โครงสร้างผู้ถือหุ้นและนโยบายเงินปันผลของบริษัทไทย

นายธีรวุฒิ ธีรโชติมงคล

วิทยานิพนธ์นี้เป็นส่วนหนึ่งของการศึกษาตามหลักสูตรปริญญาวิทยาศาสตรมหาบัณฑิต
สาขาวิชาการเงิน ภาควิชาการธนาคารและการเงิน
คณะพาณิชยศาสตร์และการบัญชี จุฬาลงกรณ์มหาวิทยาลัย
ปีการศึกษา 2553

OWNERSHIP STRUCTURE AND DIVIDEND POLICY OF THAI FIRMS

Mr. Teerawoot Teerachotmongkol

A Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Science Program in Finance

Department of Banking and Finance
Faculty of Commerce and Accountancy
Chulalongkorn University

Academic Year 20010

Thesis Title	OWNERSHIP STRUCTURE AND DIVIDEND POLICY OF THAI FIRMS
By	Mister Teerawoot Teerachotmongkol
Field of Study	Finance
Thesis Advisor	Ruttachai Seelajaroen, Ph.D.

Accepted by the Faculty of Commerce and Accountancy, Chulalongkorn University in Partial Fulfillment of the Requirements for the Master's Degree

..... Dean of the Faculty of Commerce and Accountancy

(Associate Professor Pasu Decharin, Ph.D.)

THESIS COMMITTEE

..... Chairman

(Suparatana Tanthanongsakkun, Ph.D.)

..... Thesis Advisor

(Ruttachai Seelajaroen, Ph.D.)

..... Examiner

(Assistant Professor J. Thomas Connelly)

..... External Examiner

(Charnwut Roongsangmanoon Ph,D.)

ธีรวุฒิ ธีรโชติมงคล : โครงสร้างผู้ถือหุ้นและนโยบายเงินปันผลของบริษัทไทย.
(OWNERSHIP STRUCTURE AND DIVIDEND POLICY OF THAI FIRMS).
อ. ที่ปรึกษาวิทยานิพนธ์หลัก: ดร.รัฐชัย ศีลาเจริญ, 84 หน้า

วิทยานิพนธ์ฉบับนี้ศึกษาเกี่ยวกับหน้าที่ของเงินปันผลในการลดความขัดแย้งระหว่างนายจ้างและลูกจ้างและระหว่างผู้บริหารและนายจ้างโดยมี 1,341 ตัวอย่างระหว่างปี 2002 – 2008 การถือหุ้นในประเทศไทยมีการกระจุกตัวสูง และอาจมีบริษัทอยู่สองประเภท ประเภทแรกมีความขัดแย้งระหว่างผู้ถือหุ้นรายใหญ่ที่มีอำนาจควบคุมและรายย่อยและอีกประเภทมีความขัดแย้งระหว่าผู้บริหารและผู้ถือหุ้น

ผลการทดสอบพบว่ามีบริษัทอยู่ 2 ประเภท ผลการทดสอบเป็นหลักฐานต่อการเวรคืนโดยผู้ถือหุ้นรายใหญ่ที่มีอำนาจควบคุม ผู้ถือหุ้นรายใหญ่อันดับสองและรายอื่นไม่สามารถตรวจสอบได้อย่างมีประสิทธิผล ในกลุ่มบริษัทที่ไม่มีผู้ถือหุ้นรายใหญ่ที่มีอำนาจควบคุม ผู้ถือหุ้นรายใหญ่สามารถตรวจสอบผู้บริหารได้อย่างมีประสิทธิผล ความเข้มข้นของการถือหุ้นโดยผู้ถือหุ้นรายใหญ่อันดับสองไม่ช่วยพัฒนาประสิทธิผลในการตราจสอบ การตรวจสอบมีนัยสำคัญทั้งทางสถิติและทางเศรษฐศาษตร์

ภาควิชา การธนาคารและการเงิน ลายมือชื่อนิสิต .....
สาขาวิชา การเงิน ลายมือชื่อ อ.ที่ปรึกษาวิทยานิพนธ์หลัก .....
ปีการศึกษา 2553

5282106026 : MAJOR FINANCE

KEYWORDS : OWNERSHIP STRUCTURE / DIVIDEND POLICY / AGENCY COST / CORPORATE GOVERNANCE / THAILAND

TEERAWOOT TEERACHOTMONGKOL: OWNERSHIP STRUCTURE AND DIVIDEND POLICY OF THAI FIRMS. THESIS ADVISOR: RUTTACHAI SEELAJAROEN, Ph.D., 84 pp.

This paper investigates into the role of dividend in controlling agency conflict between large and small shareholders and between managers and shareholders. Data includes 1,341 samples of listed firms in the Stock Exchange of Thailand during 2002 to 2008. Thailand has high concentration of ownership and there may be two groups of firms. One with agency conflict between large controlling shareholder and other shareholders and one between managers and shareholders.

The empirical findings suggest there are 2 groups of firm. Results provide evidence of rent extraction by controlling shareholder. The second largest and other shareholders are not effective in monitoring the largest. Among firms with no controlling shareholder, the largest shareholder has been effective in monitoring the management. Share concentration by the second largest does not help improve the effectiveness of monitoring. Monitoring is both statistically and economically significant

Department : Banking and Finance ..... Student's Signature .....

Field of Study : Finance ..... Advisor's Signature .....

Academic Year : 2010 .....

Acknowledgements

I would like to show my gratitude to Ajarn Ruttachai Seelajaroen, my advisor, for his time and his kind advises despite his tight schedule. I am grateful to Ajarn Thomas Connelly for his guidance and helpful suggestions. It has been an honor to receive valuable suggestion from Mr. Prasopsuk Damrongchietanon. I am thankful to P Pong and P Benz for their help in gathering all the data. P Pla for her help in organizing documents. It has been of great pleasure having Ms. Supinda Aniwat and family around me and encouraged me through all the hard works. Without any of the help, this thesis would not have been possible.

Contents

List of Tables

List of Figure

Chapter I

Introduction

1.1 Background of the Study

This paper examines the relationship between ownership structure and dividend policy. Return to shareholders come in two forms; capital gain or dividend. According to Miller and Modigliani (1958) dividend irrelevance hypothesis, in a perfect capital market dividend policy should be of no concern to shareholders, paying $1 dividend means $1 less capital gain. Results documented by Linter (1956), however, suggest that managers follow deliberate dividend policy implying it is relevant and an important corporate decision. $1 retained in this case does not equal $1 capital gain. One of the latter explanations of why firms pay dividend is to curtail agency conflict. There are several reasons why agency conflict would exist:

1. Perquisite taking - managers have incentive to use corporate resources at the expense of shareholders. For example, flying on business class, use luxurious automobiles, or costly decoration which appear on operating expense and add no value to the firm.

2. Choice of effort – more efforts put in by managers increase firm's value but does not increase managers' utility as they only get paid salary and bonus.

3. Different risk exposure – managers have large investment of their human capital into the firm. They have incentive to reduce nonsystematic risk even at a cost. They may forego positive NPV projects they feel too risky when shareholders can diversity nonsystematic risk themselves at lower cost.

4. Differential horizon – managers' compensation is limited to the length of their employment, they have limited incentives to concern about cash flows that extends beyond.

5. Overinvestment – managers have incentives to make investment even after all positive NPV projects have been invested as their remuneration of personal pride is tied to firm's size.

In countries with dispersed ownership structure such as the U.S. and U.K., each individual shareholder holds a small proportion of shares. They lack economy of scale and individually they would be reluctant and do not have enough voting power to control the management. Their incentive is further hampered by the free-rider problem; they would be reluctant to incur monitoring expense when the benefits are shared by all. To reduce the agency problem they prefer to minimize free cash flow at manager's discretion by paying higher dividend (Jensen, 1986). Dividend therefore serves as an important pre-commitment device to reduce agency costs.

In countries with concentrated ownership structure such as countries in Continental Europe and developing economies the largest shareholders usually hold high proportion of firm's shares (Faccio et al., 2000). Due to the size of their holdings and economies of scale, these large

shareholders have incentives and ability to monitor the management. Potentially, the existence of large shareholders helps reduce free-rider problem. Within this environment the agency conflict between managers and shareholders is lower and does not appear to be predominant (Mancinelli and Ozkan, 2006). Many authors, however, argue that in this setting there is conflict between large controlling shareholder and minority shareholders. As reported by Shleifer and Vishny (1997) that large shareholders are not well diversified and they represent their own interest. They would have the ability to do so if their control rights are significantly larger than their cash flow rights. They can achieve higher control rights than cash flow rights either through controlling the firm with complex structure such as pyramid or hold shares with superior voting rights and may distribute wealth unequally to themselves if they wish to. That is, large shareholders can enjoy private benefits of control by extracting rent from minority/small shareholders. Some forms of the activities to gain private benefits of control are:

- Paying themselves excessive salaries, enjoy perks or giving top executive positions and board seats to their family even though they are not capable (DeAngelo and DeAngelo, 1985). In almost every sample firms, management's common stock is entitled to security and superior voting right and over half of the sample has majority control by corporate officer and their families.

- Trade with companies under their control at favorable terms such as selling company's products at below market price (Shleifer and Vishny, 1997). In the Russian oil industry, such sales of oil to manager-owned trading companies (which often do not even pay for the oil) are evidently common.
- Transfer companies shares to their own account at discount as happened in Korea (Chung and Kim, 1999). The Economist (June 1995) reports that Korean chaebol sometimes sell their subsidiaries to the relatives of the chaebol founder at low prices.
- Choose risk level or investment policy according to their preference (Demsetz and Lehn, 1985)
- Sign contract with their private company for a long period of time
- Give loans from the company to themselves

According to this hypothesis, large shareholders have incentives to prefer low dividend payment such that they can derive private benefits from wealth kept within the firm. Dividend, in this case, is the result of conflict between large controlling and other shareholders.

1.2 Statement of the Problem

In this study I will investigate the role of dividend policy in controlling agency conflict in Thailand. Firstly, Thailand offers a unique setting for testing the relationship between ownership structure and dividend policy. Other countries with concentrated ownership consist mostly of firms with more complex structures and allow shares with superior voting rights which are the two methods

large shareholders can obtain higher control rights than cash flow rights. In Thailand, it has high concentration of ownership but only one share one vote rule is allowed and majority of firms have simple ownership structure where shareholders hold shares of the company directly. One share one vote rule and simple ownership structure in Thailand means the problem of large shareholders should be alleviated to a certain extent. Evidence from Anderson and Reeb (2003), however, finds that firm performance measured by ROA and Tobin's q are first increasing with shares held by controlling shareholder among family firms and then decreasing. In other words, when families have the greatest control of the firm, the potential for entrenchment and poor performance is the greatest. This could be because shareholder has higher incentive to monitor at first and as ownership gets beyond a certain point, the shareholders gain nearly full control and are wealthy enough and prefer to use firms to generate private benefits of control not shared by other shareholders. Thailand, therefore, offers a unique environment where there may be two groups of firms. One where the largest shareholder helps align incentives and one where the largest shareholder extract rent from other shareholders.

Secondly, the role of dividend as a tool for controlling agency problem has largely been ignored in Thailand and hence a research gap. Other papers conducted in Thailand looked at other aspects of dividend policy such as its role as a signaling mechanism. Atcharawan (2002) finds that compared to U.S. firms, Thai firms face less information asymmetry. There is less price reaction to

dividend initiations and omissions. This confirms monitoring by large shareholders in Thailand whom has the information prior to dividend announcements. This paper aims to test for the role of dividend in controlling agency conflict between large and small shareholders and between managers and shareholders.

1.3 Objective

To investigate the relationship between ownership structure and dividend policy, firms are separated into those with and without controlling shareholder and the following relationships are investigated:

- Pay-out ratio and percentage held by the largest
- Pay-out ratio and percentage held by the second largest
- Pay-out ratio and percentage held by the other shareholders other than the largest

Pay-out ratio will be measured in two ways, *Dividend/Earnings* and *Dividend/CFO*. *Dividend/CFO* has also been included because in making decision on dividend policy, cash flow may be considered as well.

1.4 Scope of the Study

To conduct empirical analysis of the relation between ownership structure and dividend policy of Thai firms, sample includes listed firms in the Stock Exchange of Thailand during the year

2002 to 2008. The time period has been chosen due to availability of information. In period after the financial crisis of 1997, firms in Thailand stopped paying dividend and dividend payment is back to normal condition in 2002. 23% of listed companies pay dividend in 1998 compared to 40% in 2002.

1.5 Limitation

1. Only simple ownership structure, where shareholders hold shares of the company directly, will be considered. Firms with more complex structures in Thailand, however, are 21.08% of all firms (Wiwattanakantang, 2000). This may make the coefficient bias towards zero. Rather than showing that firms with high concentration of ownership pay-out less, it would show that firms with low concentration pay-out less and results that are insignificant may actually be significant.
2. Only annual data on dividend is available. To get the most accurate pay-out ratio, dividend is divided by prior year's earnings (see dividend policy in Thailand). If a firm pays ฿10 dividend in September 2006 out of 2006 earnings and pay ฿15 dividend in March 2007 out of 2006 earnings, 2005 pay-out will be upward bias and 2006 pay-out will be downward bias. Most firms in Thailand, however, only pay dividend once a year, from 2002 to 2010 the average number of times companies pay dividend is about 1.35 with few outliers.

1.6 Contribution

This study has two main contributions:

1. It could give evidence of governance system which may hamper optimal allocation of resources in Thailand and provide implication for regulators in improving corporate governance. That is, among firms where other shareholders hold disproportionately less than the largest shareholder, they may be given legal right to claim investigation into the use of corporate resources.

2. It examines the role of agency conflict in explaining dividend policy. Dividend policy in Thailand has been considered on other aspects and by examining agency conflict among large controlling and small shareholders in Thailand can provide further evidence of dividend policy in Thailand.

Chapter II

Literature review

Dividend policy has been of great concern to financial economists since seminal work by Miller and Modigliani (1958). They proposed dividend irrelevance policy hypothesis where in a frictionless world holding investment policy constant dividend policy has no effect on shareholders' wealth. Paying more dividends reduces retained earnings and capital gain. From Miller and Modigliani (1961), in the presence of tax, there is a disadvantage of paying dividend. Investors would not want to pay government tax. If investors want dividend they can create homemade dividend by selling shares and the optimal dividend policy is to pay no dividend. Results from Lintner (1956), however, show that dividend policy is important and managers follow a very deliberate dividend policy. They try to smooth their dividend payment despite fluctuations in earnings. Some of the explanations of why firms pay dividend consider agency conflict among firm's stakeholder. These conflicts include:

- Conflict between managers and shareholders
- Conflict between creditors and shareholders
- Conflict between large controlling shareholder and small shareholders

2.1 Agency Problem and Dividend Policy

For agency conflict between managers and shareholders, managers and shareholders may not have their interest aligned. Increase in separation of ownership from control leads to lower ability to supervise managers. Managers tend to spend financial resources for their own benefits not necessarily shared by shareholders. Managers may prefer to grow the firm beyond its optimal size because it increases their power with larger resources under their control and their compensation would likely increase with sales. Shareholders, on the other hand, would prefer high dividend payment to minimize agency cost by reducing free cash flow under managers' control. Commitment to dividend payment also increases the likelihood of the need to rely on external financing which is believed to be more effective than internal financing in monitoring and disciplining management. Bonds come with legal obligation to pay future free cash flow which is more effective than promises to pay dividend (Easterbrook, 1984; Grossman and Hart, 1988; Jensen, 1986).

For agency conflict between creditors and shareholders, shareholders can expropriate wealth from creditors by excessive dividend payments, financed by reducing investments or issuing new debt (Jensen and Meckling, 1976; Myers, 1977).

For agency conflict between large controlling shareholder and small shareholders, some countries have concentrated ownership structure, the largest shareholder hold large stakes and are better equipped to monitor and discipline the management and the agency conflict between

managers and shareholders may not be critical. The prevailing agency conflict seems to be the one between controlling shareholder and other shareholders. Controlling shareholders can extract rent by paying out less dividends to enjoy private benefits from financial resources kept within the firm.

In Japan, Harada and Nguyen (2006) finds that dividend payout is negatively related to ownership concentration indicated by Herfindhal index, firms with dominant shareholders are less likely to increase dividends when profitability increases and more likely to omit dividends when investment opportunities improve. In Italy, Mancinelli and Ozcan (2006) find that firms make lower dividend payouts as the voting rights of the largest shareholder increase. The monitoring power of other shareholder is very limited and monitoring is only effective when they form agreement on their votes. In Germany, Gugler and Yurtoglu (2002) find that larger holdings of the largest owner to reduce, while larger holdings of the second largest shareholder to increase dividend pay-out ratio.

Altogether, empirical evidences show that dividend payouts are adversely affected by ownership structures that make conflict between large and small shareholders more intense.

2.2 Ownership Structure in Thailand

From Wiwattanakantang (2000) Thailand has high concentration of ownership. Average holding of the largest shareholder is 43.31% with a median of 44.12%. Individual or family is the most common among all types of largest shareholder appearing in 197 firms or 72.96%. The second most common type is foreign investor, 23 of which are corporations and 23 are individuals. The largest

shareholders hold big stakes and hence firms were evaluated on whether they have controlling shareholder and their ownership structure.

Controlling shareholder is defined as a shareholder who owns more than 25% of firm's shares. At this level of ownership the shareholder can significantly influence the firm under the Public Limited Companies Act on the following matters: 1) A controlling shareholder can nullify any corporate decisions 2) A controlling shareholder can demand to inspect the business operation, financial condition of the company and conduct of the board of director 3) A controlling shareholder can call an extraordinary general meetings any time 4) A controlling shareholder can submit a notion to the court demanding dissolution of a company if he thinks that further operation will bring more losses, and that it has no chance of recovery.

Majority of Thai firms, 82.59%, have controlling shareholder suggesting that ownership structure in Thailand is highly concentrated.

Individual is the most common type of the largest shareholder in Thailand, appearing in 220 firms (81.48%), which is true also in the United States. The pattern of shareholding, however, is totally different. While individuals in the United State hold small stakes, individuals in Thailand do not. In many cases they are major shareholders.

Controlling shareholders also act as officer or director for most of the firms with controlling shareholder, 157 (70.40%) and 159 (71.30%) respectively. Officer includes the following positions:

chairman, honorary chairman, vice-chairman, president, vice-president, CEO or managing director. Director is someone who is not an officer but a member of the board of director. An individual or family participate most as officer or director

Information on shareholdings in Thailand suggests it has a unique ownership structure. Majority of firms in Thailand has simple ownership structure where shareholders hold shares of the company directly (78.92%), and large shareholding by the largest shareholder whom are usually individual. Other markets have different ownership structure. In Japan, most firms are part of a keiretsu, where firms are centered around a bank who acts as a monitoring and emergency bail-out entity. In Italy, the prevailing ownership structure is pyramid and in Germany majority of governance system is pyramid and cross-shareholding. Thailand, therefore, provide a unique setting for testing the relation between ownership structure and dividend policy.

Dividend policy in Thailand has been studied on other explanations and its role in controlling agency problem has not been considered. While Thailand has one share one vote rule and majority of firms have simple ownership structure, when the largest shareholders holds shares beyond a certain point these largest shareholder may be wealthy enough and engage in activities to gain private benefits of control which may not be optimal for the firm.

2.3 Dividend Policy in Thailand

Unlike firms in other countries, Thai firms have a rather retrospective policy. They pay dividend base on prior period performance and usually announce in March that it will pay dividend out of prior year's earnings. For an example, a firm announces in March 2007 that it will pay dividend on earnings generated December 2006. Although required by law to pay dividend on earnings generated, with 3 months into the period it seems credible to believe they still do not know what the period performance would be like and pay dividend out of prior period performance. To get the most accurate results the data will be tested for both retrospective and perspective dividend policy and reports results for perspective dividend policy in the appendix. Firms in other countries usually have perspective dividend policy. They announce dividend base on earnings they expect to generate for the period.

Majority of Thai firms only pay dividend once a year. If a firm pay interim dividend, when it later announces dividend payment, it will only pay the remaining amount. For an example, if a firm paid an interim dividend in September 2006 of 10 Baht/share and announce in March 2007 that it will pay 15 Baht/share dividends on earnings generated December 2006, it will only pay the remaining 5 Baht/share.

Chapter III

Hypotheses development

Thailand has high concentration of ownership. Large shareholders holding a significant fraction of equity and can effectively determine decisions of the managers (La Porta, Lopez-de-silanes, and Shleifer, 1999). Most firms in Thailand are controlled by controlling shareholders whom usually participate as an officer or director. Simple ownership structure and one share on vote rule should alleviate the problem of large shareholders. Evidence from Anderson and Reeb (2003), however, finds that when families have the greatest control of the firm, the potential for entrenchment and poor performance is the greatest. The largest shareholder may has higher incentives to monitor at first and as ownership gets beyond a certain point, the shareholders gain nearly full control and may be wealthy enough they prefer to use firms to generate private benefits of control. Dividend payout ratio is therefore expected to be negatively related to percentage held by controlling shareholders.

Hypothesis 1: Dividend payout ratio is negatively related to percentage held by controlling shareholders

Among firms with controlling shareholder, the second largest and other shareholders also have an important role in determining dividend policy. Gugler and Yurtoglu (2002) results show that

larger holding of the second largest shareholder to increase dividend pay-out ratio. The authors argue that the second largest shareholder perform monitoring role to minimize excess cash kept within the firm to prevent expropriation. I expect the second largest shareholders to pressure controlling shareholders in paying more dividends to receive return from their investment rather than leaving excess cash within the company which will not be used for value-maximizing purposes. The more shares held the more effective the monitoring should be and hence a positive relation is expected between percentage held by the second largest and pay-out ratio.

Hypothesis 2: Among firms with controlling shareholder, the percentage held by the second largest shareholder is positively related to dividend payout ratio.

Among firms with controlling shareholder, shareholders holding a small percentage would have limited incentives and ability to monitor. Firms with more shareholders holding more than 0.5% disclosure threshold have more shareholders with bigger stakes and are expected to have better monitoring ability and incentive. In Italy (Mancinelli and Ozcan, 2006), when other shareholders form agreement on their votes, their monitoring becomes effective. Other shareholders are better able to pressure the largest shareholder when equipped to do so. The more shares other shareholders hold the more effective the monitoring should be and thus, a positive relation is expected between percentage held by other shareholders and dividend pay-out.

Hypothesis 3: Among firms with controlling shareholder, percentage of shares held by other shareholders holding more than 0.5% is positively related to dividend payout ratio.

Among firms with no controlling shareholder, the prevailing agency conflict would be between managers and shareholders. If unethical managers are not closely monitored they will consume perquisites at the expense of shareholders (Yermack, 2006). To avoid negative consequences of excess cash, shareholders would force managers to distribute cash. The more shares held the more effective the monitoring should be and hence more cash are paid out to shareholders. Positive relation is, therefore, expected between dividend payout ratio and percentage held by the largest shareholders among firms with no controlling shareholder.

Hypothesis 4: Among firms with no controlling shareholder, percentage held by the largest shareholder is positively related to dividend payout ratio.

Among firms with no controlling shareholder, the second largest shareholders with high concentration of ownership should help improve monitoring by the largest shareholder. The more shares held the more effective monitoring should be and hence, a positive relation is expected between percentage held by the second largest and dividend payout ratio.

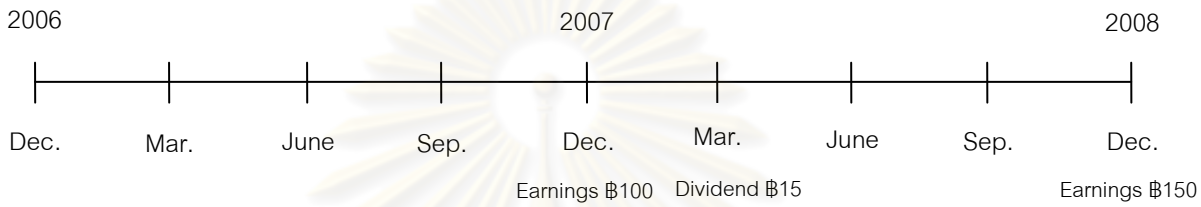
Hypothesis 5: Among firms with no controlling shareholder, percentage of shares held by the second largest shareholders is positively related to dividend payout ratios

Chapter IV

Data

Data are collected from Setsmart and Datastream from the fiscal year 2002 to 2008.

Figure 1. Dividend payment time line.



Data on dividend is collected from Datastream. Only annual amount of dividend is available. Unlike firms in other countries, firms in Thailand have retrospective dividend policy. They pay dividend out of prior period earnings. They usually announce in March that they will pay dividend out of prior period earnings and usually only pay once a year.

For retrospective dividend policy, if in March 2007 a company pays ฿15 dividend out of 2006 earnings, pay-out ratio of 2006 would be 15% (15/100). Its' advantage is that it is what managers state it is how they make decision. Its' disadvantage is that if managers make decision base on what they expect earnings would be for the period (perspective dividend policy), pay-out ratio would not reflect the actual ratio.

For perspective dividend policy, dividend payments are considered to be forward looking, ฿ 15 paid in March 2007 would be considered 2007 dividend and the pay-out ratio in 2007 would 10%

(15/150). Its' advantage is that it is how managers in other countries usually behave. Its' disadvantage is that it is not how managers in Thailand state they make decision and if managers base their decision on prior period earnings, pay-out ratio would not reflect the actual pay-out ratio.

Because retrospective dividend policy is how managers in Thailand state they make decision and with three months into the year it seems credible that they do not know what the year's earnings would be and pay dividend out of prior period earnings. Results for retrospective dividend policy are therefore reported in the main results while results for perspective dividend policy are reported in appendix B.

Data on shareholdings is collected from Setsmart. Information used is from year-end annual report or December 2006 in the example making it the closest date to dividend payment. Shareholding is mainly the same across time. It remains the same with one large change if there is any changes, thus the information used should reflect the same shareholders making the decision.

Data on control variables are collected from Datastream (See the appendix for more details).

4.1 Samples

Samples include listed firms in the Stock Exchange of Thailand. Sample is constructed by the following steps:

1. First, I excluded financial institutions. Number of sample left is reduced from 2930 to 2477.
2. Percentages held by shareholders with the same surname are summed. If a legal entity is a shareholder, its website or a newspaper website is searched for its owner and compared with other shareholders. If no information can be found it will be treated as a separate entity (see the appendix for more details).
3. Information on shareholding collected from Setsmart is matched with information on dividend payment and control variables collected from Datastream. Number of sample left is 1,433.
4. Data is calculated into variables. Dividend is divided by earnings for an example and samples with incomplete data are excluded as well as samples with negative pay-out ratio as they do not have any meanings and it would reverse the relation. This is a standard approach also used in (Mancinelli and Ozcan, 2006) and (Gugler and Yurtoglu, 2002). Leaving a total of 1,341 samples for *Dividend/Earnings* as dependent variable and 1,276 for *Dividend/CFO*.

5. Pay-out ratios more than 120% are winsorized to 120% to avoid large influence by a small group of samples (Gugler and Yurtoglu, 2003).

4.2 Variables

4.2.1 Dependent variables

Dependent variables are the same as La Porta et al. (2000) two measures of payout ratios will be used. Dividend is measured by annual cash dividend paid to common and preferred shareholders.

Dividend/Earnings ratio, where earning is net income

Dividend/Cash Flow ratio, where cash flow is cash flow from operation

4.2.2 Independent Variables

Information on shareholding is collected from Setsmart which is from year-end annual report making it the closest date to dividend payment or the same day if the corporation pays dividend once at year-end.

VR1 is percentage held by the largest shareholder holding at least 50%. Shareholders with the same surname will be treated as one person. Only direct shareholding will be considered due to the time constraint. Shareholding with more complex structures are often among family controlled companies, the type of investor most likely to expropriate and as this group of firms is a small proportion it may cause the results to be slightly underestimated.

VR2 is percentage held by the second largest shareholder

Other is percentage held by all shareholders who owns more than 0.5% disclosure threshold except the controlling shareholder and less than 20% to avoid other shareholders in similar position as the largest.

VRNC1 is percentage held by the largest shareholder who holds less than 50% (non-controlling shareholder). Shareholders having the same surname are treated as the same person.

VRNC2 is the ratio of percentage held by the second largest shareholders who owns more than 0.5% disclosure threshold among firms with no controlling shareholder.

4.2.3 Control Variables

Apart from agency conflict, other factors also have influence over firm's dividend policy. I am therefore going to control for firm size, growth, profitability and leverage.

Fama and French (2001) found that dividend payers and much larger than non-payers. Larger firms have, on average, lower direct bankruptcy cost. They are able to pay larger proportion of their earning as dividend and are assume to have easier access to capital market. It is expected to have positive relation to dividends. The *size* variable is natural logarithm of Total assets (Gugler and Yurtoglu, 2003).

Firms with high growth rate are expected to keep dividend payment low to reduce the need to raise external financing to avoid costly transactions. Fama and French (2001) find that firms with

the best growth opportunities are firms that have never paid dividends. The *growth* variable is the arithmetic average of sales growth for the past five years (La Porta et al., 2000) as it has been traditionally used in the literature.

Profitable firms are expected to have better access to capital market and influences dividend policy positively. (DeAngelo et al., 2004) finds that firms with very high earnings collectively generates the majority of earnings and dominates the dividend supply. The *ROE* variable is net income divided by average owners' equity.

From Jensen's (1986) free cash flow argument, debt and dividends can be seen as substitutes in controlling the agency problem of free cash flow. Debt financing reduces the level of free cash flow insiders can spend to increase their own benefits at the expense of outside shareholders. As well, the cost of external finance and the risk of default are likely to be higher for high-levered firms and hence these firms are expected to have lower dividend payments. The *leverage* variable is defined as total debt to total assets.

M - 1 Industry dummies are included to capture industry specific effects. Technology companies, for an example, are expected to pay less dividend due to their business nature which requires large investments. N - 1 time dummies are included to capture business cycle fluctuations (Gugler and Yurtoglu, 2003). White (1980) heteroscedasticity consistent t-values are used.

4.3 Descriptive Statistics

Descriptive statistics reported in table 1 confirms that Thailand has high concentration of ownership. The mean percentage held by the largest shareholders has been in the range of 32-39% with an average of 36.14%, a minimum of 3.14% and a maximum of 95.64%. The numbers are slightly lower than that documented by Wiwattanakantang (2000) because only simple ownership structure is considered making percentage held lower than actual number among firms with more complex structure. The increasing trend is mainly from higher shareholding among samples that appeared in later periods. Data in table 2 shows that second largest shareholders hold considerably less than the largest shareholders, holding about three times less for both mean and median. Their mean shareholding is 12.59% and their median is 10.38% with a maximum of 41.76% and a minimum of 0.85% with a stable trend of percentage held.

Table 3 reports descriptive statistics of regression variables other than ownership variables after the screening process. *Dividend/Earnings* is reported in column two and *Dividend/CFO* is reported in column three. Firms seem to generally have higher cash flow from operation than their earnings. *Dividend/Earnings* has an average of 44.78% and a median of 43.77% while *Dividend/CFO* has an average of 32.53% and a median of 23.93%. In column four, mean sample *size* is 14.5 billion baht and median sample *size* is 3.0 billion baht. The largest sample has total assets value of 891 billion baht and the smallest has 145 million baht. In column five, *growth* has an average of 12.98%

and a median of 10.39%. In column six, *ROE* has an average of 10.41%, a median of 9.89%, a maximum of 97.34%, and a minimum of -99.59%. In column seven, sample has an average leverage of 0.66 times, and a median of 0.36 times, a maximum of 6.96 times and a minimum of 0.

Table 4 reports dividend payment (*Dividend/Earnings*) for each sample year. Proportion of payers has been somewhat stable in the range of 70 – 80%. Their mean pay-out ratio increased from 36.56% in 2002 to 46.58% in 2008. Their median pay-out ratio increased from 30.52% in 2002 to 46.95% in 2008.

Table 5 shows *Dividend/Earnings* for each industry. Pay-out varies across industries with the lowest mean pay-out of 35.05% from Industrial industry and the highest of 54.48% from Agriculture and Food industry creating a difference of almost 15%. *Dividend/CFO* reported in table 6 also shows similar difference of 10% between industries with the highest and lowest mean pay-out ratio.

Table 7 reports *growth* for each year in the sample period. Growth increases from 8.92% in 2002 to 14.37% in 2008. High growth number could be because of economic expansion during the sample period.

Table 1. Descriptive statistics of percentage held by the largest shareholders of listed firms in the Stock Exchange of Thailand

VR1	2002	2003	2004	2005	2006	2007	2008	All
Mean (%)	33.12	32.21	34.04	35.88	36.47	37.74	39.14	36.14
Median (%)	29.58	27.98	31.82	33.12	33.32	35.61	39.06	33.65
Min. (%)	6.95	6.95	4.43	4.34	3.49	3.14	3.69	3.14
Max. (%)	95.64	95.64	83.81	92.92	92.92	92.92	85.70	95.64
S.D. (%)	17.45	16.40	16.13	17.22	18.06	18.27	19.01	17.85
Number of Observations	127	137	150	210	189	256	272	1341

Table 2. Descriptive statistics of percentage held by the second largest shareholders of listed firms in the Stock Exchange of Thailand

VR2	2002	2003	2004	2005	2006	2007	2008	All
Mean (%)	12.43	12.86	13.08	12.42	12.48	12.57	12.48	12.59
Median (%)	10.99	11.50	11.18	10.56	10.17	10.00	9.82	10.38
Min. (%)	1.15	1.15	1.15	0.85	0.89	1.00	1.24	0.85
Max. (%)	34.12	41.25	39.53	39.53	41.76	41.75	41.68	41.76
S.D. (%)	6.82	7.20	7.97	7.50	7.89	8.08	7.84	7.69
Number of Observations	127	137	150	210	189	256	272	1341

Table 3. Descriptive statistics of regression variables

	Dividend/ Earning (%)	Dividend/ CFO (%)	Size (thousand)	Growth (%)	ROE (%)	Leverage (times)
Mean	44.78	32.53	14,511,251	12.98	10.41	0.66
Median	43.77	23.93	3,054,467	10.39	9.89	0.36
Max	120.00	120.00	891,281,900	99.08	97.34	6.96
Min	0.00	0.00	145,806	-33.13	-99.59	0.00
S.D.	37.62	34.54	53,784,336	15.57	16.41	0.83
10th Percentile	0.00	0.00	684,493	-2.27	-0.90	0.00
90th Percentile	104.99	90.04	26,883,170	30.92	25.07	1.75

Table 4. Descriptive statistics of dividend payments (Dividend/Earnings)

	2002	2003	2004	2005	2006	2007	2008	All
Number of payers	89	108	120	164	145	190	205	1021
Mean pay-out (%)	36.56	46.54	45.07	42.78	53.22	41.25	46.58	44.78
Median pay-out (%)	30.52	45.12	48.20	43.52	43.73	40.68	46.95	43.77
Percentage of payers	70%	79%	80%	78%	77%	74%	75%	76%
Number of non-payers	38	29	30	46	44	66	67	320
Percentage of non-payers	30%	21%	20%	22%	23%	26%	25%	24%
Total	127	137	150	210	189	256	272	1341

Table 5. Descriptive statistics of *Dividend/Earnings (%)* by industry

	Agriculture and Food	Commodity Products	Technology	Industrial	Property and Construction	Resources	Services
Mean (%)	54.48	39.36	44.10	35.05	36.45	53.85	53.16
Median (%)	51.59	36.39	38.47	30.69	31.68	48.06	54.28
Max (%)	120	120	120	120	120	120	120
Min (%)	0	0	0	0	0	0	0
S.D. (%)	37.51	33.68	38.50	34.93	37.41	40.39	37.67
10th Percentile	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90th Percentile	118.72	84.43	99.99	79.04	90.13	120.00	109.56
Observation	191	200	107	218	231	71	323

Table 6. Descriptive statistics of *Dividend/CFO (%)* by industry

	Agriculture and Food	Commodity Products	Technology	Industrial	Property and Construction	Resources	Services
Mean (%)	37.78	30.19	31.17	25.32	30.01	41.10	36.16
Median (%)	28.81	21.97	20.56	17.89	12.57	32.93	28.96
Max (%)	120	120	120	120	120	120	120
Min (%)	0	0.00	0.00	0.00	0.00	0.00	0.00
S.D. (%)	36.19	32.96	33.91	29.38	39.65	38.43	32.66
10th Percentile	0.00	0.00	0.00	0.00	0.00	0.00	0.00
90th Percentile	99.62	78.68	83.23	67.11	120.00	120.00	89.96
Observation	172	199	98	214	203	68	322

Table 7. *Growth* variable by year

	2002	2003	2004	2005	2006	2007	2008	Average
Growth (%)	8.92	9.78	13.35	12.48	14.38	14.40	14.37	12.98
Observation	127	137	150	210	189	256	272	1341

Chapter V

Methodology

First of all, to find the point separating firms with and without controlling shareholder, the data will be examined through univariate tests by finding the difference in mean pay-out ratio between firms with and without controlling shareholder for different definitions of controlling shareholder by using unpaired t-test assuming equal variance and difference in median pay-out ratio by using Mann-Whitney method.

Afterwards, the sample would be tested by using regression to control for other factors which are *size, growth, ROE and leverage.* To test the hypotheses, the following regressions will be tested:

For hypotheses 1 and 2

$$\text{Payout ratio}_{i,t} = \alpha + \beta_1 VR1_{i,t} + \beta_2 VR2 + \beta_3 \text{size} + \beta_4 \text{growth} + \beta_5 \text{profitability} + \beta_6 \text{leverage} \quad (1)$$

Hypothesis 1 Dividend payout ratios are negatively related to percentage held by controlling. Shareholder

H_0: $\beta_1 = 0$

H_1: $\beta_1 \neq 0$

Hypothesis 2: Among firms with controlling shareholder, the percentage held by the second largest shareholder is positively related to dividend payout ratio.

H_0: $\beta_2 = 0$

H_1: $\beta_2 \neq 0$

β_1	
Positive	Firms with controlling shareholder have better alignment of incentives. Fewer resources are consumed in low return projects, suggesting more cash flow can be distributed as dividend. And controlling shareholders prefer high dividend to reduce their monitoring costs. Dividend is a substitute for shareholder monitoring (Easterbrook, 1984)
Negative	Controlling shareholders use dividend as a mean to expropriate wealth from other shareholders and pay dividend because of pressure from other shareholders
No Relation	Ownership Structure does not explain dividend policy
$\beta 2$	
Positive	2nd largest shareholders can effectively monitor
Negative	2nd largest shareholders cannot effectively monitor
No Relation	2nd largest shareholders cannot effectively monitor

For hypothesis 3

$$\text{Payout ratio}_{i,t} = \alpha + \beta_1 VR1_{i,t} + \beta_2 VOther + \beta_3 size + \beta_4 growth + \beta_5 profitability + \beta_6 leverage \quad (2)$$

Hypothesis 3: Among firms with controlling shareholder, percentage held by other shareholders is positively related to dividend payout ratio.

H_0: $\beta_2 = 0$

H_1: $\beta_2 \neq 0$

β_2	
Positive	Firms with more shareholders with bigger stakes can effectively monitor
Negative	These firms cannot effectively monitor
No Relation	These firms cannot effectively monitor

For hypotheses 4 and 5

$$\text{Payout ratio}_{i,t} = \alpha + \beta_1 \text{VRNC1}_{i,t} + \beta_2 \text{VRNC2} + \beta_3 \text{size} + \beta_4 \text{growth} + \beta_5 \text{profitability} + \beta_6 \text{leverage} \quad (3)$$

Hypothesis 4: Among firms with no controlling shareholder, percentage held by the largest shareholder is positively related to dividend payout ratio.

H_0: $\beta_1 = 0$

H_1: $\beta_1 \neq 0$

Hypothesis 5: Among firms with no controlling shareholder, percentage of shares held by the second largest shareholders is positively related to dividend payout ratios

H_0: $\beta_2 = 0$

H_1: $\beta_2 \neq 0$

β_1	
Positive	The largest shareholder can effectively monitor the management
Negative	The largest shareholder cannot effectively monitor the management
No Relation	The largest shareholder cannot effectively monitor the management
β_2	
Positive	2nd largest shareholders can effectively monitor
Negative	2nd largest shareholders cannot effectively monitor
No Relation	2nd largest shareholders cannot effectively monitor

Chapter VI

Empirical Results

This section analyses 1) univariate test of the sample 2) regression results of the sample

6.1 Univariate Results

Results from univariate test are reported in table 8. Difference in mean pay-out ratio has been tested using unpaired t-test assuming equal variance and difference in median has been tested using Mann-Whitney method. Panel A reports results of difference in mean pay-out ratio and Panel B reports results of difference in median pay-out ratio. Row 1 of Panel A indicates definition of controlling shareholder being used in the test. Row 3 of Panel A shows mean pay-out ratio and row 2 of Panel B shows median pay-out ratio. Row three of Panel B show number of observations. Results are reported in column 4 and every three columns thereafter. At definition of controlling shareholder of 10%, firms with controlling shareholder have significantly higher mean pay-out ratio indicated by the positive and significant t-value of 2.48. Their median pay-out ratio is not significantly different with p-value of 0.090. At definition of controlling shareholder of 20%, firms with controlling shareholder have significantly higher mean pay-out ratio indicated by the positive and significant t-value of 3.41. Their median pay-out ratio is significantly different with p-value of 0.026. At definition of controlling shareholder of 25%, firms with controlling shareholder have significantly higher mean pay-out ratio

indicated by the positive and significant t-value of 4.30. Their median pay-out ratio is significantly different with p-value of 0.004. At definition of controlling shareholder of 30%, firms with controlling shareholder have significantly higher mean pay-out ratio indicated by the positive and significant t-value of 4.92. Their median pay-out ratio is significantly different with p-value of 0.001. At definition of controlling shareholder of 40%, firms with controlling shareholder have significantly higher mean pay-out ratio indicated by the positive and significant t-value of 5.10. Their median pay-out ratio is significantly different with p-value of 0.002. At definition of controlling shareholder of 50%, firms with controlling shareholder have significantly higher mean pay-out ratio indicated by the positive and significant t-value of 1.77. Their median pay-out ratio is not significantly different with p-value of 0.541. At definition of controlling shareholder of 60%, 70%, and 75% their mean and median pay-out ratio is no longer significantly different. 50% level of ownership seems to be the point separating the two groups of firms with and without controlling shareholder.

Using Dividend/CFO reported in table 9 produced similar results. Their mean and median pay-out ratio is significantly different until40%.

From the univariate results the largest shareholders add value. They have positive influence on dividend policy. Dividend pay-out ratio increases with percentage held by the largest shareholder until 50% when it no longer increases. The results suggest large shareholders need to have significantly larger control rights than cash flow rights to have the incentives to extract rent. Without

the difference between control rights and cash flow rights, large shareholders have high proportion of their wealth tied to the firm which discourages them from making private benefits of control and helps align their interest with other shareholders.

Results from the univariate tests, however, have not controlled other factors such as size, growth opportunity, ROE, or leverage and hence regression analysis is conducted in the next section.

Table 8. Difference in Dividend policy (Dividend/Earnings) between firms with and without controlling shareholder.

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	10%			20%			25%			30%			40%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	45.34	33.11	2.48**	46.54	37.84	3.41***	47.81	38.43	4.30***	49.09	38.95	4.92***	51.03	40.45	5.10***
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	43.92	18.55	0.090	45.27	31.09	0.026*	46.78	36.33	0.004***	47.71	36.75	0.001***	49.33	39.14	0.002***
Observations	1280	61		1070	271		908	433		771	570		549	792	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 8. (Con't).

Panel A												
Definition of Controlling shareholder	50%			60%			70%			75%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	48.26	43.83	1.77*	44.33	44.83	-0.16	47.98	44.66	0.59	37.97	44.89	-0.85
Panel B												
			p-value			*p-value*			*p-value*			*p-value*
Median	45.69	43.47	0.541	39.65	43.90	0.397	45.56	43.71	0.652	30.90	43.77	0.670
Observations	289	1052		154	1187		47	1294		22	1319	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 9. Difference in Dividend policy (Dividend/CFO) between firms with and without controlling shareholder.

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	10%			20%			25%			30%			40%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	32.55	32.02	0.11	33.89	26.89	2.87***	34.45	28.27	2.97***	34.59	29.62	2.54**	35.01	30.73	2.18**
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	24.13	13.24	0.143	25.05	16.32	0.001***	25.66	18.38	0.000***	26.02	21.36	0.002***	26.43	22.03	0.008**
Observations	1217	59		1027	249		879	397		746	530		535	741	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 9. (Con't).

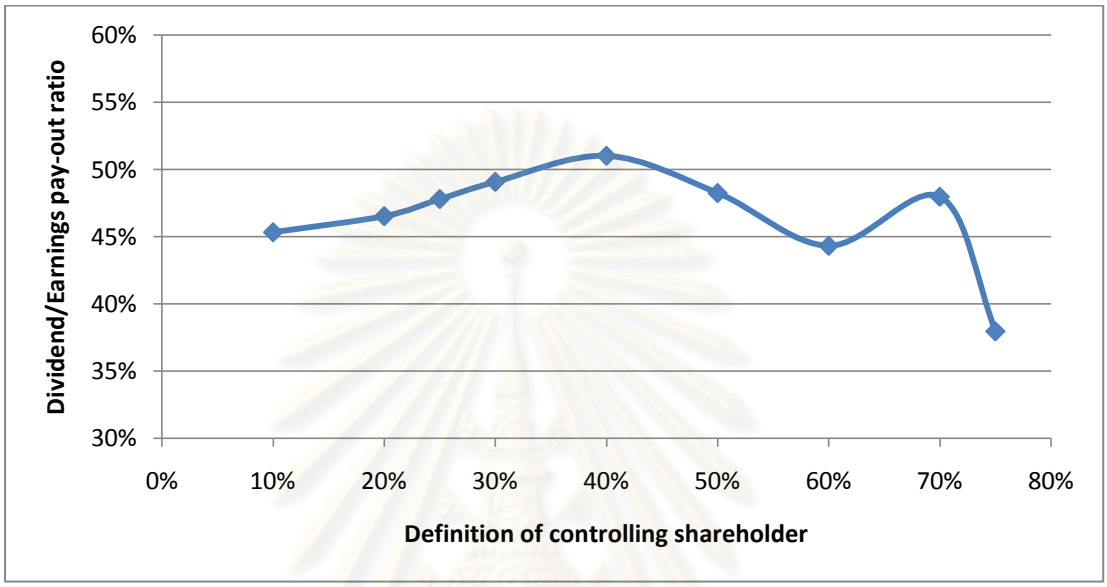
Panel A												
Definition of Controlling shareholder	50%			60%			70%			75%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	35.21	31.75	1.48	31.06	32.73	-0.56	33.21	32.50	0.14	21.10	32.73	-1.56
Panel B												
			p-value			*p-value*			*p-value*			*p-value*
Median	27.72	23.23	0.093	21.85	24.09	0.546	29.53	23.82	0.337	3.12	24.00	0.390
Observations	285	991		153	1123		48	1228		22	1254	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

6.2 Regression Results

Regression results are reported in table 10 and 11.

Figure 2. Definition of controlling shareholder and pay-out ratio (*Dividend/Earnings*)



Results from the univariate test suggest the two groups of firms are divided somewhere between 30 - 50%. Regression has been tested for the definition of 25%, 40%, and 50%. The 25% definition has also been included because it is the definition of controlling shareholder by law. The results of 40% definition are reported in the appendix because no ownership structure variables are significant and results using 50% definition are reported in the main results.

Regression has been conducted using ordinary least square method. Row 1 indicates the dependent variable used in the regression. Row 2 indicates the independent variables used in the regression. Rows 3, 5, and 7 indicate regression coefficients. Rows 4, 6, and 8 indicate White's heteroscedasticity consistent t-values. Column 1 indicates the equation number being tested.

In table 10 using *Dividend/Earnings* as dependent variable, in equation 1 the coefficient of leverage is -14.20. Among firms with controlling shareholder, one percentage increase in leverage is associated with 14.20 percentages less pay-out ratio.

Coefficients of control variables are the same for both *Dividend/Earnings* and *Dividend/CFO* as dependent variable. *Growth*, *size*, and *leverage* are significant in all three equations. *Size* is positive and significant as expected; dividend payers are larger than non-payers. *Growth* is positive and significant unlike what has been documented by Fama and French (2001), firms with higher growth do not pay less dividend. *Leverage* is negative and significant like what has been reported by Jensen's (1986), debt and dividend can be seen as substitute. *ROE* is positive and significant in equation 3 like reported by (DeAngelo et al., 2004), profitable firms have better access to the capital market and this influences dividend payment positively.

R-square is 16% in equation 1, 16% in equation 2, and 17% in equation 3. That is, the explanatory variables explain 16% of the variations in dividend pay-out ratio in equation 1, 16% in equation 2, and 17% in equation 3.

Using *Dividend/Earnings* as dependent variable does not give any significant results for ownership structure variables. This could be because 25% is not a clear point dividing the two groups of firms. As figure 2 suggests, at 25% level of ownership by the largest, dividend pay-out is still increasing.

Using *Dividend/CFO* as dependent, in equation 2 the coefficient of *other* shareholders is positive and significant indicated by t-score of 1.91 providing some evidence of monitoring by other shareholders.

Table 10. OLS regression estimates for 25% definition of controlling shareholder *(Dividend/Earnings)*

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	13.12 (0.85)	2.64 (2.83)**	0.33 (3.43)***	0.06 (0.72)	-14.2 (-9.94)***	0.09 (1.05)	0.23 (1.55)				0.16	908
(2)	8.09 (0.49)	2.78 (2.96)**	0.31 (3.26)***	0.06 (0.68)	-14.21 (-9.92)***	0.13 (1.33)		0.17 (1.50)			0.16	908
(3)	-58.20 (-2.35)**	5.22 (3.18)***	0.34 (2.60)**	0.19 (2.34)**	-8.72 (-5.26)***				0.42 (1.17)	0.31 (0.67)	0.17	433

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 11. OLS regression estimates for 25% definition of controlling shareholder *(Dividend/CFO)*

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in the bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	-2.59 (-0.17)	2.79 (3.23)***	0.36 (4.18)***	0.13 (1.77)*	-9.35652 (-6.75)***	-0.00 (-0.04)	0.04 (0.33)				0.13	879
(2)	-13.73 (-0.89)	2.98 (3.41)***	0.34 (4.05)***	0.13 (1.73)*	-9.31 (-6.73)***	0.08 (0.96)		0.18 (1.91)*			0.13	879
(3)	-51.95 (-2.18)**	4.92 (3.28)***	0.28 (2.16)**	0.24 (3.49)***	-9.75 (-7.25)***				0.24 (0.65)	-0.00 (-0.00)	0.18	397

*, **, and *** are significant at 10%, 5%, and 1% level of significance

In table 12 using Dividend/Earnings as dependent variable, in equation 3 the coefficient of the largest shareholder is 0.34. Among firms with no controlling shareholder, one percentage increase in shares held by the largest shareholder is associated with 0.34 percentage increase in pay-out ratio. The average earnings during the sample period is ฿ 862m. 1% increase in shares held by non-controlling shareholder is associated with ฿ 3m. more in dividend payment making the results economically significant as well.

Using Dividend/Earnings as dependent variable is reported in table 12. In equation 1, coefficient of controlling shareholder is not negative and not significant suggesting controlling shareholders do not have negative influence on dividend pay-out ratio and hypothesis one can be rejected. Coefficient of the second largest shareholders is not significant suggesting the second largest shareholders have not been effective in monitoring the largest or they may not need to and hypothesis 2 can be rejected. In equation 2, coefficient of controlling shareholder is also insignificant leading to the rejection of hypothesis 1 as well. Coefficient of other shareholders is insignificant suggesting other shareholders do not help improve effectiveness of monitoring and hypothesis 3 can be rejected. In equation 3, coefficient of non-controlling shareholder is positive and significant suggesting non-controlling shareholder has been effective in monitoring the management and the relevant agency conflict seem to be the one between managers and shareholders and thus hypothesis 4 can be accepted. Coefficient of the second largest shareholder is positive but

insignificant suggesting concentration of ownership by the second largest shareholders does not help improve monitoring ability of the largest and hypothesis 5 can be rejected.

Using Dividend/CFO as dependent variable reported in table 13 produced contradicting results. In equation 1 and 2, the coefficient of controlling shareholder now becomes negative and significant providing evidence of expropriation by controlling shareholder and hypothesis 1 can be accepted. The difference in result from table 12 could be because controlling shareholders avoid negative influence on *Dividend/Earnings* because it is what investors look at. The coefficient of the second largest shareholder in equation 1 remains insignificant suggesting they have not been effective in monitoring and hypothesis 2 can be rejected. The coefficient of *other* remains insignificant suggesting they do not help improve effectiveness of monitoring and hypothesis 3 can be rejected. In equation 3, among firms with no controlling shareholder, the coefficient of the largest shareholder become insignificant this could be because largest shareholder look at *Dividend/Earnings* when they monitor because it is what investors look at. The coefficient of the second largest remains insignificant.

Changing definition of dividend policy to perspective dividend policy (see appendix B) yielded similar univariate results. From the univariate tests, mean and median pay-out ratio among firms with controlling shareholder are significantly higher than firms without up to 50% definition of controlling shareholder. Regression results, on the other hand, are similar to results reported in table

10 for both types of pay-out ratio. From the regression results, at definition of controlling shareholder of 50%, in equation 1 coefficient of the largest shareholder is not negative and insignificant suggesting they do not have negative influence on pay-out ratio and hypothesis 1 can be rejected. The coefficient for the second largest shareholder is positive and significant suggesting the second largest has been effective in monitoring and hypothesis 2 can be accepted. In equation 2, the coefficient for *other* shareholders is not significant suggesting firms with more shareholders with bigger stakes do not help improve monitoring and monitoring is only effective among firms with large second largest shareholder and hypothesis 3 can be rejected. In equation 3, the coefficient for the largest shareholder is positive and significant suggesting the prevailing agency conflict is between managers and shareholders and the largest shareholders have been effective in monitoring and hypothesis 4 can be accepted. The coefficient of the second largest is not significant suggesting share concentration be the second largest does not help improve monitoring and hypothesis 5 can be rejected.

Univariate results portrayed in figure 2, however, show that there may be outliers between definitions of controlling shareholder of 60 – 70%. In the robustness test of the results outliers or those firms paying more than 120% and were winsorized to 120% were excluded (11 sample out of 289 for *Dividend/Earnings* and 8 samples for *Dividend/CFO*).

Table 12. OLS regression estimates for 50% definition of controlling shareholder *(Dividend/Earnings)*

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	33.91 (1.04)	2.59 (1.36)	0.57 (2.72)***	-0.19 (-1.16)	-18.28 (-5.72)***	-0.29 (-1.12)	0.47 (1.28)				0.22	289
(2)	46.02 (1.23)	2.64 (1.35)	0.57 (2.65)***	-0.21 (-1.32)	-17.89 (-5.52)***	-0.41 (-1.40)		-0.04 (-0.15)			0.22	289
(3)	-16.53 (-1.21)	3.95 (4.46)***	0.29 (3.59)***	0.16 (2.49)**	-10.95 (-10.43)***				0.34 (3.59)***	0.17 (1.11)	0.16	1052

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 13. OLS regression estimates for 50% definition of controlling shareholder *(Dividend/CFO)*

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in the bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	33.37 (1.04)	3.74 (1.95)*	0.47 (2.86)***	-0.20 (-1.47)	-15.68 (-5.81)***	-0.56 (-2.72)***	0.24 (0.64)				0.22	285
(2)	20.84 (0.55)	4.11 (2.09)**	0.45 (2.72)***	-0.21 (-1.56)	-15.31 (-5.61)***	-0.45 (-1.85)*		0.26 (0.92)			0.23	285
(3)	-25.71 (-2.09)**	3.61 (4.55)***	0.30 (4.02)***	0.26 (4.47)***	-8.94 (-8.27)***				0.13 (1.36)	0.01 (0.06)	0.13	991

*, **, and *** are significant at 10%, 5%, and 1% level of significance

6.3 Robustness Check

For definition of controlling shareholder of 25%, the results are reported in table 14 and 15. They are in the same format as the main result with White's heteroscedasticity consistent t-values reported in bracket under the coefficients. The control variables still have similar sign and significance.

The difference from the main results occurs in equation 2. The coefficient of *other* shareholders becomes positive and significant for both *Dividend/Earnings* and *Dividend/CFO* as dependent variable. Among firms with controlling shareholder, firms with more shareholders with bigger stakes have better monitoring ability. This coefficient, however, becomes insignificant at 50% definition of controlling shareholder suggesting that their monitoring is effective if controlling shareholders do not hold disproportionately more shares than other shareholders.

Among firms with no controlling shareholder, the results remain the same. In equation 3, the coefficient of the largest remains insignificant as well as coefficient of the second largest.

Table 14. OLS regression estimates excluding outliers for 25% definition of controlling shareholder (Dividend/Earnings)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	17.00 (1.12)	2.65 (2.88)**	0.31 (3.33)***	0.08 (0.90)	-14.75 (-10.82)***	-0.00 (-0.06)	0.21 (1.40)				0.17	897
(2)	10.03 (0.62)	2.82 (3.05)***	0.29 (3.16)***	0.07 (0.86)	-14.77 (-10.85)***	0.04 (0.46)		0.18 (1.68)*			0.17	897
(3)	-43.51 (-1.85)*	5.11 (3.11)***	0.33 (2.51)**	0.20 (2.36)**	-8.62 (-5.20)***				0.35 (0.99)	0.32 (0.68)	0.17	433

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 15. OLS regression estimates excluding outliers for 25% definition of controlling shareholder (Dividend/CFO)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	1.27 (0.09)	2.77 (3.33)***	0.35 (4.44)***	0.15 (2.20)**	-9.81 (-7.35)***	-0.08 (-1.04)	0.02 (0.16)				0.13	871
(2)	-9.94 (-0.67)	2.95 (3.52)***	0.34 (4.08)***	0.15 (1.99)**	-9.78 (-7.37)***	0.00 (0.06)		0.17 (1.83)*			0.13	871
(3)	-49.41 (-2.29)**	4.90 (3.28)***	0.28 (2.16)**	0.24 (3.57)***	-9.73 (-7.24)***				0.23 (0.62)	-0.00 (-0.00)	0.18	397

*, **, and *** are significant at 10%, 5%, and 1% level of significance

For definition of controlling shareholder of 50%, results using *Dividend/Earnings* as dependent variable are reported in table 16. Results are the same for firms with no controlling shareholder as shown in equation 3. The results for firms with controlling shareholder, on the other hand, are different. In equation 1, the coefficient for controlling shareholder is negative and significant providing evidence of expropriation by controlling shareholder and hypothesis 1 can be accepted. The coefficient for the second largest shareholder remains insignificant suggesting they are not effective in monitoring the largest and hypothesis 2 can be rejected. In equation 2, the coefficient of controlling shareholder is still negative and significant while the coefficient of *other* shareholder is insignificant suggesting other shareholders do not help improve effectiveness of monitoring and hypothesis 3 can be rejected.

Results using *Dividend/CFO* as dependent variable is reported in table 17. Results are the same as table 16 for equation 1 and 2. In equation 3, the coefficient of the largest shareholder become insignificant, this could be because when largest shareholders monitor they look at *Dividend/Earnings* because this is what investors look at but among firms with controlling shareholder, these controlling shareholders have complete control they do not avoid negative influence on their pay-out ratio.

Table 16. OLS regression estimates excluding outliers for 50% definition of controlling shareholder (Dividend/Earnings)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	38.42 (1.27)	3.41 (1.87)*	0.51 (2.73)***	-0.15 (-0.94)	-20.69 (-7.69)***	-0.56 (-2.43)**	0.32 (0.90)				0.27	278
(2)	36.66 (1.07)	3.67 (1.97)**	0.49 (2.60)***	-0.17 (-1.04)	-20.38 (-7.62)***	-0.56 (-2.07)**		0.11 (0.43)			0.26	278
(3)	-16.53 (-1.21)	3.95 (4.46)***	0.29 (3.59)***	0.16 (2.49)**	-10.95 (-10.43)***				0.34 (3.59)***	0.17 (1.11)	0.16	1052

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 17. OLS regression estimates excluding outliers for 50% definition of controlling shareholder (Dividend/CFO)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	33.16 (1.17)	4.15 (2.46)**	0.47 (2.98)***	-0.12 (-0.86)	-16.85 (-6.93)***	-0.67 (-3.48)***	0.18 (0.49)				0.26	277
(2)	17.79 (0.55)	4.59 (2.68)***	0.45 (2.83)***	-0.13 (-0.94)	-16.62 (-6.96)***	-0.55 (-2.40)**		0.28 (1.01)			0.26	277
(3)	-25.71 (-2.09)**	3.61 (4.55)***	0.30 (4.02)***	0.26 (4.47)***	-8.94 (-8.27)***				0.13 (1.36)	0.01 (0.06)	0.13	991

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Since the dependent variable has a left censor at 0, using ordinary least square would cause downwards-bias of the slope coefficient and upward-bias of the intercept, this section repeats the regression equations using TOBIT model. Results using TOBIT model are reported in table 18 and 19.

For 25% definition of controlling shareholder, using *Dividend/Earnings* as dependent variable is reported in table 18 and using *Dividend/CFO* as dependent variable is reported in table 19. All results remain the same as results using ordinary least square method suggesting the results are not due to bias caused by the model used.

Table 18. TOBIT regression estimates excluding outliers for 25% definition of controlling shareholder (Dividend/Earnings)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent z-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings											
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	No. of sample
(1)	-15.23 (-0.84)	4.59 (4.13)***	0.47 (3.83)***	0.30 (2.19)**	-24.28 (-10.67)***	-0.01 (-0.14)	0.26 (1.47)				897
(2)	-25.29 (-1.30)	4.83 (4.32)***	0.44 (3.66)***	0.30 (2.17)**	-24.39 (-10.68)***	0.05 (0.46)		0.24 (1.86)*			897
(3)	-122.02 (-3.69)	9.65 (4.24)***	0.51 (2.71)***	0.59 (3.58)***	-17.01 (-5.29)***				0.66 (1.30)	0.39 (0.58)	433

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 19. TOBIT regression estimates excluding outliers for 25% definition of controlling shareholder (Dividend/CFO)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 25% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent z-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO											
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	No. of sample
(1)	-20.10 (-2.01)	2.95 (5.95)***	0.51 (4.58)***	0.38 (3.11)***	-16.91 (-7.22)***	-0.14 (-1.51)	0.02 (0.17)				871
(2)	-43.55 (-2.43)**	4.76 (4.64)***	0.48 (4.42)***	0.38 (3.11)***	-17.26 (-7.25)***	0.03 (0.31)		0.24 (2.08)**			871
(3)	-136.51 (-4.35)***	9.78 (4.64)***	0.50 (2.66)***	0.66 (4.11)***	-21.18 (-6.74)***				(0.65) (1.22)	0.12 (0.17)	397

*, **, and *** are significant at 10%, 5%, and 1% level of significance

For 50% definition of controlling shareholder, using *Dividend/Earnings* as dependent variable is reported in table 20. All coefficients remain the same as table 16 suggesting the results are not due to bias caused by the model.

Using *Dividend/CFO* as dependent variable is reported in table 21. In equation 3, among firms with no controlling shareholder, the coefficient of the largest shareholder become positive and significant suggesting the insignificance displayed in table 17 is due to bias cause by the model.

From the univariate results, dividend pay-out increases with percentage held by the largest until it reaches about 50% when it begins to decline. Regression analysis is conducted to control for other factors including *size, growth, profitability,* and *leverage*. Classifying firms with largest shareholder holding at least 50% as firms with controlling shareholder, regression results show that controlling shareholders have negative influence on dividend pay-out. Larger holding by controlling shareholder is associated with lower dividend pay-out. Among these firms, the relevant agency conflict is the one between controlling shareholder and other shareholder. The second largest and other shareholders are ineffective in monitoring the largest. Among firms with no controlling shareholder, the relevant agency conflict is between managers and shareholders. The largest shareholder has been effective in monitoring the management. Share concentration by the second largest, however, does not help improve monitoring ability by the largest.

Compared to other studies conducted in other countries the results contradict with Shleifer and Vishny (1997). Large controlling shareholders do not need to have significantly higher control rights than ownership rights to have the incentive to extract rent by paying low dividend and retain cash within the firm. Simple ownership structure and one share one vote rule are not sufficient in limiting incentives to expropriate by large shareholders. In line with Anderson and Reeb (2003) findings, beyond 50% level of ownership largest shareholders no longer add value and larger holding by the largest is associated with lower dividend pay-out.

Compared to other paper conducted in Thailand, the results are consistent with Atcharawan (2002) findings. Thailand has high concentration of ownership, the largest shareholder perform monitoring role and thus Thai firms are subject to less information asymmetry between manager and shareholder and therefore there is less need to use dividend as a signaling mechanism.

Table 20. TOBIT regression estimates excluding outliers for 50% definition of controlling shareholder (Dividend/Earnings)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent z-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings											
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	No. of sample
(1)	12.45 (0.33)	5.17 (2.29)**	0.72 (3.14)***	0.04 (0.16)	-27.73 (-7.09)***	-0.66 (-2.28)**	0.38 (0.96)				278
(2)	12.65 (0.30)	5.46 (2.38)**	0.70 (3.01)***	0.02 (0.07)	-27.39 (-6.97)***	-0.69 (-2.09)**		0.09 (0.31)			278
(3)	-65.53 (-3.75)***	6.71 (5.90)***	0.43 (3.93)***	0.48 (4.33)***	-19.44 (-9.54)***				0.45 (3.63)***	0.21 (1.14)	1052

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 21. TOBIT regression estimates excluding outliers for 50% definition of controlling shareholder (Dividend/CFO)

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent z-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO											
Equation	Intercept	Size	Growth	ROE	Leverage	VR1	VR2	Other	VRNC1	VRNC2	No. of sample
(1)	10.15 (0.29)	5.73 (2.80)***	0.67 (3.59)***	0.04 (0.19)	-21.90 (-6.48)***	-0.76 (-3.19)***	0.26 (0.64)				277
(2)	-2.95 (-0.07)	6.18 (3.00)***	0.64 (3.45)***	0.02 (0.10)	-21.56 (-6.41)***	-0.67 (-2.42)***		0.26 (0.86)			277
(3)	-78.23 (-4.92)***	6.51 (6.29)***	0.45 (4.40)***	0.61 (5.59)***	-17.87 (-7.86)***				0.24 (1.99)**	0.07 (0.40)	991

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Chapter VII

Conclusion and Suggestion for Future Study

7.1 Conclusion

This paper aims to test for the role of dividend in controlling agency conflict between large and small shareholders and between managers and shareholders. Relationships in corporations are between principal and agent. Problems arise when the principal and agent do not have their interest aligned. Some agents only work for their best interest and sometime even at the expense of the principal.

In countries with dispersed ownership structure, each individual shareholder holds small stake. They lack economy of scale causing them to be reluctant in monitoring the management. Their incentives are further hamper by the free-rider problem; each individual shareholder does not want to individually incur monitoring expense when the benefits are shared by all. To minimize agency costs; they prefer to force managers to pay-out free cash flow to minimize cash under managers' discretion.

In countries with concentrated ownership such as Thailand, largest shareholders hold large proportion of firm's shares. Among firms with large shareholder, due to the size of their holdings and economy of scale, they would have the incentive and ability to monitor the management. These largest shareholders potentially add value. Large shareholders, however, work for their best interest

and they would have the incentive and ability to do so if they have significantly higher control rights than cash flow rights. They can achieve this either by controlling the firm through complex structure or hold shares with superior voting rights. Dividend, in this case, may be used as a mean to expropriate other shareholders by minimizing dividend pay-out to retain cash within the firm which can be used under controlling shareholders' discretion. Thailand, however, has one share one vote rule and majority of Thai firms have simple ownership structure which should help mitigate the problem. Once largest shareholders hold shares beyond a certain point, however, they may be wealthy enough they are not as concern of long-term goal and may decide to gain private benefits of control from wealth kept within the firm. Thailand, therefore, may has two groups of firms, one with controlling shareholder and the other without. Among firms with controlling shareholder, the agency conflict is argued to be the one between large controlling shareholder and other shareholders. Among firms with no controlling shareholder, the agency conflict is argued to be between managers and shareholders.

Data includes 1,341 samples for *Dividend/Earnings* and 1,276 samples for *Dividend/CFO* of

listed firms in the Stock Exchange of Thailand from the year 2002 to 2008. The univariate results show that largest shareholders add value up to about 50% beyond which no relationship exists. Regression analysis is conducted to control for other factors including *size, growth, ROE, and leverage.*

Univariate results suggest that largest shareholders add value up to 50% of ownership. Dividend pay-out increases with percentage held by the largest until 50% and no relation afterwards.

Using definition of controlling shareholder by law of 25%, results show that among firms with controlling shareholder, monitoring is more effective for firms with more shareholders with bigger stakes if controlling shareholders do not hold disproportionately more than other shareholders.

For 50% definition of controlling shareholder, regression results are the same for both *Dividend/Earnings* and *Dividend/CFO* as dependent variable. Results show that largest shareholder add value up to 50%. Until this point, larger holding by the largest is associated with higher dividend pay-out. The relevant agency conflict seems to be the one between managers and shareholders. The largest shareholder has been effective in monitoring the management while the second largest does not have any roles. Among firms with controlling shareholder, controlling shareholders have negative influence on dividend pay-out. Larger holding by controlling shareholder is associated with lower dividend pay-out. The relevant agency conflict seems to be the one between controlling shareholder and other shareholders. The largest shareholder minimizes dividend pay-out to retain financial resources within the firm which may be use for their personal benefits. The second largest and other shareholders have not been effective in monitoring the largest.

The results imply that one share one vote rule and simple ownership structure is inadequate in mitigating the incentive of large shareholders in engaging in activities to gain private benefits of control and that there are two groups of firms in Thailand.

1. Firms with controlling shareholder, or firms where the largest shareholder hold at least 50% and the relevant agency conflict is between large controlling shareholder and other shareholders
2. Firms without controlling shareholder or firms where the largest shareholder hold less than 50% and the relevant agency conflict is the one between managers and shareholders.

7.2 Suggestion for Future Study

To provide further investigation into the influences of controlling shareholders future studies may examine the relation between their holdings and firm performance as return to shareholders may come in the form of capital gain as well.

References

Atcharawan, P., 2002. Dividend, asymmetric information, and agency conflicts: a comparative study of the dividend policies of Thailand and U.S. firms. Master's Thesis, Department of Banking and Finance Faculty of Commerce and Accountancy Chulalongkorn University.

Anderson, R., and Reeb, D., 2003. Founding-Family Ownership and Firm Performance: Evidence fromthe S&P 500, 3, 1301–1328.

Black, F., 1976.The dividend puzzle. Journal of Portfolio Management, 2, 72–77.

Chung, K., and Kim, J., 1999. Corporate ownership and the value of a vote in an emerging market.Journal of Corporate Finance, 5, 35-54.

DeAngelo H., and DeAngelo, L., 1985. Managerial ownership of voting rights: a study of public corporations with dual classes of common stock. Journal of Financial Economics, 14, 33-69.

DeAngelo H., DeAngelo, L., and Skinner, D., 2004. Are dividends disappearing? dividend concentration and the consolidation of earnings. Journal of Financial Economics, 72, 425-456.

Demsetzand, H., and Lehn, K., 1985. The Structure of Corporate Ownership: Causes and Consequences. Journal of Political Economy, 93, 6.

Easterbrook, F., 1984.Two agency-cost explanations of dividend. American Economic Association, 74, 650-659

Fama, E., and French, K., 2001. Disappearing dividend: changing firm characteristics or lower propensity to pay. Journal of Financial Economics, 60, 3-43.

Grossman, S., and Hart, O., 1988. One share-one vote and the market for corporate control, Journal of Financial Economics, 20, 175–202.

Guay, W., and Harford, J., 2000. The cash-flow permanence and information content of dividend increases vs. repurchases. Journal of financial economics, 57, 385-415.

Gugler, K., and Yurtoglu, B., 2003. Corporate governance and dividend pay-out policy in Germany. European Economic Review, 47, 731-758.

Harada, K., and Nguyen, P., 2006. Ownership concentration, agency conflicts, and dividend policy in Japan.Journal of Economic Literature.

Jensen, M.C. 1986. Agency cost of free cash flow, corporate finance and takeovers, American Economic Review, 76, 323–329.

Jensen, M., and Meckling, W., 1976. Theory of the firm: managerial behaviour, agency costs and ownership structure. Journal of Financial Economics, 3, 305–360.

La Porta, R., Lopez-de-Silanes, F., and Shleifer, A., 1999. Corporate ownership around the world. Journal of Finance, 44

La Porta, R., Lopez-de-Silanes, F., Shleifer, A., and Vishny, R., 2000. Investor protection and corporate governance.Journal of Financial Economics, 58, 3-27.

Lintner, J., 1956. Distribution of incomes of corporations among dividends, retained earnings and taxes. American Economic Review, 46, 97–113.

Mancinelli, L., and Ozkan, A., 2006. Ownership structure and dividend policy: evidence from Italian firms. European Journal of Finance, 12, 265-282.

Miller, M., and Modigliani, F., 1958.The cost of capital, corporation finance and the theory of investment.The American Economic Review, 48, 261-297.

Mitton, T., 2004.Corporate governance and dividend policy in emerging markets. Emerging Markets Review, 5, 409-426.

Morck, R., Shleifer, A., and Vishny, R.W., 1988. Management ownership and market valuation: An empirical analysis. Journal of Financial Economics, 20, 293-315

Myers, S., 1977. Determinants of corporate borrowing. Journal of financial economics, 5, 147-175

Rozeff, M., 1982. Growth, beta and agency costs as determinants of dividend payout ratios. Journal of Financial Research, 5, 249-259.

Ronapat, M., and Evans, M., 2005. Disappearing dividends in the Thai capital market: changing firm characteristics or lower propensity to pay. Journal of Economic and Social Policy, 10, 7

Shleifer, A., and Vishny, R., 1997. A survey on corporate governance. Journal of Finance, 52, 737–783.

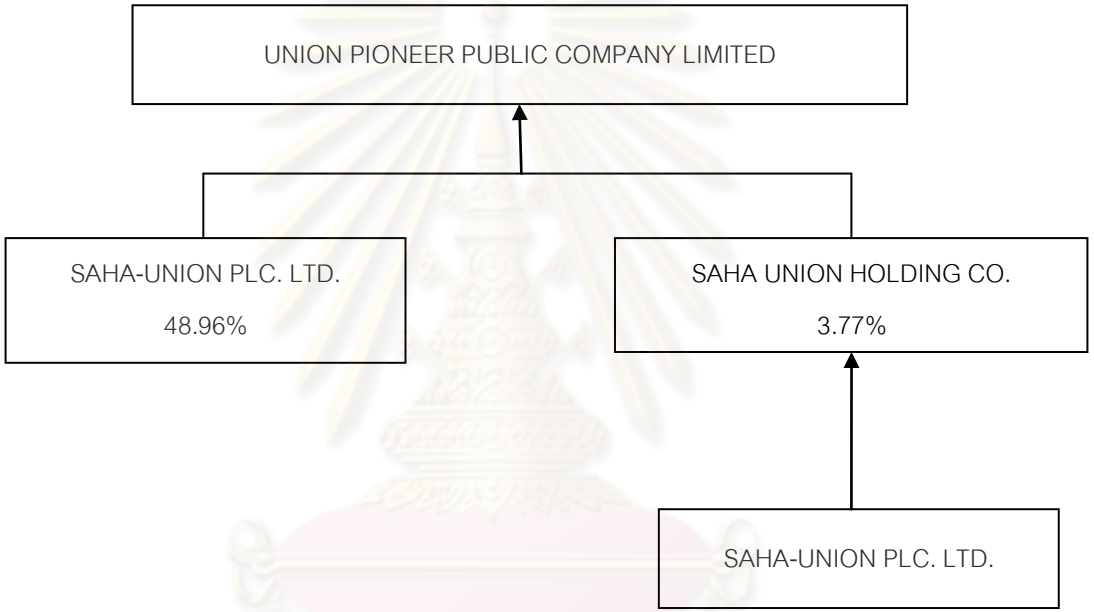
Wiwattanakantang, Y., 2000. The equity ownership structure of Thai firms. Doctoral Thesis, Center for Economic Institutions Institute of Economic Research Hitotsubashi University.

Yermack, D., 2006. Flight of fancy: corporate jets, CEO perquisites, and inferior shareholder returns. Journal of Financial Economics, 80, 211-242.

Appendices

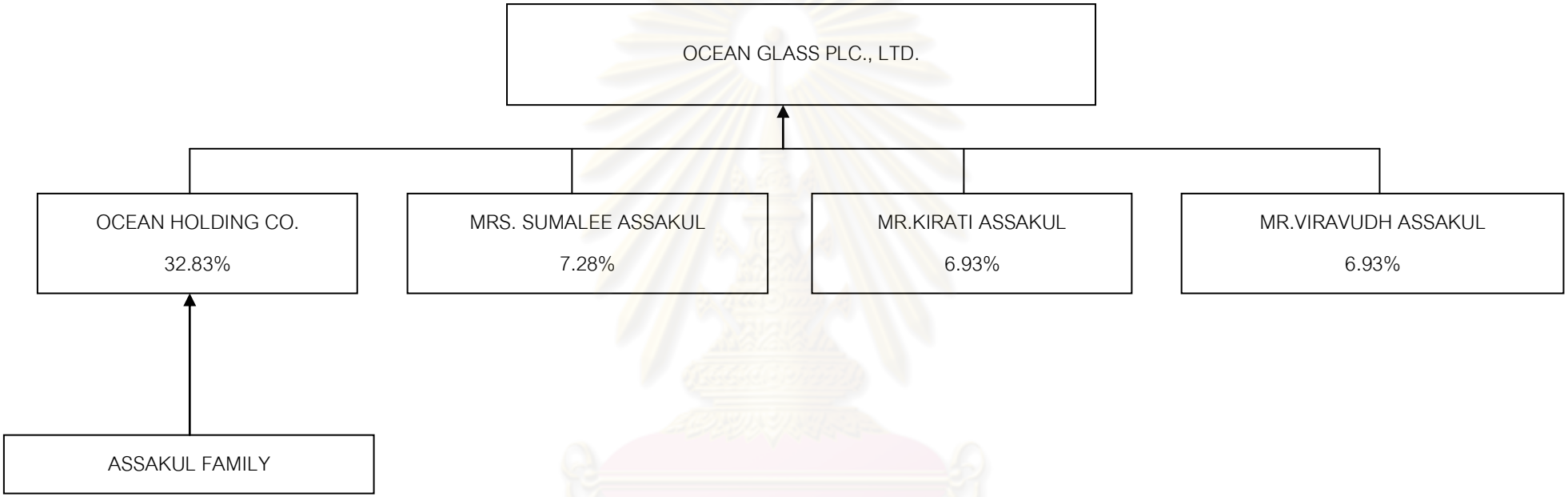
Appendix A: Sample Construction

Figure 1. Sample Construction of Union Plastic Plc., Ltd.



Saha-Union Plc. Ltd. Hold 48.96% of Union Pioneer Plc. Ltd. and own Saha Union Holding Co. thus effectively it holds 52.83 % of Union Pioneer Plc. Ltd.

Figure 2. Sample Construction of Ocean Glass Plc., Ltd.



Ocean Holding Co. Holds 32.83% of Ocean Glass Plc. Ltd. The Assakul family owns Ocen Holding Plc. Ltd. and effectively the largest shareholder, the Assakul family, owns 53.9%

Appendix B: Results for definition of controlling shareholder of 40%

Table 1: Dividend/Earnings as dependent variable

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 40% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	45.65 (2.16)**	2.32 (1.87)*	0.41 (2.86)***	-0.11 (-0.94)	-17.72 (-8.02)***	-0.25 (-1.59)	0.18 (0.90)				0.19	549
(2)	48.05 (2.25)**	2.35 (1.89)*	0.4 (2.76)***	-0.12 (-0.98)	-17.83 (-8.06)***	-0.28 (-1.81)*		0.06 (0.41)			0.19	549
(3)	-26.53 (-1.69)*	4.56 (4.45)***	0.3 (3.45)***	0.19 (2.82)***	-9.55 (-8.90)***				0.19 (1.21)	0.15 (0.78)	0.15	792

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 2: Dividend/CFO as dependent variable

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 40% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	10.64 (0.55)	3.29 (2.86)***	0.38 (3.25)***	-0.05 (-0.55)	-14.02 (-7.03)***	-0.09 (-0.71)	0.1 (0.56)				0.16	535
(2)	6.3 (0.32)	3.4 (2.91)***	0.37 (3.11)***	-0.05 (-0.60)	-14.02 (-7.00)***	-0.06 (-0.51)		0.13 (0.99)			0.16	535
(3)	-39.67 (-2.76)***	4.15 (4.43)***	0.29 (3.48)***	0.27 (4.47)***	-7.99 (-7.14)***				0.23 (1.52)	-0.09 (-0.47)	0.14	741

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Appendix C: Perspective Dividend Policy

Table 1. Dividend policy (Dividend/Earnings) between firms with and without controlling shareholder.

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	10%			20%			25%			30%			40%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	42.895	27.005	3.45***	44.661	32.262	5.05***	46.100	34.193	5.68***	47.705	34.853	6.46***	49.420	37.236	6.05***
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	38.446	17.602	0.021**	39.82	20.94	0.000***	41.07	26.99	0.000***	43.39	30.45	0.000***	42.95	33.35	0.000***
Observations	1375	71		1149	297		962	484		817	629		579	867	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 1. Dividend policy (Dividend/Earnings) between firms with and without controlling shareholder (Con't).

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	50%			60%			70%			75%			80%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	46.924	40.850	2.47**	43.121	41.991	0.35	44.336	42.030	0.43	29.379	42.329	-1.66*	24.609	42.323	-1.91*
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	39.76	37.097	0.476	35.94	38.3	0.312	35.61	37.55	0.675	6.549	37.85	0.040**	5.965	37.95	0.007***
Observations	301	1145		158	1288		53	1393		24	1422		17	1429	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 2: Difference in mean and median pay-out ratio (Dividend/CFO) between firms with and without controlling shareholder

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	10%			20%			25%			30%			40%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	28.953	21.026	2.08**	30.207	22.160	3.90***	31.103	23.352	4.37***	31.465	24.722	4.00***	30.790	27.063	2.18**
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	21.501	9.716	0.038**	22.539	14.179	0.001***	23.386	14.633	0.000***	23.567	17.092	0.000***	22.847	19.385	0.014**
Observations	1329	71		1112	288		939	461		795	605		559	841	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 2: Difference in mean and median pay-out ratio (Dividend/CFO) between firms with and without controlling shareholder (Con't)

Contr is pay-out ratio among firms with controlling shareholder. *NC* is pay-out ratio among firms with no controlling shareholder. *T-score* is from two sample assuming equal variances for the difference in mean pay-out ratio between the two groups. P-value is from Mann-Whitney test for equality of median between groups.

Panel A															
Definition of Controlling shareholder	50%			60%			70%			75%			80%		
	Contr	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*	*Contr*	*NC*	*t-score*
Mean	31.243	27.823	1.67*	28.764	28.523	0.09	30.260	28.483	0.41	16.881	28.781	-1.95*	18.421	28.691	-1.42
Panel B															
			p-value			*p-value*			*p-value*			*p-value*			*p-value*
Median	22.625	21.015	0.296	18.425	21.448	0.316	17.591	21.346	0.579	2.362	21.473	0.004***	2.232	21.423	0.003***
Observations	298	1102		162	1238		54	1346		27	1373		19	1381	

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 3: Dividend/Earnings as dependent variable

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/Earnings												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	29.663	3.025	0.045	-0.024	-0.720	-0.261	0.632	-	-	-	0.18	301
	(0.85)	(1.60)	(0.28)	(-0.16)	(-5.65)***	(-1.14)	(1.77)*	-	-	-		
(2)	42.159	3.085	0.021	-0.040	-0.691	-0.396	-	-0.024	-	-	0.17	301
	(1.10)	(1.65)*	(0.13)	(-0.26)	(-5.55)***	(-1.32)	-	(-0.07)	-	-		
(3)	-15.026	2.962	-0.023	0.042	-0.406	-	-	-	0.394	0.152	0.14	1145
	(-1.07)	(3.69)***	(-0.80)	(1.41)	(-7.75)***	-	-	-	(4.31)***	(0.98)		

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Table 4: Dividend/CFO as dependent variable

Ownership structure and dividend pay-out ratio. Time period: 2002-2008. (Eq. (1)) estimates dividend pay-out ratio as a function of percentage held by controlling shareholders, the largest shareholders holding at least 50% (VR1), and the second largest shareholder (VR2) holding at least 0.5%. (Eq.(2)) test for monitoring ability among firms with more shareholder with bigger stakes but less than 20% *(Other)* (Eq. (3)) investigates the relationship between pay-out ratio and percentage held by the largest and second largest shareholders among firms with no controlling shareholders. Control variables include *size* (natural logarithm of total assets), *growth* (arithmetic average of sales over the past five years), *profitability* (Net income divided by average owner's equity), and *leverage* (total debt divided by total assets). M-1 time dummy and N-1 industry dummy has also been included but not reported. White's heteroscedasticity consistent t-values are reported in bracket below the coefficients.

Dependent Variable: Dividend/CFO												
Equation	Intercept	Size	Growth	Profitability	Leverage	VR1	VR2	Other	VRNC1	VRNC2	R2	No. of sample
(1)	26.926 (0.94)	1.958 (1.20)	0.111 (0.73)	0.126 (1.04)	-0.515 (-4.75)***	-0.230 (-1.12)	0.279 (0.95)				0.20	298
(2)	32.817 (0.96)	1.969 (1.19)	0.100 (0.66)	0.121 (1.00)	-0.503 (-4.64)***	-0.285 (-1.17)		0.004 (0.02)			0.19	298
(3)	-10.005 (-0.83)	2.618 (3.75)***	-0.016 (-0.67)	0.161 (5.04)***	-0.354 (-8.25)***				0.139 (1.83)*	0.013 (0.10)	0.12	1102

*, **, and *** are significant at 10%, 5%, and 1% level of significance

Appendix D: Information on data

Table 1: Data description

Data	Description	Source
Dividend	Represent the total common and preferred dividends paid to shareholders of the company.	Setsmart
Net income	Represents income before extraordinary items and preferred and common dividends, but after operating and non-operating income and expense, reserves, income taxes, minority interest and equity in earnings.	Datastream - WC01551 Net income before extraordinary items/preferred dividends
Net Cash Flow	Represent the net cash receipts and disbursements resulting from the operations of the company. It is the sum of Funds from Operations, Funds From/Used for Other Operating Activities and Extraordinary Items.	Datastream - WC04860 Net cash flow – operating activities
Sales	Represent gross sales and other operating revenue less discounts, returns and allowances.	Datastream - WC01001 Net sales or revenues
Shareholder's equity	Represents the sum of Preferred Stock and Common Shareholders' Equity.	Datastream - WC03995 Total shareholder's equity
Total assets	Industrials TOTAL ASSETS represent the sum of total current assets, long term receivables, investment in unconsolidated subsidiaries,	Datastream - WC02999 Total assets

	other investments, net property plant and equipment and other assets. Banks TOTAL ASSETS represent the sum of cash & due from banks, total investments, net loans, customer liability on acceptances (if included in total assets), investment in unconsolidated subsidiaries, real estate assets, net property, plant and equipment and other assets. Insurance Companies TOTAL ASSETS represent the sum of cash, total investments, premium balance receivables, investments in unconsolidated subsidiaries, net property, plant and equipment and other assets. Other Financial Companies TOTAL ASSETS represent the sum of cash & equivalents, receivables, securities inventory, custody securities, total investments, net loans, net property, plant and equipment, investments in unconsolidated subsidiaries and other assets.	

Total debt	Represents all interest bearing and capitalized lease obligations. It is the sum of long and short term debt.	Datastream - WC03255 Total debt

Biography

Mr. Teerawoot Teerachotmongkol graduated from Bachelor of Business Administration, Thammasat University Finance major. After his graduation he worked for Krungthai Asset Management Plc. Ltd. for almost a year when he was enrolled in Master of Science in Finance program at Chulalongkorn University and graduated in academic year 2010.