Example 1-4

September 12, 2020

```
[ ]: # install the following packages and libraries (if not already installed)
     install.packages("AER")
     install.packages("zoo")
     install.packages("plm")
     library("plm")

     # import the data (if not already done)
     data("Fatalities", package="AER")

     # add the fatality rate (frate) to the data set (if not already done)
     # and create the following formula (if not already created)
     Fatalities$frate <- with(Fatalities, fatal / pop * 10000)
     fm <- frate ~ beertax
```

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

     #### Example 1-4 ####

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

     # within regression for the pooled linear model specification. the␣
     ↪transformations are
     # applied within the plm() function rather than doing the transformations␣
     ↪seperately
     w.mod <- plm(Within(frate) ~ Within(beertax) - 1, data=Fatalities,
                  model = "pooling")
     coef(w.mod)
```

Within(beertax): -0.655873722150431