

# Statistical Modeling

CH.9 - Working with Collinear Data

SS 2021 || Prof. Dr. Buchwitz

Wir geben Impulse

**1** Organizational Information

**2** Multicollinearity

Session	Topic
1	Simple Linear Regression
2	Multiple Linear Regression
3	Regression Diagnostics
4	Qualitative Variables as Predictors
5	Transformation of Variables
6	Weighted Least Squares
7	Correlated Errors
8	Analysis of Collinear Data
9	Working with Collinear Data
10	Variable Selection Procedures
11	Logistic Regression
12	Further Topics

**1** Organizational Information

**2** Multicollinearity

- The interpretation of the coefficients in a multiple regression equation depend implicitly on the assumption that the predictors are **not strongly interrelated**.
- The common interpretation of regression coefficient is the change in the response when the corresponding predictor is increased by one unit and all other predictors are held constant.

**This interpretation may not be valid if there are strong linear relationships among the regressors.**

