

**FINANCIAL DISTRESS AMONG SMES IN MALAYSIA: AN EARLY  
WARNING SIGNAL**

**BY**

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## ABSTRAK

Membuat ramalan tentang kesulitan kewangan di kalangan perusahaan kecil dan sederhana (PKS) boleh memberi impak yang signifikan ke atas ekonomi kerana ia berfungsi sebagai isyarat amaran awal yang efektif. Kajian ini membangunkan model ramalan krisis kewangan dengan menggabungkan pembolehubah kewangan, bukan kewangan dan tadbir urus, dan menganalisis pengaruh ciri-ciri tadbir urus korporat utama, seperti pemilikan dan struktur lembaga, terhadap kemungkinan krisis kewangan. Dua pendekatan yang digunakan ialah analisis diskriminan pelbagai (MDA) dan model logit. Sampel akhir bagi model anggaran adalah daripada 172 syarikat di mana ianya terdiri daripada 50 peratus syarikat yang tidak gagal dan 50 peratus syarikat yang gagal bagi tempoh antara tahun 2000 hingga 2012. Model ramalan menunjukkan prestasi yang agak baik terutamanya bagi model logit dan MDA yang menggabungkan pembolehubah tadbir urus, kewangan dan bukan kewangan, dengan kadar ketepatan keseluruhan sebanyak 93.6 peratus dan 90.7 peratus masing-masing bagi sampel anggaran. Kadar ketepatan dalam sampel *holdout* ialah 91.2 peratus bagi model logit dan MDA. Bukti ini menunjukkan bahawa model bertindak sebagai isyarat amaran awal yang efisien dan boleh digunakan bagi tujuan pemantauan dan penilaian. Pemegang saham yang mengawal, bilangan pengarah dan jantina pengarah urusan merupakan faktor yang signifikan terhadap PKS yang mengalami masalah kewangan.

Kata Kunci: Krisis kewangan, model logit, analisis diskriminan pelbagai, perusahaan kecil dan sederhana

## **ABSTRACT**

Predicting financial distress among SMEs can have a significant impact on the economy as it serves as an effective early warning signal. The study develops distress prediction models combining financial, non-financial and governance, variables and analyse the influence of major corporate governance characteristics, i.e., ownership and board structures, on the likelihood of financial distress. The two extensively documented approaches, MDA and logit methods were used. The final sample for the estimation model consists of 172 companies with 50 percent non-failed cases and 50 percent failed cases for the period between 2000 to 2012. The prediction models perform relatively especially in the logit and MDA model that incorporate governance, financial and non-financial variables, with an overall accuracy rate of 93.6 percent and 90.7 percent respectively in the estimated sample. The accuracy rate in the holdout sample was 91.2 percent for the logit and MDA model. This evidence shows that the models serve as efficient early warning signals and can thus be beneficial for monitoring and evaluation. Controlling shareholder, number of directors and sex of managing director are found to be significant predictors of financially distressed SMEs.

Keywords: Financial distress, Logit model, MDA, SMEs, Malaysia

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# CHAPTER 1

## INTRODUCTION

### 1.1 Background of Study

The consequences of corporate failure have a far-reaching impact on stakeholders either directly or indirectly. The major stakeholders in a company who are the shareholders stand to lose most of their investment. Creditors may receive partial or no repayment of their initial loans depending on whether their loans were secured or unsecured. The implication of a corporate failure is unfortunately not that simplistic and has serious consequences for many other stakeholders. Some of these consequences include; employees will lose their jobs, the government collects less company and personnel taxes, and social problem might increase. The contributions of Altman (1968); Altman, Edward, Haldeman, & Narayanan (1977); Beaver (1966); Deakin (1977); Blum (1974); and Ohlson (1983) among others have spawned huge literature on the topic of company failure. Since then a number of models have been proposed in order to correctly predict corporate failure but mostly in large public listed firms due to easy access to their financial data. However, very little number of researches on small and medium enterprises (SMEs) has been done as a result of difficulty in accessing their financial data and other information.

In recent years, SMEs are viewed to be the leading contributor to the national economy development in terms of developing entrepreneurship using indigenous skills and technologies, creating employment opportunities, building market competitive through innovativeness and allowing government to realise poverty free society (Jahur and Quadir, 2012). Small business in Malaysia plays a significant role towards economy development in the country therefore understanding why SMEs

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