Estimation Methods in R: “quantreg”

\[ rq(formula, \ tau=.5, \ data, \ subset, \ weights, \ na.action, \ method=\text{"br"}, \) \]

1. method = “br” : The default method is the modified version of the Barrodale and Roberts algorithm;

2. method = “fn” : the Frisch-Newton interior point method which is for large problem;

3. method = “pfn” : the Frisch-Newton approach which is for very large problems;

4. method = “fnc” for linear inequality constraints on the fitted coefficients;

5. method = “lasso” : penalized method uses the lasso penalty;

6. method = “scad” : The penalized method implements Fan and Li’s smoothly clipped absolute deviation penalty.
Anova function for quantile regression fits:

```r
fit0 = rq(y.net lgdp2 + fse2 + gedy2 , data = barro)
fit1 = rq(y.net lgdp2 + fse2 + gedy2 + ly2 + gcony2, data = barro)
fit2 = rq(y.net lgdp2 + fse2 + gedy2 + ly2 + gcony2, data = barro, tau=.75)
fit3 = rq(y.net lgdp2 + fse2 + gedy2 + ly2 + gcony2, data = barro, tau=.25)
anova(fit1, fit0)
anova(fit1, fit2, fit3)
anova(fit1, fit2, fit3, joint=FALSE)
```