

KfoldCrossValidation vs. LOOCV

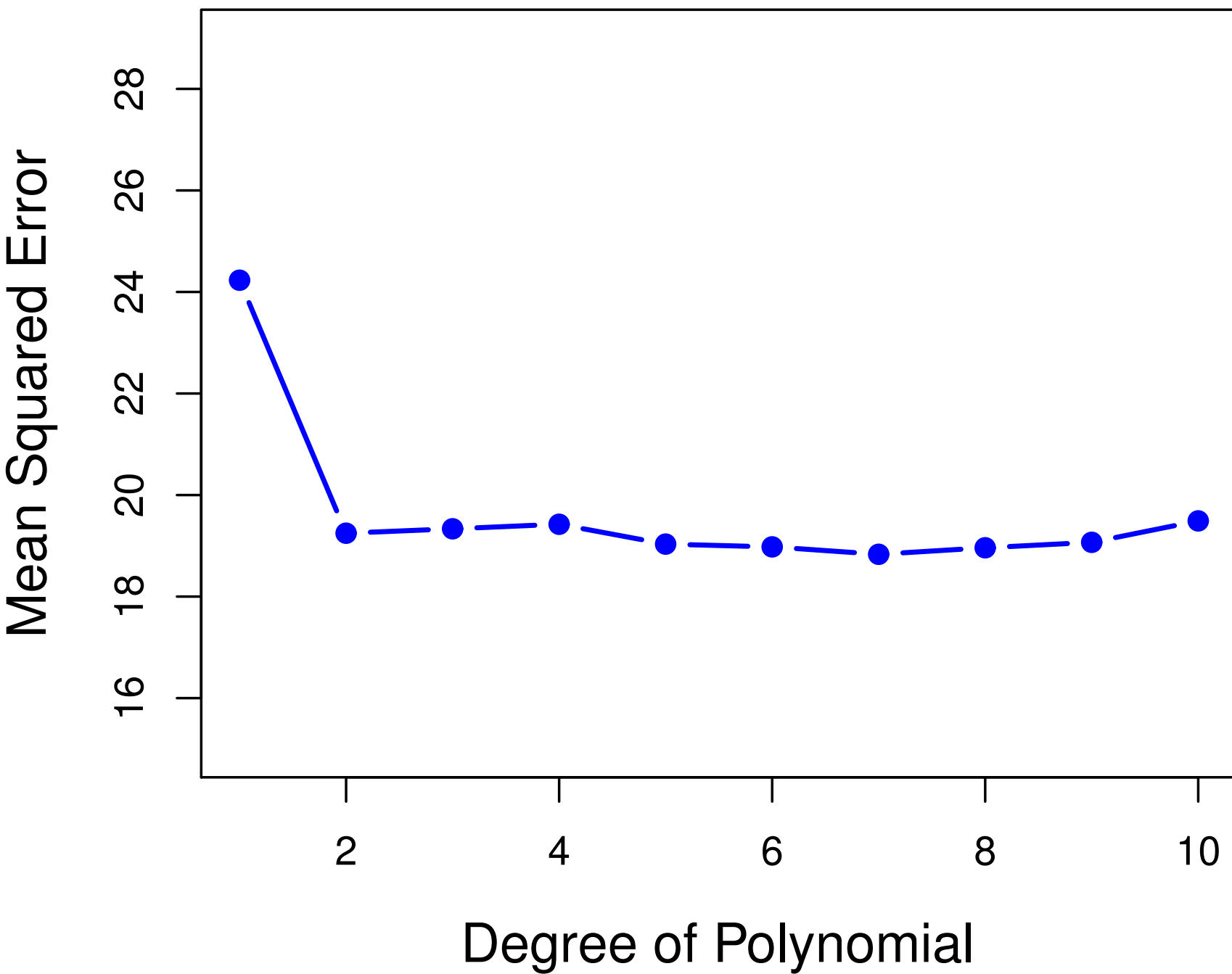
Example: Autmobile Data (ISLR2)

• K -fold CV depends on the chosen split

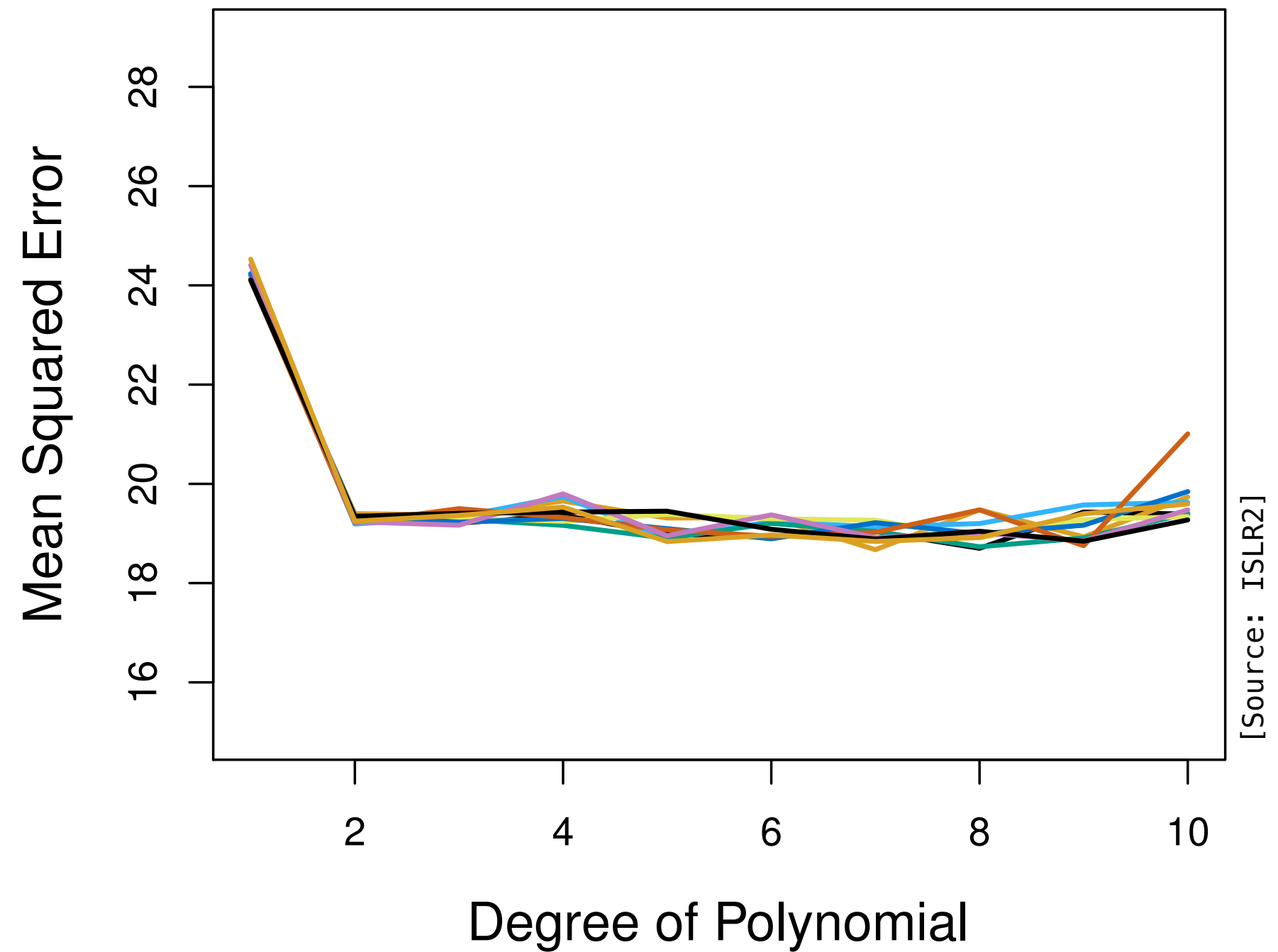
- *K*-fold CV: we train the model on less data than what is available \Rightarrow bias in test error estimate

- LOOCV: training samples highly resemble each other \Rightarrow higher variance of test error estimate

LOOCV



10-fold CV

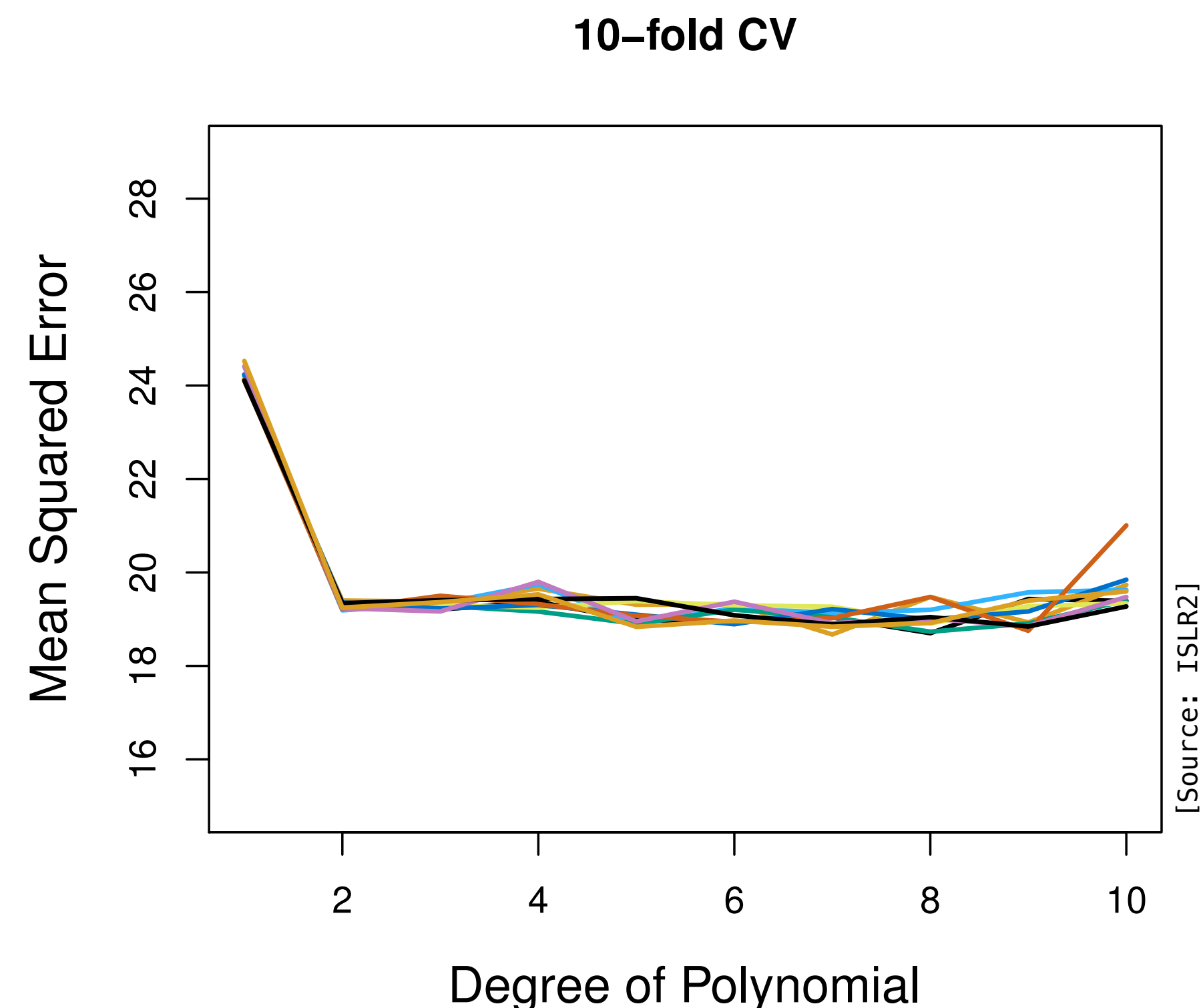
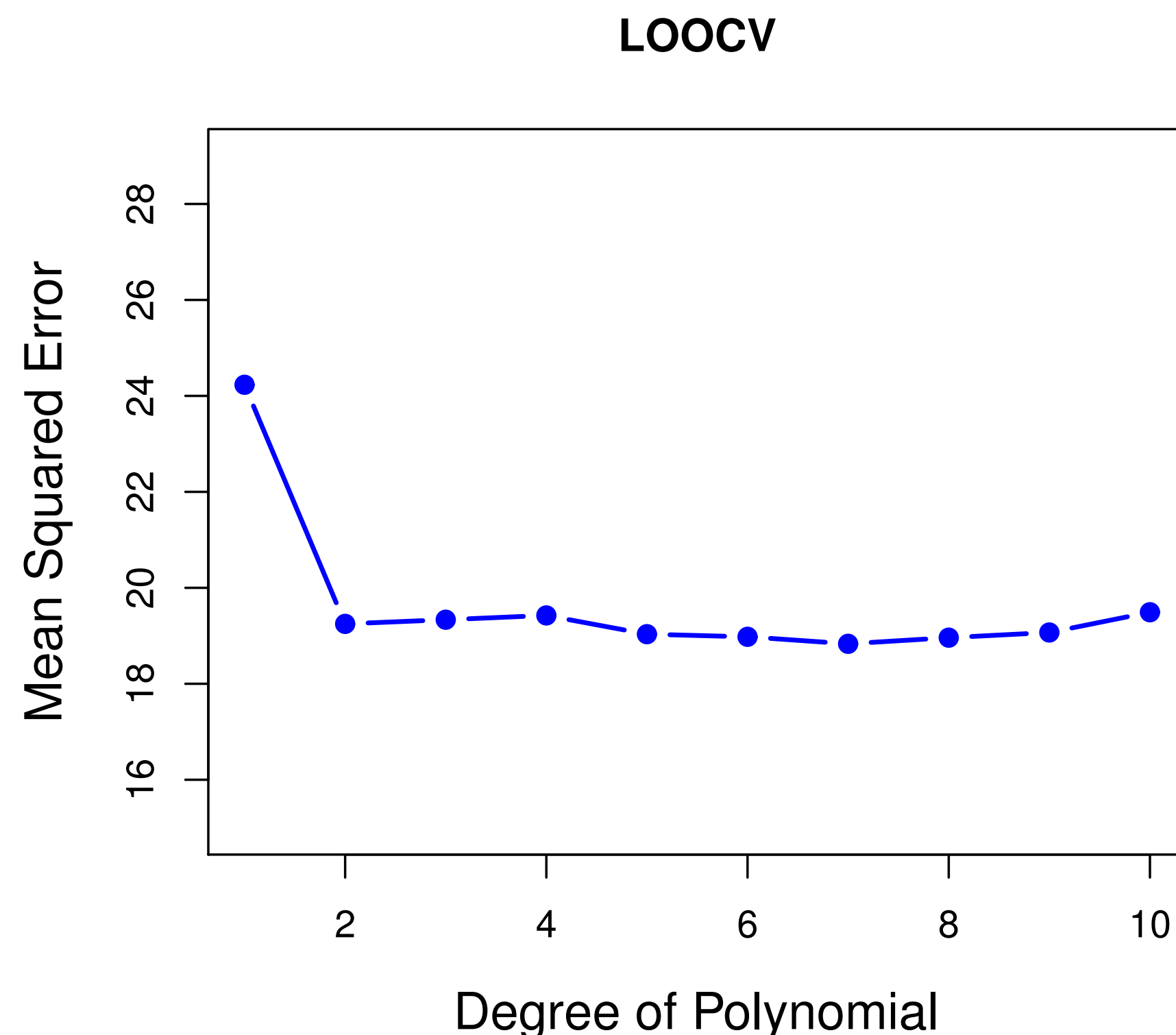


[Source: ISLR2]

K-fold Cross Validation vs. LOOCV

Example: Automobile Data (ISLR2)

- K -fold CV depends on the chosen split
- K -fold CV: we train the model on less data than what is available \implies bias in test error estimate
- LOOCV: training samples highly resemble each other \implies higher variance of test error estimate



Cross Validation on Classification Problems