

**THE EFFECTIVENESS OF BUSY DIRECTORS
ON CORPORATE PERFORMANCE**

SARANYA RATTANATHAWORN

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Thematic Paper
entitled

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.....
Ms. Saranya Rattanathaworn
Candidate

.....
Mr. Pandej Chintrakarn,
Ph.D. (Economics)
Major-advisor

.....
Mr. Atthapong Sakunsriprasert,
Ph.D. (Development Administration)
Co-advisor

.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduates Studies
Mahidol University

.....
Asst. Prof. Yingyot Chiaravutthi,
Ph.D. (Economics)
Program Director
Master of Business Administration
Program in Business Modeling and
Analysis
International College, Mahidol University

Thematic Paper
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was submitted to the Faculty of Graduate Studies, Mahidol University
for the degree of Master of Business Administration
(Business Modeling and Analysis)
on
November 27, 2010

.....
Ms. Saranya Rattanathaworn
Candidate

.....
Mr. Sittisak Leelahanon,
Ph.D.
Chair

.....
Mr. Pandej Chintrakarn,
Ph.D. (Economics)
Member

.....
Mr. Atthapong Sakunsriprasert,
Ph.D. (Development Administration)
Member

.....
Prof. Banchong Mahaisavariya,
M.D., Dip Thai Board of Orthopedics
Dean
Faculty of Graduates Studies
Mahidol University

.....
Assoc. Prof. Rassmidara Hoonsawat,
Ph.D. (Physics)
Dean
International College,
Mahidol University

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Saranya Rattanathaworn

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SARANYA RATTANATHAWORN 5138390 ICMA/M

M.B.A (BUSINESS MODELING AND ANALYSIS)

**THEMATIC PAPER ADVISORY COMMITTEE: PANDEJ CHINTRAKARN Ph.D.,
ATTAPONG SAKUNSRIPRASERT, Ph.D.**

ABSTRACT

The study, titled “the effectiveness of busy directors on corporate governance” aims to study the effectiveness of the busy directors. The performance of a company was determined from return of equity (ROE) and return on asset (ROA).

The sample was collected from the Investor Responsibility Research Center (IRRC), which was provided through DataStream. Since, the data of busy directors is unavailable in Thailand. Therefore, the data and information used in this paper is from other countries. However, the results of this testing can be applied to use with businesses around the world. The methodology used for testing the data is multiple regressions.

The result of regression indicated that average busy directors and number of busy director had affected to reduce ROA at 95% confidential interval; however, it has no affect on ROE.

**KEY WORDS: BUSY DIRECTOR / CORPORATE PERFORMANCE /
ROA / ROE / MULTIPLE DIRECTORS**

32 pages

ผลกระทบของผู้บริหารหลายตำแหน่งต่อผลประกอบการขององค์กร

THE EFFECTIVENESS OF BUSY DIRECTORS ON CORPORATE PERFORMANCE

สร้อยญา รัตนถาวร 5138390 ICMA/M

บช.ม. (การวิเคราะห์และการสร้างตัวแบบธุรกิจ)

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บทคัดย่อ

การศึกษานี้มีชื่อว่า “ผลกระทบของผู้บริหารที่ทำงานหลายที่และหลายตำแหน่งต่อประสิทธิภาพขององค์กร” เป็นการวิจัยเชิงคุณภาพ โดยผลประกอบการขององค์กรนั้นจะถูกทดสอบด้วยความสามารถในการทำกำไรจากสินทรัพย์ของบริษัท และความสามารถของบริษัทในการนำเงินลงทุนของผู้ถือหุ้นไปทำให้งอกเงยได้

ข้อมูลที่น่าสนใจคือว่าวิจัยนำมาจากข้อมูลพื้นฐานของระบบ DataStream เนื่องจากในประเทศไทยยังไม่มีเก็บข้อมูลความยุ่งยากของผู้บริหาร ผู้จัดทำจึงใช้ข้อมูลจากต่างประเทศซึ่งผลของการวิจัยสามารถนำมาปรับและประยุกต์ใช้ได้กับทุกๆบริษัททั่วโลก

ผลของการวิจัยพบว่า จำนวนผู้บริหารดำรงตำแหน่งหลายตำแหน่งและค่าเฉลี่ยของผู้บริหารที่ทำงานหลายตำแหน่งในเวลาเดียวกันมีผลกระทบทำให้การบริหารสินทรัพย์ของบริษัทแยกลง ในขณะที่การทำงานในหลายตำแหน่งของผู้บริหารไม่มีผลกระทบแต่อย่างใดกับการบริหารส่วนของผู้ถือหุ้นของบริษัท

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CHAPTER I

INTRODUCTION

1.1 Statement of the problem and its significance

The failure of a company may be caused by many factors but the main reason is likely the weakness of corporate management. Better managerial skills of directors can increase shareholders' wealth; however, this may contrast with cases such as that of Enron, WorldCom and others where the directors apparently used the company's reputation and connections to generate profits to benefit themselves rather than their firms and shareholders. Directors usually do not have set working hours in an organization; therefore they may have more opportunity to attract business deals from other firms, especially if these directors have much experience and diversification skills. However, this reason may lead to these directors' failure to attend essential company meetings which require their decision-making. Moreover, less time dedicated by these directors in addressing particular issues may lead to worse corporate performance.

Some academic research suggests that busy directors may have connections with many well-known people in a particular industry, and that thus, they have the opportunity to communicate on their own with the public and others to increase company capability and profitability. Fama and Jensen (1983) demonstrated that multiple directors jointly have more experiences and are thus able to provide efficient advice to the firm better than others. In this sense, the more experiences they have, the more efficiency they will have on the job. In terms of the firm, if the company has busy directors, the firms should have higher competency manifested in higher revenues, profits, stock price increases and rates of dividends paid to stockholders.

1.2 Objective of the study

Some previous academic studies suggest that business firms should use objective benchmarks in assessing company performance. Therefore, this research aims to prove the relationship between busy directors and return on equity and return on assets; as indicators of performance.

This paper may help companies assess whether it is beneficial or not to have multiple directorships in their organizations. The presence of busy directors may sometimes affect the perception of each director towards one another, as well as affect the stock movement of the company concerned.

1.3 Hypotheses Testing

The hypotheses testing of this research aims to see if a situation, in which a company has many board seats all occupied by busy directors at the same time, will negatively affect companies' capability and shareholders' wealth because the busy directors do not have enough time to provide competent advise to their board and may not be able to attend some important meetings which require their decision-making. Therefore, the researcher proposes hypotheses concerned with reputation and multiple directorships.

1.3.1 Reputation hypothesis testing if a busy director has a negative effect on company performance.

This hypothesis is set up in accordance with the study of Fich and Shivdasani (2006) which suggests that busy directors provide inefficient managerial service due to not having much time to concentrate and attend important meetings which need their capabilities and decision-making. This reportedly results in a reduction of the firm's performance. As a result, the National Association of Corporate Directors (1996) announced that each director should hold less than a total of 3 seats to be able to dedicate high quality work in managerial tasks.

1.3.2 Reputation hypothesis testing if less attendance of meetings by company directors negatively affects company performance.

This hypothesis is based on a study by Jiraporn (2008) which indicates a relationship between the busy directors and their attendance of meetings. The results of this study suggest that if directors are busy, they tend to absent themselves from meetings and this directly affects corporate performance. Consistent with Jiraporn, Perry and Peyer (2005) report that if directors hold zero seats outside, meaning that they were not busy at all, their frequency of meeting attendance is significantly higher than that of busy directors. Moreover, M.Fich and Shivdasani (2006) find that firms which have many busy directors tend to have a lower market-to-book value.

1.3.3 Reputation hypothesis testing if a higher rate of agency cost affects and decreases firm performance.

This is from an assumption based on a study by M.Fich and Shivdasani (2006) which documents that multiple directorships can be a cause of increased agency cost since these directors hold much more power than others in the company. In this case, it is assumed that busy directors who are say, both CEO and chairman, have the right to vote in a board meeting. Therefore, it would be easy for them to push company policy to increase their own personal profit. Ishii and Metrick (2003) also support this by saying that that the more power directors hold, the lower the performance of a company is.

1.3.4 Reputation hypothesis test that diversification firms will decrease firm performance.

The research of Singh, Nejdmalayeri and Mathur (2006) mentions that diversification of firms can have the effect of losing directors' attention in their areas of responsibility. Moreover, the researchers find that having a higher number of busy directors could lower a firm's performance as measured by return on equity (ROE) and return on assets (ROA). Likewise, De Holland and Sanz (2005) suggest that multiple directors have the effect of increasing agency cost as well as decreasing corporate performance.

1.4 Scope of the study

This study explores the effectiveness of having multiple directorships in a company by examining performance based on return on asset (ROA) and return on equity (ROE). Busy directors may be required to concurrently have outside company board seats and be involved in affairs of other firms because they have high managerial skills. In this case, with more board seats to attend to, the directors attend external and as well as internal meetings in a company which is diversified as a conglomerate, and this may cause loss of focus in some particular tasks and it finally affects the company performance itself. This study uses multiple regression to find the relationship between two or more variables which are affected by busy directors towards the firm's performance. The model and details of methodology will be explained in a later chapter.

1.5 Organization of the study

The remainder of this paper consists of and is organized as follows: Chapter II provides a literature review which looks at material related to how busy directors affect company performance. Chapter III describes a sample selection and develops a methodology for testing the hypotheses. Chapter IV illustrates the results of testing and Chapter V offers the conclusions and recommendations of this paper.

CHAPTER II

LITERATURE REVIEW

This chapter provides a literature review to support the hypothesis testing and assumptions of this study. This is based on previous academic research, including financial literature and other related writings about busy directors (multiple directorships) and corporate performance.

2.1 Multiple directorships and corporate performance

There is a debate about the effect of multiple directorships on corporate performance. Some studies show that multiple directorships or busy directors can help the firm enhance its value and performance. For example, directors' attending many meetings outside the company may allow them to learn different styles of management and strategic skills from others, which they may then apply to increase the company's quality of management (Booth and Deli, 2006). Furthermore, directors who hold many board directorships outside the company may be able to better set up a network between the many companies they service (Mace, 1986; Loderer and Peyer, 2002), and this "connection-building" may help increase a firm's value and performance. Similarly, Hee-Yung Yeo et al. (2003) found a positive association between having CEOs simultaneously serving on boards and corporate performance as determined by ROA in French firms. Consistency, Miwa and Ramseyer (2000), who studied a case in Japan, as well as Cotter et al. (1999) and Brown & Maloney (1999), who studied United States cases, argue that the more busy directors a firm has, the higher the performance of the firm. Bohren and Strom (2007) also explain that in cases where directors have more connections and networking, they tend to increase the company's performance as defined by Tobin's Q ratio.

In addition, some studies show that having a majority of board directors from outside is related to inefficiency in corporate performance, and that these firms

tend to have a lower return. This is paired with less sensitivity of CEO turnover to firm performance (Fich and Shivdasani, 2006). As a result, the National Association of Corporate Directors (1996) and the Council for Institutional Investors suggest that a company confine the number of board directorships held outside the company in order to sustain a firm's performance. Therefore, it is suggested that firms should have a minority of directors with multiple directorships and that this situation is likely to be better than using busy directors because firms may be better able to enhance capability and performance.

2.2 Director attendance

Jiraporn (2008) studied the relationship between the busyness of directors and their meeting attendance. The author studied the number of the multi-directorships held at the same time and the meeting attendance of directors in each firm. After testing the variables, it was found that the number of seats board directors simultaneously held have a linear relationship with attendance; meaning that the more number of seats a director holds, the higher the frequency of meeting absences. The author used a measurement of director meeting attendance based on the ideas of Perry and Peyer (2005). The study further illustrates that the lower the number of outside directorships, as well as in cases where directors hold zero outside seats, the more frequently directors attend meetings. Furthermore, it was found that in cases of directors with the highest number of outside directorships, who held 10 additional seats, the directors were most likely to be absent in meetings. This can help explain the second hypothesis that busy directors show inadequacy in monitoring a company's performance.

Moreover, M.Fich and Shivdasani (2006) use market-to-book value, which is normally used to indicate company growth, to find possible impact on company growth when having multi-directorships. After the author performed regression to find a relationship among variables, it was found that busy directors, those holding more than three board directorships outside a company, can't adequately monitor the company's crucial accounting performance and the company tends to have a lower

market-to-book ratio than a firm where a minority of board directors hold multiple directorships.

2.3 Agency cost

Agency cost is an essential factor which impacts a firm's performance directly. Firms which have low performance may have high agency cost; while for a high performance firm, the inverse may be true. For instance, the cases of Enron and WorldCom can be used as examples in which management personalities coordinated amongst themselves to conceal the company's accounts in order to benefit themselves privately rather than benefit shareholders. Moreover, Dechow and Sloan (1991) mention that CEOs may be tempted to play with earnings reports of the company by reducing expenses for research and development (R&D). Kim A. Kenneth and Nofsinger R. John (2007) who studied corporate accountability state that if a company has separate responsibilities between owners and managers and if shareholders cannot control their managers' behavior, then these managers will probably utilize the assets of the firm to serve their own needs, and this is known as "agency cost". Moreover, Gomper et al (2003) believe that in a firm where some directors or executives have more power than other directors, agency conflicts tend to arise. The more management holds wide-ranging power in organizations, the higher the risk that management has at the same time, according to Ishii and Metrick (2003). In this sense, if executives or directors have a lot of personal power which wields a lot of influence on many people, this creates risk for the company in managing and controlling its own power. However, some studies argue that multiple directorships may not necessarily be only negative for a company, as sometimes this variety of experience can help directors communicate with private information easily (Watt and Zimmeman, 1986, Holtahusen, 1990 and Healy & Palepu, 1993). Therefore, despite the earlier belief regarding increased agency cost, some may argue that busy directors provide more experience and that thus, increased multiple-directorships may have an inverse relationship with agency cost. This is in contrast with the opinion that multiple directorships may increase an agency cost which provides a negative sign to the

company as mentioned on the research of M.Fich and Shivdasani (2006), which provides evidence to explain that busy directors lose control and have less time to manage their jobs which leads to harmful results for the firm. Another interesting point regarding agency cost is that busy directors with many seats in other companies may be able to generate higher personal income at the expense of their organizations having lower performance.

2.4 Diversification firms

Diversification may lead to two kinds of impact on corporate competence in the sense that diversified firms provide diversified opportunity to increase directors' skills and performance and it sometimes improves firms' capability; but this may also lead to increased agency cost at the same time.

Singh, Nejdmalayeri and Mathur (2006) found that diversified firms tend to lose directors' focus on their areas of responsibility. The author used diversification dummy variables, using number 0 to represent a non-diversified firm and the number 1 to indicate a diversified firm, and then applied regression on them in relation to firm performance. The regression results suggest that firms with a high degree of diversification tend to have a lower return on equity (ROE). Besides this, the results of testing regarding diversified firms in relation to return on assets show that companies with a higher degree of diversification will probably have a lower return on assets (ROA) as well as poor performance. In this sense, this may indicate that if a company expands into many categories, its directors may lose focus on their respective tasks and this can directly affect the company's performance. Similarly, Markides (1995) found that the firms during the 1960s and 1970s had difficulty in the capital markets with loose regulation of diversified conglomerates; Hill and Hoskisson (1987) report that diversified firms have higher cost which has the impact of increased environment uncertainty and volatility which leads to lost information and difficulty in managing firms. Moreover, De Holland and Sanz (2005) suggest that a diversified company may lead to agency conflict, affecting a firm's strategy and corporate performance. Grant (1987) showed that capabilities of managers or directors may decline if a company has a high degree of international diversification. This is

similar to the suggestions of Qian and Li (2002) who mentioned that a wide scope in company responsibility may cause reduced performance. Moreover, a case study on multinational companies found that managers may take advantage of business diversification strategies to benefit themselves privately rather than benefit firm performance.

2.5 Our study

The purpose of this study is to examine the relationship between busy directors and corporate performance. The paper draws on hypothesis testing regarding the effects on corporate performance when having multiple directorships within organizations.

In the case where a company has multiple directorships, there should be a tendency to have lower performance because busy directors may not be able to attend essential meetings or concentrate on some particular issues which they may actually be obligated to handle as part of their responsibility.

CHAPTER III

METHODOLOGY

This chapter provides a methodology to find and prove a relationship between busy directors and the sample companies' performance. This quantitative research is based on the data provided from DataStream program. Background of people in this data set cannot be tracked.

3.1 Sample selection

The sample is collected from the Investor Responsibility Research Center (IRRC) which is provided through Wharton Research. The report also provides characteristics of directors such as gender, age and types (multiple or non-multiple directorships). The sample used in this study is comprised of approximately 4,008 observations related to firms during the 1998 to 2002 fiscal years.

3.2 Variables Measurement

3.2.1 Measurement of busy directors

The researcher determines the busyness of directors as measured in three ways. These are:

Firstly, the busyness of directors is defined as *Number Busy Directors* (or *nobusy* as in the multiple regression Model 1 which will be shown later in this chapter) as used by Fich & Shivdasni (2006) and Andres & Lehmann (2010). In this sense, a busy director is a person who holds more than 3 board seats. Therefore, if the total number of board directors in a company is 5 persons but only 3 of them have multiple directorships, then the data collected only pertains to the 3.

Secondly, the *Busy Board* or *busyb* is the same measurement used in the research projects of Ahn, Jiraporn and Kim (2009) and Andres & Lehmann (2010);

and this pertains to the number of busy directors on board of each company. The raw data of this variable was collected by using the dummy variables 0 and 1. If there are 2 or more busy outside directors on a board, it is counted as 1. However, if there is less than 1 busy director, it is inputted as 0.

Lastly, *Average Busy Directors* or *avgdir* is the number of busy directors divided by board size. For example, if a company has 5 directors in which 3 people out of the 5 hold more than 3 seats (CEO, chairman and executive) at the same time, it is calculated as 3×2 which is 6. Afterwards, 6 is divided by 5 so the average number of busy directors will be 1.2.

3.2.2 Measurement of firm performance

The performance of the company is estimated based on return on equity (ROE) and return on assets (ROA).

The researcher first measures performance using *Return on Equity (ROE)*, as did Samad, Amir & Ibrahim (2008) and Razaka, Ahmad & Aliahmed (2008). This is a profitability and efficiency measurement for business which can help investors in deciding whether to invest in a firm's stock or not. It is normally calculated as net profit divided by equity. If a corporation has good performance, the results of testing should present a higher number for all variables.

Return on Assets (ROA) is another factor which helps investors analyze the profitability of a company and how well the company is managed, according to Olin (2008), Fich & Shivdasani (2006) and Singh, Nejadmalayeri & Mathur (2006). It is calculated as the net income divided by total company assets and multiplied by 100 so it can be expressed in percentage form. ROA is normally used to estimate the performance of a company and how much benefit the company can generate from its assets. If firms have a low rate of ROA, investors may not be interested in investing in firms' stock.

3.2.3 Other control variables

Log Total Asset or *Lnta* is used in several researches; for example, Fich & Shivdasani (2006), Ferris, Jagannathan & Pritchard (2003) use this variable to indicate the size of an observed firm.

Debt ratio or *Debtr* is calculated as total debt of a company divided by total assets. The company is risky if the result of this equation is more than 1. Investors normally consider this figure to evaluate level of risk of a company.

Capital expenditure ratio or *Capxr* indicates how much a company invests in long term assets in a fiscal year. It shows expenditures for which the company spends money or cash to buy fixed assets to create a firm's future value. If the company invests a big amount, the resulting figure should be high. This is calculated by dividing cash flow from operations by capital expenditures.

Board size or *Bsize* commonly depends on the size of companies. Bigger companies may require having a bigger board than smaller companies to be able to work efficiently. The effect of board size may mainly impact the quality of management provided, according to Jensen (1993). Moreover, Ferris, Jagannathan and Pritchard (2003) found that a larger board size has a positive relationship with firm performance.

Duality is when a board director holds two or more positions; for example, when a director serves concurrently as CEO, chairman and president. In this case, the dummy variable will be 1. On the other hand, if a director holds only one position at one time, the variable will be 0. The researcher found that this variable is used in a lot of other related research such as that of Jermais (2008) which studied the effects of board characteristics and how it impacts firm performance, as well as research by Ibrahim, Samad & Amir (2008).

Tobin's Q ratio or *Tobinq* is a theory widely used in many public researches to measure performance of firms, according to Mak & Kunsadi (2002) and Razaka , Ahmad & Aliahmed (2008). It is calculated as equity market value + liabilities book value divided by equity book value + liabilities book value.

3.3 Multiple Linear regression models

This research examines whether firms have performance or non-performance when having multiple directorship in an organization. Therefore, this research defines the dependent variables as ROA and ROE both of which are now

“Performance”. Subsequently, this research assigns some control variables which will be used in the test, and these are:

3.3.1 The examination of busy directors and ROA.

As mentioned earlier, the *number busy directors* on board is the number of directors who hold more than 3 seats or positions at the same time. In this model, it is assumed that if the number busy directors on board increases, it will result in a decline of ROA because these directors will have less time to concentrate and provide efficient management.

Model 1:

$$ROA = \beta_0 + \beta_1(\text{Number Busy}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's Q ratio})$$

As mentioned earlier, the *number busy directors* on board is the number of directors who hold more than 3 seats or positions at the same time. In this model, it is assumed that if the number busy directors on board increases, it will result in a decline of ROA because these directors will have less time to concentrate and provide efficient management.

Model 2:

$$ROA = \beta_0 + \beta_1(\text{Busy Board}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's Q ratio})$$

Busy board of directors was tallied as a dummy variable in the sense that if there are more than 2 busy directors on a board, then it will be counted as 1. On the other hand, if the number of busy directors on board is less than 2, this will be counted as 0. It is assumed that if boards are busier, this will have the impact of a lower ROA.

Model 3:

$$ROA = \beta_0 + \beta_1(\text{Average Busy Directors}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's Q ratio})$$

The average busy directors is the number busy directors on board divided by total directors on board. This case will be quite similar to the first two models in the sense that a higher figure reduces the ROA.

3.3.2 The examination of busy directors and ROE.

The following models with numbers 4 to 6 are used to examine the relationship between busy directors and return on equity (ROE).

Model 4:

$$ROE = \beta_0 + \beta_1(\text{Number Busy}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's } Q \text{ ratio})$$

In this model, unlike the first, ROA is replaced by ROE since return on equity needs to be examined while other control variables remain the same as the initial model. It is assumed that when there are more busy directors in a firm, a lower ROE comes as a result; or in other words, the more there are busy directors, the lower the rate of ROE.

Model 5:

$$ROE = \beta_0 + \beta_1(\text{Busy Board}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's } Q \text{ ratio})$$

Model 5 is almost the same as Model 2 but ROA is again replaced by ROE while the rest of the variables are the same. It is assumed that a higher number of busy board directors results in lower performance of firms as defined by ROE.

Model 6:

$$ROE = \beta_0 + \beta_1(\text{Average Busy Directors}) + \beta_2(\text{Log Total Asset}) + \beta_3(\text{Debt ratio}) + \beta_4(\text{Capital expenditure ratio}) + \beta_5(\text{Board Size}) + \beta_6(\text{Duality}) + \beta_7(\text{Tobin's } Q \text{ ratio})$$

In this model, the researcher changes the dependent variable from ROA to ROE, but the other independent variables and control variables are the same as Model 3. Again, it is assumed that a higher figure of average busy directors has the effect of reducing the percentage of ROE because the directors may have less time to

concentrate or even attend some important meetings which need them for decision-making.

CHAPTER IV

EMPIRICAL RESULT AND DISCUSSION

This chapter shows the results of multiple regression analyses to determine the relationship between busy directors and performance of companies. The observation sampling was collected from the program DataStream as provided through IRRC as mentioned earlier. Therefore, personal data of the people in this report cannot be traced. Moreover, the data is analyzed using the STATA program which is commonly used in research.

4.1 General information of sample

4.1.1 Busy directors characteristic

According to table 1 in Panel A, we firstly established the characteristics of busy directors and found that the number of busy directors; the average of number of busy directors on board from year 1998 to 2002.

Secondly, it was also found that the average of busy board in each year is quite the same at 0.0212. The last characteristic studied regarding the directors is the average busy directors, and the results illustrate that the average number of busy directors on a board is 0.8497; or, in other words, it can be said that 1 person on average will be busy in each board.

4.1.2 Performance of firm

As mentioned, this research defines performance in terms of ROE and ROA. In the cases presented, the average ROE from 1998 to 2002 is 11.29%, while the observations show quite a low ROA; especially in years 2001 and 2002, when there were reductions in mean of -2.21% and -0.25% respectively. This indicates that that the companies sampled could not efficiently manage their assets to generate profit

and this may be linked to poor managerial practices of board directors. For firm size, the observed firms have quite similar log total asset figures of around 7.13. Moreover, it would seem that the firms have quite large portions of debt as the average debt ratio is around 43.69%. The debt ratio is normally calculated by total debt divided by total assets. The table demonstrates that the average capital expenditure percentage is 8.59% for each company. Board size in each year is quite similar at approximately 8.51. As for duality; with the dummy variable 1 or 0, it is found that the average duality is 0.65 which can be rounded off to 1, indicating that firms mostly have directors who hold many positions at one time. Tobin's Q; this is a measurement of firm performance and profit, and in this case, the Tobin's Q suggests that the data in general shows quite good performance.

4.2 Correlation Analysis

A correlation matrix is established in Table 2 to study the relationship between busy directors and corporate performance. In this sense, it is found that number busy directors correlates with consistency to busy board at a percentage of 45.17% and shows a relationship to average busy directors with a percentage of 82.45%. Moreover, the average busy directors also links and correlates with busy board of directors at a percentage of 44.62%. For the measurement of performance of the firms, it is found that ROE correlates to number busy, busy board and average busy directors with percentages of 2.23%, -0.43% and 1.89% respectively. As for ROA, it relates to number busy directors at a percentage of 3%, and this connects to the next variable which is busy directors at a percentage of -1.32%. These correlate to average busy director at 0.65% and relates to ROE with a percentage of 11.44%.

4.3 Multiple regression analysis

As for Tables 2 and 3, these illustrate the results of regression regarding busy directors in relation to ROA and ROE which are measures of corporate performance. This researcher mainly uses number busy directors, busy board of directors and average busy directors as independent variables to predict performance.

Moreover, the researcher uses other control variables for all models such as log total asset (firm size), capital expenditure, board size, duality, and the last variable, Tobin's Q.

As busy directors are represented in three variables, the researcher had to test the relationship among the dependent and independent variables using 6 models. As a result, it was found that number busy directors and average busy directors in Models 1 and 3 are significantly associated with ROA. However, the other models are not related and have no impact on firm performance.

4.3.1 Result of examination of busy directors and ROA.

According to Table 3, the findings of regression illustrate that changes in the number busy directors and average busy directors are statistically associated with firm performance, which in this case is ROA, at a 95% confidential interval. However, busy board has not affected corporate performance as the T-stat validates H_0 . The hypothesis of this part will be stated as;

H_0 : The busy directors has affected on ROA.

H_A : The busy directors has not affected on ROA.

Model 1:

$$ROA = -0.1162 - 0.0080 (\text{Number Busy}) + 0.0138 (\text{Log Total Asset}) - 0.0753(\text{Debt ratio}) - 0.1126 (\text{Capital expenditure ratio}) + 0.0062 (\text{Board Size}) + 0.0028 (\text{Duality}) + 0.0220 (\text{Tobin's Q ratio})$$

In the first model, the adjusted R-Square is 7.21%. It is found that most of all variables are statistically significant in relation to ROA but only at a 95% confidential interval and it is only the duality that rejects the null hypothesis. The intercept firstly predicted to decrease ROA by -0.1162 ($|T\text{-stat}| > 1.965$). The number busy directors has a statistically significant relationship with ROA at a 95% confidential interval ($|T\text{-stat}| > 1.965$) which causes this research to accept the null hypothesis, consistent with the hypothesis that decreasing the number busy directors on board will tend to increase ROA by 0.0080%, and consistent with the reputation hypothesis and Singh, Nejadmalayeri and Mathur (2006) which states that if the number of busy directors

increases, this has the effect of poor performance of diversified firms as well as leads to higher agency cost. Moreover, it also related to the report of Jiraporn (2008) which shows that a higher rate of busy directorship brings forth lower corporate performance. Furthermore, it was found that increasing ROA will also tend to increase log total asset by 0.00138%. This is similar to the study of Ferris, Jagannathan, & Pritchard (2003) which mentions that firm size influences firm risk and return. As for debt ratio, this is generally calculated as total debt divided by total assets, and in this case, it is sure that if the total assets of the company increases then the debt ratio must decrease since the portion of debt will decrease compared to the assets. Therefore, this regression shows that when ROA increases 1%, the debt ratio decreases by -0.753%. Board size is also associated with ROA, as documented in previous literature such as that of Adam and Mehran (2005) which found a positive relationship between ROA and board size. The observed boards show that they play an important role in increasing their strategic managerial roles. Moreover, it was found that Tobin's Q is associated with a higher ROA, similar to the study of Andres and Lehmann (2010) which proved that an increment of Tobin's Q was influenced by changes in the number of directorships as represented by the busy board.

Model 2:

$$ROA = -0.0963 - 0.0282 (\text{Busy Board}) + 0.0115 (\text{Log Total Asset}) - 0.0745(\text{Debt ratio}) - 0.1197 (\text{Capital expenditure ratio}) + 0.0049 (\text{Board Size}) + 0.0023 (\text{Duality}) + 0.0218 (\text{Tobin's Q ratio})$$

The busy board and duality have not caused poor performance, or in this case, no such effect is explained in the model since it has no significant effect on ROA ($|T\text{-stat}| < 1.645$), similar to that as reported by Andres and Lehmann (2010) who state that the busy board is not associated with poor firm performance. Moreover, Li and Ang (2000) who studied US firms found that multiple directorships were unassociated with reduced performance of firms. However, the other variables; log total asset, debt ratio, capital expenditure, board size and Tobin's Q ratio have statistically significant effects on ROA at a 95% confidential interval, with the adjusted R-square being 2.64%. Similar to Model 1, the firm size certainly affects ROA since it is calculated in terms of assets; therefore, increasing the log total asset by 1% will increase ROA by

0.0115%. Moreover, if a company has a higher portion of debt ratio by 1%, the company will definitely have a lower ROA by -0.075%. Moreover, the lower capital expenditure ratio also has an impact by decreasing performance by -0.1197%. Board size still has an effect by increasing ROA by 0.0023% because with more busy directors on board, the better the outcome that each director provided. Lastly, when Tobin's Q increases by 1%, this increases company ROA by 0.0218%.

Model 3:

$$ROA = -0.1097 - 0.0182 (\text{Average Busy Directors}) + 0.0150 (\text{Log Total Asset}) - 0.0738(\text{Debt ratio}) - 0.1251 (\text{Capital expenditure ratio}) + 0.0053 (\text{Board Size}) + 0.0026 (\text{Duality}) + 0.0220 (\text{Tobin's Q ratio})$$

Model 3, the regression result has R-square 7.33%. This model we found that our main independent variable as Average Busy Director fell in null hypothesis that if the company have 1 more percent on average busy directors, the performance of the firms which ROA in this case, will be dropped -0.0182% consistency with our hypothesis that the more busy director would impact to discount firms' performance. As the raw data doesn't show whether these firms are diversification firm or not but as our assuming that the diversification firm provided lower performance of ROA, then this should consistency to our assuming. Moreover, the reason of discount on ROA may come from the directors have less time to concentrate their meeting and cannot be able to make decision on any vital project. For firm size, if it (log total asset) increased 1%, it will imply to increase the ROA by 0.0150% ($|T\text{-stat}| > 1.645$). Again, every unit of increment on debt ratio automatically impacted to discount ROA by 0.0738%. Moreover, if the company spent 1 more percent on capital expenditure, the company may have a lower ROA by -0.1251% at the same time. Furthermore, if board size increases by 1 percent, this influences ROA to increase by 0.0053%. Duality has not significantly affected on performance ($|T\text{-stat}| < 1.654$). Tobin's Q of this model has a positive relation with ROA; the same finding result in the previous models, that if Tobin's Q ratio increase 1%, the ROA will add up 0.0220% accordingly.

4.3.2 Result of examination of busy directors and ROE.

With regard to Table 4, it was found that the variables in focus; which are number busy directors, busy board of directors and average busy directors, are not significantly related with ROE. Moreover, log total asset or firm size and duality are also not associated with firm performance. However, other control variables show a positive relationship with ROE. The hypothesis of this examination is as follows:

H₀: The busy directors has affected on ROE.

H_A: The busy directors has not affected on ROE.

Model 4:

$$ROE = -0.4431 + 0.0075 (\text{Number Busy}) - 0.0251 (\text{Log Total Asset}) + 0.6680 (\text{Debt ratio}) + 1.5345 (\text{Capital expenditure ratio}) + 0.0225 (\text{Board Size}) - 0.0057 (\text{Duality}) + 0.0728 (\text{Tobin's Q ratio})$$

For this model, the R-square is 2.82%. The coefficient of the independent variable as the number busy directors and control variables which are log total asset and duality have no statistical significance in relation to ROE of firms as the $|T\text{-Stat}| < 1.645$ which causes the research to accept H₀. However, the researcher finds that the constant of the model is -0.4431. The result of debt ratio in this model is quite different from the first three models in the sense that when debt ratio increases, ROE simultaneously increases 0.6680%. Moreover, capital expenditure, board size and Tobin's Q are positively related to ROE. In this sense, if expenditure increases 1%, then ROE will likewise increase 1.5345%. At the same time, if the company has a larger board size by 1 unit, the company gains more profit by approximately 0.0225%. Moreover, if the Tobin's Q ratio of a company increases only 1%, the performance of the company also increases by 0.0728%.

Model 5:

$$ROE = -0.4687 - 0.0851 (\text{Busy Board}) - 0.0213 (\text{Log Total Asset}) + 0.6700 (\text{Debt ratio}) + 1.5296 (\text{Capital expenditure ratio}) + 0.0233 (\text{Board Size}) - 0.0050 (\text{Duality}) + 0.0730 (\text{Tobin's Q ratio})$$

For this model, the R-square is 2.82% which is close to Model 4. The predicted coefficients of this model are not statistically significant in relation to corporate performance, especially as busy board of directors has a |T-Stat| of 0.31; as well as debt ratio and duality whose |T-stat| falls under and accepts H_0 . However, it was found that debt ratio has a statistically significant relationship to performance at a 95% confidential interval which means that increasing debt ratio by 1%, will impact to increase ROE by 0.6700%. Additionally, it was found that increasing capital expenditure, board size and Tobin's Q also has the effect of increasing ROE by 1.5296%, 0.0233% and 0.0730% in that order.

Model 6:

$$ROE = -0.4432 + 0.0246 (\text{Average Busy Directors}) - 0.0278 (\text{Log Total Asset}) + 0.6660 (\text{Debt ratio}) + 1.5392 (\text{Capital expenditure ratio}) + 0.0233 (\text{Board Size}) - 0.0056 (\text{Duality}) + 0.0727 (\text{Tobin's Q ratio})$$

The predicted coefficient of independent variable which is determined by busy board does not statistically significant as the |T-stat| < 1.645. Moreover, some other control variables; log total asset and duality, are also not associated on changes ROE. In the opposite, the rest of control variables; debt ratio, capital expenditure ratio, board size and Tobin's Q ratio are positively significant on ROE. Debt ratio increased 1%, the company also has ROE increased by 0.6660%. Further, if the board of the company decided to invest 1% more, it can approximately increased the ROE of the firm 1.5392% as well as board size. If board size increased a unit, it influenced to increase their ROE by 0.0056%. The last, if the company perform quite well which in this case, if the company has a higher Tobin's Q ration 1%, the ROE of the company will increase by 0.0727%.

Table 1: Descriptive data of Busy Directors and Board Characteristic

Panel A: Busy directors

	1998	1999	2000	2001	2002	Grand
	(Mean)	(Mean)	(Mean)	(Mean)	(Mean)	Total
						(Mean)
1) Number busy	1.0530	1.0604	0.9276	0.8915	0.8536	0.9533
2) Busy board	0.0271	0.0206	0.0251	0.0177	0.0165	0.0212
3) Average busy board	0.8491	0.8989	0.8446	0.8515	0.8101	0.8497

Panel A: Board Characteristic

	1998	1999	2000	2001	2002	Grand
	(Mean)	(Mean)	(Mean)	(Mean)	(Mean)	Total
						(Mean)
4) Return on Equity	16.35%	12.40%	15.86%	12.49%	0.33%	11.29%
5) Return on Asset	4.20%	5.47%	4.72%	-2.21%	-0.25%	2.14%
6) Log total asset	7.05	7.09	7.19	7.13	7.19	7.13
7) Debt ratio	45.98%	45.53%	44.75%	42.07%	40.78%	43.69%
8) Capital expenditure ratio	10.43%	8.17%	8.62%	8.89%	6.84%	8.59%
9) Board size	8.70	8.63	8.39	8.24	8.61	8.51
10) Duality	68.23%	66.21%	63.79%	64.67%	65.17%	65.62%
11) Tobin's Q ratio	177.17%	193.00%	166.48%	165.05%	124.21%	164.14%

Table 2: Correlation matrix

	Number busy board	Busy board	Average busy board	Return on Equity	Return on Asset
Number busy board	1				
Busy board	0.4517	1			
Average busy board	0.8245	0.4462	1		
Return on Equity	0.0223	-0.0043	0.0189	1	
Return on Asset	0.03	-0.0132	0.0065	0.1144	1

Table 3 : The result of multiple regression in difference model of ROA

	Model 1	Model 2	Model 3
Constant	-0.1162 (-6.92)*	-0.0963 (-6.23)*	-0.1097 (-6.92)*
Number busy directors	-0.0080 (-3.21)*		
Busy board of directors		-0.0282 (-1.46)	
Average busy directors			-0.0182 (-3.88)*
Log total asset	0.0138 (5.18)*	0.0115 (4.52)*	0.0150 (5.53)*
Debt ratio	-0.0753 (-5.15)*	-0.0745 (-5.09)*	-0.0738 (-5.05)*
Capital expenditure	-0.1226 (-6.55)*	-0.1197 (-6.40)*	-0.1251 (-6.67)*
Board size	0.0062 (4.61)*	0.0049 (3.81)*	0.0053 (4.07)*
Duality	0.0028 (0.47)	0.0023 (0.38)	0.0026 (0.43)
Tobin's Q ratio	0.0220 (12.19)*	0.0218 (12.07)*	0.0220 (12.20)*
R-Squared	0.07	0.07	0.07

T-stat is in parenthesis

**Significant at level 10% ($|T-stat| > 1.645$)*

Table 4: The result of multiple regression in difference model of ROE

	Model 4	Model 5	Model 6
Constant	-0.4431 (-2.69)*	-0.4687 (-3.09)*	-0.4432 (-2.84)*
Number busy directors	0.0075 (0.31)		
Busy board of directors		-0.0851 (-0.45)	
Average busy directors			0.0246 (0.53)
Log total asset	-0.0251 (-0.96)	-0.0213 (-0.86)	-0.0278 (-1.04)
Debt ratio	0.6680 (4.65)*	0.6700 (4.67)*	0.6660 (4.64)*
Capital expenditure	1.5345 (8.35)*	1.5296 (8.34)*	1.5392 (8.36)*
Board size	0.0225 (1.71)*	0.0233 (1.83)*	0.0233 (1.83)*
Duality	-0.0057 (-0.10)	-0.0050 (-0.09)	-0.0056 (-0.10)
Tobin's Q ratio	0.0728 (4.10)*	0.0730 (4.12)*	0.0727 (4.10)*
R-Squared	0.03	0.03	0.03

T-stat is in parenthesis

**Significant at level 10% ($|T-stat| > 1.645$)*

CHAPTER V

CONCLUSION AND RECOMMENDATION

5.1 Conclusion

The results of this study's multiple regression show a bit of difference from previous studies. The empirical results of this research show that multiple directors as indicated by busy directors and average busy directors have a negative relationship only with ROA. Furthermore, it was also found that the control variables; log total asset, debt ratio, capital expenditure, board size and Tobin's Q ratio, have an effect on the decrease and/or increase of ROA. However, the busy board of director, which is one variable used to indicate the busyness of directors, has not shown any effect on corporate performance. In this case, it supports the reputation hypothesis that when firms have more busy directors, they tend to have a lower ROA. This study also does not find any relationship between busy directors and ROE.

As the busy directors have been found to have an effect on ROA, this study may conclude that high busyness of directors may harm firms by reducing corporate performance since this may cause directors to have less time in concentrating on their managerial tasks and spur lower frequency of meeting attendance; and this can be considered vital because these directors are required to handle many important responsibilities, especially in diversified firms.

5.2 Recommendation

This study has some limitations, for example, firms sampled in this report are from the US only, and the oldest director in this report is 86 years old; which causes the researcher to be unsure whether some directors in question are truly bonafide directors working on boards or are only nominal or "name" directors or even nominal CEOs. Therefore, to extend a quality of research, a future study may use firms

in many countries and input more control variables such as age, gender and other ratios which can be used in more thoroughly measuring the performance of firms.

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BIOGRAPHY

NAME	Miss Saranya Rattanathaworn
DATE OF BIRTH	21 October 1981
PLACE OF BIRTH	Rayong, Thailand
INSTITUTIONS ATTENDED	Rajamangkala Institute of Technology, 1997-2000 Bachelor of Business Administration Mahidol University, 2008-2010 Master of Business Administration (Business Modeling and Analysis)
HOME ADDRESS	Rayong, Thailand Tel. 038-387-760 E-mail : saranya.muic@gmail.com