

HOW TO PREDICT THE PROFITABILITY FOR LISTED FINANCE PUBLIC LIMITED COMPANIES IN SRI LANKA

Nishanth Nicholas

A dissertation submitted in partial fulfilment of the requirement for Master of Science degree in Business
Analytics

Department of Computing

Informatics Institute of Technology, Sri Lanka in collaboration with

Robert Gordon University, UK

2021

ABSTRACT

In a developing country like Sri Lanka, it is easy to get affected by global crises. Even in recent months, Sri Lanka faced a forex crisis since the prices of most essential goods have been skyrocketing due to the falling of local currency and high global market prices by the Covid19 pandemic. Not only the directly affected industries, but even the finance company's leasing percentage have also dropped compared to previous years where the profitability ratios have gone down. In addition, there are impacts to the rates such as inflation rates, exchanges rates, etc.

Due to these reasons, companies started to predict their profitability and initiated to create strategic decisions plans accordingly. Half of the finance companies in Sri Lanka suffered a profitability shock. Therefore predicting the profitability ratios became one of the significant aspects, since it will help to set goals and plan, helps to budget, and would help to anticipate change within the market.

Also since the inflation rates affect business investment and interest rates in finance public limited companies, it can reduce the value of returns, for research purposes the inflation-adjusted profitability ratios are considered to bring more accuracy. The inflation changed return is the proportion of return that takes into account the time's expansion rate. The reason for the expansion-changed return metric is to uncover the profit from speculation after eliminating the impacts of swelling.

Eliminating the impacts of expansion from the arrival of speculation permits the financial backer to see the genuine acquiring capability of the security without outer monetary powers. The inflation-adjusted return is otherwise called the genuine pace of return.

In addition, in the conclusion section, different types of models were compared and identified to find the fittest model by using the Root Mean Squared Error and Mean Absolute Percentage Error evaluation methods. This will be done using R studio since R permits rehearsing a wide assortment of measurable and graphical strategies like direct and nonlinear modeling, time-series analysis, classification, classical present tests, clustering, and so forth. R is exceptionally extensible and simple to learn the language and cultivates an environment for measurable predictability and illustrations.

On Conclusion, the better model out of selected models was derived using the evaluation methods for each company selected and for each hypothesis. The research was prepared with the intention of providing the listed public finance companies in Sri Lanka with a competitive advantage when making decisions based on the predicted profitability ratios.