DEFAULT RISK AND FIRM PERFORMANCE AMONG
PROBLEMATIC FIRMS

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ABSTRACT

This study aims to investigate whether the problematic firms that were listed under PN17 really suffer financial difficulties prior to their fraud perpetration by using the proxy of default risk. Then, the effect of the default risk will be analysed on the performance of problematic firms. As for this study; the results show that the default risk has significant negative effect on firm’s performance among problematic firms. This implies that default risk of problematic firms could negatively affect the firm’s performance. The result of this study could pave way to any agency that monitors the misconducts among listed firms as financial difficulties may give early signal to warn a company of the possibility of severe fraud occurrence in the future. Moreover, the effect of financial difficulties will give some extent of indicators to public on the tendency to commit fraud due to financial desperation. This study could also help in formulating the guidelines on how to mitigate the effect of fraud perpetration among firms that faced financial difficulties.

Keywords: financial difficulties, firm performance, problematic firms, default risk

1. INTRODUCTION

Financial scandals typically involve complex methods for misusing funds, overstating revenues, misappropriation of assets and others. These scandals usually tarnish the image of a firm and sometimes damage its reputation beyond repair.

The financial scandal that leads to the collapse of conglomerate such as Enron, WorldCom, and Global Crossing, as well as the 2009 fraud case by Bernard Madoff in the United States of America had shaken the trust in the accounting profession as well as in the financial markets.

In Malaysia, a mini Enron scandal has been blowing this country, alerting those corporate governance players such as directors, managers, accountants, Bursa Malaysia and etc. The revealed financial scandal of Transmile Group Bhd, probably become the highlight for being the highest-profile scandal among Malaysian firms that involved in financial irregularities. Transmile’s revenue has been overstated by a total of RM530 million in 2005 and 2006. However, in 2011, the former directors of Transmile have been convicted and found guilty by the Kuala Lumpur Session Court.
Problematic firms are those firms involved in various types of fraudulent activities such as financial reporting fraud, misappropriation of assets and could also be the one that involved with litigation, fraud guilty and alleged misconduct (Crawford & Weirich, 2011).

Mohamed Sadique, Roudaki, Clark and Alias (2010) had examined and analysed the fraud cases as reported by the Malaysian Securities Commission. In their findings, it was found that in 2007, accounting and auditing offences were higher than the other offences compared to the previous years. The other offences are unlicensed trading of shares, unlicensed fund collection and unlicensed investment advisor.

Rosner (2003) highlighted that financial distressed firms encourage engaging in fraudulent financial reporting to disguise their financial condition. As such, the company may experience default payment to creditors or bankers. However, not all problematic firms especially the distress firms are facing with financially difficulties position. In particular, this study focuses on the possible relation between default risk and firm performance among problematic firms. Problematic firms have been identified as those firms listed in PN17 in Bursa Malaysia and only categorized as firms that violated financial statement requirement, involved with asset misappropriation and faced with litigation.

The performance of the problematic firm is essential and important to be known since if a firm suffers financial difficulties, firms might embrace loss of reputation and the worst part losing the shareholders and potential investors’ confidence. The fraud revelation may negatively affect the performance of the problematic firm (Garay, Gonzalez & Molina, 2007)

1.1 Background Of The Study

Bursa Malaysia is the regulator of the Malaysian capital market and its ultimate duty is to maintain the securities and derivatives that are traded fairly and orderly. Bursa Malaysia has strictly view and monitor breaches of Bursa Malaysia Listing Requirements and Bursa Malaysia Rules since the violations have possibility to impair investor's rights and protection.

Bursa Malaysia consults with Securities Commission in order to enforce actions. This is to ensure effective regulation of the capital market particularly when there is contravention of both rules of Bursa Malaysia and Securities Commission Act. Securities Commission is statutory body with enforcement and investigation powers. These problematic firms were penalized by Securities Commission accordingly based on the type of violation these firms have committed.

The sample for this study consists of 175 problematic firms in Malaysia from year 2001 to 2012 that have been identified based on Bursa Malaysia website under the PN17 Listing. PN No. 17/2005 (PN17) was issued effective from 3rd January 2005. It sets out the criteria to identify firms that failed to meet minimum capital or equity, the auditors have issued an adverse or disclaimer opinion, the business operation of firm has been suspended or ceased. Securities Commission has undertaken intensive monitoring and surveillance on these companies and has revealed several of breaches and mismanagement by the directors and management.

In particular, this study focuses on the default risk that could be suffered by these firms prior to classification under PN17. Default risk is referred to the inability of the firms to
make the required payments on their debt obligations. Default risk in this study is measured by debt to equity ratio. In order to motivate the empirical analysis, the default risk will be analysed on the performance of the problematic firms. The performance of the problematic firm will be valued using Tobin Q. There are other variables that we look to control the empirical analysis such as firm size, firm growth and leverage. The firm size will be proxy by total assets, firm growth will be proxy by changes in sales and leverage will be proxy by total debt over total assets.

This study expects to see the extent of default risk that may affect the firms’ performance among identified problematic firms in Malaysia from 2001 to 2012.

1.2 Problem Statement

Prior literatures like Liou (2008), Rosner (2002) and Spathis (2002) highlighted that the financial distressed firms were likely to involve in the fraudulent activities. However, not all problematic firms are facing with financially difficulties position. There could be any possible factors that contributed to the existence of problematic firms. Those factors may come solely from financial factor or non-financial factor. As for financial factors, the problematic firms may suffered financial difficulties like suffered financial distress or have a high proportion of default risk. On the other hand, problematic firms may suffer non-financial factor such as poor corporate governance and could also because of the poor internal control or less ethical business conduct. The study by Law (2011) found that ethical guidelines and policies were associated with minimize fraud within organizations.

By examining whether the financial difficulties as one of the contributing factor of problematic firms, the true picture of whether the problematic firms suffer financial difficulties will be revealed. Therefore, the performance of the problematic firms may be affected. The financial distress firms that involved in fraudulent activities may lead to corporate failure. The firm will have difficulties in getting the fund to finance the business operation as well as impaired the sustainability of the firm in the industry. Zeitun, Tian and Keen (2007) highlighted that the capital structure was mainly affected by probability of default as it is related to firm’s ability to get external sources of funds.

1.3 Research Objectives

Generally, this study aims to investigate the effect of default risk on firm’s performance among problematic firms. Particularly, this study would like to:

i. Examine the effect of default risk on firm performance among the problematic firms

1.4 Research Questions

i. Does the default risk affect the firm performance among the problematic firms?
1.5 **Scope of the study**

The scope of the study is to investigate the effect of the default risk on the performance of problematic firms. Then, the problematic firms that were identified were analysed whether really suffer default risk prior to their classification in the PN17 by using the proxy of default risk and financial distress. The common measure of default risk; the debt to equity ratio will be used.

1.6 **Significance of the study**

This study explores the effect of the default risk on the performance of problematic firms. The result of this study could pave way to any agency that monitors the misconducts among listed firms as financial difficulties may give early signal to warn a company of the possibility of severe fraud occurrence in the future.

Besides, this study could also help in formulating the guidelines on how to mitigate the effect of fraud among firms that faced financial difficulties. The performance of the problematic firms is very essential to be known as this would help in recovery process of any problematic firms.

2. **LITERATURE REVIEW**

2.1 **Problematic Firms**

Like the case of Enron which was formed in 1985, Cunningham and Harris (2006) highlighted the use of accounting loopholes and poor financial reporting enable the firm to hide the debt of billions dollars resulted from failed projects. The second type of fraud is known as misappropriation of assets. Misappropriation of asset, involves the theft of an entity’s assets by the employee. Liou (2008) discussed the three conditions of any fraud to be occurred; management or the employee have an incentive or intention to commit the fraud; potential circumstances for the fraud to be perpetrated; and the rational for such fraudulent action committed.

In this research, the fraud firms will be known as problematic firms as these firms commit both fraudulent financial reporting and other alleged misconduct like misappropriation of assets, involved with litigation and fraud guilty. As in this research, the problematic firms are listed under the PN17 Listing as highlighted in media release by Bursa Malaysia.

2.2 **Financial Difficulties**

Generally, the financial needs and problems could affect the sustainability of the firm. Successful firm will not only understand, anticipate, and mostly avoid financial problems or financial difficulties, but also know how to repair the damage when problems occur.

The financial difficulties or financial distress may severely result in insolvency. Ofek (1993) found that financial difficulties may result in default debts payments, modified terms and structure of debt in financing the operation of business and the worst part, bankruptcy filings or financial distress.
Thus, it is interesting to examine whether problematic firms really suffer any financial difficulties prior to their fraud perpetration. Therefore, in this research, the financial difficulties will be represented by default risk.

2.3 Financial Difficulties Measures

2.3.1 Default Risk

According to Vassalou and Xing (2004), a firm is said as default when it fails to service its debt obligation. Therefore, the default risk is the risk that firms unable to make the required payment on their debt obligation. Another key factor in determining default risk is a firm’s leverage.

The study by Zeitun, Tian and Keen (2007) showed that firm with higher leverage would have higher probability of default. Therefore, high leverage may lead to high default risk.

However, the findings of the study conducted by Rasool, Asif, Kayani and Zafar (2011) contradicted the above studies. This study investigated the relationship between the leverage levels, performance and profitability of the 19 Pakistanis firms. The finding states that larger firms have higher target debt levels and stable cash flows. These stable cash flows lead to lessen down the bankruptcy chances as well as the costs of default risk.

This research used debt to equity ratio as proxy for default risk. Zeitun, Tian and Keen (2007) measured and investigated the effect of firm’s default probability by using total debt over total equity. This also consistent with the study by Foong and Idris (2012) which also used debt to equity ratio to measure leverage of 94 general insurance companies for the year 2006 to 2009 in Malaysia.

2.4 Firm’s Performance

Independent investors determined the firm value of publicly traded companies by the perceived value of a company in a free and open market. Many factors before determining a fair value evaluated by investors included expected future performance, past performance and value of intangible assets. In addition, Iswatia and Anshoria (2007) highlighted that performance shows the ability of an organization to administer resources in various effective ways in creating competitive advantage.

Instead of than examining stock price, Wolfe and Sauaia (2003) used Tobin Q statistic as a proxy for a firm’s value. Adding more confidence, Anderson, Fornell and Mazvancheryl (2004) found that the Tobin Q statistic is more forward than just current stock price as it is based on the current and expected future revenue streams.

2.5 Default Risk and Firm’s Performance

Vassalou and Xing (2004) posited credit risk or default risk is the oldest form of risk associated with financial markets. According to Scott (1981), firm will have potential to face bankrupt (default) when the debt obligations more than current year profit. Therefore, the firm considered as corporate failure or firm with poor performance as the current year profit is less than debt obligations. Higher financial leverage will decrease firm value by
increasing bankruptcy risk. Therefore, to enhance the market value of the firm, every firm has to have a sound optimal capital structure.

Chiang, Chang and Hui (2002) had used sample of construction firms in Hong Kong and investigate the relationship between capital structure and firm’s performance. Their finding shows that high gearing negatively related with firm performance.

Ebaid (2009) highlighted that the firm’s performance could be affected by amount of leverage in capital structure. The finding shows that total debts impact negatively on the firm’s performance.

However, some prior literatures contradict with the findings discussed above. Based on sample of 645 companies for the period of 2009 to 2011 which is listed in the Taiwan Securities Exchange (TSE), Cheng and Tzeng (2011) found that there is positive relationship between leverage and firm’s performance.

2.6 **Firm Size and Firm’s Performance**

Basically, large firms are thought to possess advantages in capital-raising activities which may reflect real scale economies. Abor (2005) suggested that firms of higher size generally have higher profitability. This suggests a positive relationship between the size and profitability.

This is consistent by the study conducted by Ha- Brookshire (2009) whereby he found that the firm size effect is present only on the relationship with performance. Gill and Mathur (2011) took a sample of 91 Canadian manufacturing firms for a period of three years from 2008 to 2010 which listed on the Toronto Stock Exchange (TSX). They also obtained the findings that firm size affects the firm’s performance positively.

Study by Zeitun and Tian (2007) used total assets to measure the firm size. This is also consistent with the study conducted by Belkaoui and Pavlik (1993) which the firm size was measured by total assets. As for this study, the consistent approach was used that is the firm size was measured by total assets.

2.7 **Firm Growth and Firm’s Performance**

Firm growth usually reflects market acceptance and firm success and is one of the most important issues in business management. Abor (2005) suggested that enterprises of higher growth opportunities generally have higher profitability.

In addition, study by Cheng, Liu and Chien (2010) also suggested that enterprises of higher growth rate on operating sales generally have higher firm value. Their finding shows that firm growth rates have a significantly positive effect on firm value or performance. However, Lin (2010) obtained the finding that growth is not significantly related to firm value. Lin (2010) suggests the growth might have either positive relationship with firm value or not significantly related to firm value. This also consistent with the study by Ahmad, Abdullah and Roslan (2012) which analysed the relationship between firm growth with operating performance of Malaysian firms.
The used of change or increase in sales as a measurement of firm growth is consistent with the study conducted by Summers and Sweeney (1998). According to Abor (2005), growth is defined by growth rate on operating sales. Similarly, Cheng, Liu and Chien (2010) showed that growth is defined by growth rate of operating sales and growth rate of total assets.

2.8 Leverage and Firm’s Performance

Berger and Bonaccorsi (2006) supported the notion that there is a positive relationship between level of debt and firm’s performance. Cheng and Tzeng (2011) found a positive relationship between leverage and firm value. Cuong and Canh (2012) found that the relationship between leverage and firm value is nonlinear. Their findings showed that any firms use debt ratio of less than 59.27% are able to enhance firm value. The study by Cuong and Canh (2012) used the debt to total asset as their measurement of leverage. This is consistent with the study by Berger and Bonaccorsi (2006) which used debt to total asset to measure the leverage.

3. RESEARCH METHODOLOGY

3.1 Research Design

This research focuses on the effect of the financial difficulties on problematic firms’ performance. Then, financial difficulties or other factor that could be suffered by problematic firms before being classified under PN17 will also be examined. In this research, focus is given on the performance of the problematic firms and financial difficulties proxy by default risk while controlling the firm size, firm growth and leverage. The default risk is measured by debt to equity ratio and Altman Z score model is used to calculate the financial distress.

3.2 Population and Sample

The population for this study is 175 problematic firms in Malaysia which identified based on Bursa Malaysia web as at January 2013. These firms are categorized under the PN17 Listing from year 2001 to 2012. These companies were known as problematic firms since it was listed under PN17 which is known as companies that violated the Bursa Malaysia Listing Requirement and with poor performance.

Under Practice Notes 17 of Bursa Malaysia Listing Requirements which relates to the business operations of listed firms, it is clear that any listed firm that trigger the criteria of the Practice Notes will fall under the category of PN17 Companies. Among the criteria are the firm failed to meet the minimum capital or equity of 25% or less on consolidated basis and paid up capital less than RM40 million, the auditors have expressed an emphasis of matter of the ability of the firm to continue as a going concern and the business has ceased its operation and etc.

Firm’s financial data was downloaded from Datastream database and each firm’s annual report respectively. Data is pooled and analyzed using SPSS.
3.3 Theoretical Framework

The research framework for this study is shown in Figure 3.1 below.

\[
\text{TOBINQ}_i = \beta_0 + \beta_1 \text{DR}_{i,t-1} + \beta_2 \text{SIZE}_{i,t-1} + \beta_3 \text{GRW}_{i,t-1} + \beta_4 \text{LEV}_{i,t-1} + e \quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots (1)
\]

The models explained as below:

\[
\text{TOBINQ} = \text{Firm performance measured by TobinQ (market Capital /average total assets)}
\]

\[
\text{DR}_{t-1} = \text{Default Risk (Long term Debt /Total Shareholders’ Equity)}
\]

\[
\text{SIZE}_{t-1} = \text{Firm size represent by the Total assets}
\]

\[
\text{GRW}_{t-1} = \text{Growth represent by the Change in sales}
\]

\[
\text{LEV}_{t-1} = \text{Leverage represent by the Total debt/ total asset}
\]

3.4 Hypothesis Development

3.4.1 Default Risk and Firm’s Performance

A clear and concise definition of default is significant for analysis of data. Default is usually defined as the inability of corporation to meet its debt obligations on due date. Lopez and Saidenberg (2000) defined default risk as the degree of value changes in debt instruments and derivatives caused by fluctuation in the credit quality of borrowers.

However, in this research, the firm’s performance will be measured by Tobin Q. Tobin (1969) has developed Tobin Q statistic that is widely used as a proxy for the firm’s value from the perspective of investors.

DeFond and Park (1997) highlighted in their studies the higher leveraged company lead to greater the risk on defaulting the debt agreements. Thus, the default risk is connected with financial leverage. Higher financial leverage will decrease firm value due to increasing bankruptcy risk. In addition, many prior literatures such as Foong and Razak (2012) and Whiting and Gilkison (2000) had highlighted that financial leverage has negative effect on the firm’s performance.

The finding of the study by Foong and Idris (2012) indicated that leverage has a negative impact on performance. They concluded that leverage could be beneficial or detrimental to
the financial performance, subjected to the product diversity level. According to Altman (1968), a decline in firm value will be faster for a highly leveraged firm than that of a less leveraged, due to the fact that a highly leverage firm can decrease less before it is forced into bankruptcy.

However, as for the problematic firms, the effects of the default risk on firm’s performance could be worst since the problematic firms have been identified as firms that committed fraud and other alleged misconduct contrary to Bursa Malaysia Listing Requirements. The performance of firms may be severely impaired as the fraud committed by firm due to high debt level.

Therefore, it is expected that:

H1. Default risk has significant negative effect on firm’s performance among problematic firms

In order to estimate the regression in this research, firm size, firm growth and leverage are controlled.

4. FINDINGS

4.1 Summary of the Findings

The result of the study highlight that default risk was negatively related with firm’s performance. The study is conclusive since the relationship of default risk with firm’s performance is significant. The finding is consistent with Foong and Razak (2012) whereby they also obtained the finding of negative relationship between leverage and firm’s performance.

On the other hand, a few control variables show consistent result with prior studies. The firm size and leverage are positively related with firm’s performance. The results are consistent with previous studies (Almajali, Alamro & Al-Soub, 2012; Cheng & Tzeng, 2011). However, firm growth has negative relationship with firm performance. This finding contradicts with the study by Cuong and Canh (2012) which showed that growth has no significant effects on firm performance.

4.2 Limitations of the Study

The first limitation of this study is that the samples are firms that were listed under PN17 of Bursa Malaysia came from various sectors/industry. There is no dummy variable for industry. Results may not be generalizable across all industries since different industries adopt different accounting policies and different annual closing account. As for comparison, the difference of accounting policies and annual closing account may impair the accuracy of result.

The models can be extended with new variables in order to obtain more comprehensive results. These models tested five variables (i.e. default risk, financial distress, firm size, firm growth and leverage) with firm’s performance. On this basis, this model might face
the fact that there are other possible omitted factors influencing the effect of default risk and financial distress on firm’s performance that were not included in the models.

4.3 Recommendation for Future Research

As for the recommendation for future research, it is based on the findings of the research: Future research may need to comprehend the attributes of bankruptcy and financially distressed firms. Understanding the financially distressed firms’ characteristic is important as to select the variable that could explain precisely the bankrupt and financial distress. A further research into non-financial factors that lead to financial failure can be carried out. Other variables for instance, attributes of corporate governance like board composition, number of independent directors and etc. would provide additional information on non-financial factors that could contribute to financial distress. In addition, the effect of these non-financial factors to the firm’s performance should be examined as well.

There is a need for further research on the recovery of the financially distresses firms. The research could examine whether the financially distressed firms can be put back on track, being delisted from PN17 Listing and can recover its financial performance. The post-performance of the financial distress firms will also be worth studied.

4.4 Significant Contributions of the Study

This study provides empirical evidence that prior to PN17 classification, the problematic firms suffered financial difficulties. Therefore, any financial difficulties could possible warn and signal some extent of problem that would be created by firms either financial reporting fraud, misappropriation of assets and litigation. Although the sample firm only choose the PN17 companies, but that companies were identified and segregated according to the type of fraudulent activities such as financial reporting fraud, misappropriation of assets and faced with litigation. This study also helps regulators in their monitoring and enforcement activities.

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