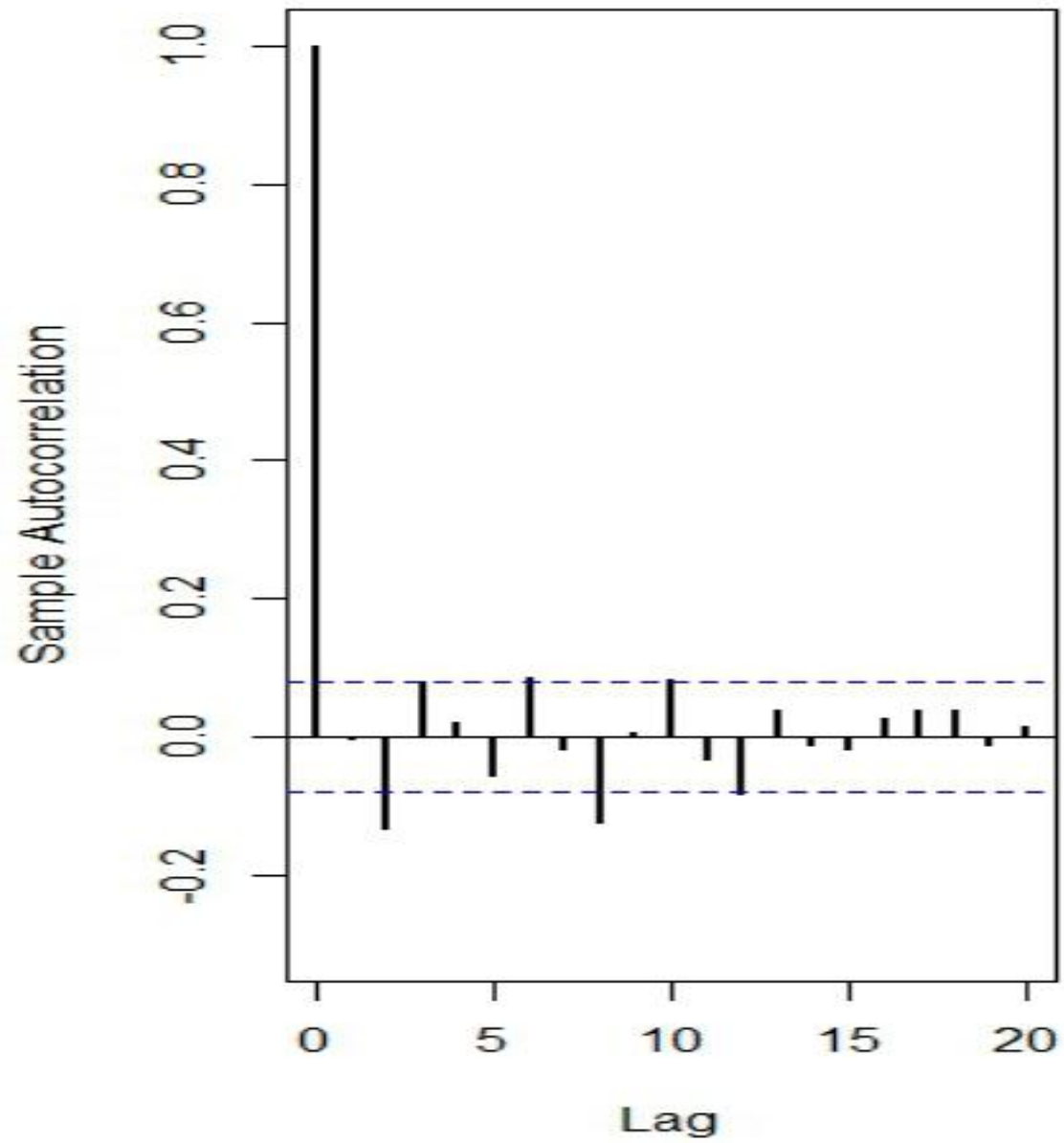
The daily value of indices in the CRIX family: CRIX, ECRIX AND EFCRIX



The log returns of RIX

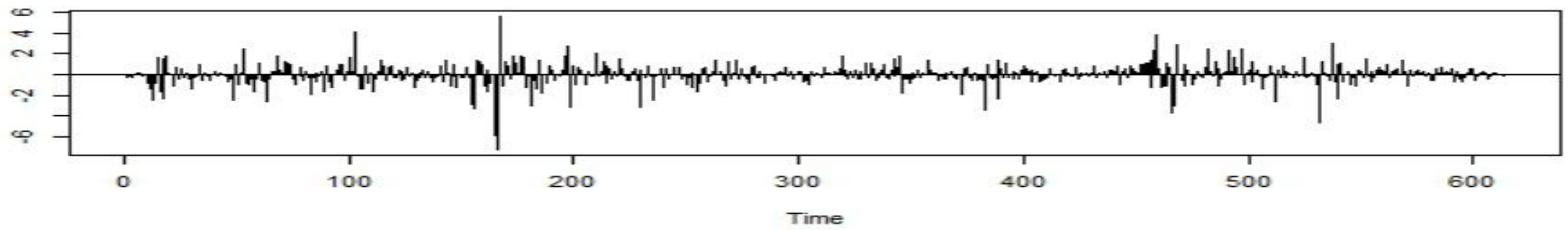


Histogram and QQ plot of CRIX returns

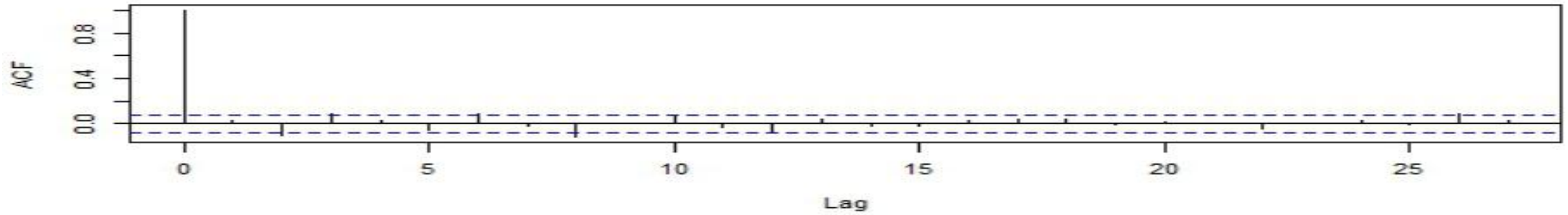


The sample ACF and PACF of CRIX returns

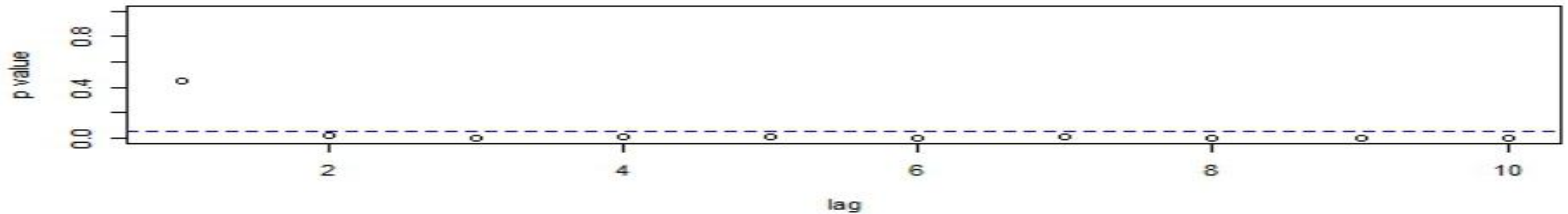
Standardized Residuals



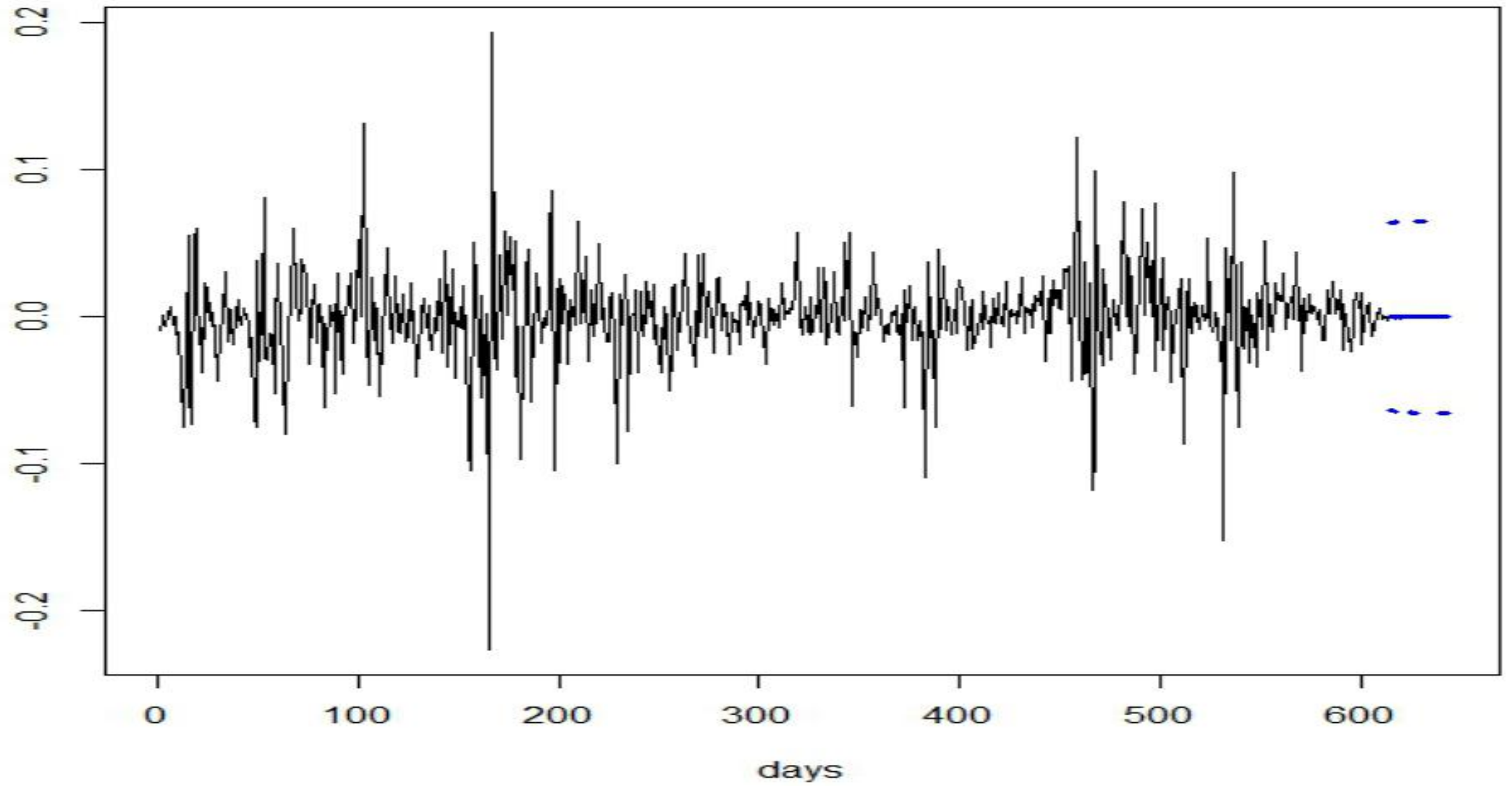
ACF of Residuals



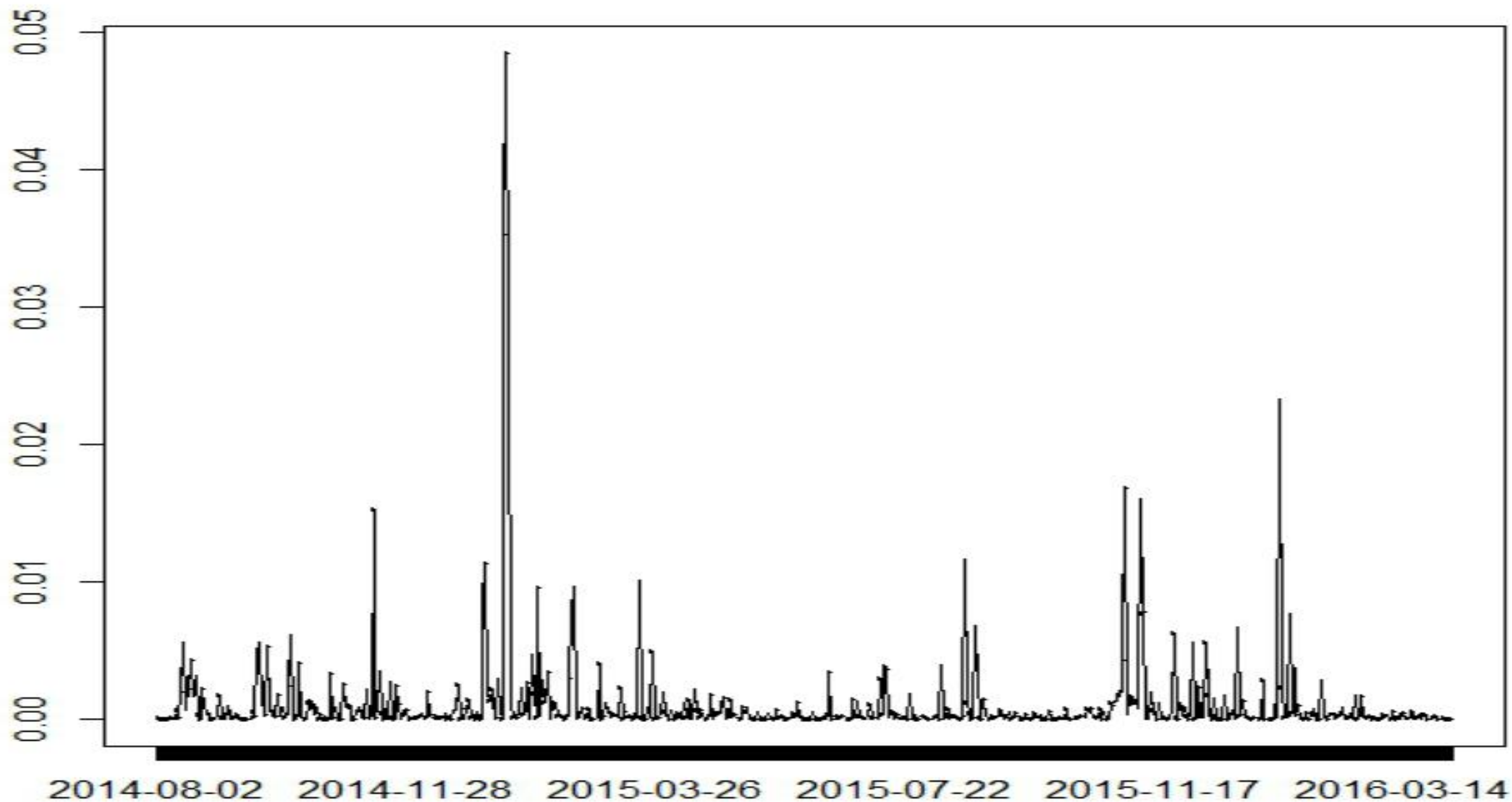
p values for Ljung-Box statistic



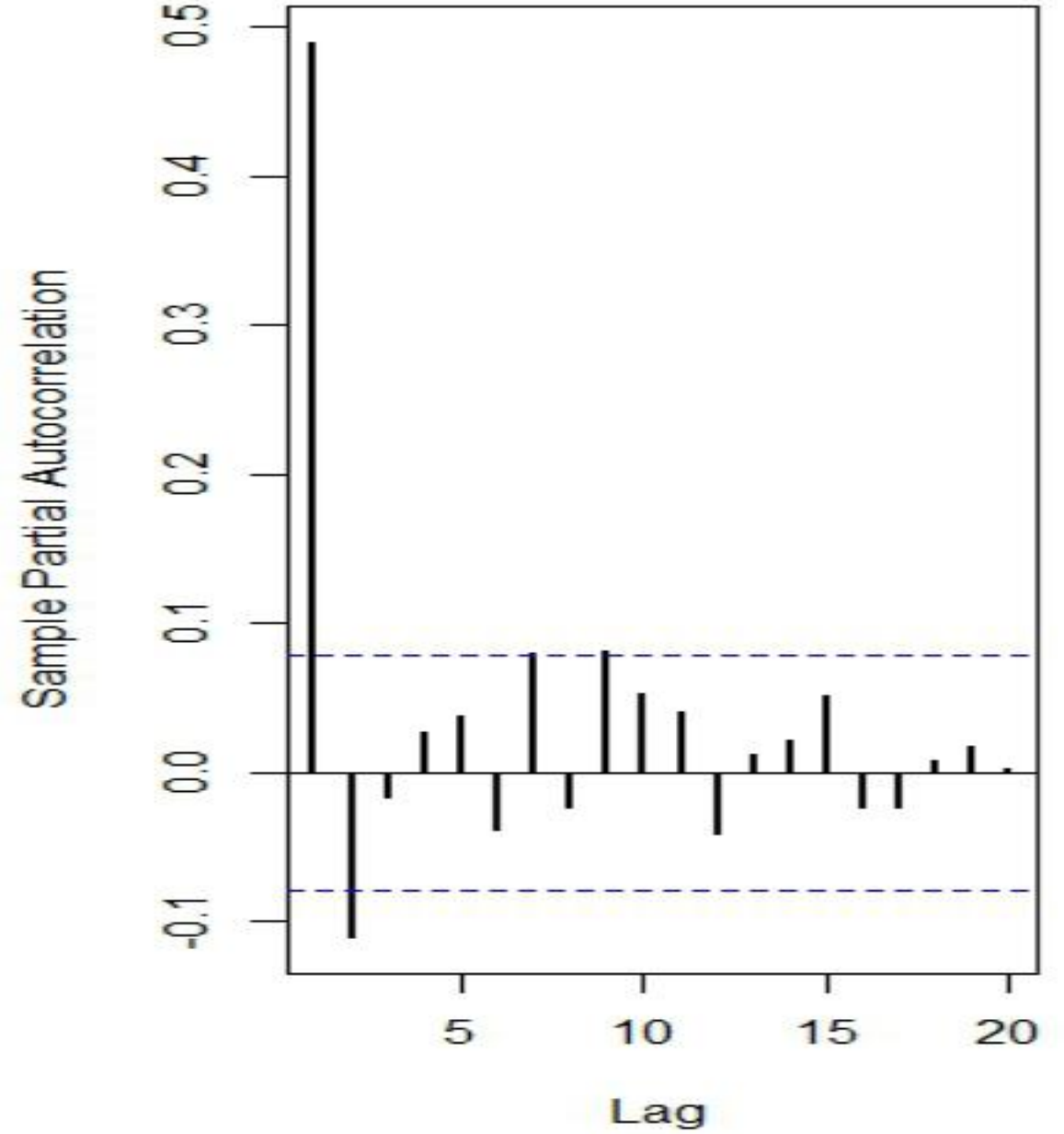
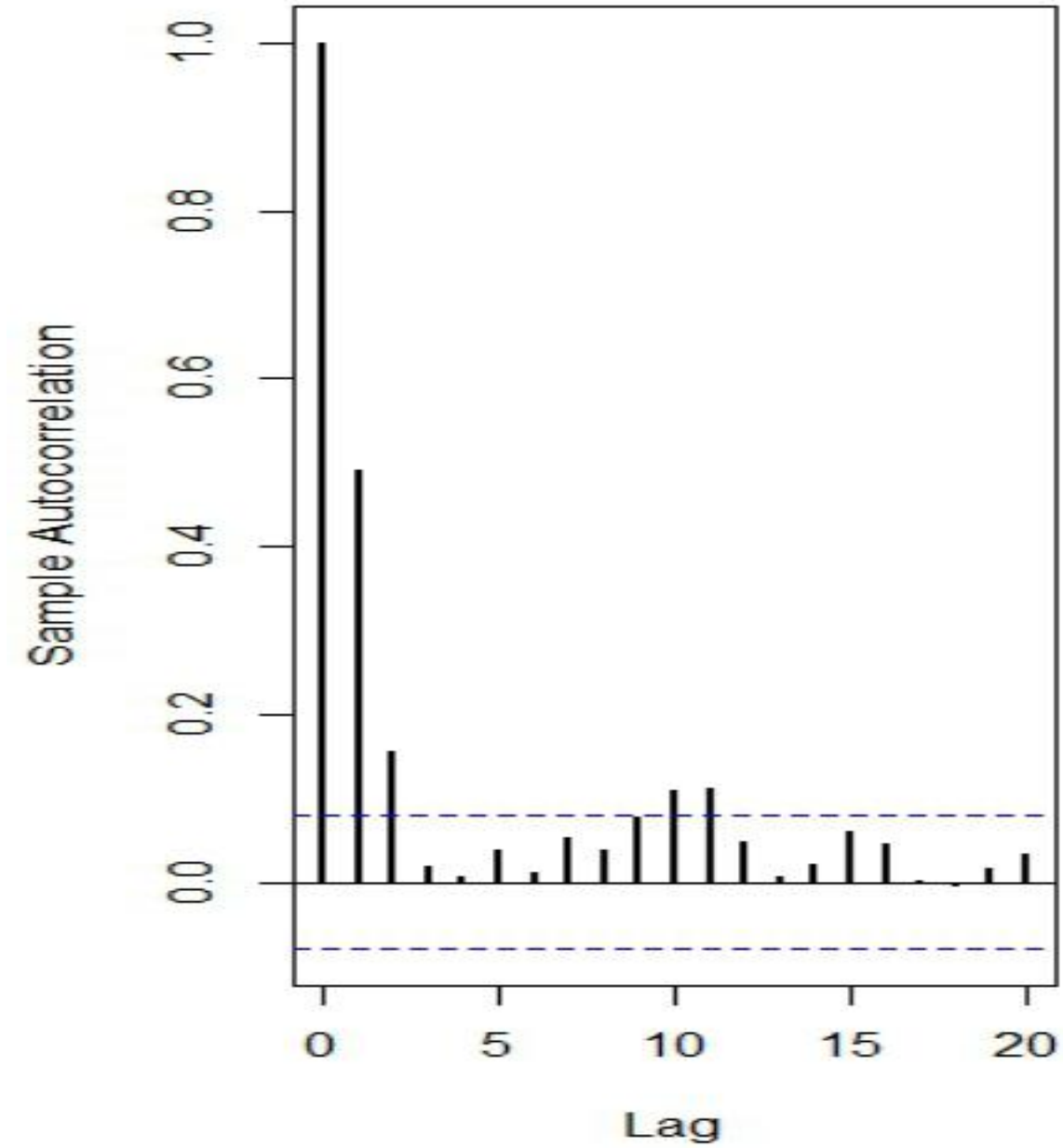
Diagnostic Checking



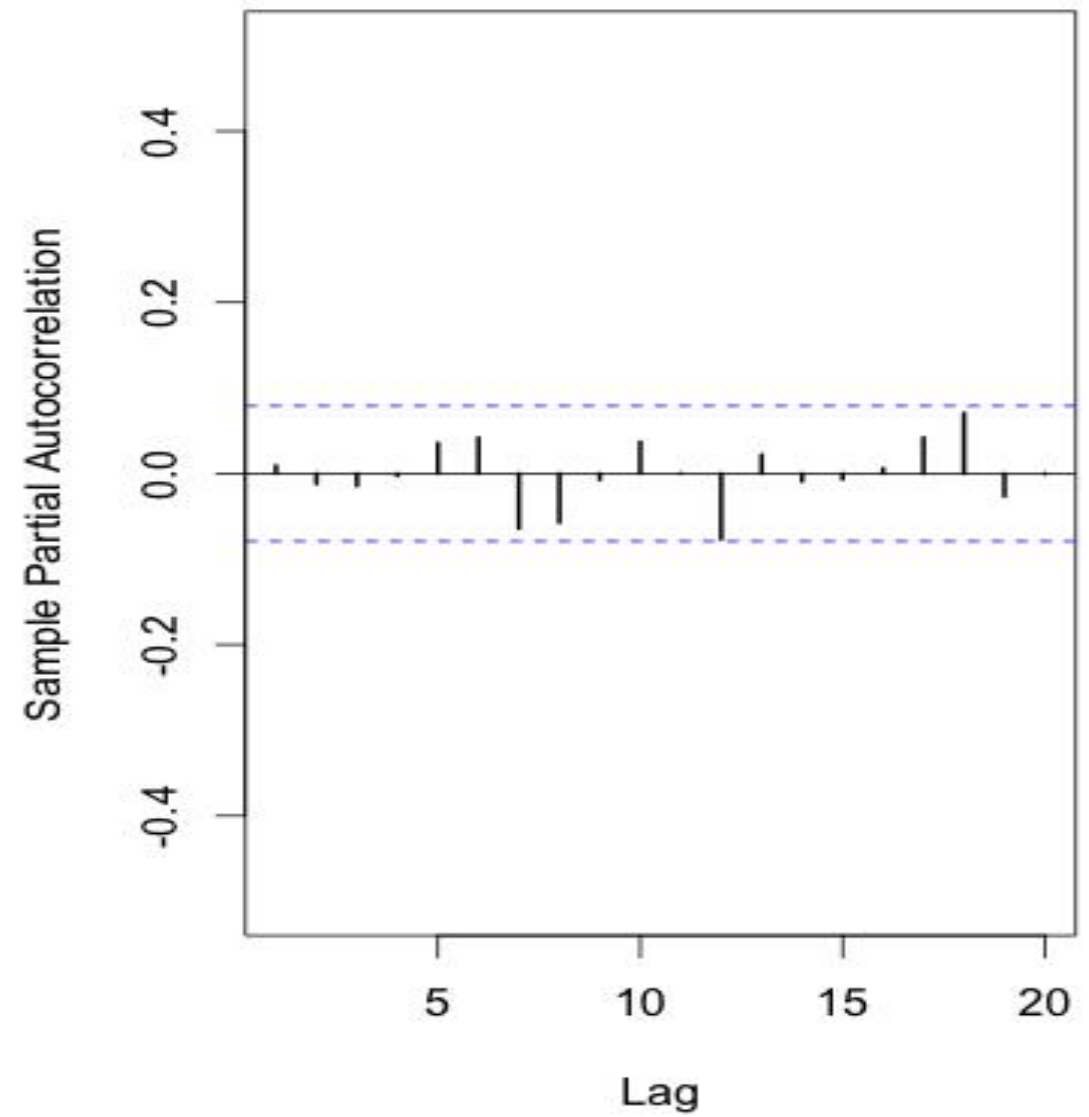
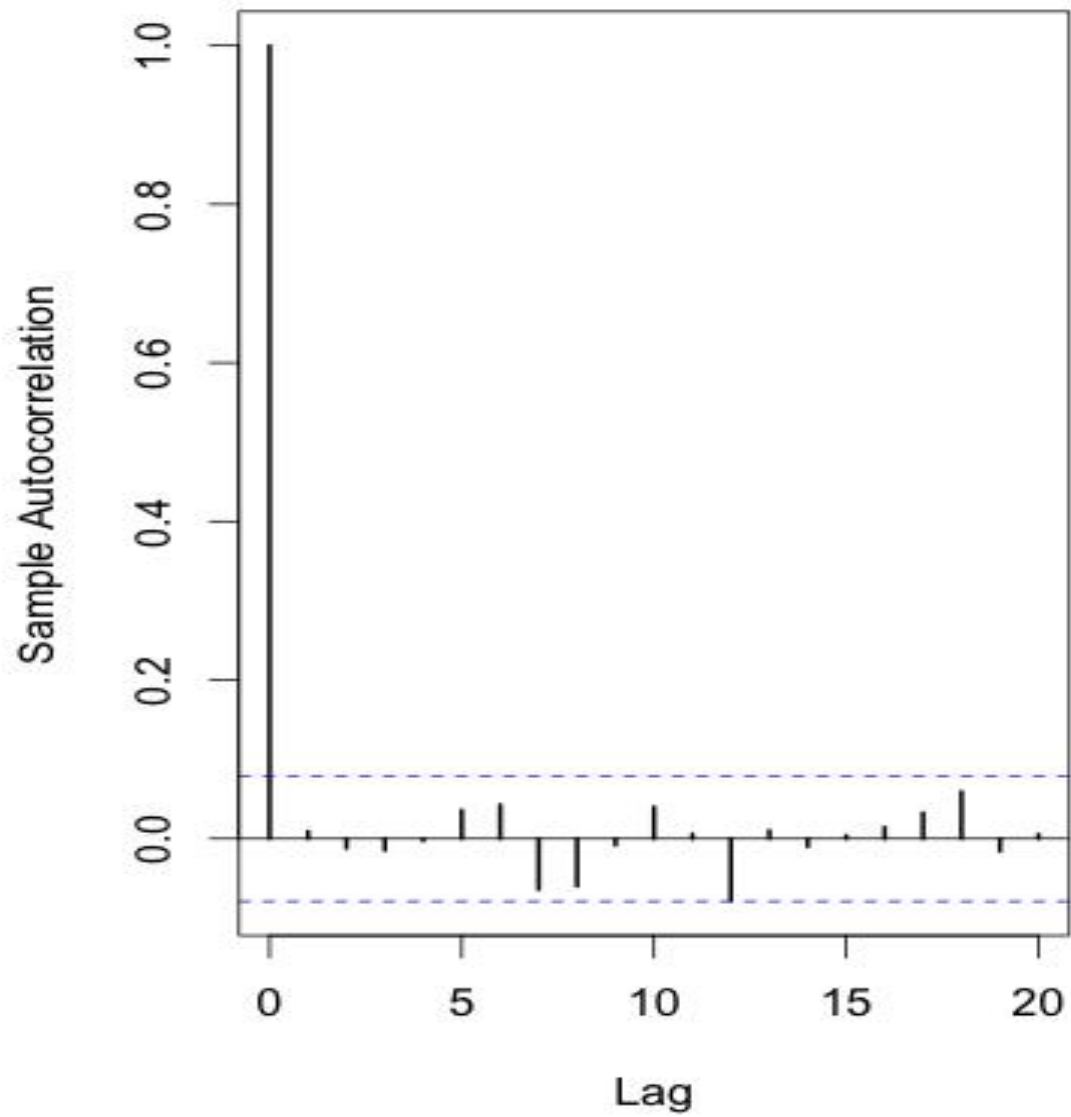
CRIX returns and predicted values



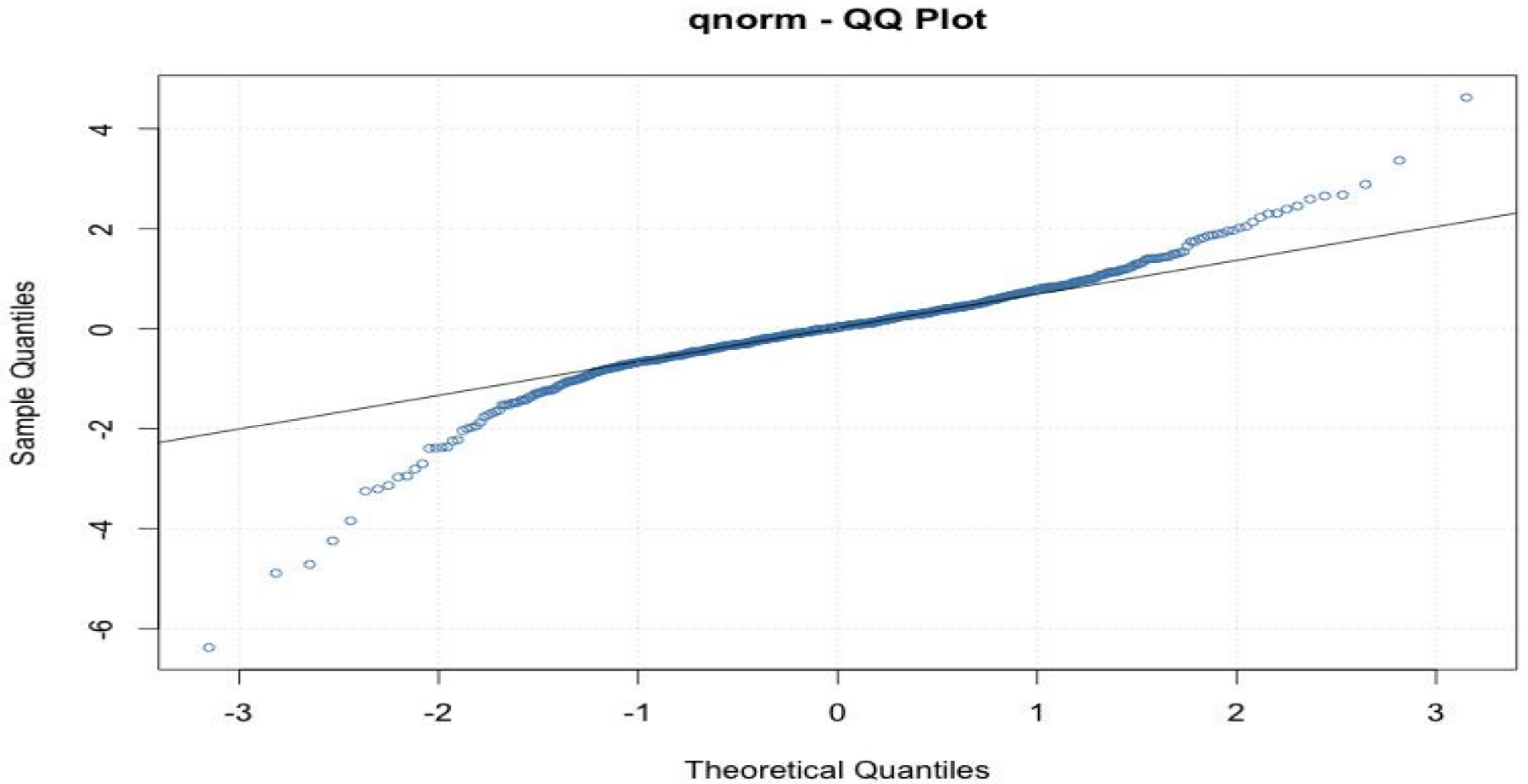
The squared ARIMA(2,0,2) residuals of CRIX returns



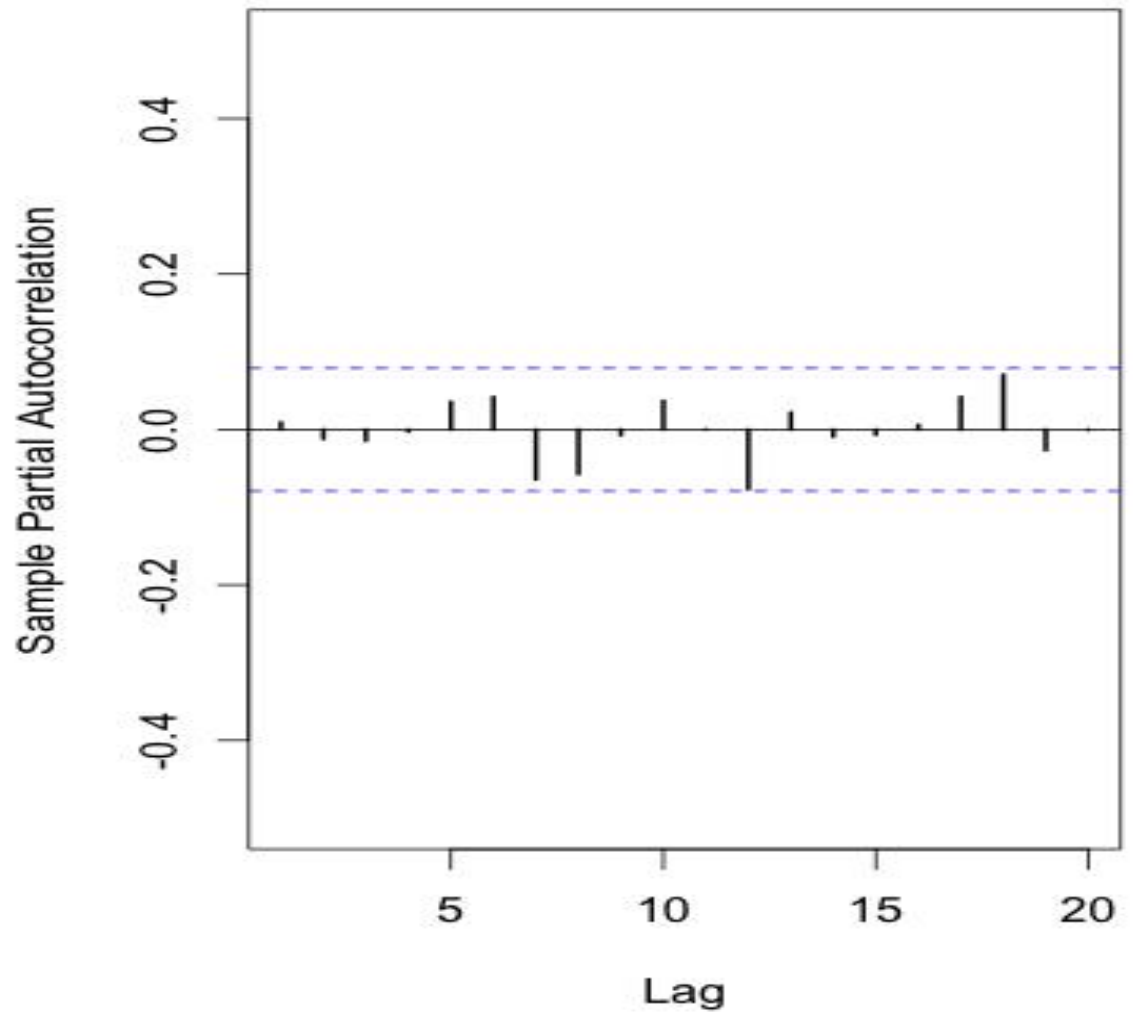
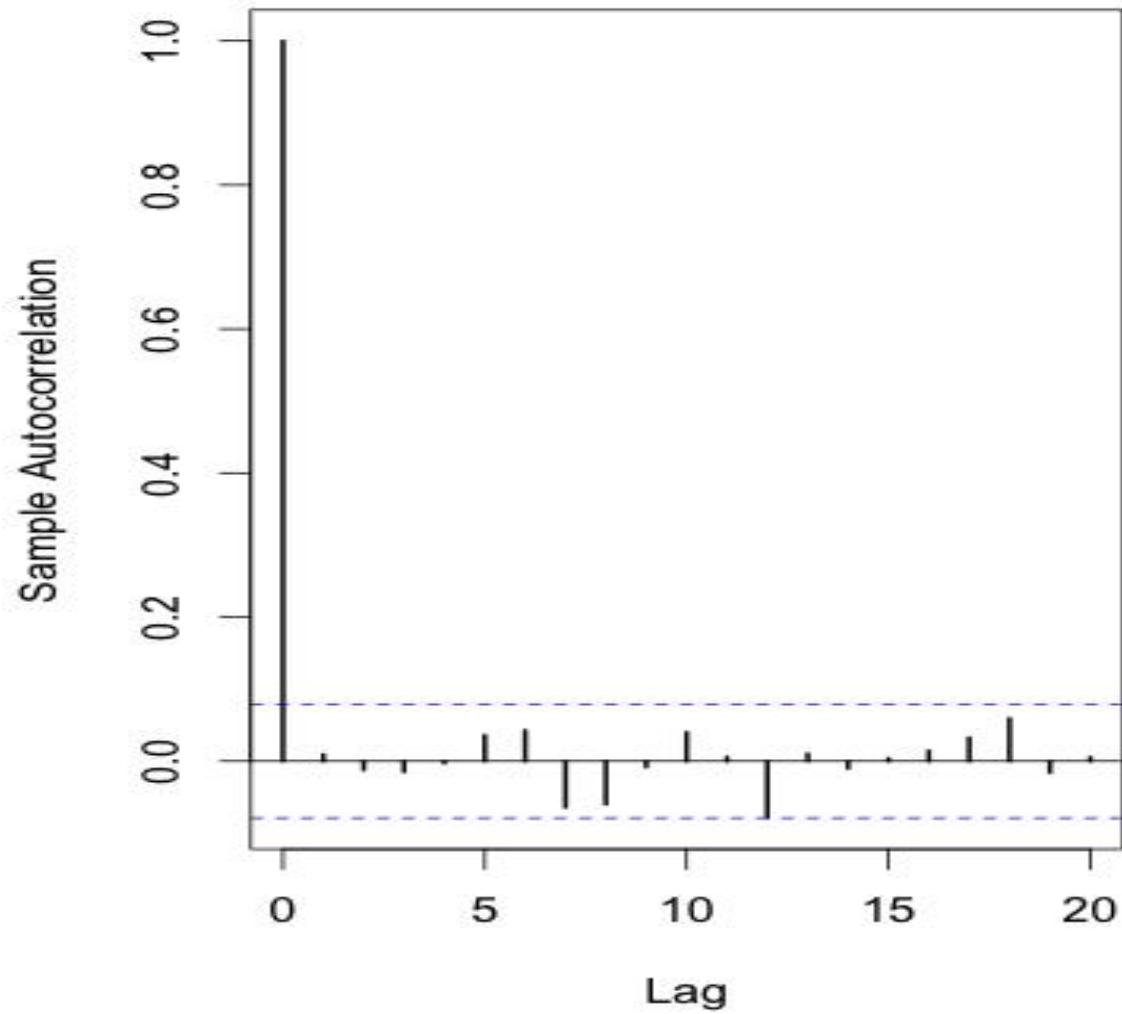
The ACF and PACF of squared ARIMA(2,0,2) residuals



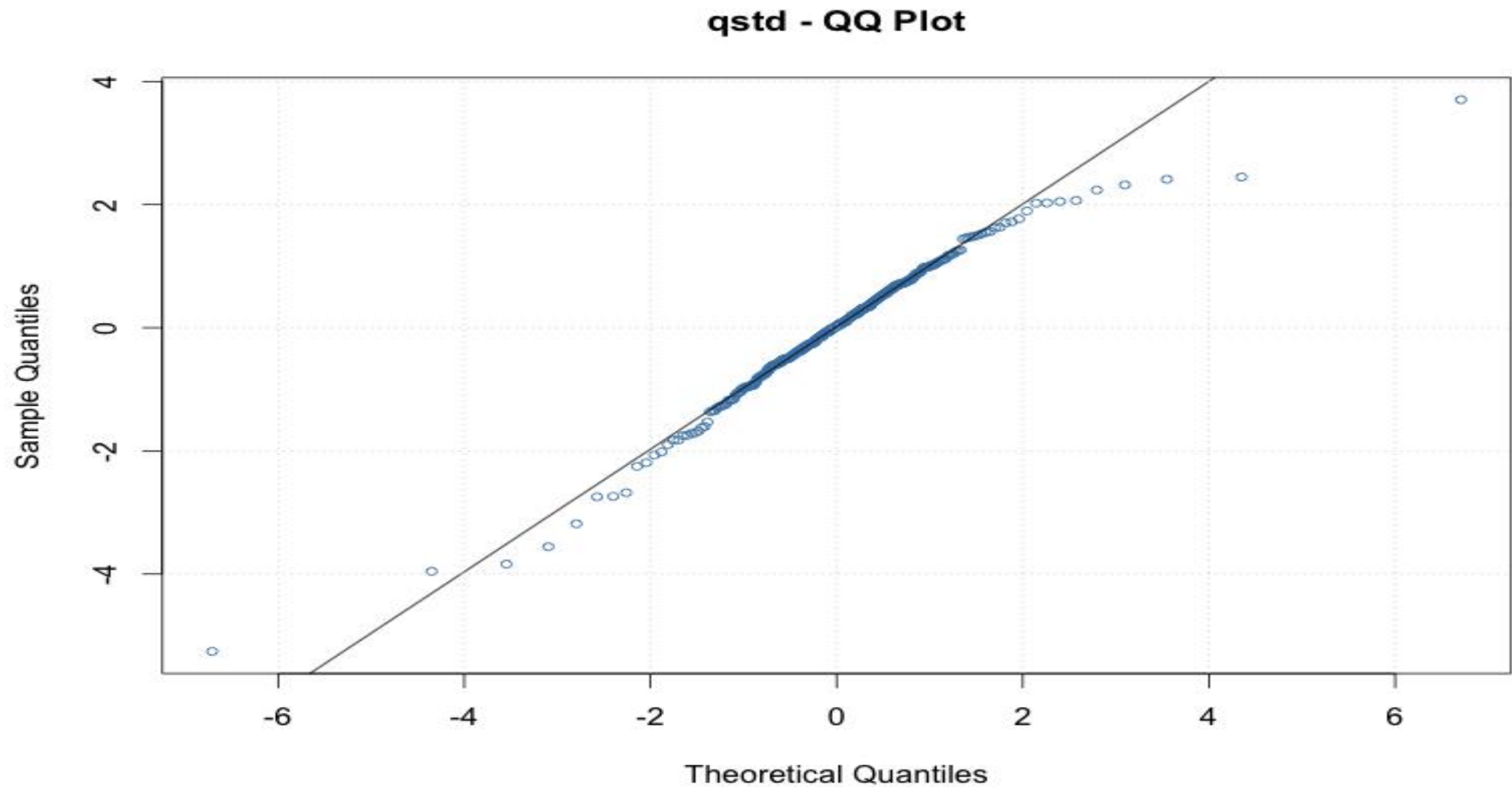
The ACF and PACF of squared ARIMA(2,0,2) residuals



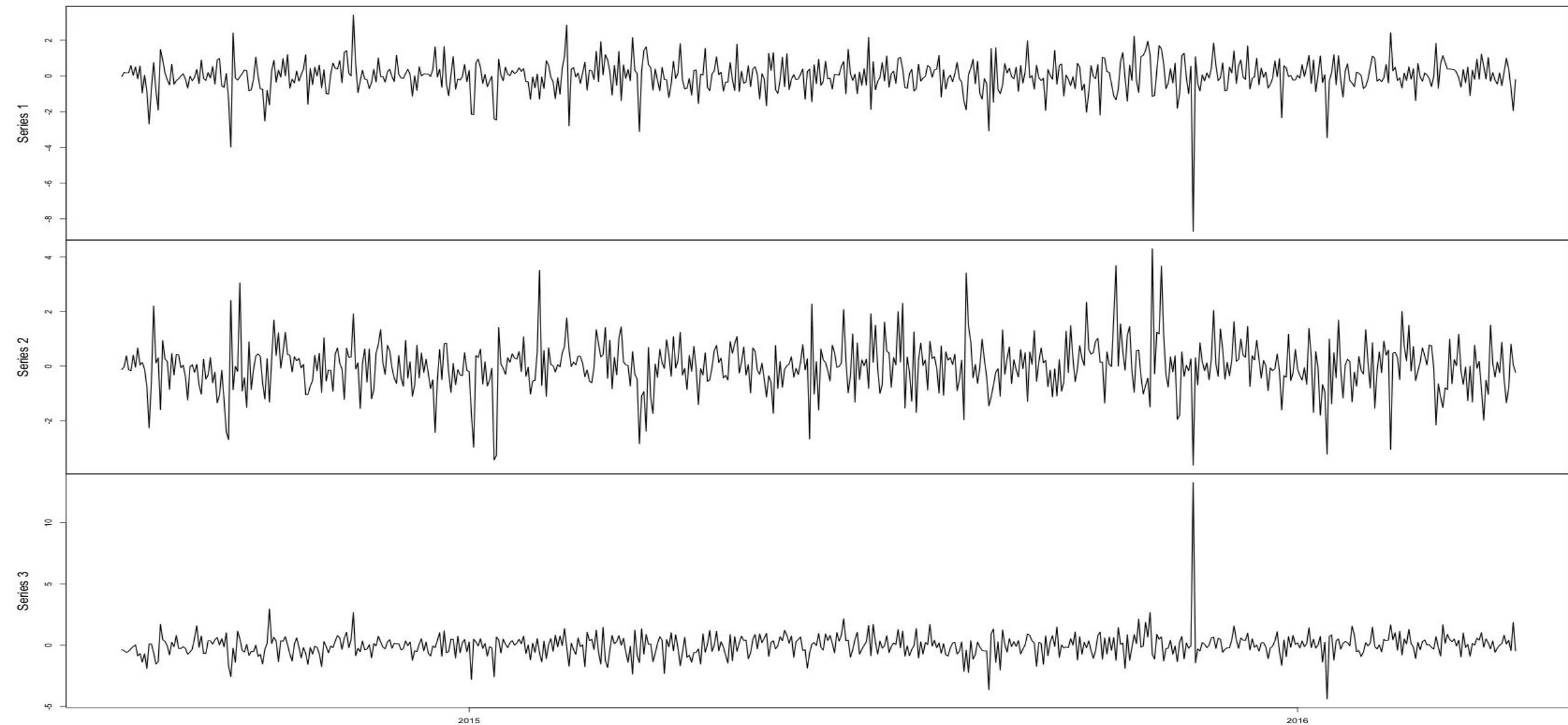
The QQ plots of model residuals of ARIMA-GARCH process



The PACF and ACF plots for model residuals of ARIMA(2,0,2)-t-GARCH(1,1) process



The QQ plots of model residuals of ARIMA-t-GARCH process

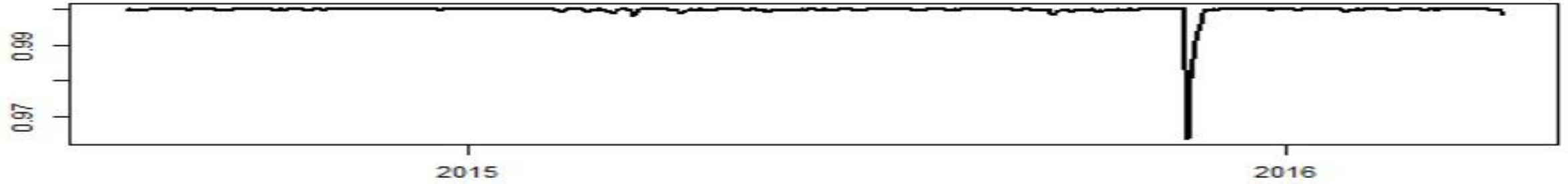


The S.E of DCC-GARCH model,with CRIX(upper),ECRIX(middle) and EFCRIX(lower)

CRIX v.s. ECRIX



CRIX v.s. EFCRIX

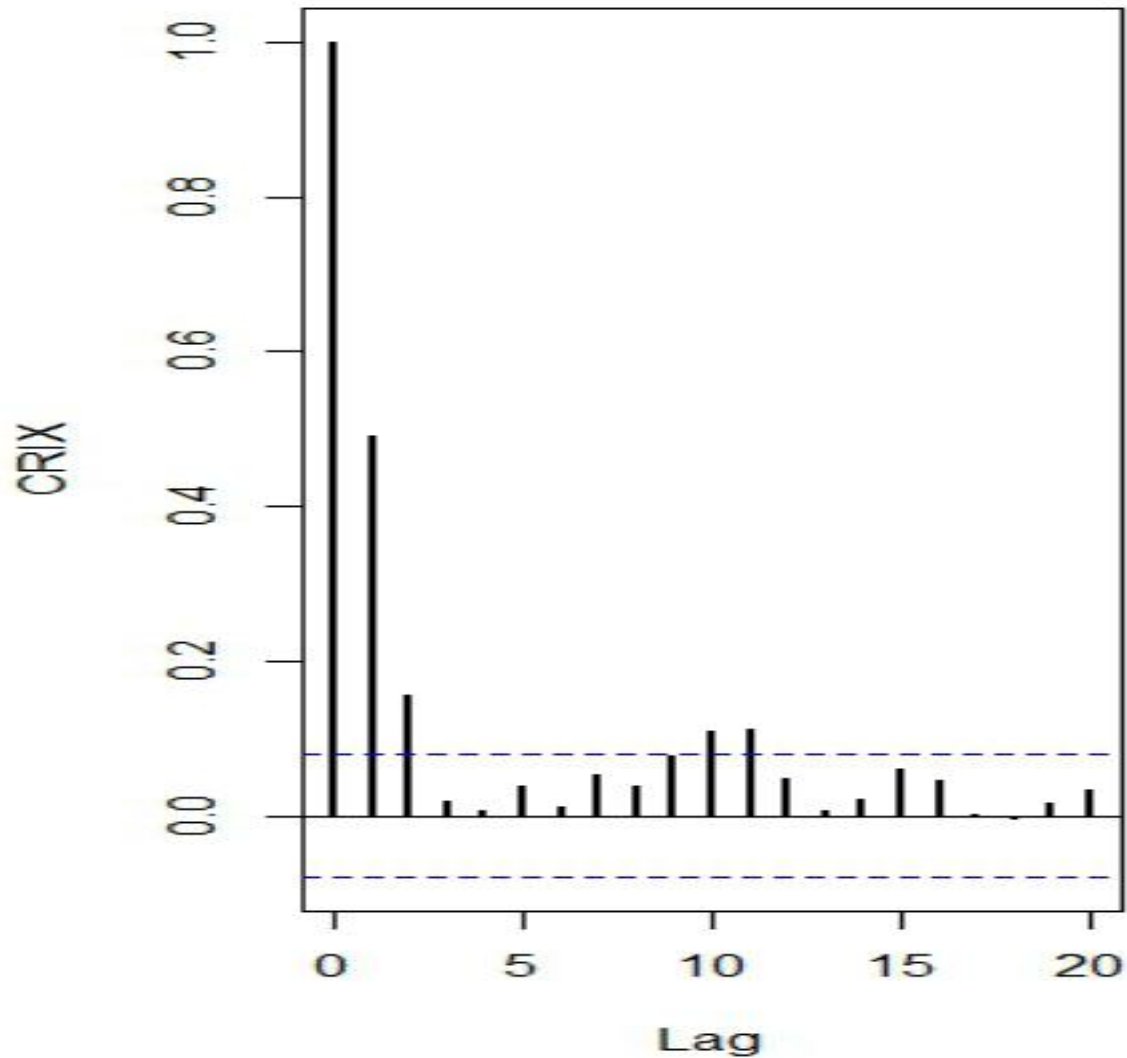


ECRIX v.s. EFCRIX

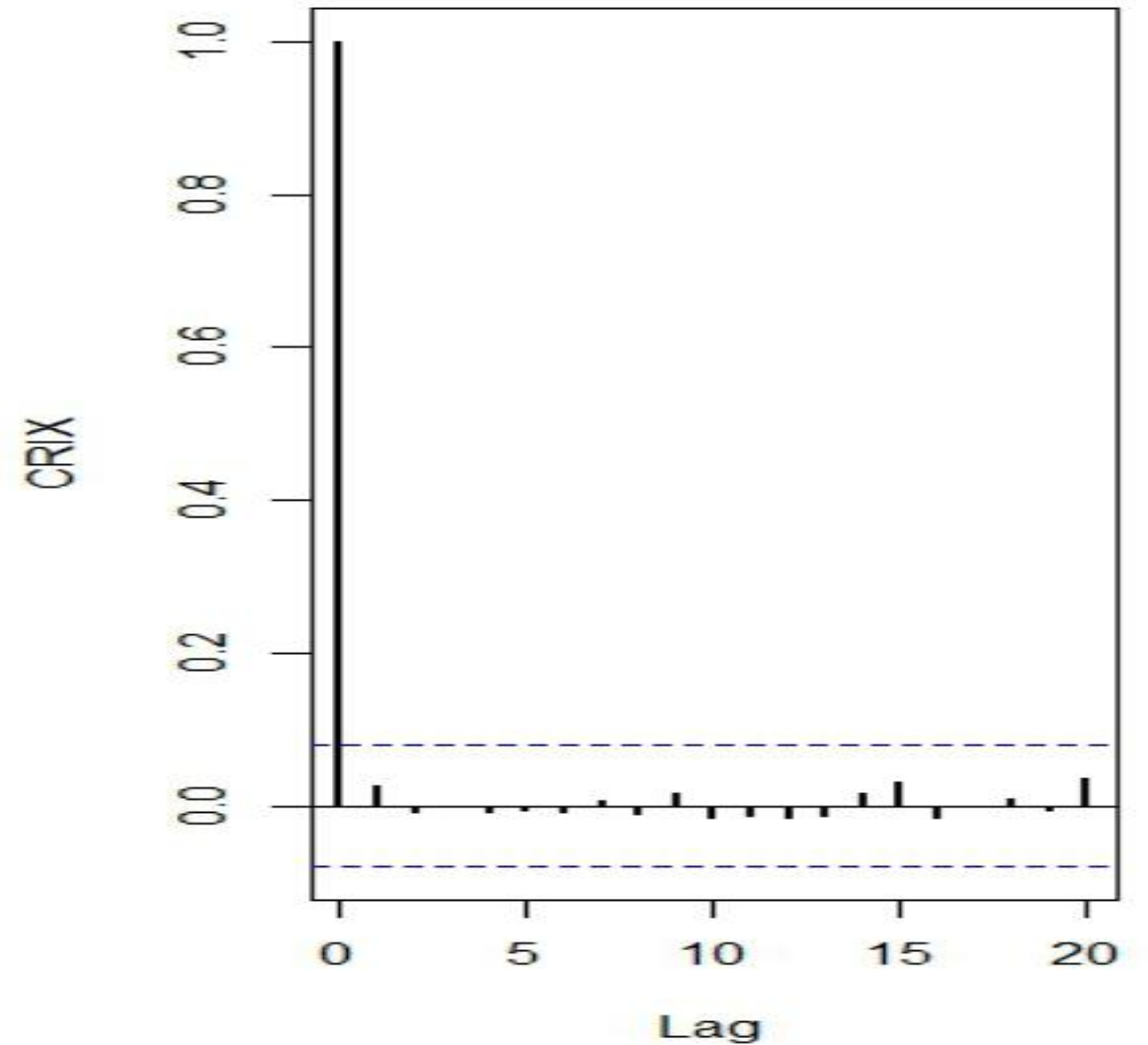


The dynamic autocorrelation

ACF of Premodel Residuals

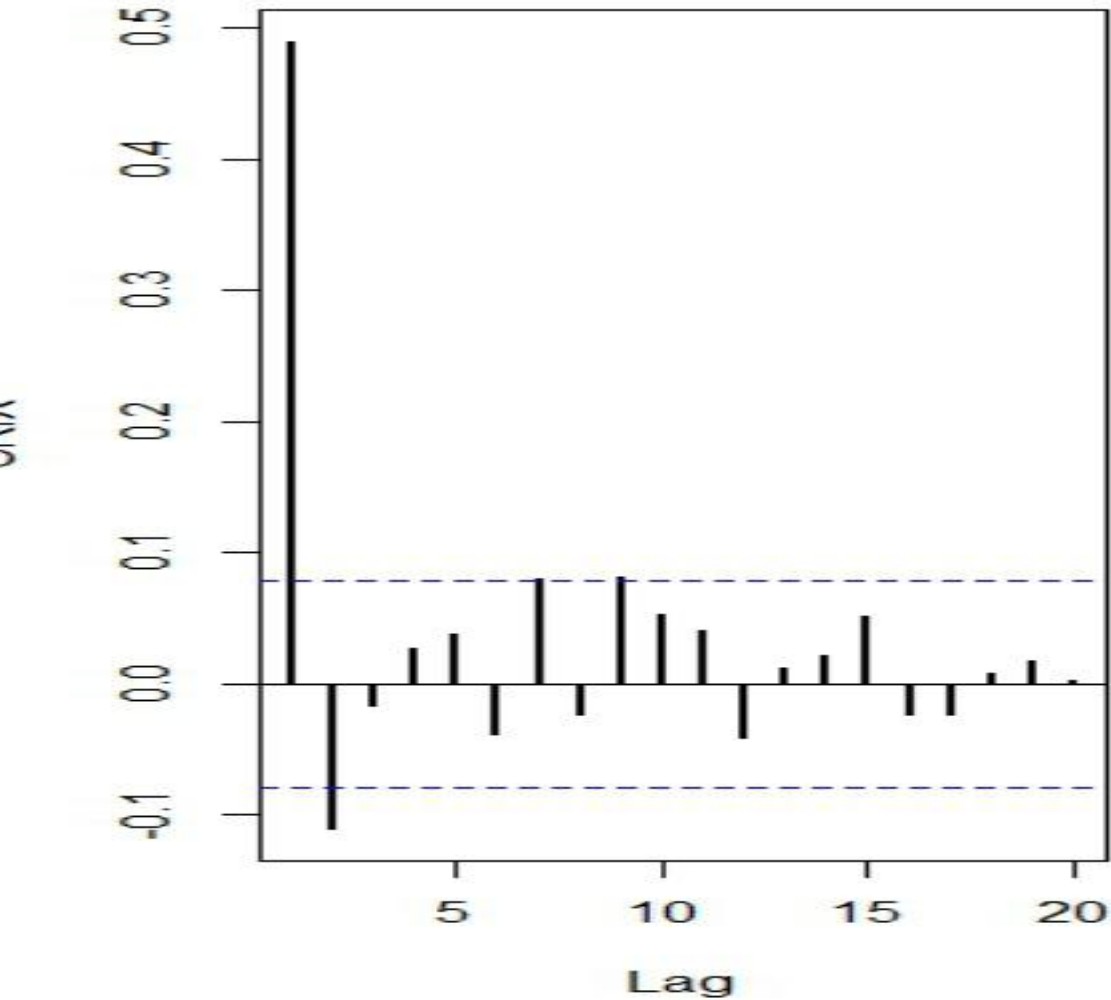


ACF of DCC Residuals

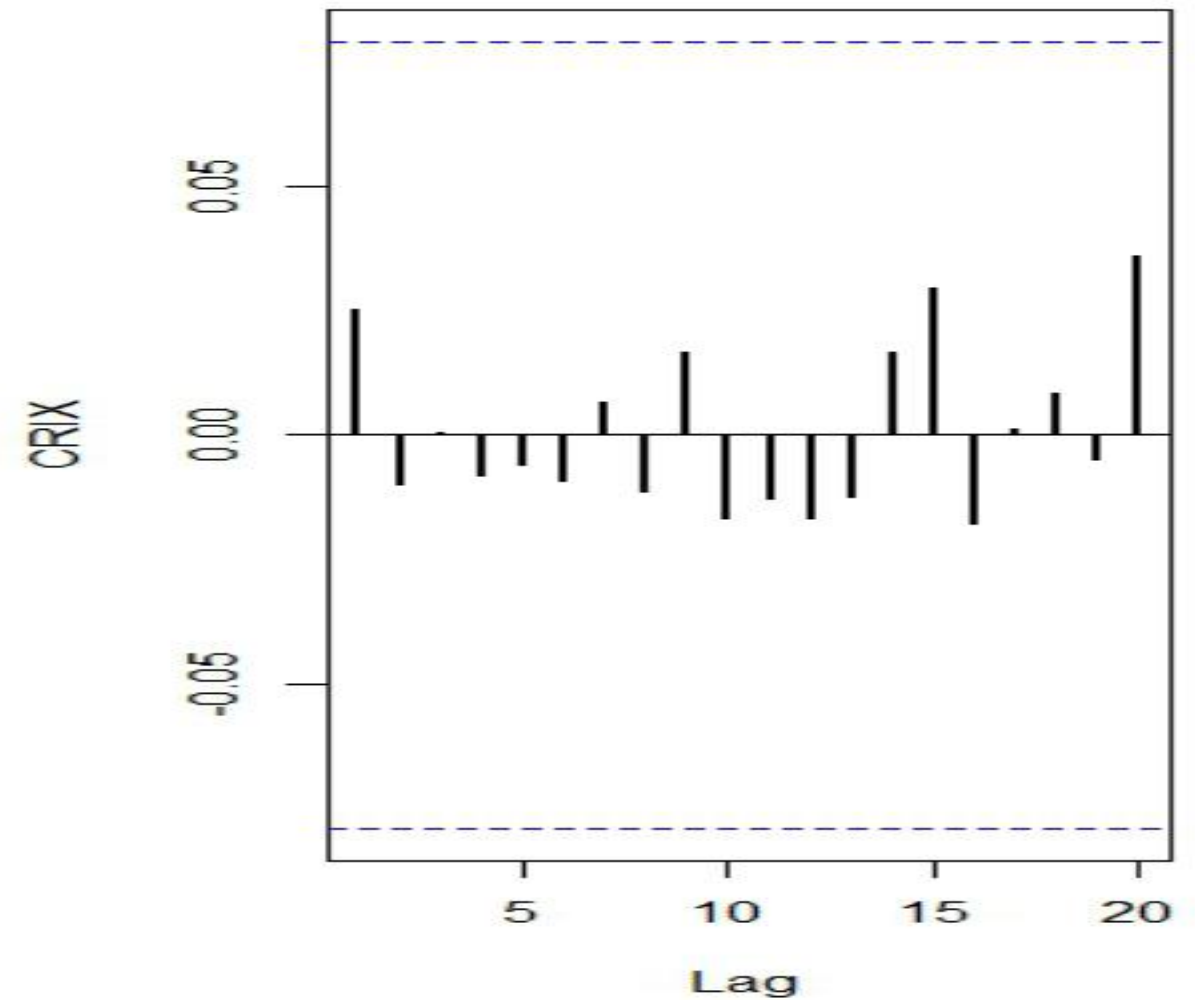


The comparison of ACF between premodel squared residuals and DCC squared residuals ,for exanple CRIX

PACF of Premodel Residuals



PACF of DCC Residuals



The comparison of PACF between premodel squared residuals and DCC squared residuals ,for exanple CRIX