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Exercises session 10

The topic of this lab is the forecasting. We ask you to work on the dataset *Transportation mode choice in the Netherlands*. On the exercises web page, we provide a final model that you can use for the following tasks.

1. In the data, 102 respondents are men, and 126 are women. In the Netherlands population, there are 98 men for 100 women. How can you compute the predicted market shares in order to handle with the over sampling of women in the data?
2. Imagine that the rail service want to increase its (real) revenues. How would you proceed to find the rail costs which maximize the rail revenues? Find the optimal costs (for simplification you can consider either a global increase or decrease of rail costs in terms of percentage of the current rail costs). You can draw your inspiration from results presented in the file *summary\_forecasting.xls*.
3. For computing the market shares, the estimated parameters of the model are used. How standard errors of parameters can affect the predicted market shares?