

Recall Have obs $y_1, \dots, y_n \in \{0, 1\}$ + fitted probabilities $\hat{p}_1, \dots, \hat{p}_n$ for $P(Y_i = 1 | x_i)$.

DEF The Brier score is

$$\sum_{i=1}^n (y_i - \hat{p}_i)^2$$

smaller Brier scores \Rightarrow better model

Remark For classification problems it is always a good idea to split data into training + testing.

The in-sample error is usually much lower than out-of-sample error.

