



## **[Glossary]**

### **Generalised Least Squares**

<b>Subject:</b>	Business Economics
<b>Course:</b>	B. A. (Hons.), 5 <sup>th</sup> Semester, Undergraduate
<b>Paper No. &amp; Title:</b>	Paper – 531 Elective Paper Q1 – Advanced Econometrics
<b>Unit No. &amp; Title:</b>	Unit – 1 Relaxing the Assumptions of The Classical Linear Model
<b>Lecture No. &amp; Title:</b>	Lecture – 4 Generalised Least Squares

## Glossary

### GLSE

Generalised Least Squares Estimators They are used to deal with heteroscedastic situation.

**Heteroscedasticity** It is a situation when the disturbance are non-spherical in nature. Variance of disturbance terms are not the same and also any pair of disturbances can be correlated.

**WLSE** Weighted Least Squares Estimators. They are used when  $E(U_i^2) = \sigma_i^2$  are known and weights are inversely proportional to  $\sigma_i^2$ .

**Milder and Harder Heteroscedasticity** Harder heteroscedasticity when  $\sigma_i^2$  is proportional to  $X_i^2$ . Milder heteroscedasticity when  $\sigma_i^2$  is proportional to  $X_i$ .

**2SLS** Two stage Least Squares Estimators. They are used when  $\sigma_i^2$  are given by means of some assumptions.

**Spurious correlation** For transformed model under the case of heteroscedasticity it is the correlation between  $\frac{Y_i}{X_i}$  and  $\frac{1}{X_i}$  etc.