2020/3/1 LAD Estimation

LAD Estimation

Kei Sakamoto

Least Abusolute Derivations Estimation \succeq OLS \varnothing 比較

load("~/計量経済学演習/R data sets for 5e/rdchem.RData") rdchem<-data

OLS

ols <- lm(rdintens ~ I(sales/1000) +profmarg, data=rdchem)

LAD Regression

library(quantreg) ## Loading required package: SparseM ## Attaching package: 'SparseM' ## The following object is masked from 'package:base': ## ## backsolve lad <- rq(rdintens ~ I(sales/1000) +profmarg, data=rdchem) library(stargazer)

Please cite as:

Hlavac, Marek (2018). stargazer: Well-Formatted Regression and Summary Statistics Tables.

R package version 5.2.2. https://CRAN.R-project.org/package=stargazer

stargazer(ols,lad, type = "text")

2020/3/1 LAD Estimation

```
##
##
            Dependent variable:
##
##
              rdintens
##
            OLS
                   quantile
##
                 regression
##
            (1)
                   (2)
## --
## I(sales/1000)
                0.053
                         0.019
##
            (0.044)
                   (0.059)
##
               0.045
                       0.118**
## profmarg
##
            (0.046)
                    (0.049)
##
               2.625***
## Constant
                        1.623***
##
            (0.586) (0.509)
##
## -----
## Observations
                 32
                        32
## R2
             0.076
## Adjusted R2
                0.012
## Residual Std. Error 1.862 (df = 29)
## F Statistic
            1.195 (df = 2; 29)
*p<0.1; **p<0.05; ***p<0.01
## Note:
```