INTERNATIONAL ISLAMIC UNIVERSITY MALAYSIA

GOING CONCERN AS A SIGN OF COMPANY'S FINANCIAL DISTRESS

BY

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ABSTRACT

Information regarding business financial position is crucial to the stakeholder especially to the investors and creditors. The ability to predict as early as possible the potential business failure would reduce substantial losses by providing ample warning to the interested parties. Therefore, many scientific models have been developed by researchers to assist users in predicting impending financial distress since as the early as 1930s such as linear discriminant analysis, logit analysis, recursive partitioning, survival analysis and the latest model is neural network. Previous studies had demonstrated that all these models have shown high predictive accuracy, indeed, there is no superior method in term of prediction. The possible reason posits on these results may come from the underlying principle applied to all models where the models are susceptible to financial ratios analysis. Nevertheless, there were a few cases where companies collapse just after making high returns for a past few years. Thus, the prediction ability of financial ratios is questionable. Therefore, some researchers had integrated the financial ratios with other qualitative variables in the prediction studies. One of the useful non-financial indicators in predicting bankruptcy is auditor's opinion. Auditor's opinion is the best platform to convey a professional judgment regarding the company's viability status as the auditor's opinion is an expression of company's financial and other matters that may affect its continuity in future. One of the auditor's opinion that may sign as early warning of company's viability is going concern opinion. Going concern is an assumption a company will continue operate for a foreseeable future and has no intention to liquidate its operations. Thus a going concern exception issued by auditors seems to indicate financial problem. Therefore, going concern is seen to be a tool of increasing the prediction ability of the financial distress model. In view of this point, this study aims to provide a basis for understanding of going concern opinion in predicting a financial distress company. Using multivariate discriminant analysis, a sample of 52 companies that are represented by equal number of PN4 and Non-PN4 companies are obtained. The results indicate that the financial distress companies tend to receive going concern opinion from the auditors as far as two years prior to reclassification of the companies under PN4 status. Going concern also improve the predictive accuracy of the model used in this study as it can predict accurately as far as two years prior to PN4 status compared to the model without going concern as a variable. Thus, these results suggest that going concern opinion is useful as an indicator of the future prospects of company.

ملخص البحث

إن معرفة المعلومات عن الوضع المالي ضرورية لمتسلّم الرهان خاصة للمستثمرين والدائنين. وإن التنبؤ المبكر لاحتمال إخفاق الأعمال التجارية سوف يقلل من الخسائر الكبيرة إذ يتيح الفرصة الكافية لتقديم تحذير للأطراف المختلفة أصحاب المصلحة، لذلك فقد قام الباحثون بتطوير نماذج مختلفة لمساعدة المشتغلين في المجال التجاري على التنبؤ بالمحن التجارية الوشيكة الحدوث منذ عام 1930، مثل: التحليل التمييزى الخطي، وتحليل لوجت، والتقسيم المتواتر، والتحليل المستمر ثم النموذج الحديث الذي يسمى بالشبكة المحايدة. وقد خلصت الدراسات السابقة أن جميع تلك النماذج أظهرت دقة عالية في التنبؤ، ولكن لا توجد طريقة ذات تنبؤ متناهي. وقد يعود السبب في الدقة إلى القاعدة الأساسية في التطبيق لكل النماذج، خاصة عندما تكون النتائج قابلة للتحليل بالنسب المالية. ومع ذلك هناك حالات يصعب فيها التنبؤ وذلك عند انهيار الشركة بعد فترة وجيزة من العائدات الكبيرة المحققة في السنوات القليلة الماضية. وهكذا تصبح مقدرة التنبؤ بالنسب المالية محل مساءلة.

ونتيجة لذلك، فقد قام بعض الباحثين بدمج النسب المالية مع المتغيرات النوعية الأخرى المستخدمة في دراسات التنبؤ. ومن المؤشرات المفيدة غير المالية لتنبؤ الإفلاس هي رأي المراجع المالي وهو أساس قوي لرأى المهني حول نمو الشركة، لأن رأي المراجع المالي تعبير عن الشأن المالي للشركة بجانب الأمور الأخرى التى تؤثر في استمرارية الشركة مستقبلاً. وقد يكون رأي من المراجع المالي مؤشراً مهماً كتحذير مبكر يجب أخذه بعين الاعتبار. والاعتبار المهم عبارة عن افتراض أن الشركة سوف يستمر في المعاملات لمستقبل متوقع دون تصفية معاملاتها. إن الاستثناء الذي يقرره المراجع المالي يشير إلى مشكلة مالية. وبذلك يكون الاعتبار أداة لزيادة مقدرة التنبؤ لنموذج المحن المالية. انطلاقاً مما سبق فإن هذه الدراسة ترمي إلى تقديم قاعدة قوية لفهم اعتبار التنبؤ في المحن المالية للشركة. وقد استخدمت الدراسة التحليل التمييزى المتعدد لعينة من 52 شركة تمثيلها بأرقام متساوية (PN4) و (Non-PN4). وقد أشارت النتائج إلى أن الشركات التى لها محن مالية تميل إلى

أن تحصل على الرأي الاعتباري من المراجع المالي قبل سنتين على الأقل من إعادة تصنيف الشركات تحت الحالة (PN4) . وقد برهن الرأى الاعتباري دقة في التنبؤ للنموذج الذي استخدم في هذه الدراسة، لأن هذا النموذج يمكنه التنبؤ قبل سنتين من الحالة (PN4) مقارنة بالنموذج الخالي من الرأي الاعتباري كمتغير. إذن فالنتائج تقترح أن الرأى الاعتباري مفيد جداً كمؤشر لتوقعات الشركة المستقبلية.

APPROVAL PAGE

I certify that I have supervised and read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Accounting.

Mohd Azmi Omar
Supervisor

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Master of Science in Accounting.

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DECLARATION

I hereby declare that this dissertation is the result of my own investigations, except where otherwise stated. I also declare that it has not been previously or concurrently submitted as a whole for any other degrees at IIUM or other institutions.

MOHD NAZLI BIN MOHD NOR

Signature:_________________________ Date:___________________

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF ABBREVIATIONS

CAPM	Capital asset pricing model
CATA	Current asset to total asset
CATS	Current asset to total sales
DA	Discriminant analysis
DR	Debt ratio
e.g.	*exempli gratia*: for example
et al.	*et alia*: and others
EVA	Economic Value Added
FCF	Free Cash Flow
FIFO	First in first out
GAAP	Generally accepted accounting principles
GC	Going concern
HIP	Human information processing
IAS	International Accounting Standard
ISA	International Standards on Auditing
LA	Logit analysis
LIFO	Last in first out
MASB	Malaysian Accounting Standard Board

MDA	Multivariate discriminant analysis
MIA	Malaysian Institute of Accountants
MVEBVD	Market value of equity to book value of debt
NAARS	National Automated Accounting Research System
NN	Neural networks
NOPAT	Net operating profit after tax
OTC	Over-the-counter
PN4	Practice note no. 4
R&D	Research and development
REVA	Refined economic value added
RI	Residual income
ROA	Return on asset
ROI	Return on investment
ROE	Return on equity
RPA	Recursive partition
SA	Survival analysis
SAS	Statement of Auditing Standards
TATO	Total asset turnover
VIF	Variance Inflation Factor
WACC	Weighted average cost of capital
WCTA	Working capital to total asset

CHAPTER 1

INTRODUCTION

This study aims to provide a basis for understanding of going concern opinion in predicting a financial distress company. To achieve this objective, the study analyzes auditor's report and financial statement of companies that are listed in Bursa Malaysia (formerly known as Kuala Lumpur Stock Exchange). The financial distress companies are represented by Practice Note no 4 company (PN4) and the healthy companies are matched by industries and assets. This study employs multivariate discriminant analysis in order to answer the above objective. It is hoped that this study would improve the decision making made by the financial users and also, this study is expected to fill the void of researches in the field of company prediction especially in Malaysia environment.

1.1 OBJECTIVES OF THE STUDY

This study has three objectives. The first objective of the study is to examine the association between going concern opinion and company's financial status. The second objective is to determine the prediction accuracy of going concern opinion and the third objective of the study is to examine the influence of non-normal variables to the prediction accuracy.

1.2 BACKGROUND OF THE STUDY

Information regarding the business financial position is crucial to the stakeholder especially to the investors and creditors. The ability to predict as early as possible the potential business failure by providing ample warning to the interested parties would reduce substantial losses (Deakin, 1972). Therefore, many models have been developed by researchers to assist users in predicting impending financial distress as early as 1930s. The earlier model, linear discriminant analysis was applied in failure prediction in the 1960s (Altman, 1968), followed by logit analysis in 1980s (Ohlson, 1980). Recursive partitioning and survival analysis were also developed in 1980s and the latest model is neural network, which was developed in the 1990s (Laitinen and Kankaanpaa, 1999).

Although the models are developed in different decades, the prediction accuracy of each model is very high and there is no superior method in terms of prediction (Laitinen and Kankaanpaa, 1999). The possible reason posits on this result may come from the underlying principle applied to all models in which the models are susceptible to financial ratios analysis. In fact, there were a few cases of companies collapse just after making high returns for a past few years. Thus, the prediction ability of financial ratios is questionable.

Therefore, some researchers have integrated the financial ratios with other qualitative variables in the prediction studies. One of the useful non-financial indicators in predicting bankruptcy is auditor’s opinion and auditor changes (Levitan and Knoblett, 1985). Auditor’s opinion is the best platform to convey a professional judgment regarding the company’s viability status as the auditor’s opinion is an expression of company’s financial and other matters that may affect its continuity in the future. The auditor’s task is to present clearly and concisely a highly technical subject to a variety of interested readers (Carmicheal *et al*., 1996).

One of the auditor’s opinion that signal as early warning of company’s viability is going concern opinion. Going concern is an assumption a company will continue operate for a foreseeable future and has no intention to liquidate its operations (Venuiti, 2004; Kuruppu *et al*., 2003; Carmicheal *et al*, 1996). Thus a going concern exception issued by auditors seems to indicate financial distress (Levitan and Knoblett, 1985). Therefore, going concern is seen to be a tool of increasing the prediction ability of the financial distress model.

To date, studies on the going concern in the predictions can be classified into three classes. First, auditor’s report information has been used to construct bankruptcy prediction models. Second, bankruptcy prediction models have been constructed to help in making audit qualifications and third, several statistical models have been developed to explain qualifications in audit reports. These studies have produced mixed findings. Some researchers have found going concern opinion is a sign of company's financial distress (Geiger and Raghunandan, 2001; Laitinen and Laitinen, 1998; Schwartz and Soo, 1995; Chen and Church, 1992; Hopwood *et al*., 1989). On the contrary, other researchers revealed that going concern opinion did not have any association with the company's financial distress; hence it did not have any prediction ability (Koh, 1991; Levitan and Knoblett, 1985).

1.3 MOTIVATIONS OF THE STUDY

The contradicting evidences found in studies on the usefulness of going concern opinion in the prediction of company's financial problem highlighted above, plus the very minimal number of studies on financial distress prediction in Malaysian motivated the researcher to provide additional evidences on the usefulness of going concern opinion in predicting financial distress, especially in Malaysian environment.

Furthermore, most of the models used by previous studies were susceptible to financial ratios analysis. Many financial experts stress that balance sheet information alone is not sufficient to predict catastrophic factors such as bad management, economic downturn, over-trading and acquisition of a failed company (Abidali and Harris, 1995). Therefore, it is important to include qualitative variables in predicting company's financial status. Qualitative variables such as non-financial information has been proved to be a significant discriminant in prediction company's financial status (Lee and Yeh, 2004; Kuo et al., 2003), but the use of the non-financial information in financial distress prediction model is very limited and has not been widely carried out.

The motivation to focus on going concern opinion stems largely from the current issue on the auditor's impotence on high-profile engagements such as WorldCom and Enron which went bankrupt on 2002 and 2001 respectively. The auditors failed to give a serious warning about the financial distress faced by these companies that led to losses to the related parties (Venuti, 2004). Thus, the researcher believes that it is essential to analyze whether going concern opinion can be used as a signal of company's financial distress.

In addition, most of the previous studies were suffered from the fundamental assumption required by prediction model (Altman *et al*.,1995; Ohlson, 1980; Deakin, 1972; Altman, 1968). One of the fundamental assumptions in the statistical methods used requires independent variables to be normally distributed. Failed to meet this assumption may lead to bias and invalid results (Hair *et al*., 1998; Altman *et al*., 1981). Hence, the researcher has taken this consideration in prediction analysis to generate a robust model.

In view of the above scenario, it motivates the researcher to conduct a study in relation to the financial distress prediction, particularly, going concern opinion in predicting company's future viability.

1.4 ORGANIZATION OF THE CHAPTERS

This thesis will be presented in six chapters, including this chapter, which represents an introductory part of the thesis. The second chapter briefly introduces the concept of financial distress and going concern. Basically, this chapter reviews the term of financial distress used by previous studies and in the context of Malaysian Law. It also defines the auditors' opinion in general and going concern opinion in specific.

Chapter three attempts to review the literature on the prediction models and going concern opinion in company's financial prediction. This chapter briefly introduces the models used in prediction such as multivariate discriminant analysis, logit analysis and neural networks and attempts to bring in the issues relate to each model. This chapter also provides empirical studies and the focus is highly given to multivariate discriminant analysis. Further, it provides empirical studies on companys' financial prediction that uses going concern as their variables.

Chapter four attempts to integrate the literature reviewed in the previous chapter (prediction model and going concern). Then, it outlines three research objectives formulated based on the literature reviewed. Next, it presents the methodology adopted for the research and explains the procedures involved in data collection and data analysis.

Chapter five analyzes data collection and provides findings of statistical test performed. Finally, Chapter six discusses findings for each of the research hypotheses and underlines a few limitations faced in the study. It also highlights contributions made by the study and offers some suggestions for future research.

CHAPTER 2

THE CONCEPT OF FINANCIAL DISTRESS AND GOING CONCERN

2.1 INTRODUCTION

The purpose of this chapter is to provide a clear definition of the concept of financial distress and going concern. In particular, this chapter attempts to review the term "financial distress" used by previous studies and in the context of Malaysia's law. The chapter also attempts to review the concept of going concern opinion in Malaysian context.

2.2 THE CONCEPT OF FINANCIAL DISTRESS

According to Foster (1986) as quoted by Omar (1994), the term "financial distress" has been used to describe companies experiencing severe liquidity problems that cannot be resolved without a sizeable rescaling of its operations or structure. This definition is very general, thus the term "financial distress" has been defined in numerous ways in attempts to depict the companies' financial problems. Therefore, one of the problems in examining the literature on predicting financial distress is that different authors use different criteria to indicate financial distress.

Table 2.1 provides several definitions of financial distress, bankruptcy and failure used by the previous studies. It can be seen that most of the authors prefer to use bankruptcy rather than failure and financial distress as a surrogate for financial distress. Indeed, there is no consistency among the authors in using these terms. Some use all the terms interchangeably to indicate companies that filed for bankruptcy petition or liquidation. The term "bankruptcy" seems to focus on the legal action taken by a company to file the bankruptcy petition. However, this definition is obviously inappropriate if a company may file a bankruptcy petition for reasons other than experiencing serious financial difficulty (Omar, 1994). On the other hand, the term "failure" and "financial distress" have been used in a broad way. Companies are categorized as failure or financial distress if they experience any of the following events: bankruptcy, insolvency, liquidated, acquired or merged, in receivership, privatized, operating losses, negative retained earnings and defaulted in loan and interest payments. The definition of financial distress used in these empirical studies seems to influence the sample size of studies. If the legal definition of bankruptcy is used, the number of sample will obviously be small and if a broader definition of financial distressed or failure is used, the sample size will absolutely increase (Omar, 1994).

Altman (1993) defines corporate distress into four categories, which are failure, insolvency, default and bankruptcy. According to him, “failure” by economic criteria, means that the realized rate of return on invested capital, with allowances for risk consideration, is significantly and continually lower than prevailing rates on similar investments. The other definitions are insufficient revenues to cover costs and the average return on investment being below the company’s cost of capital. On the other hand, business failure as defined by Dun & Bradstreet includes business that cease operation following assignment or bankruptcy; those that cease with loss to creditors after such actions as execution, foreclosure, or attachment; those that voluntarily withdraw, leaving unpaid obligations; or those that are involved in court actions such as receivership, reorganization, or arrangement; and those that voluntarily compromise with creditors (Altman, 1993).

Altman (1993) categorizes insolvency into two groups; “technical insolvency” and “insolvency in a bankruptcy sense”. The former exists when a company is unable to meet its current obligations. The latter exists when company’s total liabilities exceed a fair valuation of its total assets and more critical than technical insolvency. Technical insolvency may be a temporary condition compared to insolvency in a bankruptcy that indicates a chronic situation.

Default is referring to the inability of a company to make principal and interest loan repayments on time. Technical default occurs when a company violates a condition of an agreement with a creditor and it can be grounds for legal action