CHAPTER III



METHODOLOGY

3.1 Data

The sample contains data on all listed firms from eight industries; Agro & Food, Consumer Products, Financials, Industrials, Property & Construction, Resources, Services and Technology in the Stock Exchange of Thailand between years 1999-2004 excluding the firms having a change of CEO in that year.

Data has been divided into three groups. First, yearly CEOs' characteristics; number of years since he was appointed, number percentage of shares, business related educational background and age are collected from form 56-1. Next, yearly firms' characteristics; firm age, name and title of directors and executives and number of shares from firm non affiliated owners (shareholders who do not have the same last name as the firm's directors and executives that identify in form 56-1) who hold at least 5% of the firm's outstanding shares are collected from Setsmart or form 56-1. Finally, Yearly financial variables; earning before interest, taxes, depreciation and amortization (EBITDA), market value of equity, sales, book value of assets, book value of liabilities, long term debts, capital expenditures (CAPEX) and return index are collected from Datastream.

After collecting all samples, this study excluded some firms which do not have enough data such as CEO's tenure, CEO's business related educational background, CAPEX and return index and some firms having a change of CEO in that year. Finally, there are 1,248 observations across eight industries during six years.

3.2 Research Hypotheses

Hypothesis 1: CEO who is one of the company's founders or founder direct descendant has a positive effect on firm performance

This hypothesis based on Casson (1999) who states that founding families maximize firm value in long term because they view the firm as an asset to pass on to their descendants.

Hypothesis 2: CEO who becomes both CEO and Chairman has a negative effect on firm performance

This hypothesis based on Fama and Jensen (1983) who state that agency costs can be reduced by a separation of decision management (management team) from decision control (board of directors)

Hypothesis 3: CEO who has graduated in business related field has a positive effect on firm performance

If the CEO has a background in business, he is more skillful in firm management.

Hypothesis 4: CEO's ownership has a positive effect on firm performance

This hypothesis based on Loderer and Martin (1997) who state that managers' stockholdings in their firms give them incentives to avoid share-price-decreasing decisions and to seek out share-price-increasing ones.

Hypothesis 5: CEO's tenure has a positive effect on firm performance

This hypothesis based on Sturman (2003) who states that tenure accumulates relevant knowledge, skills and abilities.

3.3 Measuring CEO's Characteristics

This study divided CEO's characteristics into two groups. First, qualitative characteristics by using dummy variables are relationship with founding families, having other insider on board, concentration of titles and business related educational background. Next, quantitative characteristics are age, ownership and tenure. All data based on form 56-1 that issued in year of study.

The first qualitative characteristic is relationship with founding families. This paper measures whether the CEO is one of the company's founders or founder direct descendant. This dummy variable in a given year equals to one when memorandum of association named the current CEO as a founder or current CEO has the same last name as one of the founder. Otherwise, the value of this dummy is zero. The second qualitative characteristic is having other insider on board. If the other insider sits on the board, he will support CEO's opinions. So, the influenced power of the CEO will increase. This dummy variable in a given year equals to one when it has other executive except CEO sits on the board. Otherwise, the value of this dummy is zero.

Moreover, the third qualitative characteristic is concentration of titles. If the current CEO becomes both CEO and Chairman, he should have more influenced power over the board. This dummy variable in a given year equals to one when the CEO and Chairman is the same person. Otherwise, the value of this dummy is zero. Finally, the last qualitative characteristic is business related educational background. If the current CEO has knowledge in business skill, he is more expertise to control the firm. This dummy variable in a given year equals to one when the CEO has graduated in business related field; accounting, economics, finance, management and marketing. Otherwise, the value of this dummy is zero.

The first quantitative characteristic is age. It implies attitudes, experiences and management styles. The second quantitative characteristic is ownership which is the number percentage of shares owned by the CEO. It provides an incentive to improve

firm performance. Finally, the last quantitative characteristic is tenure which is the number of years since the CEO was appointed as CEO. More working experiences can help him know more about the business.

3.4 Measuring Firm Performance

This study uses three firm performance measurements; yearly stock return, industry adjusted ROA and industry adjusted Tobin's Q. All data are calculated at the end of year. First, yearly stock return is calculated from natural logarithm of return index in current year divided by return index in previous year. Next, industry adjusted ROA to capture the impact on accounting performance. ROA is calculated from EBITDA divided by book value of assets. Then, it is adjusted to eliminate the industry effect based on Sitasuwan (2000) by minus with median of ROA in the firm located industry which is calculated from sample in this study. Lastly, industry adjusted Tobin's Q to capture the impact on market values. Tobin's Q is calculated from market value of equity plus book value of liabilities divided by book value of assets based on Adam et al. (2003). Then, it is adjusted to eliminate the industry effect based on Sitasuwan (2000) by minus with median of Tobin's Q in the firm located industry which is calculated from sample in this study.

3.5 Hypotheses Testing

All hypotheses are tested by running OLS regression with this equation.

$$\begin{split} \text{FPM}_{i} &= \alpha + \beta_{1}\text{CEO \& Founder}_{i} + \beta_{2}\text{CEO \& Other Insider}_{i} + \beta_{3}\text{CEO's Concentration of} \\ \text{Titles}_{i} + \beta_{4}\text{CEO's Bus Edu_Bg}_{i} + \beta_{5}\text{CEO's Age}_{i} + \beta_{6}\text{CEO's Ownership}_{i} + \beta_{7}\text{(CEO's Ownership}_{i})^{2} + \beta_{8}\text{CEO's Tenure}_{i} + \beta_{9}\text{(CEO's Tenure}_{i})^{2} + \beta_{10}\text{FIN}_{i} + \beta_{11}\text{Leverage}_{i} + \beta_{12}\text{Firm Size}_{i} + \beta_{13}\text{Firm Age}_{i} + \beta_{14}\text{CAPEX/Sales}_{i} + \beta_{15}\text{Board_Ind}_{i} + \beta_{16}\text{Block_Sh}_{i} + \epsilon_{i} \end{aligned}$$

Where

FPM_i = Firm performance measurement of firm i; Yearly Stock Return, Industry Adjusted ROA and Industry Adjusted Tobin's Q

CEO & Founder_i = Dummy variable that indicates whether the CEO is one of the company's founders or founder direct descendant in firm i

CEO & Other Insider_i = Dummy variable that indicates whether the CEO has the other insider on board in firm i

CEO's Concentration of Titles, = Dummy variable that indicates whether the CEO and Chairman is the same person in firm i

CEO's Bus Edu_Bg_i = Dummy variable that indicates the CEO's business related educational background in firm i

CEO's Age; = Ages of the CEO in firm i

CEO's Ownership, = Number percentage of shares owned by the CEO in firm i

CEO's Tenure_i = Number of years since the CEO was appointed as CEO in firm i

FIN, = Dummy variable that indicate whether the firm i is in financials industry

Leverage, = Long term debts in firm i / Book value of assets in firm i

Firm Size = In(Book value of assets in firm i)

Firm Age, = Number of year since first date of incorporation in firm i

CAPEX/Sales_i = Capital expenditure in firm i / Sales in firm i

Board_Ind_i = Number of firm independent directors in firm i (the directors who identify in form 56-1 as the independent directors) / Number of firm total directors in firm i

Block_Sh_i = Total percentage of shares from firm nonaffiliated owners (shareholders who do not have the same last name as the firm's directors & executives that identify in form 56-1) who hold at least 5% of the firm's outstanding shares in firm i

Hypothesis 1: CEO who is one of the company's founders or founder direct descendant has a positive effect on firm performance

$$H_0: \beta_1 = 0$$

$$H_1: \beta_1 > 0$$

The significant of this coefficient is tested by using t-statistic.

Hypothesis 2: CEO who becomes both CEO & Chairman has a negative effect on firm performance

$$H_0: \beta_3 = 0$$

$$H_1: \beta_3 < 0$$

The significant of this coefficient is tested by using t-statistic.

Hypothesis 3: CEO who has graduated in business related field has a positive effect on firm performance

$$H_0: \beta_4 = 0$$

$$H_1: \beta_4 > 0$$

The significant of this coefficient is tested by using t-statistic.

Hypothesis 4: CEO's ownership has a positive effect on firm performance

$$H_0: \beta_6 = 0$$

$$H_1: \beta_6 > 0$$

The significant of this coefficient is tested by using t-statistic.

Hypothesis 5: CEO's tenure has a positive effect on firm performance

$$H_{\scriptscriptstyle 0}:\beta_{\scriptscriptstyle 8}\!=\!0$$

$$H_1: \beta_8 > 0$$

The significant of this coefficient is tested by using t-statistic.

Moreover, this paper examines the same relationship in different environment; recession period in years 1999-2001 and booming period in years 2002-2004. So, this study divided the sample into two periods; years 1999-2001 and years 2002-2004. Then, run equation (1) in each period.