

## Example 5-9

September 12, 2020

```
[ ]: # install the following package and libraries
install.packages("plm")

library("plm")
library("lmtest")
library("sandwich")
```

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

#### Example 5-9 ####

## -----
data("Grunfeld", package = "plm")

# default Hausman test
phtest(inv ~ value + capital, data = Grunfeld)
```

Hausman Test

```
data: inv ~ value + capital
chisq = 2.3304, df = 2, p-value = 0.3119
alternative hypothesis: one model is inconsistent
```

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

# Hausman test through the auxillary regression
phtest(inv ~ value + capital, data = Grunfeld, method = "aux")
```

Regression-based Hausman test

```
data: inv ~ value + capital
chisq = 2.1314, df = 2, p-value = 0.3445
alternative hypothesis: one model is inconsistent
```