













■ It can be shown that

$$E[\hat{\boldsymbol{\varepsilon}}^T\hat{\boldsymbol{\varepsilon}}] = (n-r-1)\sigma^2$$

• Therefore an unbiased estimator of σ^2 can be obtained as

$$s^2 = \frac{\hat{\mathbf{\epsilon}}^T \hat{\mathbf{\epsilon}}}{n-r-1}$$



