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Corporate Failure Prediction in Malaysia

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Abstract

This study is to develop a financial prediction equation that based on public listed companies in Malaysia. Logistic regression analysis was employed to develop the equation. Eleven financial ratios were found useful in developing the financial distress prediction models. The sample consists forty eight public listed companies in Malaysia and the data covers the period from 2010 to 2014. SPSS software was used to perform the statistical analysis. The result indicated that the selected financial ratios were significant for corporate failure prediction in Malaysia. The developed equation is able to predict financial failure with an eighty eight percent accuracy rate. The accuracy is higher than those previous studies which used discriminate analysis technique. As the financial crisis of 1997 had created a major impact for Malaysia corporations, a financial distress prediction model is needed to prevent the public funds lost. This study was conducted using the recent data on public listed companies in Malaysia. Hence, this model is more relevant in predicting corporate failure in Malaysia.

Index Terms: Financial Prediction Equation; Logistic Regression Analysis; Corporate Failure; Financial Failure; Discriminate Analysis Technique

1.1 Background of the Study

Corporation failures are very common in the current business environments and it is an investigated topic within corporate finance. According to Kosmas and Antonios (2013), corporate failure results in breaking up a corporation's social and economic interaction. It also affects the stakeholders such as shareholders, creditors, managers, and employees. Many researchers and academics had studied the corporate failure diagnosis for the last few decades. There are numerous of corporate failure prediction models had been developed and the financial institutions recently gained further attention to the corporate failure prediction approaches to support their operations. Ahmed, Bahrain and David (2005) mention that it is important for financial institutions to recognize the loan problem early and to respond immediately by correcting the problem. The delay of recognizing the problem may result the liquidation of the firms and the loss of the financial institution's investment. Ong, Yap and Khong (2011) believe that the corporate failure prediction models are important for financial institutions to analysis the customers' creditworthiness when processing loan and prevention actions can be taken for those corporations that have potential of falling into financial distress.

There are numbers of studies on financial distress prediction have been studied and reported in the literature. However, there are very few studies that used data from Malaysia to develop the financial distress prediction model. There are very few studies used Malaysia's public listed company to build the financial distress prediction model. Argenti (1976) states that the corporate failure models derived in one country are not necessarily applicable to another. Besides, Syahida and Rashid (2010) mention that the research findings from developed economies such as the USA and the UK cannot be applied to Malaysian firms. This is because there are differences in market structures, social economic factors, provision and implementation of law, political environment, and accounting standards. Ong, Yap and Khong (2011) applied logistic regression analysis to develop a financial distress prediction model amongst public listed companies in Malaysia. The sample adopted in their study was selected from companies listed on Bursa Malaysia and classified as financial distressed from 2001 to 2007. According to Grice and Dugan (2011), the accuracy of the models decreased when applied to different periods of the original periods. Hence, models are time sensitive. In order to provide higher prediction accuracy,

a new financial prediction model is developed which the sample was selected from Malaysia's public listed company on Bursa Malaysia and classified as financial distress from 2010 to 2014.

During the last two decades, researchers employed different methodologies to develop the financial distress prediction models. Altman (1968) first used multiple discriminant analysis (MDA) in his research on prediction of corporate bankruptcy. Juliana and Heather (2005) state that assumption such as "the independent variables must have multivariate normal distribution and the variance-covariance matrix of the independent variables in each failed and non-failed groups must be the same" is required in the MDA models. According to Ong, Yap and Khong (2011), the MDA model was popularly used for corporate failure studies in the 1970s and 1980s. However, the restrictive assumptions such as linearity, normality, independent among input variables, and pre-existing functional form relating to the dependent variables and independent variables limit the validity of the MDA model. Adnan and Humayon (2006) mention that the restrictive assumptions affect the predictive performance of the MDA. Thus, the logistic regression model is constructed to provide higher prediction accuracy. The limitation and weaknesses of the MDA in constructing financial distress prediction model can be overcome by adopting logistic regression analysis (Ong, Yap and Khong, 2011).

1.2 Problem Statement

(i) The financial crisis of 1997 had created a major impact for Malaysia corporations. The corporate failure caused most of the banks lost on their lending activities. A huge loss of public funds and bank loans has been reported after the financial crisis in 1997. It has also affected the investors faced major losses for their investment.

(ii) There are many of financial distress prediction models and whether they can predict the corporation failure and help financial institutions and investors to protect their interest are the issues that need to be studied.

1.3 Research Question

i) Does the logistic regression analysis a reliable technique for financial distress prediction?

ii) Does the result proves that the identified financial ratios significant and useful for corporate failure prediction?

1.4 Objectives of the Study

The objectives of the study are to develop a corporate financial distress prediction model of public listed company in Malaysia and identify the predictor variables that enhance the accuracy of the financial distress prediction model.

1.5 Significance of the Study

This study intends to develop a corporate financial distress prediction model by using the data from public listed company in Malaysia. The data is adopted from year 2010 to 2014 as financial distress prediction models are time sensitive. The financial distress prediction model acts as a predictor to measure the warning signals of a company. The developed financial distress prediction model is useful for the financial institutions to support their operation.

1.6 Assumptions of the Study

i) The overall predictive accuracy demonstrates that the logistic regression analysis used is a reliable technique for financial distress prediction in Malaysia.

ii) The predictive accuracy of the model is higher than the previous study.

1.7 Limitations of the Study

i) The developed financial distress prediction model is tailored to suit for Malaysia firms.

ii) The predictor variables used in this study are activity ratio, cash flow ratio, solvency ratio, liquidity ratio, and profitability ratio.

iii) The sample is selected from companies listed on Bursa Malaysia and classified as financial distressed from 2010 to 2014.

2. LITERATURE REVIEW

2.1 Introduction

The study on corporate failure prediction has attracted the interest of researchers for many years. The corporate failure prediction was considered important after the great depression during 1930s and there were plenty of companies collapsed. Over the last 80 years, numerous studies on this topic have been done by most of the researchers. According to Wan, Raja and Khairul, business survival is a vital element in the corporate world, it is important that the corporations to ensure the financial losses can be minimized as much as possible. Corporate failure results in breaking up a corporation's social and economic interaction. It also affects the stakeholders such as shareholders, creditors, managers, and employees

(Kosmas and Antonios, 2013).

The corporate failure prediction is therefore to assist the corporations to gauge their financial condition in order to strategize their survival techniques and to cope with the unexpected downturn. Alessandra, Marco, Marialusia and Luca (2011) state that the first relevant studies were published by Smith in the 1930s. In Smith's study, 29 companies which failed during 1920s were studied and he concluded that 24 ratios were sensitive barometers of the progress of a company. From the late 1960s to present day, corporate failure prediction model have been studied based on statistical classification techniques. The pioneer researchers in developing corporate failure prediction model includes Beaver (1966), Altman (1968) and Altman et. al (1977). Their studies are then tested and extended by other researchers. Numerous of new models have been developed by including other variables to enhance the accuracy and predictive ability.

2.2 Corporate Failure Prediction Model

There are many arguments on which techniques to be used are best to predict corporate failure. Altman (1968) developed the Z-score model which the model provided more accurate predictive ability. The approach combined the ratio analysis with a rigorous statistical approach, the multivariate discriminant analysis (MDA) and it emphasized the correlations among ratios. The MDA was widely used for corporate failure studies until present. Marcellina (2011) mentioned that MDA regression technique identifies the characteristic unique to each group and it derives a statistical function and score to separate the group with their distinguishing traits. The scores are used to assign each observation to the appropriate categorization. According to Bhandari and Rajesh (2013), "MDA is a multivariate technique by means of which multiple measurement are reduced to a single weighted composite score, which can distinguish between members of two or more groups. In case of two groups, the multivariate problem is reduced to a simple univariate problem". However, the MDA assumptions were not investigated by most of the researchers. Kosmas and Antonios state that the accuracy of MDA model is based on assumptions such as linearity, normality and independent among predictor variables that rarely exist in the real world. According to Ong, Yap and Khong (2011), "MDA is not free from defects because it largely depends on some restrictions such as linearity, normality, independence amongst input variables and pre-existing functional form relating to the dependent variables and independent variable". The normality conditions played an important role in the MDA. The model is believed valid if the normality conditions are met.

Logistic regression analysis was introduced to construct the financial distress prediction model in the late 1980. Alessandra, Marco, Marialusia and Luca (2011) mention that "the logistic regression analysis has been used to examine the relationship between binary or ordinal response probability and explanatory variables". It is believed that the logistic regression analysis provide higher prediction accuracy compared with MDA. Hence, logistic regression analysis has been introduced to overcome the weaknesses of the MDA. The logistic regression analysis was then adopted by other researchers to develop the predictive model (Kahya, 1997; Darayseh, Waples and Tsoukalas, 2003; Wong, Nicholas and Holt, 2003; Ismail, Ahmad, Kamarudin and Yahaya, 2005; Wood, 2006; Gaganis and Pasiouras, 2007; Liou, 2008; Baixauli and Modica, 2010; Giovanis, 2010). According to Laitinen and Laitinen (2000), the problems due to the normality of variables were overcome by applying logistic regression in their study. The logistic regression analysis was widely used in recent financial distress prediction studies (Ong, Yap and Khong, 2011; Polemis and Gounopoulos, 2012; Foster and Zurada, 2013; kosmidis and Stavropoulos, 2014).

2.3 Variable Selection

In Mossman et al. (1998) study, four types of bankruptcy prediction models were tested based on financial statement ratios, cash flows, stock returns and return standard deviations. They believed these important ratios have been ignored in the previous studies. Beaver (1966) calculated 30 ratios for his univariate approach study. The selection of the ratios is based on: popularity; ratios which performed well in the previous study; and ratios which can be defined in terms of a cash flow concept. Bellovary et al. (2007) stated that there were few criteria need to be fulfilled when choosing the variables. The variables must be: consists of relevant financial meaning in a failure context; commonly used in failure predictions literature, and the information needed to calculate these ratios is available. According to Laitinen and Laitinen (2000), most of the researchers constructed a series of trial and error processes to determine the financial ratios as variables in the financial distress prediction models.

There is no theoretical approach that can be used to guide in selecting variables for financial distress prediction models. In this study, the independent variables selection were based on being popular, with frequent appearances in the literature, significance, and recognition of financial ratios in earlier studies.

2.4 A Review on Corporate Financial Distress

In order to enhance the quality of listed company issuers on Bursa Securities; transparency and investor protection; the attractiveness of Bursa Securities; and the integrity and credibility of the market, Bursa Malaysia has made amendments to the listing requirements in relation to financial condition and level of operations on 5 May 2006. According to Bursa Malaysia (2006), pursuant paragraph 8.14C of the LR and Practice Note 17/2005 ("Existing PN17"), a listed issuer which trigger the prescribed criteria relating to financial condition and level of operations ("Existing PN17 Criteria") must

regularize its condition within the prescribed timeframe and provide additional disclosures to the market in the manner prescribed under the Existing PN17. Similarly under paragraph 8.14B of the LR and Practice Note 16/2005 ("Existing PN16"), a listed issuer considered as a Cash Company ("Cash Company") must also regularize its condition and provide additional disclosures to the market, in the manner prescribed under the Existing PN16. The current requirements under paragraphs 8.14B, 8.14C, Existing PN16 and Existing PN17 are collectively referred to as "Existing PN16 & PN17 Framework". Besides that, other related amendments have also been made to Practice Note No 1/2001 ("PN1"), which requiring listed issuers to make announcements on default in payment as required in PN1 to provide certain additional disclosures as prescribed in PN1 ("Additional PN1 Announcement"). The firms under financial distress and classified by Bursa Malaysia under No. 17(PN17) were used in this study.

3. METHODOLOGY

3.1 Design of the Study

The design of the study is quantitative study. Logistic regression analysis is employed to construct financial distress prediction model based on public listed companies' longitudinal data from Malaysia.

3.2 Proposed Theoretical Framework

Logistic regression is employed in this study. According to Hair et al. (2006), logistic regression is the appropriate statistical technique when the dependent variable is a non-metric variable and the independent variables are metric variables. Logistic regression model, or LOGIT analysis are a combination of multiple regression and discriminant analysis:

$$Logit_i = b_0 + b_1 X_1 + \cdots + b_n X_n$$

The equation described above express the probability that a case belongs in a certain category. The result from the equation is a probability value that varies between 0 and 1. A case that is very unlikely to occur when the value is close to zero while a case that is very likely to occur when the value is close to one.

The dependent variable in this study consists of two groups, which is distressed group and non-distress group. The independent variable includes activity ratio, cash flow ratio, solvency ratio, liquidity ratio, and profitability ratio. Each independent variable has its own coefficient in the logistic regression equation.

3.3 Population of the Study

The population of the study was the public listed company on Bursa Malaysia and classified as financial distressed from 2010 to 2014.

3.4 Sample Size

The sample consists of 54 companies from different sectors. 27 public listed companies were classified as PN 17 company, as at 5 May 2014 by Bursa Malaysia, Media Releases. 27 non-financial distressed public listed companies were selected to perform balanced sample analysis. These industries include industrial products, trading and services, properties, consumer products, constructions, and finance.

3.5 Sampling Procedure

A balanced sample approach was used in this study. Each financially distressed public listed company was matched with the non-financially distressed public listed company. In order to minimize the bias in selecting the sample for development of financial prediction models, both financially distressed public listed company and non-financially distress public listed company must be matched by same industry, closest assets size, and failure year.

3.6 Usable Sample

The usable samples are those public listed companies consist of 5 years financial data based on their latest financial reports. For example, if a company's latest financial report is on 2013, the usable data is from 2009 to 2013. In the same way, if a company's latest financial report is on 2014, the usable data is from 2010 to 2014. The comparable of financially distressed public listed company and non-financially distress public listed company must be same industry in Malaysia. Therefore, those financially distress public listed companies which cannot be compared to Malaysia non-financially distress public listed companies were excluded. In general, the usable sample consists of 48 companies.

3.7 Data Collection

The financially distressed public listed company and non-financially distressed public listed company was selected from the Bursa Malaysia. The financial ratios of each company were obtained from Datastream, a tool which provide the financial and macro-economic data to help in developing the logistic regression equation. Most of the ratios were based

on balance sheet and income statement data.

3.8 Data Analysis

SPSS software was used to perform the statistical analysis. Each of the financially distressed public listed company was matched to a non-financially distressed public listed company which belonged to same industry, closest assets and failure year from 2010 to 2014 period.

4. EMPIRICAL RESULTS

4.1 Descriptive Statistics of Independent Variables

Table 1 to 24 shows the mean of eleven ratios for each distressed companies while Table 25 to 48 shows the mean for each non-distressed companies. Table 5.49 shows the independent variables that used to estimate the logistic regression model in this study. The mean of total asset turnover for non-distress companies (0.6093) is higher than the mean for distressed companies (0.5906). It means that the non-distress companies have higher efficiency in deploying its asset compared to the distress companies. The inventory turnover for non-distress companies is 12.0082 while the inventory turnover for distress companies is 42.6898. The payable turnover for non-distress companies and distress companies are 13.7819 and 5.5118 respectively. This shows that distress companies are taking longer time to pay off its suppliers. The total debt to total capital for non-distress company (21.8051) is lower than the distress companies (80.2803). The high total debt to total capital ratio shows that the distress companies have weak financial strength. Non-distress company has higher return on asset (0.0374) compared to distress company (-0.0999).

4.2 Results of Logistic Regression Analysis

Eleven ratios, namely total turnover asset; inventory turnover; receivable turnover; payable turnover; cash flow to current liability; total debt to equity; total debt to total capital; quick ratio; current ratio; return on equity; and return.

Table 1: Mean Ratios of Distress Company (Auto Air Holding Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.3904	0.7531	0.4265	0.3930	-	**0.4908**
Inventory Turnover	1.2131	-	1.0015	0.8675	-	**1.0274**
Receivable Turnover	2.1194	-	2.5506	2.5789	2.7688	**2.5044**
Payable Turnover	1.3881	-	2.4595	2.6862	3.9722	**2.6265**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.2099	0.3927	0.0366	(0.0723)	(0.0632)	**0.1007**
Solvency Ratio						
Total Debt / Equity	24.9810	36.1816	54.5308	40.8502	61.8845	**43.6856**
Total Debt / Total Capital	19.9878	26.5687	35.2880	29.0026	38.2276	**29.8149**
Liquidity Ratio						
Quick Ratio	0.4508	0.4292	0.3514	0.4708	0.4255	**0.4255**
Current Ratio	0.9399	0.8612	1.2205	1.4626	2.0018	**1.2972**
Profitability Ratio						
Return on Equity	(0.0464)	(0.3758)	(0.2988)	(0.1415)	(0.2172)	**(0.2159)**
Return On Assets	(0.0226)	(0.1723)	(0.1429)	(0.0543)	(0.1016)	**(0.0987)**

Table 2: Mean Ratios of Distress Company (Bina GoodYear Berhad)					
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	**Mean**
Activity Ratio					
Total Asset Turnover	4.3645	1.4610	1.1119	1.6951	-	**2.1581**
Inventory Turnover	418.1941	140.2336	60.9603	14.8404	-	**158.5571**
Receivable Turnover	1.3832	1.2446	1.1472	1.7715	1.6701	**1.4433**
Payable Turnover	2.7033	3.7740	4.9660	6.0547	4.9517	**4.4900**
Cash Flow Ratio					
Cash Flow/Current Liabilities	0.0746	0.1088	(0.0302)	0.5258	(0.0450)	**0.1268**
Solvency Ratio					
Total Debt / Equity	(7.7806)	74.5111	43.0852	40.6421	120.8814	**54.2678**
Total Debt / Total Capital	(8.4371)	42.6971	30.1116	28.2458	54.0453	**29.3325**
Liquidity Ratio					
Quick Ratio	0.1531	1.2699	1.6275	1.6306	1.2327	**1.1827**
Current Ratio	0.1531	1.2789	1.6474	1.6725	1.4571	**1.2418**
Profitability Ratio					
Return on Equity	-	(0.8225)	(0.2574)	(0.1020)	(0.2275)	**(0.3523)**
Return On Assets	(1.8029)	(0.2396)	(0.0862)	(0.0360)	(0.0810)	**(0.4491)**

Table 3: Mean Ratios of Distress Company (Biosis Group Berhad)					
	03/31/14 MYR	03/31/13 MYR	03/31/12 MYR	03/31/10 MYR	03/31/09 MYR	**Mean**
Activity Ratio					
Total Asset Turnover	0.2739	0.1803	0.2668	0.2981	0.4964	**0.3031**
Inventory Turnover	-	2.0194	-	-	-	**2.0194**
Receivable Turnover	-	0.8026	-	-	-	**0.8026**
Payable Turnover	-	3.1145	-	-	-	**3.1145**
Cash Flow Ratio					
Cash Flow/Current Liabilities	(0.2231)	0.1003	0.0303	(0.1319)	(0.2027)	**(0.0854)**
Solvency Ratio					
Total Debt / Equity	(171.5716)	235.1650	129.6639	96.3697	100.3680	**77.9990**
Total Debt / Total Capital	-	71.4890	56.3406	-	-	**63.9148**
Liquidity Ratio					
Quick Ratio	-	0.3407	0.4685	-	-	**0.4046**
Current Ratio	0.1472	0.7562	0.6889	1.2243	1.0028	**0.7639**
Profitability Ratio					
Return on Equity	-	(0.6835)	-	(0.1839)	(0.0566)	**(0.3080)**
Return On Assets	(0.5349)	(0.1618)	-	(0.0448)	0.0002	**(0.1853)**

Table 4: Mean Ratios of Distress Company (ECM Libra Financial Group Berhad)						
	01/31/14 MYR	01/31/13 MYR	01/31/12 MYR	01/31/11 MYR	01/31/10 MYR	Mean
Activity Ratio						
Total Asset Turnover	-	-	-	-	-	**-**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	-	-	-	-	-	**-**
Payable Turnover	-	-	-	-	-	**-**
Cash Flow Ratio						
Cash Flow/Current Liabilities	-	-	-	-	-	**-**
Solvency Ratio						
Total Debt / Equity	0.0000	0.0000	0.0000	0.0000	0.0115	**0.0023**
Total Debt / Total Capital	0.0000	0.0000	0.0000	0.0000	0.0115	**0.0023**
Liquidity Ratio						
Quick Ratio	-	-	-	-	-	**-**
Current Ratio	-	-	-	-	-	**-**
Profitability Ratio						
Return on Equity	0.0191	(0.0436)	0.0314	0.0666	0.0439	**0.0235**
Return On Assets	0.0188	(0.0224)	0.0199	0.0335	0.0250	**0.0150**

Table 5: Mean Ratios of Distress Company (Global Carriers Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.1112	0.1826	0.1900	-	0.1452	**0.1572**
Inventory Turnover	9.4553	10.1129	-	-	-	**9.7841**
Receivable Turnover	2.6257	15.4967	9.5464	-	-	**9.2230**
Payable Turnover	0.8207	0.9824	0.9563	-	-	**0.9198**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0311	0.0171	0.0703	-	0.0548	**0.0433**
Solvency Ratio						
Total Debt / Equity	(410.30)	(3,097.676)	434.079	-	272.96	**(700.23)**
Total Debt / Total Capital	114.5795	87.2740	71.8689	-	-	**91.2408**
Liquidity Ratio						
Quick Ratio	0.1329	0.0957	0.1163	-	-	**0.1150**
Current Ratio	0.1423	0.1154	0.1333	-	0.3305	**0.1804**
Profitability Ratio						
Return on Equity	-	-	-	(0.322)	(0.185)	**(0.2542)**
Return On Assets	(0.0947)	(0.1399)	-	(0.026)	(0.031)	**(0.0731)**

Table 6: Mean Ratios of Distress Company (GW Plastics Holding Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	Mean
Activity Ratio					
Total Asset Turnover	0.0000	0.0000	1.1853	1.1197	**0.5763**
Inventory Turnover	-	-	6.7242	-	**6.7242**
Receivable Turnover	0.0000	0.0000	7.3358	-	**2.4453**
Payable Turnover	0.0000	0.0000	6.0632	-	**2.0211**
Cash Flow Ratio					
Cash Flow/Current Liabilities	4.3191	0.4650	0.4203	0.2861	**1.3726**
Solvency Ratio					
Total Debt / Equity	0.0000	0.0000	17.3440	16.2905	**8.4086**
Total Debt / Total Capital	0.0000	0.0000	14.7805	14.0085	**7.1972**
Liquidity Ratio					
Quick Ratio	282.3805	0.0186	0.7072	0.8103	**70.9792**
Current Ratio	282.4580	3.7436	1.2363	1.3824	**72.2051**
Profitability Ratio					
Return on Equity	0.4171	-	0.0997	-	**0.2584**
Return On Assets	0.3435	-	0.0750	-	**0.2092**

Table 7: Mean Ratios of Distress Company (Haisan Resources Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio	0.5011	0.4168	0.4859	0.3274	0.2259	**0.3914**
Total Asset Turnover	-	46.1150	-	-	-	**46.1150**
Inventory Turnover	-	4.2203	5.4047	-	-	**4.8125**
Receivable Turnover	-	2.9420	3.0458	-	-	**2.9939**
Payable Turnover						
Cash Flow Ratio	(0.0584)	(0.0515)	(0.0888)	0.0337	(0.0032)	**(0.0336)**
Cash Flow/Current Liabilities						
Solvency Ratio	(167.97)	(183.18)	(374.60)	(31,398)	706.67	**(6,283.4198)**
Total Debt / Equity	-	220.151	136.359	-	80.3374	**145.6160**
Total Debt / Total Capital						
Liquidity Ratio	-	0.0729	0.1359	-	0.1354	**0.1147**
Quick Ratio	0.2282	0.2514	0.3446	0.1117	0.1788	**0.2229**
Current Ratio						
Profitability Ratio	-	-	-	(2.0122)	(0.8577)	**(1.4349)**
Return on Equity	0.0978	(0.1864)	(0.0987)	(0.0801)	(0.0809)	**(0.0697)**
Return On Assets	0.5011	0.4168	0.4859	0.3274	0.2259	**0.3914**

Table 8: Mean Ratios of Distress Company (HIGH-5 Conglomerate Berhad)						
	10/31/14 MYR	10/31/13 MYR	10/31/12 MYR	10/31/11 MYR	10/31/010 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7819	1.1072	0.6060	0.5188	-	**0.7535**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	-	-	-	-	8.4664	**8.4664**
Payable Turnover	-	-	-	-	22.7691	**22.7691**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0027)	(0.1879)	(0.0980)	0.0242	0.3159	**0.0103**
Solvency Ratio						
Total Debt / Equity	(116.972)	(149.476)	71.0554	71.6609	114.7417	**(1.7982)**
Total Debt / Total Capital	691.4903	-	-	41.7130	53.3851	**262.196**
Liquidity Ratio						
Quick Ratio	0.0455	-	-	0.7178	0.5282	**0.4305**
Current Ratio	0.0589	0.0834	1.1735	0.8541	0.5969	**0.5534**
Profitability Ratio						
Return on Equity	-	(7.4582)	0.0240	0.0215	0.0101	**(1.8506)**
Return On Assets	(0.3228)	(1.3063)	0.0306	0.0295	0.0262	**(0.3086)**

Table 9: Mean Ratios of Distress Company (Hytex Integrated Berhad)						
	03/31/14 MYR	03/31/13 MYR	03/31/12 MYR	03/31/11 MYR	03/31/10 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.3477	0.2131	0.3702	-	0.4738	**0.3512**
Inventory Turnover	-	0.3030	-	-	-	**0.3030**
Receivable Turnover	-	1.9775	3.3715	-	-	**2.6745**
Payable Turnover	-	2.0871	5.3057	-	-	**3.6964**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.1164	0.0319	0.0699	-	(0.0067)	**0.0529**
Solvency Ratio						
Total Debt / Equity	(148.76)	559.5210	312.0130	-	300.1081	**255.7202**
Total Debt / Total Capital	-	84.8375	75.7289	-	-	**80.2832**
Liquidity Ratio						
Quick Ratio	-	0.1797	0.1364	-	-	**0.1581**
Current Ratio	0.1158	0.5813	0.5656	-	0.8052	**0.5170**
Profitability Ratio						
Return on Equity	-	(0.4875)	-	(0.3648)	(0.4395)	**(0.4306)**
Return On Assets	(0.4382)	(0.0280)	-	(0.0694)	(0.0744)	**(0.1525)**

Table 10: Mean Ratios of Distress Company (Integrated Rubber Corporation Berhad)						
	01/31/14 MYR	01/31/13 MYR	01/31/12 MYR	01/31/10 MYR	01/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	1.2378	0.9194	0.6619	-	0.8525	**0.9179**
Inventory Turnover	8.1262	5.5187	-	-	3.2694	**5.6381**
Receivable Turnover	9.4502	8.6750	5.6331	-	6.3570	**7.5288**
Payable Turnover	10.5942	11.9619	12.9441	-	8.4192	**10.9798**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.1049)	0.1372	(0.1229)	-	0.0938	**0.0008**
Solvency Ratio						
Total Debt / Equity	0.1713	163.3306	98.2492	-	101.4411	**90.7980**
Total Debt / Total Capital	0.1710	62.0249	49.5586	-	50.3579	**40.5281**
Liquidity Ratio						
Quick Ratio	0.4923	0.6927	0.8099	-	0.3415	**0.5841**
Current Ratio	0.7996	0.8491	1.3412	-	0.8419	**0.9579**
Profitability Ratio						
Return on Equity	(0.4828)	(0.6155)	-	(0.4362)	0.0772	**(0.3643)**
Return On Assets	(0.1410)	(0.2234)	-	(0.1865)	0.0499	**(0.1253)**

Table 11: Mean Ratios of Distress Company (IRM Group Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.1149	1.1329	1.3811	1.7435	1.6794	**1.2104**
Inventory Turnover	-	5.4368	-	-	-	**5.4368**
Receivable Turnover	-	9.5779	9.5307	-	-	**9.5543**
Payable Turnover	-	7.3583	8.1639	-	-	**7.7611**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.1450)	(0.0504)	0.1082	0.0008	0.0362	**(0.0100)**
Solvency Ratio						
Total Debt / Equity	11,575.80	137.1049	78.0416	103.406	65.7883	**2,392.028**
Total Debt / Total Capital	-	57.8246	43.8333	-	39.6821	**47.1134**
Liquidity Ratio						
Quick Ratio	-	0.1300	0.2635	-	0.3508	**0.2481**
Current Ratio	0.6341	0.3799	0.6918	0.7272	0.8409	**0.6548**
Profitability Ratio						
Return on Equity	(1.9400)	(0.4640)	(0.1135)	(0.2201)	0.0116	**(0.5452)**
Return On Assets	(0.3101)	(0.1357)	(0.0247)	(0.0808)	0.0171	**(0.1068)**

Table 12: Mean Ratios of Distress Company (Kejuruteraan Samudra Timur Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7433	0.6793	0.3154	0.3625	-	**0.5251**
Inventory Turnover	12.7662	-	-	8.4253	-	**10.5957**
Receivable Turnover	2.6903	3.0600	-	2.7347	-	**2.8283**
Payable Turnover	2.7815	3.8745	-	5.4693	-	**4.0417**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.3863	0.1897	(0.0999)	0.1193	0.2283	**0.1647**
Solvency Ratio						
Total Debt / Equity	202.3733	242.1946	334.7448	324.2434	258.4950	**272.4102**
Total Debt / Total Capital	67.2676	70.9354	-	72.4728	71.4670	**70.5357**
Liquidity Ratio						
Quick Ratio	0.7160	0.4323	-	0.3546	0.3493	**0.4630**
Current Ratio	1.1732	0.5167	0.3777	0.4841	0.4046	**0.5913**
Profitability Ratio						
Return on Equity	(0.2858)	0.0451	(0.5325)	(0.3860)	-	**(0.2898)**
Return On Assets	(0.0504)	0.0420	(0.0599)	(0.0457)	-	**(0.0285)**

Table 13: Mean Ratios of Distress Company (LFE Corporation Berhad)						
	07/31/13 MYR	07/31/12 MYR	07/31/11 MYR	07/31/10 MYR	07/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.6263	0.2099	0.4895	0.9273	-	**0.5632**
Inventory Turnover	1,718.9514	72.8786	35.0240	52.0926	-	**469.7366**
Receivable Turnover	0.6368	0.2158	0.3970	1.2467	-	**0.6241**
Payable Turnover	1.3817	0.8219	1.0750	2.7627	-	**1.5103**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0082)	0.0560	(0.0199)	(0.0313)	(0.0932)	**(0.0193)**
Solvency Ratio						
Total Debt / Equity	185.624	(776.02)	98.5587	212.346	135.833	**(28.731)**
Total Debt / Total Capital	64.9890	114.792	49.6371	67.7636	57.1753	**70.8715**
Liquidity Ratio						
Quick Ratio	1.1731	0.9855	1.3114	1.1616	1.0260	**1.1315**
Current Ratio	1.1750	0.9961	1.3329	1.2591	1.1340	**1.1794**
Profitability Ratio						
Return on Equity	3.1726	(2.4497)	0.0352	(0.1645)	-	**0.1484**
Return On Assets	0.1385	(0.2434)	0.0212	(0.0005)	-	**(0.0211)**

Table 14: Mean Ratios of Distress Company (Lion Corporation Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.6476	0.6039	0.5651	0.5754	-	**0.5980**
Inventory Turnover	2.4566	3.0723	2.1503	2.3643	-	**2.5108**
Receivable Turnover	17.1463	20.8320	14.3355	11.8271	8.7788	**14.5839**
Payable Turnover	1.5565	1.7739	1.7160	1.8289	3.3367	**2.0424**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0197	0.0499	0.0480	0.0221	0.0225	**0.0324**
Solvency Ratio						
Total Debt / Equity	881.020	590.420	1,428.049	674.320	590.757	**832.9138**
Total Debt / Total Capital	91.5629	84.4702	90.3981	83.3461	80.6860	**86.0926**
Liquidity Ratio						
Quick Ratio	0.0974	0.0983	0.0857	0.1280	0.1150	**0.1049**
Current Ratio	0.3929	0.3994	0.3681	0.5629	0.3380	**0.4123**
Profitability Ratio						
Return on Equity	(0.6950)	(1.3269)	(0.7175)	(0.2308)	(1.7298)	**(0.9400)**
Return On Assets	0.0059	(0.0345)	0.0143	0.0308	(0.0913)	**(0.0150)**

Table 15: Mean Ratios of Distress Company (MAA Group Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	-	-	-	-	-	**-**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	-	-	-	-	-	**-**
Payable Turnover	-	-	-	-	-	**-**
Cash Flow Ratio						
Cash Flow/Current Liabilities	-	-	-	-	-	**-**
Solvency Ratio						
Total Debt / Equity	1.0977	1.0143	2.4105	75.6479	82.5086	**32.5358**
Total Debt / Total Capital	1.0355	0.9456	2.1713	40.3932	41.7352	**17.2562**
Liquidity Ratio						
Quick Ratio	-	-	-	-	-	**-**
Current Ratio	-	-	-	-	-	**-**
Profitability Ratio						
Return on Equity	0.0110	0.1011	0.3596	0.0988	0.2187	**0.1578**
Return On Assets	0.0039	0.0358	0.0275	0.0047	0.0085	**0.0161**

Table 16: Mean Ratios of Distress Company (Malaysian AE Models Holdings Berhad)					
	05/31/13 MYR	05/31/12 MYR	05/31/11 MYR	05/31/10 MYR	05/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7970	0.8834	-	0.7870	-	**0.8225**
Inventory Turnover	-	-	-	32.8735	32.6912	**32.7824**
Receivable Turnover	-	1.2929	-	1.3495	1.6091	**1.4171**
Payable Turnover	-	17.7662	-	17.2494	15.5271	**16.8476**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0635)	(0.1355)	-	(0.1034)	(0.0500)	**(0.0881)**
Solvency Ratio						
Total Debt / Equity	1,065.62	170.56	-	148.68	137.09	**380.4945**
Total Debt / Total Capital	-	63.0405	-	59.7883	57.4889	**60.1059**
Liquidity Ratio						
Quick Ratio	-	1.2480	-	1.3432	1.3511	**1.3141**
Current Ratio	0.8539	1.2864	-	1.4012	1.3878	**1.2323**
Profitability Ratio						
Return on Equity	(1.4245)	-	0.0890	0.0323	0.0573	**(0.3115)**
Return On Assets	(0.2573)	-	0.0561	0.0310	0.0455	**(0.0312)**

Table 17: Mean Ratios of Distress Company (Maxtral Industry Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.0891	0.1448	0.1376	0.2264	-	**0.1495**
Inventory Turnover	3.8979	2.6700	6.8364	1.7300	4.0566	**3.8382**
Receivable Turnover	0.1730	0.5477	0.4628	1.2814	3.7601	**1.2450**
Payable Turnover	1.9771	4.5418	26.0892	14.7225	36.7858	**16.8233**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0990)	(0.0597)	0.0020	0.1070	0.5925	**0.1086**
Solvency Ratio						
Total Debt / Equity	(112.40)	179.4965	86.7660	33.4619	42.1099	**45.8868**
Total Debt / Total Capital	906.4487	64.2214	44.4921	24.5009	29.1804	**213.7687**
Liquidity Ratio						
Quick Ratio	0.1923	0.1838	0.5873	1.0923	1.3771	**0.6866**
Current Ratio	0.3865	0.2389	0.7462	1.8203	2.2311	**1.0846**
Profitability Ratio						
Return on Equity	(27.9498)	(0.7875)	(0.9206)	(0.0522)	0.0255	**(5.9369)**
Return On Assets	(0.9279)	(0.2750)	(0.5251)	(0.0158)	0.0325	**(0.3423)**

Table 18: Mean Ratios of Distress Company (Octagon Consolidated Berhad)						
	10/31/13 MYR	10/31/12 MYR	10/31/11 MYR	10/31/10 MYR	10/31/09 MYR	**Mean**
Activity Ratio						
Total Asset Turnover	0.7490	0.1751	0.1302	0.1319	0.3184	**0.3009**
Inventory Turnover	-	-	1.8374	-	-	**1.8374**
Receivable Turnover	-	-	1.4681	-	-	**1.4681**
Payable Turnover	-	-	2.5603	-	-	**2.5603**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0048	(0.0393)	(0.0313)	0.0740	(0.0591)	**(0.0102)**
Solvency Ratio						
Total Debt / Equity	(78.095)	4,555.46	251.28	198.88	152.13	**1,015.93**
Total Debt / Total Capital	(162.2817)	-	70.2545	66.4399	-	**(8.5291)**
Liquidity Ratio						
Quick Ratio	0.0824	-	0.1876	0.3644	-	**0.2115**
Current Ratio	0.1210	0.1877	0.2729	0.4738	1.1691	**0.4449**
Profitability Ratio						
Return on Equity	-	(1.6678)	(0.2092)	(0.2702)	(0.1209)	**(0.5670)**
Return On Assets	(0.9245)	(0.1803)	(0.0240)	(0.0611)	(0.0126)	**(0.2405)**

Table 19: Mean Ratios of Distress Company (Pan Malaysian Industries Berhad)						
	03/31/13 MYR	03/31/12 MYR	03/31/11 MYR	03/31/10 MYR	03/31/09 MYR	**Mean**
Activity Ratio						
Total Asset Turnover	-	-	-	-	-	**-**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	-	-	-	-	-	**-**
Payable Turnover	-	-	-	-	-	**-**
Cash Flow Ratio						
Cash Flow/Current Liabilities	-	-	-	-	-	**-**
Solvency Ratio						
Total Debt / Equity	2,080.59	389.56	-	355.90	252.32	**769.5973**
Total Debt / Total Capital	95.4141	79.5738	-	78.0656	71.6173	**81.1677**
Liquidity Ratio						
Quick Ratio	-	-	-	-	-	**-**
Current Ratio	-	-	-	-	-	**-**
Profitability Ratio						
Return on Equity	(1.2169)	-	(0.0104)	(0.2129)	(0.4152)	**(0.4638)**
Return On Assets	(0.0854)	-	0.0454	(0.0099)	(0.0615)	**(0.0279)**

Table 20: Mean Ratios of Distress Company (Perwaja Holdings Berhad)						
	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	12/31/08 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7063	0.7313	0.5971	0.6913	0.9970	**0.7446**
Inventory Turnover	2.1805	2.2533	1.7622	2.2655	-	**2.1154**
Receivable Turnover	12.3035	11.5179	8.7628	9.4630	-	**10.5118**
Payable Turnover	2.8000	6.3266	5.6295	6.0664	-	**5.2056**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0863)	0.0357	(0.0032)	0.0343	(0.1238)	**(0.0287)**
Solvency Ratio						
Total Debt / Equity	331.3668	150.4814	108.8374	99.8926	89.2780	**155.9712**
Total Debt / Total Capital	76.8179	60.0769	52.1159	49.9731	47.1677	**57.2303**
Liquidity Ratio						
Quick Ratio	0.0997	0.1063	0.1149	0.1851	0.2377	**0.1487**
Current Ratio	0.5876	0.5307	0.7122	0.7543	0.9794	**0.7129**
Profitability Ratio						
Return on Equity	(0.4654)	(0.3508)	(0.0774)	(0.1188)	-	**(0.2531)**
Return On Assets	(0.0471)	(0.0712)	0.0044	(0.0232)	-	**(0.0343)**

Table 21: Mean Ratios of Distress Company (Petrol One Resources Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	1.3605	0.1907	0.1686	0.1093	0.1302	**0.3918**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	3.3189	10.3201	-	3.0781	-	**5.5724**
Payable Turnover	1.0795	1.3642	-	3.7170	-	**2.0536**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0867)	0.0536	0.0526	0.1709	0.3220	**0.1025**
Solvency Ratio						
Total Debt / Equity	(54.19)	(957.59)	466.9911	246.5143	197.1296	**(20.231)**
Total Debt / Total Capital	(118.33)	111.6606	-	67.8552	62.4465	**30.9064**
Liquidity Ratio						
Quick Ratio	0.0942	0.0355	-	0.1171	0.3013	**0.1370**
Current Ratio	0.0956	0.3227	0.6044	0.6592	0.3931	**0.4150**
Profitability Ratio						
Return on Equity	-	(5.6983)	(0.6319)	(0.0464)	(0.0809)	**(1.6144)**
Return On Assets	(0.6907)	(0.1857)	(0.1002)	0.0064	(0.0062)	**(0.1953)**

Table 22: Mean Ratios of Distress Company (Sumatec Resources Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.0000	0.0028	-	0.2705	0.2017	**0.1187**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	0.0000	0.0675	-	-	-	**0.0337**
Payable Turnover	0.0000	0.2645	-	-	-	**0.1322**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(4.6285)	0.0327	-	0.2565	0.2593	**(1.0200)**
Solvency Ratio						
Total Debt / Equity	4.2065	(59.666)	-	3,447.64	1,295.814	**1,172.00**
Total Debt / Total Capital	4.0385	550.9291	-	-	92.7924	**215.9200**
Liquidity Ratio						
Quick Ratio	0.2412	0.0019	-	-	0.3578	**0.2003**
Current Ratio	0.9144	0.8897	-	0.3940	0.4461	**0.6610**
Profitability Ratio						
Return on Equity	0.5094	-	-	(1.0268)	(0.7977)	**(0.4383)**
Return On Assets	0.1633	-	(0.0468)	(0.0022)	(0.0730)	**0.0103**

Table 23: Mean Ratios of Distress Company (TPC Plus Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.8026	0.1924	0.6185	-	0.7036	**0.5793**
Inventory Turnover	4.0736	0.9837	-	-	2.9634	**2.6736**
Receivable Turnover	12.2048	4.0488	-	12.9787	13.2482	**10.6201**
Payable Turnover	2.6213	1.0330	-	2.4258	2.7731	**2.2133**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0574	0.0135	0.1210	0.0326	0.0362	**0.0521**
Solvency Ratio						
Total Debt / Equity	282.6041	121.8168	79.5741	81.0909	83.6336	**129.7439**
Total Debt / Total Capital	73.8626	54.9178	44.3127	44.7791	45.5437	**52.6832**
Liquidity Ratio						
Quick Ratio	0.1424	0.1361	0.1238	0.1229	0.1157	**0.1282**
Current Ratio	0.3810	0.4117	0.5492	0.5136	0.5218	**0.4755**
Profitability Ratio						
Return on Equity	(0.2252)	(0.0604)	-	(0.0240)	(0.0929)	**(0.1006)**
Return On Assets	(0.0145)	(0.0110)	-	0.0066	(0.0179)	**(0.0092)**

Table 24: Mean Ratios of Distress Company (VTI Vintage Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio					
Total Asset Turnover	0.2230	-	0.6357	0.1808	0.1606	**0.3000**
Inventory Turnover	5.4940	-	18.2010	0.3216	2.8706	**6.7218**
Receivable Turnover	0.6191	-	4.4548	2.1146	0.7276	**1.9790**
Payable Turnover	0.4995	-	2.7202	0.0544	0.5101	**0.9461**
Cash Flow Ratio					
Cash Flow/Current Liabilities	0.0411	0.0051	0.0082	0.0054	(0.0226)	**0.0074**
Solvency Ratio					
Total Debt / Equity	(155.13)	(203.335)	(237.31)	(237.91)	521.273	**(62.486)**
Total Debt / Total Capital	281.3875	196.7722	172.8232	172.5060	83.9040	**181.4786**
Liquidity Ratio					
Quick Ratio	0.1356	0.3340	0.2269	0.0232	0.1822	**0.1804**
Current Ratio	0.1949	0.3519	0.2988	0.1341	0.3471	**0.2654**
Profitability Ratio					
Return on Equity	-	-	-	-	(1.5891)	**(1.5891)**
Return On Assets	(0.0137)	(0.0070)	0.0279	(0.2025)	(0.4712)	**(0.1333)**

Table 25: Mean Ratios of Distress Company (Watta Holding Berhad)					
	09/31/13 MYR	09/31/12 MYR	09/31/11 MYR	09/31/10 MYR	09/31/09 MYR	Mean
Activity Ratio					
Total Asset Turnover	0.4276	0.3356	0.5173	0.5407	-	**0.4553**
Inventory Turnover	5.1649	-	-	-	-	**5.1649**
Receivable Turnover	3.3627	-	-	-	1.1586	**2.2606**
Payable Turnover	11.2553	-	-	-	4.0235	**7.6394**
Cash Flow Ratio					
Cash Flow/Current Liabilities	1.0686	0.0239	0.1364	0.0127	0.9473	**0.4378**
Solvency Ratio					
Total Debt / Equity	6.2023	10.7697	8.6639	7.8397	7.0638	**8.1079**
Total Debt / Total Capital	5.8407	9.7907	-	-	6.3822	**7.3379**
Liquidity Ratio					
Quick Ratio	4.0717	3.9521	-	-	3.0552	**3.6930**
Current Ratio	4.5815	4.3415	5.0499	4.7074	3.4900	**4.4340**
Profitability Ratio					
Return on Equity	0.0248	0.0707	0.0241	0.0039	0.0043	**0.0256**
Return On Assets	0.0222	0.0600	0.0220	0.0054	0.0036	**0.0226**

Table 26: Mean Ratios of Distress Company (ARK Resources Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.3366	0.4619	0.1757	0.1399	0.0000	**0.2228**
Inventory Turnover	-	15.4788	3.7766	-	-	**9.6277**
Receivable Turnover	0.6086	1.0281	0.4317	0.1481	-	**0.5541**
Payable Turnover	1.8356	7.5068	0.6638	0.1286	-	**2.5337**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.4319)	(1.5314)	(5.0655)	(0.0011)	(0.0032)	**(1.4066)**
Solvency Ratio						
Total Debt / Equity	51.7718	65.2645	12.3645	(1.6622)	(1.6629)	**25.2152**
Total Debt / Total Capital	34.1116	39.4909	11.0039	(1.6903)	-	**20.7291**
Liquidity Ratio						
Quick Ratio	3.1396	6.2448	7.4425	0.0901	-	**4.2293**
Current Ratio	3.1707	6.2881	7.9717	0.0952	0.0972	**3.5246**
Profitability Ratio						
Return on Equity	0.0085	0.0056	-	-	-	**0.0070**
Return On Assets	0.0216	0.0221	5.7610	0.0192	0.2638	**1.2176**

Table 27: Mean Ratios of Distress Company (Takaso Resources Berhad)						
	03/31/13 MYR	03/31/12 MYR	03/31/11 MYR	03/31/10 MYR	03/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.8100	0.7153	0.6051	0.5969	-	**0.6818**
Inventory Turnover	5.3508	5.5723	1.9001	1.7960	-	**3.6548**
Receivable Turnover	3.2576	4.1628	4.0535	3.7732	3.7958	**3.8086**
Payable Turnover	14.9613	15.4177	4.4869	4.7451	6.9037	**9.3030**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.4981	(0.9904)	0.0362	0.1711	0.1361	**(0.0298)**
Solvency Ratio						
Total Debt / Equity	16.0020	20.8874	92.4112	89.0203	96.0253	**62.8692**
Total Debt / Total Capital	13.7946	17.2786	48.0281	47.0956	48.9872	**35.0368**
Liquidity Ratio						
Quick Ratio	2.0991	2.3318	0.2470	0.3062	0.3290	**1.0626**
Current Ratio	2.6292	2.8433	0.6223	0.7296	0.8429	**1.5335**
Profitability Ratio						
Return on Equity	(0.0837)	(0.0772)	(0.1801)	(0.1119)	(0.1588)	**(0.1223)**
Return On Assets	(0.0536)	(0.0350)	(0.0399)	(0.0180)	(0.0385)	**(0.0370)**

Table 28: Mean Ratios of Distress Company (Apex Equity Holdings Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	**Mean**
Activity Ratio						
Total Asset Turnover	-	-	-	-	-	**-**
Inventory Turnover	-	-	-	-	-	**-**
Receivable Turnover	-	-	-	-	-	**-**
Payable Turnover	-	-	-	-	-	**-**
Cash Flow Ratio						
Cash Flow/Current Liabilities	-	-	-	-	-	**-**
Solvency Ratio						
Total Debt / Equity	3.7023	2.9696	4.0195	6.4740	5.1513	**4.4633**
Total Debt / Total Capital	3.5701	2.8839	3.8642	6.0803	4.8990	**4.2595**
Liquidity Ratio						
Quick Ratio	-	-	-	-	-	**-**
Current Ratio	-	-	-	-	-	**-**
Profitability Ratio						
Return on Equity	0.0921	0.0940	0.0629	0.0528	0.0598	**0.0723**
Return On Assets	0.0782	0.0693	0.0446	0.0400	0.0466	**0.0557**

Table 29: Mean Ratios of Distress Company (PDZ Holdings Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	**Mean**
Activity Ratio						
Total Asset Turnover	1.5289	1.4155	1.3706	1.2541	-	**1.3923**
Inventory Turnover	82.6503	-	-	104.3007	-	**93.4755**
Receivable Turnover	7.4337	8.4625	-	7.6395	9.7581	**8.3235**
Payable Turnover	9.8994	10.0558	-	12.4421	12.9827	**11.3450**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.2528	0.5830	0.6467	(0.1264)	(0.8677)	**0.0977**
Solvency Ratio						
Total Debt / Equity	7.2521	10.2097	10.3296	12.7174	0.0000	**8.1018**
Total Debt / Total Capital	6.2889	8.7359	-	10.7216	0.0000	**6.4366**
Liquidity Ratio						
Quick Ratio	1.8545	1.9778	-	1.8448	3.0393	**2.1791**
Current Ratio	1.9342	2.0514	1.8558	1.9515	3.1617	**2.1909**
Profitability Ratio						
Return on Equity	(0.1397)	0.0897	0.0248	(0.0246)	(0.1203)	**(0.0340)**
Return On Assets	(0.0954)	0.0663	0.0206	(0.0182)	(0.0951)	**(0.0243)**

Table 30: Mean Ratios of Distress Company (Malaysia Packaging Industry Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.8799	0.7904	0.8381	0.8126	0.6958	**0.8034**
Inventory Turnover	-	4.9158	5.8115	-	-	**5.3636**
Receivable Turnover	-	3.4286	3.6210	3.3990	-	**3.4829**
Payable Turnover	-	18.0706	19.9370	21.0634	-	**19.6903**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.3495	0.2769	0.1824	0.4343	0.3153	**0.3117**
Solvency Ratio						
Total Debt / Equity	28.6889	41.3301	46.5406	44.2207	55.9610	**43.3483**
Total Debt / Total Capital	-	29.2403	31.7591	30.6618	-	**30.5538**
Liquidity Ratio						
Quick Ratio	-	1.3792	1.2493	1.4513	-	**1.3599**
Current Ratio	1.7040	2.0392	1.7999	1.9957	1.3300	**1.7738**
Profitability Ratio						
Return on Equity	0.0914	0.0255	0.0399	0.0915	0.0975	**0.0691**
Return On Assets	0.0734	0.0294	0.0373	0.0705	0.0712	**0.0564**

Table 31: Mean Ratios of Distress Company (Jiankun International Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.1934	0.4895	0.7668	1.5986	0.5801	**0.7257**
Inventory Turnover	1.1610	-	-	-	-	**1.1610**
Receivable Turnover	2.3498	3.6182	-	-	-	**2.9840**
Payable Turnover	7.3423	12.9393	-	-	-	**10.1408**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.0359)	(0.2199)	(0.6861)	(8.8093)	0.1468	**(1.9209)**
Solvency Ratio						
Total Debt / Equity	5.2987	14.5675	5.9168	0.0000	0.0000	**5.1566**
Total Debt / Total Capital	5.0320	12.7152	-	-	0.0000	**5.9157**
Liquidity Ratio						
Quick Ratio	0.3334	0.9024	-	-	1.4440	**0.8933**
Current Ratio	1.4984	3.1778	9.4555	22.7420	2.6187	**7.8985**
Profitability Ratio						
Return on Equity	0.2612	(0.1000)	(0.0726)	(0.7960)	(0.0493)	**(0.1513)**
Return On Assets	0.1755	(0.0713)	(0.0601)	(0.5755)	(0.0326)	**(0.1128)**

Table 32: Mean Ratios of Distress Company (Amtel Holdings Berhad)					
	11/30/13 MYR	11/30/12 MYR	11/30/11 MYR	11/30/10 MYR	11/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.6504	0.8141	-	1.1564	-	**0.8736**
Inventory Turnover	-	-	-	-	12.1057	**12.1057**
Receivable Turnover	-	-	-	-	5.0041	**5.0041**
Payable Turnover	-	-	0.0000	-	7.7415	**3.8707**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.7107	0.2438	0.8226	(0.0104)	0.1366	**0.3807**
Solvency Ratio						
Total Debt / Equity	19.1686	22.8753	5.3398	7.4107	12.7749	**13.5139**
Total Debt / Total Capital	15.9726	-	5.0561	6.8522	11.1348	**9.7539**
Liquidity Ratio						
Quick Ratio	4.0979	-	3.4585	2.7708	1.3508	**2.9195**
Current Ratio	4.2149	3.2581	3.7334	3.3438	1.7478	**3.2596**
Profitability Ratio						
Return on Equity	0.0246	0.0960	0.0926	0.1086	0.0846	**0.0813**
Return On Assets	0.0212	0.0697	0.0714	0.0828	0.0675	**0.0625**

Table 33: Mean Ratios of Distress Company (Kumpulan Powernet Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.1516	0.3032	0.3696	0.4222	0.4307	**0.3355**
Inventory Turnover	1.2230	1.4197	1.6457	1.7436	1.5643	**1.5193**
Receivable Turnover	2.4783	2.8303	3.0013	4.0520	4.5945	**3.3913**
Payable Turnover	85.6111	64.7704	57.5781	36.3642	37.9274	**56.4502**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.3405	3.2260	(0.5424)	1.2707	1.1880	**1.0966**
Solvency Ratio						
Total Debt / Equity	0.0000	0.2306	1.5859	1.1046	2.4744	**1.0791**
Total Debt / Total Capital	0.0000	0.2324	1.5695	1.0915	2.4142	**1.0615**
Liquidity Ratio						
Quick Ratio	0.9008	15.2333	8.3764	9.0871	6.8602	**8.0916**
Current Ratio	1.7126	22.6100	12.4372	13.8465	10.8995	**12.3011**
Profitability Ratio						
Return on Equity	(0.1546)	(0.0751)	(0.0219)	(0.0055)	0.0027	**(0.0509)**
Return On Assets	(0.1421)	(0.0722)	(0.0197)	(0.0037)	0.0036	**(0.0468)**

Table 34: Mean Ratios of Distress Company (Adventa Berhad)						
	10/31/13 MYR	10/31/12 MYR	10/31/11 MYR	10/31/10 MYR	10/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.2935	0.0276	0.0282	0.8397	-	**0.2972**
Inventory Turnover	-	-	-	4.5289	-	**4.5289**
Receivable Turnover	-	-	-	5.5639	4.9126	**5.2382**
Payable Turnover	-	-	-	7.8643	7.9869	**7.9256**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(1.0499)	0.1326	(0.2704)	0.3466	0.2559	**(0.1170)**
Solvency Ratio						
Total Debt / Equity	15.5001	6.8260	87.8409	59.0813	62.9293	**46.4355**
Total Debt / Total Capital	13.4200	-	-	37.0529	38.4682	**29.6470**
Liquidity Ratio						
Quick Ratio	1.4309	-	-	0.6609	1.0538	**1.0486**
Current Ratio	1.9440	1.6697	1.3974	1.1112	1.6792	**1.5603**
Profitability Ratio						
Return on Equity	0.5315	0.0096	0.0192	0.1735	0.0963	**0.1660**
Return On Assets	0.2664	0.0051	0.0267	0.1095	0.0673	**0.0950**

Table 35: Mean Ratios of Distress Company (Plastrade Technology Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	1.2473	1.1102	1.0571	0.9747	0.7415	**1.0262**
Inventory Turnover	-	4.2798	4.0112	-	-	**4.1455**
Receivable Turnover	-	5.2328	5.6485	5.2291	-	**5.3701**
Payable Turnover	-	8.2996	9.6316	12.6765	-	**10.2025**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.2045	0.1475	0.1839	0.1099	(0.0713)	**0.1149**
Solvency Ratio						
Total Debt / Equity	35.6009	46.4334	56.9686	72.6759	79.0113	**58.1380**
Total Debt / Total Capital	-	31.7096	36.2931	42.0880	-	**36.6969**
Liquidity Ratio						
Quick Ratio	-	0.8435	0.6668	0.5849	-	**0.6984**
Current Ratio	1.5975	1.3956	1.1945	1.0960	1.0418	**1.2651**
Profitability Ratio						
Return on Equity	0.0398	0.0418	0.0055	(0.0093)	(0.0092)	**0.0137**
Return On Assets	0.0322	0.0327	0.0296	0.0150	0.0119	**0.0243**

Table 36: Mean Ratios of Distress Company (Handal Resources Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.6225	0.5895	0.4878	0.7912	0.4806	**0.5943**
Inventory Turnover	3.0470	3.9699	-	-	1.2029	**2.7399**
Receivable Turnover	3.5555	2.6400	2.2247	-	2.7784	**2.7997**
Payable Turnover	4.8222	4.8793	5.9713	-	2.7759	**4.6122**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.1864	0.0377	0.2383	0.3605	0.3947	**0.2435**
Solvency Ratio						
Total Debt / Equity	39.8099	49.1944	48.8613	48.9902	55.2185	**48.4149**
Total Debt / Total Capital	28.4733	32.9703	32.8221	-	35.5747	**32.4601**
Liquidity Ratio						
Quick Ratio	1.1351	1.6619	2.3760	-	1.8270	**1.7500**
Current Ratio	1.9914	2.1946	2.8278	3.2397	2.6273	**2.5762**
Profitability Ratio						
Return on Equity	0.0198	0.0306	0.0361	0.2461	0.1923	**0.1050**
Return On Assets	0.0166	0.0249	0.0306	0.1550	0.1118	**0.0678**

Table 37: Mean Ratios of Distress Company (MQ technology Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7096	0.6470	0.4350	0.6340	0.6184	**0.6088**
Inventory Turnover	58.1390	23.9962	-	-	-	**41.0676**
Receivable Turnover	7.3073	4.4515	3.1484	-	-	**4.9691**
Payable Turnover	7.5472	10.4638	8.1589	-	-	**8.7233**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.3728)	0.4065	0.2477	0.9753	0.6210	**0.3755**
Solvency Ratio						
Total Debt / Equity	16.3470	21.4303	9.7461	10.8114	6.6505	**12.9970**
Total Debt / Total Capital	14.0502	17.6482	8.8806	-	6.2357	**11.7037**
Liquidity Ratio						
Quick Ratio	1.6390	2.0302	3.0006	-	3.8173	**2.6218**
Current Ratio	1.7765	2.1875	3.2938	4.1001	4.1703	**3.1057**
Profitability Ratio						
Return on Equity	(0.3081)	(0.4753)	(0.0809)	0.0497	0.0045	**(0.1620)**
Return On Assets	(0.2219)	(0.3689)	(0.0618)	0.0449	0.0056	**(0.1204)**

Table 38: Mean Ratios of Distress Company (YKGI Holdings Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	**Mean**
Activity Ratio					
Total Asset Turnover	0.9336	-	0.8074	0.8665	-	**0.8691**
Inventory Turnover	-	-	-	-	2.3474	**2.3474**
Receivable Turnover	-	-	5.5168	-	5.5765	**5.5467**
Payable Turnover	-	-	12.5870	-	21.4083	**16.9977**
Cash Flow Ratio					
Cash Flow/Current Liabilities	(0.0463)	-	0.1816	0.0429	0.0165	**0.0487**
Solvency Ratio					
Total Debt / Equity	142.5963	-	218.4969	177.3378	184.8033	**180.8086**
Total Debt / Total Capital	-	-	65.0115	-	63.0723	**64.0419**
Liquidity Ratio					
Quick Ratio	-	-	0.3627	-	0.3544	**0.3586**
Current Ratio	0.8445	-	0.8239	1.0323	0.9981	**0.9247**
Profitability Ratio					
Return on Equity	-	(0.1087)	(0.1152)	0.0606	0.0662	**(0.0243)**
Return On Assets	-	0.0007	(0.0050)	0.0375	0.0359	**0.0173**

Table 39: Mean Ratios of Distress Company (Tanco Holdings Berhad)					
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	**Mean**
Activity Ratio					
Total Asset Turnover	0.1060	-	0.0608	0.0310	0.0455	**0.0608**
Inventory Turnover	0.4808	-	-	-	0.0430	**0.2619**
Receivable Turnover	0.9885	-	-	-	1.2034	**1.0959**
Payable Turnover	1.3212	-	-	-	0.2106	**0.7659**
Cash Flow Ratio					
Cash Flow/Current Liabilities	(0.4720)	0.1443	0.0019	(0.0001)	(0.0073)	**(0.0666)**
Solvency Ratio					
Total Debt / Equity	17.6622	9.7701	0.1076	0.1968	180.1976	**41.5869**
Total Debt / Total Capital	15.0045	8.8969	0.1075	-	64.3033	**22.0781**
Liquidity Ratio					
Quick Ratio	0.4184	0.6386	0.3818	-	0.0869	**0.3814**
Current Ratio	1.2357	1.2115	0.8558	0.2603	0.2532	**0.7633**
Profitability Ratio					
Return on Equity	(0.3571)	0.0017	0.2984	(0.0309)	0.0299	**(0.0116)**
Return On Assets	(0.2497)	0.0040	0.1440	(0.0084)	0.0094	**(0.0201)**

Table 40: Mean Ratios of Distress Company (AT Systematization Berhad)						
	02/28/13 MYR	02/28/12 MYR	02/28/11 MYR	02/28/10 MYR	02/28/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.4048	0.6695	-	0.8134	0.5447	**0.6081**
Inventory Turnover	9.9735	11.4831	-	8.3021	-	**9.9196**
Receivable Turnover	3.4170	2.8364	-	3.1855	-	**3.1463**
Payable Turnover	5.4668	5.6415	-	5.1810	-	**5.4298**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0434	(0.5054)	-	0.5690	(0.1725)	**(0.0164)**
Solvency Ratio						
Total Debt / Equity	43.0379	109.7646	-	74.9241	90.8999	**79.6566**
Total Debt / Total Capital	30.0778	52.3275	-	42.8323	47.3424	**43.1450**
Liquidity Ratio						
Quick Ratio	4.5395	0.9321	-	1.1928	1.1409	**1.9513**
Current Ratio	4.8982	1.3220	-	1.5942	1.3910	**2.3013**
Profitability Ratio						
Return on Equity	0.0467	(0.6060)	0.0104	0.0137	(0.0766)	**(0.1224)**
Return On Assets	0.0411	(0.2505)	0.0101	0.0119	(0.0139)	**(0.0403)**

Table 41: Mean Ratios of Distress Company (Nakamichi Corporation Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.0941	0.1481	0.3394	0.2074	0.1428	**0.1864**
Inventory Turnover	1.9063	-	-	12.1890	-	**7.0476**
Receivable Turnover	6.6498	-	-	31.7853	0.5547	**12.9966**
Payable Turnover	1.2129	-	-	-	-	**1.2129**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.7974)	0.5433	0.3078	0.2295	(0.4846)	**(0.0403)**
Solvency Ratio						
Total Debt / Equity	1.3873	2.8807	52.8817	82.8094	0.0000	**27.9918**
Total Debt / Total Capital	0.5755	1.2179	-	27.5207	0.0000	**7.3285**
Liquidity Ratio						
Quick Ratio	0.0388	0.0821	-	0.1380	0.5917	**0.2126**
Current Ratio	0.4570	0.7750	1.0331	1.2853	0.6718	**0.8444**
Profitability Ratio						
Return on Equity	(0.1054)	(0.1185)	(0.0115)	0.0553	0.0441	**(0.0272)**
Return On Assets	(0.0188)	(0.0209)	0.0036	0.0310	0.0331	**0.0056**

Table 42: Mean Ratios of Distress Company (BTM Resources Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio					
Total Asset Turnover	0.2310	0.1921	0.4983	0.5081	0.2670	**0.3393**
Inventory Turnover	-	1.7749	3.8826	3.9085	3.1770	**3.1857**
Receivable Turnover	-	1.0111	2.3165	2.3215	1.9109	**1.8900**
Payable Turnover	-	7.5220	13.1971	9.8460	5.4393	**9.0011**
Cash Flow Ratio					
Cash Flow/Current Liabilities	0.0459	(0.2223)	0.0103	(1.2796)	(0.0346)	**(0.2961)**
Solvency Ratio					
Total Debt / Equity	31.1128	55.6828	48.8790	56.8434	46.4807	**47.7997**
Total Debt / Total Capital	-	35.7668	32.8314	36.2421	31.7316	**34.1430**
Liquidity Ratio					
Quick Ratio	-	0.5127	0.6871	1.0806	1.5687	**0.9623**
Current Ratio	0.9750	0.8098	0.9886	1.6142	1.7865	**1.2348**
Profitability Ratio					
Return on Equity	(0.0495)	(0.1683)	(0.1527)	(0.2447)	(0.1086)	**(0.1448)**
Return On Assets	0.0001	(0.0442)	(0.0440)	(0.0952)	(0.0220)	**(0.0411)**

Table 43: Mean Ratios of Distress Company (South Malaysia Industries Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio					
Total Asset Turnover	0.3523	0.4629	0.4774	0.6050	0.3161	**0.4427**
Inventory Turnover	3.8280	3.8096	3.2533	-	-	**3.6303**
Receivable Turnover	2.3738	3.2978	2.6996	3.9497	-	**3.0802**
Payable Turnover	-	-	-	-	-	**-**
Cash Flow Ratio					
Cash Flow/Current Liabilities	0.0142	-	-	-	-	**0.0142**
Solvency Ratio					
Total Debt / Equity	19.3959	17.9959	6.2998	21.9864	65.3358	**26.2028**
Total Debt / Total Capital	16.6804	15.5365	5.9873	18.0952	39.6525	**19.1904**
Liquidity Ratio					
Quick Ratio	1.5195	-	-	-	-	**1.5195**
Current Ratio	1.9493	-	-	-	-	**1.9493**
Profitability Ratio					
Return on Equity	(0.1014)	(0.0378)	(0.0328)	(0.0345)	0.0838	**(0.0245)**
Return On Assets	(0.0629)	(0.0203)	(0.0202)	(0.0173)	0.0384	**(0.0165)**

Table 44: Mean Ratios of Distress Company (Mycron Steel Berhad)						
	06/30/13 MYR	06/30/12 MYR	06/30/11 MYR	06/30/10 MYR	06/30/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	1.1101	0.9169	0.8996	0.8759	-	**0.9507**
Inventory Turnover	7.5395	-	-	4.7207	-	**6.1301**
Receivable Turnover	5.3180	-	-	6.5421	6.1901	**6.0167**
Payable Turnover	24.5669	-	-	11.7520	49.3175	**28.5455**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.2035	(0.1267)	0.4309	(0.1891)	0.4268	**0.1491**
Solvency Ratio						
Total Debt / Equity	55.5440	70.5014	58.8517	75.9024	78.5861	**67.8771**
Total Debt / Total Capital	35.7095	41.3495	-	43.1503	44.0046	**41.0535**
Liquidity Ratio						
Quick Ratio	0.5221	0.6866	-	0.4443	0.6266	**0.5699**
Current Ratio	0.9684	0.9242	0.9395	1.0945	1.0521	**0.9957**
Profitability Ratio						
Return on Equity	0.0270	(0.0479)	0.0020	0.1034	(0.1505)	**(0.0132)**
Return On Assets	0.0254	(0.0104)	0.0169	0.0661	(0.0624)	**0.0071**

Table 45: Mean Ratios of Distress Company (MQ Technology Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.7096	0.6470	0.4350	0.6340	0.6184	**0.6088**
Inventory Turnover	58.1390	23.9962	-	-	-	**41.0676**
Receivable Turnover	7.3073	4.4515	3.1484	-	-	**4.9691**
Payable Turnover	7.5472	10.4638	8.1589	-	-	**8.7233**
Cash Flow Ratio						
Cash Flow/Current Liabilities	(0.3728)	0.4065	0.2477	0.9753	0.6210	**0.3755**
Solvency Ratio						
Total Debt / Equity	16.3470	21.4303	9.7461	10.8114	6.6505	**12.9970**
Total Debt / Total Capital	14.0502	17.6482	8.8806	-	6.2357	**11.7037**
Liquidity Ratio						
Quick Ratio	1.6390	2.0302	3.0006	-	3.8173	**2.6218**
Current Ratio	1.7765	2.1875	3.2938	4.1001	4.1703	**3.1057**
Profitability Ratio						
Return on Equity	(0.3081)	(0.4753)	(0.0809)	0.0497	0.0045	**(0.1620)**
Return On Assets	(0.2219)	(0.3689)	(0.0618)	0.0449	0.0056	**(0.1204)**

Table 46: Mean Ratios of Distress Company (Uzma Berhad)					
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	Mean
Activity Ratio						
Total Asset Turnover	1.6810	1.3709	1.3892	1.3319	1.3351	**1.4216**
Inventory Turnover	4.4667	7.1017	27.9317	-	-	**13.1667**
Receivable Turnover	6.6125	5.9712	5.6156	3.1904	1.8996	**4.6579**
Payable Turnover	20.7039	14.4001	14.4400	11.7979	13.5254	**14.9735**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0613	0.2348	0.1416	0.2561	0.2034	**0.1794**
Solvency Ratio						
Total Debt / Equity	25.2847	25.5597	47.6167	23.6374	15.4943	**27.5186**
Total Debt / Total Capital	19.3437	19.5210	30.7960	17.8214	13.2588	**20.1482**
Liquidity Ratio						
Quick Ratio	1.1028	1.1368	0.9682	1.7561	2.7283	**1.5384**
Current Ratio	2.0687	1.7561	1.7151	2.3526	3.2235	**2.2232**
Profitability Ratio						
Return on Equity	0.2919	0.2807	0.2236	(0.0419)	(0.2099)	**0.1089**
Return On Assets	0.1562	0.1333	0.1128	(0.0185)	(0.1342)	**0.0499**

Table 47: Mean Ratios of Distress Company (Xian Leng Holdings Berhad)					
	01/31/14 MYR	01/31/13 MYR	01/31/12 MYR	01/31/11 MYR	01/31/10 MYR	Mean
Activity Ratio						
Total Asset Turnover	0.2075	0.2133	0.1840	0.1307	0.1187	**0.1708**
Inventory Turnover	1.6058	1.7773	-	-	-	**1.6915**
Receivable Turnover	3.1953	3.5528	-	5.6599	-	**4.1360**
Payable Turnover	53.4046	70.4528	-	44.4864	-	**56.1146**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.6378	(0.1504)	0.0295	0.2514	0.1757	**0.1888**
Solvency Ratio						
Total Debt / Equity	10.5822	23.9115	30.1086	16.5939	20.5690	**20.3530**
Total Debt / Total Capital	9.5695	19.2972	23.1411	14.2328	-	**16.5602**
Liquidity Ratio						
Quick Ratio	0.3506	0.5613	0.1775	0.2654	-	**0.3387**
Current Ratio	1.2080	1.0369	0.6297	0.6654	0.5052	**0.8091**
Profitability Ratio						
Return on Equity	(0.0399)	(0.2283)	(0.5925)	(0.0061)	(0.0299)	**(0.1793)**
Return On Assets	(0.0218)	(0.1573)	(0.4420)	0.0070	(0.0114)	**(0.1251)**

Table 48: Mean Ratios of Distress Company (BTM Resources Berhad)						
	12/31/13 MYR	12/31/12 MYR	12/31/11 MYR	12/31/10 MYR	12/31/09 MYR	**Mean**
Activity Ratio						
Total Asset Turnover	0.2310	0.1921	0.4983	0.5081	0.2670	**0.3393**
Inventory Turnover	-	1.7749	3.8826	3.9085	3.1770	**3.1857**
Receivable Turnover	-	1.0111	2.3165	2.3215	1.9109	**1.8900**
Payable Turnover	-	7.5220	13.1971	9.8460	5.4393	**9.0011**
Cash Flow Ratio						
Cash Flow/Current Liabilities	0.0459	(0.2223)	0.0103	(1.2796)	(0.0346)	**(0.2961)**
Solvency Ratio						
Total Debt / Equity	31.1128	55.6828	48.8790	56.8434	46.4807	**47.7997**
Total Debt / Total Capital	-	35.7668	32.8314	36.2421	31.7316	**34.1430**
Liquidity Ratio						
Quick Ratio	-	0.5127	0.6871	1.0806	1.5687	**0.9623**
Current Ratio	0.9750	0.8098	0.9886	1.6142	1.7865	**1.2348**
Profitability Ratio						
Return on Equity	(0.0495)	(0.1683)	(0.1527)	(0.2447)	(0.1086)	**(0.1448)**
Return On Assets	0.0001	(0.0442)	(0.0440)	(0.0952)	(0.0220)	**(0.0411)**

Table 49: Descriptive Statistic of Independent Variables				
	Non-distress companies		Distress companies	
	Mean	SD	Mean	SD
Activity Ratio				
Total Asset Turnover	0.6093	0.14347	0.5906	0.29122
Inventory Turnover	12.0082	5.41370	42.6898	85.99653
Receivable Turnover	4.2440	1.46515	4.7780	1.88157
Payable Turnover	13.7819	4.69242	5.5118	1.93668
Cash Flow Ratio				
Cash Flow/Current Liabilities	-0.0073	0.63197	0.0419	0.30483
Solvency Ratio				
Total Debt / Equity	36.7373	16.87092	26.3956	1188.81592
Total Debt / Total Capital	21.8051	7.09509	80.2803	68.14237
Liquidity Ratio				
Quick Ratio	1.7485	0.85244	3.7785	6.85547
Current Ratio	2.5754	1.35113	4.0985	6.95373
Profitability Ratio				
Return on Equity	-0.02903	0.11887	-0.7364	1.23044
Return On Assets	0.0374	0.17385	-0.0999	0.18184

On asset are identified to be significant in predicting the corporate failure. Table 5.50 shows the output results that generated in SPSS software. The logistic regression equation is developed which,

$$Logit = -147.064 \ (Total \ Asset \ Turnover) - 0.135 \ (Inventory \ Turnover) - 3.055 \ (Receivable \ Turnover) - 28.504 \ (Payable \ Turnover) + 429.136 \ (Cash \ Flow \ To \ Current \ Liabilities) + 0.231 \ (Total \ Debt \ To \ Equity) + 3.487 \ (Total \ Debt \ To \ Total \ Capital) + 371.792 \ (Quick \ Ratio) - 367.386 \ (Current \ Ratio) - 722.093 \ (Return \ On \ Equity) - 954.459 \ (Return \ On \ Assets) + 74.261$$

Table 50: Results of Logistic Regression Analysis			
Coefficients	Coefficients	Logistic Regression Analysis SE	Wald Test
Total Asset Turnover	-147.064	5916.414	0.001
Inventory Turnover	-0.135	8.377	0.000
Receivable Turnover	-3.055	327.390	0.000
Payable Turnover	-28.504	554.329	0.003
Cash Flow To Current Liabilities	429.136	10227.317	0.002
Total Debt To Equity	0.231	4.582	0.003
Total Debt To Total Capital	3.487	102.009	0.001
Quick Ratio	371.792	6900.706	0.003
Current Ratio	-367.386	6820.936	0.003
Return On Equity	-722.093	14871.806	0.002
Return On Assets	-954.459	29149.652	0.001
Constant	74.261	2309.257	0.001

The total turnover asset ratio indicates the company's efficiency in using its assets to generate revenues. The ratio is negatively correlated with the dependent variable. This means the higher the turnover asset ratio, the lower the probability a company fall into financial distress. The inventory turnover ratio shows the number of days that a company sells and replaces its inventory over a period. A high inventory turnover ratio of a company indicates it has strong sales. The ratio has a negative correlation with the dependent variable. This shows that the higher the inventory turnover ratio, the lower the chance a company going into financial distress. The receivable turnover, which measures the company's ability in collecting debts, has a negative correlation with the dependent variable. This indicates the higher the receivable turnover, the lower the probability of a company face bankruptcy. The payable turnover has a negative correlation with the dependent variable. This means that the higher the ratio, the lower the probability of a company to face financial distress. The cash flow to current liability measures a company's liquidity in short term. The positive correlation indicates that the higher the ratio, the higher the chance of a company falls into financial distress. The total debt to equity, which measures a company's financial leverage, has a positive correlation with the dependent variable. This shows that the higher the ratio, the higher the probability of a company to face financial distress. The total debt to total capital indicates a company's financial structure. The ratio is positively correlated with the dependent variable. This means the higher the ratio, the higher the chance of a firm going financially distress. The current ratio measures a company's ability to pay its short term debts. The negative correlation with the dependent variable indicates that the higher the ratio, the lower the probability of a company face financial distress. The return on equity show how profitable a company is relative to its shareholders equity and the return on asset shows how profitable a company is relative to its total assets. Both ratios have a negative correlation with the dependent variable. This indicates that the higher the ratios, the lower the probability of a company fall into financial distress.

4.3 Validation of Logistic Regression Analysis

The analysis sample that used for developing logistic regression is used for results validation. Table 5.51 shows the validation results of logistic regression analysis. 48 companies' financial statuses are tested by using the logistic regression equation. The logit for each company is calculated. Next, the calculated logit is used to calculate the odds and probability for every company.

$$Odds = e^{Logit}$$

$$Probability = Odds/(1+Odds)$$

The probability that near to 1 shows the company is very likely to fall into financial distress while the probability that near to 0 shows the company is very unlikely to fall into financial distress. In this study, the validation of the analysis

sample is eighty eight percent. There are forty two companies (out of forty eight companies) are correctly classified for their financial status.

No	Company	Category	Logit	Odd	Probability
Table 51: Validation Results of Logistic Regression Analysis					
1	Auto Air Holding Berhad	Distress	12.9861	436328	1
2	Bina GoodYear Berhad	Distress	438.8078	3.7×10^{190}	1
3	Biosis Group Berhad	Distress	415.7271	3.5×10^{180}	1
4	ECM Libra Financial Group	Distress	50.27455	6.82×10^{21}	1
5	Global Carriers Berhad	Distress	400.2179	6.5×10^{173}	1
6	GW Plastics Holding Berhad	Distress	15.68572	6489683	1
7	Haisan Resources Berhad	Distress	15.7196	6713305	1
8	HIGH-5 Conglomerate Berhad	Distress	1794.452	-	-
9	Hytex Integrated Berhad	Distress	596.0886	7.6×10^{258}	1
10	Integrated Rubber Corporation	Distress	13.07709	477867.9	1
11	IRM Group Berhad	Distress	704.9601	1.4×10^{306}	1
12	Kejuruteraan Samudra Timur	Distress	442.6946	1.8×10^{192}	1
13	LFE Corporation Berhad	Distress	15.64153	6209126	1
14	Lion Corporation Berhad	Distress	970.3314	-	-
15	MAA Group Berhad	Distress	12.63607	307451.9	1
16	Malaysian AE Models Holdings	Distress	14.55182	2088206	1
17	Maxtral Industry Berhad	Distress	4841.548	-	-
18	Octagon Consolidated Berhad	Distress	707.0181	1.1×10^{307}	1
19	Pan Malaysian Industries Berhad	Distress	896.6059	-	-
20	Perwaja Holdings Berhad	Distress	16.12847	10104266	1
21	Petrol One Resources Berhad	Distress	1338.789	-	-
22	Sumatec Resources Berhad	Distress	777.1499	-	-
23	TPC Plus Berhad	Distress	83.604	2.04×10^{36}	1
24	VTI Vintage Berhad	Distress	1862.052	-	-
25	Watta Holding Berhad	Non-Distress	-298.736	1.8×10^{-130}	0
26	ARK Resources Berhad	Non-Distress	-1448.91	0	0
27	Takaso Resources Berhad	Non-Distress	-224.094	4.76×10^{-98}	0
28	Apex Equity Holdings Berhad.	Non-Distress	-15.2258	2.44×10^{-07}	0
29	PDZ Holdings Berhad	Non-Distress	-372.669	1.4×10^{-162}	0
30	Malaysia Packaging Industry	Non-Distress	-615.988	3×10^{-268}	0
31	Jiankun International Berhad	Non-Distress	-3486.06	0	0
32	Amtel Holdings Berhad	Non-Distress	-211.405	1.54×10^{-92}	0
33	Kumpulan Powernet Berhad	Non-Distress	-2549.6	0	0
34	Adventa Berhad	Non-Distress	-541.987	4.1×10^{-236}	0
35	Plastrade Technology Berhad	Non-Distress	-431.94	2.6×10^{-188}	0
36	Handal Resources Berhad	Non-Distress	-361.017	1.6×10^{-157}	0
37	MQ technology Berhad	Non-Distress	-14.0221	8.13×10^{-07}	0
38	YKGI Holdings Berhad	Non-Distress	-474.7	6.9×10^{-207}	0
39	Tanco Holdings Berhad	Non-Distress	-12.9459	2.39×10^{-06}	0
40	AT Systematization Berhad	Non-Distress	-12.2201	4.93×10^{-06}	0
41	Nakamichi Corporation Berhad	Non-Distress	-230.536	7.6×10^{-101}	0

42	BTM Resources Berhad	Non-Distress	-187.463	3.85×10^{-82}	0
43	South Malaysia Industries Berhad	Non-Distress	-39.4486	7.37×10^{-18}	0
44	Mycron Steel Berhad	Non-Distress	-826.772	0	0
45	MQ Technology Berhad	Non-Distress	-14.0221	8.13×10^{-07}	0
46	Uzma Berhad	Non-Distress	-795.183	0	0
47	Xian Leng Holdings Berhad	Non-Distress	-1342.2	0	0
48	BTM Resources Berhad	Non-Distress	-187.463	3.85×10^{-82}	0

Notes: Logit = -147.064 x Total Asset Turnover – 0.135 x Inventory Turnover – 3.055 x Receivable Turnover – 28.504 x Payable Turnover + 429.136 x Cash Flow To Current Liabilities + 0.231 x Total Debt To Equity + 3.487 x Total Debt To Total Capital + 371.792 x Quick Ratio -367.386 x Current Ratio – 722.093 x Return On Equity – 954.459 x Return On Assets + 74.261; Odd = e^Logit; Probability = Odds/(1+Odds)

5. Conclusion

In conclusion, the eleven financial ratios, namely total turnover asset; inventory turnover; receivable turnover; payable turnover; cash flow to current liability; total debt to equity; total debt to total capital; quick ratio; current ratio; return on equity; and return on assets were found significant in predicting the corporate failure in Malaysia. The analysis samples which a total number of forty eight public listed companies in Malaysia were tested by using the developed logistic regression equation. The study showed the developed equation has eighty eight percent accurately predicted the analysis samples. The accuracy of prediction for logistic regression is higher when comparing the previous studies that used discriminant analysis. This means the logistic regression analysis is a more reliable technique in predicting financial distress. The developed equation may benefit to the agencies in Malaysia such as Securities Commission, Bursa Malaysia, and Bank Negara Malaysia. Moreover, the investor may also employ this model to evaluate the financial status for a company before making an investment decision. The model can be used to predict a company financial status and it give warning signal on those companies going to fall into financial distress.

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