

Quiz #8
Chapter 11
Group 1
Econometrics 06216

Name: _____

1. When disturbances are positively serially correlated, it is true that:
- The size of the t-tests and the F-tests is affected in the bivariate model but not in the multiple regression model, furthermore these tests tend to reject a true null hypothesis.
 - The size of the t-tests and of the F-tests is affected in the bivariate model and in the multiple regression model, furthermore these tests tend to reject a null hypothesis.
 - The size of the F-tests but not of the t-tests is affected in the bivariate model and in the multiple regression model, furthermore these tests do not tend to reject a true null hypothesis.
 - None of the above.

Answer d

2. In the presence of autoregressive disturbances which of the following Gauss-Markov assumptions it is violated:
- $\text{cov}(\varepsilon_t, \varepsilon_{t'}) = E(\varepsilon_t \varepsilon_{t'}) = 0$
 - $E(\varepsilon_t) \neq 0$
 - $\text{var}(\varepsilon_t) = \sigma^2 x$ Where x is an explanatory variable.
 - None of the above.

Answer a

3. It can be said that disturbances are covariance stationary, when:
- $\sigma_{t'}$ depends only on the distance between the observations in time.
 - The disturbances are not heteroskedastic.
 - a and b are true.
 - $\sigma_{t'}$ do not depends only on the distance between the observations in time and the disturbances are homoskedastic.

Answer c

4. The Cochrane-Orcutt estimator:
- Gives an estimate of $\hat{\rho}$, and it is important because the data can be transform with this estimated value.
 - Is a FGLS.

- c. Can not determine the sign of the serial autocorrelation.
- d. None of the above.

Answer d

5. Which of the following are not true:

- a. When DW tends towards 4 there is strong positive serial correlation.
- b. There can be serial correlation different to first order.
- c. The Durbin-Watson (DW) test is not the only test that is used to check serial correlation.
- d. When DW tends towards 4 there is strong negative serial correlation.

Answer a