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Financial distress, restructuring and turnaround: evidence from Thai SMEs

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Abstract

This study examines firstly whether there are significant differences in the financial characteristics of financially distressed and non-distressed SMEs in Thailand, and secondly, whether distressed SMEs can quickly turnaround once they enter into the court directed restructuring process. Building on both parametric and non-parametric tests and a good number of sample SMEs in both groups of firms, it provides evidence that the Thai financially distressed SMEs are significantly different from their non-distressed counterparts in terms of profitability, liquidity and leverage. Again, for the distressed SMEs that have entered into the court process of restructuring, turnaround is seemed to be a longer-term phenomenon rather than short-term, as the findings show weak signs of improvement in the financials of interest except a few. This implies that financial recovery and performance do not happen as quickly as expected after restructuring. These findings of the study have implications for an emerging economy such as Thailand for providing continued support and assistance that can ensure speedy financial recovery of distressed SMEs as well as insure the positive effect of being financially restructured firms for the economy.

Keywords: *financial characteristics, Thai distressed and non-distressed SMEs, turnaround, restructuring*

บทคัดย่อ

งานวิจัยนี้เป็นการทดสอบถึงความแตกต่างของคุณลักษณะที่สำคัญทางการเงินระหว่างบริษัทที่ประสบปัญหาทางการเงิน กับบริษัทที่ไม่ประสบปัญหาทางการเงิน ของบริษัทที่เป็นธุรกิจขนาดกลางถึงขนาดย่อม (SMEs) ในประเทศไทย และนอกจากนี้ยังศึกษาถึงความรวดเร็วในการฟื้นตัวของบริษัท SMEs ที่มีปัญหาทางการเงิน การพลิกฟื้นสถานการณ์ทางการเงินของบริษัทฯ หลังจากเข้าสู่กระบวนการทางศาลในการปรับโครงสร้างหนี้ ผลจากการทดสอบทางสถิติ พารามิเตอร์ และที่มิใช่พารามิเตอร์ จากจำนวนกลุ่มตัวอย่างของธุรกิจ SMEs ในทั้งสองกลุ่มบริษัทฯ ในประเทศไทย พบว่า ธุรกิจ SMEs ที่ประสบปัญหาทางการเงินมีคุณลักษณะทางการเงินที่แตกต่างอย่างมีนัยสำคัญจากธุรกิจ SMEs ที่ไม่มีปัญหาทางการเงินโดยเฉพาะในส่วนของการทำกำไร สภาพคล่อง และความสามารถในการชำระหนี้ อีกทั้งธุรกิจ SMEs ที่มีปัญหาทางการเงินเมื่อเข้าสู่กระบวนการปรับโครงสร้างหนี้ผ่านระบบศาล การฟื้นตัวของธุรกิจดูจะช้ามากกว่าเร็ว ผลจากการศึกษาพบว่า การฟื้นตัวทางการเงินมีเพียงเล็กน้อยเท่านั้น นี่อาจจะหมายถึงว่า การฟื้นตัวทางการเงินและประสิทธิภาพในการดำเนินงานของบริษัทฯ ไม่อาจฟื้นตัวได้ทันในช่วงระยะเวลาอันสั้นภายหลังการปรับโครงสร้างหนี้ ผลจากการศึกษาสามารถประยุกต์ใช้ในภาวะเศรษฐกิจเกิดใหม่ อย่างเช่น ในกรณีของประเทศไทย ในเรื่องของการเตรียมพร้อมในการให้ความเชื่อเหลือ และการสนับสนุนที่ควรเป็นไปอย่างต่อเนื่อง เพื่อให้มั่นใจถึงการเร่งการฟื้นตัวทางการเงินของธุรกิจ SMEs และยังเพิ่มความมั่นใจในผลกระทบด้านบวกที่มีต่อเศรษฐกิจ

คำสำคัญ: *คุณลักษณะทางการเงิน, ธุรกิจ SMEs ไทยที่ประสบปัญหาทางการเงิน, การพลิกฟื้น, การปรับโครงสร้างหนี้*

1. Introduction

Business failure is not uncommon across the globe, it rather becomes a recurring event despite the fact that the factors, both internal and external to the firm, that lead a business to failure, may vary across countries. It is perceived that numerous internal factors including ineffectiveness of management, cost inefficiency, poor employee productivity, etc. is directly attributable to the firm's financial distress and bankruptcy. However, often some external factors such as economic recession, high interest rates, inflation, government regulation, etc. could contribute to a firm's liquidation that is beyond the control of a firm. Charalambous (2004) contends that in the past two decades, business failures have occurred at higher rates than at any

other time since the early 1930s. The failure of a business has severe economic consequences and substantial costs, both financial and psychological, to numerous parties involved. The economic cost of business failures are significant in terms of both direct and indirect effects that include among others the expenses of either liquidating or attempting to restructure the internal financial domain of the business, accounting and legal fees and other professional service costs that resulted due to the crisis.

It is conceivable that 'financial distress' of a firm ultimately leads to insolvency and business failure. Lee and Yeh (2004) identified a firm as financially distressed when: a) it defaults on loan repayments, b) its net worth falls below half of its stock, c) it engages in loan term negotiations. Asquith, Robert, and Scharfstein (1994) identified an unhealthy firm if in any two consecutive years, the firm's earnings before interest, tax, depreciation and amortization are less than 80% of its interest expense. Again, Elloumi and Gueyle (2001) classified a financially distressed firm if the firm has experienced negative earnings per share consecutively for 5 years. Wruck (1990) classified a firm as being financially distressed when its cash flows are not sufficient to cover its current obligations. Whitaker (1999) contended a firm being in financial distress when cash flows are less than the current maturities of long-term debt. They imply that poor financial performance is the root cause of a firm falling into financial distressed.

In the business world, 'turnaround' is used when poor financial performance of a firm experiences a positive reversal. Schendel, Patton, and Riggs (1976), Bibeault (1982), Hambrick and Schecter (1983) and Robbins and Pearce (1992) defined turnaround as performance decline followed by performance improvement. Turnaround strategies denotes to implementing changes in the internal management of a failing firm. Turnaround strategies typically include retrenchment, repositioning and reorganization etc. which management can use in overcoming the organizational decline (Hambrick & Schecter, 1983; Pearce & Robbins, 1993; Arogyaswamy, Barker, & Yasai-Ardekani, 1995). Retrenchment, repositioning and reorganization are broadly recognized as 'restructuring'. Retrenchment refers to reduction in the size and scope of a business. It includes quitting difficult markets or part of the business that is unproductive and unprofitable, downsizing, disposing of assets etc. that can control further financial losses and generate additional resources for future profitability. Reorganization includes new structures, human resource management, replacement of top executives etc. and repositioning emphasizes on growth that includes finding new markets, seeking new resources, or new products to generate more revenue. The restructuring attempts that lead to turnaround are pursued differently in different firms based on their needs and managerial judgment.

Financial insolvency is one of the most significant threats for many businesses in Thailand since the economic crisis in 1997. Many businesses in Thailand have become bankrupt that resulted in a chain-effect to other associated and connected businesses. As business collapse occurs, Small and Medium Enterprises (SMEs) have been seen as one of the key engines to sustain economic growth in Thailand. Although business failure were studied widely for big enterprises to identify the signs or early detection symptoms that lead to potential business failure or developing financial difficulty, Thai SME sector has not received sufficient research attention despite the recent trend of emphasis on SMEs (Bàkiewicz, 2005). Therefore, this study aims to fill this gap in the literature regarding Thai small and medium-sized enterprises and their financial restructuring. The purpose of the study is twofold, firstly to distinguish the similarities or differences between financially distressed SMEs and financially non-distressed SMEs in Thailand with respect to their financials such as liquidity, financial leverage and profitability; secondly to analyze the turnaround of financially distressed SMEs one year after the insolvency (i.e. being in the Central Bankruptcy Courts in Thailand) in terms of their financials.

The remainder of the paper is as follows: Section 2 discusses literature briefly while Section 3 focuses on the Thai context of SMEs and their restructuring. Section 4 provides data and hypotheses of the study and Sections 5 discusses on research method. Finally, Section 6 concludes the findings and implications therein.

2. Literature Review

SMEs are identified in a number of ways considering different aspects of the internal structures of the businesses. The size of total assets, amount of fixed assets, total assets in the balance sheets, total sale volume or some combination of these factors has mostly been employed to identify SMEs. However, the number of employees is

considered to be the most frequently identifying factor used in many countries (Asian Productivity Organization; Storey, 1994). For instance, the definition of the European Commission states that small and medium-sized enterprises are firms that employ less than two hundred and fifty staff and have an annual turnover not exceeding €50 million or an annual balance sheet total not exceeding €43 million (European Commission, 2003). The definition of SME as used by the new Basal Capital Accord considered those businesses with a sales volume of less than US$65 million as SMEs (Altman & Sabato, 2007). In the USA businesses are classified as very small enterprises if they employ less than twenty staff, small enterprises if they employ less than one hundred staff, and medium enterprises if they employ less than five hundred employees (Office of Advocacy, 1984). Within the manufacturing business sector of Australia, small enterprises are those that employ less than one hundred staff with medium enterprises being those firms that employ less than two hundred staff (Holmes & Kent, 1991; Meredith, 1982). The nations of China, Indonesia, Japan, Korea, Malaysia, and Singapore also utilized the number of employees as the basis for the classification of firms, however with different levels of employment size as cut off points (Khader & Gupta, 2002). Thus, it can be argued that where both categories of the value of fixed assets and the number of employees are placed, the firm is either a small or a medium one; the lower of the two will determine how the enterprise should be classified (Institute for Small and Medium Enterprises Development, 2006)

A considerable number of studies have focused largely on the incidence of bankruptcy in various settings. There has been advanced empirical research attempting to develop models using the financial data of firms that appear successful and those firms that fail or become bankrupt, such as the research by Beaver (1966), Altman (1968, 1983, 1993, 2007), Deakin (1972, 1976), Edmister (1972), Berryman (1982), Fulmer, Moon, Gavin and Ervin (1984). However, very little research has been undertaken on financial distress probability of the firm, in particular focusing on SMEs. Moreover little attention has been paid to creating a model to calculate the credit risk for SMEs (Altman & Sabato 2007; Altman, Sabato, and Wilson, 2008). Such study is warranted to predict the failure of SMEs as SMEs tend to exhibit risk characteristics that differ from those of large corporations (Chan & Chen, 1991; Holmes & Kent, 1991; Hutchinson & Michaelas, 2000; Walker & Petty, 1978). Of particular interest is predicting business failure, which has been a major concern of researchers for several decades (Ahn, Cho & Kim, 2000). While the study of business stability has been the major focus of many researchers (Altman & Sabato, 2007; Altman, Sabato, & Wilson, 2008), some researches focus on identifying financial characteristics of SMEs (for example, Dennis, 1993; English, 2001; Hall, Hutchinson, & Michaelas, 2000; Hatten, 1997; Holmes, Hutchinson, Forsaith, Gibson, & McMahon, 2003; Holmes & Zimmer, 1994; Huang & Brown, 2000; Hutchinson, Meric, & Meric, 1988; McMahon, Holmes, Hutchinson, & Forsaith 1993; Chittenden, Hall, & Hutchinson, 1996), while others concentrate on the financial characteristics of large corporates (such as, Bei and Liu, 2005; Chan & Chen, 1991; Holmes & Kent, 1990; Shu-e & Li, 2005; Walker & Petty, 1978).

With considerable economic significance of SMEs the need to understand the underlying reasons for SME failure has attracted research attention in recent times. Of further interest is the need for the comprehension of the difficulties required to be successfully solvent and the measures to be employed and their outcomes during the restructuring process to enhance the financial stability of the business. This study will, thus, shed light on financial distress of Thai SMEs and their subsequent restructuring and turnaround atmosphere through analyzing relevant financial characteristics of selected SMEs. This study is particularly concerned on the firms that have gone through the court-supervised restructuring process, so the SMEs that filed a petition with the Central Bankruptcy Court during 2002–2005 for corporate restructuring have been selected.

3. Thai Context of SMEs and Their Restructuring Process

SMEs are fundamental units of the Thai economy, constituting over 99 per cent of the total number of enterprises in the country (Office of SMEs Promotion 2007). In Thailand, SMEs are categorized by three major features: production, service and trading and they are classified as small or medium enterprises through the amount of fixed assets, excluding land, and the number of employees (see Table 1).

Table 1 Size Classification of Small and Medium Enterprises in Thailand

Sector	Small Enterprise		Medium Enterprise	
	Employment (no. of people)	Fixed assets (Million Baht)	Employment (no. of people)	Fixed assets (Million Baht)
Production	≤ 50	≤ 50	51 - 200	> 50-200
Service	≤50	≤ 50	51 - 200	> 50-200
Trading:				
Wholesale	≤25	≤ 50	26-50	> 50-100
Retail	≤15	≤ 30	16-30	> 30-60

Source: Institute for Small and Medium Enterprises Development (2006)

The importance of SMEs in job creation and stimulating economic growth has been recognized (Bàkiewicz, 2005; Veskaisri, 2007). As a result of this recognition, the issue of sustainability of SMEs has been getting momentum as a significant factor in the development of government policies. Although Thai Government has implemented policies to enhance the capability of SMEs, the problem of SMEs potential failure still persists. The committee for the Promotion of SMEs summarized the obstacles faced by Thai SMEs in four main categories: limited financial access, the loss of competitive advantage, the lack of good corporate governance, and ineffective support from the government (Office of SMEs Promotion 2006 and 2007). The financial aspect of SMEs failure has attracted particular policy attention in Thailand since the financial crisis of 1997. At this time, the percentage of non-performing loans (NPLs) to total credits of the country's financial system hit 47.7 per cent, which is the highest in the history of the country (Bank of Thailand 2008). This crisis triggered the Government's greater concern for economic recovery and growth (Bàkiewicz, 2005; Swierczek & Ha, 2003). The Thailand Ninth National Economic and Social Development Plan (2001–2006) (Thai 9th NESDP; Office of The National Economic and Social Development Board 2001) emphasized the concern for economic development, which promoted and encouraged a focus on SMEs development. The Thai Government, through the Office of SMEs Promotion (OSMEP), formulated the 1st SMEs Promotion Plan (2002-2006) that aimed at resolving the effects of the economic crisis and supporting the revival of SMEs.

Restructuring Process

In Thailand, stressed assets are seen as non-performing loans (NPLs) on the financial statements of the Thai financial institutions. The number of NPLs has substantially increased since the 1997 economic crisis; this has resulted in numerous corporate failures and a record number of NPLs in the financial system (Vongvipanond, 2004). Corporate financial restructuring is the preferred way used to satisfy both debtors and creditors. Such restructuring involves substantial changes in a company's financial structure or ownership and control, and possibly the internal business portfolio with the intention of increasing the value of the firm. The proper restructuring of stressed assets and liabilities may allow potentially successful companies to continue their business activities and survive the financial crisis (Giddy, 2010).

There are two methods available for pursuing the restructuring process in Thailand since its introduction into the Thai economy: (i) out-of-court restructuring and (ii) court-supervised restructuring (Bank of Thailand, 2001; Dasri, 2001). There are several organizations involved in the out-of-court process to assist the distressed firms to financially recover such as the informal restructuring within financial institutions, the Corporate Debt Restructuring Advisory Committee (CDRAC), the SET-Rehabco Restructuring as established by the Stock Exchange of Thailand (SET) and the asset-management companies (AMCs) (Dasri, 2005; Rroude, 2005). However, highly distressed firms may require more complex restructuring methods offered through the court process rather than the out-of-court procedures. Once the Court approves the petition, the process of restructuring then takes place. The method that is frequently used in the debt restructuring process, in both out-of-court and court-supervised restructuring processes, is a combination of a number of alternatives, such as the extension of the loan period with or without a grace period for the

principal or interest and/or debt forgiveness. This can also include the conversion of debt to equity through the transfer of the debt burden to an affiliated company, the conversion of the debt to convertible debenture and the transfer of other assets such as investment capital, claims on debtors, zero coupon bonds, office buildings, real estate, machinery, houses, and golf courses to an affiliated company. The distressed firms may also receive a continuation of their current credit line or a credit guarantee. The restructuring plans, such as the extension of a loan period in which some of the obligations are extended, ensure that businesses have a greater or increased cash flow, and in case that restructuring had been offered exemption of an interest expense with a grace period of between 1-3 years, or debt forgiveness in some portions of total debts, which further enhances cash flow into the businesses and enables the businesses to pay financial obligations as they come due. Together with having a normal credit line or increasing the credit line ensures that the business continues growing, and eventually regaining financial success. However, if the court does not approve the restructuring plan or terminates the reorganization, with orders of absolute receivership, the debtor undergoes bankruptcy procedures. The successful implementation of the restructuring process has been the major key to assist businesses to return to normal financial activity.

4. Hypotheses and Data

In this study, the term 'financially distressed firm' is used to refer to businesses that were involved in the Central Bankruptcy Court actions such as internal reorganization, financial re-arrangement or receivership, or the firms that were unable to pay their financial obligations as they mature. The characteristics of such financially distressed firms are (i) firms showing low liquidities with their current liabilities greater than their current assets, (ii) firms with high debts, where their total liabilities greater than their total assets or firms with negative equities, (iii) firms having low or negative profitability by the end of their financial year. It also employed the use of financial ratios to distinguish between the two focus groups of firms, financially distressed and non-distressed firms, and to examine the turnaround performance of restructuring in the distressed firms. It is thus worthwhile to examine the financials of both groups of firms with respect to three different categories of liquidity, leverage and profitability. The following hypotheses are set for the research purpose.

H_1: There are significant differences in financial ratios between the Thai financially distressed and financially non-distressed SMEs. That is,

- $H_{1.1}$: Liquidity of the Thai financially distressed SMEs is less than that of non- financially distressed SMEs.
- $H_{1.2}$: Financial leverage of the Thai financially distressed SMEs is greater than that of non- financially distressed SMEs.
- $H_{1.3}$: Profitability of the Thai financially distressed SMEs is less than that of non-financially distressed SMEs.

H_2: After the restructuring, there is significant improvement in financial ratios in the Thai turnaround SMEs who were in financial distress in terms of liquidity, leverage and profitability. That is,

- $H_{2.1}$: Liquidity of the Thai turnaround SMEs increases after the restructuring.
- $H_{2.2}$: Financial leverage of the Thai turnaround SMEs decreases after the restructuring.
- $H_{2.3}$: Profitability of the Thai turnaround SMEs increases after the restructuring.

In regards to the first hypothesis, it is anticipated that financially distressed SMEs are significantly different from that of financially non-distressed SMEs. As the distressed SMEs are facing financial difficulty, it is expected that they would have less liquidity and profitability and high leverage compared to non-distressed SMEs. The second hypothesis relates to the changes over time as the financially distressed SMEs go through the court guided restructuring process. By taking the financial ratios of companies for base year and one year after the restructuring, it is expected that there is an increase in their liquidity and profitability and a decrease in financial leverage in the post-restructuring period as compared to the pre-restructuring period.

The samples of financially distressed firms in this study were selected from firms that went through the Central Bankruptcy Courts (CBC), Thailand during 2002–2005 periods. It is conceivable that all the firms going through the courts would have the status of a non-performing loan (NPL) at the time of entering the court procedure for restructuring. The firms being selected for this study were showing low liquidities, low profitability, and high debts at the time they went to the courts for restructuring. However, the future of these firms, whether it is a business collapse or financial failure or bankruptcy, depended on the progress of their restructuring of loans and plans for improving their financial performance and success in other related factors. Again, the criteria chosen to classify the size of the business was the asset size gained from the consideration of the balance sheets together with considering the recommendation of the European Commission that the annual balance sheet (or total assets) of enterprises should not exceed €43 million (or THB 2,000 million (x-rate.com, 2006)) being classified as small and medium-size enterprises (European Commission 2003). This chosen criteria is also consistent with the information of the Market for Alternative Investment (MAI) listed companies which are considered as Thai medium-sized enterprises, with each company not having a total amount of assets on the balance sheet over THB 2,000 million (Market for Alternative Investment 2007). Therefore, in this study, the business with an asset size THB 2,000 million or less is classified as small and medium.

Following the above criteria, the list of the distressed firms was obtained from the website of the Legal Execution Department, Ministry of Justice, Thailand (http://www.led.go.th). The financial statements were then obtained from the website of the Department of Business Development (DBD), the former Ministry of Commerce, Thailand (http://www.dbd.go.th). In total the financial data is gained from the balance sheets and income statements of 68 financially distressed companies that went into the Central Bankruptcy Court during the period 2002–2005 for restructuring. Similarly, financial data of 191 financially non-distressed firms were obtained directly through the website of the DBD for the same period. Both 68 financially distressed and 191 non-distressed SMEs constitute the gross sample size of this study totaling 259 SMEs. However, this unadjusted data (including all outliers) is later trimmed by excluding outliers from both groups of firms, which leaves the final sample as 42 financially distressed, 174 financially non-distressed SMEs to a total of 216 SMEs.

5. Research Method

In regards to variable selection and methodology applied, this study provides an analysis of financial ratios to enhance the ability to differentiate the financial characteristics of financially distressed from non-distressed Thai SMEs as well as examine the changes over time of the distressed firms' financial ratios of base year and one year after being in the court, using 0.05 at the significance level. A comparative statistical description of eight variables is used in this paper for distressed and non-distressed firms. Both parametric (independent and dependent paired sample T-test) and non-parametric (Mann-Whitney U test and Wilcoxon signed rank test) methods are used to analyze the eight variables in order to find the significant differences between the two sample groups. Since the variables do not show normal distribution, the non-parametric approach using the Mann-Whitney U Test is considered the best approach to record the similarities and/or differences of financially distressed and non-distressed SMEs. Similarly, the nonparametric method, the Wilcoxon Signed Rank Test, is used and considered the best fit to observe the changes over time in distressed firms between their base year of court proceedings for restructuring and one year after being in court procedures.

Table 2 presents selected variables for the analysis and comparison between the financially distressed and non-distressed firms, and between the distressed firms with a lag of 1 year from their base

year of court proceedings for restructuring. These independent variables are most commonly used by previous studies, which may be divided into three categories: 1) Liquidity, 2) Leverage and 3) Profitability.

Table 2 Variable Definition

Variables	Calculated as:
Measures of liquidity:	
1. Current assets to total assets ratio (CATA)	The amount of cash, account receivables, bills, inventory and other current assets as a percentage of total assets.
2. Current liability to total assets ratio (CLTA)	The amount of account payables, and other short-term liability as a percentage of total assets.
3. Working capital to total assets ratio (WCTA)	The current assets less current liability as a percentage of total assets.
Measures of financial leverage:	
1. Long-term liability to total assets ratio (LLTA)	The amount of long-term liabilities as a percentage of total assets.
2. Total liability to total assets ratio (TLTA)	The amount of short-term and long-term liabilities as a percentage of total assets.
3. Debt to equity ratio (DE)	The amount of debt divided by equity.
Measures of profitability:	
1. Earnings before interest and tax expenses to total assets ratio (EBITTA)	All earnings before interest and tax expenses as a percentage of total assets.
2. Earnings after interest and tax expenses to total assets ratio (EAITTA)	All earnings after interest and tax expenses as a percentage of total assets.

6. Empirical Results and Discussion

Table 3 documents the comparisons between distressed and non-distressed SMEs for the adjusted sample (outliers excluded) of 42 and 174 firms, respectively. It reveals high level of satisfactory liquidity ratios of non-distressed SMEs as compared to the distressed firms, which are more than double in the former firms than the latter firms. The average of CATA ratio is 73.67 for non-distressed SMEs and 40.71 for distressed SMEs. Similarly, WCTA ratio is 35.54 for non-distressed firms and -46.78 for distressed ones. Also CLTA ration is 38.13 for the former and 87.49 for the latter. All these ratios indicate significant differences between distressed and non-distressed firms as reflected in their financials. As expected, profitability ratios of non-distressed SMEs are positive against negative ratios for distressed SMEs. EBITTA and EAITTA ratios are 13.24 and 8.88 respectively for the former while -12.14 and -28.38 for the latter. Such levels can explain the extensity of financial distress of the negative profit-earning firms in Thailand when compared with their counterpart in financially solvent firms. Likewise, the same pattern is reflected in leverage ratios for both groups of firms and the high level of ratios for distressed firms than non-distressed. Debt-equity ratio is negative for distressed firms (-3.13) but positive for non-distressed firms (1.64). Both total liability and long-term liability to total asset ratios are exceptionally high in distressed firms, 160.53 and 73.04 respectively. These ratios are 46.62 and 8.49, in non-distressed firms respectively. Overall, differences in liquidity ratios are huge between both groups of firms that explicitly explain the circumstances that each group is facing in Thailand.

Table 3 Descriptive Statistics of Thai Financially Distressed and Non-distressed SMEs

Variable	Non-distressed SMEs		Distressed SMEs	
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**
Liquidity				
1) CATA	73.6716	22.4105	40.7107	27.4344
2) CLTA	38.1278	24.8029	87.4880	61.2530
3) WCTA	35.5440	21.9308	-46.7774	65.4858
Leverage				
4) LLTA	8.4876	16.0430	73.0424	68.0272
5) TLTA	46.6151	25.5493	160.5304	54.4584
6) DE	1.6466	1.9827	-3.1303	5.9675
Profitability				
7) EBITTA	13.2424	9.1235	-12.1419	44.9312
8) EAITTA	8.8759	6.6189	-28.3778	63.8593

Number of sample: 174 Non-Financially distressed SMEs
: 42 Financially distressed SMEs

Table 4 provides comparison of financially distressed SMEs between their base year of court procedures for restructuring and one year after going to the court. It is documented that five out of eight variables have improved after being in court restructuring process. In particular, both liquidity and profitability ratios show significant change as compared to their levels in base year. Among the liquidity rations, both CLTA and WCTA ratios improved from 87.49 to 72.04 and -46.78 to -31.32, respectively. CATA ratio remains in the same level. Similarly, profitability ratios EBITTA and EAITTA improved from, -12.14 to 15.14 and -28.38 to 7.64, respectively. Of the leverage ratios, only debt-equity ratio has made progress from -3.13 to -2.19, while other two ratios (i.e. LLTA and TLTA) have deteriorated from their previous levels. While such deterioration of leverage ratios is not surprising during the period of restructuring process, other ratios indicate performance improvement in terms of profitability and liquidity. These results signify the effectiveness of court directed restructuring process of SMEs in Thailand to get rid of financial distress and in some cases bail them out from severe financial difficulties and poor performance.

Table 4 Descriptive Statistics of Financially Distressed SMEs base-year and 1-year after the Court Directed Restructuring process

Variable	Base year of the court process		One year AFTER the court process	
	Mean	**Standard Deviation**	**Mean**	**Standard Deviation**
Liquidity				
1) CATA	40.7107	27.4344	40.7146	29.4819
2) CLTA	87.4880	61.2530	72.0375	87.1358
3) WCTA	-46.7774	65.4858	-31.3229	99.0346
Leverage				
4) LLTA	73.0424	68.0272	94.8063	85.4017
5) TLTA	160.5304	54.4584	166.8438	91.4711
6) DE	-3.1303	5.9675	-2.1910	4.0283
Profitability				
7) EBITTA	**-2.6290**	**17.5845**	15.1387	52.0591
8) EAITTA	**-9.5674**	**18.1872**	7.6441	57.9067

Number of sample: 42 Financially distressed SMEs in base year of being in the court
: 42 Financially distressed SMEs one year **AFTER** being in the court

Table 5 denotes comparative results of the financial ratios of financially distressed and non-distressed SMEs following parametric T test and non-parametric Mann-Whitney U Test. Given that the latter test is more reliable than the former in the sample of not normally distributed for both groups of firms, both tests show that for liquidity, leverage and profitability ratios, there is a statistically significant difference within each variable in interest, a total of eight variables. The characteristics of the financially distressed SMEs are shown to be having low liquidity, high leverage and low profitability while the non-distressed SMEs demonstrate a sound financial profile in the opposite direction having high liquidity, low leverage and high profitability. All eight variables show significant difference between financially distressed and non-distressed SMEs in both parametric and non-parametric tests. Therefore, the first hypothesis of the study including all sub-hypotheses ($H_{1.1}$, $H_{1.2}$, and H1.3) is accepted.

Table 5 The Comparative Result of Financially Distressed and Non-distressed SMEs

Variable	Parametric Independent Paired Sample T-Test				Nonparametric Mann-Whitney U Test	
	Unadjusted data		*Adjusted data*		*Unadjusted data*	
	Sig. (2-tailed)	*Result*	*Sig. (2-tailed)*	*Result*	*Asymp. Sig. (2-tailed)*	*Result*
Liquidity						
1) CATA	.000	***	.000	***	.000	***
2) CLTA	.000	***	.000	***	.000	***
3) WCTA	.000	***	.000	***	.000	***
Leverage						
4) LLTA	.000	***	.000	***	.000	***
5) TLTA	.000	***	.000	***	.000	***
6) DE						
Profitability						
7) EBITTA	.000	***	.000	***	.000	***
8) EAITTA	.000	***	.000	***	.000	***

*** Significant at .1% level (0.001)

Table 6 reports comparative results of financially distressed SMEs between their base year of the court process of restructuring and one year after the court process to indicate whether distressed firms could be able to turnaround from financial difficulties by showing satisfactory performance in their liquidity, profitability and leverage, etc. As the restructuring process has been implemented though the court process, the overall performance of distressed firms is expected to improve such as an increase in liquidity ratios along with profitability and decrease in leverage ratios. Contrary to expectation, both parametric T test and non-parametric Wilcoxon ranked Test in Table 6 provides inconsistent findings. While parametric test indicates no significant change in the financial ratios of liquidity, profitability and leverage in the distressed SMEs between their base year of the court process of restructuring and one year after the court process, non-parametric test shows significant change in profitability ratios and debt-equity ratio only. Two of the three liquidity ratios show a weak level of significant change at 10% significance level. This implies that the court process does not improve the liquidity of distressed firms as per expectation; thus sub-hypothesis$_{2.1}$ is partially accepted. Similarly, two of the three leverage ratios reveal no significant changes between the base year and the year after being in court; thus sub-hypothesis$_{2.2}$ is rejected. Given the non-satisfactory change of performance in liquidity and leverage ratios, with surprise it is revealed in the nonparametric test that the profitability ratios of distressed firms are significantly different between the base year of the court process of restructuring and one year after the court process accordingly; therefore sub-hypothesis$_{2.3}$ is accepted. Overall, it is plausible to say that, unlike the first hypothesis, the second hypothesis of the study is partially accepted.

Table 6 Comparative Result of Financially Distressed SMEs in base-year and 1-year after the Court Directed Restructuring Process

Variable	Parametric Independent Paired Sample T-Test				Nonparametric Wilcoxon Ranked Test	
	Unadjusted data		*Adjusted data*		*Unadjusted data*	
	Sig. (2-tailed)	*Result*	*Sig. (2-tailed)*	*Result*	*Asymp. Sig. (2-tailed)*	*Result*
Liquidity						
1) CATA	.153	NS	.999	NS	.130	NS
2) CLTA	.141	NS	.268	NS	.095	*
3) WCTA	.125	NS	.277	NS	.062	*
Leverage						
4) LLTA	.221	NS	.100	*	.422	NS
5) TLTA	.707	NS	.666	NS	.932	NS
6) DE	.571	NS	.376	NS	.020	**
Profitability						
7) EBITTA	.094	*	.031	**	.007	***
8) EAITTA	.090	*	.064	*	.011	***

*** Significant at .1% level (0.001)
** Significant at 1% level (0.01)
* Significant at 5% level (0.05)
NS: Not significant

Thus, in regards to first hypothesis it can be concluded that in the context of Thai SMEs there are significant differences between the financially distressed and non-distressed firms in terms of their financial ratios such as liquidity, profitability and leverage. This signifies the severity of financial difficulties as well as performance of distressed firms. It is documented that financial distress starts from not being able to service debts and payables in due course and for not having sufficient liquidity and/or profitability. While non-distressed firms may have high leverage ratio similar to distressed firms, that leverage can be served with their sufficient level of liquidity and/or profitability. Sometimes liquidity appears to be more important than profitability when profit is not readily converted into cash flows. Also liquidity depends on proper management of inventory procurement and short sales revenue recovery. Unlike non-financially distressed firms, financially distressed ones are lacking in these respects to repay liabilities in time and face severe consequences. On the contrary, following the second hypothesis it can be said that financially distressed SMEs in Thailand takes longer time to show turnaround from poor performance once they are in the court process of restructuring. One year after the restructuring process, they show moderate improvement in their financials. Except profitability, other areas of financials do not indicate massive change through restructuring process. There may be some other reasons for improving profitability, which are beyond the scope of this study. Conceivably different financials have not shown consistency and expected satisfactory performance change in distressed firms in the periods before and after the restructuring. Turnaround has no hard and fast time limit which may occur between 1 to 5 years period depending on internal and external environments of the firm. When both internal and external environments are favorable to a firm, it takes a shorter time period to turnaround from restructuring stage and to run as a normal business and vice versa. The evidence of this study indicate that for Thai distressed SMEs turnaround requires longer time, that is, more than one year time. One year after restructuring is not sufficient as they are in need of government support to get rid of financial obstacles and to show expected satisfactory performance to contribute to the economy. Their internal environment is not sufficient to overcome financial difficulty without assistance from external environments.

7. Conclusions and Implications

Business failures occur worldwide, which are more prevalent in SMEs than big enterprises. Prior studies document substantial benefits of SMEs to all financial systems of developed and emerging economies. To maintain potential benefits from SMEs as the main driving force of the economy, there are incentives to support them and to keep them out of financial difficulties for sustainable economic progress of the country. This study undertakes to empirically establish the similarities

and/or differences in the financial characteristics between the financially distressed and non-distressed SMEs in Thailand as one of the two main objectives. These characteristics are regarding liquidity, financial leverage and profitability as investigated through the use of both parametric (independent paired sample T-Test) and non-parametric (Mann-Whitney U Test) tests. Another objective is to examine the turnaround of the distressed firms that have gone through the court process of restructuring to assist the enterprises to recover from their financial difficulty. To observe the changes over time between the base year of restructuring and one year after being in court process, both parametric (independent paired sample T-Test) and non-parametric (Wilcoxon Ranked Test) tests.

In regards to findings, it is observed that there exist statistically significant differences between the financially distressed and non-distressed SMEs, where distressed firms demonstrate less liquidity, less profitability and highly leverage ratios as compared to non-distressed firms. These results are as per expectation and consistent to the findings of prior studies. However, contrary to expectation, distressed SMEs do not show satisfactory progress in the aforementioned financial ratios except profitability after one year of going through the court directed restructuring process. This provides evidence that restructuring takes longer time in Thai SMEs to turnaround from financial difficulties and poor performance.

The implications of the study in the context of an emerging economy like Thailand is to provide continued support and assistance that can ensure a speedy financial recovery of distressed SMEs as well as insure the positive effect of being financially restructured firms for the economy. While financial institutions and small enterprise owner-manager are the parties most actively involved in this process, suggestions regarding the financial aspects for the recovery of an enterprise can be provided to all other interested parties to ensure that the restructuring process is worthwhile. Similarly, fundamental characteristics of the business should be considered; as well as the strong and weak points of the company; management and shareholders and lenders interest should also be considered as there is a potential for conflict of interest among these parties (Giddy, 2010; Miller, 1977; Modigliani & Miller, 1958).

Future research may be built up on the limitations of the current study. Firstly, the sample size selected in this study is limited, hence may not be a true representation of the entire number of distressed firms. Therefore, a larger sample size of firms should be undertaken in future studies. Secondly, the number of variables is also limited to three areas of financials and the wide range of other variables including non-financial data may assist the researcher to find better characteristics that will explain the financial distress of the firm. Thirdly, in regards to the second objective of the study, the time length after the firms have gone through the court directed restructuring process is too short and should be extended beyond one year as the financial profiles of the SMEs failed to generate a speedy turnaround by showing non-satisfactory progress in financial ratios except profitability. It is also worth looking for other reasons of improvement in profitability ratios while other financials reveal a weak power of change between base year and one year after the restructuring process. Added to this is the fact that the sample was taken from different periods of time with unequal financial pressures due to the differences in the overall economic climate, legal assistance and programs as well as research methods and techniques on which future research studies may look at from different perspectives not covered in this study in order to enhance the body of knowledge.

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