Lesson-3—02.05.2023.R

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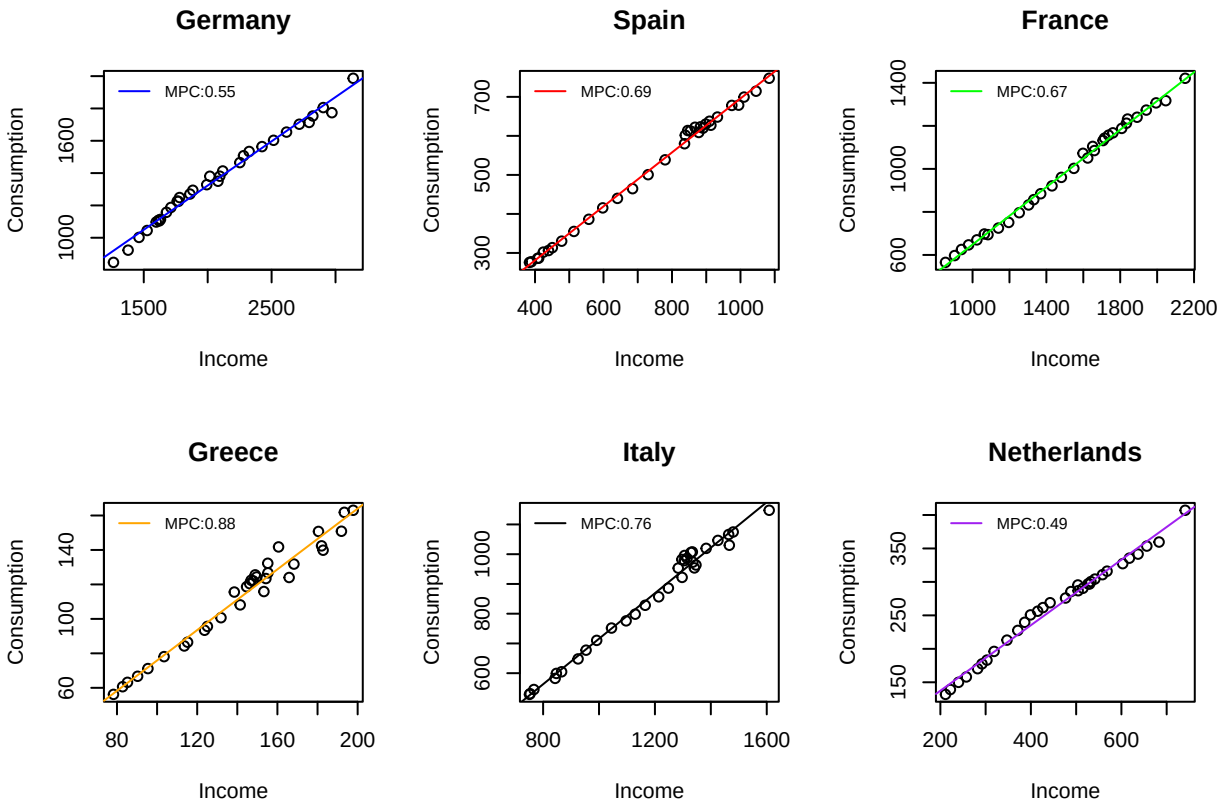
```
library(readxl)
```

```
## Warning: Paket 'readxl' wurde unter R Version 4.2.3 erstellt
```

```
data_mpc <- read_excel("data_mpc.xlsx",
                       sheet = 1, skip = 1)

countries <- unique(data_mpc$country)

cols <- cols <- c("blue", "red", "green", "orange", "black", "purple")

par(mfrow = c(2, 3))

for (i in 1:length(countries)) {

  plot(x = data_mpc$income[data_mpc$country == countries[i]],
       y = data_mpc$consumption[data_mpc$country == countries[i]],
       xlim = c(min(data_mpc$income[data_mpc$country == countries[i]]),
                max(data_mpc$income[data_mpc$country == countries[i]])),
       ylim = c(min(data_mpc$consumption[data_mpc$country == countries[i]]),
                max(data_mpc$consumption[data_mpc$country == countries[i]])),
       main = countries[i],
       xlab = "Income",
       ylab = "Consumption")

  reg <- lm(data_mpc$consumption[data_mpc$country == countries[i]] ~
              data_mpc$income[data_mpc$country == countries[i]])

  abline(reg, col = cols[i])

  legend("topleft",
         legend = paste0("MPC:",round(reg$coefficients[2], digits = 2)),
         col = cols[i],
         lty = 1,
         lwd = 1,
         bty = "n",
         cex = 0.8)

}
```


Germany
MPC:0.55
Consumption
1000
1600
1500
2500
Income
Spain
MPC:0.69
Consumption
300
500
700
400
600
800
1000
Income
France
MPC:0.67
Consumption
600
1000
1400
1000
1400
1800
2200
Income
Greece
MPC:0.88
Consumption
60
100
140
80
120
160
200
Income
Italy
MPC:0.76
Consumption
600
800
1000
800
1200
1600
Income
Netherlands
MPC:0.49
Consumption
150
250
350
200
400
600
Income