### THE DETERMINANTS OF CREDIT RISK

IN AN EMERGING MARKET

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### ABSTRACT

The aim of this study is to examine the determinants of credit risk management in an emerging market by using Malaysian listed companies. The sample of the study is selected using paired sample method. In order to adjust for earning management portions, the discretionary accrual model is used to calculate the abnormal accruals of firms. Furthermore, logistic regression is applied to determine the accuracy of unadjusted and adjusted model in predicting financial distress.

Based on the empirical result, the liquidity ratio is proof to be significant at 5percent significance level in determining financial distress before and after earnings management is adjusted. Meanwhile, the productivity ratio is only showing its significance before the earnings management is adjusted and the profitability ratio is significant after the earnings management is adjusted. On the other hand, this study indicates that both unadjusted and adjusted models are having the same level of Type I error (23.3%). Out of the total 30 distressed observations, 23 are classified as distressed observations resulting in 76.6 percent of success classification and 7 are classified as non-distressed observations resulting in a 23.3 percent failure. However, for the Type II error, the non-adjusted model is performing better with a 16.7 percent failure compared to a 26.7 percent failure of adjusted model. As a result, by considering the cost for both Type I and Type II errors, the unadjusted model is better and more appropriate in predicting financial distress firms in Malaysian market compared to the adjusted model. This indicates that the unadjusted model helps in improving credit management among market participants in Malaysia.

Keywords: credit risk management, bankruptcy, financial distress determinants, earnings management

### ABSTRAK

Kajian ini bertujuan untuk menguji keberkesanan faktor-faktor dalam meramalkan kemuflisan dengan menggunakan syarikat-syarikat yang tersenarai di Bursa Malaysia sebagai sampel. Sampel kajian dipilih dengan menggunakan kaedah sampel berpasangan. Dalam usaha untuk menyelaraskan pengurusan pendapatan, model akruan digunakan dalam kajian ini. Tambahan pula, regresi logistik digunakan untuk menentukan ketepatan model-model dalam meramalkan kemuflisan firma sebelum dan selepas penyelarasan pengurusan pendapatan.

Berdasarkan keputusan, nisbah liquidity didapati berkesan dalam meramal kemungkinan kemuflisan firma sama ada sebelum atau selepas penyelarasan pengurusan pendapatan. Pada masa yang sama, nisbah productivity didapati hanya berkesan dalam meramal kemungkinan kemuflisan firma sebelum penyelarasan pengurusan pendapatan dan nisbah *profitability* pula berkesan dalam meramal kemuflisan firma selepas penyelarasan pengurusan pendapatan. Di samping itu, keputusan menunjukkan model sebelum penyelarasan pengurusan pendapatan mempunyai Ralat I sebanyak 23.3 peratus pada masa sebelum dan selepas pengurusan pendapatan diselaraskan. Daripada jumlah keseluruhan 30 pemerhatian yang menghadapi masalah kewangan, 23 dikelaskan sebagai firma yang mempunyai masalah kewangan manakala 7 dikelaskan sebagai firma yang tidak menghadapi masalah kewangan. Dari segi Ralat II, model yang sebelum penyelarasan pengurusan pendapatan didapati lebih baik dalam meramal firma yang tidak mempunyai masalah kewangan berbanding dengan model yang telah diselaraskan pengurusan pendapatan. Kesimpulannya, dengan mempertimbangkan kos bagi kedua-dua Ralat I dan Ralat II, model tanpa penyelarasan pegurusan pendapatan adalah lebih baik dan sesuai dalam meramalkan kecenderungan masalah kewangan firma di Malaysia. Ini menunjukkan bahawa model tanpa penyelarasan pengurusan pendapatan dapat membantu dalam meningkatkan pengurusan kredit di kalangan pelabur yang melabur di Malaysia.

Kata kunci: Pengurusan risiko kredit, kemuflisan, pengurusan pendapatan

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### LIST OF ABBREVIATIONS

BNM	Bank Negara Malaysia (Central Bank of Malaysia)
Bursa Malaysia	Bursa Malaysia Berhad
DataStreams	Thomson Reuters Datastreams
EM	Emerging market
FRS	Financial Reporting Standards
GAAP	General Accepted Accounting Principles
IFRS	International Financial Reporting Standards
MARC	Malaysian Rating Corporation Berhad
MDA	Multivariate discriminant analysis
MIDA	Malaysian Investment Development Authority
PN 17	Practice Notes 17/2005
SC	Securities Commission

### **CHAPTER ONE**

### **INTRODUCTION**

### 1.0 Introduction

The contents of this chapter including discussion on the background of the study, highlighting on the problem statement of the study, description about the research objectives and research questions, hypotheses of the study, explanation about the significance of the study, the scope of study and finally, summary of the organization of the study.

### **1.1 Background of study**

Credit risk is the risk if an economic loss from the failure of counterparty to meet its contractual obligations (Jorion, 2003). From bank perspective, credit risk can be defined as the possibility of losses due to diminution in borrower's credit quality or the potential where a bank's borrower or counterparty fails in to meet its obligations (Sinha, 2010). The borrower or lender can be an individual, a corporation or even a government. The default of the repayment may not only bring a huge financial loss, including principle and interest, to the lender but also cost the lender to collect back its principle. Meanwhile, the borrower may suffer in losing its reputation, creditworthiness and moreover its property that pledged as collateral on its borrowing. Based on those circumstance mentioned above, credit risk has became one of financial risk that concerned by not only credit providers but also cautious by investors, corporations and regulators. Therefore, the assessment of credit risk plays a

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