Example 8-6

September 11, 2020

[ ]:
```
# install the following packages and library
install.packages("pder")
install.packages("plm")


library("plm")


# import data
data("HousePricesUS", package = "pder")
```

[2]:
```
##---------------------------------Block 1---------------------------------

#### Example 8-6 ####

## ------------------------------------------------------------------------

# common correlated effects mean groups model
ccemgmod <- pcce(log(price) ~ log(income), data=HousePricesUS, model="mg")
summary(ccemgmod)
```

```
Common Correlated Effects Mean Groups model

Call:
pcce(formula = log(price) ~ log(income), data = HousePricesUS,
    model = "mg")

Balanced Panel: n = 49, T = 29, N = 1421

Residuals:
      Min.    1st Qu.     Median       Mean    3rd Qu.       Max.
-0.2374376 -0.0354899  0.0002718  0.0000000  0.0363912  0.2242333

Coefficients:
            Estimate Std. Error z-value  Pr(>|z|)
log(income)  1.13540    0.19546   5.809 6.285e-09 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
```

```
Total Sum of Squares: 47.234
Residual Sum of Squares: 5.6567
HPY R-squared: 0.74027
```

[3]:
```
##---------------------------------Block 2---------------------------------

# common correlated effects pooled model
ccepmod <- pcce(log(price) ~ log(income), data=HousePricesUS, model="p")
summary(ccepmod)
```

```
Common Correlated Effects Pooled model

Call:
pcce(formula = log(price) ~ log(income), data = HousePricesUS,
    model = "p")

Balanced Panel: n = 49, T = 29, N = 1421

Residuals:
     Min.   1st Qu.    Median      Mean   3rd Qu.      Max.
-0.278833 -0.039281 -0.002089  0.000000  0.039268  0.299930

Coefficients:
            Estimate Std. Error z-value  Pr(>|z|)
log(income)  1.19941    0.20728  5.7864 7.193e-09 ***
---
Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
Total Sum of Squares: 47.234
Residual Sum of Squares: 6.8851
HPY R-squared: 0.69579
```