

ABSTRACT

Lapse Rate is the rate at which life insurance policies terminate because of failure to pay the renewal premiums by the policyholders on stipulated dates.

Mathematically speaking,

Annualized Lapse Rate = Amount lapsing during the year / Amount exposed to lapse during the year.

It is important to understand difference between surrender and lapse, as surrender refers to a situation where the policyholder surrenders his policy and takes the surrender proceeds as specified in the product - policy document. Hence, there is a well-informed parting of policyholder from the company. Whereas, in the case of lapses, within some specified time, the policyholder may revive the lapsed policy by paying all the premiums, which are due on, that date and verifying continued insurability.

The data of twenty one Life companies were being collected from the IRDA website and also from the website of each individual companies. The data of Lapse ratio, total premium and total reserve over the year 2008-09, 2009-10, and 2010-11 was founded.

Once the data collection was complete, compilation of data was done. Since it's a panel data so compilation of data is necessary to run regression analysis.

After this the regression analysis was done using statistical tool STATA.

Panel (data) analysis is a statistical method, widely used in social science, epidemiology, and econometrics, which deals with two-dimensional (cross sectional/times series) panel data. The data are usually collected over time and over the same individuals and then a regression is run over these two dimensions. Multidimensional analysis is an econometric method in which data are collected over more than two dimensions (typically, time, individuals, and some third dimension).

Now in the regression analysis, the model used is Panel Corrected Standard Error model.

Linear Regression with panel corrected standard errors (xtpcse) calculates panel corrected standard error estimates for linear cross-sectional time series models where the parameters are estimated by either OLS or Panel-Corrected Error regression. When computing the standard errors and the variance-covariance estimates, xtpcse assumes that the disturbances are, by default, heteroscedastic and contemporaneously correlated across panel.

This is the reason why this model has been used in the regression analysis. After doing the analysis using Panel-Corrected Error regression panel corrected standard error model, the result found is significant at 10% level.