



[Glossary]

Regression Analysis for Qualitative Variables

Subject:	Business Economics
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Unit No. & Title:	Unit – 4 Binary Data and Limited Dependent Variable Models
Lecture No. & Title:	Lecture – 1 Regression Analysis for Qualitative Variables

Glossary

Categorical Variable

A variable representing quality characteristic such as sex, religion, residence etc. It is also a dummy variable.

Dummy Variables Traps

It is multicollinearity arising due to incorrect way of presenting dummy variables

Base or Control

It is corresponding to the omitted category. e.g. Sex – Male or female. If we write $D = 1$ for male, $D = 0$ for female. Then '0' is Base.

Differential Intercept Co-efficient (DIC)

Coefficient attached to a dummy variable is called DIC.

Differential Slope Co-efficient

It is co-efficient attached to explanatory variable which is used with a dummy variable

ANOVA Model

If regression model is exclusively for dummy variables, it is called ANOVA model.

ANCOVA Model

Analysis of co-variance model. It is the model where there is a mixture of both explanatory and dummy variables.

Dummy Interaction

(1) In the case of additive model, Interaction between explanatory and dummy variable is expressed by the product of these variables. (2) In the case of multiplicative model, there is interaction between two dummies.

Threshold

It is the target which is to be achieved, so that regression line beyond it will be steeper than the earlier one.

Piecewise Regression

It is done in two stages. Stage I is upto threshold value and stage II is for exceeding the threshold value. Both the regression lines have different slopes.