LAD Estimation

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Least Abusolute Derivations Estimation と OLS の比較

```
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 Summar
y Statistics Tables.

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

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

##
## =================================================
##                          Dependent variable:
##                     -----------------------------
##                               rdintens
##                            OLS          quantile
```

```
##                                         regression
##                            (1)            (2)
## -------------------------------------------------
## I(sales/1000)             0.053          0.019
##                          (0.044)        (0.059)
##
## profmarg                  0.045         0.118**
##                          (0.046)        (0.049)
##
## Constant                 2.625***       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)
## =================================================
## Note:                 *p<0.1; **p<0.05; ***p<0.01
```