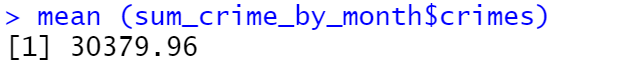
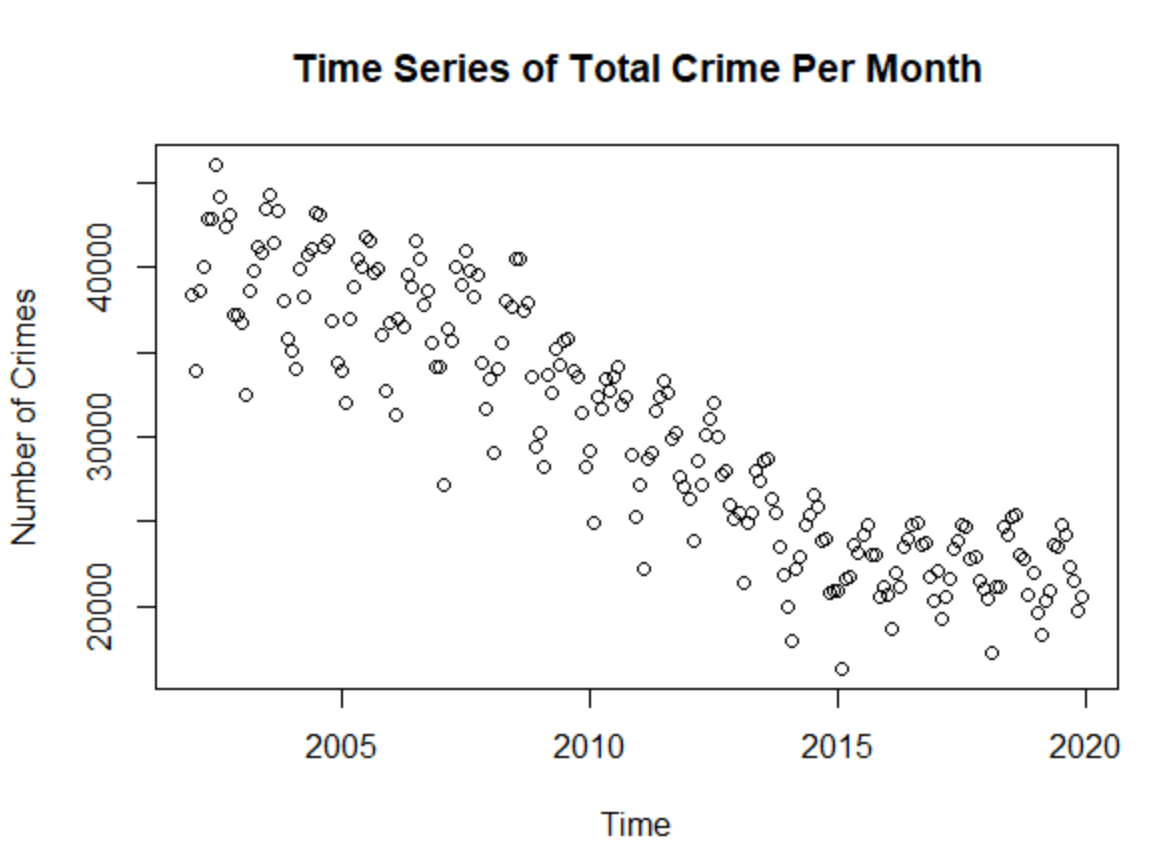
**# Exercise 1**

See R. file.

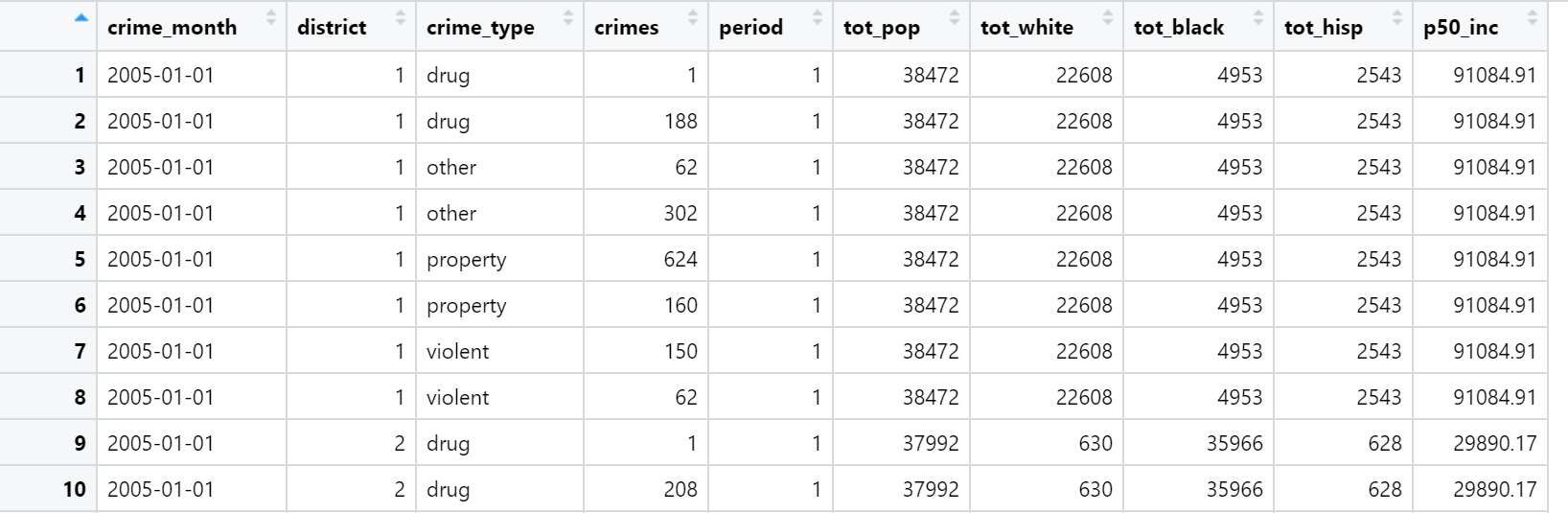
**# Exercise 2.1**





**# Exercise 2.2**

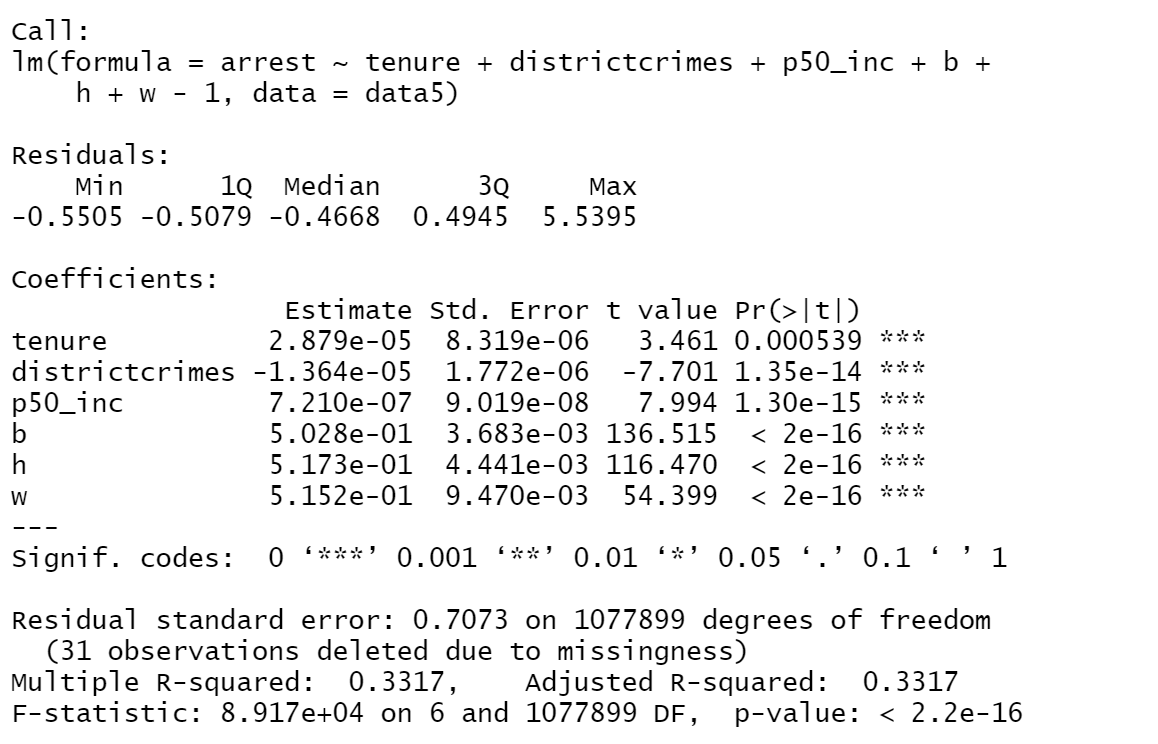
Merge the two datasets by districts-units and period



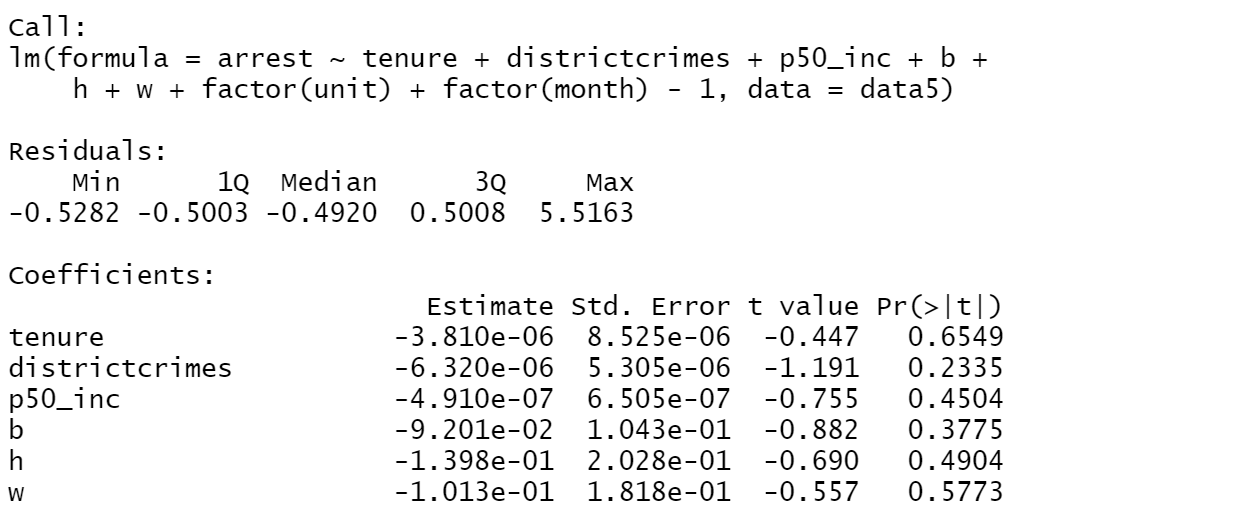
**# Exercise 2.3**

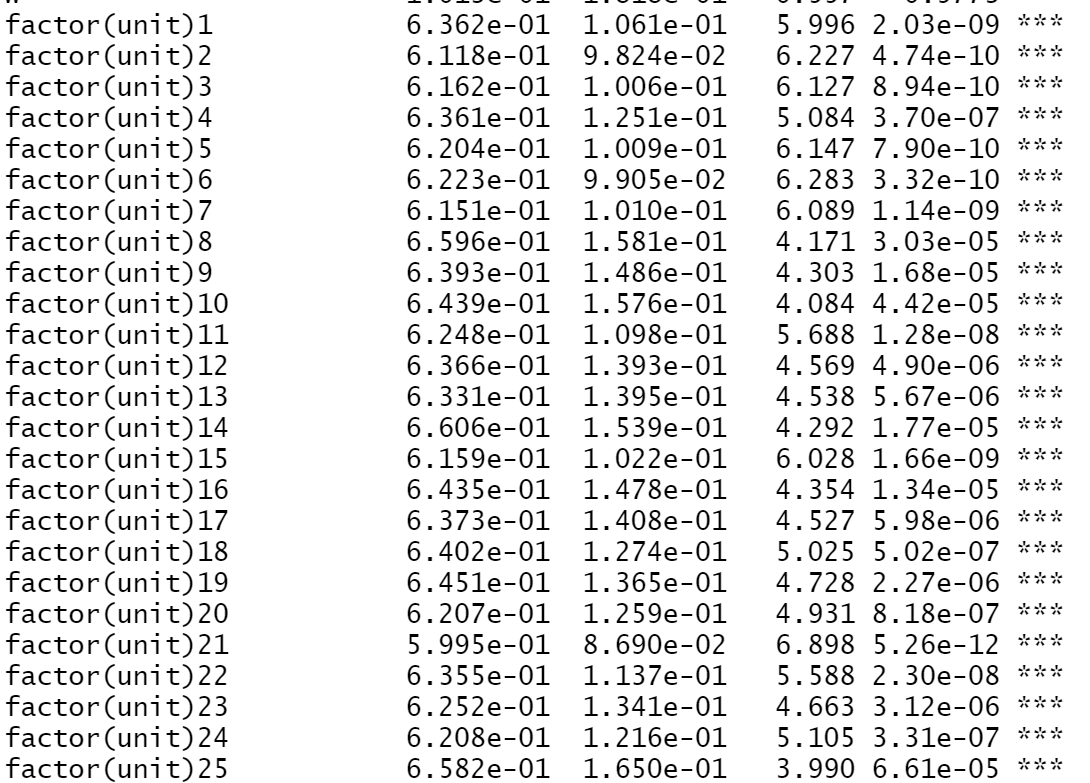
See R. file.

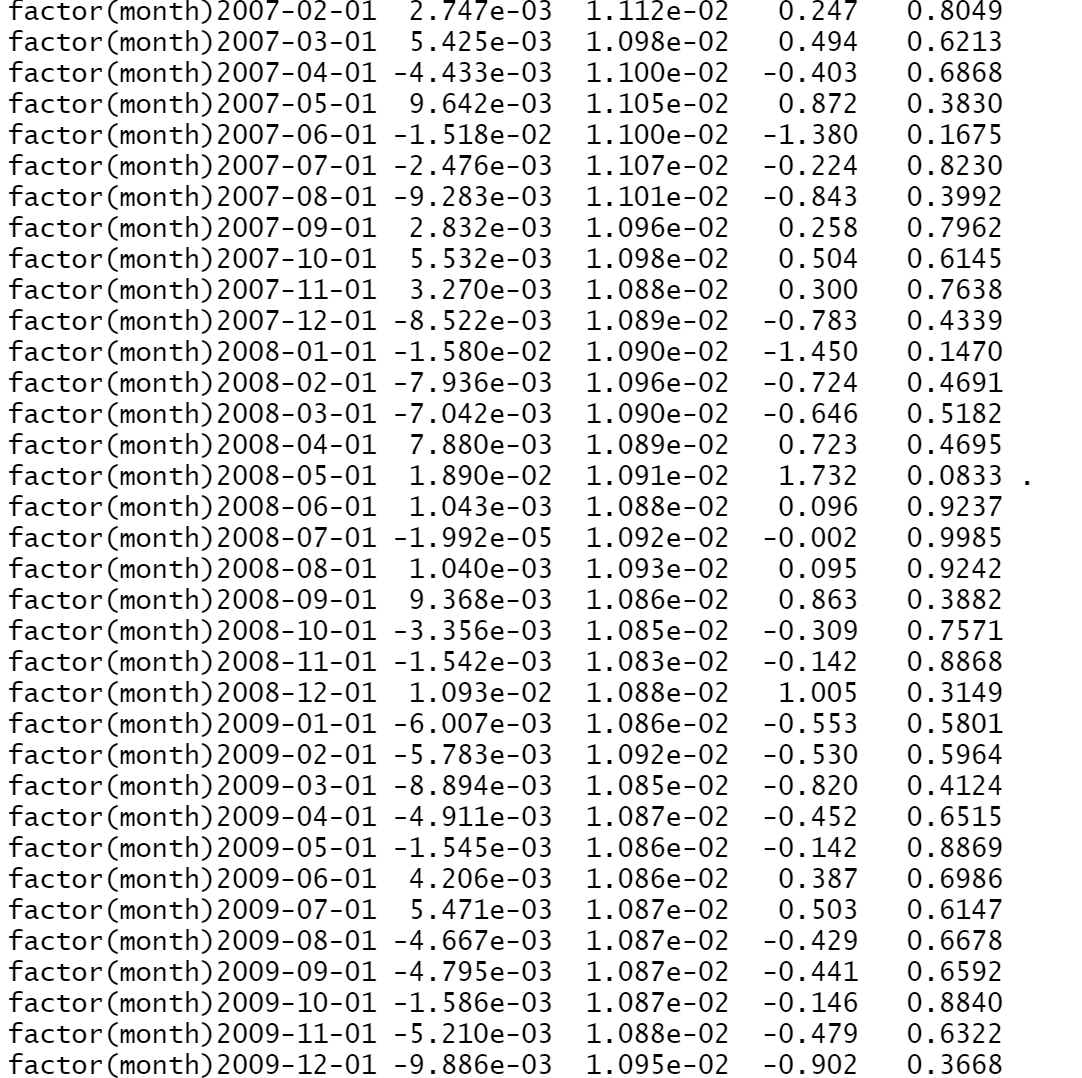
**# Exercise 3**

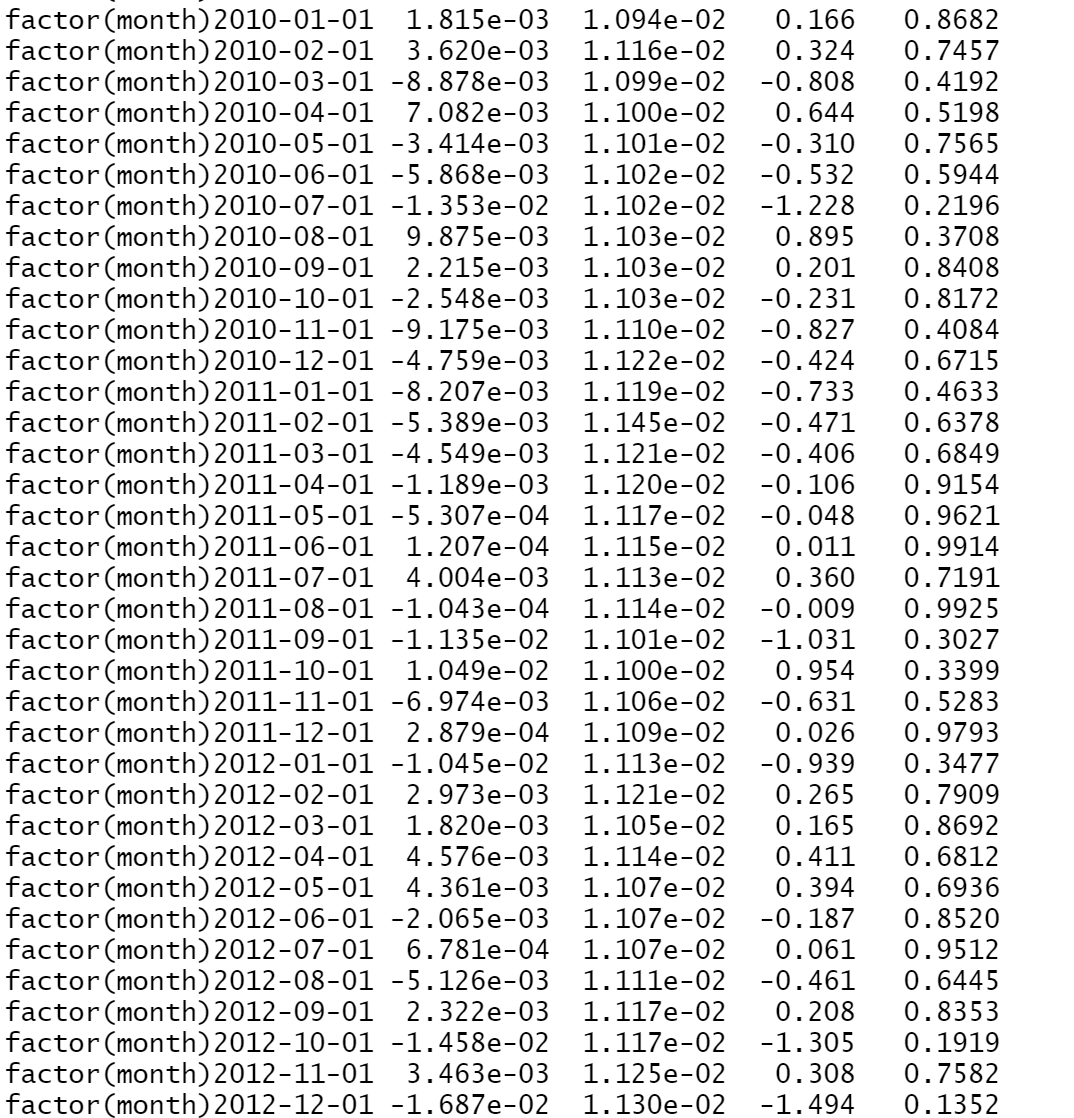


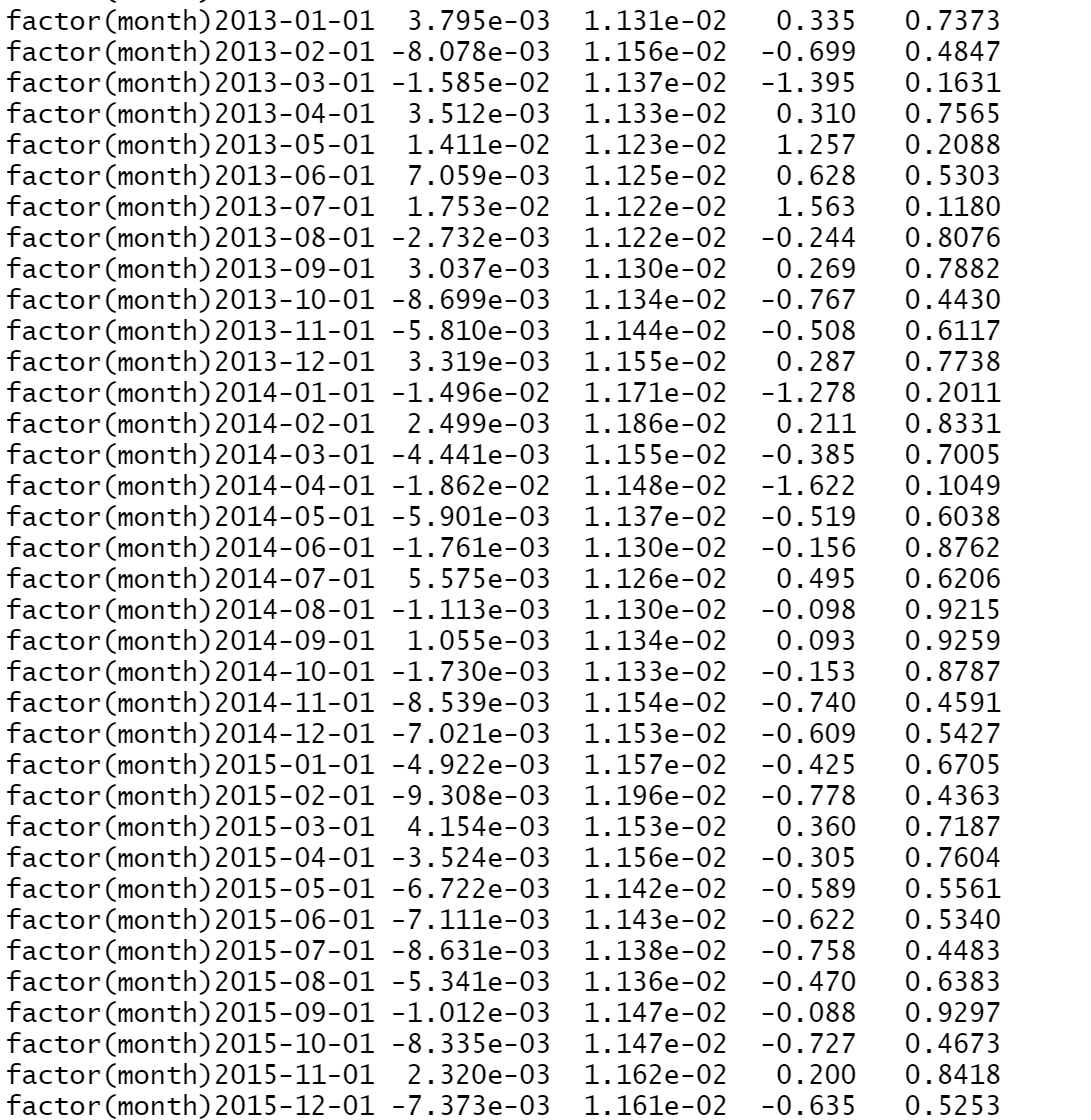
**# Exercise 4**

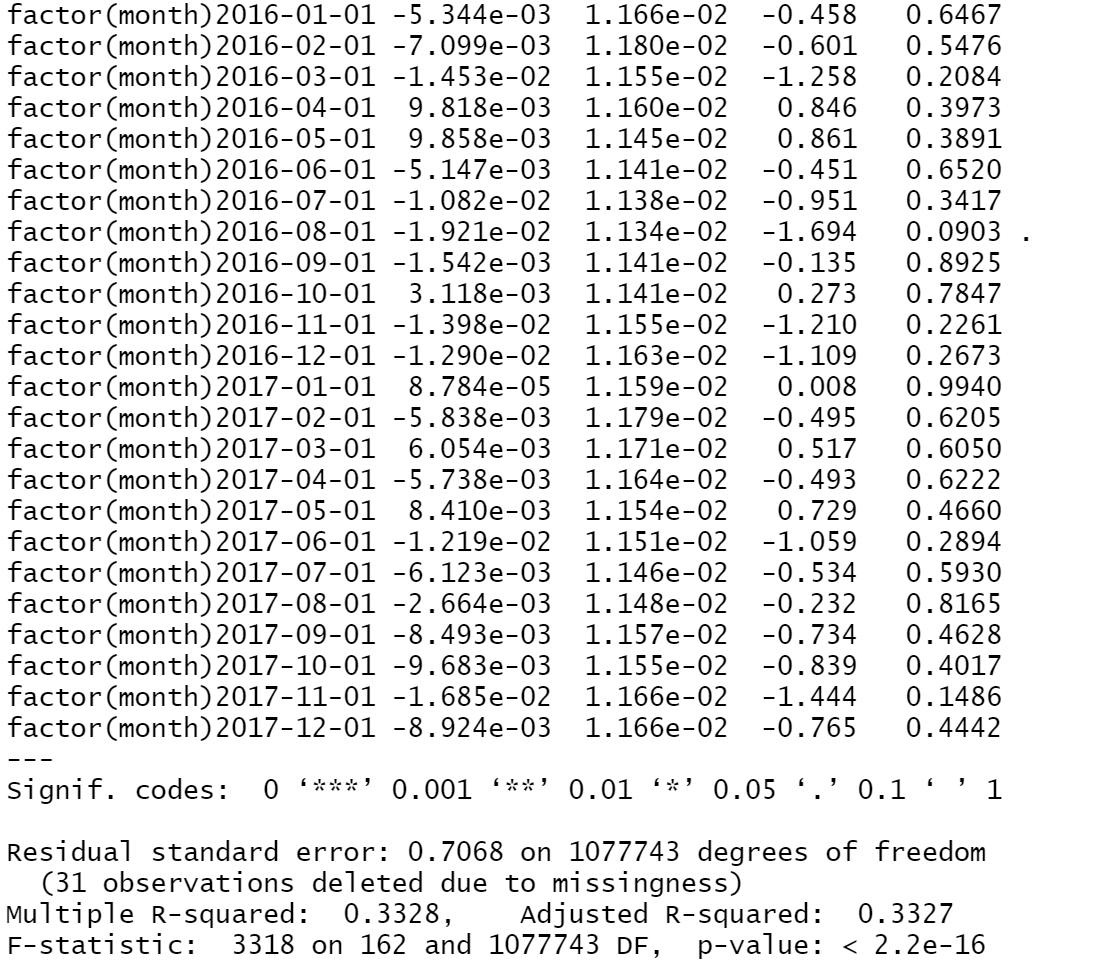








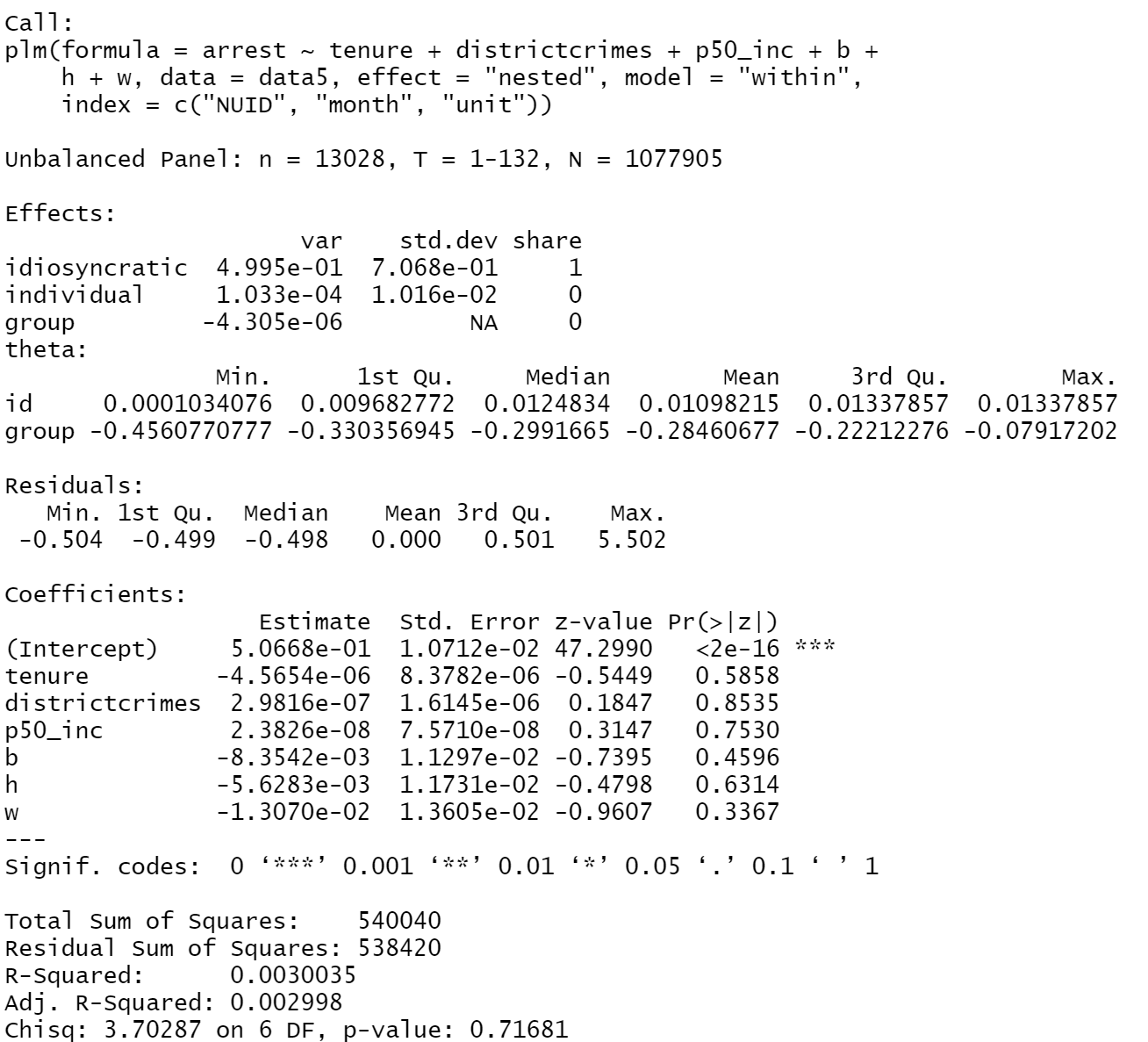


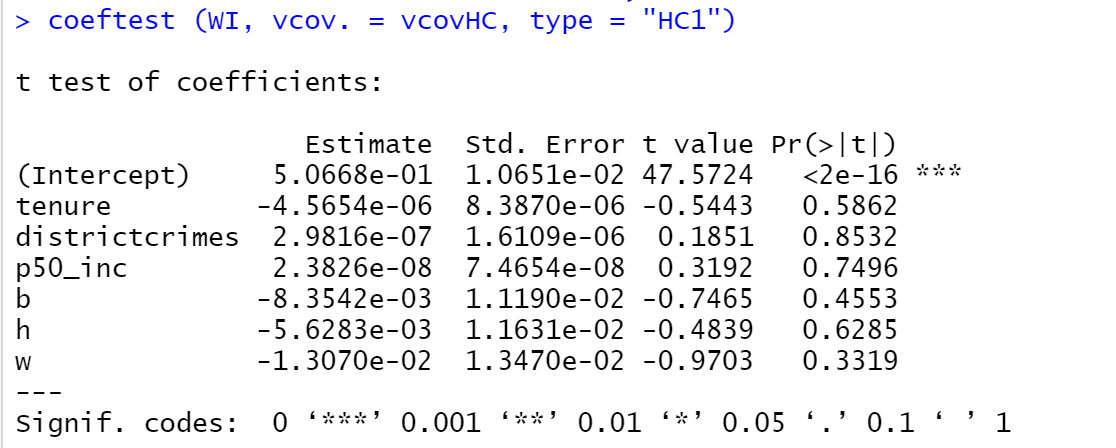


**# Exercise 5**

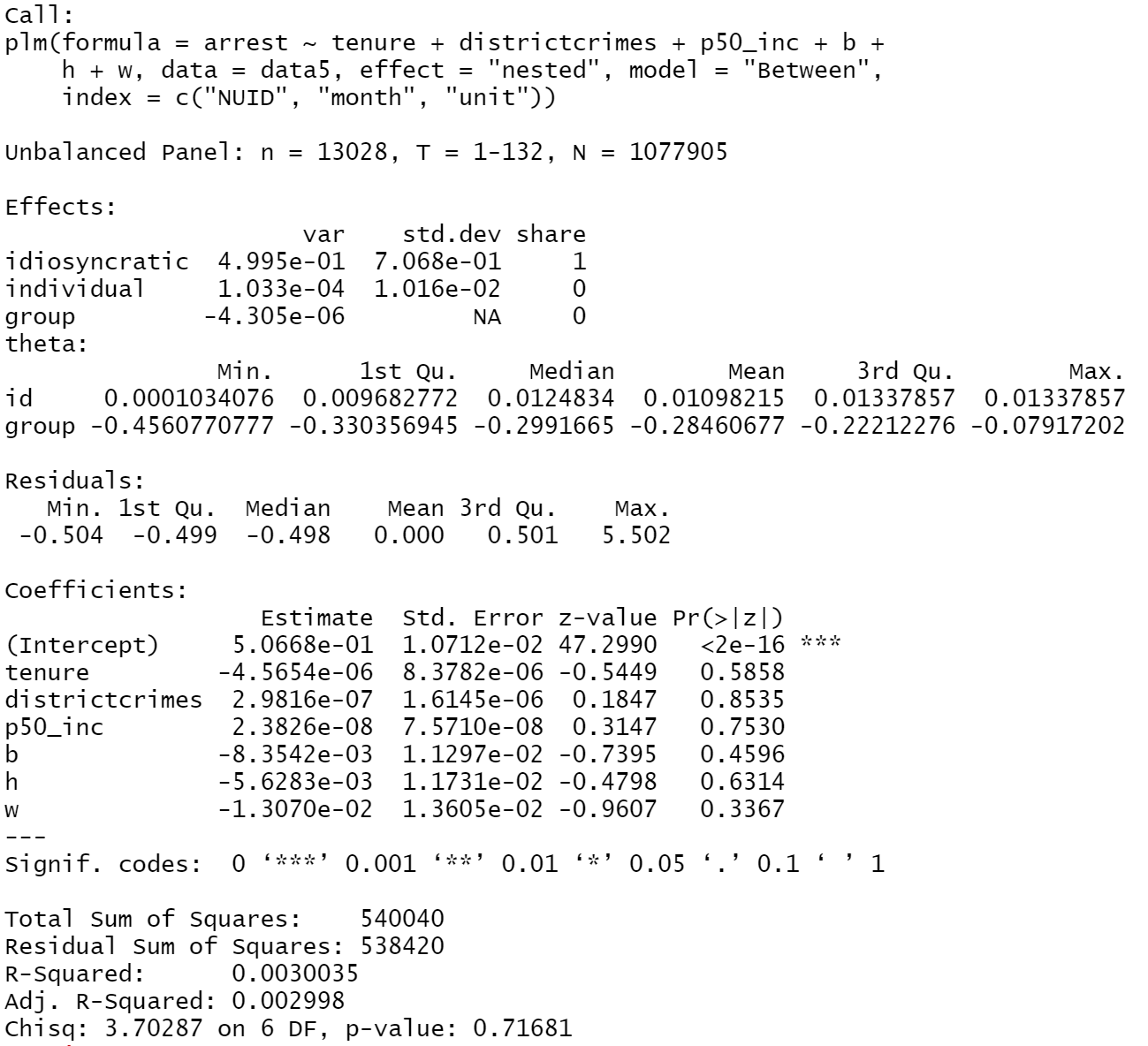
Panel Data: Individual Fixed Effects

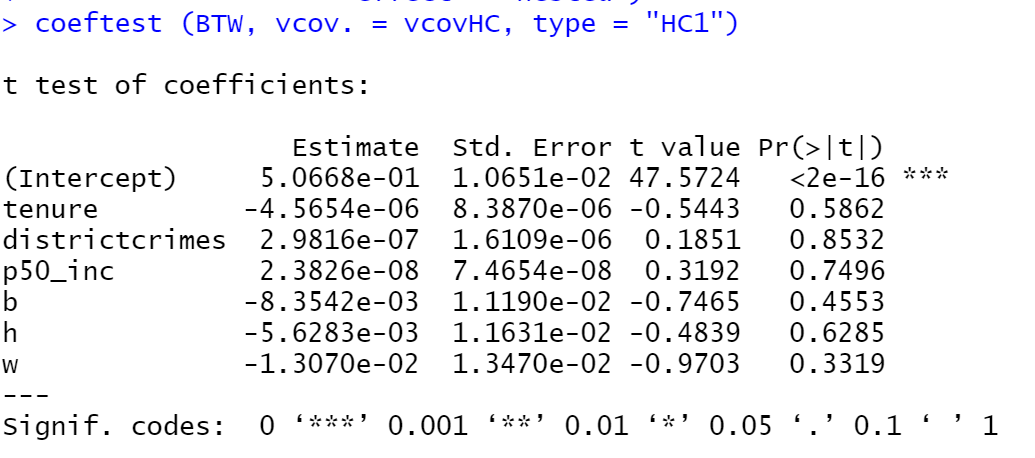
1. *Within estimator*



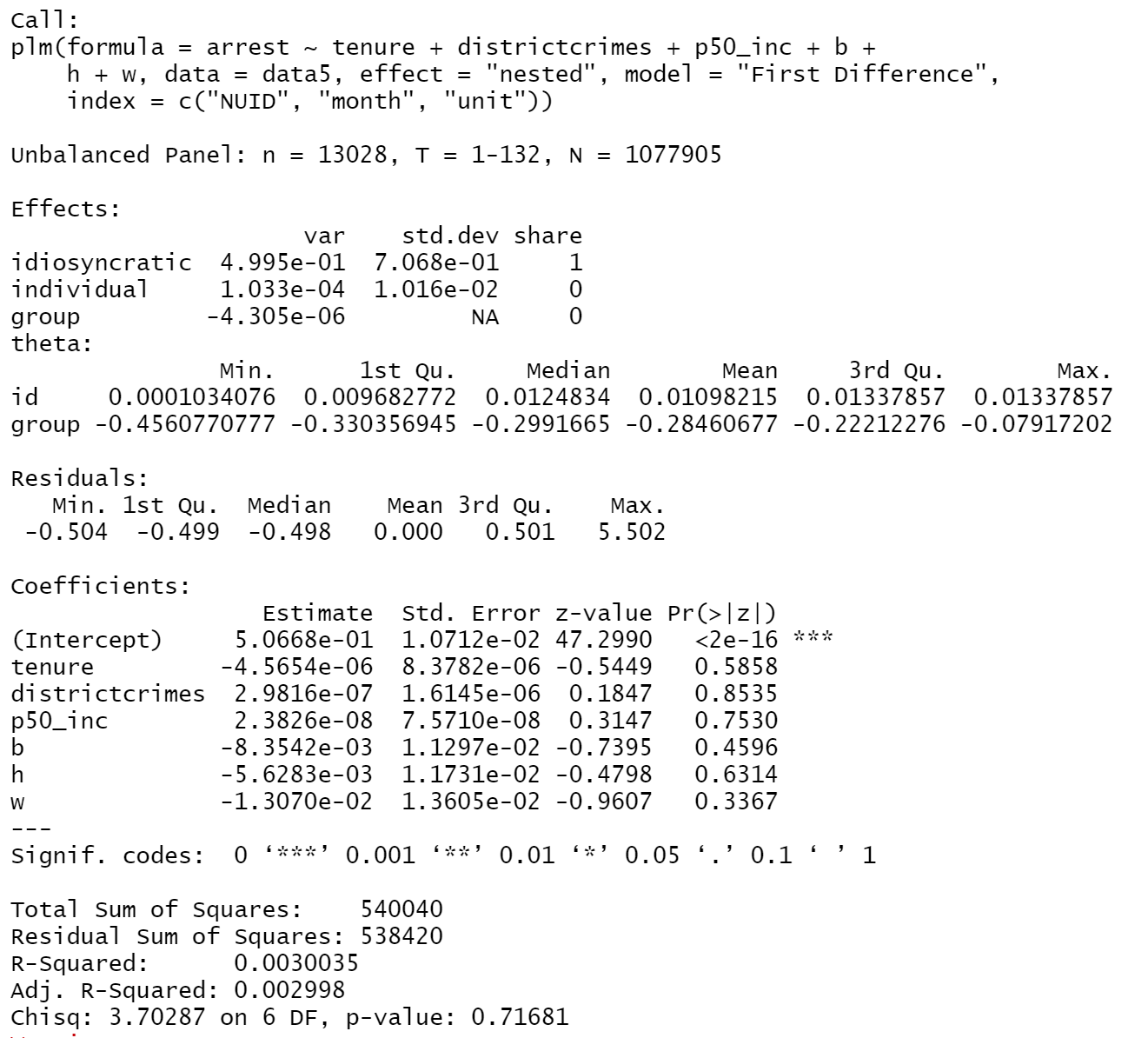


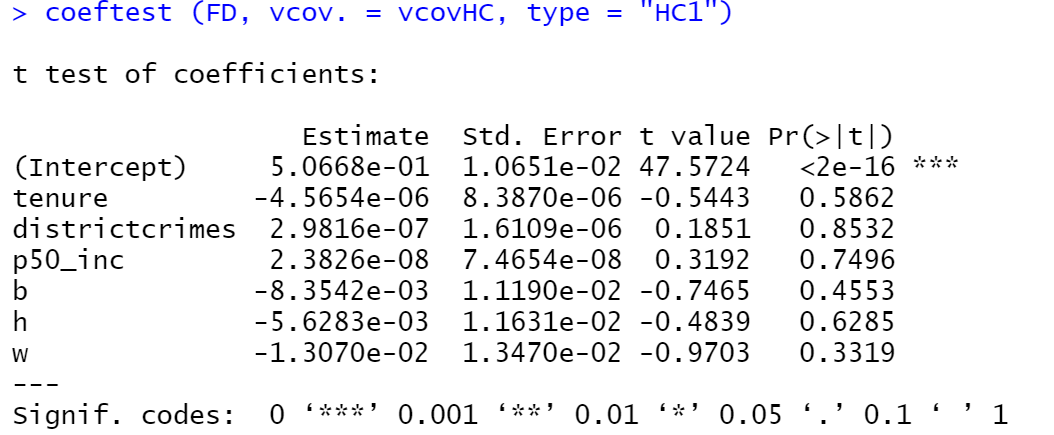
1. *Between estimator*





1. *First difference estimator*





The estimated parameters by within, between, and first difference model are close without significant differences.

# 5.2 Use a GMM approach to estimate all parameters in one step.