

To detect multicollinearity, we can use the correlation method as the best one. The multicollinearity is predicted happens when R^2 is high, say in excess of 0.8. If R^2 is high, the F test in most cases will reject the hypothesis that the partial slope coefficients are simultaneously equal to zero.

b. Autocorrelation

The term autocorrelation may be defined as correlation between members of series of observations ordered in time (as in time series data) or space (as in cross-sectional data) (Gujarati, 1995: 400). If there is autocorrelation in the model, it will raise the value of residual and the impact is the number of t-test, f-test and R^2 will decline.

The tool of analysis is used to detect autocorrelation is using LM test (Lagrange Multiplier Test). This test uses the level of degree (χ^2) in which the expressing that there is no autocorrelation, with the guidance if χ^2 statistic bigger than the value of χ^2 table, hence H_0 denied and also on the contrary.

c. Heteroscedasticity

An important assumption of heteroscedasticity shows the conditional of X increasing as Y increasing. Here the variances of X are not the same. The writer used White Test that provided by the Eviews 3.0 software to detect heterocedasticity. The White Model is: