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Implementing and Evaluating Financial Distress Prediction Models of Structural Companies

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ABSTRACT

The Greek as well as the European economy is experiencing a crisis which in turn is causing a severe recession in the economy. The economic crisis has as a result many companies to face viability problems due to the sharp reduction in liquidity and in bank lending. This situation has led to the bankruptcy of many companies. Over the past 50 years many analysts have addressed the issue of corporate sustainability. Their studies mainly involve the analysis of economic conditions of bankrupt or failing companies, and the comparison of these companies with non bankrupt or successful companies, using financial indicators. However, there is no convergence of views on the selection of financial ratios. On the contrary opinions were divided about the appropriateness of indicators for predicting bankruptcy. These studies have often led to the development of models to predict the viability.This thesis entitled "Implementing and Evaluating Financial Distress Prediction Models of Structural Companies" is to investigate the situation of five construction companies in relation to the state of the Greek economy and the progress of the construction industry over the last four years, 2012-2015, which correspond to the period after the start of the global financial crisis. Specifically, the five largest construction companies listed on the Greek stock market was selected (Senario 1). Also, it was investigated three more construction companies, which have been deleted from the Greek stock market in 2013 (Senario 2).This paper aims to investigate and evaluate the financial distress prediction models in the selected Greek construction enterprises using the model of multiple discrimination z-score, created by Professor Edward Altman, as well as the reformed models z'-score and z''–score. Initially, a financial analysis was carried out using the five ratios included in the bankruptcy prediction model z-score, and the additional ratio that enter in the reformed models z'-score and z''-score. This analysis use the elements from the official annual financial statements of the selected companies for the four years 2012-2015 (Scenario 1) and for the period 2005-2007 (Scenario 2). Then it was made the calculation of the three models and a comparative summary of the derived values and subsequent graphs was then prepared to illustrate the relationship and the viability of the companies in the general economic environment. Finally, conclusions were drawn and proposals were suggested

KEYWORDS

Financial distress prediction models, Altman z-score, z'-score & z”-score, financial analysis, ratios analysis, construction industry.