Homodscedastic-equal variance

,MAE,MSE

The evaluation of predictive models is typically performed through a form

of **cross-validation** where the sample is split into a training sample and a

testing sample. In this model validation, the model is estimated on the

training sample and then evaluated **out-of-sample** on the testing sample.

In OLS regression PA is typically assessed using error based metrics:

**Mean Square Error**, **Root Mean Square Error**, and **Mean Absolute**

**Error**.

Goodness of fit.

• Validate the normality assumption: Produce a Quantile-Quantile Plot

(QQ-Plot) of the residuals to compare their distribution to a normal

distribution.

• Validate the homoscedasticity assumption (equal variance): Produce a

scatterplot of the residuals against each predictor variable. If there is any

structure in this plot, then the model will need a transformation of the

predictor variable or an additional predictor variable added to the model.

• Interpret the R-Squared measure for your model. Applications tend to GOF conditions.

have typical ranges for “good” R-Squared values. If Model 1 has a RSquared

of 0.23 and Model 2 has a R-Squared of 0.54, then Model 2

should be prefered to Model 1, provided that Model 2 satisfies the other