

Econometrics

Lecture 12: Multiple Linear Regression: Problem of Inference and Functional Forms Quiz

1. Contribution of an explanatory variable to the model means whether the addition of the variable to the model increases ESS (and hence R^2) significantly in relation to the RSS. **True** / False
2. Which of the following is a statistic that can be used to test hypotheses about a single population parameter?
 - a. F statistic
 - b. **t statistic**
 - c. χ^2 statistic
 - d. Z statistic
3. If the calculated value of the F statistic is greater than the critical value, the null hypothesis, H_0 is rejected in favor of the alternative hypothesis, H_1 . **True**/False
4. $H_1: \beta_j \neq 0$, where β_j is a regression coefficient associated with an explanatory variable, represents a one-sided alternative hypothesis. True/**False**
5. The t test can be used to test multiple linear restrictions. True/**False**
6. A test of single restriction is also referred to as a joint hypotheses test. **True**/False
7. A restricted model will always have fewer parameters than its unrestricted model. **True**/False