

The Line between Business Value and Financial Distress: A Hybrid Approach to Predicting Distress

Michal Karas^{a,*}, Mária Režňáková^a

^a Brno University of Technology, Faculty of Business and Management, Kolejní 2906/4, Brno 61200, Czech Republic

Abstract

Purpose of the article According to the neoclassical theory of economics, the aim of doing business is to maximize its value. At the same time, the business has aim to satisfy its maturing obligation or rather avoid the financial distress. We argue, that there has been lot of attention paid to factors determining the value of business and also to the factors driving the financial distress, while there has been a limited attention paid to the common relationship between these two areas.

Methodology/methods For reducing the initial set of variables the Principal Component Analysis (PCA) and method of Classification and Regression Trees (CART) was employed. While for the purpose of resembling the predictive model a hybrid approach of logistic regression and CART method was used.

Scientific aim The research was carried out on a sample of Czech manufacturing SMEs. The aim was to analyse the usefulness of value driving factors in predicting the financial distress. In contrary to other approaches, our research focuses solely on cash flow based indicators, as these indicators are strongly related to the business value. The result of the research are in a form of probabilistic model predicting the financial distress based on factors driving the business value.

Findings The results showed that the operating cash flow ratios play significant role in financial distress, especially when combining with short-term debts. The connection between creating the value and avoiding distress may lay in the operating cash flow, working capital investments and capital structure.

Conclusions There is significant connection between the financial distress and factors driving the business value. By employing a combination of these factors a unique model of distress prediction could be formulated, while the outcomes of such model would be strongly related to not only to financial distress by also with business value.

Keywords: value drivers, financial distress, prediction models, business value, hybrid model, SMEs,

JEL Classification: G33, C53

* Corresponding author.

E-mail address: karas@fbm.vutbr.cz.