

# Exercises on multiple linear regression

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## 1 Exercises on multiple linear regression

### 1.1 Studying coffee data

Read in the data set [coffee\\_data.csv](#).

It contains the following variables:

- **CoffeePrice**: The world market price for coffee from Brazil in EUR per kilo
- **CoffeeDemand**: The demand for coffee from Brazil in tons
- **CoffeeSeller**: The kind of coffee company: **Standard** or **FairTrade**

In the following, treat **CoffeeDemand** as the dependent variable, and **CoffeePrice** and **CoffeeSeller** as the independent variables.

Estimate a parallel slopes model, and an interaction model. Which of the models would you prefer?

You should justify your choice using two main arguments.

### 1.2 Exploring feasible model specifications

Read in the data set [ice\\_data.csv](#). What kind of relationships could you reasonably study in a linear regression framework (without further data transformation).

### 1.3 Solutions

The solutions to both exercises can be found [here](#).