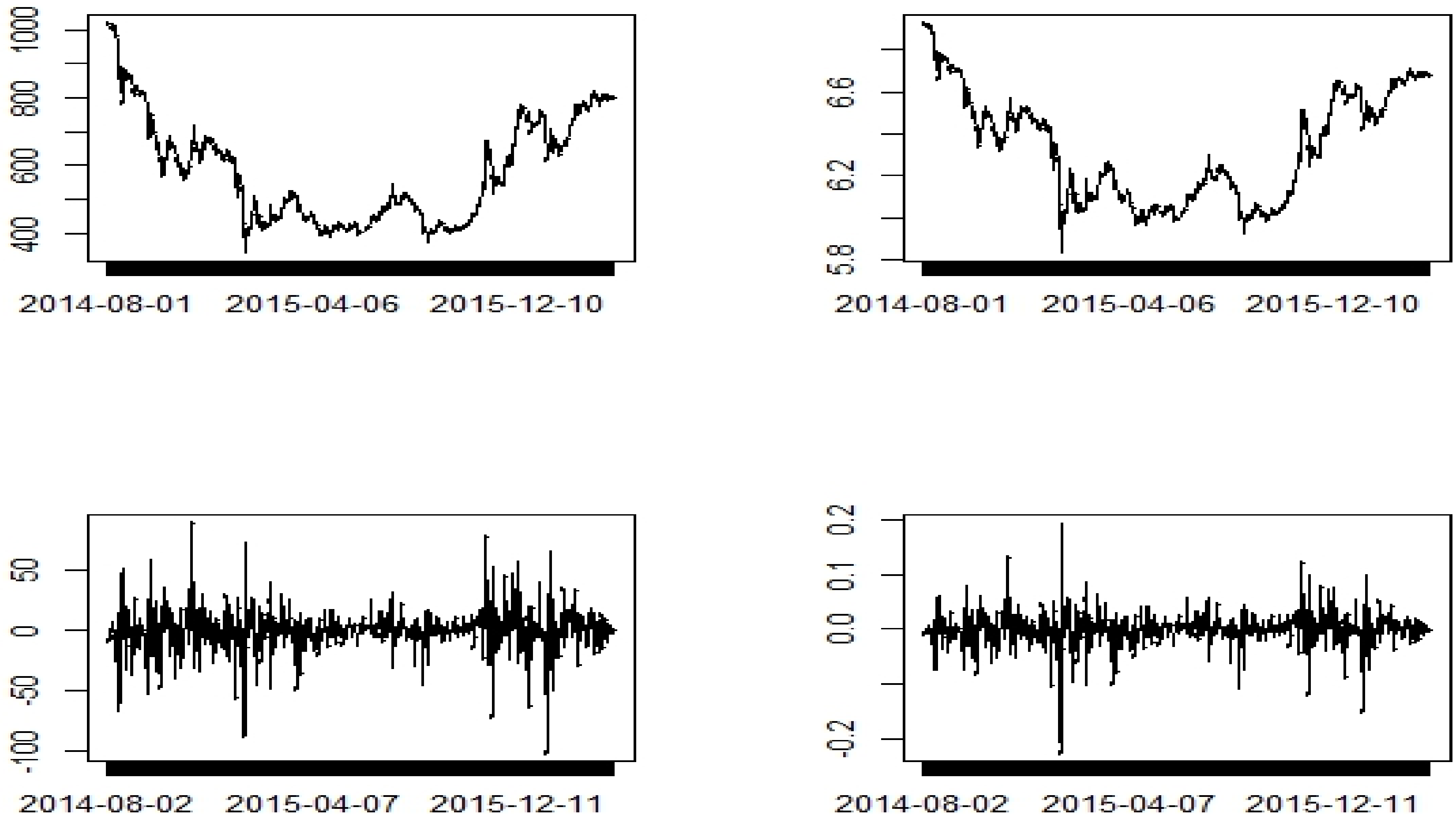
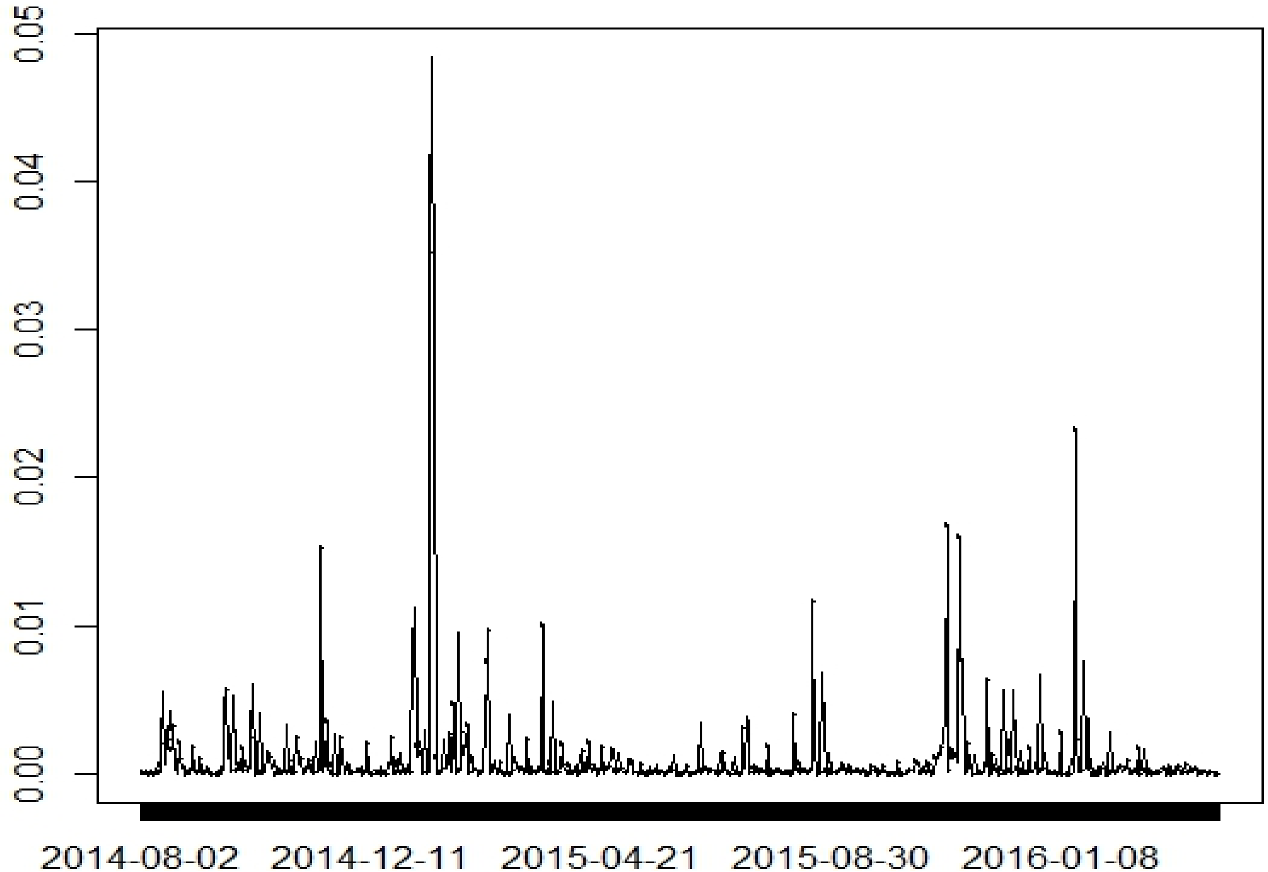
HOMEWORK UNIT4 QUESTION 3

Reporter： Xiumei Wang

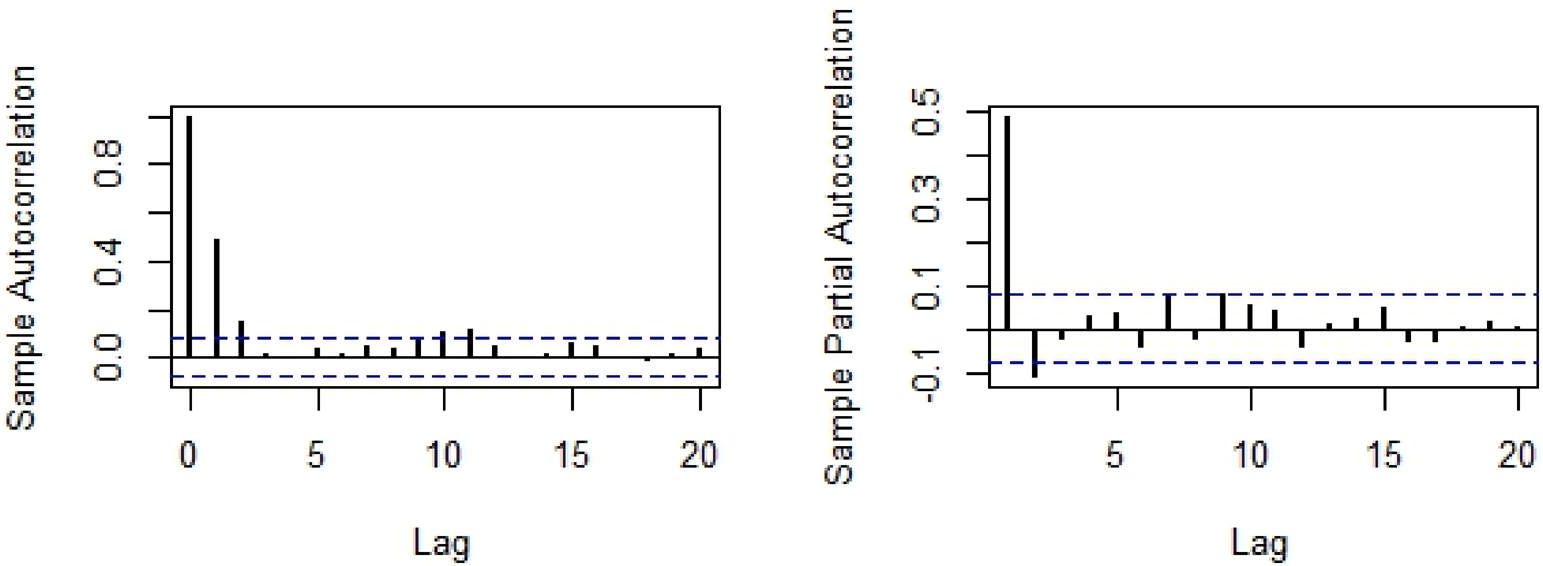
Instructor： Wolfgang Härdle



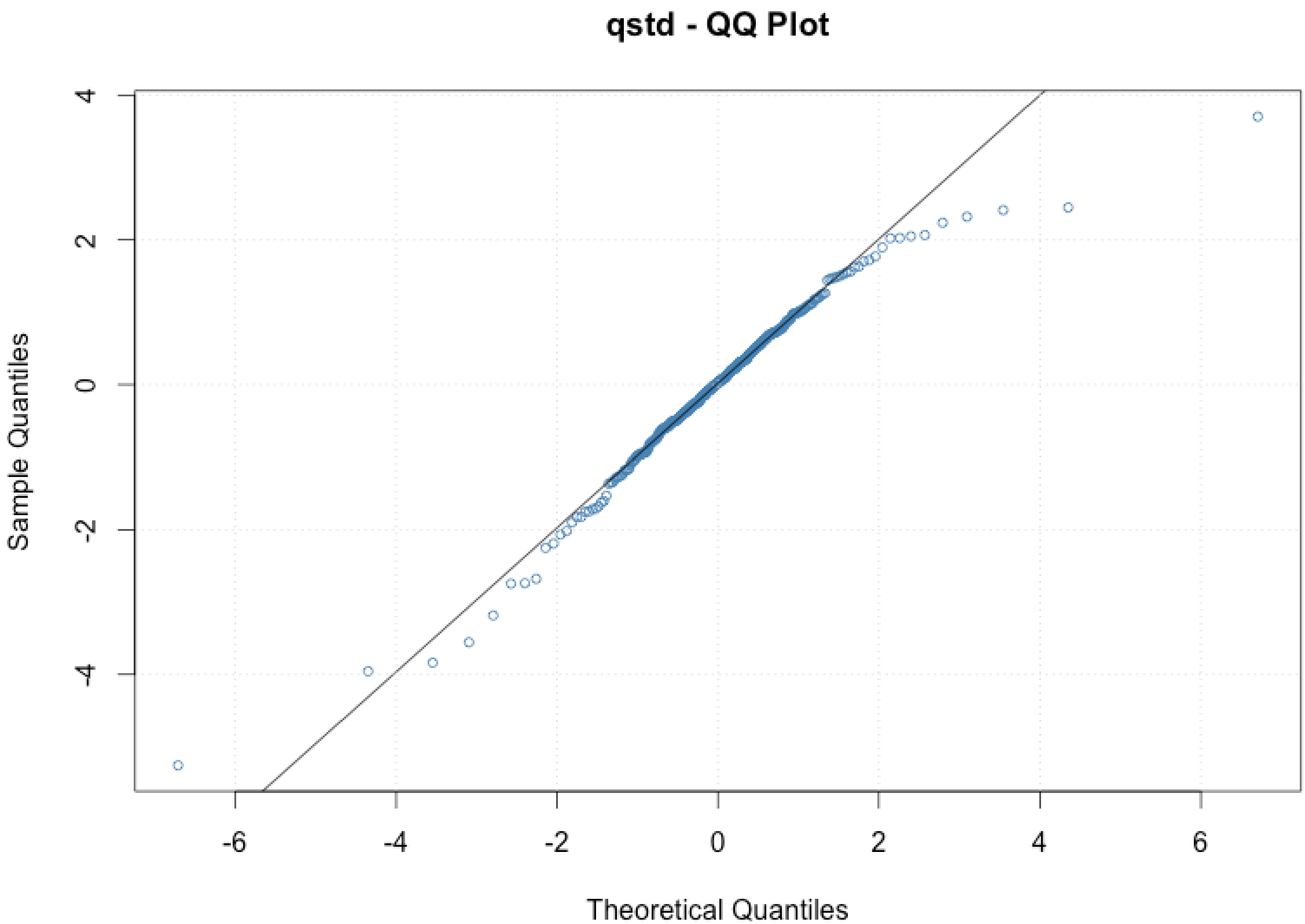
The difference of crix returns.



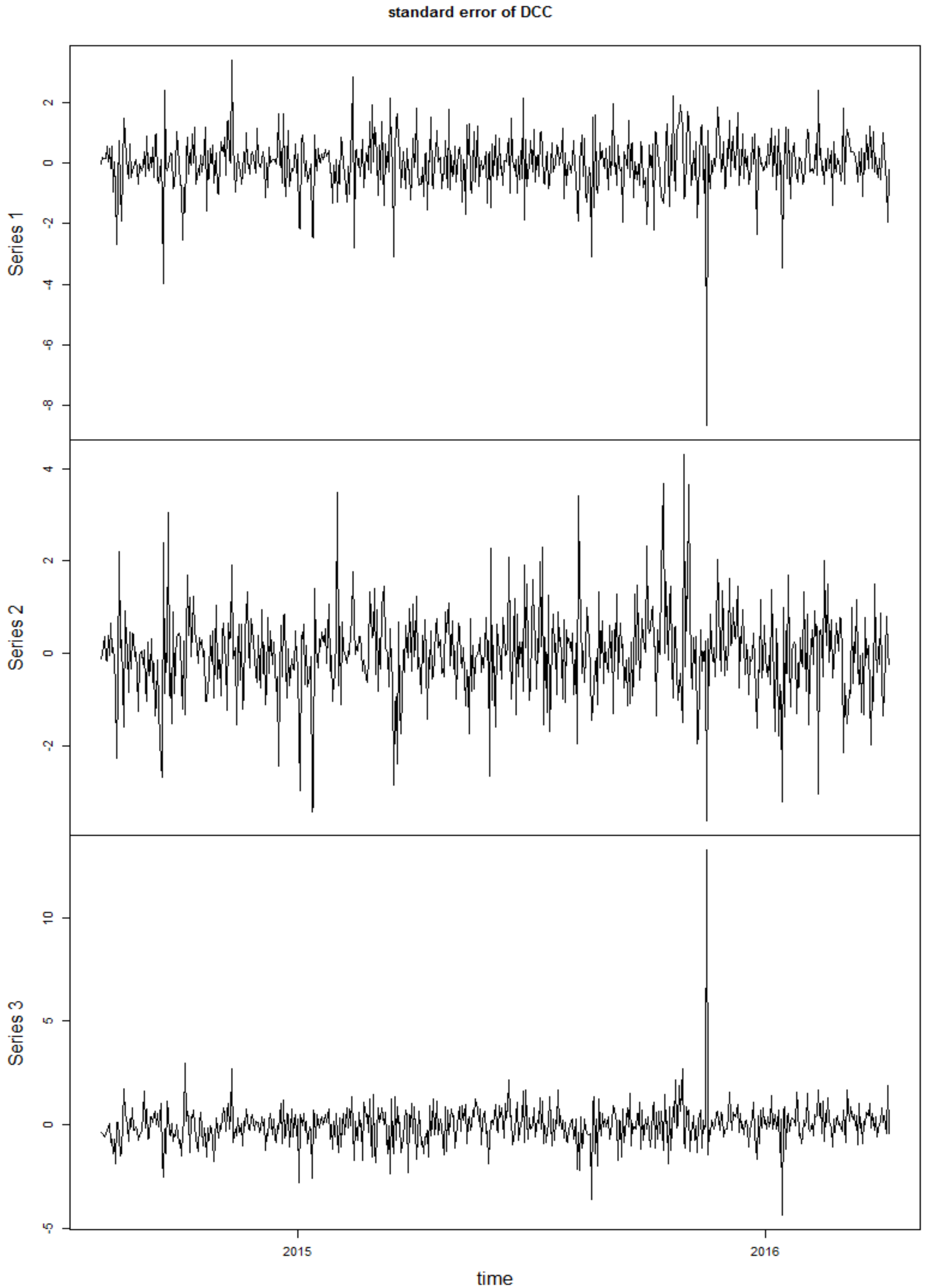
The squared ARIMA(2,0,2) residuals of CRIX returns.



The ACF and PACF of squared ARIMA(2,0,2) residuals from 01/08/2014 to 06/04/2016.

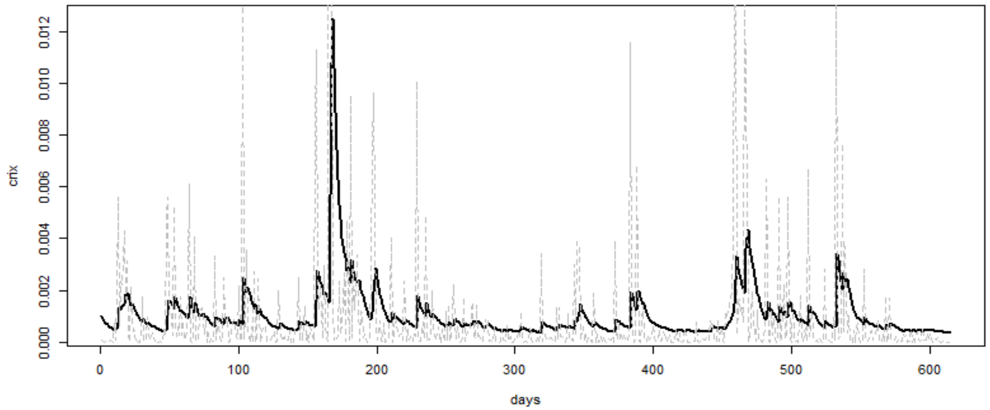


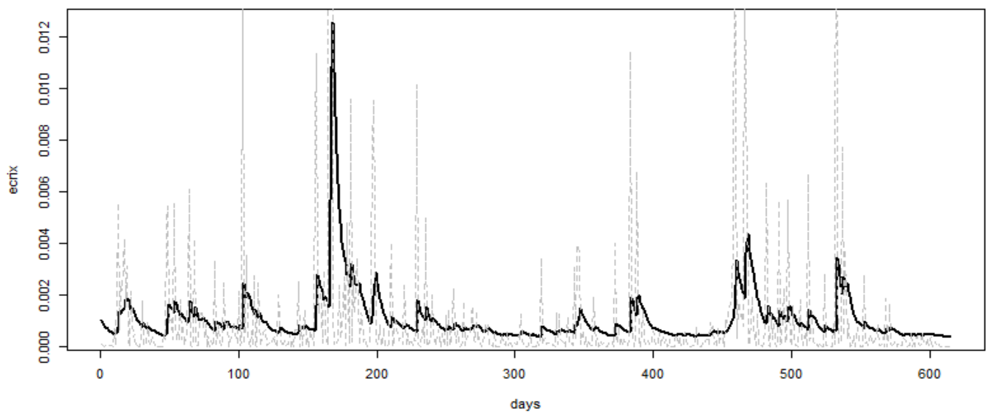
qstd - QQ Plot
Sample Quantiles
Theoretical Quantiles
4
2
0
-2
-4
-6
-4
-2
0
2
4
6

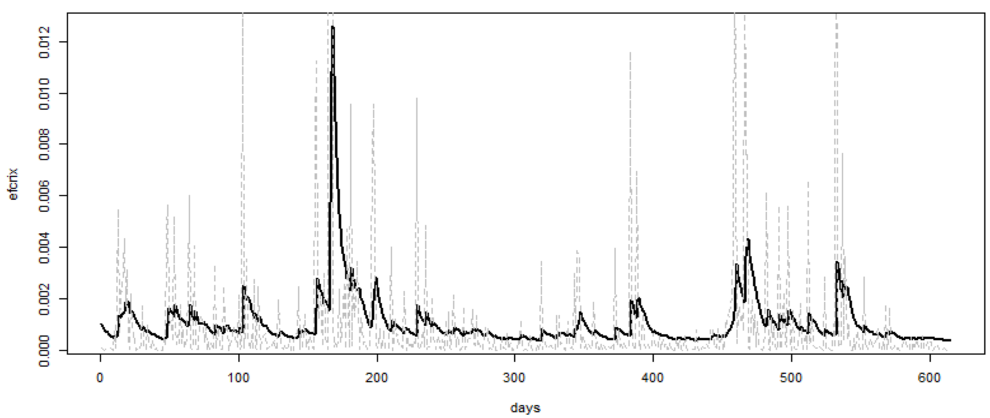


The standard error of DCC-GARCH model.

CRIX(upper)
ECRIX (middle)
EFCRIX(lower)

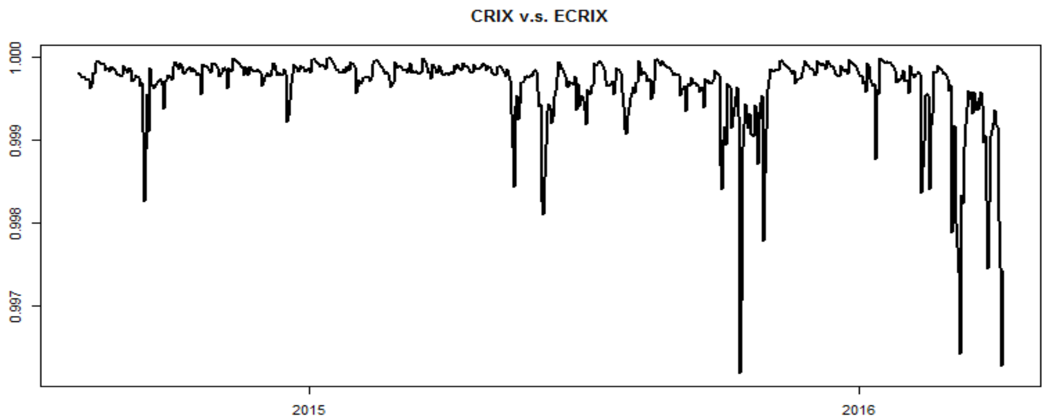


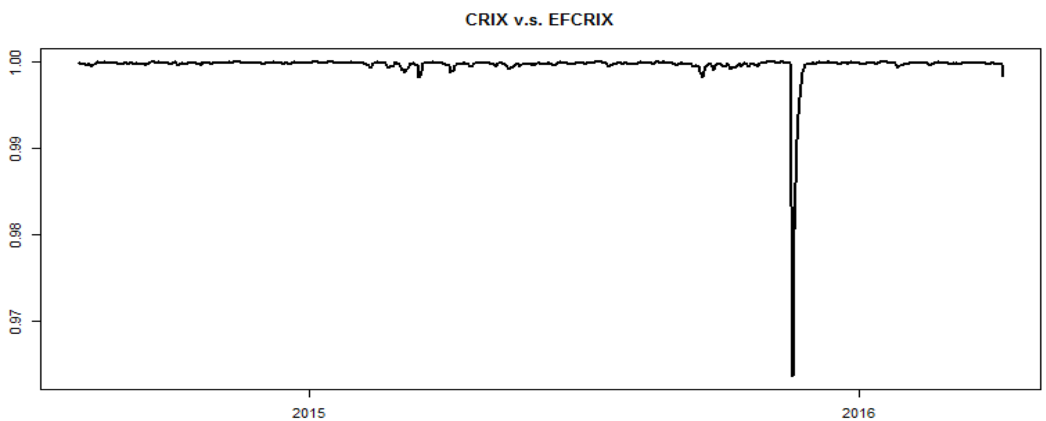


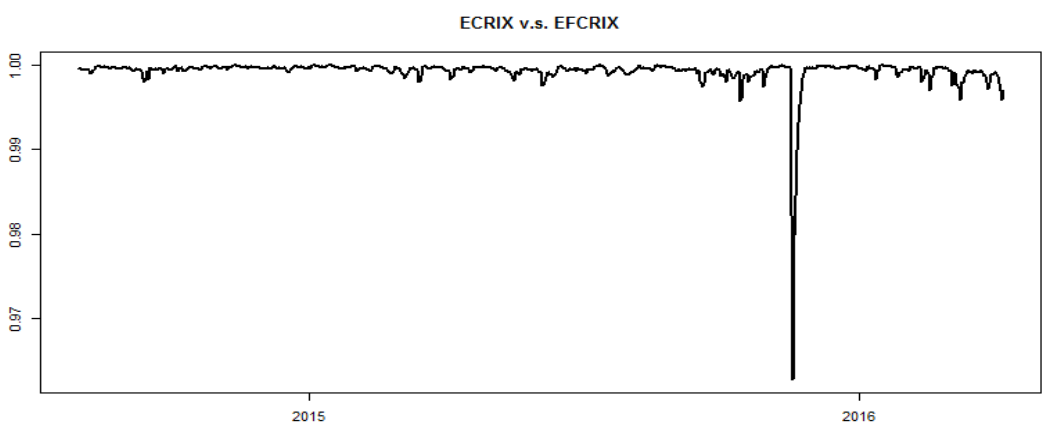


The estimated volatility (black) and realized volatility (grey) using DCC-GARCH model.

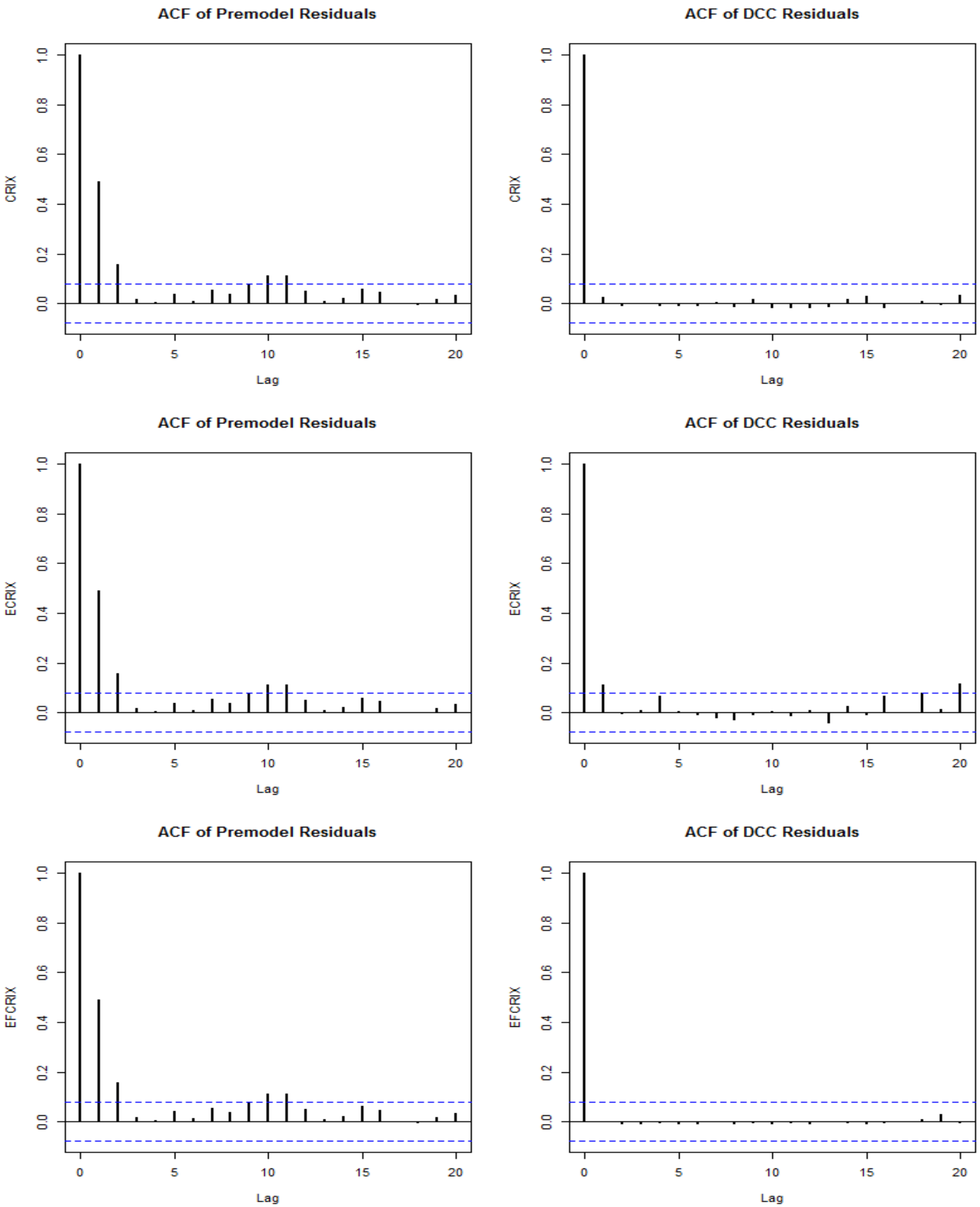
CRIX(upper)
ECRIX (middle)
EFCRIX(lower)





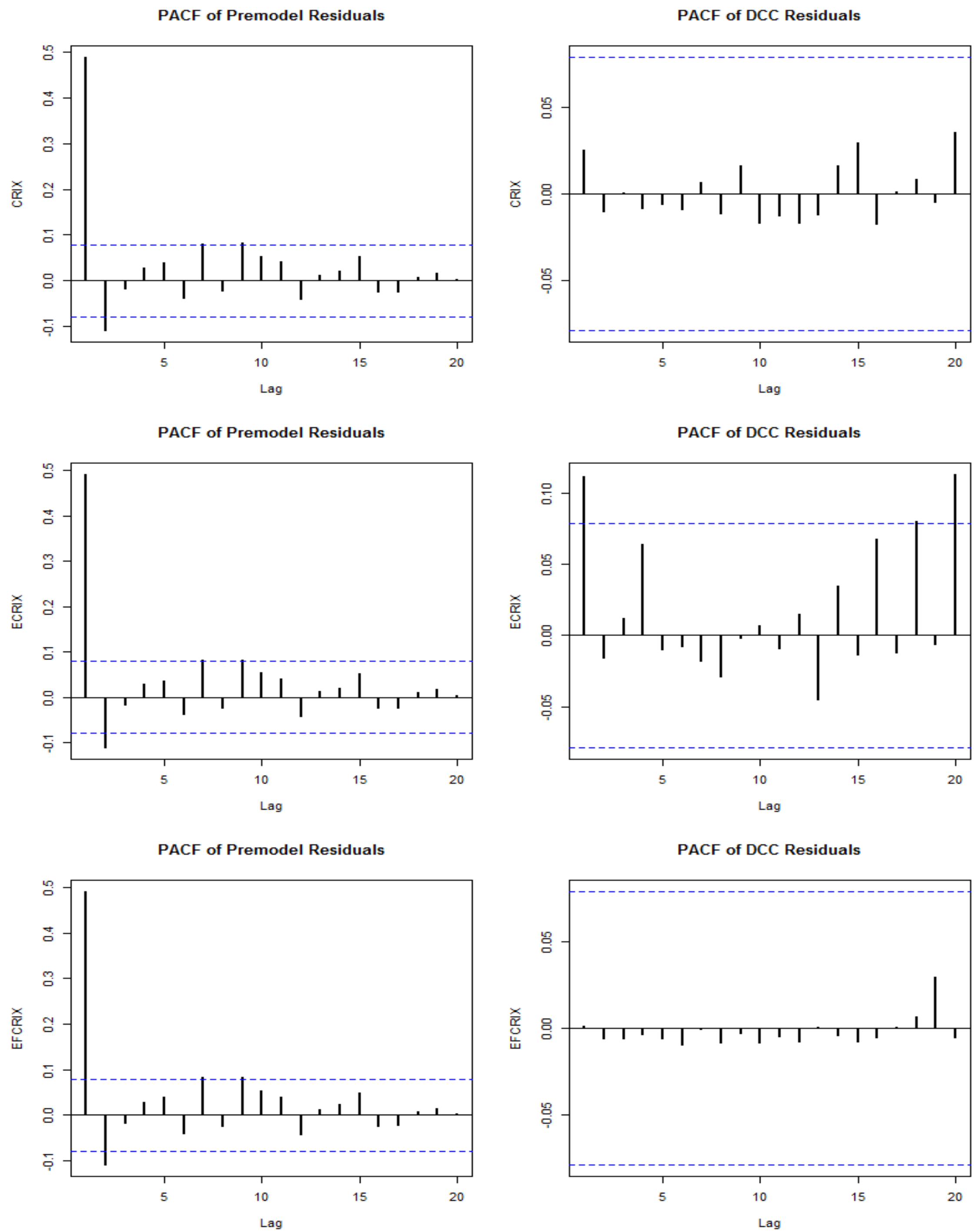


The dynamic autocorrelation between three CRIX indices: CRIX,ECRIX and EFCRIX estimated by DCC-GARCH model.



The comparison of ACF between premodel squared residuals and DCC squared residuals.

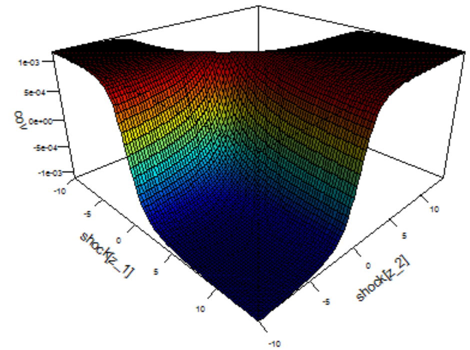
CRIX(upper)
ECRIX (middle)
EFCRIX(lower)



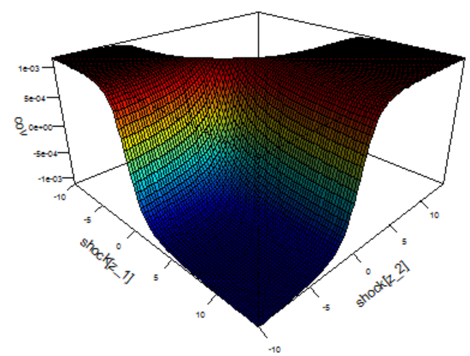
The comparison of PACF between premodel squared residuals and DCC squared residuals.

CRIX(upper)
ECRIX (middle)
EFCRIX(lower)

DCC News Impact Covariance Surface
cres-ecres



DCC News Impact Covariance Surface
cres-efcres



DCC News Impact Covariance Surface
ecres-efcres