

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](#).