Corporate Governance and Company Survival

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Abstract

The main purpose of this paper is to review the literature on the empirical methodologies utilized in bankruptcy prediction and the potential predictors of firm surviving. The paper has reviewed and briefly discussed previous literature examining firm survival or failure in various countries *e.g.* Australia, China, Germany, Taiwan, U.S.A. and Thailand using various research methodologies such as logistic regression, multivariate discriminant analysis, neural network, survival analysis and *etc*. These studies have been conducted both within the qualitative and quantitative framework. It can be seen that previous studies have been using various empirical methodologies in exploring the issue regarding company survival. Future research could improve upon this current research in various aspects. Some doubts may cast on the appropriateness of model specification and the omission of important variables in previous studies. Thus, more future research incorporated other feasible variables is needed for model validation. The examples of those possible variables are the qualitative variables *e.g.* ownership structure data, specifically, gender, education and attitudes.

Key Words: Company Survival; Corporate Governance

Introduction

The prediction of firm's financial distress or corporate survival analysis has been of considerable interest to accountants and financial economists over the last three decades. Since financial distress affects a firm's entire existence and results in a huge cost to the firms, the society and the country's economy, prediction of firm's financial distress is crucial for all those involve; owners or shareholders, managers, employees, lenders, suppliers, clients, the community and the government. Interest in corporate financial distress prediction or corporate survival analysis has grown rapidly in recent years with the global increase in the number of corporate collapses such as the Asian financial crisis in 1997, HIH Insurance Australia in 2001, the Enron and WorldCom collapse in the US in 2001 and 2002, respectively.

These collapses often result significant direct and indirect costs to many stakeholders including shareholders, managers, employees, creditors, investors, stockholders, auditors, suppliers, customers and community. For example, the collapse of HIH entailed huge individual and social costs, as the HIH group comprises several insurance companies and was a major provider of all types of insurance in Australia (Leung and Cooper, 2003). The deficiency of the group was estimated to be between \$3.6 billion and \$5.3 billion, 200 permanently disabled people were left with no regular income payments, retirees with superannuation in HIH shares saw their investment disappear and several non-profit organizations were liquidated by the collapse (Commonwealth of Australia, 2003).

When company entered into financial distress, the significant costs including direct and indirect cost have occurred (Altman and Hotchkiss, 2006). The impact of such events on owners, shareholders, managers, employees, lenders, suppliers, clients, the community and the government is horrendous. According to Altman (1983), financial distress can cause direct and indirect costs to the firm. Direct costs are the tangible, out of pocket expense of either liquidity or attempting a reorganization of the ailing enterprise. These include bankruptcy filing fees and legal, accountants' fee and other professional service costs such as lawyers' fee.

The primary indirect cost is the lost sales and profits of the firm due to the perceived potential bankruptcy. These losses are primarily from customer reluctance. Customers often need assurance that firms are sufficiently stable to deliver on promises and will be reluctance to buy from a firm that may fail. Similarly, the potential of financial distress of firms will affect the relationship between the firm and the suppliers. Suppliers providing goods and services on credit are likely to reduce the generosity of credit terms or even stop supplying. In financial distress situation, employees may become demotivated as job insecurity perception. Furthermore, the high potential staff will start to move to another safer enterprise. The additional indirect cost is the lost of managerial time and opportunity cost. The management has to spend daily time in dealing with liquidity problems and focusing on short term cash flow rather than long term shareholder wealth.

In addition to the economic costs result from corporate failure, there exist the social costs relating corporate collapse. Argenti (1976) pointed that corporate collapse has always brought fearful mental pain to proprietors, entrepreneurs, managers and their families. Failure ruins lives, destroys the health of its victims, pushes the victims into the edge of suicide and beyond. It can be seen that the failure companies entail significant direct and indirect costs to many stakeholders. Many of the costs may be avoided if ones can identify the factors and the survival probability of the company.

The reason why firms succeed or fail is perhaps the central question of strategy (Porter, 1991). Since corporate governance is the system by which companies are directed and controlled and board of directors are responsible for the governance of the companies and develop firm's strategy (Pass, 2004), then it is expected that corporate performance and survival is affected by corporate governance attributes. The Asian financial crisis in 1997 highlighted the importance of good corporate governance for the long-term survival of companies. The recent economic crisis of Thailand has been claimed to be connected to the poor quality of corporate governance and the crony economy (Alba et al., 1998; Dhnadirek and Tang, 2003; Limpaphayom and Connelly, 2004).

The 1997 financial crisis result in the government shuttered fifty-six finance firms. Several banks closed, either taken over by the government or merged into larger rivals. Several of remaining banks were forced to seek strategic foreign investors to speed their recovery. The weak of corporate governance practices played a major role in these difficulties (Limpaphayom and Connelly, 2004). Consistently, Johnson et al. (2000) pointed that in the countries with weak corporate governance, worse economic prospects result in more expropriation by managers and thus a larger fall in asset prices. The Bangkok Bank of Commerce is a well-documented example of expropriation by managers that worsened as the bank's financial troubles deepened.

There exist a number of studies explored the influence of corporate governance attributes on corporate performance and suggested that the corporate governance variables significantly influence the performance of a company in Thailand. The significant corporate governance attributes suggested by previous studies affect corporate performance such as ownership concentration (Alba et al., 1998; Dhnadirek and Tang, 2003), family-controlled characteristics (Suehiro, 2001; Wiwattanakantang, 2001), board composition (Connelly and Limpaphayom, 2004) and managerial ownership (Kim et al., 2004).

If corporate governance influences corporate performance, then it is expected that corporate governance attributes affect the likelihood of corporate survival (Goktan et al., 2006). In Thailand, however, there is a lack of corporate governance studies focusing on long-term survival of the company. Accordingly, this study will explore the influences of corporate governance structures on company survival in Thai context. Corporate governance has become a prominent topic over at least the last two decades. One of the reasons for this prominence is the events of a series of recent USA scandals and corporate failures of the late 1990s (Becht et al., 2002).

Prior literature suggests that many corporate governance structures are associated with corporate survival. For example, Parker, Peters and Turetsky (2002) reported that the auditor is less likely to issue a going concern modification to the company in the presence of employee audit committee members, greater insider ownership and blockholder ownership. By investigating 176 financially distressed firms, Parker, Peters and Turetsky (2002) suggested firms that replaced their Chief Executive Officer (CEO) with an outsider were more than twice as likely to experience bankruptcy. Furthermore, the results suggested positive relationship between likelihood of firm survival and larger levels of blockholder and insider ownership.

The failure of business unit causes significant direct and indirect costs which are the business unit that plays significant roles in the economy. The model that could be used as an early warning signal of failure is essential. Therefore, the main purpose of this paper is to review the literature on the empirical methodologies utilized in bankruptcy prediction and the potential predictors of firm surviving. The paper is divided into four sections start with the introduction. The following section presents literature on corporate governance. Then, we discuss the relationship between corporate governance structure and corporate survival. Finally, we provide the conclusions.

Empirical Research on Corporate Governance

Corporate governance is the system by which companies are directed and managed. It influences how the objectives of the company are set and achieved, how risk is monitored and assessed and how performance is optimized. Good corporate governance structures encourage companies to create value through entrepreneurism, innovation, development and exploration and provide accountability and control systems commensurate with the risks involved (ASX, March 2003).

Corporate governance has become a prominent topic over at least the last two decades. The reason for this prominence are a number of events such as the worldwide wave of privatization of the past two decades, pension fund reform and the growth of private savings, the takeover wave of the 1980s, deregulation and the integration of capital markets, the 1998 East Asia crisis, which has put the spotlight on corporate governance in emerging markets, a series of recent USA scandals and corporate failures of the late 1990s (Becht et al., 2002).

The corporate collapses of the late 1990s highlighted the need for good corporate governance and financial reporting quality. There exist various studies explore corporate governance aspects in relation to corporate performance in various countries. For example, Balatbat, Taylor and Walter

(2004) found that board composition measured by outsider ownership is not related with Australian IPOs operating performance while independent board leadership structure is associated with better company's performance. The consistent finding about the influence of CEO duality on corporate performance also is found in Bai et al. (2004) and Li and Naughton (2007) which focus the studies in Chinese context.

In Chinese companies context, Hovey, Li and Naughton (2003) confirmed that ownership concentration has little explanatory power but ownership structure has significant relationship with firm performance. However, Xu and Wang (1999) argued that the mix and concentration of stock ownership significantly affect a company's performance. Lehmann and Weigand (2000) also found that ownership concentration negatively affect the corporate profitability in German corporations. Furthermore, investigating ownership structure and corporate performance in the Czech Republic, Claessens and Djankov (1999) also found that the more concentrated the ownership, the higher the firm profitability and labor productivity.

In Thai context, there exist a numbers of studies examine the influence of corporate governance variables on corporate performance, for example, Alba, Claessens and Djankov (1998) investigated the relationships between ownership concentration, leverage and corporate performance of non-financial firms listed on SET. The empirical findings highlight the weaknesses in corporate governance and the risky corporate financing structures. Consistently, Dhnadirek and Tang (2003) investigated the status of Thai corporate governance system prior to the 1997 financial crisis focus on firms in the finance industry and suggested solving ownership concentration problems should be the first priority in strengthen Thai corporate governance systems.

In contrast, Suehiro (2001) explored the relationship between ownership patterns, corporate structure and economic performance in listed Thai companies between 1996 and 2000. The major finding is that family businesses were not a major cause of the financial distress. The similar results also found in Wiwattanakantang (2001) which investigated the effects of controlling shareholders on corporate performance and suggested that family-controlled firms display significantly higher performance. Furthermore, Yammeesri, Lodh and Herath (2006) examined the effect of ownership structure on corporate performance of Thai non-financial firms between 1993 and 1996 and reported the positive association between concentrated ownership and firm performance. The results show that different types of concentrated ownership have positive relationships to performance measures.

Sukcharoensin (2003) provided three assays of corporate governance and corporate performance in Thailand. First, the effect of the board independence on firm performance in contingent on the ownership structure of the firm was investigated. Secondly, the relationship between audit committee independence and firm performance was examined. Finally, the effect of the announcement of corporate director changes on the company's stock price is explored. Overall results suggest that an independent board member of Thai listed firms is important factor in explaining corporate performance.

Limpaphayom and Connelly (2004) reviewed corporate governance issue in Thailand and analyzed the relationship between corporate governance practices and firm performance. The results found a positive relationship between corporate governance rating and firm value measured by Tobin's Q ratio. The study confirmed that corporate governance practices can lead to high firm value.

Rather than focus on established companies in Thailand, Kim, Kitsabunnarat and Nofsinger (2004) examined corporate operating performance by focusing on the IPOs company. The study explored the association of managerial ownership and the post-IPO change in performance. The results found a curvilinear relationship between managerial ownership and corporate performance after going public.

By focusing the study on specific sector, Limpaphayom and Connelly (2004) examined the relationship between board characteristics and firm performance in life insurance companies in Thailand. The empirical evidences suggest that board composition is positively related to profitability and negatively related to the risk-taking behavior of life insurance firms.

However, board size is not significantly associated with firm performance.

It can be seen that various studies found the evidences support the importance of corporate governance in relation to corporate performance. In contrast, Weir and Laing (2001) investigated the relationship of corporate governance structure with corporate performance in the UK and suggested that there is no clear relationship between corporate governance and corporate performance. If corporate governance factors influence the performance of the company, then the governance attributes are expected to impact on the likelihood of company survival Goktan, Kieschnick and Moussawi (2006).

Prior literature suggests that many corporate governance structures are associated with financial distress or the likelihood of firm survival. For example, Lee, Yeh and Liu (2003) employed accounting, corporate governance and macroeconomic variables to construct a binary logistic regression model for the prediction of financially distressed firms. The percentage of directors controlled by the largest shareholder, management participation, and the percentage of shares pledged for loans by large shareholders are found to have positive relationship with the probability of financial distress.

Lee and Yeh (2004) utilized three corporate governance variables namely, the percentage of directors occupied by the controlling shareholder, the percentage the controlling shareholders shareholding pledged for bank loans and the deviation in control away from the cash flow rights to fit the dichotomous prediction models. The results suggested that three variables mentioned above are positively related to the risk of financial distress of Taiwan companies.

Goktan, Kieschnick and Moussawi (2006) examined the relation between corporate governance structures and the likelihood of a company going private, being acquired or going bankrupt. They found the evidence that corporate governance primarily influences whether a corporation is acquired or goes private but not whether it goes bankrupt. In order to reduce the agency cost, Yang and Sheu (2006) suggested that the equity stake owned by management, especially by top officers, of an IPO firm should be encouraged. Furthermore, they observed the U-shaped relationship between insider ownership and the survival time of Taiwan IPOs.

Rather than focusing on the established company survival, various studies have focused on IPOs company. IPOs refers to the first sale of stock by a private company to the public. The process of going from a private to a public company often begins when a young company needs additional capital to grow its business. In order to gain access to required capital, the firm will sometimes choose to sell an ownership stake or shares of stock to outside investors. This process results in several internal changes for IPOs company especially in ownership and governance structure and this is an opportunity of the firm to considering the optimal board structure that maximizing the market value of the company (Shekhar and Stapledon, 2007).

The survival of IPOs companies has been investigated by existing literature *e.g.* Cockburn and Wagner (2007) examined the effect of patenting on the survival of internet-related firms which going public during the dot-com boom after the late 1990s. The independent variables include industrial classification, financial data. firm's age, venture capital backed, firms' total assets, market environment and patent information. Using Cox's Proportional Hazard model, the results found that patenting is positively associated with survival controlling for age, venture-capital backing, financial characteristics, and stock market conditions.

Additionally, Kauffman and Wang (2007) investigated the drivers of internet firm survival and exit using Cox proportional hazards model and a semiparametric Bayesian survival analysis. The empirical results suggested that market, firm and e-commerce related variables can reduce an internet firm's likelihood of exit. Those variables include the entry of additional internet firms via IPOs, a smaller firm size, good IPO timing, being a late entrant and the selling of digital products or services. In addition, internet firms which operate in breakthrough markets are more likely to survive than those that operate in re-formed markets.

The recent literature on the survival of IPOs which focus on the impact of corporate governance *e.g.* Audretsch and Lehmann (2004) explored the relationship between ownership and induced incentives and the survival of young and high-tech firm survival listed on the *Neuer Markt* in Germany from 1997 to 2002. They found that CEOs ownership negatively related to company failure likelihood but it become insignificance when introducing measurements of human capital and intellectual rights. The results confirmed that the governance structure needed for firms in the new economy industries are different from traditional firms.

Van der Goot, Van Giersbergen and Botman (2008) analyse the determinants of survival of internet firms listed on the NASDAQ between 1996 and 2001. Their results show that surviving firms are associated with lower risk indications in the IPO prospectus, higher underwriter reputation, higher investor demand for the shares issued at the IPO, lower valuation un-certainty, higher insider ownership retention, a lower NASDAQ market level, and a higher operating cash flow to liabilities ratio compared to non-survivors.

In Thailand, to our best knowledge, there is no prior study has explored the survival of IPOs companies. Kim, Kitsabunnarat and Nofsinger (2004) is the first study examining IPOs companies in Thailand but the study main focus is on exploring managerial ownership on the post-IPO change in performance. Furthermore, there exist limited number of studies explored corporate governance variables and financial distress in Thai context. These studies include Mainkamnurd (1999) and Jaikengkit (2004).

Mainkamnurd (1999) focused on exploring managerial determinants in relation to firm's financial distress rather than focused mainly on corporate governance variables. Specifically, the study explored whether management is related to financial distress or not. However, it should be noted that some variables used in the study *e.g.* ownership structure, management turnover and quality and creditworthiness of financial information could be categorized as corporate governance variables. Furthermore, Jaikengkit (2004) examined the relationship between corporate governance variables and financial distress in Thai context. However, the sample incorporate in Jaikengkit (2004) consist of established companies rather than IPOs companies.

Using logistic model, Jaikengkit (2004) examined the impacts of concentrated ownership, board of director characteristics and managerial ownership on the probability of financial distress. The findings indicated that corporate governance and corporate failure are associated and confirmed that an early warning system in financial distress prediction cannot be complete without incorporating the corporate governance characteristics.

The Relationship between Corporate Governance Structure and Corporate Survival

The development of agency theory suggests that there is the link between corporate governance and firm performance (Audretsch and Lehmann, 2004). If corporate governance influences corporate performance, then it should have some effect on corporate survival (Goktan et al., 2006). There exist the literature explore the relationship between corporate governance structure and corporate survival. For example, Lee and Yeh (2004) presented the connection between corporate governance and financial distress and emphasised that firms with weak corporate governance are vulnerable to economic downturns and the probability of falling into financial distress increases. This finding is consistent with Johnson et al. (2000). In this section, we explore three areas of corporate governance include the board size, board independence and ownership concentration. Company characteristic *e.g.* company age and company size are additionally included in the model as the control variables.

1. Board Size

There exist mixed results relating the effect of board size on firm survival. Lamberto and Rath (2008) claimed that guidelines of good governance endorse larger board sizes based on the notion that greater accountability will result. In addition, Pfeffer and Salancik (1978) argued that firms with large boards will bring a wider range of views and external connections, will exploit more opportunities and strengthen the power of the board relative to the CEO. Furthermore, Li and Naughton (2007) found that the board size of Chinese IPOs has a significant positive relationship to initial returns, suggesting that board size is an important issue for IPO investors in China. This is consistent with the findings of (Adams and Mehran, 2003).

However, board size is found to have inverse relationship with firm value (Yermack, 1996). The author also pointed out that companies with small boards exhibit more favorable values for financial ratios and provide stronger CEO performance incentives form compensation and the threat of dismissal. Furthermore, Elsayed (2007) found board size is never significant impact on corporate performance. This finding is consistent with Parker, Peters and Turetsky (2002) and Lamberto and Rath (2008) which also found that board size has insignificant effect on survival. By investigating life insurance company in Thailand, Connelly and Limpaphayom (2004) also confirmed that board size is not significantly related to firm performance.

2. Board Independence

While the importance of board independence has been generally acknowledged, there is no common consensus relating the definition of 'independence' (Brennan and McDermott, 2004; Kang et al., 2007). Previous studies have using the word 'outside directors' instead of 'independence' to describe directors who are presumed to be independent from management (Ajinkya et al., 2005). Some existing studies simply consider the differences between 'executive' and 'non-executive' directors in three aspects (Kang et al., 2007; Lamberto and Rath, 2008).

Firstly, based on agency perspective, Fama and Jensen (1983) argued that if the majority of the directors on the board are independent director, then the less likely the CEO and inside directors will exercise behaviors that are self-serving on the costs of shareholders. Consistently, Pass (2004) pointed that since non-executive directors can provide independent judgment, thus, the interests of shareholders will be protected by the presence of independent directors. Furthermore, the company could benefit from non-executive directors since they can contribute valuable external business expertise to the company, can often see risks and opportunities for the company which might have been overlooked by the company's executive directors who are typically immersed in the day-to-day running of the business.

The results from existing literature relating the effects of proportion of non-executive directors on corporate performance and survival are mixed. Some literature found evidence support expectation that higher proportion of non-executive directors in the board lead to better corporate performance and consequently, higher probability of corporate survival. *e.g.* Rosenstein and Wyatt (1990), Daily and Dalton (1994) and Beasley (1996). In contrast, Hermalin and Weisbach (1991), Yermack (1996) and Klein (1998) found a negative relationship between the proportion of outside directors and corporate performance. Furthermore, some literature found there is no relationship between the proportion of non-executive directors and corporate performance *e.g.* Vafeas and Theodorou (1998), Laing and Weir (1999), Bhagat and Black (2001) and Balatbat, Taylor and Walter (2004).

In Thai context, Sukcharoensin (2003) suggested that an independent board member of Thai listed firms is important factor in explaining corporate performance. In addition, Connelly and Limpaphayom (2004) also found the positive relationship between insurance firm performance and the board composition measured by the number of outside directors divided by the total number of board members. Based on Connelly and Limpaphayom (2004), this study also adopted the same measurement of independent directors for examining the effect of independent directors on IPOs survival.

Secondly, chairman is responsible for leadership of the board, for the efficient organization and conduct of the board's function and for the briefing of all directors in relation to issues arising at board meetings (ASX, March 2003). It is expected that a company with the presence of independent chairman is more likely to pursue the interests of the shareholders and effectively monitor the management (Weir and Laing, 2001). This implies that non-executive chairman enhance the corporate performance and survival likelihood.

In contrary, executive chairman is expected to have a greater knowledge of a firm and its industry and have greater commitment to the organization than an external or non-executive chairman (Boyd, 1995). Therefore, this argument expects the negative relationship between the presence of non-executive chairman and firm performance and survival. It can be seen that there are conflicting argument about the effect of non-executive chairman on corporate performance and survival. Therefore, it remains open question whether IPOs company with the presence of non-executive chairman is more likely to survive.

Finally, measurement of board independence is the usage of independent leadership structure. CEO duality leadership structure exists when the same person serves as a firm's CEO and the chairman of the board of directors while independent leadership structure could be described as the case which different individuals serve in these positions is referred. There exist conflicting opinions about the benefits and costs of using these leadership structures. Proponents of the independent structure argue that CEO duality structure may constitute a clear conflict of interest and systematically reduces the board's ability to fulfill its governance function (Rechner and Dalton, 1991; Brickley et al., 1997).

Given that one of the board's central functions is to monitor the performance of top management, allowing the CEO serve both roles may lead to compromise in the desired system of check and balance (Levy, 1981; Dayton, 1984; Rechner and Dalton, 1991). The inappropriate governance structures may contribute to firm crisis and eventual bankrupt (Daily and Dalton, 1994). Advocates of the CEO duality structure argue that CEO duality structure provides a single focal point for company leadership and provides clear focus for objectives and operations (Rechner and Dalton, 1991). Additionally, the independent leadership structure may lead to a potential for rivalry between the CEO and the chairperson and making it difficult to pinpoint blame for poor performance (Brickley et al., 1997).

The empirical results regarding the association between CEO duality structure and corporate performance survival are mixed. For example, Fama and Jensen (1983), Rechner and Dalton (1991), Jensen (1993) and Daily and Dalton (1994) suggested that CEO duality leadership is ineffective. However, some studies found CEO duality has no impact on corporate failure (Chaganti et al., 1985) and corporate performance (Elsayed, 2007).

A dummy variable is used for measure of independent leadership structure. Specifically, if the chairman and CEO are different people then a value of 1 is recorded, 0 otherwise. The third area of corporate governance mechanisms examined in this study is the ownership concentration. Particular attention on the corporate governance literature has been put on ownership concentration as a key to more effective corporate governance and shareholders value maximization.

3. Ownership Concentration

Agency theory concerns what set of governance rules will enhance efficiency and thus maximize wealth (Arthur et al., 1993). The main concern is whether managers pursue their own interests rather than maximize shareholder's values.

Based on the monitoring and convergence of interested hypothesis of agency theory, when shareholders are too diffuse to monitor managers, corporate assets can be used for the benefit of managers rather than for maximizing shareholder wealth (Himmelberg et al., 1999). In addition, it is argued that firm is more likely to survive if ownership concentration is high. This is because shareholders are more likely to have an influence on management's decisions and shareholders will want to expend monitoring costs as their stake in the firm is relatively high (Jensen and Meckling, 1976).

Based on information asymmetry theory, when stockholdings are concentrated, information asymmetries are low, the ability of stockholders to remove a management team is high and managers are more likely to pursue strategies that are in stockholder's interests. In contrast, when stockholding are diffused, the significant information asymmetries are likely to exist and management is then more likely to pursue strategies inconsistent with stockholders interested (Hill and Snell, 1989).

The effect of ownership concentration on corporate performance has been the subject of many theoretical and empirical researches. However, the empirical results about effects of ownership concentration on firm performance are mixed. For example, Claessens and Djankov (1999) suggested that the more concentrated the ownership, the higher profitability and labor productivity. Consistently, Bai et al. (2004) confirmed the positive relationship between ownership concentration and corporate values.

In contrast, some studies suggested that ownership concentration negatively related to corporate survival *e.g.* Woo, Jeffrey and Lange (1995) and Kang, Cheng and Gray (2007). Furthermore, Demsetz and Lehn (1985) found that corporate ownership concentration is not related to accounting profit rates of a company. Consistent with Demsetz and Lehn (1985), Hovey, Li and Naughton (2003) also indicated that ownership concentration does not explain firm performance.

In Thai context, Alba, Claessens and Djankov (1998) discussed that concentration of ownership is common in developing countries and there are both pros and cons to such concentration. However, high concentrated ownership in Thailand may lead to following disadvantages. First, ownership concentration may impede the development of professional managers that are required as economies and firms mature and become more complex. Second, it may have led to increased risk taking behavior by firms given the inter-relationships between financial institutions and banks. The empirical results found that firms with concentrated ownership show a deteriorating performance relative to firms with less concentrated ownership.

Consistently, focusing the analysis on firms in finance industry, Dhnadirek and Tang (2003) also reported that Thai system lacks diversity in governance mechanisms while ownership concentration is ineffective.

However, Suehiro (2001) found that ownership via family affiliated firms is positively related to corporate performance measured by ROA and ROE. Additionally, Wiwattanakantang (2001) also confirmed the consistent results that family-controlled firms are associated with higher performance. The consistent evidence also found in Yammeesri, Lodh and Herath (2006) which reported the positive association between concentrated ownership and Thai non-financial firms performance.

This study examines the relation of ownership concentration and IPOs survival, this study hypothesizes that ownership concentration attribute is significantly related IPOs companies survival.

Furthermore, this study additionally explores the relationship between control variables and the likelihood of survival of IPOs companies in addition to corporate governance as the core variables in the analysis. The details are specified as follows.

4. Company Characteristic

Two variables measuring company-specific characteristics are employed in the analysis as following details. First, prior literature presented that firm survival are negatively correlated with its size. The rational for this relationship is the larger firms have more ability to avoid financial distress by using public equity markets (Goktan et al., 2006). Schultz (1993) found the inverse relationship between the probability of delisting and firm size. Smaller firms have a higher probability of delisting and larger firms have a higher probability of survival.

Second, previous studies, for example, Jovanovic (1982), Chen and Lee (1993), Lensberg, Eilifsen and McKee (2004), Rommer (2004), Li, Zhang and Zhou (2005), Rommer (2005), Hensher, Jones and Greene (2007) suggest the importance of company age in explaining financial failure. Jovanovic (1982) developed a learning model where age captures the experience of firm and thus is the major determinant of firm survival. Younger firm may have less experience, incomplete knowledge of the business, limited managerial quality (Jovanovic, 1982; Hopenhayn, 1992). Therefore, younger companies are associated with higher risks of failure.

Table 1 Summary of Selected Empirical Studies on Corporate Governance and Company Survival

No	Studies	Data			Methodology
		Countries	Period	Independent Variables	
1	Alba, Claessens and Djankov (1998)	Thailand	1992 - 1996	Ownership concentration, leverage, corporate financing patterns, Sector Dummy and Size Dummy	Correlation analysis
2	Claessens and Djankov (1999)	Czech Republic	1992 - 1997	Accounting data and the share of equity held by the top five investors	Regression analysis
3	Xu and Wang (1999)	China	1993 - 1995	Ownership mix and concentration, legal person shareholders and the inefficiency of state ownership	Regression analysis
4	Lehmann and Weigand (2000)	Germany	1991 - 1996	Ownership concentration, the managed vs. the governed firm, corporations traded on the stock exchange and non-stock corporations	Regression analysis
5	Suehiro (2001)	Thailand	1996 - 2000	Types of business, ownership patterns, management structures, profiles of board of directors, and executive committee and audit committee members	Descriptive statistics
6	Wiwattanakantang (2001)	Thailand	1996	The presence of controlling shareholders, types of controlling shareholders, the involvement in management by controlling shareholders, firm characteristics and industry effects	Regression analysis
7	Dhnadirek and Tang (2003)	Thailand	1994 - 1996	Managerial ownership, debt pressure, bank ownership, year dummy variables and firm size	Ordinary-least-squares regression and hierarchical regression

Table 1 Summary of Selected Empirical Studies on Corporate Governance and Company Survival (continued)

No	Studies	Data			Methodology
		Countries	Period	Independent Variables	
8	Hovey, Li and Naughton (2003)	China	1997 - 1999	Ownership of large shareholders, the top five shareholders, and the state and legal persons, relative to the proportion of tradable A-shares	Regression analysis
9	Bai *et al*. (2004)	China	1999 - 2001	Ownership variables, board of directors, executive compensation, the percentage of shares held by these top executives, financial transparency, government controlling, size, leverage ratio, the capital-sales ratio, the operation income-sales ratio and industry sector	The fixed effects models and the random effects models
10	Balatbat, Taylor and Walter (2004)	Australia	1976 – 1993	Ownership and corporate governance attributes	Ordinary-least-squares regression
11	Limpaphayom and Connelly (2004)	Thailand	1997-2002	Sales, single domestic owner dummy variables, non-family group dummy variables, new firms dummy and industry dummy variables.	Regression analysis
12	Li and Naughton (2007)	China	1999 - 2001	Board independency, leadership structure, board size, year of issuance, IPO offer size, lottery rate ratio, industry dummy, legal person ownership, tradable A-shares ownership and earnings per share	Ordinary-least-squares regression
13	Mainkamnurd (1999)	Thailand	1996 - 1998	Ownership structure, managerial turnover, management's aggression in terms of investing and financing styles, skills and perspectives of managing under floating exchange rate regime, quality of conducting financial information and industry condition	Logistic regression analysis

Table 1 Summary of Selected Empirical Studies on Corporate Governance and Company Survival (continued)

No	Studies	Data			Methodology
		Countries	Period	Independent Variables	
14	Lee, Yeh and Liu (2003)	Taiwan	1998 - 2001	Accounting, corporate governance and macroeconomic variables	Logistic regression analysis
15	Audretsch and Lehmann (2004)	Germany	1997 - 2002	Firm age, firm size, firm growth, ownership academic title executives and board and firm patents	Proportional hazard duration model
16	Jaikengkit (2004)	Thailand		Concentrated ownership, board of director characteristics and managerial ownership	Logistic regression analysis
17	Kim, Kitsabunnarat and Nofsinger (2004)	Thailand	1987 - 1993,	Managerial ownership	Ordinary-least-squares regression
18	Lee and Yeh (2004)	Taiwan	1996 - 1999	The percentage of directors occupied by the controlling shareholder, the percentage the controlling shareholders shareholding pledged for bank loans and the deviation in control away from the cash flow rights	Logistic regression analysis
19	Goktan, Kieschnick and Moussawi (2006)	U.S.A.	1997 - 2004	A firm's financial features, board size, board composition, management's equity stake, corporate charter/bylaws, and the state laws	A discrete time hazard model with competing risks.
20	Yang and Sheu (2006)	Taiwan	1992-2000	Managerial ownership retention, managerial ownership structure, the square of managerial ownership, age, size, activity, market level, and industry effect	Survival analysis

Table 1 Summary of Selected Empirical Studies on Corporate Governance and Company Survival (continued)

No	Studies	Data			Methodology
		Countries	Period	Independent Variables	
21	Lamberto and Rath (2008)	Australia	1995 - 2004	Age at offering, offer price, size of the offering, ownership retained, attachment of options to the offer, underwriter backing, issue costs as a percentage of the offer proceeds, auditor in the big 5, earnings to price ratio, forecast dividend yield, number of risk factors in the prospectus, non-executive chairman, number of directors, percentage of independent directors, industry, leverage, profitability, size of the firm, tangibility of assets, total asset turnover	Cox proportional hazard model
22	Van der Goot, Van Giersbergen and Botman (2008)	U.S.A.	1996 - 2001	Number of risk factors, a reputation of the lead manager, firm size, investor demand, valuation uncertainty, percentage of insider ownership retention duration of internet activities, market level at the time of offering, offer-to-book ratio, net sales over assets, operating cash flow over liabilities and receivables over total assets.	Cox proportional hazard model

Conclusions

This paper has presented many issues relating the failure rate from previous literature. Furthermore, the paper also has reviewed and briefly discussed previous literature examining company survival or failure in various countries *e.g.* Australia, China, Germany, Taiwan, U.S.A. and Thailand using various research methodologies such as logistic regression, multivariate discriminant analysis, neural network, survival analysis and *etc*. These studies have been conducted both within the qualitative and quantitative framework.

In Thailand, however, there is a lack of corporate governance studies focusing on long-term survival of the company. Rather than examining the survival likelihood of a company, most of previous corporate governance studies in Thai context have focused on examining the corporate performance issue. These studies such as Alba, Claessens and Djankov (1998), Suehiro (2001), Wiwattanakantang (2001), Dhnadirek and Tang (2003), Sukcharoensin (2003), Connelly and Limpaphayom (2004), Kim, Kitsabunnarat and Nofsinger (2004) and Yammeesri, Lodh and Herath (2006).

It can be seen that previous studies have been using various empirical methodologies in exploring the issue regarding company survival or failure. Future research could improve upon this current research in various aspects. Some doubts may cast on the appropriateness of model specification and the omission of important variables in previous studies. Thus, more future research incorporated other feasible variables is needed for model validation. The examples of those possible variables are the qualitative variables *e.g.* ownership structure data, specifically, gender, education, attitudes *etc*. (Yang and Sheu, 2006). Keasey and Watson (1987) discussed that marginally better predictions concerning small company failure may be obtained from non-financial data. Consistently, Laitinen and Kankaanpaa (1999) indicated that the efficiency of the prediction model in terms of its discriminatory power may be enhanced by non-financial characteristics and pointed that agency theories suggest that managerial incentives are potentially influential factors.

One possible limitation of financial failure or bankruptcy research is the limited sample size and data availability. This study also is not the exception. Particularly, many IPOs have to be cut from the analysis because of uncompleted data. Therefore, in future studies, research should put more effort into collecting larger data sets should be considered to avoid the limited reliability of the findings problem and support the empirical results found in this research. There have been various empirical methodologies employed to explore financial distress or bankruptcy areas. Researchers argue that these models have their own benefits and limitations. Laitinen and Kankaanpaa (1999) confirmed that no superior method among the six most popular failure prediction techniques *e.g.* MDA, logit analysis, recursive partitioning, survival analysis, neural networks and the human information processing approach. Accordingly, it can be stated that one of the latest applications, neural networks, is in its present form as effective as MDA which was as early as thirty years ago. Therefore, the future study that incorporates various methodologies *e.g.* MDA, survival analysis or neural network in predicting financial failure and compare the estimated model ability could contribute the empirical evidence to the relevant literature.

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