

Chapter 6-1 Practice

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Crime and House Prices

Standardized Coefficients

1. Estimate the following model using the `hprice2` dataset as `hprice.lm1`:

$$Price = \beta_0 + \beta_1 NO2 + \beta_2 Crime + \beta_3 Rooms + \beta_4 Employer\ Distance + \beta_5 Student-Teacher\ Ratio + u : (\text{hprice.lm1})$$

2. Reestimate the same model *with and without a constant* using the `scale` function in your formula argument to estimate the standardized coefficients (`hprice.lm2` and `hprice.lm3`).

Elasticities

3. Calculate the elasticities for the model estimated in (1) as `hprice.eyex1`.
4. Present the estimates in the same text table using `stargazer`.

Log Transformation

1. Estimate the following model using `hprice2`.

$$\ln(Price) = \beta_0 + \beta_1 \ln(NO2) + \beta_2 \ln(Crime) + \beta_3 Rooms + \beta_4 Rooms^2 + \beta_5 Employer\ Distance + \beta_5 Student-Teacher\ Ratio + u : (\ln\text{hprice.lm1})$$

2. Summarize this estimation using the `summary()` function.