

## [Example11-4] Lag Dependent Model(AR(p))

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

library(dynlm);library(stargazer)

## Loading required package: zoo

##
## Attaching package: 'zoo'

## The following objects are masked from 'package:base':
##
##   as.Date, as.Date.numeric

##
## 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
```

### AR(1),AR(2),AR(3)

```
tsdata <- ts(nyse)
reg1 <- dynlm(return~L(return), data=tsdata)
reg2 <- dynlm(return~L(return)+L(return,2), data=tsdata)
reg3 <- dynlm(return~L(return)+L(return,2)+L(return,3), data=tsdata)
stargazer(reg1, reg2, reg3, type="text",
           keep.stat=c("n", "rsq", "adj.rsq", "f"))

##
## =====
##
##                               Dependent variable:
##
##   -----
##
##                               return
##
##           (1)           (2)           (3)
```

```

## -----
--
## L(return)          0.059          0.060          0.061
##                    (0.038)        (0.038)        (0.038)
##
## L(return, 2)       -0.038          -0.040
##                    (0.038)        (0.038)
##
## L(return, 3)              0.031
##                          (0.038)
##
## Constant          0.180**         0.186**         0.179**
##                    (0.081)        (0.081)        (0.082)
##
## -----
--
## Observations        689          688          687
## R2                   0.003         0.005         0.006
## Adjusted R2         0.002         0.002         0.001
## F Statistic  2.399 (df = 1; 687) 1.659 (df = 2; 685) 1.322 (df = 3; 68
3)
## =====
==
## Note:                *p<0.1; **p<0.05; ***p<0.
01

```

ほぼ変わらんしどのモデルのどの lag も significant じゃない。