Addis Ababa University

College of Information, Management and Economic Science

School of Business and Public Administration

MBA Program

The Influence of Ownership Structure on Corporate Performance; Evidence from selected Ethiopian companies

A Thesis Submitted to MBA program, School of Business and Public Administration, Addis Ababa University in partial fulfillment of the Requirement of Degree of Masters of Business Administration in Finance

By: Mikael Belay

Advisor: Abebe Yitayew (Asst. Prof.)

June, 2011

Addis Ababa, Ethiopia

The Influence of Ownership Structure on Corporate Performance; Evidence from selected Ethiopian companies

By: MIKAEL BELAY

A Thesis Submitted to MBA program, School of Business and Public Administration, Addis Ababa University in partial fulfillment of the Requirement of Degree of Masters of Business Administration in Finance

Addis Ababa University

College of Information, Management and Economic Science

School of Business and Public Administration

MBA Program

Approved by Board of examiners:

1._____ _____

Advisor Name **Signature**

2._____ _____

Examiner Name **Signature**

June, 2011

Declaration

"This thesis is my original work and has not been presented for a degree in any other university, and that all sources of material used for the thesis have been properly acknowledged"

Name: _____

Signature: _____

Confirmed by Advisor:

Name: _____

Signature: _____

Place and date of submission: Addis Ababa University, June, 2011.

Acknowledgement

It is a great honor for me to work on this topic and I feel glad to accomplish my task. Along with my interest, there are few people, who really helped me to make this endeavor to be a successful one.

At first, I would like to pass my appreciation, gratitude and thanks to my Advisor Ato Abebe Yitayew (Asst. Prof.). His valuable suggestions and ideas in every step of my work helped me a lot to prepare this thesis.

I'm very much grateful to my admirable friend Abdisa Terefe, who also contributed a lot in accomplishing this piece of work to be a successful one. In addition, I'm truly thankful to my friend Hailemariam Mamo and other friends who have taken part in this paper.

Lastly, I want to say that without the commitment and support of those persons working at FIRA this study would never be completed. Specially, I thank Ato Mesfin.

Abstract

This paper explores the influence of ownership structure and firm performance among selected Ethiopian companies. The data collected for this research is for the period 2008-2010 and the sample consists of 23 companies among which 5 are sole proprietorship, 8 partnership and 10 share companies. Three specific research questions are applied to explore the relationships between the ownership structure (characterized by owners' identity and ownership concentration) and firm performance. Ownership concentration is measured by the percentage of shares owned by the largest five shareholders and HHI while the performance measures applied are ROA and ROE. While analyzing the linear regression, the ownership structure measures were treated as independent variables and the firm performance measures were treated as dependent variables controlling for firm size, firm age and debt ratio. The results indicate that there is no statistically significant performance difference between solely owned, partner controlled and diffused firms. However, the linear regression analysis shows that young solely owned firms have better performance compared to old solely owned firms. The other result shows that, there are positive relationships between institutional and foreign ownership and firm performance measures. Whereas, the correlation of government ownership and firm performance measure reveals a negative sign.

Key Words: Ownership Structure; Ownership Concentration; Ownership Identity; Firm Performance

Abbreviations

DR	Debt Ratio
FA	Firm Age
FIRA	Federal Inland Revenue Authority
FS	Firm Size
HHI	Herfindal Hirschman Index
MoT	Ministry of Trade
NYSE	New York Security Exchange
ROA	Return on Asset
ROE	Return on Equity

Table of Content

List of Tables

Chapter One

Introduction

Currently, there is a growing literature that studies the influence of ownership structure on corporate performance. The possible relation between the structure of ownership and corporate performance has been widely discussed since Berle and Means (1932) introduced the separation of ownership and control in modern companies as an important negative factor in relation to corporate performance. Ownership structure varies considerably across countries and firms. That might be resulted in difference of performance.

The discussion about the relation between ownership structure and corporate performance is based on theoretical as well as empirical arguments. Besides these arguments, there is also an arguments for no or inverse relations between ownership structure and corporate performance. One theoretical argument for no positive relation is based on the idea that ownership structure and performance is determined endogenously; those who own shares and those who will own shares will also trade shares, and this process goes on while the firm is attempting to maximize profits. This means that ownership structure and firm performance may or may not be correlated, Demsetz (1983), Demsetz and Lehn (1985), Morck, Shleifer and Vishny (1986), and Demsetz and Villalonga (2001).

In the empirical studies of ownership-performance relationship, two measures of firm performance are typically used. The accounting profit rate was used in the Demsetz and Lehn study (1985), while Tobin's Q was used in most of the studies that followed (Morck *et al*., 1988; Cho, 1998; Loderer and Martin, 1997; Hermalin and Weisbach, 1991; McConnell and Servaes, 1990; and Demsetz and Villalonga, 2001). There are two important respects in which these two measures differ. One is in time perspective, backward-looking for accounting profit rate and forward-looking for *Q*.

In addition a notable feature of the existing body of literature is its failure to reach a consensus regarding the nature of the relationship. Demsetz and Villalonga (2001) posit

that the conflicting results may stem from differences with respect to the measurement of variables, sample period, estimating technique and whether or not the research explicitly accounts for the endogeneity of a firm's ownership structure, that is documented by Demsetz (1983) and Demsetz and Lehn (1985), among others.

An appropriate measure of the link between ownership structure and firm performance must include not only the distribution of ownership shares (i.e., ownership concentration), but also the identities of the relevant owners (Pedersen and Thomsen 1997). Potential owners differ in terms of wealth, costs of capital, competence, preferences for consumption of perks, and non-ownership ties to the firm (Thomsen and Pedersen 2000). These differences may affect the way they exercise their ownership rights and therefore have important consequences for firm behavior. Moreover, ownership structure can be defined and measured by the share and identity of the largest owner.

Although the issue of ownership-performance relationship was the area of concern for the researchers since Berle and Means (1932), few studies were conducted in Ethiopian case. In this paper the researcher has studied the influence of ownership structure on corporate performance through using Ethiopian firms categorized as sole proprietor, partnership and corporation. The independent variable in this study is the ownership structure which is characterized by ownership concentration and owner identity and the dependent variable is accounting profitability measured by return on asset and return on equity. As control variables firm size, firm age and debt ratio are chosen. In addition no previous research has treated the unit of analysis this manner.

1.2. Statement of the Problem

For many years and in many economies, most of the business activity was conducted by proprietorships, partnerships or closed corporations. In these forms of business organization, a small and closely related group of individuals belonging to the same family or cooperating in business for lengthy periods runs the firm and shares its profits.

The sole proprietorship is the oldest, most common, and simplest form of business organization. A sole proprietorship is a business entity owned and managed by one person. The sole proprietorship can be organized very informally, is not subject to much federal or state regulation, and is relatively simple to manage and control. The sole

proprietor is liable personally for all debts of the business operation. Article 510 of the 1960 Ethiopian Commercial code states that a private limited company is a company whose partners are liable only to the extent of their contributions. The maximum number of the partners is fifty while the minimum is two. As per Article 512 of the commercial code the minimum required amount of capital to form private limited company is 15,000 Ethiopian Birr.

According to the 1960 Ethiopian Commercial Code Article 304-A, Share Company is a company whose capital is fixed in advance and divided into shares, and liabilities are only met by assets of the company. Articles 306 and 307 of the Commercial Code disclose that the establishment of Share Company requires 50,000 Birr as a minimum capital and at least five persons. Formal registration or investment certificate is required.

In the modern world, the move towards market economy brought about a tremendous increase in numbers and types of business ownership structures, and each of them may also absorb a number of performance differences. Thus, it has paramount importance to be aware of these performance differences in choosing and structuring a business organization. In connection to this, one of the questions faced by any investor who wishes to set up a new business or invest in existing business is what form of business organization he or she has to choose. As a result, every investor should understand the basic performance difference of various types of ownership structure of each business organization and needs to decide what would be the best form of business organization for his or her business venture.

Keeping this in mind, the following research questions were raised to be investigated throughout the research work.

- Does ownership concentration positively related to firm performance?
- Does the difference in ownership structure raise difference in performance of the firms?
- Does the difference in owners identity leads to difference in corporate performance?

1.3. Hypothesis

Ho=Company performance to a large extent depends on the degree of ownership concentration, and higher ownership concentration is associated with better performance.

1.4. Objectives of the study

The principal aim of this survey study is to investigate the impact of ownership structure on the performance of the firm using return on asset and return on equity as a measure of performance, for the selected Ethiopian enterprises.

Specific objectives

The specific objective includes;

- To determine whether corporate performance, as measured by accounting profitability rate, is different in various ownership structure of the firms.
- To ascertain whether ownership concentrations, as measured by percentage of shares owned by the five larger shareholders and Herfindahl-Hirschman Index, is positively related to firm performance.
- To examine whether owner identity, as measured by individual/family ownership, institutional ownership, government ownership and foreign ownership, creates difference in firm performance.
- To examine the impact of different other control variables which affect firm performance.

1.5. Significance of the study

A study of an organization's ownership structure and its performance, concerned here with 'sole proprietorship, partnership and share companies' is important for several reasons. First, it helps to understand the underlying relationships between various ownership structure and performance, and can offer a contribution to improve investment decisions by both potential and existing stockholders. Second, a fundamental decision confronting all people in business world concerns the agency relationship which is obvious in separation of ownership and control of the firms. So having the knowledge of such issue has a great importance for them. Third, it helps the policy makers especially in the areas of ownership structure and agency problem. Finally, it contributes to the lacking literature on ownership structure and performance of Ethiopian firms.

1.6. Scope of the study

This empirical research work is limited to study the influence of ownership structure on corporate performance using 23 sample selected companies of Ethiopia. Corporate performance relies on many variables such as size of the firm, financial structure,

industry as well as characteristics of the firm like its market share, business strategy and goodwill. However, this study focuses on the influence of ownership structure on corporate performance among the many variables. Moreover, because of the absence of the secondary market in Ethiopia, the researcher has planned to use the accounting profit i.e. Return on Asset (ROA) and Return on Equity (ROE) as a measure of firm performance rather than Tobin's Q which is becoming common in corporate finance literatures. The Q ratio is calculated as the market value of a company divided by the replacement value of the firm's assets.

While sole proprietorship, partnership and share companies might be the most prominent organizational form, they are only part of the whole spectrum of ownership structures present in business world.

1.7. Research Method

Sample

The participants of the study were 23 firms of which 5 sole proprietorship, 8 partnership and 10 share companies regardless of their industry type. The companies were selected randomly based on the availability of data for the study. The rationale to use only 23 companies emanates from the hope that the researcher can manage it with in time available.

Data collection instrument, variables and materials

The examination of the influence of ownership structure on corporate performance requires a researcher to collect and use the secondary data, particularly financial statements of the firm and ownership structure of the firm. Accordingly, a researcher has collected and examined varies documents from Ministry of Trade (MoT) on ownership structure and from Federal Inland Revenue Authority (FIRA) the published financial statements of the firms.

The independent variable in this study is the ownership structure. Ownership structure can be defined and measured in many ways. The share and identity of the largest owner is a fairly good measure of ownership structure in Ethiopian companies because of a generally high level of ownership concentration.

In previous research, normal proxies of ownership concentration have been the percentage of shares held by the n largest or n'th largest shareholder(s), in addition to

approximations of the Herfindahl Index. Demsetz and Lehn (1985) use three alternative measures for ownership concentration. They look at percentage of equity owned by the largest 5 shareholders, percentage of equity owned by the largest 25 shareholders and the Herfindahl-Hirschman Index. Demsetz and Villalonga (2001) continue to use percentage of equity owned by the largest 5 shareholders as the measure of ownership concentration. For the purpose of this study, percentage of shares owned by the largest five shareholders and the Herfindahl-Hirschman Index was used as the measure of ownership concentration.

An appropriate measure of the link between ownership structure and firm performance must include not only the distribution of ownership shares (i.e., ownership concentration), but also the identities of the relevant owners (Pedersen and Thomsen 1997). Potential owners differ in terms of wealth, costs of capital, competence, preferences for consumption of perks, and non-ownership ties to the firm (Thomsen and Pedersen 2000). Accordingly, four owners identity type was used in this study i.e. individual/family ownership, institutional ownership, government ownership and foreign ownership.

Whereas, profitability measures including return on asset and return on equity was treated as dependent variables. A simple reason of choosing the ROA is because it is well known that the ROA is one of the most useful measures of the firm's efficiency and profitability. The return on assets ratio (ROA) is calculated by dividing earnings before interests and income taxes (EBIT) by average total assets. Return on Assets measures the net income returned on each dollar of assets. This ratio measures overall profitability from our investment in assets. Higher rates of return are desirable. Return on Equity is a measure of how well management has used the capital invested by shareholders. Return on Equity tells us the percent returned for each dollar (or other monetary unit) invested by shareholders. Return on Equity is calculated by dividing Net Income by Average Shareholders' Equity (including Retained Earnings).

As control variables firm size, firm age and debt ratio are chosen. Size of the firm is log of assets. Age is a variable representing number of years the firm was in operation. Debt ratio is a ratio that indicates what proportion of debt a company has relative to its assets. The measure gives an idea to the leverage of the company along with the potential risks

the company faces in terms of its debt-load. Debt ratio is calculated as total liabilities divided by total assets.

Data analysis and validity procedures

Most of the previous studies on ownership structure and performance used a regression analysis of cross-section of firms in which accounting profitability was used as dependent variables and various features of ownership structure played the role of regressor. In this study, a cross-sectional data of three years were used to examine the relationship between ownership structure and firm performance using linear regression. While conducting linear regression, the accounting profitability indicators (return on asset and return on equity) treated as dependent variables and ownership structure measured by owners' identity (which is indicated by family/individual ownership, institutional ownership, government ownership and foreign ownership) ownership concentration (the percentage of shares owned by the largest five shareholders and HHI) employed as a predictor variable.

1.8. Limitations of the study

Limitations of the study includes shortage of literature on the study area in case of Ethiopia, lack of compiled data on the ownership structure of the firms, unavailability of secondary financial market in Ethiopia which helps to determine the market value of the firm. Because of the absence of the secondary market in Ethiopia, the researcher has planned to use the accounting profit i.e. Return on Asset (ROA) and Return on Equity (ROE) as a measure of firm performance in this study.

1.9. Organization of the paper

The reminder of this paper will be organized as follows. In Chapter two a review of the ownership structure and firm's performance literature was undertaken. This review is primarily focused on previous studies that are based on the ownership identity and concentration perspectives. Chapter three describes measurement variables, and construction of the data followed by regression analysis. Finally, in Chapter four conclusion of the study were, followed by implication for further research.

Chapter Two

Literature Review

2.1. Overview of ownership structure and corporate performance

Ownership structure has two implications: structure of ownership (share percents of state, legal or institution, domestic individual holders) and ownership concentration (share percents of top five or 10 holders).

The relationship between ownership structure and corporation performance is one that has received considerable attention in the finance literature. The typical achievement among ownership structure and firm performance researches are the results of Jensen and Meckling. They divided shareholders into internal (investors with management right) and external shareholders (investors without ballot right). The conclusion of their research is value of firm depends on the internal shareholder's share, which is called ownership structure. Theoretically, more internal shareholder's share more firm value. The research also defines firm value as a function of ownership structure. Because ownership structure has links with corporate governance, it can have both positive and negative effects on corporation governance. The existing of top stockholders can give promotion to firm operating to some extends. According to the Shleifer's research, in the enterprise where corporate governance lacking protection to external investors, there is a trend that ownership became concentrate, which is a natural reaction of extends investors to protect their own benefit. Thus it could assumed that at the circumstances corporation governance lacking well protection to external stockholders benefit, the firm performance will get better with the first top holders shares holdings increasing.

One of the most important trademarks of the modern corporation is the separation of ownership and control. Modern corporations are typically run by professional executives who own only a small fraction of the shares. There is an ongoing debate in the literature on the impact and merit of the separation of ownership and control. Early theorists such as Williamson (1964) propose that non-owner managers prefer their own interests over

that of the shareholders. Consequently, non-owner managed firms become less efficient than owner-managed firms.

The more recent literature reexamines this issue and prediction. It points out the existence of mechanisms that moderate the prospects of non-optimal and selfish behavior by the manager. Fama (1980), for example, argues that the availability and competition in the managerial labor markets reduce the prospects that managers would act irresponsibly. In addition, the presence of outside directors on the board constrains management behavior. Others, like Murphy (1985), suggest that executive compensation packages help align management interests with those of the shareholders by generating a link between management pay and firm performance. Hence, non- owner manager firms are not less efficient than owner-managed firms. Most interestingly, Demsetz and Lehn (1985) conclude that the structure of ownership varies in ways that are consistent with value maximization. That is, diffuse ownership and non-owner managed firms emerge when they are more worthwhile.

The empirical evidence on the issue is mixed. Part of the diverse results can be attributed to the difference across the studies in the criteria for differentiation between owner and non-owner manager controlled firms. These criteria, typically based on percentage ownership by large block holders, are less harmless and more problematic than initially believed because, as demonstrated by Morck, Shleifer and Vishny (1988) and McConnell and Servaes (1990), the relation between percentage ownership and firm performance is nonlinear. Further, percent ownership appears insufficient for describing the control structure. Two firms with identical overall percentage ownership by large block holders are likely to have different control organizations, depending on the identity of the large block holders.

In this study, I utilize the traditional ownership classification scheme. This scheme distinguishes between firms controlled by owner (proprietors), firms controlled by a group of individuals (partners), and non-owner managed firms (share companies). Obviously, the control structure in each of these firm types is different.

2.2. Controlling Ownership and Firm Performance

Since Berle and Means (1932) presented the separation of ownership from control, several researchers have debated and discussed the effects of concentrated (or

controlling) ownership on corporate performance. So far, there has been no conclusion as to whether or not there is the relationship between such ownership and firm performance. A number of studies find that there is a significant positive relationship between controlling ownership and firm performance (Monsen et al, 1968; Radice, 1971; Boudreaux, 1973; Stano, 1976; Steer and Cable, 1978; Kesner, 1987; Alba et al, 1998; Xu and Wang, 1999). Recently, Chen (2001) examines the relationship between ownership structure and firm value in the case of China. The results show that there is a strong positive relationship between concentrated ownership and corporate value (Tobin's Q). A positive relationship between corporate value and domestic institutional shareholders is also reported. Moreover, he mentions that managerial shareholders are positively and state shareholders are negatively related to firm value respectively (Chen, 2001).

In addition, Wiwattanakantung (2001) tests the impact of ownership structure on firm performance of Thai non-financial firms listed in the Stock Exchange of Thailand in 1996. The study argues that there is no evidence to support that controlling shareholders extract corporate assets away from the firm for their own benefits. That is, firms with controlling shareholders have higher profitability (as measured by the return on assets and sales-to-asset) than those with non-controlling shareholders. The results also report that firms with family and foreign-controlling shareholders, as well as firms with more than one controlling shareholder, have higher profitability than do firms with non-controlling shareholders.

In contrast, Holderness and Sheehan (1988) suggest that there is no difference between firms with concentrated owners and those with dispersed owners. Mulari and Welch (1989) support this notion that the performance of firms with high concentrated ownership does not differ from other firms with dispersed ownership. Also Demsetz and Lehn (1985) examine the effects of concentrated ownership on firm performance. They also classify concentrated ownership into three groups: all investors, family and individual investors, and institutional investors. The results suggest that there is no significant relationship between concentrated ownership including its three types and return to shareholders. Demsetz and Lehn (1985) argue "the structure of corporate ownership varies systematically in ways that are consistent with value maximization".

2.3. Ownership concentration and firm performance

The agency theory predicts that when ownership is separated from control, corporate value can be destroyed if monitoring of management is weak. However, in order for an owner to have economic incentives to carry monitoring costs, he must hold a sufficiently large equity stake in the firm (Jensen and Meckling, 1976). This can be explained by the fact that minority shareholders are likely to free-ride, and thus share in the value generated by the monitoring conducted by majority shareholders. Moreover, owners must hold a sufficiently large equity stake in the firm to be able to monitor effectively. Shleifer and Vishny (1986) argue that if monitoring by owners improve the quality of managerial decisions, and if there are no other effects of ownership concentration, then performance and concentration will be positively correlated.

If the owners aim to maximize the market value of the firm, ownership concentration implies more monitoring, reduced agency costs, higher expected profits and share prices, because of greater incentive alignment between owners and managers. However, if the dominant owners have other goals, ownership concentration may also have adverse effects from the viewpoint of value-maximizing minority investors. La Porta et al. (2000), Holderness (2001), Fama and Jensen (1983), Morck et al. (1988), and Shleifer and Vishny (1997) all discuss that large owners may benefit at the expense of minority shareholders e.g. by using access to insider information to their own advantage or undertaking excess expenditure according to their own preferences. Jensen and Meckling (1976) and Morck et al. (1988), argue that increased ownership concentration may therefore imply greater entrenchment in the same way that high managerial ownership may imply managerial entrenchment or diversion of funds, and thereby result in a low market value of the firm. Moreover, large owners may become risk averse and focus on low risk – low return projects because they have invested a disproportionate share of their wealth in a single firm. Hence, this lack of diversification on the owner side might contribute to lowering firm value.

2.4. Family/Individual Ownership, Control, and Firm Performance

The study of Ådne Klungland and Kenneth Sunde (2009) on the effect of ownership structure on firm performance using Norwegian listed firms indicates that there is no clear effect of individual ownership on firm performance relative to other owner groups.

However, they see that concentrated individual ownership is positive compared to financial institutional ownership and government ownership. They added that the effect on non-financial institutional ownership is questionable, but might be a consequence of owner categorization. Hence, they do not find unanimous support for the positive effect of concentrated individual ownership. However, where they observe positive effects, it might well be explained in the agency context, primarily by the effect and incentive of monitoring directly when having a personal claim to the firm's cash flow, as opposed to institutional and government owners.

Ownership is commonly concentrated to the hands of the founding family members in family firms. In addition, to maintain their majority of ownership, family owners are also willing to employ different control structures which, in turn, may lead to agency problems between majority, i.e. family, and minority owners, i.e. agency problem II[1]. Among others, Morck et al. (1988) and McConnell & Servaes (1990) presented that corporate value can be considered as a function of the ownership structure, i.e. ownership structure is thus considered as an exogenous outcome. Hence, it is worth clarifying, whether the extensive family controls benefits or hurts firm performance.

For example, Ehrhardt & Nowak (2003) found out that during three following years of Initial Public Offering (IPO) there is a nonlinear relationship between voting rights concentration to family stockholders and corresponding stock returns. Results indicated significantly negative abnormal returns when voting rights concentration was above 75 percent, and the result was particularly evident in cases when non-voting stocks were issued. On the other hand, Ehrhardt & Nowak observed positive excess returns when voting right concentrations were between 25 and 75 percent. Moreover, when voting rights held by the family decreased to the range of 25 and 50 percent, firm value was even higher. In addition, it was found out that when family owners' voting rights were under 25 percent, the long-term stock returns were negative. However, only the results of negative abnormal returns when voting rights concentration was above 75 percent, was statistically significant at conventional levels.

Also Anderson & Reeb (2003) presented empirical evidence that the relationship between family holdings and firm performance is non-linear over the different levels of family

[1] The agency problem between majority shareholders and minority shareholders

ownership. It was suggested that the firm performance measured by both accounting and market based measures, i.e. ROA and Tobin's q, increases until family ownership is about one-third of the outstanding equity, after which the performance begins to suffer from concentrated family ownership. However, Anderson & Reeb pointed out that, family firms still, on average, performed better than non-family firms.

Also, Chen et al. (2005) suggested that there exists evidence on the nonlinear relationship between family ownership and firm performance in Hong Kong publicly listed firms. Chen et al. also noted that ownership concentration has differential effect on firm performance in small and large firms. The result was explained by stating that small and large firms are under different scrutiny of financial markets.

In addition, Maury (2006) presented that family-controlled Western European corporations perform better than non-family controlled firms. However, results also revealed that family control has a different effect on firm value than on accounting based performance. Namely, when family vote holdings were at the moderate levels of 10–20 percent and 30-40 percent, firm value measured by Tobin's q increased significantly. In addition, it was found out that the firm profitability measured by ROA increased when family control was above 30 percent of votes. However, the deeper analysis revealed that the family control contributed statistically better performance measured by both Tobin's q and ROA in non-majority controlled firms than in majority controlled firms, where family control, albeit not statistically significantly, affected negatively both firm value and profitability.

Hence, results could be considered to be in line with previous studies, e.g. Ehrhardt & Nowak (2003), which suggested that there is a non-linear relationship between firm performance and family control. Hence, empirical evidence suggests that family opportunism and extraction of private benefits might increase with increased control and, thus, impair the firm performance.

Maury (2006) also presented that due to different regulation schemes family control have differential effect on firm value in different countries, i.e. differences in legal shareholder protection and transparency between different countries have an influence on results. Hence, in countries where investor protection was at the high level, family firms' value

was significantly higher than the value of family firms in poor shareholder protection countries.

However, also in countries with poorer legal system, family ownership had positive effect on the firm value, although not statistically significantly. In both sub-samples concerning the shareholder protection, family controlled and, especially, family managed firms' outperformed nonfamily firms when firm performance was measured by ROA. Thus, results suggest that legal shareholder protection affects differently firm value and firm accounting based performance. Consequently, Mayry (2006a) suggested that in transparent and well-regulated markets active family control won't harm minority shareholders due to the reduced agency costs between controlling family and the minority shareholders. If anything, family ownership and control would thus benefit all shareholders.

Also Anderson & Reeb (2003) suggested that in well-regulated environments family ownership bears advantages. Thus, results from both Western European and U.S. corporations presented by Maury (2006) and Anderson & Reeb (2003), respectively, can be considered to reinforce the results presented by Faccio et al. (2001). Namely, Faccio et al. reported that due to conflicts between family owners and other equity claimants, family ownership impedes the firm performance in East Asian corporations. However, it is worth noting that the political-regulatory environment and transparency differs greatly between Asia and both Europe and United States, which naturally should keep in mind when considering differences in results.

However, for example Demsetz (1983) and Demsetz & Lehn (1985) presented that profit-maximizing decisions made by owners determine endogenously the level of ownership concentration. Hence, it was argued that due to this optimally determined way, ownership structure should not affect firm performance. The argument of the independency between ownership concentration and firm performance is supported, among others, by Cho (1998), Himmelberg et al. (1999), Demsetz & Villalonga (2001), and Welch (2003).

For example, Cho (1998) examined the relationship between ownership structure, investments and corporate value. Ownership structure was studied from the perspective of insider ownership which was defined as the proportion of stocks held by both officers and directors of the board. Particularly, it was examined whether ownership structure

affects investments which, in turn, have an effect on corporate value. However, it was found out that, in fact, investments affect corporate value, which in turn has an effect on ownership structure, but not vice versa.

Also, Himmelberg et al. (1999) concluded that there is no statistically significant relationship between managerial ownership and firm performance. Hence, it was argued that regressions explaining Tobin's q by the ownership concentration may be misspecified because of common determinants behind both dependent and independent variables. Thus, studies which suggest that ownership structure should be considered as an endogenous outcome are trying to argue against studies which implicitly assume that ownership structure is an exogenous outcome. (e.g. Morck et al. (1988), McConnell & Servaes (1990), Toyne et al. (2000) and Ehrhardt & Nowak (2003) etc.).

However, for example Anderson & Reeb (2003) and Maury (2006) took into account the possibility that the ownership structure and, especially, family ownership is in some extent depended on firm performance. Consequently, if analysis suffers from an endogeneity problem, it is not known how strongly family ownership affects firm performance or, on the other hand, what is the effect of strong firm performance on ownership structure.

Both studies of Anderson & Reeb (2003) and Maury (2006) confirmed results concerning the better performance of family firms compared to nonfamily firms. However, for example Anderson & Reeb (2003) pointed out that the results related to endogeneity of family ownership cannot distinguish, whether the better performance of family firms is due to reduced managerial agency costs or the possibility that family owners are more likely to exit firms which have poor future prospects. Hence, it was assumed that because families often own large equity stakes, employ control mechanisms, and have controlling senior management positions, they evidently have more information concerning the firm's future prospects than other shareholders. Thus, the superior performance of family firms could potentially be a result of family's foresight and deeper understanding of the family business as well as decreased agency costs.

By studying the effects of family ownership, control and management on firm performance both separately and combined with one another, Villalonga & Amit (2006) found that each of these elements is likely to be an endogenous outcome, i.e. family

ownership, control and management are thus each interpreted to be a function of firm former performance. Although, there is possibility that family ownership, control and also management are all results of endogenous decisions, the extended time horizon, which is often considered to be a typical feature of family controlled firms, supports the argument of exogeneity, i.e. extended time horizon enables better investment decisions which, in turn, boost firm performance.

Also, the whole family reputation can often be seen to be bound up in the firm success which thus may increase the devotion of the family to improve the firm performance. There is also some evidence concerning the relationship between the vote holdings in excess of equity ownership and firm performance. For example, La Porta et al. (1999) presented that family control around the world can be considered to be very prevalent, and the control rights of family members often exceed their cash flow rights. Similarly, evidence on Western European corporations provided by Maury (2006) suggested that excess control, i.e. control minus ownership, is negatively related to firm value.

Maury (2006) found out that ownership is more concentrated in family than in non-family firms. In addition, analysis revealed that the employing of the excess control is more pronounced in family firms than in widely held firms. However, there was no significant relationship between excess control and firm profitability. It is also worth noting, that results concerning both firm value and profitability, i.e. Tobin's q and ROA, were driven by countries where the shareholder protection was at the lower level. Hence, results indicated that due to the different shareholder protection, also excess control affected differentially on firm performance. In addition, excess control had also different effect on firm value than on firm profitability.

Consequently, results could be explained by the conflicts of interests between the controlling and minority shareholders. Maury's (2006) results concerning the relationship between excess control and firm value are in line with ones provided by Claessens et al. (2002), who reported that excess control affects negatively firm value in East Asian firms. However, it was found out that there is a positive correlation between firm value and cash-flow ownership of the largest shareholder. The relationship was also non-linear. In addition, Claessens et al pointed out that results are driven by family firms. Thus, it was suggested that results reflect the incentive and also entrenchment effects of large

shareholders, i.e. large cash-flow rights of a single or few stockholders generates a positive incentive effect, while the excess control could be related to negative entrenchment effect. On the other hand, Maury (2006) provided evidence that in Western European countries cash flow rights are not significantly related to firm value or profitability. Hence, it was suggested that cash flow incentives have more important role in economies where shareholder protection is at the lower level than in Western European economies.

Although in United States shareholder protection is at the substantially higher level than, for example in Asian countries (e.g. Claessens et al. (2002)) and overall in emerging markets (e.g. Lins (2003)), also Villalonga & Amit (2006) provided evidence, which indicated that family excess voteholdings are negatively related to firm value. Moreover, it was presented that in dual-class firms, firm value increases with the family ownership stake, but decreases due to excess family voting rights. Thus, results from U.S. markets were consisted with the findings from East Asian markets presented by Claessens et al. (2002) but differed partly from results concerning Western European corporations reported by Maury (2006). However, also Villalonga & Amit pointed out that despite the negative effect of family member's excess control on firm performance, family ownership contributes benefits which make the group of minority shareholders better off than their stake would be in non-family firms.

2.5. Separation of ownership and control

What is the primary goal of the corporation? The traditional answer is that managers in a corporation snake decisions for the stockholders of the corporation. However, it is impossible to give a definitive answer to this important question because the corporation is an artificial being, not a natural person.

It is necessary to precisely identify who controls the corporation. It shall be considered from the set-of-contracts viewpoint. This viewpoint suggests the corporate firm will attempt to maximize the shareholders' wealth in the firm by taking actions that increase the current value per share of existing stock.

Some people argue that shareholders do not completely control the corporation. They argue that shareholder ownership is too diffuse (spread out) and fragmented for effective control of management. A striking feature of the modern large corporation is the diffusion

of ownership among thousands of investors Belre and Means (1932).

One of the most important advantages of the corporate form of business organization is that it allows ownership of shares to be transferred. The resulting diffuse ownership, however, brings with it the separation of ownership and control of the large corporation. The possible separation of ownership and control raises an important question: Who controls the firm?

Do Shareholders Control Managerial Behavior?

The claim that managers can ignore the interests of shareholders is deduced from the fact that ownership in large corporations is widely dispersed. As a consequence, it is often claimed that individual shareholders cannot control management (Berle and Means, 1932; Jensen and Meckling, 1976; Fama and Jensen, 1983,). There is some merit in this argument, but it is too simplistic.

The extent to which shareholders can control managers depends on (1) the costs of monitoring management, (2) the costs of implementing the control devices, and (3) the benefits of control Stephen G. Marks, (1999).

When a conflict of interest exists between management and shareholders, who wins? Does management or do the shareholders control the firm? There is no doubt and that ownership in large corporations is diffuse when compared to the closely held corporation. However, several control devices used by shareholders tie management to the self-interest of shareholders Berle and Means, (1932):

1. Shareholders determine the membership of the board of directors by voting. Thus, shareholders control the directors, who in turn select the management team.
2. Contracts with management and arrangements for compensation, such as stock option plans, can be made so that management has an incentive to pursue the goal of the shareholders. Another device is called performance shares. These are shares of the company (often the treasury stock) given to managers on the basis of performance as measured by earnings per share and similar criteria.
3. If the price of a firm's stock drops too low because of poor management, the firm may be acquired by a group of outside shareholders, by another firm, or by an individual. This is called a takeover. In a takeover, the top management of the acquired firm may find itself out of a job. This puts pressure on the management

to make decisions in the stockholders' interests. Fear of a takeover gives managers an incentive to take actions that will maximize stock prices.

4. Competition in the managerial labor market may force managers to perform in the best interest of stockholders. Otherwise they will be replaced. Firms willing to pay the most will lure good managers. These are likely to be firms that compensate managers based on the value they create.

The available evidence and theory are consistent with the ideas of shareholder control and shareholder value maximization However, there can be no doubt that at times corporations pursue managerial goals at the expense of shareholders. There is also evidence that the diverse claims of customers, vendors, and employees must frequently be considered in the goals of the corporation [(Berle and Means (1933)); (Jensen and Meckling (1976)); (Shleifer and Vishny (1989 and 1997)); (Jensen, (1974 and 1986)); (Williamson (1964))].

2.6. Institutional ownership and firm performance

A features common to all institutional investors is that they provide a form of risk pooling for small investors, hence providing a better trade-off of risk and return than what is achievable via direct holdings. Today, different kinds of institutional investors deal with various markets and clients, and for various purposes. Many act on several markets simultaneously and the competition is fierce for market shares and clients. Hence, institutional investors are far from a homogeneous group. They differ in terms of contractual relations between the owners of the assets and the asset managers, in the rules determining the distribution of risk and return, as well as in the definition of their liabilities. The institutional investors this paper is concerned with can be summarized as pension funds, life insurance companies, and mutual funds.

One factor favoring institutional investors relative to individuals is their ability to absorb and process information. In many cases it is this informational advantage that the consumer pays for. This advantage has also given rise to the expression "informed investors" which distinguishes this type of professional investor from the average individual. However, the information advantage might be large or small depending on the type of institution, and the type of information.

Allen and Phillips (2000) argue that non-financial firms in particular may create value by holding long-term equity positions in other firms. This may happen when ownership acts as a mechanism for sharing jointly produced profits or to reduce information asymmetries between separate firms participating in a strategic alliance. Long-term partial ownership positions might be useful in aligning the incentives of the firms involved in alliances or joint ventures. Contracting or monitoring costs between firms may be reduced if a significant ownership stake increases the incentives of firms to invest in product market relationships or other relationship-specific assets. Klein et al. (1978) argue that relationship-specific assets create the potential for "holdup" costs between firms. Williamson (1979, 1985) argues that equity can lead to lower contracting costs in product market relationships or can lower the costs of monitoring agreements. In a study, Aghion and Tirole (1994) model several cases in which the optimal solution, given relationship-specific investments by both parties, may be partial ownership by a downstream firm of an upstream firm.

According to Allen and Phillips (2000), block equity purchases by non-financial institutions could mitigate information problems regarding the investment opportunities of target firms. For example, if asymmetric information has an adverse impact on the cost and availability of external capital, it may be less costly to sell equity to an informed party such as an outside corporation. Under this argument, block equity placements with outside firms provide capital directly to issuing firms (private equity placements) or validate the target's investment opportunities to the capital markets or other capital providers. Non-financial institutions taking large equity positions may also be able to effectively monitor or influence management. They may possess industry knowledge or operating expertise that is superior to financial-institutional owners or other shareholders. Pound (1988) argues that managers of institutional owners are agents on behalf of other principles which have insufficient value-maximizing incentives. This proposition leads to conclude that institutions will monitor with lower quality than would personal owners.

Ådne Klungland and Kenneth Sunde (2009) find that non-financial ownership is negative in relation to international ownership and positive in relation to government ownership, but find no significant effect in relation to individual and financial institutional ownership.

Likewise, a considerable body of research has focused on the role of institutional investors as corporate monitors. The rationale is that due to the high cost of monitoring; only large shareholders such as institutional investors can achieve sufficient benefits to have an incentive to monitor Grossman and Hart (1980). Indeed, Shleifer and Vishny (1986) note that large shareholders may have a greater incentive to monitor managers than members of the board of directors, who may have little or no wealth invested in the firm. Moreover, large institutional investors have the opportunity, resources, and ability to monitor, discipline, and influence managers. McConnell and Servaes (1990), Nesbitt (1994), Smith (1996), and Del Guercio and Hawkins (1999) have found evidence consistent with the hypothesis that corporate monitoring by institutional investors can force managers to focus more on corporate performance and less on opportunistic or self-serving behavior.

On the other hand, Maug (1998) notes that whether institutions use their ability to influence corporate decisions are partially a function of the size of their shareholdings. If institutional investor shareholdings are high, shares are less marketable and are thus held for longer periods. In this case, there is greater incentive to monitor a firm's management. However, when institutional investors hold relatively few shares in a firm, they can easily liquidate their investments if the firm performs poorly, and therefore have less incentive to monitor. Several studies conclude that institutional investors' goal of maintaining the liquidity of their holdings and their desire for short-term profit outweighs the benefits of monitoring management in the hope of eliciting higher long-term profitability [Coffee (1991), Bhide (1994), Denirag (1998), and Maug (1998)].

On balance, however, it seems clear that large stockholders and institutional investors have become increasingly active in corporate governance, especially in underperforming firms. Bethel et al. (1998) find that block share purchases by institutional investors are most likely in highly diversified firms with poor profitability. Further, these activist purchases are followed by increases in asset divestitures, decreases in mergers and acquisitions, and abnormal share price increases. Gillan and Starks (2000) find that corporate governance proposals sponsored by institutional investors receive more favorable votes than those sponsored by independent individuals or religious organizations. Hartzell and Starks (2002) document a significant positive relationship between concentration of institutional

ownership and pay-for-performance sensitivity — particularly when the institutional investors are pressure-insensitive — as well as a significant negative relationship between institutional ownership and the level of executive compensation. Chung et al. (2002) find that large institutional shareholdings in a firm deter managers from pursuing opportunistic earnings management through discretionary accrual choices. Finally, Parrino et al. (2003) show that aggregate institutional ownership as well as the number of institutional investors declines in the year prior to forced CEO turnover and that these CEOs are more likely to be replaced with an outsider. Thus, institutional investors can effectively "vote with their feet" when dissatisfied with a firm's management.

Pound (1988) argued that institutional investors may affect firm value either in a positive or a negative manner. The positive effect occurs when institutional investors act as more efficient monitors of professional managers than are individual shareholders; the negative effect occurs when institutional investors conspire with corporate managers against their fiduciary duty. Empirical studies have shown inconsistent results in concluding how institutional ownership may affect firm performance (Agrawal & Knoeber, 1996; Chaganti & Damanpour, 1991; Craswell, Taylor, & Saywell, 1997; Demsetz & Lehn, 1985; Han & Suk, 1998; Loderer & Martin, 1997; McConnell & Servaes, 1990).

Furthermore, institutional ownership was found to help lower the long-term debt-to-capital ratio. Stockholdings by corporate executives was used as a control variable in their study. Using stock returns as a measure of firm performance for 301 NYSE/AMEX firms during 1988-1992, Han and Suk (1998) found that stock returns were positively related to institutional ownership, and they attributed this relationship to effective monitoring of institutional investors. Control variables used in their study included systematic risk (beta), firm size by log of market value of equity, and earnings/price ratio. McConnell and Servaes (1990) found a significant and positive relation between Tobin's *Q* and the percentage of shareholdings by institutional investors, using a cross-sectional sample of 1,173 firms listed on NYSE/AMEX in 1976 and another set of 1,093 firms in 1986. Tobin's *Q* was used as a measure for firm performance in their study. They claimed that the positive and significant impact of institutional ownership on firm performance revealed efficient monitoring by institutional investors. Control variables included in their study were financial leverage by debt ratio, research and development

(R&D) expenditures to total assets, advertising expenditures to total assets, and the replacement value of total assets.

The inconclusive results of previous studies on the institutional ownership–firm performance relationship may stem from inconsistency in variable measurement, sample periods, estimating technique and, in particular, the accountability of the endogeneity of a firm's ownership structure (Demsetz & Villalonga, 2001).

According to Demsetz (1983), ownership endogeneity implies that the underlying conditions under which a firm operates determines which ownership structure is best for shareholders. The ownership structure of a firm, whether concentrated or diffused, is an endogenous outcome of competitive selection within the firm leading to firm value maximization. When modeling the relationship between ownership structure and firm performance in an endogenous framework, due to considerations such as insider information and performance-based compensation, firm performance is at least likely to affect ownership structure as ownership structure is to affect firm performance. Therefore, the effect of firm performance on ownership structure should be examined simultaneously when investigating the impact of ownership structure on performance if ownership endogeneity is to be accounted for (Demsetz & Villalonga, 2001).

Many studies (Cho, 1998; Clay, 2001; Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001; Holderness, Kroszner, & Sheehan, 1999; Loderer & Martin, 1997; Welch, 2003) repeated Demsetz's view (1983) and provided empirical evidence for the endogeneity of ownership structure when modeling the relationship between ownership structure (e.g., insider, blockholder, and institutional) and firm performance. Cho (1998) examined the relationship between insider ownership and firm performance measured by Tobin's *Q* and found that insider ownership increased significantly with Tobin's *Q*. Demsetz and Villalonga (2001) studied how large shareholders might relate to firm performance measured by Tobin's *Q* and showed that firm performance affected large shareholder ownership in a simultaneous framework. Loderer and Martin (1997) also tested the relationship between insider ownership and firm performance measured by Tobin's *Q* and reported that insider ownership decreased significantly with Tobin's *Q*; however, the reverse is not evidenced. Nevertheless, treating institutional ownership endogenously,

Clay (2001) provided empirical evidence that institutional ownership increases firm value as measured by a proxy for Tobin's *Q*.

2.7. Government Ownership and corporate performance

Reasons for government ownership are, among other, to ensure national control of extensive natural resources or ensure that the company's headquarters remain in a country. With private, institutional or international ownership the government would risk control over national resources and hence it is not an alternative for the government to completely sell their stakes. The driver behind having partly privatized ownership is that politicians have become aware of the advantages to private operation. However, it might be argued that issues for other shareholders, facing large government ownership, emerge when politics and socio-economic factors are taken into consideration, and corporate decisions are made because of such reflections. With a controlling position the government could extract benefits for the state at the expense of the minority private shareholders. With changing parties in the political administration, with different political views, it could also be difficult for the government to act consequently and long term with its ownership stakes. The mixture of roles and incentives which are associated with government ownership is negatively related to firm performance Ådne Klungland and Kenneth Sunde (2009).

According to Shleifer (1998), the main argument for government ownership could be split in two. First, actions based on market failure. Reasons for market failure include externalities, natural monopoly and barriers to entry or asymmetric information. The state can impose rules and regulation to limit market failure, and hence contribute to effective usage of resources. Second, even if the market works, the resulting allocation may not be justified in political terms.

Government ownership is also a way of achieving other important political objectives relating to regional policy, transport policy, cultural policy and health policy.

In this circumstance, government ownership might provide a control mechanism to discipline the management self-interest behavior more in line with company objectives, hence improving performance. Seminal work on such issues was addressed by LaPorta (1999) who investigates the ultimate ownership control in company. He divided into five types of ultimate owners: (1) a family or an individual, (2) the State, (3) a widely held

financial institution such as a bank or an insurance company, (4) a widely held corporation, or (5) miscellaneous, such as a corporative, a voting trust, or a group with no single controlling investors. State control is a separate category because it is a form of concentrated ownership in which the State uses companies to pursue political objectives, while the public pays for losses (Shleifer and Vishny (1997)). In a related study, Claessen, Djankov and Lang (1999) investigate the separation of ownership and control in 2980 public companies in East Asian countries. Their findings suggest that corporate control is typically enhanced pyramid structure and cross holding companies in all East Asian countries except Singapore where about half of the samples companies are controlled by state.

Orden and Garmendia (2005) examined the relationship between ownership structure and corporate performance in Spanish companies. Ownership structure has been analyzed in terms of concentration of control and the type of investor exerting control. Company performances which used in research were return on assets (ROA) and return on equity (ROE). One of hypotheses findings is companies which under controlled government showed negative impact and have worse performance that other ownership structures.

More recently, Zeitun and Tian (2007) examined the impact of ownership structure mix on company performance and the default risk of a sample of 59 publicly listed companies in Jordan from 1989 to 2002. They documented that the ownership structure has significant impact on performance based on accounting measure however, government involvement are significantly negative related to the company's performance based on ROA and ROE (return on equity) but shows positively related to market performance based on Tobin's Q.

Moreover, the literature on government ownership and performance has been limited and no systematic pattern of relationship between government ownership and company performance has been uncovered. It could be due to fact that Government controlled companies may respond have different set of objective which not only to enhance national welfare or other non-profit considerations, but also a goal of value maximization. Ang and Ding (2005) compare the financial and market performance of Government Link Companies (GLC) with non-GLCs in Singapore through government agency (Temasek Hodings). The findings from their study suggest that the GLCs on average exhibit higher

valuations than non-GLCs, even after controlling for company specific factors such as profitability, leverage, company size, industry and foreign ownership. However, Kumar (2003) compared the financial performance of state owned, private owned, and mixed state-private ownership companies in India from 1973 to 1989.

Findings appear to be differing with Singapore based study and suggest that the most profitable companies were the private owned followed by mixed ownership. While state owned enterprises had the worst performance. A majority of other studies in India and abroad draw similar conclusions (Shleifer and Vishny, 1997; Shleifer, 1998).

As general and conclusion, it is found that majority studies shown negative result when looking on government ownership and performance or company valuation. There are many reasons may lead to why government ownership results in poor financial performance. First, the government is guided by social altruism, which may not be in line with the profit motive. Second, the government is not the ultimate owner, but the agent of the real owners – the citizens. And it is not the real owners who exercise governance, but the bureaucrats. There is no personal interest that bureaucrats have to ensure that an organization is run efficiently or governed well since they do not have any benefits from good governance.

2.8. Foreign/International ownership and firm performance

Agency theory suggests that international investors would be reluctant to perform active corporate governance due to lack of country specific knowledge regarding law, regulation, competition, local investors and corporate strategy. Brennan and Cao (1997) argue, whilst information about domestic companies can be easily acquired, information about foreign companies requires considerably more effort and resources to acquire. Because of the additional information costs, foreign investors are at a disadvantage relative to domestic investors. Disclosure helps to reduce agency conflicts by bridging the information gap that exists between managers and shareholders and between the informed and uninformed investors (Healy and Palepu, 2001, Leuz and Verrecchia, 2000). Ahearne et al. (2004) document empirical evidence showing that US investors consider the cost of information gathering as an important factor against investing in foreign shares. The reasons why foreign ownership can create value for domestic companies are related to “spillovers” (Hill, 2003). This includes capital in terms of

financial, human and technology resources which foreign investors add through their investment. Alternative explanations for the positive effect of international ownership might lie in the development of the stock market itself. Brennan and Cao (1997), argue that when domestic investors possess a cumulative information advantage over foreign investors about their domestic market, investors tend to purchase foreign assets in periods when the return on foreign assets is high and to sell when the return is low.

2.9. Measurements of ownership structure

A number of studies that came after Demsetz and Lehn (1985) measure concentration of ownership with respect to a group of block holders, frequently as the fraction owned by the five, ten, or twenty largest shareholders. Earle et al. (2005) contend that the group measure may obscure some important aspects of interactions among large shareholders and the pattern of concentration, which may crucially influence the estimate of the effect of concentration on performance. For example, if a dominant owner presents in a firm, additional small block holders might make little marginal contributions to monitoring, and serve even to increase costs of concentration. In this situation, measuring concentration by the largest holdings seems to be better than using the joint holdings. Earle et al. (2005) believe that the lack of attention to the limitation of the group measure could explain partially the conflicting findings of previous studies.

Another issue that draws researchers' attention is whether the fraction of shares owned by insiders is the appropriate measure to be representative of the strength or incentives of professional management. Demsetz and Villalonga (2001) argue that a board member, for example, who has large holdings of the company's stock, often has interests identical to those of outside investors, rather than professional management. A large level of management shareholdings, therefore, is not so reliable an index of the ability of professional management to ignore shareholders. Thus, it is especially important that we understand: which is the better measure of incentives to management.

Chapter Three

Analysis and Findings

In this section a brief description of the summary output from the regression analysis in Microsoft Excel is presented and discussed.

The relationships between ownership structure and firm performance have empirically examined treating ownership concentration and owner identity as separate. By utilizing a three years data of 23 Ethiopian firms regardless of their industry type, analysis was made and the result is discussed. The following regression model was applied;

Firm performance = $\alpha + \beta 1CO + \beta 2\ SH + \beta 3\ HHI + \beta 4\ FS + \beta 5\ FA + \beta 6DR + e$…….1

Where;

Firm performance= alternatively measured by ROA and ROE

CO= owners identity represented by family/individual ownership, institutional ownership, government ownership and foreign ownership.

SH= ownership concentration measured by the percentage share of the largest five share holders

HHI= Herfindahl-Hirschman Index

FS= Firm size measured as log of asset

FA= Firm age

DR= Debt ratio

In addition to tables below, when presenting the results from the empirical findings, the correlation matrixes included in Appendix is also referred. In the correlation matrixes I have included the two performance measures (ROA and ROE), ownership structure measures (owners' identity, the percentage of shares owned by the five largest shareholders and HHI), the three control variables (firm size, firm age and debt ratio). The owners' identity is included as dummies; family ownership, institutional ownership, government ownership and foreign ownership along with the structure dummies; sole proprietorship, partnership and diffused companies.

Focusing on linear regression estimates for the equation 1 above, it is noted that firm performance is always statistically dependent on at least one measure of ownership structure. To test the relationship between performance and ownership structure, I began by separately regressing the different performance measures against the ownership structure variables involving owners' identity, percentage of shares owned by the largest five shareholders and HHI controlling for firm specific factors (age, size and debt ratio).

Table 3.1. Correlation coefficients using ROA as dependent variable

Correlations								
		ROA	Owner identity	SH*	HHI	Firm size	Firm age	Debt ratio
Pearson Correlation	ROA	1.000	.319	.343	.040	-.029	.171	-.267
	Owner identity	.319	1.000	.546	.187	.193	.799	-.012
	SH*	.343	.546	1.000	-.081	.162	.470	-.212
	HHI	.040	.187	-.081	1.000	.225	.108	.012
	Firm size	-.029	.193	.162	.225	1.000	.246	-.056
	Firm age	.171	.799	.470	.108	.246	1.000	-.121
	Debt ratio	-.267	-.012	-.212	.012	-.056	-.121	1.000
Sig. (1-tailed)	ROA	.	.069	.054	.428	.447	.217	.109
	Owner identity	.069	.	.003	.196	.189	.000	.478
	SH*	.054	.003	.	.357	.230	.012	.166
	HHI	.428	.196	.357	.	.151	.312	.479
	Firm size	.447	.189	.230	.151	.	.129	.400
	Firm age	.217	.000	.012	.312	.129	.	.292
	Debt ratio	.109	.478	.166	.479	.400	.292	.

SH* - the percentage of shares owned by the five largest shareholders.

The finding shown in Tables 3.1 is the positive effect of the owners' identity (whether it is family/individual, institutional, government and foreign dominated) on ROA. In all linear regression analysis, owners' identity positively affects firm performance at a significance level of 0.01 and 0.05. This indicates that firm ownership by different owners' characteristics has a direct impact on ROA of the firm. The correlation coefficient between foreign ownership and firm performance shows a positive sign. This also holds true for the later analysis of firm performance measures ROE. The results suggest that foreign owned firms possibly good at the managerial efficiency and technical skills as well as the state of technology that it bring to their work environment. Given that the Ethiopian Government is contemplating to achieve the five year growth and transformation plan, the results imply that government policies with regards to foreign direct investment should be further relaxed to attract foreign investors into the Country. These changes in the private sector would promote efficiency and contribute to growth in the economy.

Moreover, the most definitive results were on the relationship between foreign ownership and firm performance. The significant positive relationships have vindicated the long-held belief that on average, foreign owned companies perform better than their counterparts with dominant local ownership. Thomsen and Pedersen (1997) posit that preferences regarding company strategies will often involve a trade-off between the pursuit of shareholder values, orientation and other goals. Successful companies with an international presence tend to be large, with well established management systems that are replicated (with minimal customization) in all their branches and affiliates abroad.

The regression coefficient of the fraction of shares owned by important outside investors takes a positive sign and is statistically significant. This implies that outside investor shareholdings affect positively ROA. This finding is consistent with what one would expect: greater ownership concentration by outside investors may lead to superior performance. The second measure of ownership concentration, namely the HHI, also has a positive effect on performance measured by ROA, although the coefficient is statistically significant at much lower levels of significance (0.01 or 0.05).

This result is consistent with the finding that the simple correlation coefficient between the two ownership variables is 0.715.

Moreover, as the correlation matrixes indicate a slight positive correlation between firm age and ROA. However there is negative correlation between firm size and debt ratio and firm performance measured by ROA.

The R Square is a descriptive measure of goodness of fit. It measures the proportion of the variation in the dependent variable that is explained by variation in the explanatory variables. R Square itself does not measure the quality of the regression model, and therefore one can not only look at the model generating the highest R Square when determining which model to use. However the R Square can be low in some regression models but will still be viewed as efficient since regression results using cross-sectional data normally record low values of R Square (Hill et al, 2001).

A relatively high standard error in comparison to the value of the coefficient indicates that the result cannot be considered relevant. The t Stat equals the coefficient value divided by the standard error (Hill et al, 2001).

The table below shows that the F value in the ANOVA table indicates whether the null hypotheses can be rejected or not, and concludes that one or more of the variables in the model is of significance. The Significance F values in the ANOVA table shows the probability that the null hypotheses can be rejected.

Table 3.2 Regression result for ROA

ANOVA[b]				
Model		Mean Square	F	Sig.
1	Regression	.061	.826	.566[a]

Model Summary[b]				
Model	R	R Square	Adjusted RSquare	Std. Error of the Estimate
1	.486[a]	.236	.185	.27214863703

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, SH, Owner identity

b. Dependent Variable: ROA

The other firm performance measure variable that a regression analysis conducted for is ROE. As result shows there is a positive sign in the correlation between the firm performances measured by ROE and owners' identity and HHI. Though, the significance level is low at 0.01 or 0.02. This leads us to conclude that the owners' identity and ownership concentration measured by HHI are significant in explaining the ROE. The positive relationship between owner's' identity and firm performance measure reveals that individual, institutional, government and foreign owners differ in terms of wealth, cost of capital, competence, preferences for perks consumption and their non-ownership related ties to the firm. Therefore, different owners might have different approaches to the way they exercise the owner role, which in turn might influence firm performance.

The regression analysis for owners' identity variables with performance measures of the firm (both ROA and ROE) depicts different results. Accordingly, there is positive relationship between institutional ownership and firm performance. It is found that institutional ownership can improve firm performance but in case of concentration of institutional ownership, its effect would be negative. So it seems that in order to improve firm performance, institutional owners shouldn't own a large block of share of company. In other word according to the findings of this research firm performance will be improved if several distinct institutional shareholders own the company because their control mechanisms would avoid collision between managers and dominant shareholders. As a result expropriation problem could be prevented.

The correlation coefficient has shown negative result when looking on government ownership and performance or company valuation. There are many reasons may lead to why government ownership results in poor financial performance. First, the government is guided by social altruism, which may not be in line with the profit motive. Second, the government is not the ultimate owner, but the agent of the real owners – the citizens. And it is not the real owners who exercise governance, but the bureaucrats. There is no personal interest that bureaucrats have to ensure that an organization is run efficiently or governed well since they do not have any benefits from good governance.

Further, this study suggests that, in the case of Ethiopia, family ownership has a strong positive relationship to firm performance measures ROA and ROE. The results of this study are consistent with those of DeAngelo and DeAngelo (1985) and Smith and Amoako-Adu (1999) who suggest that family controlled firms tend to have a high incentive to maximize firm performance because the firms they control mostly belong to their family. As well, the family shareholders possibly have information advantages on firm performance compared to the other types of shareholders because of their close relationship with senior managers and directors.

Table 3.3.Regression result for ROE

ANOVAb				
Model		Mean Square	F	Sig.
1	Regression	0.051	0.639	.698a

Model Summaryb				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.440a	0.193	0.109	0.282320902

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, Ownership concentration, Owner identity

b. Dependent Variable: ROE

In addition, the correlation matrixes show a positive sign in the correlation between the ROE and firm age and debt ratio of the firm. Whereas, the relationship between firm size and ROE shows a negative sign. This leads us to conclude that the real growth of the firm does not have affected the ROE of the sample firms, especially this is true for partnerships and share companies.

Opposite to the above, firm performance measure (ROA), the percentage of shares owned by the five largest shareholders have a negative effect on ROE with the same level of significance at 0.01 and 0.05, whereas HHI have a positive effect on ROE and it is significant. Moreover, owners' identity positively and significantly affects firm performance measured by ROE.

Table 3.4 correlation coefficient for ROE as dependent variables

Correlations								
		ROE	Owner identity	SH*	HHI	Firm size	Firm age	Debt ratio
Pearson Correlation	ROE	1.000	.227	-.028	.087	-.262	.135	.165
	Owner identity	.227	1.000	.546	.187	.193	.799	-.012
	SH*	-.028	.546	1.000	-.081	.162	.470	-.212
	HHI	.087	.187	-.081	1.000	.225	.108	.012
	Firm size	-.262	.193	.162	.225	1.000	.246	-.056
	Firm age	.135	.799	.470	.108	.246	1.000	-.121
	Debt ratio	.165	-.012	-.212	.012	-.056	-.121	1.000
Sig. (1-tailed)	ROE	.	.149	.450	.347	.113	.270	.225
	Owner identity	.149	.	.003	.196	.189	.000	.478
	SH*	.450	.003	.	.357	.230	.012	.166
	HHI	.347	.196	.357	.	.151	.312	.479
	Firm size	.113	.189	.230	.151	.	.129	.400
	Firm age	.270	.000	.012	.312	.129	.	.292
	Debt ratio	.225	.478	.166	.479	.400	.292	.

SH* - the percentage of shares owned by the five largest shareholders.

Furthermore, the significant value of the simple correlation coefficient between ROA and ROE (0.539) suggests that we can consider the two measures of performance. Therefore, using the firm performance measurements (ROA and ROE) as an alternative measure of firm performance in this analysis is possible. It is noted that the coefficients that link ownership variables to firm performance are reasonable. However, the fraction of shares owned by the largest five shareholders has a negative effect on ROE.

When considering the regression rather the values of coefficient estimates of interaction sole proprietor firm dummy variables and control variables of firm size, firm age, it could be concluded that there is a negative relationship between the firm age and return on assets among family firms, i.e. the younger the family firm, the better the profitability. On the other hand, it could be assumed that coefficient estimates for the control variable of firm age would indicate on positive relation between firm age and ROA among partnership and share companies. In order to confirm these assumptions on the relation between firm age and firm performance measure among sole proprietor as well as partnership and diffused firms, the effect of firm age on firm performance among both sole proprietor and other firms is examined by further regression analysis. In addition, the relation between firm age and profitability is investigated visually in graphical form.

The correlation coefficient also reveals, whether the relation between firm age and accounting profitability measured by ROA and ROE is linear or not. Both regression results and correlation coefficient are presented in appendixes. The regression results in appendix present that, the relation between firm ages and accounting profitability is negative and statistically significant at 0.01 and 0.02 for all the sample family controlled, partnerships and diffused firms.

In other words, results indicate that when firm is a sole proprietor firm, young firms, on average, perform better than older sole proprietor owned firms, whereas older firms appear to be more profitable measured by ROA and ROE than younger ones among partnership and share companies.

However, the results of regression that controls for firm size, firm age and debt equity ratio shows a better performance for sole proprietor companies. This reveals the support of other empirical evidences. Recently, among others, Anderson & Reeb (2003), Villalonga & Amit (2006), Maury (2006) and Martikainen & Nikkinen (2006) have suggested that, overall, family firms are better performers than non-family firms. In addition, for example, Villalonga & Amit (2006) investigated the effects of family ownership on firm performance in great detail. They presented evidence that the founder and founder's descendants in leading positions have a different effect on firm performance. More precisely, it was suggested that the active involvement of founders benefits firm performance, while descendants have a negative effect on firm performance. Thus, it was found out that family management creates value for all shareholders only when founder of the firm act either as a CEO and Chairman or as a Chairman with a hired CEO. On the other hand, results indicated that firm value suffers detrimentally when descendants act as a CEO or Chairman of the Board. Actually, even if founder acted as a Chairman with descendant CEO, firm value was still suffering from the descendant manager.

In addition, Villalonga & Amit (2006) found out that firm value is highest when the founder acts as a CEO and there are no control enhancing mechanisms, i.e. there exist neither agency problems between owners and managers nor between majority and

minority owners. Also, Anderson & Reeb (2003) presented that the CEO status in family firms affects firm performance. Thus, findings of both Anderson & Reeb (2003) and Villalonga & Amit (2006) suggest that not only the family ownership but also the management and control arrangements in family owned firms affect firm performance.

Chapter Four

Conclusion and Recommendation

4.1. Conclusion

Throughout this paper the researcher has tried to answer the research questions stated at very beginning concerning the influence of ownership structure on corporate performance.

Using the firm performance model the separate regressions found a significant positive relationship between firm performance measures (ROA and ROE) and owners' identity and HHI, while the percentage of shares owned by the largest five shareholders was negatively related to ROE and positively related to ROA.

The regression coefficient of the fraction of shares owned by five important outside investors takes a positive sign and is statistically significant. This implies that outside investor shareholdings affect positively ROA. This result is parallel with the expectation of the research as stated in hypothesis. However, there is negative relationship between ROE and the percentage of shares owned by the five largest shareholders.

In this study it was also investigated, whether individual, i.e. family ownership, contributes better firm performance than partnership and dispersed firms. In addition, it was examined, whether there are differences in firm performance between young and old as well as between small and big family firms. The empirical analysis was conducted by a linear regression analysis. Results indicated that there is no statistically significant

difference in firm performance between sole proprietor, partnership and share companies. This result might be emerged from a reason that the paper doesn't differentiate the industry type of the sample firms, because a variety of factors affects different sectors in different ways. For instance the finance sector is the most regulated one. In addition, various industries resume different intensity of competition. However, the other regression result that controls for firm size, firm age and debt equity ratio shows a better performance for sole proprietor companies.

Further, results suggested that the better performance of solely owned firm is primarily attributable to young, i.e. generally rather small, family controlled firms. Also, results suggested that small sole proprietorship firms perform somewhat better than larger sole proprietorship firms. However, since young firms appeared to be also smaller than older ones, this result can be seen to be related to the positive effect of young firm age on the accounting profitability rate of solely owned firms.

In the concluding remarks section, it is also summarized that among the sample firms, those with dispersed ownership structure are associated with lower firm performance. This emanates from a mixture of factors. First, the firms with diffused ownership separate the ownership and control that leads to agency problem. Agency problem arise when the interests of the firm's managers are not aligned with those of the firm's owner(s), and take the form of preference for on-the-job perks, shirking, and making self-interested and entrenched decisions that reduce shareholder wealth (Fama and Jensen, 1983; Jensen and Meckling 1976; Berle and Mean, 1932). Second, dispersed ownership structure are associated with higher risk, implying higher market valuation, but worse performance when it comes to stock return, ROA and ROE Anderson J. et.al (2004). On the contrary,

firms with a family controlled and partnership owned in general have a better performance. This implies that the individual/family dominated firms have lower risk levels. Moreover, family -controlled firms tend to have a high incentive to maximize firm performance because the firms they control mostly belong to their family. As well, the family shareholders possibly have information advantages on firm performance compared to the other types of shareholders because of their close relationship with senior managers and directors.

Moreover, the most definitive results were on the relationship between the four owners' identity variables and firm performance. The relationship between foreign ownership and firm performance depicts a positive sign. The significant positive relationships have vindicated the long-held belief that on average, foreign owned companies perform better than their counterparts with dominant local ownership because of managerial efficiency and technical skills as well as the state of technology.

Whilst, the correlation of institutional ownership and firm performance discloses that firm performance will be improved if several distinct institutional shareholders own the company because their control mechanisms would avoid collision between managers and dominant shareholders. As a result expropriation problem could be prevented.

However, government ownership has a negative correlation with firm performance. This is caused as too much government ownership leads to too much control and interference of government in economic operations of the firm. Further, the government is not the ultimate owner, but the agent of the real owners – the citizens. And it is not the real owners who exercise governance, but the bureaucrats. There is no personal interest that

bureaucrats have to ensure that an organization is run efficiently or governed well since they do not have any benefits from good governance.

4.2. Recommendation

During the course of this paper the researcher came across several ideas and potential research areas. The purpose of this section is to serve as a source of inspiration for further researchers who want to write research papers within this area of work.

One interesting idea is to separate companies according to size and industry type. In this study it have been seen that large companies that in general represent maturing industries are associated with better performance regarding accounting profitability. It will be interesting to see if the results concerning the effect of ownership structure on firm performance would remain the same if larger firms were excluded from the data set. In addition, different factors affect different industries differently. For instance, the banking sector is the most regulated one. So the influence of ownership structure on firm performance has to be checked by excluding firms from banking and finance sector too, if the results remain the same.

Another interesting aspect would be to use other performance measures. In this study the researcher has only applied accounting profitability (ROA and ROE) as a means of firm performance measures. Other measures of performance including Tobin's Q, return on stock, market-to-book value are also helpful in measuring corporate performance.

When it comes to the measures for ownership structure the researcher has only applied the owners' identity and ownership concentration measured by the share percentage owned by the five largest shareholders and HHI. It would be interesting too in a more qualitative way to investigate managers' and owners' direct involvement in managing the firm and separate out the effect of active and more passive owners.

References

- A. A. Berle and G. C. Means (1932). The Modern Corporation and Private Property, New York, United States Of America, Macmillan.
- Adiba Kholmurodova, (2009): Family ownership and firm performance; *Empirical evidence from Denmark*
- Anderson, R. C. & Reeb, D. M. (2003): Founding-Family Ownership and Firm Performance: Evidence from S&P 500. *The Journal of Finance 58, No. 3, 1301–1328.*
- Chaganti, R., & Damanpour, F. (1991). Institutional Ownership, Capital Structure, and Firm Performance. *Strategic Management Journal, 12(7), 479-491.*
- Cho, M.-H. (1998) Ownership Structure, Investment, and the Corporate Value: An Empirical Analysis. *Journal of Financial Economics, 47, 103–121.*
- Claessens, Stijn, Simeon Djankov, And Larry H.P. Lang, (2000), the Separation of Ownership and Control in East Asian Corporations," *In Journal of Financial Economics.*
- Claudio A. Bonilla, Mariela Carvajal And Jean Sepúlveda (2010): Family Ownership And Firm Performance: *A Closer Look At The Evidence From Public Companies In Chile*
- 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, 33-71.*
- Demsetz, H. And Lehn, K. 1985. "The Structure Of Corporate Ownership: Causes and Consequences", *Journal of Political Economy, Vol. 93 No. 6.*
- Demsetz, H., 1983. The Structure of Ownership and the Theory of the Firm. *Journal of Law and Economics 26, 375–394.*
- Demsetz. H. 1983. "The Structure of Ownership and the Theory of the Firm", *Journal of Law and Economics, 26, P. 375-390.*
- Fama, Eugene F. (1980), 'Agency Problems and the Theory of the Firm', *Journal of Political Economy, 88, No. 2, 288-307.*

- Fama, Eugene F., and Michael C. Jensen, (1983a), Separation of ownership and control, *Journal of Law and Economics 26, 301-325.*
- Hermalin, B. Andweisbach, M. (1991): The Effects of Board Composition and Direct Incentives on Firm Performance, *Financial Management, 20(4), 101–112*.
- Holderness, C. G., Kroszner, R. S., & Sheehan, D. P. (1999). Were the Good Old Days That Good? Evolution of Managerial Stock Ownership and Corporate Governance since the Great Depression. *Journal of Finance, 54(2), 435-469*.
- James S. Ang, Rebel A. Cole, And James Wuh Lin (2000), Agency Costs And Ownership Structure. *The Journal of Finance, 55, No. 1, 81-106*.
- Jensen, Michael C. And William H. Meckling (1976). Theory of the Firm: Managerial Behavior, Agency Costs, and Ownership Structure. *Journal of Financial Economics 3, No. 4, 305-360.*
- La Porta, R., Lopez-De-Silanes, F., Shleifer, A., Vishny, R.W., 1999. Corporate Ownership around the World. *Journal of Finance 54, 471–517.*
- Loderer, C. And Martin, K. (1997). Executive Stock Ownership and Performance Tracking Faint Traces. *Journal of Financial Economics, 45(2): 595-612.*
- Maury, B. (2006): Family Ownership And Firm Performance: Empirical Evidence From Western European Corporations. *Journal of Corporate Finance 12, No. 2, 321–341.*
- Mcconnell, J., Servaes, H., 1990. Additional Evidence on Equity Ownership and Corporate Value. *Journal of Financial Economics 27, 595–612*.
- Morck, R., Shleifer A., Vishny, R.W., 1988. Management Ownership and Firm Value: An Empirical Analysis. *Journal of Financial Economics 20, 293-315.*
- Päivi Kortelainen, (2007):The Effect Of Family Ownership On Firm Performance: *Empirical Evidence From Norway; Lappeenranta School Of Business*
- Pedersen, T., Thomsen S., 2000. Ownership Structure and Economic Performance in the Largest European Companies. *Strategic Management Journal 21, 689–705.*

- Pedersen, T., Thomsen S., 2003. Ownership Structure and the Value of the Largest European Firms: The Importance of Owner Identity. *Journal of Management and Governance 7, 27-55.*
- Pedersen, T., Thomsen, S., 1997. European Patterns of Corporate Ownership. *Journal of International Business Studies 28.*
- Pound, J. (1988). Proxy Contests and the Efficiency of Shareholder Oversight. *Journal of Financial Economics, 20, 237-265.*
- Prasad S. Bhattacharya And Michael Graham (2007): Institutional Ownership And Firm Performance: *Evidence From Finland*
- Richard A. Brealey, Stewart C. Myers, and Alan J. Marcus (1995), Fundamentals of Corporate Finance, New York, United States Of America, The Mcgraw-Hill Companies, Inc.
- Stephen A. Ross, Randolph W. Westerfield and Jeffrey Jaffe (1999), *Corporate finance*, Boston, United State, The McGraw-Hill companies, Inc.
- Stephen G. Marks, (1999), The separation of ownership and Control, *Journals of Law and Economics, 662-722*
- Welch, E., 2003. The Relationship between Ownership Structure and Performance in Listed Australian Companies. *Australian Journal of Management 28, 287-306*.
- Wiwattanakantang, Y., 2001, Controlling Shareholders and Corporate Value: *Evidence from Thailand, Pacific-Basin Finance Journal 9, 323–362.*

Appendices

Descriptive Statistics								
	N	Range	Minimum	Maximum	Mean		Std. Deviation	Variance
	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Statistic
Owner identity	23	1	0	1	.43	.106	.507	.257
SH	23	.50	.50	1.00	.8803	.04095	.19639	.039
HHI	23	1	0	1	.96	.043	.209	.043
ROA	23	1.44089333E0	-8.98166667E-1	.54272667	.0516504348	.05538390231	.26561186456	.071
ROE	23	1.39810000E0	-5.45366667E-1	.85273333	.1125608696	.05589524578	.26806418171	.072
Firm size	23	3.61893760E0	1.59504015E1	1.95693391E1	1.7770884113E1	.26230819453	1.25798590816E0	1.583
Firm age	23	38	6	44	17.65	2.374	11.384	129.601
Debt ratio	23	.93800000	.00000000	.93800000	.4321086957	.06113698322	.29320267137	.086
Valid N (listwise)	23							

Correlations									
		Owner identity	SH	HHI	ROA	ROE	Firm size	Firm age	Debt ratio
Owner identity	Pearson Correlation	1	.546**	.187	.319	.227	.193	.799**	-.012
	Sig. (2-tailed)		.007	.393	.139	.298	.379	.000	.956

	Sum of Squares and Cross-products	5.652	1.197	.435	.943	.678	2.701	101.478	-.040
	Covariance	.257	.054	.020	.043	.031	.123	4.613	-.002
	N	23	23	23	23	23	23	23	23
SH	Pearson Correlation	.546**	1	-.081	.343	-.028	.162	.470*	-.212
	Sig. (2-tailed)	.007		.715	.109	.901	.460	.024	.333
	Sum of Squares and Cross-products	1.197	.849	-.073	.394	-.032	.880	23.105	-.268
	Covariance	.054	.039	-.003	.018	-.001	.040	1.050	-.012
	N	23	23	23	23	23	23	23	23
HHI	Pearson Correlation	.187	-.081	1	.040	.087	.225	.108	.012
	Sig. (2-tailed)	.393	.715		.856	.694	.301	.623	.957
	Sum of Squares and Cross-products	.435	-.073	.957	.049	.106	1.300	5.652	.016
	Covariance	.020	-.003	.043	.002	.005	.059	.257	.001
	N	23	23	23	23	23	23	23	23
ROA	Pearson Correlation	.319	.343	.040	1	.539**	-.029	.171	-.267
	Sig. (2-tailed)	.139	.109	.856		.008	.895	.435	.218
	Sum of Squares and Cross-products	.943	.394	.049	1.552	.844	-.215	11.393	-.457
	Covariance	.043	.018	.002	.071	.038	-.010	.518	-.021
	N	23	23	23	23	23	23	23	23
ROE	Pearson Correlation	.227	-.028	.087	.539**	1	-.262	.135	.165
	Sig. (2-tailed)	.298	.901	.694	.008		.227	.539	.451

	Sum of Squares and Cross-products	.678	-.032	.106	.844	1.581	-1.945	9.063	.286
	Covariance	.031	-.001	.005	.038	.072	-.088	.412	.013
	N	23	23	23	23	23	23	23	23
Firm size	Pearson Correlation	.193	.162	.225	-.029	-.262	1	.246	-.056
	Sig. (2-tailed)	.379	.460	.301	.895	.227		.258	.800
	Sum of Squares and Cross-products	2.701	.880	1.300	-.215	-1.945	34.816	77.436	-.453
	Covariance	.123	.040	.059	-.010	-.088	1.583	3.520	-.021
	N	23	23	23	23	23	23	23	23
Firm age	Pearson Correlation	.799**	.470*	.108	.171	.135	.246	1	-.121
	Sig. (2-tailed)	.000	.024	.623	.435	.539	.258		.584
	Sum of Squares and Cross-products	101.478	23.105	5.652	11.393	9.063	77.436	2.851E3	-8.857
	Covariance	4.613	1.050	.257	.518	.412	3.520	129.601	-.403
	N	23	23	23	23	23	23	23	23
Debt ratio	Pearson Correlation	-.012	-.212	.012	-.267	.165	-.056	-.121	1
	Sig. (2-tailed)	.956	.333	.957	.218	.451	.800	.584	
	Sum of Squares and Cross-products	-.040	-.268	.016	-.457	.286	-.453	-8.857	1.891
	Covariance	-.002	-.012	.001	-.021	.013	-.021	-.403	.086
	N	23	23	23	23	23	23	23	23
**. Correlation is significant at the 0.01 level (2-tailed).									
*. Correlation is significant at the 0.05 level (2-tailed).									

Regression results of ROA

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.486[a]	.236	-.050	.27214863703	.236	.826	6	16	.566	1.623

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, SH, Owner identity

b. Dependent Variable: ROA

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.367	6	.061	.826	.566[a]
	Residual	1.185	16	.074		
	Total	1.552	22			

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, SH, Owner identity

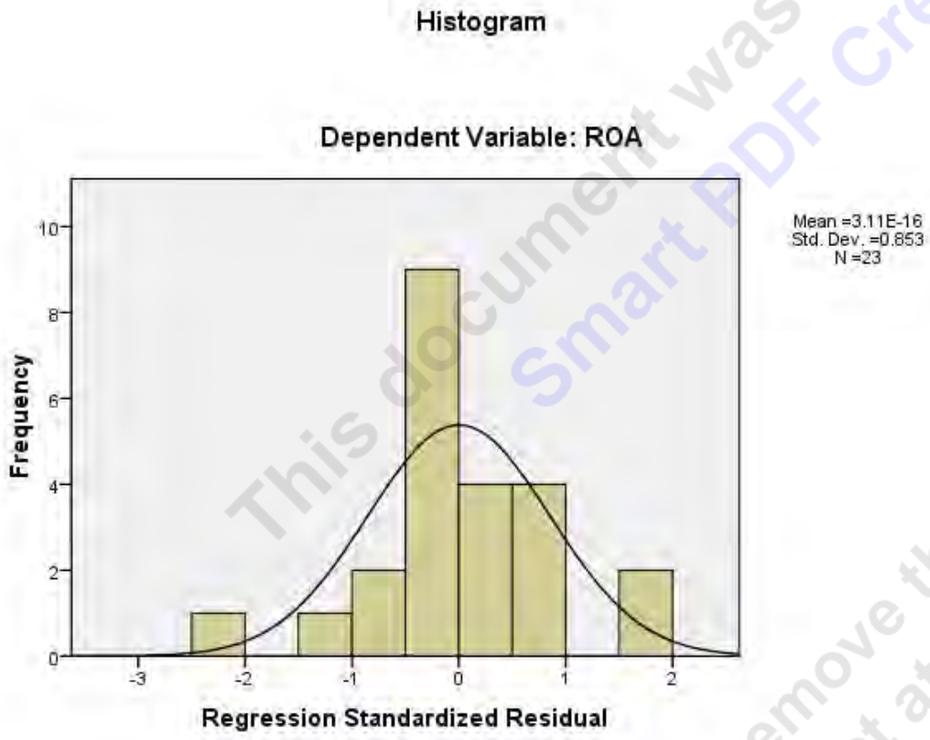
b. Dependent Variable: ROA

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95% Confidence Interval for B		Correlations			Collinearity
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance
1	(Constant)	.272	.895		.304	.765	-1.624	2.168				
	Owner identity	.243	.213	.464	1.144	.269	-.207	.694	.319	.275	.250	.290
	SH	.262	.376	.193	.697	.496	-.535	1.058	.343	.172	.152	.619
	HHI	.034	.299	.026	.112	.912	-.601	.668	.040	.028	.024	.864
	Firm size	-.020	.049	-.096	-.416	.683	-.124	.083	-.029	-.103	-.091	.887

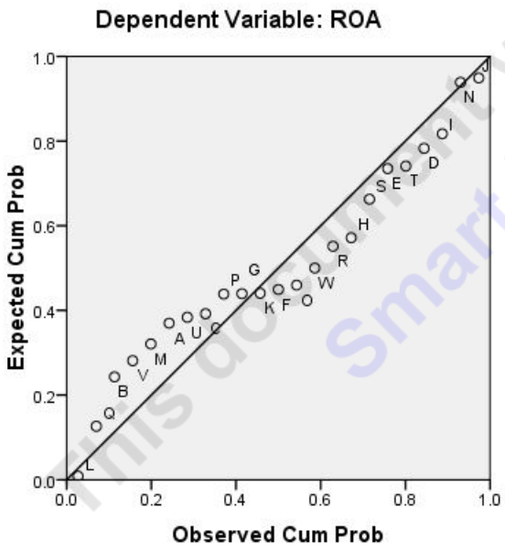
	Firm age	-.007	.009	-.302	-.802	.434	-.026	.012	.171	-.197	-.175	.338
	Debt ratio	-.238	.208	-.262	-1.145	.269	-.678	.202	-.267	-.275	-.250	.909
a. Dependent Variable: ROA												

Charts

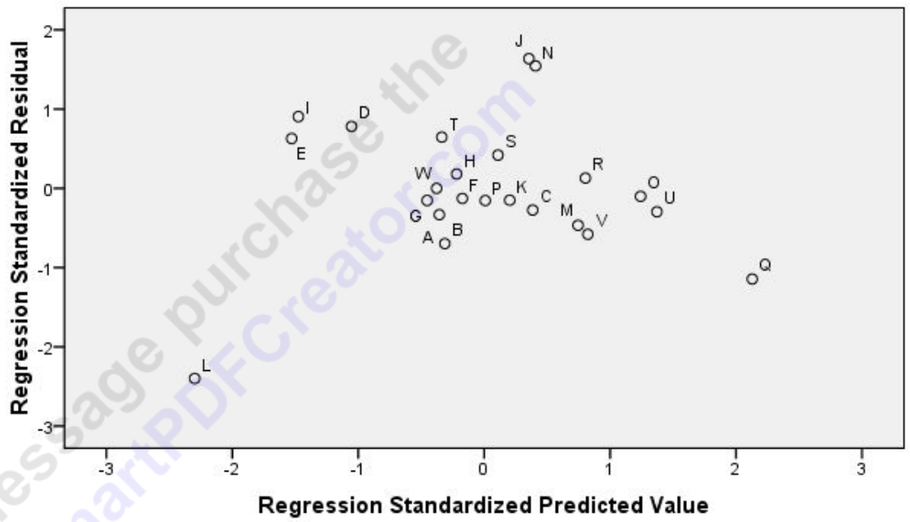


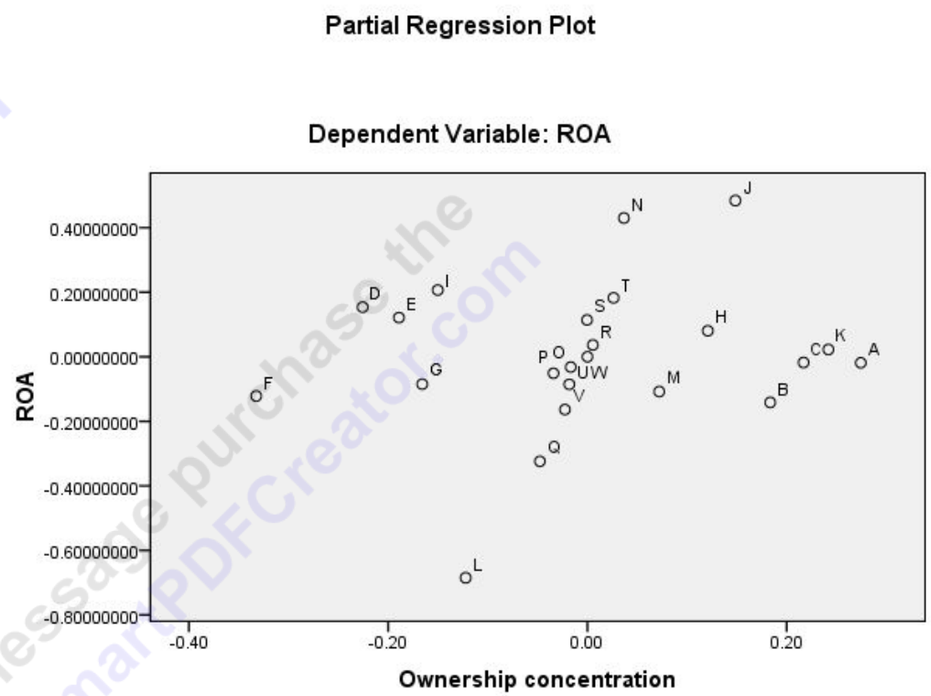
Note that the sample company names were symbolized by the spellings extending from A-W.

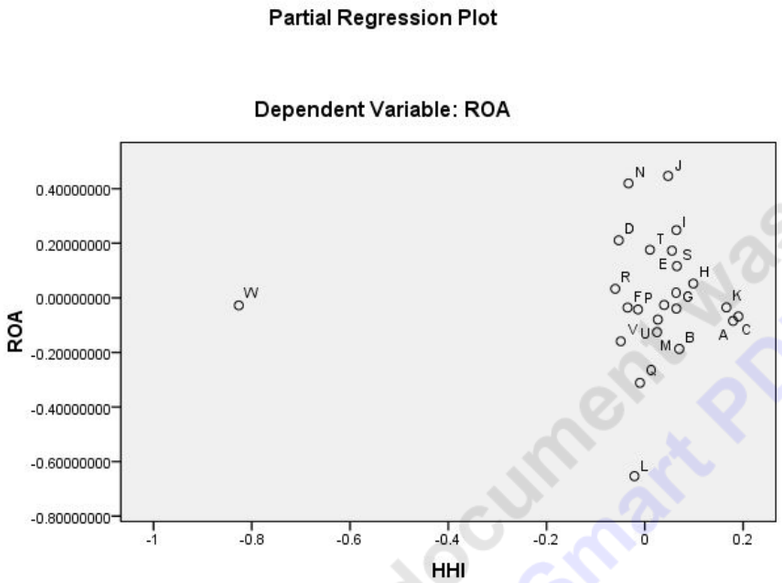
Normal P-P Plot of Regression Standardized Residual

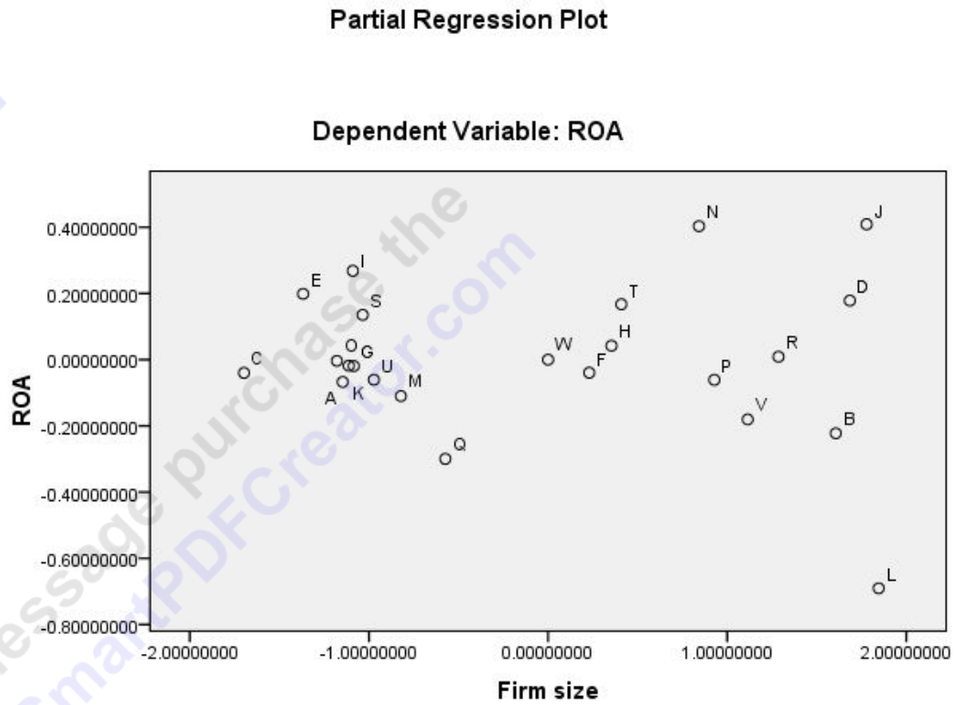


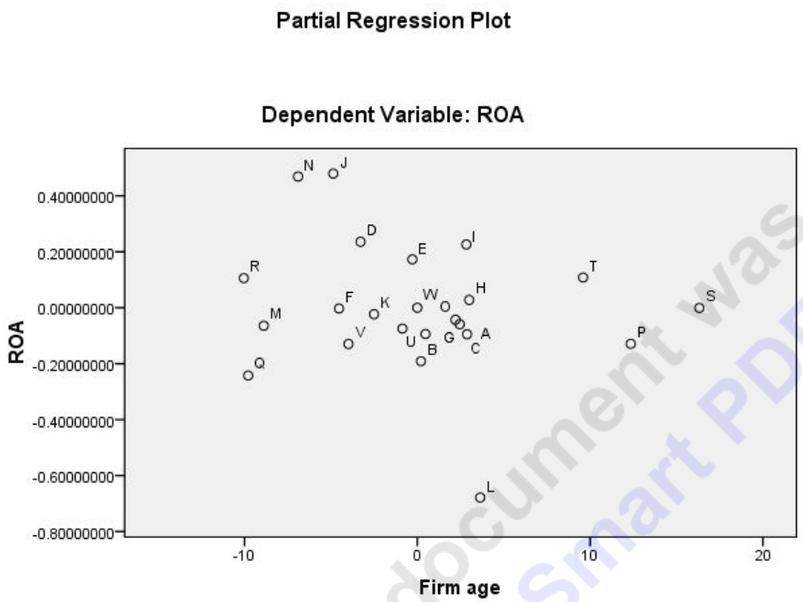
Scatterplot

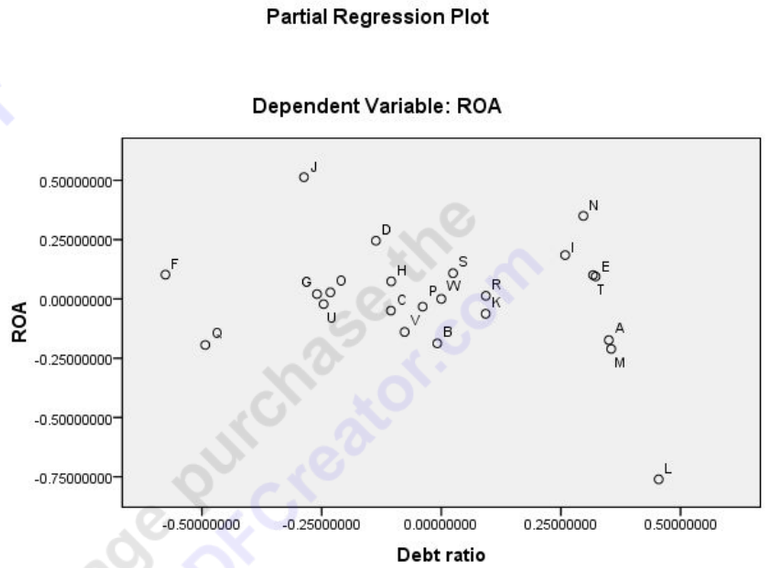












Regression result for ROE

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.440[a]	.193	-.109	.28232090159	.193	.639	6	16	.698	2.058

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, Ownership concentration, Owner identity

b. Dependent Variable: ROE

ANOVA[b]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	.306	6	.051	.639	.698[a]
	Residual	1.275	16	.080		
	Total	1.581	22			

a. Predictors: (Constant), Debt ratio, HHI, Firm age, Firm size, Ownership concentration, Owner identity

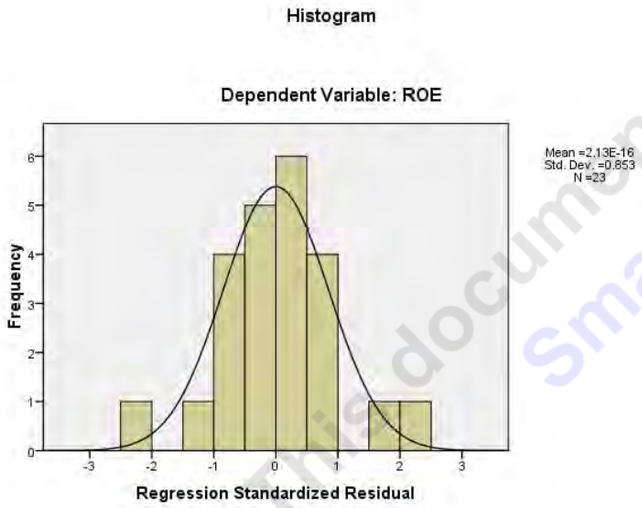
b. Dependent Variable: ROE

Coefficients[a]

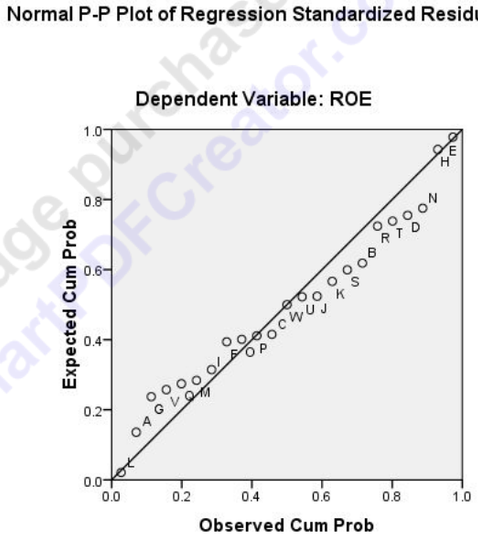
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95% Confidence Interval for B		Correlations			Collinearity
		B	Std. Error	Beta			Lower Bound	Upper Bound	Zero-order	Partial	Part	Tolerance
1	(Constant)	1.252	.928		1.349	.196	-.715	3.219				
	Owner identity	.178	.221	.337	.807	.431	-.290	.646	.227	.198	.181	.290
	Ownership concentration	-.181	.390	-.133	-.466	.648	-1.007	.644	-.028	-.116	-.105	.619
	HHI	.106	.311	.082	.340	.738	-.553	.764	.087	.085	.076	.864

	Firm size	-.068	.051	-.320	-1.343	.198	-.176	.039	-.262	-.318	-.302	.887
	Firm age	.000	.009	.013	.034	.973	-.019	.020	.135	.009	.008	.338
	Debt ratio	.113	.215	.124	.527	.606	-.343	.570	.165	.131	.118	.909
a. Dependent Variable: ROE												

Charts

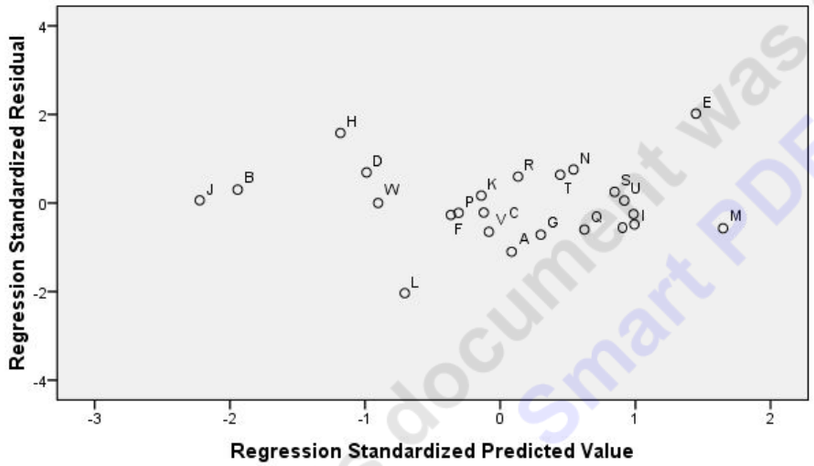


Note that the sample company names were symbolized by the spellings extending from A-W.



Scatterplot

Dependent Variable: ROE



Partial Regression Plot

Dependent Variable: ROE