

## POLITICAL CONNECTION AND OWNERSHIP CONCENTRATION: EVIDENCE FROM THAILAND

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## ABSTRACT

This study investigates firm performance and risk with the impact of political connection and ownership concentration. The evidence based on firms listed in the Stock Exchange of Thailand from year 2001 to 2004. Political connection defines as firm with political ties to any Cabinet Ministers. This connection has two types. First type is the connection through shareholder who holds at least 10 percent shareholding. Second type is the connection through Board of Directors, including both executive and non-executive positions. Ownership concentration defines as the cumulative stock ownership of shareholders who own at least 5 percent. Political connection is a dummy variable where it equals to 1 if firm has connection through either shareholder, Board of Directors or both. The empirical result shows that political connection has a positive effect on firm performance such as return on equity, Tobin's Q and market share. Ownership concentration on the other hand has a positive effect on Tobin's Q and market share. Higher leverage is associated with concentrated ownership firm but not with political connection.

The political connection proves to have no impact on level of firm risk, while ownership concentration is negatively related with beta, this indicates high concentrated ownership firm reduces level of market risk.

## CHAPTER 1

#### 1.1 Introduction

The topic on the political connection has been around many years. Many researchers have conducted empirical studies around the world. Some focus around Asia Pacific region, Fisman (2001) studies Indonesia's connected firms, Johnson and Mitton (2003) focuses in Malaysia while Faccio (2006) extends the study to cover 47 countries around the world in order to produce a comparative result between these countries. The connection exists in many countries, even in a developed country as in United States, Agrawal and Knoeber (2001) finds that there are benefits to the firm performance when appointing a Board of Directors with political experienced. Obviously the benefits of political connection can take many forms. Dinc (2005) suggests that government-owned banks are more influenced during the election years by politicians to increase the lending. The connection provides some value to the public firms listed in stock market in Indonesia, Fisman (2001).

The connection is strongly linked in developing countries with weak law enforcements and poor quality of independent institution to monitor the government actions and in this environment that some business groups take advantages by exerting their influence onto the government policy. In particular, Morck et al. (2000), suggests that large business groups have an incentive to lobby the government in order to preserve their wealth and business position and allocate resources to enhance their private economic interests at the expense of the society. In China, Cheung et al. (2005), found supporting evidence that political connections are detrimental for minority shareholders and state owned firms turn their blind eyes on the expropriation by private shareholders.

Concentration of ownership is another issue that strongly linked in developing countries. Claessens et al. (2000) studies firms in East Asia region and finds that family control is common in more than half of East Asian corporations. The concentration of control generally diminishes with the level of economic development in the country. Khanthavit et al. (2003) investigates the ownership and control of Thai public firms. They

focus during the period after the crisis and they find that the ownership and control appear to be more concentrated in the hands of controlling shareholders. Mitton (2002) studies the corporate governance of five countries in East Asian. The focus is on the firm performance during the crisis with different corporate governance variables. The result shows strong performance for firms during the crisis with a presence of block shareholder.

Thailand provides an interesting setting for the study on political connection and ownership concentration because Thailand represents one of the emerging countries where large politically influential business groups exist and became dominantly in power during 2001 to 2004. This period of study provides a unique sample of political party led by Mr. Thaksin Shinawatra that is worth studying. Mr. Thaksin Shinawatra had led his party, Thai Rak Thai (TRT), to win an enormous majority of votes in 2001 (TRT completed the full 4-year term without dissolution). TRT had attracted many major business leaders who suffered from the financial crisis and saw the opportunity to be more actively participated in politics, Baker and Phongpaichit (2005). Therefore, the entry of businessmen into politics has created an opportunity to identify firms with political connection. In general, there are many politicians who connected with business firms and some are differed in terms of their political power depending whether they are Cabinet Ministers or Members of Parliament.

The mixture of business and politics are common in many countries as suggested by Bunkanwanicha and Wiwattanakantang (2006), in Hong Kong where a shipping tycoon, Tung Chee Hwa, turned a leader as Hong Kong's Chief Executive during 1997 to 2004. In Italy, a media tycoon, Silvio Berlusconi, served as a country Prime Minister.

This paper complements other related literatures, Bunkanwanicha and Wiwattanakantang (2006) and Imai (2006), by investigating if politically connected firms obtain any private benefits during the reign of TRT party from 2001 to 2004. The closest papers to date are Imai (2006) which investigates politically connected firms their performance and compare if benefits is different with varying level of political power and Bunkanwanicha and Wiwattanakantang (2006) which investigates the incentive for big business owners to seek position in politics by studying the connected firms

performance, through the market valuation and using event study to show if economic advantages are transferred to connected firms.

However, this paper is similar and different from previous literatures in several ways. The first similarity is to focus on the connection through the Cabinet members, according to previous findings, this level of political power is greater than if the connection is through Members of Parliament. The second similarity is measuring firm performance by using accounting method, to see the differences between connected and non-connected firms. The differences, this paper studies the connected firm performance using both accounting and market measures and the risk measurement is introduced to compare between connected and unconnected firms. This paper is also the first to investigate the combined effect of political connection and concentration of ownership on firm performance and risk.

## 1.2 Research Question

Whether the political connection and concentration of ownership have any impacts on firm performance, leverage, market power and firm risk?

## 1.3 Objectives of Study

- 1 To study the impact of political connection and concentration of ownership on the firm performance.
- 2 To study the impact of political connection and concentration of ownership on the firm leverage.
- 3 To study the impact of political connection and concentration of ownership on the firm market power.
- 4 To study the impact of political connection and concentration of ownership on the firm risk.

#### 1.4 Scope of Study

The period of study focuses between years 2001 to 2004 when TRT party led by Mr. Thaksin Shinawatra ran the country as the Prime Minister. The time is considered as an interesting period when the group of business leaders joined TRT party therefore this should provide a solid experiment to study the rent seeking activities by politicians through connected firms. The sample firms are the listed firms in Stock Exchange of Thailand (SET).

The firm performance uses Return on Asset (ROA) and Return on Equity (ROE) as accounting measures while uses Tobin's q as a market measure. For leverage uses the ratio of long-term debts to the product of book value of liabilities and the market value of equity. For market power uses firm's sales to total market sales. The firm risk uses market model beta (systematic risk), standard deviation (total risk) of weekly returns and unsystematic risk.

The definition of connection will follow Faccio (2006) where the criteria fall under two categories. First is the connection through Board of Directors, including both executive and non-executive directors. Second, the connection through major shareholder, at least 10 percent shareholding level according to the Rules of Stock Exchange of Thailand and at this level, a shareholder can control the firm in some manners according to the Thai corporate law, Charumilind, Kali and Wiwattanakantang (2006).

For ownership structure, the scope will focus on the ownership concentration rather than trying to find an ultimate owner. To measure the ownership concentration, I will follow Mitton (2002) by using all shareholders own more than 5 percent.

#### 1.5 Limitations of Study

The search for political connection will focus only the direct measure of connection that is observable any connection such as friendship will be excluded.

Less established firms and families may not be properly accounted due to lack of information on the family information.

The sample excludes firms that are not trading during the period since the information on the weekly stock return is needed and firms with negative book value of equity.

The intention of setting up nominee account is to hide the true ownership of firm, therefore the sample could potentially be underestimated.

By including only the connection with Prime Minister and the Cabinet Ministers, the result can potentially underestimate the value of connection with other government officials or Members of Parliament.

The measurement of ownership concentration does not indicate divergence between cash flow rights and voting rights.

The rest of the paper is organized as follows. Chapter 2 will briefly describe Thai political system after the new constitution and follow by reviewing some relevant literatures. Chapter 3 will describe sources and types of data, discuss about hypothesis and methodology.

## **CHAPTER 2**

#### 2.1 Literatures Review

This section reviews the literatures on the finding of political connections and the common characteristics for such condition to exist and if these connections add value to the firm. I will start by introducing some background literatures on the Thai political system since the financial crisis.

#### 2.1.1 Political Reform after Financial Crisis

After the financial crisis in 1997, there was a political reform and resulting in a new constitution. The intention was to reduce the corruption problem that Thailand saw it as a cause of crisis and to create a more stable democratic system. Thailand has a history of unstable government where the power changes hand too often and with this new constitution aims to increase the transparency and create independent institutions to oversee the election and check corruption for elected politicians. The Election Commission, the National Counter Corruption Commission, the Constitutional Court and elected Senate supposedly aim to eliminate the conflicts of interest among the politicians and provide more transparency to the system. The constitution stated that the cabinet members could only hold less than 5 percent of shares in any private company.

The general election that was held on January 6, 2001, the Thai Rak Thai party won the election with 248 out of 500 seats of the House of Representatives, representing 48 out of 100 party list members according to the 1997 constitution. Other party list members were drawn up by opposition parties.

Thai Rak Thai party is a unique example of business politicians in that the Prime Minister and many Cabinet Ministers are either the founders of big business or belong to the families who own businesses. There has not been such a concentration of leading businessmen involved directly and openly in party politics (later in Cabinet) since early 1980s. However, after financial crisis, they see the necessity of taking the political roles themselves and partly it was made possible by the party list system, Baker and Phongpaichit (2005).

Another reason that made the business politicians to participate in the politics is that, the law prohibits Cabinet Ministers from holding an excessive stake in private businesses has in itself a loophole, Imai (2006). Basically, they can transfer their shares to their family and friends or even housekeeper and driver (in the case of Prime Minister). Once they were appointed, they started bringing close connected people to serve on independent institutions in order to control the monitoring actions.

#### 2.1.2 The Connection

Political connection can be important to firms especially in an emerging country where firms operate under weak law enforcement and dominated by concentrated ownership and family businesses. The firms in Thailand are found to be mainly family controlled, Claessens et al. (2000). This view supports by Bunkanwanicha and Wiwattanakantang (2006), they show that a country's corporate ownership being concentrated in the hands of a few wealthy families tend to seek to influence the state power by getting elected. Once in the power, they can modify or set up policies that cater for their business empires. This is because the country has weak institutions and does not have sufficient independent media to monitor the government since some of the TV stations and major newspapers controlled by the state and the politicians.

Faccio (2006) studies corporate political connections around the globe, she suggests that connections are particularly common in countries that are perceived as being highly corrupt. The connections are less common in the presence of more stringent regulation of political conflicts of interest. She identifies connections by tracing, a Member of Parliament, a Minister or the head of State connects through top officers (by sitting on the Board of Directors) and large shareholders (holding at least 10 percent of shareholder votes) of the firms. She also expands the connections to capture the close relationship between top official and politicians. Overall, she finds that 2.68 percent of all listed corporations are connected and for Thailand, it has over 10 percent of listed corporations that are politically connected, which in turn accounted for more

than 20 percent of market capitalization. By composing the connection index using various variables, she discovers the significantly positive result associated with corruption as well as less freedom of press is associated with higher incidence of connections. However, in countries with better legal environments, the evidence supports that the connections are less common by showing statistically significant in regressions.

Faccio and Parsley (2006) introduce a different approach in tracing for the political connections. They argue that political connection is based on geographic origin and education and therefore suggest that politicians systematically favor local firms and so location forms a basis of political connections. The study relies on the location of firm headquarters to establish ties and considers the connection to a politician all firms located in the same town as the one in which the politician lived or was born. They focus on countries with available date which eventually end up with relatively developed economies.

Morck et al. (2000) study firms with controlling heirs and suggesting that the strong economic position is due to their heritage and their controlled firms' prominence rather than heirs own abilities to manage or innovate. Billionaire heirs are likely to oppose to innovation and openness in doing business, they see this as potential treats. Therefore, controlling families have incentives to invest in excess political lobbying. Firm pyramidal structure allows controlling families to use the firm low in their pyramids' resources in lobbying the government to secure their position in business through policies. By using an index of FDI barriers to measure the impediments of market entry and capital flow, higher value means level of difficulty is higher to enter the market whereas low value means easier to entry. The evidence shows that billionaire-heir wealth is greater when barriers are high.

Often the study of connection ties together between bank and politician in the form of crony lending or connected lending. Government-owned banks are regarded as politically influenced by the actions of politicians in some emerging markets. Dinc (2005) provides cross-country study of this influence on banks. The paper concentrates around an event that induces politicians to use government-owned banks for their own political aims such as election. The evidence suggests that government-owned banks increase

their lending in election years relative to private banks. The study of crony lending in Thailand before the financial crisis, Wiwattanakantang, Kali and Charumilind (2006), indicates that the allocation of credit by banks on soft terms to friends and relatives rather than on the basis of hard market criteria has been hypothesized as an important cause of the crisis. They examine whether non-financial firms with crony ties to banks have easier access to long term debt than firms without such ties. The evidence shows greater access to long term debt for firms with such ties and these firms require less collateral for long term loans.

Political relationships and the firm's choice of financing can be seen by the study of Leuz and Oberholzer-Gee (2005). They focus in Indonesia, and examine the link between political ties and firms' global financing strategies. They argue that firms with political ties often receive cheap loans from state-owned banks so they are less likely to use foreign capital markets as their financing choice. The study provides strong support that firm with close connection with the Suharto regime is significantly less likely to have publicly traded securities abroad.

The earlier studies of connection under Mr. Thaksin Shinawatra's Ministers by Bunkanwanicha and Wiwattanakantang (2006) and Imai (2006) provide the basis of further investigation in political connection in Thailand. Bunkanwanicha and Wiwattanakantang (2006) analyze the framework based on the private-interest theory of government that hypothesizes that leaders are self motivated. Business tycoons have economic incentives to seek political power in order to use state policies to preserve or expand their economic power. The connection focuses on the tycoons who ran for the positions of the House of Representatives in January 2001 general election. The tycoons are from the top 100 wealthy families based on family total assets. They also exclusively define the connection of business tycoons who were in the Thaksin Shinawatra's Cabinets during 2001 to 2003.

Imai (2006) uses Thai family businesses that published under, Thai Business Group: A Unique Guide to Who Owns What, by the Brooker Group to trace for connection with politicians. The study suggests that Cabinet members have higher political power and more control over the everyday management therefore they should have benefited more

from the connection. To strengthen the connection, the search is narrowed down to include only the firms that are owned by families whose members are politicians.

## 2.2 The Performance of Connected Firms

The value of connection can be measure through the use of accounting approach.

#### 2.2.1 Accounting Measurement Approach

Faccio (2006), focuses connected firms performance in 47 countries where the data on the political ties come from published paper by Faccio (2006). She analyzes the characteristics of connected firms using leverage, taxation, market power, accounting performance and market valuation. Connected firms exhibit higher leverage than nonconnected firms and even higher leverage if the connection is stronger. Taxation is lower for connected firms while the difference between tax rate of connected and nonconnected is not statistically significant. Market share shows stronger among the connected firms and notably even higher through connection with ownership rather than through a director. For accounting performance, she uses Return on Equity (ROE) while market valuation uses market-to-book ratio. Connected firms show lower ROE and also lower market-to-book ratio, they are poorer performers than non-connected firms.

Fraser et al. (2006), focus on the link between leverage and political patronage of the firms in Malaysia. To measure the political patronage, they use the percentage of direct government equity ownership of a firm, the percentage of equity owned by institutional investors and the informal ties with three politician officials similar in the study by Johnson and Mitton (2003). The study supports that there is a positive link between leverage and informal ties to politicians. The link between political patronage and firm leverage is indirectly through firm size and profitability. Higher leverage also links to the firms with high level of direct government equity ownership, high level of institutional investors and firms with informal political ties. This suggests that the political patronage is linked to a firm's ability to carry more debt. When comparing with size and profitability, the leverage increasing effects are stronger for larger and more profitable firms, while market-to-book ratio does not appear to be related to firm leverage. This view is supported by Johnson and Mitton (2003) where they find that connected firms carry more debt than non-connected firms before the crisis.

Bunkanwanicha and Wiwattanakantang (2006) uses market valuation and market share to investigate the connected firm performance. Market valuation uses market-tobook ratio and market share as firm's sales divided by total industry sales. Connected firms outperformed non-connected firms significantly by increasing in market-to-book ratio. For the market share, before business tycoons took position in the government, is not statistically distinguishable from that of non-connected firms, however once they took the position, the market share increased substantially.

Imai (2006) uses Return on Assets (ROA), net profit-to-sales, operating profit-toassets and operating profit-to-sales ratios to measure for the firm profitability. The study shows that the profitability difference between connected and unconnected firms is approximately 2 percent. Firms' connection with the Cabinets results in higher profitability than unconnected firms by 9 percent, whereas firms owned by families whose members are in the Cabinet enjoy approximately 10 percent higher returns than firms without connection. The connection proves as one of the key determinant in doing business while connection through the Cabinet members exerts stronger value of connection than the connection among political officials.

In this study, my focus will be on the connection with Prime Minister and the Cabinet Ministers and to study the firm performance and risk. The method of tracing ownership structure will follow Bunkanwanicha and Wiwattanakantang (2006). The types of political connection follow Faccio (2006).

#### 2.3 The Concentration of Ownership

The relationship between ownership structure and firm performance has been explored in many aspects. The monitoring of firm with dispersed shareholders tends to be very little due to the small stake in each of the shareholding. Therefore, there is no incentive to monitor the management and this leads to a danger causes by the manager who could pursue his own interest at the expense of shareholders. The possibility of this happening is minimal for the case of a firm with large or controlling shareholders. These shareholders have more incentive to monitor the management in order to maximize the profit. The problem discusses raise the issue of agency cost, where this agency cost refers to the cost that manager interest is not aligned with the shareholders and can take into a form of preference for on the job perk, making self-interest or entrench decision that reduces shareholders' value. In order to reduce the agency cost, some researchers suggest that a firm needs to have one or more large shareholder to perform monitoring activity. If one shareholder's monitoring lead to an improvement in firm performance then all shareholders will benefit and each shareholder will free-ride in the hope that other shareholders will do the monitoring activity.

According to the paper by La Porta et al. (1999), they argue that with concentrated ownership, this can help lower the agency cost. The result suggests a positive relationship between external shareholdings by blockholder and performance. Claessens et al. (2000) find that the separation of management from ownership is rare and family control dominate the corporations. This implies the incentive on expropriation wealth from minority shareholder.

Wiwattanakantang (2001) investigates the effect of controlling shareholder on corporate performance. She discovers that the presence of controlling shareholder enhances the firm performance, however when controlling shareholder involves in management the firm performance declines and more declining if the level of managerial ownership rises to 25-50 percent.

Lins (2002) investigates to see if management ownership structure and large nonmanagement block holder relates to firm value. The study uses samples from 18 emerging countries and results show that firm value is lower when management group's control rights exceed its cash-flow rights. However with large non-management block holder's control rights, the result is positively related to the firm value. Therefore, this large non-management block serves as the partial substitution for institutional governance mechanisms.

Mitton (2002) explores firm performance on corporate governance variables. The results show better stock return during the crisis for firm with higher accounting standard

by having the auditors from the Big Six international accounting firms, firm with large block of shareholder and with focus firm rather than diversified firm.

#### 2.3.1 The Risk Measurement

According to Gursoy and Aydogan (1999), firm with higher concentration of ownership exhibits lower accounting based measurement such as ROA and ROE whereas market performance, price to earnings and stock return, are higher. Risk exposure is also different on the level of ownership concentration. In the study, authors employ capital market measurements such as total risk and market risk of equity. Beta is a measure of market risk and standard deviation is a measure of total risk. They observe that concentrated firms are higher in total risk and lower in market risk. Low market risk can be expected as firm with diffuse shareholders is usually run by professional managers with less or no interest in the firm, so these risk-averse managers cannot diversify their human capital. While higher concentrated ownership firm tends to take on more risk at the expense of creditors.

Moreover, the presence of different types of shareholders illustrates different level of risk. For government owned firms, the finding shows positive related with risk measures both beta and standard deviation. They tend to show higher risk according to the lower level of good transparency or corporate governance. For foreign owned firms, total risk is higher as the firms face additional risk of having to expose to exchange risk.

## CHAPTER 3

#### 3.1 Methodology

Following this chapter, I would describe how the data will be collected, state the hypothesis and follow by explaining the method in order to answer the hypothesis.

#### 3.1.1 Data Sources

This study uses firm-level data for companies listed in the Stock Exchange of Thailand in 2001 to 2004. The data are collected from multiple sources. The equity ownership, members of the Board of Directors, number of shares outstanding and accounting data (for consolidated companies) are obtained directly from the Stock Exchange of Thailand website (www.set.or.th) and from setsmart website (www.setsmart.com). For private company information, I use Business Online website to trace for the company ownership. The sources contain the information in great detail both in English and Thai languages. The database provides the information on shareholders with shareholdings of at least 0.5 percent. For each firm, I will be able to obtain family relationships between the major shareholders and the management beyond their surnames. The Stock Exchange of Thailand requires listed companies to disclose the information in Form 56-1. Additional information and references for ownership structure and family relationships, especially those affiliated with big business groups are obtained from Thai Business Groups 5<sup>th</sup> edition published by the Brooker Group Public Co., Sappaiboon (2000, 2001) provide detailed information on fifty-five wealthy families, Thai newspaper such as Krung Thep Turakit (various issues). For cross checking on information about shareholders, I can use Form 56-1 for listed companies.

For the information on the Thai government during the period of 2001 to 2004, I am able to use multiple sources of websites, such as www.mof.go.th, www.thaigov.go.th, www.parliament.go.th and from wikipedia website. Thai newspaper database in the university library also provide useful source of politicians name and their role in the government during the period.

#### 3.2 Sample Description

The sample in this study includes both financial and non-financial listed firms in Thailand during the year 2001 to 2004. Financial data can be obtained from website of Stock Exchange of Thailand and information about stock price, stock returns and market index from the Datastream. Each firm needs to provide a complete data for the period of study, otherwise firm with missing data will be excluded from the sample. The final data will be arranged into a balanced panel structure where each firm is sorted by year under each row.

## 3.3 Identify the Political Connection

Tracing for politically connected firms are not quite such a straightforward task. Data on ownership for some of the firms are held through nominee accounts and shell entities. However, I have limited myself only on the major shareholder, those who control at least 10 percent of shares, and also I focus only on direct measure of connections that can be observed. Taking into account some empirical studies on ownership structure of Thai firms, Wiwattanakantang (2001) finds that Thai firms are concentrated among groups of families and the ownership is concentrated via pyramid structure. Claessens et al. (2000) find extensive family control in more than half of East Asian countries, firms in Thailand are mainly family controlled and the largest ten families control half of the firm assets in the study.

I will treat all family members as well as controlling companies owned by these members a single shareholder as in Bunkanwanicha and Wiwattanakantang (2006) since in Thailand it is very common that businesses are closely tied by a group of family. A shareholder will include individuals with same surnames and close families that linked through marriage.

Political connection in this study follows Faccio (2006) type of connection by classifying into two categories. The first category is connection through the Board of Directors. This is done by checking surnames of listed firms for same surnames as either the Prime Minister or Cabinet Ministers, including also close family members such

as in-laws family members. The second category is connection through shareholding of at least 10 percent accumulation (define as a major shareholder).

#### 3.4 Define the Concentration of Ownership

Ownership concentration is defined similar to the paper by Mitton (2002). I choose to follow Mitton to identify all shareholders who own more than 5 percent in each firm and sum up the total holding of these shareholders.

## 3.5 Hypothesis

According to the literature review, the relationship with politicians can result in better firm performance through preferential treatment or directly receive benefit from the new government policies or can be detrimental to minority shareholders as in China. However for the case in Thailand, the literature by Imai (2006) uses accounting measure ROA to represent the firm profitability. The investigation proves firms to have additional advantage of having political connection to enhance firm value. Therefore, in this first hypothesis, I would expect to see similar trend as previous study illustrated that connected firms have higher Return on Assets than the non-connected firms.

## Hypothesis 1 Connected firms have higher Return on Assets than nonconnected firms

Previous study by Imai (2006) uses Return on Assets (ROA) to measure firm profitability, the result shows higher ROA for connected firms than non-connected firms. Also the connection with Cabinet Ministers, on average results in higher ROA than non-connected firms by 9 percent. Wiwattanakantang (2001) finds higher ROA for firms with controlling shareholder (25 percent shareholding) than firms without controlling shareholder.

Another measure for firm performance is Return on Equity (ROE). I expect that this indicator should show higher performance for connected firms due to their incentive to

hold the market position by lobbying the politicians. These firms are connected with Cabinet Ministers so degree of special treatment or winning the licenses are higher compare with firms without connection.

## Hypothesis 2 Connected firms have higher Return on Equity than nonconnected firms

Faccio (2006) shows firms with connection to be poor performers than nonconnected firms. Interestingly, the result show similarity in all countries in the sample and the difference is more significantly in Russia and Thailand.

Wiwattanakantang (2001) compares results with three different ownership levels, 25-50 percent, 50-75 percent and 75-100 percent. They all support the argument that firms with concentrated ownership are less serious in the expropriation problem.

By studying firm performance with market measure, I include Tobin's q in this study. Many empirical studies use Tobin's q as a market measure because it captures the relationship between firm performance and the ownership structure, it is also less subjective to management manipulation of firm's earning and it incorporates market expectation about firm value. Therefore I hypothesize that firms with connection will show higher Tobin's q value due to their ability in competing with non-connected firms.

#### Hypothesis 3 Connected firms have higher Tobin's q than non-connected firms

Wiwattanakantang (2001) uses Tobin's q to measure the firm performance for ownership structure. She shows Tobin's q to be positive for firms with controlling shareholder-and-manager with more than 75 percent ownership. This supports the argument that firm's value increases as the controlling shareholder and management have their interests align with those outside investors.

Chunhachinda and Jumreornvong (1999) use Tobin's q to measure for the competitiveness of bank and finance industry as well as the factors that may contribute to the competitiveness of these firms. Tobin's q ratio on average for finance firms is

higher than that of banks. High efficiency in funding gap management and high liquidity of loans to deposits are the contribution to the higher competitiveness of finance firms.

Most of literatures on connection provide evidence of connected firms having higher leverage than non-connected firms. The supporting argument is also true for the case of crony lending where connected firms are easier to get loans from banks. Lenders are more willing to extend credit to connected firms as they could possibly receive a guarantee agreement with the government or being bailed out if these firms encounter any financial difficulties. Therefore I hypothesize that connected firms should have higher debt than non-connected firms.

#### Hypothesis 4 Connected firms have higher leverage than non-connected firms

Faccio (2006) finds that connected firms show significantly higher leverage than non-connected firms. Higher leverage firms tend to be for firms with connection through owner rather than through Board of Directors.

Johnson and Mitton (2003) suggest that if firms have higher leverage prior to the crisis then they would be expected to perform worse in a crisis. They show higher debt ratios among the connected firms.

Fraser et al. (2006) find the link between political patronage and leverage of connected firms to be positive and significant. They investigate three different proxies, government equity ownership, institutional ownership and connection with three most powerful politicians in Malaysia by following Johnson and Mitton (2003). The three proxies show the similar results as previous finding where connected firms have higher leverage.

In order to measure the market power of firms in the industry, there are several measurements available. Faccio (2006) uses market share as a measure of connected firm's market power. She suggests two different ways of calculating for market share, one is using sales and another one is using market capitalization. The reason for market capitalization is used because financial firms are included in the sample. Firms connected with Cabinet Ministers, can influence the outcome of regulations and directly allocate public resources to their own private interests. This in turn creates entry barrier

for new competitors, weak price competition and less capital flow. Therefore, I expect connected firms should enjoy higher level of market share or market power.

# Hypothesis 5 Connected firms have higher market power than non-connected firms

The measures of firm risk in this study include beta and standard deviation. Beta is a measure of market risk expressed as a coefficient whose average value for the market is unity. Therefore if firms have beta greater than unity then firms are relatively sensitive to market movements. Standard deviation consists of both systematic and unsystematic risk. Firms with political connection in some ways should reflect lower level of risk associated. This is because connected firms rely more upon projects launched by the government due to their strong connection with Cabinet Ministers. As long as the government remains in control or power, these firms should gain mostly from government projects and licenses. Therefore, I expect to see lower beta, standard deviation and unsystematic risk for connected firms. However, the risk measures may not have any relationship with the political connection as some firms may invest in more risky projects due to their ability to gain an easy access to the capital so the management has an incentive to take up more risk at the expense of creditors since the government is backing up in case the firms fail to realize return from the risky investment.

- Hypothesis 6 Connected firms have lower beta value than non-connected firms
- Hypothesis 7 Connected firms have lower standard deviation than nonconnected firms
- Hypothesis 8 Connected firms have lower unsystematic risk than nonconnected firms

Gursoy and Aydogan (1999) investigate the impact of ownership on firm performance. Family, foreign and government ownership types are used and each type of ownership should exert different risk attitudes. They show that firms with concentrated ownership have higher total risk and lower market risk than firms with diffuse ownership. Government ownership is positively related to both beta and the standard deviation.

## 3.6 Defining Performance, Leverage, Market Power and Risk Measures

The firm performance uses Return on Asset (ROA), Return on Equity (ROE), market power, leverage and Tobin's q. The firm risk uses market model beta, standard deviation of weekly returns and unsystematic risk. The firm performance and risk may be directly or indirectly affected by the number of factors related to the nature and industry of the firm. Therefore, a number of control variables are introduced to account when doing the regression.

#### 3.6.1 Performance Measures

#### Return on Assets (ROA)

Return on Assets is defined as the ratio of earnings before interest and tax (EBIT) divide by total assets.

#### Return on Equity (ROE)

Return on Equity is defined as net profit divide by common equity.

#### Tobin's q (Q)

Tobin's q is defined as the market value of equity at the end of year plus the book value of liabilities divided by the book value of total assets. The market value of equity is the product of firm's market price of stock and the number of common shares. I follow the simplified version of Tobin's q as suggested in the paper by Wiwattanakantang (2001).

## 3.6.2 Leverage and Market Power Measures

#### Leverage (LEV)

Leverage is defined as the ratio of long-term debts divide by the product of book value of liabilities and market value of equity.

#### Market Power (MKTP)

Market power is defined as the firm's sales to the total market sales.

## 3.6.3 Risk Measures

#### Beta (BETA)

Method of finding beta is as followed, first employing weekly return for stocks and market (SET index return) over two-year prior to the study period. Then subtracting stock return with risk free rate, in this case I use 10-year bond, to get Ri. Subtract SET index return with the same risk free rate to get market premium, Rm, and substitute into market model equation. This beta represents a market risk for firm.

#### Standard Deviation (STDEV)

Standard Deviation is defined as the equity rates of return for the firm's equity. I will employ weekly return over the two-year prior to the study period. This represents a total risk for firm as it encompasses systematic and unsystematic risks.

#### Unsystematic Risk (UNSYS)

Unsystematic risk defines as the residual variance according to the following equation,  $\sigma_{\varepsilon}^2 = \sigma_i^2 - \beta^2 * \sigma_m^2$ , where  $\sigma_i$  is firm *i* variance,  $\sigma_m$  is market variance and  $\beta$  is firm's beta. This represents firm's specific risk.

#### 3.7 Explanatory Variables

#### Connection through director or major shareholder (PCON)

The firms with connection through a major shareholder (accumulation of at least 10 percent shareholding) or firm's Board of Directors fall under this category. This variable is equal to one if a firm's director or major shareholder is connected with Prime Minister or Cabinet Ministers and zero otherwise. This is a dummy variable.

#### Concentration of ownership (CONC)

To measure the ownership concentration, I sum up total holding of all shareholders who own more than 5 percent in each firm.

# Interaction term between political connection and concentration of ownership (POLCON)

This represents the effect from both political connection and concentration of ownership to the firm performance and risk.

#### 3.8 Control Variables

As stated earlier that a firm's performance and risk may be affected directly or indirectly by factors related to the nature of the firm and its industry. Therefore I introduce the following control variables.

#### Size (SIZE)

The natural log of firm's total assets is a proxy for firm size. Larger firms may find it easier to generate funds internally and to access funds from external sources. Firm size is widely used to control for the firm's market power as larger firm with high level of output raises entry to barrier. This control variable should reflect a positive relationship with firm performance as larger firm with higher production and lower cost enabling higher level of economy of scale comparing with smaller firms. Small firm should be more flexible at investing in risky projects as shareholders of this firm tend to involve in management therefore they are willing to take on projects that give higher return at the debt holders' expense. Larger firm normally diversifies its market and customer based therefore firm's risk should be lower. This should reflect a negative relationship with risk.

#### Age (AGE)

This defines as number of years since incorporation. Well established firms may have superior performance as a result of experience and reputation. Newly established firms are hard to predict about firm's future as skill and experience required time to master. Therefore I expect this control variable to have a positive relationship with firm performance.

Start-up firm is difficult to predict the outcome of its business performance therefore level of failure is higher than well established firm. This should reflect a negative relationship with risk.

#### Sales to Asset (STA)

This defines as sales divide by total assets. This variable is proxy for firm efficiency as I expect this to be positively related to firm profitability. More efficient firms should result in higher profitability. Higher risk can be associated with high capital intensive firm, as firm rapidly builds up its size and continues to push higher sales. Therefore this should show a positive relationship with risk.

#### Government (GOV)

This serves as a dummy variable for firms with government (Ministry of Finance) owned more than 10 percent. Previous studies suggest that government owned firms face serious corporate governance problem and lack of management's expertise to increase firm performance. Therefore, this should be negatively related to firm profitability as well as firm risk.

#### State-owned Enterprise (SOE)

This is a dummy variable for firms with state-owned enterprise owned more than 10 percent. Similar argument as government owned firms that SOE tends to suffer corporate governance problem and detrimental to minority shareholders. Therefore I expect this to have a negative relationship with both firm performance and risk.

#### Foreign (FOREIGN)

This serves as a dummy variable for firms with foreign owned more than 10 percent. Previous study by **Wiwattanakantang (2001)** finds that foreign owned firms tend to perform better than domestically owned firms because of foreign expertise and knowhow. Therefore I expect this to be positively related with firm performance.

With foreign management, level of firm risk should be minimal as firm equips with better risk management as well as global opportunity in order to diversify its market. This should reflect a negative relationship with risk.

Industry (IND) variable is included as dummy variable in order to remove variation from different type of industries. Some industries might have industry specific pattern of capital structure, market products and level of competition. Certain industries are difficult to forecast while other industries are easy therefore these can affect on firm performance and risk.

#### 3.9 Model Specification

The relationship between political connection and concentration of ownership to both the firm performance and the firm risk can be expressed in the form of OLS regression below:

#### Connection, concentration of ownership and firm performance

 $ROA_{tt} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$  $ROE_{tt} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

 $Q_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

where subscript *i* represents firm and *t* represents year of study

## Connection, concentration of ownership and leverage

 $LEV_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

where subscript *i* represents firm and *t* represents year of study

Connection, concentration of ownership and market power

 $MKTP_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

where subscript *i* represents firm and *t* represents year of study

## Connection, concentration of ownership and firm risk

 $BETA_{t} = \beta_{0} + \beta_{1}PCON + \beta_{2}CONC + \beta_{3}POLCON + \beta_{4}STA + \beta_{5}SIZE + \beta_{6}AGE + \beta_{7}GOV + \beta_{8}SOE + \beta_{9}FOREI + \beta_{10}IND + \varepsilon_{it}$   $STDEV_{it} = \beta_{0} + \beta_{1}PCON + \beta_{2}CONC + \beta_{3}POLCON + \beta_{4}STA + \beta_{5}SIZE + \beta_{6}AGE + \beta_{7}GOV + \beta_{8}SOE + \beta_{9}FOREI + \beta_{10}IND + \varepsilon_{it}$   $UNSYS_{t} = \beta_{0} + \beta_{1}PCON + \beta_{2}CONC + \beta_{3}POLCON + \beta_{4}STA + \beta_{5}SIZE + \beta_{6}AGE + \beta_{7}GOV + \beta_{8}SOE + \beta_{9}FOREI + \beta_{10}IND + \varepsilon_{it}$ 

where subscript *i* represents firm and *t* represents year of study

## **CHAPTER 4**

#### 4.1 Empirical Result

#### 4.1.1 Summary Statistics

The sample data are the listed companies in Stock Exchange of Thailand during year 2001 to 2004, the sample excludes firms under rehabilitation sector and those with unavailable information. The selected sample is used to examine the relationship between political connection and ownership concentration with firm performance and risk. Overall sample consists of 278 firms and detailed descriptive statistics are in tables below.

Table 1 illustrates the distribution of firms across industries in the sample, it shows that politically connected firms are present in 12 industries. The connected firms are most concentrated in communication and spread among banking, commerce, electronic components, energy, entertainment and recreation, finance and securities, hotel and travel services, household goods, insurance and property development. Certain industries are protected by government regulation and licensing which potentially led to market barrier for new competitors and benefited those firms with political tie. The sample covers approximately 80 percent of total market capitalization. The firms with connection represent over 30 percent of total sample capitalization. Under connected firms, 14 firms are classified as connected through management, 2 firms are connected through shareholders and 7 firms are connected through both shareholders and management. This classification of political connection follows the work by Faccio (2006) where any firm with political ties hold at least 10 percent shareholding is regarded as connected through management.

Table 1

Table 2 displays the descriptive statistics of the sample. On average connected firm show higher total assets, total liabilities and market capitalization when compare with non-connected firms and the sample average. Non-connected firms are smaller on average in terms of total assets, liabilities and market capitalization. Interestingly, non-connected firms are more concentrated in ownership with 51.68 percent when compare with the sample average of 51.44 percent. Connected firms are actually less concentrated with 48.87 percent. This ownership concentration figure is accumulated number of each shareholder who at least holds 5 percent in one particular firm. This definition follows the work by Mitton (2002).

The average operating years for connected firms is longer than the average of sample, 32.76 years and 30.03 years respectively. As expected for firm size, connected firms are larger on average when compare with non-connected firms. Connected firms are lower in sales to asset with 0.63 when compare with the sample average of 0.82. The non-connected firms are higher than average with 0.83.

From the performance measures, connected firms on average show lowest ROA of 5.32 percent where the sample average is 5.60 percent and unconnected firms show the highest ROA of 8.21 percent. For ROE, Tobin's Q and market power, connected firms display higher figures of 11.61 percent, 1.29 and 1.20 percent respectively compare with the sample average of 10.57 percent, 1.12 and 0.36 percent. The non-connected firms show lowest in these figures for ROE, Tobin's Q and market power. For the leverage, connected firms carry highest debts on average with 0.20 where the sample average is 0.14. Non-connected firms are lowest in leverage with 0.13. By considering the risk measures, market based measurement with beta, connected firms show higher beta of 1.04 when compare with the sample average of 0.82. Non-connected firms are lowest with 0.80. Another risk measure, the standard deviation of weekly stock return, displays the same number for two groups of firms with 0.12. This is also in line with the sample average.

Table 2

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Table 3 shows the sample correlation matrix between the variables used in the regression equations. The results display positive correlation between political connection and performance variables such as ROE, Tobin's Q, market power and leverage. However, ownership concentration and ROA show negative correlated with political connection variable. Beta displays a positive correlated with political connection while standard deviation and unsystematic risk show negative figure. Ownership concentration is positively correlated with ROA, Tobin's Q, market power, sales to asset and unsystematic risk while ROE, leverage, beta and standard deviation show negative relationship. The interaction term (POLCON) displays positive relationship with ROA, ROE, Tobin's Q, market power, leverage and beta. Sales to asset ratio, standard deviation and unsystematic risk prove to be negatively correlated with POLCON. However, further regression is needed to test the combined effects of these variables to prove the hypothesis.

Table 3

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#### 4.1.2 Regression Results

Table 4 -11 show all the estimation results of regression equations shown in Chapter 3. Each table consists of two columns of regression results, first column is regression with political connection, ownership concentration with all control variables. The second column includes interaction variable.

Table 4 shows the relationship between Return on Assets with political connection and ownership concentration. The regression uses panel least squares method where dependent variable is ROA and explanatory variables are political connection, ownership concentration and the interaction term, POLCON, the multiplication of political connection and ownership concentration variables. Return on assets ratio uses earnings before interest rate and tax (EBIT) divide by total assets. From the hypothesis, I expect to see firm with political connection to perform better in term of accounting measurement such as ROA and ROE. The connection provides additional benefit for firm in Thailand to improve its profit and eliminating level of competitiveness in the industry. The result should follow previous finding by Imai (2006) where connected firm shows higher ROA than non-connected firm. While higher ownership concentration reduces agency problem for firm and increases firm's profitability.

In column one, the coefficient is positively related between ROA and political connection but it is not statistically significant. Ownership concentration is also positively related with ROA but not statistically significant. Possible explanation is that connected firm may be underperformed in term of ROA, even though connection itself is providing value, due to amount of firm resources are being devoted to rent seeking activities which offsetting the benefit firm receives. For ownership concentration, this has no relationship with firm's ROA so the difference percentage of concentration does not influence the firm performance. Firm age, size and sales to asset are positively related with profitability as expected due to the higher level of efficiency for the bigger firm. The coefficients on government and state-owned enterprises are negatively related with ROA, this is due to the fact that government owned firm lacks of management skill for running a profitable business. Foreign ownership also reflects a negative relationship with ROA meaning the foreign expertise has a reverse effect on the firm's earnings. The plausible explanation could be that their controlling is not allocated in Thailand directly therefore the monitoring is made more difficult. Any benefit firm receives from foreign expertise is overcome by the negative performance.

In column two, after having POLCON variable adds onto the specification, regression results show a negative relationship for both political connection and ownership concentration. The interaction term itself proves to be positively related with ROA meaning firm with political connection and has a concentrated ownership will result in higher ROA. This is in line with the hypothesis, even though the result is not statistically significant.

Table 4

Table 5 shows the relationship between Return on Equity with political connection and ownership concentration. By running panel least squares regression with the dependent variable is ROE and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. Return on equity uses the ratio of net profit divide by common equity. From the hypothesis, I expect to see ROE for connected firm higher than non-connected firm as with previous hypothesis where accounting measure should reflect the benefit firm receives from having political connection. Higher level of ownership concentration should enable firm to become more productive and aligning firm's goal between management and shareholder.

In column one, the coefficient on political connection is statistically significant at 95 percent confident level with positive relationship. This result proves the hypothesis that political connection adds value to the Thai firm rather than detrimental the shareholders value. Previous finding by Faccio (2006), has discovered that ROE for connected firms are lower compare with non-connected firms. Possibly, Thai firms with connection tend to provide a rewarding benefit to the shareholders and clearly this is an incentive to become connected in order to maintain this profitability. The ownership concentration variable is not statistically significant but provided a positive relationship with ROE. The coefficient on firm size is positively related with statistically significant at 90 percent confident level. This shows that firm with bigger size tends to be more efficient and operate at a lower cost, enhancing shareholders value. While government and state-owned enterprises are negatively related with 90 percent statistically significant meaning government owned firms are facing difficulty in competing with privately owned firm due to the lower level of management skills and poorer corporate governance.

For column two, after added POLCON variable onto the specification, this has removed the level of significant from political connection variable. The coefficient of POLCON is positively related with ROE. This is in line with the hypothesis that both political connection and concentrated ownership contribute to the better performance of firm. The statistical significant of 90 percent confident level remains for firm size, government and state-owned enterprise variables.

Table 5

Table 6 shows the relationship between Tobin's Q with political connection and ownership concentration. The regression uses panel least squares method with dependent variable is Tobin's Q and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. Tobin's Q is measure by the ratio of market value of equity plus the book value of liabilities divide by the book value of total assets. From the hypothesis, I expect to see higher Tobin's Q for connected firm than non-connected firm. Tobin's Q reflects the relationship between firm performance and the ownership structure. It is also less subjective to management manipulation. Previous finding shows higher level of performance in concentrated firm than firm with diffuse ownership, Wiwattanakantang (2001). Therefore the result should be in line with the literature.

In column one, the coefficient on political connection is positive and statistically significant at 95 percent confident level. The result proves the hypothesis that we expect to see higher Tobin's Q ratio for connected firm compare with non-connected firm. This ratio illustrates the market measure for firm performance and explains how the market views the stocks of connected firms higher than stocks of non-connected firms. The coefficient on ownership concentration is positive and statistically significant at 99 percent confident level showing a strong relationship between the level of ownership concentration and firm performance so higher level of concentration will result in higher profit. This view is supported by Wiwattanakantang (2001) and Chunhachinda and Jumreornvong (1999) where firm with concentrated shareholders tend to have higher Tobin's Q and more competitive among other firms. According to the study, concentrated ownership firms have lower agency problem and hence increased the value of firm by aligning firm's interest between shareholder and management. The coefficients for sales to asset, firm size and foreign ownership variables are positive and statistically significant at 99 percent confident level, meaning a strong relationship between profitability with efficiency, size and foreign shareholding. This finding indicates that firm with foreign partnership will result in better performance with superior technology and receive other benefits from Board of Investment (BOI).

In column two, the interaction term shows a positive relationship with Tobin's Q, the result is statistically significant at 90 percent confident level. The finding further implies

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how the combination of both political connection and ownership concentration boost higher firm performance.

#### Table 6

Table 7 displays the relationship between market power with political connection and ownership concentration. The regression uses panel least squares method with dependent variable is market power and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. The measure of market power is firm's sales to the total market sales. From the hypothesis, I expect firm with connection will result in higher market power, or in this case market share than nonconnected firm. Faccio (2006) discovers level of market share for connected firm to be significantly higher than non-connected firm. This indicates how strong the connection proves or supports higher firm's growth through special treatment from the government or increases level of barrier for new entries.

In column one, the coefficient on political connection is positive and statistically significant at 99 percent confident level. This evidence is particularly strong and confirmed the hypothesis that connected firms enjoy a significantly higher market share. This view is consistent with Faccio (2006) that firms with connection maintain their market share through government policies and state licensing. The coefficient on ownership concentration is positive and statistically significant at 95 percent confident level. The higher level of concentrated ownership will increase firm performance as shareholders may become involved in firm management so decreasing the level of agency problem between managers and shareholders. Firm size and government variables are positive and statistically significant at 99 percent confident level, indicating firms are enjoying privileges through government policies to stay dominant in term of market share. Interestingly, foreign owned firm is negatively related with statistically significant at 95 percent confident level. As previously explained, firm with foreign ownership could result in either positive or negative due to the strategy of foreign parent company abroad. In this case as foreign ownership increases, market share tends to decrease, the possible interpretation could be that foreign parent company focuses

upon controlling production cost and taking benefit of cheap labors instead of concentrating on marketing strategy to increase the firm's market share.

For column two, the interaction term, POLCON, is positively related with statistically significant at 99 percent confident level. The result confirms the hypothesis that firm with political connection and concentrated ownership give firm's advantage to increase the market share and possibly eliminate the level of competition in the industry.

Table 7

Table 8 shows the relationship between leverage with political connection and ownership concentration. The regression uses panel least squares method with dependent variable is market power and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. The measure of leverage uses long-term debts divide with book value of liabilities plus market value of equity. From the hypothesis, I expect connected firm to show higher level of leverage than non-connected firm. Previous study shows how creditors or lenders are more willing to give out credit or special loans for firm with government supports. This soft loan possibly guaranteed by the government in case firm goes bankrupt.

In column one, the coefficient on political connection is positive indicating level of leverage is higher with connected firms, however the result in insignificant. The sign on coefficient is in line with the hypothesis and also similar to the previous literature by Faccio (2006) where the result indicates connected firms to carry more debts than non-connected firms due to the firm's ability to access debt financing easier so firms tend to be highly leveraged. The ownership concentration has a negative related with statistically significant at 95 percent confident level. The result reveals level of leverage decreases as ownership concentration increases. The coefficient on firm size is positive and statistically significant at 99 percent confident level. This indicates how bigger firm finances with more debt than smaller firm. Government controlled firm tends to carry higher debt than privately owned firm as the result shows positively related at 95 percent confident level.

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For column two, the interaction term, POLCON, shows a negative relationship with leverage but the result is insignificant. Therefore only ownership concentration factor that significantly explained level of leverage.

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### Table 8

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Table 9 to 11, show the relationship between firm risk with political connection and ownership concentration. The measurement of firm risk uses market risk (beta), standard deviation of weekly stock return and unsystematic risk.

Table 9 shows the relationship between beta with political connection and ownership concentration. The regression uses panel least squares with dependent variable is beta and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. Beta is measured by using market model with weekly stock return and market premium. The weekly return is taking over two-year period prior the study period. From the hypothesis, I expect connected firm to show lower level of risk. In this case, connected firm should report lower beta, standard deviation and unsystematic risk. As with period of the study, the government encourages higher level of investment from local and foreign firms. Many governmental projects are opening for bid by firms with sufficient level of firm specifications. The expectation that firm with close tied to the government should receive some preferential treatment by winning these projects are undeniable. Level of risk may not relate with the connection if firm uses the advantage of soft loan to invest in highly risky project at the expense of creditors. This should overcome the benefit it receives from connection.

In column one, the coefficient on political connection is positively related but insignificant, meaning political connection factor has no impact on level of market risk for firm. The sign of coefficient is contradicting to the hypothesis, I expect political connection variable should illustrate a negative sign rather than a positive sign. Possibly in this case, the intention of connected firms is focusing on higher return than actively monitoring firm's risk and so risky projects are preferred at creditors' expense. While the coefficient on ownership concentration is negative and statistically significant at 99 percent confident level, indicating higher level of concentrated ownership will result in lower beta. This result is in line with Gursoy and Aydogan (1999), where they find a negative relationship between ownership concentration and market risk beta. This illustrates how concentrated firm focuses on reducing firm's risk and reflecting on managers of the firm are being risk averse. Firm size is positively related and statistically significant at 99 percent confident level. Larger firm exposes to higher systematic risk, this due to the complexity of firm's structure where firm size as big as conglomerate being faces with different kind of risks whether it is market risk, operational risk and financial risk within its subsidiaries. Foreign owned firms are negatively related and statistically significant at 95 percent confident level. In effect, level of foreign controlled has reduced risk being exposed by local firm. This result suggests benefits local firm receives from foreign contribution through management and technology know how.

For column two, the interaction term, POLCON, has a negative relationship with market risk but it is not significant. Combination of both variables has no impact on level of market risk.

#### Table 9

Table 10 shows the relationship between standard deviation with political connection and ownership concentration. The regression uses panel least squares with dependent variable is standard deviation and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. Standard deviation is measured by taking standard deviation of weekly return two-year before the study period. For column one, the coefficient on political connection is positive but insignificant. The coefficient shows positive relationship rather than negative relationship that I expected. This insignificant level indicates how political connection factor has no impact on firm's total risk. The coefficient on ownership concentration is negatively related and also insignificant. The sign is contradicting to the study by Gursoy and Aydogan (1999), where they find a positive relationship between ownership concentration and standard deviation. When comparing the adjusted R-square between beta and standard deviation, beta results in higher adjusted R-square than standard deviation with 44.92% for beta and 22.96% for standard deviation. Therefore, beta yields a better result as a proxy for firm's risk. Firm size and sales to asset are negatively related and statistically significant at 99 percent confident level. As firm increases its size, level of total risk reduces. This total risk composes of systematic and unsystematic risks, so larger firm size will be able to eliminate firm's specific risk, or unsystematic risk by diversifying its products and investment. Government owned firm is positively related and statistically significant at 95 percent confident level. This result reflects the similar finding as suggested by Gursoy and Aydogan (1999), where they find a positive relationship for government controlled firm and standard deviation. As with recent finding, government controlled firm has lower corporate governance and tend to detrimental to minority shareholders. Foreign owned firm shows negatively related with statistically significant at 99 percent confident level. This is in line with beta where result shows negative relationship.

In column two, the interaction term, POLCON, is positively related but insignificant. The sign of coefficient is opposite with that of beta result. The insignificant level suggests firm with political connection and ownership concentration variables do not affect the level of firm's risk, for this case is standard deviation.

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### Table 10

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Table 11 shows the relationship between unsystematic risk with political connection and ownership concentration. The regression uses panel least squares with dependent variable is unsystematic risk and explanatory variables are political connection, ownership concentration and the interaction term, POLCON. The unsystematic risk is defined as the residual variance. In column one, both political connection and ownership concentration variables show negative relationship with unsystematic risk, however the result is insignificant. This follows similar finding with standard deviation that both of these variables have no effect on level of firm's unsystematic risk. From the investors' point of view, unsystematic risk can be reduced by diversifying the portfolio to include different type of investment assets. Firm size is negatively related with statistically significant at 99 percent confident level. Larger firm tends to develop higher level of risk control in order to prevent firm from exposing risks so risk management is fully established whereas smaller firm may not adequately involve in risk management therefore it exposes to higher risk. Government owned firm shows positive relationship with statistically significant at 99 percent confident level. Higher level of unsystematic risk for government controlled firm suggests how firm faces serious corporate governance problem and potentially lacks of management skill comparing with nongovernment controlled firm. The coefficient on foreign owned firm shows negative relationship with unsystematic risk at 99 percent confident level. This indicates how foreign partnership helps local firm develops highly skilled risk management.

In column two, the interaction term, POLCON, shows a positive relationship with unsystematic risk but it is insignificant. The combined effect proves how unsystematic risk has no effect on the firm.

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Table 11

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## CHAPTER 5

### 5.1 Conclusion

The consequences of mixing politics and business in Thailand have been explored in this paper through direct measure of political connection between firm's shareholder and management with Cabinet Ministers. Previous researches in political connection have found Thai firms to be benefited from the connection and enhanced its profitability with market dominance. This paper on the other hand explores political connection together with ownership concentration to investigate the impact on firm performance and risk. The study takes 278 sample firms in Stock Exchange of Thailand during year 2001 to 2004. The performance indicators use both accounting and market measures. From the summary statistics, the number of connected firms accounts for approximately 30 percent of total sample firms. The average size and operating years are larger and longer for connected firms compare with non-connected firms. Level of ownership concentration is more diffused with connected firms than non-connected firms.

Political connection and ownership concentration have no impact on the firm's return on assets (ROA). Connected firms are underperformed when compare with nonconnected firms. This shows how any benefit firm receives from connection can be overcome by the amount of firm's resources being used for establishing the connection. Return on equity for connected firm is higher compare with non-connected, indicating higher return for shareholder if they allocate firm resources to establish connection with politicians. Tobin's Q rises as firm becomes politically connected, while the combination of both political connection and ownership concentration enhance firm's profitability. This view is also in line with level of ownership concentration where higher concentrated firm results in higher Tobin's Q. Firm with higher level of ownership concentration tends to eliminate agency problem and aligning management and shareholder's view together to increase firm's value. Connected firm shows higher gain in market share than nonconnected through firm's sales. The connection provides firm with preferential treatment from the government and winning state licenses. The combination of political connection and ownership concentration also prove to be beneficial to firm's market share. On the level of leverage, political connection provides no evidence that connected firm carries more debts than non-connected firm.

Further investigation on the level of firm's risk, I employ beta to measure the level of market risk while using standard deviation to measure the total risk. Political connection proves to have no impact on firm's market risk, however, result of positive relationship between political connection and beta illustrates how connected firm focuses on higher return from investment rather than monitoring level of firm's risk. In this case, connected firm takes risky projects at the creditors' expense. Beta decreases as level of ownership concentration increases, this shows how concentrated firms are being more risk averse than less concentrated firms. The foreign owned firm shows a decrease in level of firm's risk. Foreign controlled firm has increased the level of firm's competency in dealing or manage the risk management and therefore lowering the risk exposure. With the measure of standard deviation, firm size and sales to asset are two variables that significantly impact on firm's total risk. The level of total risk decreases as firm size increases. Larger firms can diversify their unsystematic risk by investing in different products or businesses from their core businesses.

Beside, firm's systematic and total risks, the unsystematic risk is included to reflect the firm's specific risk with political connection and ownership concentration variables. Both political connection and ownership concentration variables show insignificant effect on the firm's specific risk with negative relationship. As firm size increases, level of specific risk decreases, this is in line with standard deviation. Foreign controlled firm has a negative impact on the level of firm's specific risk, this can be seen as value added for local firm to equip with highly skilled risk management.

### 5.2 Implication

According to the finding in this study, political connection is valuable to the Thai firms. The evidence supports how political connection impacts level of firm performance by increasing firm's output measured as sales compare with non-connected firm. When connected firm increases its own market share, level of Tobin's Q increases creating

higher trading premium for the stock. Apart from the political connection factor, ownership structure of firm also has an impact on level of firm performance.

From the regulator's point of view, this study provides some evidence where regulator can implement certain rules in order to increase good corporate governance. The problem doing business in a country with weak law enforces and low transparency is that business leaders are encouraged to seek political connection as a way to enhance the business. In order to increase level of corporate governance, regulators or independent agencies should set up stricter regulations on how politicians could involve in any business both directly and indirectly via any member of family. The independent agency should be given more authority and free from politics in order to be more effective in dealing with firm that violates the laws. There should be some corporate governance benchmark and promotion given out for firm whose scores highest and penalty for firm whose scores below the benchmark. This can serve as one of the investment criteria for investor.

From the investor's point of view, this study provides several insights on firm's business and political power. When making an investment decision, investor needs to consider both firm business strategy and how firm operates according to the good corporate governance policy. In a developed country, the good corporate governance is a general practice for management to follow. Investors should understand how firm with different ownership structure performs its business. In addition, investor has to consider how firm manages its business risk according to the risk management policy.

From the management's point of view, this study provides some evidence on how different shareholders contribute or detrimental firm's value. This can help management to lay out appropriate policy in order to maximize firm performance as well as organizing an effective risk management. As for good corporate governance policy, Board of Directors must consist of independent directors from outside in order to monitor and provide necessary guidance for management's role.

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#### Table 1: Classification of connection by type

This table presents the sample firms across industries and classified firms with connection between shareholders and management. Government data is collected from www.mof.go.th, www.thaigov.go.th and, www.parliament.go.th. Political connection is defined into two categories, connection through shareholders and through management. Through shareholders: this represents firm that has any shareholder who at least holds 10 percent connects with Cabinet ministers. Through management: this represents firm that has any executive or non-executive position within board of directors connects with Cabinet ministers. Both: this represents firm with connection in both categories.

In Justice	Non-	Con	nected firms	
Industry	connected firms	Through shareholders	Through management	Both
Agribusiness	18			
Banking	7		2	
Building & Furnishing Materials	14			
Chemicals & Plastics	12			
Commerce	7		3	
Communication	3	2	1	2
Electrical Products & Computer	8			
Electronic Components	6		1	
Energy	7		2	
Entertainment & Recreation	5			2
Finance & Securities	19			1
Food & Beverage	18			
Health Care Services	9			
Hotel & Travel Services	10			1
Household Goods	5		1	1
Insurance	15		2	
Jewelry & Ornaments	2			
Machinery & Equipment	2			
Mining	1			
Packaging	13			
Pharmaceutical Product & Cosmetics	3			
Printing & Publishing	8			
Professional Services	3			
Property Development	21		1	
Pulp & Paper	2			
Textile, Clothing & Footwears	21			
Transportation	6			
Vehicles & Parts	7			
Warehouse & Silo	3		1	
Total	255	2	14	7

#### Table 2: Descriptive statistics of firm characteristic

This table presents summary statistic for characteristic of firms included in this study. The sample consists of 278 firms listed in Stock Exchange of Thailand (SET) during year 2001 to 2004. Data is collected from Stock Exchange of Thailand website, Form 56-1 and Setsmart website. The table illustrates mean and median for all firms in sample and separately showing the differences between connected and non-connected firm characteristics.

	All f	irms	Non-conn	ected firms	Connect	ed firms
	Mean	Median	Mean	Median	Mean	Median
Total assets <sup>a</sup> (mn Bt)	31.27	2.80	24.00	2.47	111.87	10.02
Total liabilities <sup>b</sup> (mn Bt)	25.68	1.16	19.67	1.07	92.38	4.79
Market cap <sup>c</sup> (mn Bt)	9,334.71	1,541.01	6,740.30	1,401.60	38,098.89	6,432.29
Firm age <sup>d</sup> (year)	30.03	25.94	29.78	25.97	32.76	25.57
Firm size <sup>e</sup>	15.16	14.84	15.04	14.72	16.40	16.12
Ownership concentration <sup>f</sup> (%)	51.44	53.02	51.68	53.32	48.87	48.80
Sales to asset <sup>9</sup>	0.82	0.74	0.83	0.76	0.63	0.51
ROA <sup>h</sup>	8.32%	7.90%	8.33%	8.03%	8.21%	6.54%
ROE <sup>i</sup>	10.57%	10.58%	10.48%	10.64%	11.61%	9.66%
Tobin's Q <sup>j</sup>	1.12	0.99	1.10	0.99	1.29	0.99
Market power <sup>k</sup>	0.36%	0.09%	0.28%	0.08%	1.20%	0.23%
Leverage	0.14	0.07	0.13	0.07	0.20	0.12
Beta <sup>m</sup>	0.82	0.70	0.80	0.68	1.04	1.04
Standard Deviation <sup>n</sup>	0.12	0.12	0.12	0.12	0.12	0.11
Unsystematic risk <sup>o</sup>	0.06	0.06	0.06	0.06	0.05	0.05

a: Total asset is the book value of firm's assets at the end of year

b: Total liabilities is the book value of firm's liabilities at the end of year

c: Market cap is the firm's total market capitalization at the end of year

d: Firm age is the number of years since firm is incorporated

e: Firm size is the natural log of firm's total assets

f: Concentration ownership is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

g: Sales to asset is the ratio of sales divide by total assets

h: ROA is the ratio of earnings before interest and tax (EBIT) divide by total assets

i: ROE is the ratio of net profit divide by common equity

j: Tobin's Q is the ratio of market value of equity plus the book value of liabilities divide by the book value of total assets

k: Market power is the ratio of firm's sales to the total market sales

I: Leverage is the ratio of long-term debts divide by the product of book value of liabilities and market value of equity

m: Beta is measured by using market model with weekly stock return and market premium

n: Standard deviation is the standard deviation of weekly stock return for the firm

o: UNSYS is the unsystematic risk defines as the residual variance in the following equation below

 $\sigma_{\varepsilon}^2 = \sigma_i^2 - \beta^2 * \sigma_m^2$ 

#### Table 3: Correlation matrix

This table presents correlation among the variables use in the regression. PCON is the dummy variable represents firm with political connection through shareholder or management. This variable equals to 1 if firm is connected and 0 otherwise. CONC is cumulative stock ownership of shareholder who owns at least 5 percent in the firm. POLCON is an interaction variable represents firm with political connection and concentrated ownership. ROA is the ratio of earnings before interest and tax (EBIT) divide by total assets. ROE is the ratio of net profit divide by common equity. STA is the ratio of sales divide by total assets. Q is the ratio of market value of equity plus the book value of liabilities divide by the book value of total assets. MKTP is the ratio of firm's sales to the total market sales. LEV is the ratio of long-term debts divide by the product of book value of liabilities and market value of equity. BETA is measured by using market model with weekly stock return and market premium. STDEV is the standard deviation of weekly stock return for the firm. UNSYS defines as the residual variance following this equation  $\sigma_{\varepsilon}^2 = \sigma_i^2 - \beta^2 * \sigma_m^2$ . AGE is the number of years since firm is incorporated. SIZE is the natural log of firm's total assets. FOREI is the dummy variable represents firm with foreign ownership with at least 10 percent holding. This variable equals to 1 if firm has government ownership and 0 otherwise. GOV is the dummy variable represents firm with government ownership with at least 10 percent holding. This variable equals to 1 if firm has government ownership and 0 otherwise. SOE is the dummy variable represents firm with state control with at least 10 percent holding. This variable equals to 1 if firm has government ownership and 0 otherwise.

	PCON	CONC	POLCON	ROA	ROE	Q	MKTP	LEV	BETA	STDEV	UNSYS	STA	AGE	SIZE	GOV	SOE	FOREI
PCON	1																
CONC	-0.03755	1															
POLCON	0.921059	0.07292	1														
ROA	-0.0003	0.000288	0.001766391	1													
ROE	0.007949	-0.01584	0.012623181	0.030361	1												
Q	0.094718	0.06081	0.107839873	0.036114	0.113965	1											
MKTP	0.197679	0.062551	0.253609085	0.007354	0.034125	0.094181	1										
LEV	0.11392	-0.1134	0.106660816	0.029312	0.070604	-0.11421	0.123538	1									
BETA	0.122272	-0.20125	0.096646658	-0.03025	-0.08829	0.112144	0.087968	0.243791	1								
STDEV	-0.05511	-0.02301	-0.048165289	-0.03421	-0.03323	-0.10783	-0.11274	0.153438	0.385028	1							
UNSYS	-0.08592	0.012887	-0.073902762	-0.02032	-0.01351	-0.12047	-0.13977	0.095285	0.193032	0.975883	1						
STA	-0.09054	0.200096	-0.075784897	0.017826	0.013809	0.062679	0.07766	-0.27469	-0.3299	-0.12081	-0.05328	1					
AGE	0.048003	-0.00444	-0.019229769	-0.00389	-0.01465	-0.09997	-0.00484	-0.18347	-0.05229	-0.07156	-0.06226	-0.16617	1				
SIZE	0.227823	-0.11087	0.217075514	0.011437	0.036485	0.146657	0.449676	0.240337	0.395107	-0.2194	-0.31847	-0.29065	0.121816	1			
GOV	0.032788	0.080125	0.059732303	-0.00427	-0.01805	-0.00738	0.408025	0.099644	0.035789	0.010596	0.004378	-0.01745	-0.02508	0.151127	1		
SOE	0.043664	0.123108	0.061976015	-0.0025	-0.02924	-0.00923	0.006121	0.089503	-0.04154	-0.07571	-0.07372	-0.08979	-0.04421	0.079675	-0.02862	1	
FOREI	0.02785	-0.00037	0.002953553	-0.03	-0.01474	0.182689	0.027807	-0.02661	0.06879	-0.1339	-0.16336	0.013703	-0.01256	0.224141	-0.04571	0.030513	1

# Table 4: Regression result of the relationship between political connection and ownership concentration with return on total assets (ROA)

This table represents two regression results with column one using the following model of

 $ROA_{tt} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The second column uses the following regression model of

 $ROA_{tt} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent v	ariable: ROA <sup>a</sup>
Variables	(1)	(2)
Constant	-0.45155	-0.44804
	(-0.89606)	(-0.8879)
Political Connection <sup>b</sup>	0.00072	-0.04860
	(0.00541)	(-0.14838)
Ownership Concentration <sup>c</sup>	0.00003	-0.00005
	(0.02001)	(-0.02819)
POLCON <sup>d</sup>		0.00100
		(0.16475)
Firm age <sup>e</sup>	0.00016	0.00023
	(0.06512)	(0.09288)
Firm size <sup>f</sup>	0.03380	0.03369
	(1.11006)	(1.10566)
Sales to asset <sup>9</sup>	0.04710	0.04762
	(0.59682)	(0.60269)
Government <sup>h</sup>	-0.10643	-0.10816
	(-0.44672)	(-0.45331)
State-owned enterprise <sup>i</sup>	-0.01005	-0.00941
	(-0.04749)	(-0.04444)
Foreign <sup>j</sup>	-0.09590	-0.09518
	(-1.31546)	(-1.3027)
Industry dummy	YES	YES
Adjusted R-squared	-0.02922	-0.03015
Prob(F-statistic)	1.00000	1.00000
Durbin-Watson stat	2.25023	2.25025

a: ROA is the ratio of earnings before interest and tax (EBIT) divide by total assets

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## Table 5: Regression result of the relationship between political connection and ownership concentration with return on equity (ROE)

This table represents two regression results with column one using the following model of

 $ROE_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The second column uses the following regression model of

 $ROE_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent va	ariable: ROE <sup>a</sup>
Variables	(1)	(2)
Constant	-0.26100	-0.25787
	(-1.40529)	(-1.38661)
Political Connection <sup>b</sup>	0.10178**	0.05775
	(2.07900)	(0.47851)
Ownership Concentration <sup>c</sup>	0.00007	-0.000004
	(0.11354)	(-0.00600)
POLCON <sup>d</sup>		0.00090
		(0.39915)
Firm age <sup>e</sup>	-0.00033	-0.00027
	(-0.36743)	(-0.29187)
Firm size <sup>f</sup>	0.02132***	0.02122***
	(1.89968)	(1.88969)
Sales to asset <sup>9</sup>	0.04008	0.04055
	(1.37801)	(1.39239)
Government <sup>h</sup>	-0.16521***	-0.16675***
	(-1.88142)	(-1.89639)
State-owned enterprise <sup>i</sup>	-0.12038***	-0.11981***
	(-1.54300)	(-1.53481)
Foreign <sup>j</sup>	-0.02396	-0.02332
	(-0.89170)	(-0.86598)
Industry dummy	YES	YES
Adjusted R-squared	0.01858	0.01781
Prob(F-statistic)	0.01917	0.02401
Durbin-Watson stat	1.33674	1.33664

a: ROE is the ratio of net profit divide by common equity

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## Table 6: Regression result of the relationship between political connection and ownership concentration with Tobin's Q (Q)

This table represents two regression results with column one using the following model of

### $Q_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$

The second column uses the following regression model of

 $Q_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent varia	able: Tobin's Q <sup>a</sup>
Valiables	(1)	(2)
Constant	-0.33069	-0.31525
	(-1.44374)	(-1.37607)
Political Connection <sup>b</sup>	0.11609**	-0.10072
	(1.92272)	(-0.67738)
Ownership Concentration <sup>c</sup>	0.00283*	0.00247*
	(3.72117)	(3.1082)
POLCON <sup>d</sup>		0.00441***
		(1.59544)
Firm age <sup>e</sup>	-0.00165***	-0.00133
	(-1.47774)	(-1.1772)
Firm size <sup>f</sup>	0.05904*	0.05855*
	(4.26559)	(4.23250)
Sales to asset <sup>9</sup>	0.21472*	0.21702*
	(5.98641)	(6.04999)
Government <sup>h</sup>	-0.10890	-0.11649
	(-1.00563)	(-1.0754)
State-owned enterprise	-0.04571	-0.04289
	(-0.47504)	(-0.44603)
Foreign <sup>j</sup>	0.13272*	0.13588*
	(4.00548)	(4.09633)
Industry dummy	YES	YES
Adjusted R-squared	0.23665	0.23774
Prob(F-statistic)	0.00000	0.00000
Durbin-Watson stat	0.60819	0.60996

a: Tobin's Q is the ratio of market value of equity plus the book value of liabilities divide by the book value of total assets

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## Table 7: Regression result of the relationship between political connection and ownership concentration with market power (MKTP)

This table represents two regression results with column one using the following model of

### $MKTP_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$

The second column uses the following regression model of

 $MKTP_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent variat	ole: Market Power <sup>a</sup>
Valiables	(1)	(2)
Constant	-0.06883*	-0.06776*
	(-15.0682)	(-15.0303)
Political Connection <sup>b</sup>	0.00494*	-0.01008*
	(4.10469)	(-3.4449)
Ownership Concentration <sup>c</sup>	0.00004**	0.00001
	(2.42183)	(0.73798)
POLCON <sup>d</sup>		0.00031*
		(5.61743)
Firm age <sup>e</sup>	0.00003	0.00005**
	(1.14019)	(2.12033)
Firm size <sup>f</sup>	0.00439*	0.00436*
	(15.91240)	(16.01010)
Sales to asset <sup>9</sup>	0.00389*	0.00405*
	(5.43695)	(5.73514)
Government <sup>h</sup>	0.02893*	0.0284*
	(13.3966)	(13.3266)
State-owned enterprise <sup>i</sup>	-0.00623*	-0.00604*
	(-3.24823)	(-3.19056)
Foreign <sup>j</sup>	-0.00145**	-0.00123***
	(-2.18732)	(-1.87953)
Industry dummy	YES	YES
Adjusted R-squared	0.44488	0.47970
Prob(F-statistic)	0.00000	0.00000
Durbin-Watson stat	0.32906	0.34212

a: Market power is the ratio of firm's sales to the total market sales

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## Table 8: Regression result of the relationship between political connection and ownership concentration with leverage (LEV)

This table represents two regression results with column one using the following model of

 $LEV_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The second column uses the following regression model of

 $LEV_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent vari	able: Leverage <sup>a</sup>
Valiables	(1)	(2)
Constant	-0.17769*	-0.18047*
	(-2.74835)	(-2.78881)
Political Connection <sup>b</sup>	0.01975	0.05871
	(1.15892)	(1.39782)
Ownership Concentration <sup>c</sup>	-0.00047**	-0.00040***
	(-2.16991)	(-1.78671)
POLCON <sup>d</sup>		-0.00079
		(-1.01484)
Firm age <sup>e</sup>	-0.00071**	-0.00077**
	(-2.25004)	(-2.39281)
Firm size <sup>f</sup>	0.02711*	0.02720*
	(6.94014)	(6.96090)
Sales to asset <sup>9</sup>	-0.05708*	-0.05750*
	(-5.63794)	(-5.67424)
Government <sup>h</sup>	0.05929**	0.06065**
	(1.93944)	(1.98214)
State-owned enterprise <sup>i</sup>	0.03645	0.03595
	(1.34225)	(1.32342)
Foreign <sup>j</sup>	-0.03643*	-0.03699*
	(-3.89457)	(-3.94819)
Industry dummy	YES	YES
Adjusted R-squared	0.35968	0.35969
Prob(F-statistic)	0.00000	0.00000
Durbin-Watson stat	0.55028	0.55114

a: Leverage is the ratio of long-term debts divide by the product of book value of liabilities and market value of equity b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## Table 9: Regression result of the relationship between political connection and ownership concentration with beta (BETA)

This table represents two regression results with column one using the following model of

### $BETA_{tt} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$

The second column uses the following regression model of

 $BETA_{t} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent va	ariable: Beta <sup>a</sup>
Variables	(1)	(2)
Constant	0.04559	0.03679
	(0.23799)	(0.19194)
Political Connection <sup>b</sup>	0.01721	0.14062
	(0.34091)	(1.13029)
Ownership Concentration <sup>c</sup>	-0.00258*	-0.00237*
	(-4.05211)	(-3.56954)
POLCON <sup>d</sup>		-0.00251
		(-1.08531)
Firm age <sup>e</sup>	0.00066	0.00048
	(0.70504)	(0.50455)
Firm size <sup>f</sup>	0.04527*	0.04555*
	(3.91132)	(3.93459)
Sales to asset <sup>9</sup>	-0.04527***	-0.04658***
	(-1.50922)	(-1.55174)
Government <sup>h</sup>	-0.02365	-0.01933
	(-0.26112)	(-0.21326)
State-owned enterprise <sup>i</sup>	-0.11163	-0.11324
	(-1.38752)	(-1.40732)
Foreign <sup>j</sup>	-0.05375**	-0.05554**
	(-1.93975)	(-2.00115)
Industry dummy	YES	YES
Adjusted R-squared	0.44924	0.44933
Prob(F-statistic)	0.00000	0.00000
Durbin-Watson stat	0.67370	0.67618

a: Beta is measured by using market model with weekly stock return and market premium

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

# Table 10: Regression result of the relationship between political connection and ownership concentration with standard deviation (STDEV)

This table represents two regression results with column one using the following model of

 $STDEV_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The second column uses the following regression model of

 $STDEV_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ 

The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent var	riable: STDEV <sup>a</sup>
Variables	(1)	(2)
Constant	0.23593*	0.23611*
	(18.4028)	(18.3931)
Political Connection <sup>b</sup>	0.00003	-0.00255
	(0.00939)	(-0.30649)
Ownership Concentration <sup>c</sup>	-0.00003	-0.00004
	(-0.82991)	(-0.89214)
POLCON <sup>d</sup>		0.00005
		(0.33951)
Firm age <sup>e</sup>	0.00008	0.00008
	(1.23816)	(1.27794)
Firm size <sup>f</sup>	-0.00742*	-0.00743*
	(-9.58341)	(-9.58460)
Sales to asset <sup>g</sup>	-0.00773*	-0.00770*
	(-3.84841)	(-3.83007)
Government <sup>h</sup>	0.01395**	0.01385**
	(2.30070)	(2.28264)
State-owned enterprise <sup>i</sup>	-0.00754	-0.00751
	(-1.40055)	(-1.39351)
Foreign <sup>j</sup>	-0.00568*	-0.00564*
	(-3.06268)	(-3.03574)
Industry dummy	YES	YES
Adjusted R-squared	0.22957	0.22893
Prob(F-statistic)	0.00000	0.00000
Durbin-Watson stat	0.52759	0.52730

a: Standard deviation is the standard deviation of weekly stock return for the firm

b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

# Table 11: Regression result of the relationship between political connection and ownership concentration with unsystematic risk (UNSYS)

This table represents two regression results with column one using the following model of

 $UNSYS_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ The second column uses the following regression model of

 $UNSYS_{it} = \beta_0 + \beta_1 PCON + \beta_2 CONC + \beta_3 POLCON + \beta_4 STA + \beta_5 SIZE + \beta_6 AGE + \beta_7 GOV + \beta_8 SOE + \beta_9 FOREI + \beta_{10} IND + \varepsilon_{it}$ The regression results estimated by using panel least square procedure with fixed period effect. Figures in the body of the table are coefficient estimates, t-values are reported separately in parentheses. \*, \*\*, \*\*\* denote significance at 1, 5, 10 percent levels respectively.

Variables	Dependent variable: UNSYS <sup>a</sup>			
Variables	(1)	(2)		
Constant	0.18559*	0.18587*		
	(15.51120)	(15.51597)		
Political Connection <sup>b</sup>	-0.00014	-0.00411		
	(-0.04462)	(-0.52850)		
Ownership Concentration <sup>c</sup>	-0.00001	-0.00002		
	(-0.30562)	(-0.45314)		
POLCON <sup>d</sup>		0.00008		
		(0.55844)		
Firm age <sup>e</sup>	0.00007	0.00007		
	(1.16291)	(1.24224)		
Firm size <sup>f</sup>	-0.00795*	-0.00796*		
	(-10.9923)	(-10.9984)		
Sales to asset <sup>9</sup>	-0.00693*	-0.00688*		
	(-3.69594)	(-3.66933)		
Government <sup>h</sup>	0.01436*	0.01422*		
	(2.53871)	(2.51095)		
State-owned enterprise <sup>i</sup>	-0.00596	-0.00591		
	(-1.18554)	(-1.17472)		
Foreign <sup>j</sup>	-0.00508*	-0.00502*		
	(-2.93324)	(-2.89380)		
Industry dummy	YES	YES		
Adjusted R-squared	0.22063	0.22013		
Prob(F-statistic)	0.00000	0.00000		
Durbin-Watson stat	0.55103	0.55077		

a: UNSYS is the unsystematic risk defines as the residual variance in the following equation,  $\sigma_{\varepsilon}^2 = \sigma_i^2 - \beta^2 * \sigma_m^2$ b: Political connection is a dummy variable where equal to 1 if firm has political connection through shareholder or management and 0 otherwise

c: Ownership concentration is cumulative stock ownership of shareholder who owns at least 5 percent in the firm

d: POLCON is an interaction term where two variables, political connection and ownership concentration are multiplied

e: Firm age is the number of years since firm is incorporated

f: Firm size is the natural log of firm's total assets

g: Sales to asset is the ratio of sales divide by total assets

h: Government is the dummy variable where equal 1 if firm has a government holding of at least 10 percent and 0 otherwise

i: State-owned enterprise is a dummy variable where equal 1 if firm has a state holding of at least 10 percent and 0 otherwise

## APPENDIX

Politically connected firms	Politically connected families	
KTB	Chaovisit	
SCB	Issarangkul na Ayutthaya	
ICC	Chatusripitak	
LOXLEY	Chatusripitak	
SPC	Chatusripitak	
ADVANC	Shinawatra	
IEC	Uthaisang	
SATTEL	Shinawatra	
SHIN	Shinawatra	
TT&T	Potharamik	
SVI	Piemsomboon	
PTT	Shinawatra , Wongsawat	
EGCOMP	Shinawatra , Wongsawat	
BEC	Maleenond	
CVD	Maleenond	
KK	Thepkanchana, Wattanawekin	
ERAWAN	Thepkanchana, Wattanawekin	
ROCK	Juengrungruangkij, Jurangkool	
SRITHAI	Thepkanchana, Augaubonkul	
BKI	Chaovisit	
DVS	Issarangkul na Ayutthaya	
TFD	Sathirathai	
TSTE	Thepkanchana, Wattanawekin	

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