

Homoscedasticity vs Heteroscedasticity

Features	Homoscedasticity	Heteroscedasticity
Apply	Homoscedasticity assumptions apply to linear regression, t-test, and ANOVA	Heteroscedasticity assumptions apply to linear regression, t-test, and ANOVA
Detect	Bartlett test and Levene's test checks the homogeneity of variance in t-tests and ANOVA.	There are several tests that can be used to detect heteroscedasticity in a regression model such as Breusch-Pagan test, White test and Park test
Violates	Homoscedasticity do not impact the validity of econometric analysis or financial models like CAPM.	Heteroscedasticity impact the validity of econometric analysis or financial models like CAPM.
In Short	Homoscedasticity is a statistical property that refers to a situation in which the variability of the residuals which mean the difference between the observed values & predicted values in a regression model is constant across the range of predictor values. This means that the error variance is kept constant with level of independent variables.	Heteroscedasticity is a statistical property that refers to a situation in which the variability of the residuals which mean the difference between the observed values & predicted values in a regression model is not constant across the range of predictor values. This means that the error variance changes with level of independent variables.