LUND UNIVERSITY

SCHOOL OF ECONOMICS AND MANAGEMENT

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Minority Blockholders and Firm Value

by

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May 2020

Master's Programme in Accounting and Finance

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Abstract

Seminar Date:	June 3rd, 2020
Course:	BUSN79 Degree Project in Accounting and Finance
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Key words:	Corporate Governance, Minority Blockholders, Firm Value, Voting Power, Excess Votes
Purpose:	The purpose of this study is to investigate the firm value effect of the relative voting power between the minority blockholders and the largest shareholder in firms, and the excess voting rights relative to capital rights for minority blockholders.
Methodology:	The empirical model is developed using an OLS regression, controlling for fixed effects and clustered standard errors. Tobin's Q and Return on Assets is used as the primary dependent variables, regressed across a set of independent variables signifying various ownership relations.
Theoretical Perspectives:	*Agency theory*, *Principal-principal problem*, *Entrenchment effect*
Empirical Foundation:	The Holdings database was used to collect detailed ownership data on a sample of 266 listed Swedish firms corresponding to 1 781 firm-year while financial data were retrieved from Orbis.
Conclusions:	The results suggest that firm values are positively related to a more equal distribution of voting rights between the coalition of minority blockholders and the largest blockholder in the firm. Furthermore, we find indications that the excess votes of institutional minority blockholders are positively related to firm values, suggesting a novel interpretation of the entrenchment effect. Firm values may be enhanced when institutional minority blockholders carry excess votes in relation to their invested capital, since the excess votes increase their power of voice in monitoring the firm and other blockholders for a fixed level of investment.

Acknowledgements

First and foremost, we would like to express our gratitude to our supervisor, Håkan Jankensgård, for his dedication and helpful advice during our degree project.

Secondly, we would like to pay special regards to the team at Modular Finance, whose assistance with compiling data from the Holdings database was pivotal in making this study possible.

Lastly, we would like to thank our families for their support and encouragement throughout our studies at Lund University.

Louise Sjödin Anton Lindfors

Lund, May 29th, 2020

Table of Contents

List of Tables

1. Introduction

In the introductory chapter to this paper, we present a background on the role of blockholders in corporate governance. Subsequently, we go into detail on the identified research problem, the purpose of the study and the research questions. Lastly, an outline of the structure of the paper follows, to guide the reading of the thesis.

1.1 Background

The firm value effect of large shareholders in the ownership structure of companies has long been a topic of interest for researchers in the field of finance and corporate governance. Stemming from traditional corporate finance literature, large equity investors in firms with dispersed ownership, also known as *blockholders*, are theorized to carry both the abilities and the incentives to monitor and control managers (Shleifer & Vishny, 1986; Becht, Bolton & Röell, 2002). In the interest of all shareholders, the presence of these large shareholders may function as a tool to mitigate the *principal-agent problem* and ensure that management pursue shareholder value maximization (Connelly, Hoskisson, Tihanyi & Certo, 2010).

However, scholars have called into question the potential conflicting interests between shareholder groups. The objectives of the large shareholders may depart from the mutual interests of the aggregate group of investors (Shleifer & Vishny, 1997; Thomsen, Pedersen & Kvist, 2006). Large stockholders that reach a sufficient level of control over the firm may use their influence over the company and its management to reap private benefits of control and expropriate wealth from the firm. This potential issue of conflicting interests between owners constitutes the *principal-principal* problem, a popular topic of inquiry in corporate governance research.

Albeit, the conflicting discourse on the role of large shareholders does not end there. While clashing interests between owners may emerge from the presence of influential blockholders in the ownership structure of firms, it has further been suggested that the presence of multiple large shareholders may be an efficient mechanism to deter the

principal-principal problem (La Porta, Lopez-de-Silanes & Shleifer, 1999). Anchored in traditional blockholder theory assertions, large shareholders may exercise their monitoring aptitudes in regard to other blockholders (Pagano & Röell, 1998) and thwart minority shareholder value expropriation. This theory has since been tested empirically in a myriad of research. For instance, Attig, El Ghoul & Guedhami (2009) studied the phenomena in a sample of firms in East Asia and found indications that firms with multiple large shareholder structures traded at a 9.44% premium over firms with a single blockholder owner. The findings are suggested to support the theory of inter-blockholder monitoring contributing to enhanced firm values.

Finally, several studies in the field have further examined the extent to which the identities of the blockholders carry implications for the observed corporate valuation effect (see e.g. Laeven & Levine, 2008; Attig, El Ghoul & Guedhami, 2009). For instance, Maury and Pajuste (2005), using a sample of Finnish firms, find indications that *families* as the second-largest shareholder are negatively related to firm value, when the largest shareholder is also a family. The results are discussed in the light of potential inclinations to collude among private investors such as families, to jointly lower the marginal cost of value expropriation. By contrast, the authors find that institutional investors in the role as the secondary large shareholder in family-controlled firms are positively related to firm value. Institutional investors, as suggested by Maury and Pajuste (2005), may experience higher marginal costs of profit diversion, due to more intense legal scrutiny. The results are striking, since they indicate the disparities between blockholder types and their inclinations to either conspire with, or monitor, other large shareholders.

1.2 Problem Discussion

There is certainly no shortage of theories and arguments in corporate governance literature concerning how blockholders may influence firm value and performance. On the one hand, blockholders may supply costly monitoring of management, to the benefit of all shareholders, and therefore contribute value. On the other hand, should a large shareholder gain adequate control over the firm, one may expect that the blockholder starts to expropriate wealth from minority shareholders, and destroy value. While the presence of several blockholders may dissuade from firm value expropriation, through inter-blockholder monitoring, it seems a blunt instrument in deterring the *principal-*

principal problem. Contrastive research has also discussed how certain large shareholders may stray from their monitoring duties and collude with other blockholders, to exacerbate the *principal-principal* problem (Maury & Pajuste, 2005; Attig, El Ghoul & Guedhami, 2009).

In particular, *minority blockholders*, those blockholders that are not the largest shareholder but still hold significant stakes in the firm, and ownership structures with multiple blockholders have attracted attention in research (see e.g. Laeven & Levine, 2008; Konijn, Kräussl & Lucas, 2011). The minority blockholders are of particular interest, since they ought to be the most predisposed to monitor other blockholders, encouraged by a willingness to safeguard their equity investments from expropriation. Concurrently, research has shown how minority blockholders may turn to collusion with other large shareholders, given the opportunity. Thus, minority blockholders may work two conflicting ways in the ownership structure of firms. The relationship between the minority blockholders and the largest shareholder will chart the course for this paper. We set out to examine the firm value effect, measured as Tobin's Q, of *minority blockholders* using a sample of Swedish listed firms during 2010 to 2018.

In the empirical study, we utilize a set of ownership variables to capture two specific dimensions. First, we use a simple variable that signify the votes dispersion between the minority blockholders, seen as a single coalition, and the largest shareholder in the firm. Through this, we aspire to examine how control rights of the minority blockholders relative to the control rights of the largest owner influence firm values in our sample. Secondly, adopting a measure of the blockholders' excess voting rights, developed by Cronqvist and Nilsson (2003), we aspire to investigate the potential entrenchment effect among the minority blockholders and its relation to firm values. In short, Cronqvist and Nilsson (2003) discuss how shareholders carrying excess votes in relation to their capital may exacerbate the principal-principal problem, drawing on research by Shleifer and Vishny (1997) and Claessens, Djankov, Fan and Lang (2002). Since the large shareholder gain in full from private benefits of control but only partly internalize the negative corporate valuation consequences, the incentives to expropriate value from the firm are elevated (Cronqvist & Nilsson, 2003). This argument is extended in this study to specifically examine the minority blockholders. Should the minority blockholders hold

excess votes in relation to their capital rights, they may be more inclined to turn to collusion with the largest shareholder, since they too would gain from private benefits whilst only suffering a fraction of the corporate valuation consequence.

To further expand the scope of the study, we also examine three varieties of blockholder types, namely *institutional*, *families*, and *governmental* owners, following commonly used classifications in prior research. For instance, Boyd and Solarino (2016) include, amongst others, *Institutional*, *Family* and *State-Owned Enterprises* investors and Russino, Picone and Dagnino (2019) use the shareholder types *Family*, *Industrial* and *Institutional* investors. Blockholder identities are thought to carry implications for the incentives to monitor or collude with other large shareholders (Cronqvist & Nilsson, 2003; Maury & Pajuste, 2005), why it is meaningful to distinguish between blockholder types. By adopting our particular classification of blockholders, we may capture both ends of the large shareholder spectrum on the owner's incentives and level of activism in the firm. On the one end, we may examine the effect of family blockholders, as the type of large shareholders that are thought the most inclined to engage in collusion with other blockholders, given the opportunity (Jara-Bertin, López-Iturriaga & López-de-Foronda, 2008). On the other end, we incorporate institutional investors that are theorized to act in accordance with shareholder value-maximization to the benefit of all equity investors (Lehmann & Weigand, 2000; Boyd & Solarino, 2016). As a third contribution to the analysis, we include governmental blockholders. Governmental investors are a particular type of owners, since they often pursue interests divergent from the other shareholders in the firm. They may aspire for societal and political interests, while they are simultaneously considered strong monitors and controllers of firm management (Boyd & Solarino, 2016). Assuredly, there are other blockholder types that may carry other incentives, interests, and characteristics from the three types included in this study. However, we consider the covered shareholder types amply interesting to motivate a narrower scope of the study. We will return to this discussion in Chapter 8.

Finally, the Swedish market presents an excellent opportunity to study the inter-relations between minority and majority blockholders. The extensive use of dual-class shares with diverging voting rights makes separation of capital rights and control rights frequent in Swedish firms (La Porta, Lopez-de-Silanes & Shleifer, 1999; Cronqvist &

Nilsson, 2003). Moreover, blockholders, including such influential houses like the Wallenberg family, are recurrent in the ownership lists of Swedish firms (La Porta, Lopez-de-Silanes & Shleifer, 1999). Using Modular Finance's *Holdings* ownership database, its equal rarely available in other markets, we access detailed ownership data for our sample firms. The database allows for studies on many dimensions of firm ownership and control by shareholders. Altogether, the Swedish market serves well as the setting for a study of this fashion.

1.3 Purpose and Research Questions

In this paper, we set out to examine the corporate valuation effect, as measured by Tobin's Q, of *minority blockholders* as a singular coalition, and then dissected into three types of blockholder identities. The relation between the minority blockholders and the largest shareholder are of theoretical interest to our study. Moreover, we aspire to investigate the potential entrenchment effect of minority blockholders, an area not meticulously explored in earlier studies. The observable impact on firm values in the Swedish setting by these theoretical assertions is the empirical scope of this study. Through this, we aspire to contribute to and develop the literature on corporate governance in firms with minority blockholders as the focal point.

In particular, we aim to answer the following research questions:

Does a stronger power of voice by minority blockholders contribute to firm value?

Do the identities of the minority blockholders influence their contribution to firm value?

The paper is structured as follows. In Chapter 2, we conduct a literature review of the earlier research in the field of blockholders as a form of corporate governance and empirical studies on the observable impact on firm value. In Chapter 3, we elaborate on the theoretical arguments bestowed by previous literature in the field, on which we develop the research hypotheses. In Chapter 4, we present and discuss our methodology in the empirical study conducted. Subsequently, in Chapter 5, we present descriptive statistics of the data and the variables used in the study. In Chapter 6, we present the empirical results and analysis. In Chapter 7, we discuss the empirical findings of the study

in relation to theory. Concluding the paper in Chapter 8, we discuss the main contributions of the study, its potential limitations, and review our proposals for further research in the field.

2. Literature Review

The literature review surveys previous research on the topics of blockholders, and empirical research conducted to examine its relation to firm value.

Ample research has examined the firm value and firm performance effect of ownership constellations as a form of corporate governance. Stemming from the traditional agency problem, theoretical arguments suggest that large shareholders may contribute to deterring agency costs through investing in monitoring of management (Becht, Jenkinson & Mayer, 2005). However, research has since gone beyond the traditional question to consider the equally pressing topic of *principal-principal* problems, i.e. conflicting interests among owners. In the following passages, we expand on the empirical studies conducted in the field and provide a review of the main findings of the research. We divide the included studies into two main scopes of research: first, we review studies examining the firm value and performance effect of blockholder ownership and ownership dispersion. In the consecutive section, we review studies examining the firm value effect of blockholders of various identities in minority and other constellations. A summary of the literature review is included in the appendix.

2.1 Blockholders and Ownership Dispersion

Control dispersion among owners in firms and the related firm value effect is a topic of inquiry in a myriad of empirical research on both emerging and developed markets. Considerable attention is paid in examining empirical support of theoretical assertions based on blockholder theory, and the proposal that a large shareholder may be beneficial to firm value as compared to a dispersed body of owners (Becht, Bolton & Röell, 2002).

An evolution of this strand of research has investigated how ownership dispersion and the presence of multiple blockholders are related to firm value. For instance, Konijn, Kräussl and Lucas (2011) use US data from 1996 to 2001, to examine the relation between firm values, as measured by Tobin's Q, and blockholder owner dispersion. Using a scaled version of the Herfindahl index to proxy for blockholder ownership dispersion within the group of blockholder, the authors find a negative relation between dispersion and firm

value. That is, more dispersed ownership between the blockholders is found to be associated with lower firm values. The authors discuss the results in the light of theories suggesting that ownership dispersion is detrimental since it may limit the possibilities of smaller blockholders to challenge the largest blockholder, who may then proceed to extract private benefits of control from the firm (Pagano & Röell, 1998; Konijn, Kräussl & Lucas, 2011).

Conversely, using a sample of 1,301 East Asian firms, Claessens et al. (2002) find indications of a positive relation between firm value and the cash flow-rights of the largest shareholder. The findings are consistent with the theory that the incentives for the largest shareholders to expropriate wealth from the firm are reduced with increased equity rights. Through holding larger cash flow-rights, the shareholder is thought to internalize the negative corporate valuation consequences of their expropriation activities to a greater extent. The findings of Konijn, Kräussl and Lucas (2011) and Claessens et al. (2002) provide empirical support of the depiction that dispersed ownership among blockholders is harmful to firm value. Meanwhile, larger cash flow holdings of the single largest shareholder simultaneously lower the incentives to engage in firm value expropriation in the first place.

Leading on the study by Konijn, Kräussl and Lucas (2011), the shareholders' incentives seem insufficient to achieve efficient inter-shareholder monitoring. The power of the shareholders' voice, i.e. voting rights, also appear to carry implications for their ability to do so. Building on a similar line of research, Laeven and Levine (2008) conduct a study on a sample of 1,657 European publicly listed firms, inquiring into the firm value effect of ownership structures involving multiple large shareholders. Interestingly, Laeven and Levine (2008) define large owners as those individual investors holding at least ten percent of the voting rights of the firm. These large shareholders would bear considerable voice of power within the firm, and thus possess the ability to actively contest with other blockholders. The authors find a positive relation between ownership dispersion and Tobin's Q, when the cash flow-rights of the second largest shareholders are greater than the cash flow-rights of the largest shareholder. The results indicate that dispersion may be beneficial to firm values when other large owners have sufficient voting rights to contest but also the equity rights to incentivize them do so.

Further indicative of this notion, Laeven and Levine (2008) find that increased cash flow-rights of the largest shareholder is positively associated with firm value, while control rights in excess of capital rights are negatively related to firm value. However, Laeven and Levine (2008) solely focus on the two largest owners. The authors do not inquire into the control rights relation between the largest and the second largest owner, and only consider cash flow-rights dispersion. While capital rights may be interesting to inquire into how dispersion of equity ownership influence the inter-blockholder monitoring through an incentive effect, the control rights may be more informative as to assess the large shareholders' ability to engage in monitoring.

2.2 Minority Ownership

The firm value and firm performance effect of the secondary and other large shareholders in minority positions in the ownership structure of firms is a strand of research that have previously received some attention in empirical studies. These studies commonly aim at examining the dynamic between multiple large shareholders and how they relate to the performance and valuation of firms. For instance, a study by Maury and Pajuste (2005) examining 136 Finish firms find indications that more equal voting rights among large shareholders is related to higher firm values. Interestingly, the authors also find indications that the identity of the secondary blockholder in the ownership structure in the firm has implications for the value effect. Two families as joint blockholders in a firm are negatively related to firm value in Maury and Pajuste's (2005) study, while a positive relation is found when a family blockholder is joint by an institution as a secondary blockholder. As such, Maury and Pajuste (2005) reveal that contestability among the large shareholders are related to firm values, but that the importance of the relation is affected by the identities of the investors.

Moreover, Jara-Bertin, López-Iturriaga and López-de-Foronda (2008) conduct a study on 1,208 firms in Europe and examine the firm value effect of large shareholders in coalitions, and the contestability among the largest shareholders. The results indicate that contestability, measured as the dispersion of ownership among the second and third largest blockholder to the largest shareholder, in non-family-controlled firms does not significantly impact firm values. However, in family-controlled firms, higher contestability among the top three largest shareholders is positively related to firm value.

The results are in line with the findings of Maury and Pajuste (2005), suggesting that contestability among large shareholders are generally related to firm value.

Cronqvist and Nilsson (2003) study a sample comprising 309 Swedish listed firms during 1991 to 1997 and inquire into the firm value effect of the voting rights of the so-called *controlling minority shareholders* (CMS). The controlling shareholders that posture the subjects of the authors' study are owners that hold substantially more voting rights than capital rights in the firm. As such, these investors may be inclined to engage in value expropriation from the firm, stemming from the so-called entrenchment effect of blockholdings. We expand on the entrenchment effect in Chapter 3. The authors find indications that the excess votes held by the controlling shareholder is not directly related to firm values, but instead operate as a way for the owner to gain adequate control over the firm for a fixed level of equity investments. Rather, the level of voting rights of the controlling shareholders is found to be negatively related to firm value, but also return on assets. The findings indicate, according to the authors, that "the relatively lower market value associated with CMSs can be partly explained by what these owners/firms do…" (Cronqvist & Nilsson, 2003, p. 714). As such, influential blockholders may impact the firm in several ways, beyond solely the market valuation.

Further indicative of this posit is found by a study by Lehmann and Weigand (2000) on a panel of 361 German firms with blockholder owners. The authors examine the corporate performance effect, as measured by return on assets and return on equity, of large shareholder owners. The results indicate that firms with concentrated ownership, i.e. with blockholder owners, exhibit lower accounting returns and that the effect is exacerbated with family blockholders. However, institutional blockholders as the largest shareholder are related to enhanced corporate performance. The authors argue that this is consistent with the suggestion that institutional owners are efficient monitors and may operate to mitigate agency costs in the firms. Moreover, the presence of a secondary large shareholder in the ownership structure is further associated with higher rates of return. The results may potentially be indicative of blockholders exercising contestability among each other.

As such, large shareholders have been indicated to influence firm values not only through their presence, but also through how they operate in the firm. The scope of literature has largely been conducted on ownership dispersion and the influence of a few large shareholders in the ownership structure of firms. The minority blockholders are however commonly studied as the secondary, sometimes, third largest shareholders. Few studies have examined the connection between the minority blockholders as a coalition in relation to the largest shareholder. As such, sparse research has delved deeper into the minority group of blockholders, presenting the main objective of this paper.

3. Theoretical Background and Hypothesis Development

In this chapter, we present the primary theories underlying our field of research. The chapter will end with the development of the hypotheses of this study.

3.1 Theoretical Background

The value effect of blockholders in the ownership structure of firms stem from several well-established theories in financial literature. In the following sections, we elaborate on these theories and discuss the role blockholders may play in mitigating or exacerbating the asserted problems. Additionally, we include theories that have been indicated to factor in on the specific incentives of blockholders to expropriate value from the firm or engage in value-enhancing monitoring activities. Subsequently, we develop the research hypotheses on the predicted value effect of minority blockholders.

3.1.1 The Principal-Agent Problem

The potential conflicts of interests between the suppliers of capital, the owners, and the controllers of firms, the managers, constitute the classic *agent-principal* problem in modern corporations (Jensen & Meckling, 1976). The principal may incur costs of aligning the interests of the agent to which they have delegated decision-making authority over the firm. These costs are part of what Jensen and Meckling (1976) term *agency costs*. The conflict of interests between the suppliers of capital and the controllers of the firms, besides any costs incurred in monitoring management, are theorized to ultimately be detrimental to firm value, ceteris paribus (Denis & McConnell, 2003).

Owners may venture to deter the agency costs through investing in forms of corporate governance, as "corporate governance deals with the ways in which suppliers of finance to corporations assure themselves of getting a return on their investment" (Shleifer & Vishny, 1997, p. 737). According to *blockholder theory*, the presence of large shareholders in the ownership structure of firms may operate to mitigate agency costs as a form of corporate governance (Shleifer and Vishny, 1986; Becht, Bolton & Röell, 2002). The size of the equity stake held by the blockholder in the firm is theorized to provide adequate

incentives to warrant the costs of investing in monitoring and controlling of management (Connelly et al. 2010).

By way of comparison, the situation where the stock of a firm is held by a dispersed set of investors, i.e. no shareholders substantially larger than the other, no sole investor would have the incentives to invest in costly monitoring and controlling activities. Since the investor incur the full cost of the investment while only internalizing a fraction of the benefits (Shleifer & Vishny, 1986), the individual gains from these activities are usually outweighed by the sustained costs (Lehmann & Weigand, 2000). This is referred to as the *free-rider problem* of dispersed ownership. The blockholder's substantial stake in the firm allow for sufficient internalization of the benefits from engaging in monitoring, making it rational to carry out the investment. Thus, large shareholder may mitigate the free-rider problem. Drawing upon this founding argument of blockholder theory, blockholders are predicted to contribute to firm value, in relation to corporations with dispersed ownership.

3.1.2 The Principal-Principal Problem

While blockholders may alleviate the free-rider problem, an inherent problem with large shareholders as a form of corporate governance is that the investors primarily represent their own interests (Shleifer & Vishny, 1997). These concerns may depart from the mutual interests of the collective group of shareholders. Blockholders may use the controlling influence over the firm that follow their sizeable equity investment to treat themselves preferentially. For instance, the large shareholder may exercise their control over the firm to pay special dividends or by tying business relations with other firms in their control, and from which they privately gain from. The issue of conflicting interests between owners constitute the theory of the *principal-principal problem*. The net firm value effect emanating from the influence of blockholder owners is thus theorized to depend on a trade-off (Denis & McConnell, 2003). The costs include potential expropriation of firm resources that large shareholders may be apt to pursue, and the benefits include the mitigation of agency costs of management discretion.

A growing strand of literature has since examined how blockholders may similarly exercise their monitoring abilities not only to oversee management, but also to monitor

other blockholders (La Porta, Lopez-de-Silanes & Shleifer, 1999). Founded on the same arguments as traditional blockholder theory, large shareholders may be equally incentivized to engage in monitoring of other blockholders. Since value expropriation by influential large shareholders may be detrimental to firm value, other blockholders holding significant stakes in the firm would internalize the costs of expropriation to a larger degree. Thus, the incentives of blockholders to monitor other large shareholders may be equally considerable in this regard. Consequently, the presence of multiple large shareholders may operate to mitigate the potential costs incurred by value expropriation by influential blockholders, thereby alleviating the principal-principal problem.

3.1.3 Additional Theories on Blockholder Activism

Additionally, literature has gone beyond the founding arguments on the principal-agent and principal-principal problems to examine other factors that may influence the impact of blockholders in the ownership structure of firms. The size of the equity position held by the large shareholder is theorized to be related to the incentives of the blockholder to invest in monitoring of management and other blockholders (Konjin, Kräussl & Lucas, 2011). The benefits of monitoring the firm internalized by the large shareholder trail the size of the investment made in the firm, termed by Bennedsen and Wolfenzon (2000) as the *alignment effect*. This effect is founding for the role of the blockholder in mitigating the principal-agent and principal-principal problems, as discussed in the preceding section.

Conversely, the argument may be inverted. Blockholders holding excess voting rights in relation to cash flow-rights may entail diminished incentives to invest in monitoring activities, as the blockholder internalize only a fraction of the benefits gained from doing so (Cronqvist & Nilsson, 2003). Instead, the incentives to engage in value expropriation from the firm are elevated. The negative corporate valuation consequences are internalized to a lesser degree by the expropriating blockholder whilst the benefits of expropriation are reaped in full. This issue is commonly referred to as the *entrenchment effect* of blockholdings (Claessens et al. 2002). The use of instruments, such as dual-class shares with diverging voting rights, particularly sets the stage for the entrenchment effect where the blockholder investor carry excess voting rights over the firm without having to hold the corresponding amount of cash flow-rights.

However, contestability, i.e. more equal power distribution between large shareholders in the ownership structure of firms are thought to mitigate the inclination for expropriation by large shareholders (Maury & Pajuste, 2005). Increased voting rights among shareholders that are not part of a controlling coalition in the firm would entail greater possibilities of monitoring other blockholders and dissuade from value expropriation.

Furthermore, as a remark on the significance of blockholder identities, blockholders are thought to differ in the ultimate objective of their equity stake in the firm. For instance, *families* in control of firms are thought to be more inclined to behave opportunistically when external monitoring is weak, and thus be detrimental to firm value (Fattoum-Guedri, Guedri & Delmar, 2018). Families and private investors may be less restricted than their public counterparts in their abilities to engage in value expropriation, as opaque private contracts may be relatively simpler to realize (Cronqvist & Nilsson, 2003).

This assertion extends to the theorized role of families as blockholders in firms. Families are thought to be more inclined to entrench themselves and engage in extraction of private benefits from the firm (Chrisman, Kellermanns, Chan & Liano, 2010). This would, ceteris paribus, predict an adverse effect on firm values when families are in a position of control that allow for value expropriation, either by their own accord or through forming coalitions with larger blockholders (Maury & Pajuste, 2005). In this instance, family blockholders do not fit into the traditional role of a blockholder according to blockholder theory, in supplying costly monitoring and controlling activities, but are instead generally associated with opportunistic behavior and diminished firm values.

Sharing in the family blockholders' ambitions to realize alternate and private objectives, are *governmental blockholders*, whose incentives are thought to diverge from the motives of financial investors (Boyd & Solarino, 2016). State and other governmental ownership may hold diverging objectives such as societal or politically guided ambitions ahead of firm value maximization, conflicting with the goals of private investors (Liu, 2018). While governmental blockholders may control and govern firms for the sake of societal ambitions, they are seemingly not likely to collude with private investors to gain those

benefits of control. Like many *institutional* investors, who are hindered by legal scrutiny and transparency requirements (Maury & Pajuste, 2005), the feasibility of collusion with private investors for these blockholders is sparse. Cronqvist and Nilsson (2003) suggest that this renders institutional investors more inclined to primarily pursue shareholder value maximization and exercise monitoring of other blockholders, since opportunities to expropriate wealth in collusion with others are restricted. As such, institutional blockholders are thought to be more inclined to engage in activities that benefit the mutual group of shareholders, as opposed to pursuing private interests.

3.2 Hypothesis Development

Our first research hypothesis commences from theories developed on ownership dispersion among shareholders. Based on articles by Konjun, Kräussl and Lucas (2011) and Maury and Pajuste (2005), it is argued that more dispersed voting rights amongst large shareholders sets the stage for efficient inter-blockholder monitoring, through increased contestability among the shareholders. As such, a setting with more evenly distributed voting rights amid the largest shareholders should yield a positive firm value effect. Thus, our first hypothesis ($H_{0,1}$) predict that a larger proportion of minority blockholder votes in relation to the largest shareholder's vote will yield a positive effect on Tobin's Q. In the presence of a particularly large influential shareholder, the effect should be elevated, leading on theories on the significance of contestability among blockholders (Maury & Pajuste, 2005). Thus, our second hypothesis ($H_{0,2}$) predict a positive effect of more even distribution of votes amid blockholders, and therefore higher contestability, when the largest shareholder holds a particularly large amount of voting rights.

Next, we consider the shareholder identities and dissect the minority blockholders into institutional, family, and governmental investors. Drawing upon theories on the incentives and activism of these blockholder types, we develop the following hypotheses. The institutional investors are theorized to be restricted in their ability to engage in collusion with other blockholders due to legal restrictions (Cronqvist & Nilsson, 2003), making them less inclined to coordinate coalitions and expropriate wealth together with other large shareholders. As such, institutional blockholders are generally thought to be positively associated to firm value. Leading on these arguments, our third hypothesis ($H_{0,3}$) predict that more powerful institutional minority blockholders are positively

related to Tobin's Q. In contrast, family ownership is theorized to be heavily associated with the inclination to collude with other shareholders when in a minority position in the ownership structure. Thus, our fourth hypothesis ($H_{0,4}$) predict a negative relationship between Tobin's Q and the relative power of family minority blockholders. Lastly, we consider governmental ownership. In our fifth hypothesis ($H_{0,5}$), we predict a negative relationship between the relative power of governmental minority blockholdings and Tobin's Q. Governmental owners are theorized to pursue conflicting interests with the other owners, such as societal or political ambitions (Liu, 2018). As such, the costs of conflicting interests between owners are expected to be especially exacerbated in firms with governmental blockholdings.

Lastly, we consider the theoretical arguments made on the possible entrenchment effect stemming from excess votes held by blockholders, as theorized by Shleifer and Vishny (1997) and later developed by Claessens et al. (2002). Excess votes held by blockholders are thought to present incentives to expropriate wealth from the firm and become entrenched. Drawing on this argument, should the entrenchment effect be material even among minority blockholders, we would predict lower firm values in firms where the minority blockholders carry greater excess votes. Less excess votes would entail lower incentives to expropriate wealth, and instead contribute to the alignment effect between the blockholders and the smaller shareholders. Thus, our sixth hypothesis ($H_{0,6}$) predict that minority blockholders' excess votes will yield a negative effect on Tobin's Q.

4. Methodology

In the Methodology chapter, the research method used to process the empirical material is presented. Concluding the chapter is a presentation of the endogeneity test conducted.

4.1 Research Method

In this study, we adopt a deductive research approach. That is, using theory, several hypotheses are developed that are then tested empirically using relevant data (Bryman & Bell, 2011). Contingent on the results, the hypotheses may then be confirmed or rejected, which lead to the revision of the hypotheses. In this study, we will empirically test the hypotheses on the predicted value effect of minority blockholders based on previously developed theory. To be able to answer the research questions and test the hypotheses developed, we utilize a quantitative empirical research method. As such, to determine the relations between firm value and the ownership variables we use, numerical data across a sample of firms listed on the stock exchange Nasdaq Stockholm is used to represent the Swedish market in large.

4.2 Empirical Model

To examine the firm value effect of minority blockholders in our sample, a longitudinal study is performed. The software Stata is used to conduct all regressions. The empirical model is an ordinary least square (OLS) estimator where the dependent variable, *Tobin's* Q, is regressed across several ownership characteristics. The independent variables are primarily aimed to measure voting power relations and excess voting rights. Additionally, we include a selection of control variables to account for characteristics of the firms. To control for changes in market conditions, year dummies are adopted in the model. We further use the natural logarithm of Tobin's Q, since the data exhibit a lognormal distribution. Among the control variables, the logarithm of leverage and total assets are used. Following prior research, we also winsorize these variables at the 1st and 99th percentile to address outliers (see e.g. Attig, El Ghoul & Guedhami, 2018. The model for Regression 1 is presented as follows:

$$Log(Tobin's\ Q_{i,t}) = \beta_0 + \beta_1 MLV_{i,t} + \lambda control + v_{i,t}$$

where log(*Tobin*'s Q) is the natural logarithm of Tobin's Q and where the subscript *i* refers to firm and *t* refers to year. In the first set of regressions, we treat the minority blockholders as a homogenous group. The first regression examines the main explanatory variable *MLV*, computed as the ratio of the minority blockholders' cumulative voting rights to the voting rights of the largest shareholder. In the second regression, the ratio *MLV* is complemented with the variable LSV, measuring the largest shareholder's votes. Moreover, in this regression the interactive term *MLV x LSV* is introduced to gauge the effect on Tobin's Q of any complementary effect of the size of the largest blockholder and MLV. The model for Regression 2 is presented below:

$$Log(Tobin's\ Q_{i,t}) = \beta_0 + \beta_1 MLV_{i,t} + \beta_2 LSV_{i,t} + \beta_3 MLV_{i,t} \times LSV_{i,t} + \lambda control + v_{i,t}$$

Next, we substitute Tobin's Q to return on assets (ROA) as the dependent variable, to test the impact on corporate performance by our ownership variables. Since our ROA is accounting-based, we gain the benefit of incorporating an alternate performance measurement, as opposed to the market-based Tobin's Q. The model for Regression 3 is presented below:

$$ROA_{i,t} = \beta_0 + \beta_1 MLV_{i,t} + \beta_2 LSV_{i,t} + \beta_3 MLV_{i,t} \times LSV_{i,t} + \lambda control + v_{i,t}$$

The second set of regressions address the identities of the minority blockholders: institutional, families and governmental investors. In Regression 4, MLV is dissected into three variables, one for each minority blockholder type, on which we regress Tobin's Q. The model for Regression 4 is presented below:

$$Log(Tobin's\ Q_{i,t}) = \beta_0 + \beta_1 IMLV_{i,t} + \beta_2 FMLV_{i,t} + \beta_3 GMLV_{i,t} + \lambda control + v_{i,t}$$

In Regression 5, we add to Regression 4 our measures of the minority blockholders' excess votes, for each distinct blockholder type. The model for Regression 5 is presented below:

$$Log(Tobin's\ Q_{i,t}) = \beta_0 + \beta_1 IMLV_{i,t} + \beta_2 FMLV_{i,t} + \beta_3 GMLV_{i,t} + \beta_4 IMEV_{i,t} + \beta_5 FMEV_{i,t} + \beta_6 GMEV_{i,t} + \lambda control + v_{i,t}$$

Lastly, following the same argument as for the third regression, ROA is incorporated as the dependent variable in Regression 6, using the same independent variables as in Regression 5. The model for Regression 6 is presented below:

$$ROA_{i,t} = \beta_0 + \beta_1 IMLV_{i,t} + \beta_2 FMLV_{i,t} + \beta_3 GMLV_{i,t} + \beta_4 IMEV_{i,t} + \beta_5 FMEV_{i,t} + \beta_6 GMEV_{i,t} + \lambda control + v_{i,t}$$

The interpretation of coefficient β_1 show the impact of the ownership variable where an increase with a unit, Tobin's Q will increase with the percentage shown in β_1. Moreover, the composite errors constitute of idiosyncratic errors ($u_{i,t}$), meaning errors which are unit specific but time variant.

4.3 Endogeneity Control

To control for potential endogeneity in our model, firm characteristics variables (expanded on in Section 5.2.3), acting as proxies for firm health, are included in the regression. The F-test is used to show the fit of the panel structure of our data. As the null-hypothesis is rejected, see Table 5, correlation between the model and the dependent variable are jointly statistically significant and a panel data structure is preferred (Woodridge, 2010). Furthermore, to test for strict exogeneity, the Wooldridge test is performed. The results motivate the selection of a fixed effects model compared to the first-difference estimator approach.

Next, a Hausman (1978) test aimed at inquiring into whether individual effects are uncorrelated with the regressors is used. The test may further assist in evaluating the consistency of the random effect models and its fixed effects counterpart. Since the null hypothesis which favors the random effect model is rejected, see Table 5, a fixed effect model is adapted (Wooldridge, 2010). Additionally, a Breusch-Pagan (1979) test is used to examine the homoscedasticity assumption of the OLS. The test results, presented in Table 5, indicate heteroscedasticity in our dataset, thereby motivating the

implementation of clustered robust errors at firm level. To address multicollinearity, a correlation matrix is performed indicating no serious cross-sectional dependencies, see Tables 6 through 9. Controlling for the aforementioned test effects, a fixed effects model with clustered robust errors at firm level is adopted as the final regression model for both sets of regressions.

The panel data format for the data is used to capture over-time effects in the same firm, which is made possible through the longitudinal set-up of our data. An alternative method would be a pooled cross-sectional method. However, we would lose insights into the effect over time in the same firm which potentially experience change in ownership structures. Thus, we prefer the panel data-format for this specific study.

5. Data and Descriptive Statistics

In this chapter, the data, variable definitions, and summary statistics for the variables used in the study are presented.

5.1 Sample Construction

The sample used in this study is the intersection of two databases. Modular Finance's analytical service *Holdings* is used to collect ownership data while financial data is retrieved through Moody's analytical service company Bureau van Dijk's database *Orbis*. The sample comprise publicly traded Swedish firms domiciled in Sweden during the period 2010 to 2018, providing an unbalanced panel dataset. All firms in the sample are listed on either the Large-cap, Mid-cap or Small-cap lists on the major stock exchange in Sweden, Nasdaq Stockholm. The firms listed on these markets comprise a large share of the total number of publicly traded Swedish firms, and we consider the sample firms to be sufficiently representative of the larger population of firms. Ownership shares from the Holdings database are computed at year-end, which correspond to the year-end financial data retrieved from Orbis. Firms listed on other lists such as Nordic Growth Market or First North are not included in the sample due to restrictions in data access from the Holdings database.

The original sample comprise 365 firms and 2,562 firm-year observations. Since the scope of this study does not include insider ownership, the first removal from the sample are all observations of blockholders comprising management holdings and firm treasury. This leave our sample comprising 352 firms and 2,283 firm-year observations. Subsequently, 29 firms were identified to be listed on the Nasdaq Stockholm but registered in another country and were dropped from the sample. Next, leading on ample prior studies we exclude all firms operating in the financial sector, in consideration of difficulties to accurately measure firm value and other firm measures between financial and non-financial firms using the same proxy (see e.g. Hamberg, Fagerland & Nilsen, 2013; Fattoum-Guedri, Guedri & Delmar, 2018). As such, all sample firms registered under the SIC classification 6000 through 6999 were dropped from the sample. Finally, we exclude

all firms with insufficient financial data to calculate variables, leaving our final sample comprising 266 firms and 1,781 firm-year observations. The process described above is summarized in Table 1.

5.2 Variable Definitions and Descriptive Statistics

We define several variables to examine the firm value effect of minority blockholders and the power relation between the majority and minority large shareholders. Many of the variables included, notably the control variables, are similar to the variables used in prior research. Additionally, we define variables that probe into our specific research questions. The variables used in the empirical study will be described in the following sections. A table summarizing all variables and their definitions can be found in Table 2. Moreover, tables with summary statistics for the variables can be found in Table 3 and 4.

5.2.1 Dependent Variables

To proxy our dependent variable *Firm Value*, we use Tobin's Q following ample prior research in the field (see e.g. Maury & Pajuste, 2005; Attig, El Ghoul & Guedhami, 2009; Fattoum-Guedri, Guedri & Delmar, 2018). Our Tobin's Q is defined as the ratio of the market value of the firm's equity and book value of debt to the book value of total assets. In other words, the market value of the firm in relation to the replacement cost of its assets, where the replacement costs are approximated using book values. In our sample, the mean Tobin's Q is 4.04 with a median of 1.20 over 1,781 firm-year observations, see Table 3.

$$Tobin's\ Q = \frac{Market\ Value\ of\ Equity\ +\ Book\ Value\ of\ Debt}{Total\ Assets}$$

As our secondary dependent variable, we use an accounting-based return on assets (ROA). The use of ROA is frequently used in similar studies to measure corporate performance (Lehmann & Weigand, 2000; Cronqvist & Nilsson, 2003; Thomsen, Pedersen & Kvist, 2006), using a different outlook from the largely market-based Tobin's Q. Our ROA is defined as the ratio of net income to total assets. As seen in Table 3, the mean ROA for our sample firms is 3.63% while the median is 6.30%.

$$ROA = \frac{Net\ Income}{Total\ Assets}$$

5.2.2 Independent Variables

We define several independent variables to capture the relative power of the minority blockholders relative the largest shareholder, and the excess votes held by the minority blockholders in our sample firms. However, we first need to derive our definition of a blockholder. A blockholder investor is generally defined by corporate governance literature as a single investor in possession of a significant number of the firm's total outstanding shares. The US Securities and Exchange Commission's (SEC) definition is widely used to specify this threshold (see e.g. Slovin & Sushka, 1993; Konijn, Kräussl & Lucas, 2011; Boyd & Solarino, 2016). The SEC classification of a blockholder is an entity holding five or more percent of the firm's equity, and leading on prior studies, we adopt the same definition of blockholders. Furthermore, we label the large shareholders into three distinct categories following commonly used classifications in prior research, namely *Institutional*, *Governmental* and *Families* blockholders (see e.g. Boyd & Solarino, 2016; Russino, Picone & Dagnino, 2019).

As the first of our independent variables, we construct MLV, defined as the ratio of the minority blockholders' cumulative voting rights to the voting rights of the single largest shareholder in the ownership structure. The minority blockholders are defined as those blockholders holding five or more percent of the firm's equity yet are not the largest shareholders in the firm, measured by voting rights. The variable is an adaption of a similar measure developed by Jara-Bertin, López-Iturriaga and López-de-Foronda (2008), who construct a ratio of the ownership between the second and third largest shareholders to the largest shareholder. In this study, we instead consider the entire minority blockholder group's relative voting power to that of the largest shareholder. Should MLV take on a value less than 1, it would indicate that the largest shareholder holds more voting rights than the minority blockholder altogether, whilst a measure larger than 1 would indicate a more equal power balance between the minority block and the largest shareholder. As seen in Table 3, the mean ratio of the relative voting power between the minority block and the largest shareholder is 0.81 and the median is 0.65.

This indicates that the minority blockholders for both the mean and the median firm are less powerful than the largest shareholder in terms of voting rights.

Next, we construct the variable *LSV*, defined as the single largest shareholder's total voting rights. As seen in Table 3, the mean voting rights held by the largest shareholder in our sample is 27.01% and the median is 18.03%. The largest shareholder is defined as the single investor holding the greatest amount of voting rights in the firm. We use voting rights in this respect, as we consider it meaningful to analyze the minority blockholders in relation to the most influential shareholder. An alternative method in this regard would be to compare the minority blockholders' voting rights to that of a *controlling* blockholder, often defined as a shareholder holding 10 or 25 percent or more of the firm's total voting rights. However, we deem this rationale too narrow, since it would exclude those firms that have no shareholders holding voting rights in excess of a particular threshold. Leading on the discussion by Burkart, Gromb and Panunzi (2006), control over a firm is not necessarily defined through custody of a majority of the votes, since a smaller block of votes may warrant control when the remaining shares are dispersed. As such, we utilize the largest shareholder in our analysis of power dispersion.

We construct the variables *IMLV*, *FMLV* and *GMLV*, defined as the ratio of institutional, families and governmental minority blockholders' cumulative voting rights respectively, to the total voting rights of the largest shareholder in the firm. For instance, *IMLV* measures the ratio of the cumulative voting rights of all institutional minority blockholders in the firm, to the largest shareholder's voting rights. Through including this measure, we aim to incorporate how the relative power of the respective blockholder identities in the minority position impacts firm value. As seen in Table 3, the mean IMLV is 0.47, while the same ratio for FMLV and GMLV is 0.32 and 0.01, respectively. This indicates that the mean cumulative votes held by institutional minority blockholders is approximately half of the voting rights of the largest shareholder, while family minority blockholders hold roughly a third as many votes as the largest shareholder.

Finally, we include the measures IMEV, FMEV and GMEV, defined as the respective minority blockholder types' cumulative excess votes. The measure is calculated following a similar variable used by Cronqvist and Nilsson (2003) in their study of controlling

minority shareholders. The variable is computed as the ratio of the total voting rights held by the minority blockholders to the total capital rights, minus one. The variable indicates the percentage surplus or lacking voting rights held by the minority blockholders relative their capital rights. Cronqvist and Nilsson (2003) argue that this measure may indicate the blockholders' incentives to expropriate other shareholders, i.e. the potential for the entrenchment effect. Incentives to expropriate other shareholders are thought to increase when blockholders hold control rights in excess of their capital rights, as the negative corporate valuation consequences are internalized by the expropriating shareholder to a lesser degree when fewer cash flow-rights are held. Through including this variable, we aim to inquire into the influence of potential entrenchment by minority blockholders.

As seen in Table 4, the mean excess votes ratio held by institutional minority blockholders in our sample is -0.04, indicating that the mean institutional blockholder holds more cash flow-rights than voting rights. The same ratio for family blockholders in our sample is 0.21, indicating that the mean family blockholder hold 21% more voting rights than cash flow-rights. Finally, the corresponding ratio for governmental blockholders is 0.002, i.e., the mean governmental blockholder holds approximately the same voting rights to their cash flow-rights. Theory suggest that the entrenchment effect should be the most prominent among the family blockholders in our sample per their excess votes (Claessens et al., 2002), based on the descriptive statistics.

5.2.3 Control Variables

We include several control variables following prior research, to account for firm characteristics that may influence Tobin's Q and ROA. First, firm size, TA, defined as the natural logarithm of *total assets*, is included. Larger firms are expected to be in a more mature stage of their business cycle and hold fewer investment opportunities, potentially a negative influence on the market valuation (Maury & Pajuste, 2005).

Next, we control for *leverage*, LEV, computed as the ratio of the book value of total debt to the book value of total assets, following Konjin, Kräussl and Lucas (2011) and Attig, El Ghoul and Guedhami (2018). Leading on Cronqvist and Nilsson (2003), we also include a

measure of the firm's ability to generate sales on the basis on the book value of their total assets, the variable *SALESTA*.

Subsequently, we include an indicator variable, *DD*, taking on the value 1 if the firm paid dividends during that year and 0 otherwise. Jara-Bertin, López-Iturriaga and López-de-Foronda (2008) use the firm's dividend payout ratio as a measure for corporate discipline, while we instead use an indicator variable. Beyond the disciplining mechanism of dividends payments, we aspire to capture the dimension of financial constraint through using this straight-forward indicator variable. Firms paying dividends are seemingly less financial constraint and better able to pursue profitable investment opportunities, which may carry corporate valuation consequences.

We control for *Asset Tangibility*, *AT*, computed as the ratio of the book value of tangible assets to total assets, following Maury and Pajuste (2005) and Konjin, Kräussl and Lucas (2011). Firms with low asset tangibility, i.e. a higher composition of intangible assets, capital may be more severely affected by agency problems but may too carry misstated replacement costs of assets in Tobin's Q (Konjin, Kräussl & Lucas, 2011), motivating us to account for this effect.

6. Empirical Analysis

In the sixth chapter of the paper, the results of the empirical study are presented. The analysis is integrated into the results, to compare the findings to prior empirical research.

6.1 Ownership Dispersion

In order to test our first and second hypotheses, we conduct Set 1 Regressions presented in Table 5. Using our main explanatory variable MLV and our set of control variables in Regression 1, we first assess the ratio of voting rights dispersion between the minority blockholders and the largest shareholder and its effect on Tobin's Q. The primary regression yields positive, yet insignificant, results. However, by including the variable for largest blockholder voting rights, LSV, and introducing the interactive variable, MLV x LSV, we record significant positive effect by MLV on Tobin's Q. The magnitude of the effect is a 9.6% increase in Tobin's Q following a one percentage increase in MLV. Thus, the results indicate support for the first research hypothesis while the second hypothesis is rejected.

In our sample, more even voting rights between the minority blockholders and the largest shareholder in the ownership structure is therefore found to be positively related to firm values. There is seemingly no significant effect of the interactive variable, indicating a positive firm value effect of evenly distributed voting rights among the blockholders indifferent of the size of the largest shareholder's voting rights. Furthermore, the results indicate that more efficient firms, as measured by the sales to assets ratio, firms with higher asset tangibility and firms that pay dividends are all positively related to Tobin's Q in our sample.

The results are in line with the findings of Maury and Pajuste (2005) who record a positive firm value effect by more equal distribution of votes among the largest shareholders in their sample of Finish listed firms during 1993 to 2000. The findings are also transferable from Attig, El Ghoul and Guedhami's (2009) study on a sample of East Asian firms, where firms with multiple large shareholders trade at a premium compared to firms with a

single, large blockholder. However, the results of this study differ from the findings of Konijn, Kräussl and Lucas (2011) in their study on US firms, finding a negative relationship between ownership dispersion and Tobin's Q. The disparity potentially indicates the significance of the context and legal environment of the firms on the governance structure and observable firm value effect.

Next, in order to test the impact on corporate performance of our sample firms to further understand potential reasons behind the firm value effect on Tobin's Q, return on assets (ROA) is incorporated as the second dependent variable in our regression. The results from the regression are diverging from previous findings of Cronqvist and Nilsson (2003) who assign part of the negative value effect on Tobin's Q to less efficient investment decisions, as indicated by a lower ROA in their findings. Our study yields no significant result on the main independent variables in this respect, as seen in Regression 3. Concludingly, the results indicate a significant positive firm value effect of a larger proportion of the minority blockholders' cumulative voting rights to that of the largest shareholder, but the results may not be interpreted in the light of a significant effect on ROA in our sample.

6.2 Ownership Identities

In Set 2 regressions presented in Table 5, the blockholder minority coalition is dissected into the corresponding investor groups, in order to analyze the impact of the shareholder type. As indicated by the results in Regression 4, the posit of our fourth hypothesis, proposing that more powerful institutional minority blockholders are positively related to firm value, is confirmed. In the sample, a one percentage increase in the ratio of voting rights of the institutional minority blockholders to the largest shareholder in the firm is related with a strongly significant, positive 14.6% increase in Tobin's Q. In contrast, the relative voting power ratio of family minority blockholders is of approximately the same magnitude, but instead a strongly significant negative firm value effect on Tobin's, equal to 13.8%. Thus, hypothesis four may be confirmed. The results in Regression 4 are ambiguous as to answer hypothesis five, not presenting any significant results, on the impact of the relative voting power ratio of governmental minority blockholders. Thereby, hypothesis five may neither be confirmed or rejected using the results.

The results are largely consistent with the findings of prior research. Although Lehmann and Weigand (2000) examine corporate performance as measured by return on assets and return on equity, the authors find indications that institutional large shareholders are efficient monitors in firms and may operate to mitigate agency costs. The results of this study are in line with the notion of monitoring efficiency of institutional large shareholders, in that institutional minority blockholders are positively related to firm value. Moreover, Maury and Pajuste (2005) find that family large shareholders as the second largest blockholder in firms are associated with a negative firm value effect when the largest shareholder is also a family. The results presented above are largely consistent with these findings. However, the results indicate that family minority blockholders appear significantly negatively related to firm values, regardless of the identity of the largest shareholder.

Next, we introduce measures of the minority blockholders' excess votes, per investor group, as seen in Regression 5. The regression is conducted to test for the sixth hypothesis and the impact of the potential entrenchment effect of the minority blockholders. The significant results from Regression 4 are intact after introducing these measures, and we find a significant, positive effect on Tobin's Q from excess votes held by both institutional and governmental minority blockholders. No significant results are found for the excess votes held by family minority blockholders. Per these findings, the main part of our sixth hypothesis may be rejected. The magnitude of the effect is a 4.8% increase in Tobin's Q for each one percentage increase in the institutional minority blockholders' excess voting rights. The corresponding figure is 33.7% for governmental minority blockholders. However, one should exercise caution in drawing too strong conclusions from the findings on the governmental minority blockholders, as our sample of governmental shareholders only comprise 22 firm-year observations.

The findings in this study deviate from prior research conducted on excess votes by Cronqvist and Nilsson (2003), who find no significant value effect of the excess votes held the controlling shareholder in their sample of Swedish firms. The results of this study are also not in line with the findings of Maury and Pajuste (2005), who record a significant negative value effect of the control-to-ownership ratio of the largest shareholder in the firm. However, notably the results found by both Cronqvist and Nilsson (2003) and Maury

and Pajuste (2005) concern the largest shareholder, and not the minority coalitions of blockholders as constitute the scope of this study.

Finally, the sixth and last regression incorporates ROA as the dependent variable constituting an accounting-based performance measurement, as opposed to the market valuation-based Tobin's Q. The regression yields a smaller, but more significant, positive effect of governmental excess votes on ROA. The positive effect of institutional excess votes on ROA is intact from the findings on Tobin's Q, but wanes in significance. As a final remark, corporate performance among the sample firms is positively related to firms who pay dividends, firms with a higher sale to assets turnover ratio, and firms where the total assets comprise a greater amount of tangible assets.

7. Discussion

In the seventh chapter of this paper, the results are discussed. Our study yields several novel empirical findings, and in the following sections we relate them to theory.

7.1 Ownership Dispersion

An abundance of research has examined the value effect of ownership dispersion among large shareholders using Tobin's Q as a proxy for firm value. The results from this study complements the prior theoretical assertions on the beneficial firm value effect of more dispersed ownership. Dispersed ownership and equal distribution among the larger shareholders may entail increased possibility for contestability among the blockholders, leading on the conclusions by Maury and Pajuste (2005) and Attig, El Ghoul and Guedhami (2009). Contestability among the large shareholders may in turn dissuade from firm value expropriation and potentially mitigate the principal-principal problem. The results of our study may contribute to corroborate the notion of the generally beneficial effect on firm values from a setting where blockholders may contest with each other, and in particular with the largest shareholder.

However, our results indicate that more equal voting power distribution between the minority coalition of blockholders and the largest shareholder is beneficial to firm value, regardless of the largest blockholder type. This may indicate a more general interpretation of the notion of contestability among minority and majority blockholders. Another interpretation of the results is that more equal voting rights among blockholders may not only work to mitigate the principal-principal problem, but also influence the alleviation of the principal-agent problem. That is, the founding concern on which blockholder theory is developed. More equally powerful blockholders may provide the setting in which management is under observation by several large shareholders. This could potentially entail the mitigation of agency costs of the firm. The observed impact on firm value, may be a concurrence of two value-enhancing monitoring respects and a positive net effect in regard to the potential costs of blockholder ownership.

7.2 Ownership Identities

The findings relating to the positive firm value effect of more equal distribution of voting rights between institutional minority blockholders and the largest shareholder in the firm support several theories developed in prior research. For instance, Cronqvist and Nilsson (2003) discuss how institutional investors may be more restricted in their ability to engage in collusion with other shareholders, on account of confining legal scrutiny and the requirement to adhere to transparency requirements.

An interpretation of our results may be that increased voting rights of these institutional minority blockholders relative to the largest shareholder entail increased power of voice and thus, a greater capability for contention between the blockholders. This is in line with the discussion by Maury and Pajuste (2005) and Attig, El Ghoul and Guedhami (2009) on the importance of contestability among shareholders. The authors argue that firm values may be favorably affected by the ability of other blockholders to challenge other large shareholders. The opportunities for blockholders to engage in value collusion may be more restricted when surrounded by other large influential shareholders that want to safeguard their investments and our results are supporting this notion. The increased influence by the minority coalition of institutional blockholders may allow them to contest the largest shareholder more efficiently. As discussed in the section above, a more powerful institutional minority blockholder coalition may efficiently exercise monitoring of management, in line with their theorized incentives, potentially mitigating the agency costs of the firm.

On the other side of the spectrum, the negative firm value effect observed in firm with more powerful family minority blockholder coalitions appear to support the assertions on the negative influence by large family shareholders. Family blockholders have been depicted as prone to expropriate and collude with other blockholders given the opportunity. Maury and Pajuste's (2003) study on the topic provide empirical results indicating a negative relation between Tobin's Q and family blockholder ownership. The authors point towards an aggravated firm value effect in the situation where both the largest shareholder and second largest shareholder are families. Drawing upon theoretical arguments, family blockholders seemingly exacerbate the principal-principal problem as they may primarily pursue personal incentives, detrimental to firm value. Our

study provides indications that further support this notion. However, although our results are in line with prior findings, they support a more general interpretation of this phenomena. The negative firm value effect of powerful family minority blockholder coalitions, appear to hold regardless of the largest blockholder type.

Furthermore, we inquire into the effect of excess voting rights held by minority blockholders. Interestingly, the excess voting rights held by institutional minority blockholders are related to enhanced firm values in our sample. The findings appear in contrast to our fifth hypothesis, and the potential entrenchment effect that may be incurred by blockholders holding a disproportionate number of votes in relation to their capital, as discussed by Claessens et al. (2002). Instead, the results propose another side of the story of the entrenchment effect on institutional minority blockholders when holding excess votes. While other blockholders may experience heightened incentives to expropriate firm values, an interpretation of the results may be that excess votes in the hands of institutional minority blockholder introduce a positive nuance of the entrenchment effect. Cronqvist and Nilsson (2003) discuss how the excess votes held by blockholders may primarily function as a way for owners to attain a high level of vote ownership for fixed level of capital, while not being a direct source of any firm value effect. The same rationale may potentially explain our results. That is, the firm value-enhancing effect, through supporting the ability to contest other blockholders, of the institutional minority blockholders are "leveraged" through holding excess votes.

However, the results are ambiguous regarding the influence of families, as the minority blockholders, as no statistical significance for a value effect was found. This finding is in line with previous research conducted on the controlling shareholder's excess votes by Cronqvist and Nilsson (2003). The authors find no significant value effect of the excess votes held the controlling shareholder in their sample of Swedish firms. Moreover, as previously mentioned, Cronqvist and Nilsson (2003) propose that the value effect of excess votes is operating in an indirect fashion, through allowing owners to gain a high level of votes in the firm but are not directly related to the firm value effect. Instead, it is the total voting rights, allowing for control, that are significantly negatively related to firm value in their sample (Cronqvist & Nilsson, 2003). The same conclusion may apply for our dataset, where family blockholders hold excess votes to a larger degree, as seen

in Table 4. Thus, our results and the significant negative effect of the ratio between the family minority blockholders' cumulative voting rights to the largest shareholder's voting rights, may support this suggestion.

8. Contributions and Further Research

In the concluding chapter of the paper, we summarize the main contributions made by our work while acknowledging its potential limitations. As a final remark, we review our proposals for further research in the field.

8.1 Contributions and Limitations

The findings of this study, based on a panel of 266 publicly listed Swedish firms during 2010 to 2018, contribute to research in several interesting respects. First, we find general indications of the beneficial effect of more equal voting power distribution between the minority blockholders and the largest shareholder, regardless of the largest shareholder identity. The first contribution of our work thus complements previous research. The second contribution made by our study concern the findings on the positive firm value effect of the relative power of institutional minority blockholders, and the positive value effect related to their excess votes. The findings may contribute to nuancing our understanding of the entrenchment effect of blockholdings. While excess votes in the hands of blockholders with diverging interests may be detrimental to firm value, the excess votes may also allow value-enhancing institutional owners to leverage their influence in the firm. As such, the entrenchment effect may potentially also be value-enhancing.

Aside from the contributions made by this study, we want to shed light on the limitations that our work is subject to. First, using our variables we may solely inquire into the observable effect on Tobin's Q. The observable impact would reveal the net effect of the many different influences that may entail from blockholder owners. We are not able to measure the exact effect of firm value expropriation, or the sole value effect stemming from blockholders mitigating agency costs. Thus, the conclusions we draw from our findings are based on the observable net value effect, and not on more detailed measurements.

Next, as previously mentioned, this study solely includes three blockholder classifications, namely *institutional*, *families* and *governmental* shareholders. Assuredly, there are a multitude of other investor types that may carry diverging incentives and characteristics from those included in this study. The omittance of these shareholder types potentially limit our analysis. Yet, we deem that we capture the most pronounced shareholder types, in regard to their characteristics, in corporate governance literature.

Furthermore, insider ownership in the firm could potentially also play a meaningful role in understanding the interconnections between the large shareholders. Insider blockholders potentially hold power in the firm and may influence the principal-principal problem through collusion with certain blockholders, or by resisting blockholder monitoring. This problem lands outside of the scope of this study but could potentially be an interesting dynamic to include in complementary studies.

8.2 Recommendations for Research

In this study, we pool the institutional investors in the sample firms' ownership structures into one category. This allows us to generalize the traits and behaviors of this type of investor into a single group, which is characterized by separation between ownership and administration of the invested capital, a high degree of accountability and transparency to principals, and oftentimes many investments in diverse portfolio companies. However, we suggest that further insights may be derived in a complementary study to ours where the institutional investors are treated as a heterogenous group. In this approach, the institutional investors would be divided into more detailed groups that would allow for a more comprehensive study into institutional shareholders, in the role as minority blockholders. We suggest that an approach where institutional investors are divided into groups based on their relative *pressure-sensitivity* or *pressure-resistance*, based on the categorization by Brickley, Lease and Smith (1988), would be an interesting classification of institutional investors. The topic could potentially be of interest to develop our study on the firm value effect of blockholder power relations, using a more detailed scope. This comprise our first suggestion on further research topics.

Prior research in the field of blockholder ownership and firm value have raised the question whether the observed value effect of blockholder ownership may depend in part on what the blockholders actually *do* in the firm, such as investments made and the returns gained from it, and not solely on their effect on the agency dimension of firms (Cronqvist & Nilsson, 2003). As such, we suggest that a study delving deeper into the operational performance of firms with different ownership constellations would provide an interesting complement to ours. To fully understand how and in some regards, why, firm values are affected by their owners, and the interrelations in between them, the operational dimension may provide interesting insights into the phenomena. There are a multitude of operational measurements that describes a firm in a nuanced manner which could potentially complement our understanding on the workings of firms with minority blockholder owners. This topic comprises our second proposal for further research in the field.

Lastly, we propose that the findings of this thesis would benefit from testing in other regulatory environments such as those that apply for financial sector firms or legislation in other countries. Since the protection of minority shareholder rights may differ between countries (La Porta, Lopez-de-Silanes & Shleifer, 1999), the relationships found through our work may diverge. For instance, in a setting where legislation do well to protect minority shareholder rights, the relative power of the minority blockholders may be heightened. Thus, studies conducted using other contexts and in countries with traditions of corporate governance structures would potentially contribute to our understanding on the complex phenomena of blockholders in the ownership structure of firms.

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Tables

Table 1: Sample Selection

Sample Selection Steps	Firms
Original Sample	365
Exclude: Insiders and Treasury Holdings	13
Companies Remaining	352
% of Original Sample	96.5%
Exclude: Foreign Registered Firms	29
Companies Remaining	323
% of Original Sample	88.5%
Exclude: Financial Sector Firms & Firm with Insufficient Financial Data	57
Final Sample	266
% of Original Sample	73%

Table 1 summarize the sample selection process, from the original sample of 365 firms to the final sample comprising 266 firms.

Table 2: Variable Definitions

Variable	Definition
Dependent Variable	
Tobin's Q	Logarithm of (Market Value of Equity + Book Value of Debt) / Book Value of Total Assets
Return on Assets	Net Income / Book Value of Total Assets
Independent Variables	
MLV	Minority Blockholders' Cumulative Voting Rights / Largest Shareholder's Votes
LSV	Total Voting Rights of the Largest Shareholder in the Firm
MLV x LSV	Interactive Variable between MLV and LSV (MLV multiplied by LSV)
IMLV	Minority Institutional Blockholders' Cumulative Voting Rights / Largest Shareholder's Votes
IMEV	Minority Institutional Blockholders' [Voting Rights / Capital Rights] -1
FMLV	Minority Family Blockholders' Cumulative Voting Rights / Largest Shareholder's Votes
FMEV	Minority Family Blockholders' [Voting Rights / Capital Rights] -1
GMLV	Minority Governmental Blockholders' Cumulative Voting Rights / Largest Shareholder's Votes
GMEV	Minority Governmental Blockholders' [Voting Rights / Capital Rights] -1
Control Variables	
Firm Size (TA)	Logarithm of Book Value of Total Assets
Leverage (LEV)	Book Value of Total Debt / Book Value Total Assets
Sales to Assets (SALESTA)	Sales / Book Value of Total Assets
Dividend Dummy (DD)	Dummy Variable: 1 if Firm Pays Dividends That Year, 0 Otherwise
Asset Tangibility (AT)	Tangible Assets / Book Value of Total Assets

Table 2 summarize the variables used in the study and their definitions

Table 3: Summary Statistics

Variable	Obs.	Mean	Median	Std. Dev.	Min	Max
Dependent Variable						
Tobin's Q	1 781	4.04	1.20	28.52	0.83	753.03
Return on Assets	1 753	3.63%	6.30%	17.83%	-97.92%	85.54%
Independent Variables						
MLV	1 781	0.81	0.65	0.74	0	5.01
LSV	1 781	27.01%	18.03%	17.22%	2.67%	94.55%
IMLV	1 781	0.47	0.24	0.62	0	3.85
FMLV	1 781	0.32	0	0.48	0	2.82
GMLV	1 781	0.01	0	0.08	0	0.96
Firm Characteristics						
Firm Size (mSEK)	1 781	14 333	1 496	42 631	3.3	474 663
Leverage	1 781	0.18	0.15	2.10	0.00	0.97
Sales to Assets	1 781	1.09	1.02	0.73	0	4.47
Dividend (dummy)	1 097	n.a.	n.a.	n.a.	n.a.	n.a.
Asset Tangibility	1 781	0.71	0.72	0.22	0.03	1

Table 3 reports summary statistics for our dependent variables, our independent ownership variables used when considering the minority blockholders as a singular coalition, and firm characteristics. MLV reports the ratio of the minority blockholders' cumulative voting rights to the largest shareholder's voting rights. MEV reports minority blockholders' cumulative excess voting rights. Firm Size is reported in the table as the book value of total assets in thousand SEK. Leverage is reported as the ratio of the book value of total debt to the book value of total assets. Return on Assets is reported as the percentage ratio of net income to the book value of total assets. Sales to Assets is reported as the ratio of Sales to the book value of total assets. Dividend (dummy) is an indicator variable signifying whether the firm paid dividends that year. Asset tangibility is calculated as the ratio of the book value of tangible assets to the book value of total assets.

Table 4: Summary Ownership Statistics per Blockholder Type

	Institutional	Families	Governmental	Total
N, *Largest Shareholder*	690	1069	22	1781
Mean Largest Shareholder Votes	23.68%	29.23%	24.27%	
Median Largest Shareholder Votes	21.49%	25.00%	21.43%	
Std. Dev. Largest Shareholder Votes	15.08%	18.24%	12.23%	
Min Largest Shareholder Votes	2.69%	2.67%	5.13%	
Max Largest Shareholder Votes	81.32%	94.55%	37.29%	
N, *Minority Blockholders*	515	579	14	1108
Mean Minority Shareholder Votes	9.00%	15.39%	0.21%	
Median Minority Shareholder Votes	5.98%	13.40%	0	
Std. Dev. Minority Shareholder Votes	9.96%	8.83%	1.51%	
Min Minority Shareholder Votes	0.86%	1.27%	5.12%	
Max Minority Shareholder Votes	55.33%	41.47%	14.29%	
Mean Excess Minority Shareholder Votes	-0.04	0.21	0.002	
Median Excess Minority Shareholder Votes	0	0	0	
Std. Dev. Excess Minority Shareholder Votes	0.46	1.08	0.05	
Min Excess Minority Shareholder Votes	-2.47	-10.5	-0.41	
Max Excess Minority Shareholder Votes	4.83	18.93	0.98	

Table 4 reports summary ownership statistics per blockholder type. The mean, median, standard deviation, minimum and maximum of the largest shareholder's and the minority blockholders' votes and excess votes are reported

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Table 5: Regression Results

	Set 1 Regressions			Set 2 Regressions		
Explanatory variables	(1) log TQ	(2) log TQ	(3) ROA	(4) log TQ	(5) log TQ	(6) ROA
MLV	0.042 (0.024)	0.096* (0.055)	0.004 (0.021)			
LSV		0.086 (0.219)	-0.615 (0.069)			
MLV x LSV		-0.440 (0.356)	-0.053 (0.0816)			
IMLV				0.146*** (0.039)	0.150*** (0.039)	0.012 (0.009)
FMLV				-0.138** (0.051)	-0.139*** (0.051)	-0.014 (0.015)
GMLV				-0.303 (0.306)	-0.236 (0.273)	0.054 (0.036)
IMEV					0.048* (0.025)	0.017 (0.008)
FMEV					-0.004 (0.009)	0.000 (0.003)
GMEV					0.337* (0.190)	0.080*** (0.025)
TA	-0.130 (0.113)	-0.132 (0.114)	-0.070*** (0.023)	-0.150 (0.112)	-0.150 (0.112)	0.069*** (0.022)
LEV	0.270 (0.218)	0.282 (0.219)	-0.201** (0.084)	0.277 (0.217)	0.280 (0.217)	-0.198** (0.084)
SALESTA	0.209*** (0.077)	0.211*** (0.070)	0.093*** (0.029)	0.189** (0.074)	0.188*** (0.074)	0.091*** (0.029)
DD	0.154*** (0.038)	0.157*** (0.037)	0.041*** (0.089)	0.154** (0.037)	0.153** (0.037)	0.041*** (0.009)
AT	0.550* (0.314)	0.535* (0.314)	0.206*** (0.056)	0.569* (0.309)	0.572* (0.310)	0.214*** (0.057)
Constant	1.382	1.419	-1.187***	1.699	1.699	-1.203***
N	1781	1781	1753	1781	1781	1753
R^2 within	0.163	0.165	0.151	0.189	0.190	0.153
R^2 between	0.048	0.049	0.248	0.083	0.082	0.233
R^2 overall	0.038	0.041	0.195	0.063	0.062	0.187
Wooldridge test	140.38***	138.68***	6106***	138.82***	138.47***	6556**
F-test: fixed effects vs. pooled OLS	28.08***	27.90***	9.21***	28.16***	28.13***	9.06***
Beusch-Pagan test	231.70***	251.51***	725.68***	194.58***	196.07***	726.82***
Hausman-test: fixed vs. random effects	55.52***	55.40***	104.28***	51.44***	48.80***	118.64***

*** p<0.01, ** p<0.05, * p<0.10

Standard errors in parentheses

Table 5 reports estimated regressions generated in Stata. All models shown adopt clustered standard errors at firm level. In the first regression sequence, the aim is to check hypotheses 1 and 2, where MLV is regressed to the natural logarithm of Tobin's Q and ROA. The second regression is expanding on the first regression by introducing the interactive term between the MLV ratio and the largest shareholder. This is done to examine whether the positive effect of equally distributed voting rights among blockholders is pronounced with especially large voting rights held by the largest shareholder. The second set of regressions is used to test hypotheses 3-6, where model 4 tests the effect of the blockholders' identities. Model 5 incorporates the different shareholder's excessive votes to diagnose the entrenchment effect. Lastly, as in Set 1, ROA is used as the independent variable to investigate the effect on accounting measure. All models include the following set of control variables; total asset and leverage logarithm, total asset sales, a dividend dummy equal to 1 is the company's pay dividend and asset tangibility.

Table 6: Correlation Matrix Tobin's Q, Ownership Dispersion

	Tobin's Q	MLV	MEV	TA	LEV	ROA	SALESTA	DD	AT
Tobin's Q	1								
MLV	0.043	1							
MEV	-0.051	-0.470	1						
TA	-0.025	0.734	-0.079	1					
LEV	-0.298	-0.133	0.207	-0.035	1				
ROA	-0.214	-0.055	0.140	0.071	0.366	1			
SALESTA	-0.168	0.029	-0.088	-0.034	-0.062	-0.205	1		
DD	-0.060	-0.001	0.063	0.066	0.430	0.083	0.216	1	
AT	0.028	-0.060	0.066	-0.061	-0.004	-0.106	0.131	-0.061	1

Table 6 reports the pairwise correlation between the variables representing firm ownership dispersion. There is, as expected, a high correlation between the ratio of minority voting rights to the largest shareholder rights and its subcomponents. However, as the correlation does not exceed 0.8 the variables are kept. The low correlation in the remaining variables indicates no serious multicollinearity in the sample.

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Table 7: Correlation Matrix Return on Assets, Ownership Dispersion

	ROA	MLV	MEV	TA	LEV	ROA	SALESTA	DD	AT
ROA	1								
MLV	0.026	1							
MEV	0.032	-0.470	1						
TA	0.006	0.734	-0.079	1					
LEV	0.300	-0.133	0.207	-0.035	1				
ROA	-0.005	-0.055	0.140	0.071	0.366	1			
SALESTA	0.303	0.029	-0.088	-0.034	-0.062	-0.205	1		
DD	0.468	-0.001	0.063	0.066	0.430	0.083	0.216	1	
AT	0.024	-0.060	0.066	-0.061	-0.004	-0.106	0.131	-0.061	1

Table 7 reports the pairwise correlation between the variables representing firm ownership dispersion. There is, as expected, a high correlation between the ratio of minority voting rights to the largest shareholder rights and its subcomponents. However, as the correlation does not exceed 0.8 the variables are kept. The low correlation in the remaining variables indicates no serious multicollinearity in the sample.

Table 8: Correlation Matrix Tobin's Q, Ownership Identities

	Tobin's Q	IMV	FMLV	GMLV	IMEV	FMEV	GMEV	TA	LEV	SALESTA	DD	AT
Tobin's Q	1											
IMLV	0.081	1										
FMLV	−0.017	−0.128	1									
GMLV	−0.133	−0.001	−0.082	1								
IMEV	−0.055	0.055	−0.079	0.002	1							
FMEV	−0.04	−0.043	0.223	−0.025	−0.098	1						
GMEV	−0.016	−0.028	−0.015	0.065	0.023	0	1					
TA	−0.298	0.064	−0.32	0.201	0.24	−0.008	0.108	1				
LEV	−0.214	−0.042	−0.053	0.132	0.017	0.019	0.032	0.366	1			
SALESTA	−0.168	0.045	−0.003	−0.069	−0.061	−0.039	−0.017	−0.062	−0.205	1		
DD	−0.06	0.116	−0.14	−0.072	0.032	−0.006	0.062	0.43	0.083	0.216	1	
AT	0.028	−0.091	0.011	0.09	0.027	−0.003	0.042	−0.004	−0.106	0.131	−0.061	1

Table 8 reports the pairwise correlation between the variables representing the identity of blockholder ownership. Exhibiting visibly low correlation, even within the ownership variables, the table does not indicate any serious multicollinearity in the sample.

Table 9: Correlation Matrix Return on Assets, Ownership Identities

	ROA	IMV	FMLV	GLMV	IMEV	FMEV	GMEV	TA	LEV	SALESTA	DD	AT
ROA	1											
IMLV	0.108	1										
FMLV	−0.098	−0.128	1									
GLMV	−0.011	−0.001	−0.082	1								
IMEV	−0.056	0.055	−0.079	0.002	1							
FMEV	0.018	−0.043	0.223	−0.025	−0.098	1						
GMEV	0.015	−0.028	−0.015	0.065	0.023	0	1					
TA	0.300	0.064	−0.320	0.201	0.240	−0.008	0.108	1				
LEV	−0.005	−0.042	−0.053	0.132	0.017	0.019	0.032	0.366	1			
SALESTA	0.303	0.045	−0.003	−0.069	−0.061	−0.039	−0.017	−0.062	−0.205	1		
DD	0.468	0.116	−0.140	−0.072	0.032	−0.006	0.062	0.430	0.083	0.216	1	
AT	0.024	−0.091	0.011	0.090	0.027	−0.003	0.042	−0.004	−0.106	0.131	−0.061	1

Table 9 reports the pairwise correlation between the variables representing the identity of blockholder ownership. Exhibiting visibly low correlation, even within the ownership variables, the table does not indicate any serious multicollinearity in the sample.

Appendix

Appendix 1: Literature Review

Authors	Year	Purpose of Study	Period	Geographic Area	Database	Sample Size	Variables	Method	Summary of Findings
Attig, El Ghoul & Guedhami	2009	Examines multiple large shareholders structures and the value effect in nine East Asian countries	1996	Hong Kong, Indonesia, Japan, Korea, Malaysia, Philippines, Singapore, Taiwan, and Thailand	Worldscope	1252 firms	Dependent: Tobin's Q. Independent: Multiple large shareholders (>10%) dummy, Number of large shareholders, Voting rights second largest owner, Difference between largest and second largest voting rights, Herfindahl, Cash flow rights largest owner, Excess voting rights. Control variables: Firm size, Sales growth, Leverage, FCF, ROA, Net Margin,	Univariate and multivariate regressions	The results indicate that the presence, number and size of multiple large shareholders are on average associated with a valuation premium in the data sample. The results further indicate that the identity of the blockholders play a role in governance in the firms.
Cronqvist & Nilsson	2003	Analyzes the value effect of controlling minority shareholders on firm values in Swedish firms	1991-1997	Sweden	Swedish Public Shareholder's Register for ownership data. SIX TRUST database for accounting data.	309 firms	Dependent: Tobin's Q. Independent: Blockholder identities dummys, Blockholder Excess Votes ([Voting Rights / Capital Rights]-1). Control Variables: Firm Size, Leverage, ROA, Sales/Assets, CAPEX/Assets, PPE/Assets	Fixed firm effects multivariate regression	Finds a negative relationship between vote ownership by controlling owners and firm values. Agency costs of controlling vote ownership are 6%-25% of firm values for the median firm in the sample. Controlling shareholders that are families are related to the steepest decrease in value
Fattoum-Guedri, Guedri & Delmar	2018	Analyze the distribution of voting power and its relation to firm performance. Also include the number of blockholder types to help explain how voting power distribution relates to performance	1992-2012	France	Ownership data from firm reference documents filed by French financial market authority	413 firms	Dependent: Tobin's Q. Independent: Shapley power index, Blockholder type, Blockholder Type Shapley power index, Number of Blockholder Types. Control Variables: Firm size, Firm age, Leverage, Risk (Equity Beta), Board of Directors characteristics	Fixed firm effects multivariate regression	The study finds empirical support of the hypothesis that asymmertrical distribution of voting rights among family and non-family blockholders is detrimental to firm value/performance, as measured by Tobin's Q
Hamberg, Fagerland & Nilsen	2013	The effect of funding-family on firm value derived from agancy costs and monitoring capabilities	2001-2010	Sweden	Thomson Datastream, SIX database, annual reports	375 firms, 2671 firm-year observations	Dependent: Tobin's Q and Return on Net Operating Assets. Independent: Founding-family owner, non-founding family owners, percentage of founding family ownership, engagement from stakeholder (Board, CEO, CEO and Chairman, CEO and Board, Founding family and no engagement). Control variables: Firm size, Risk, Firm age, Intangible asset intensity, industry and year effects	Pooled cross-sectional regression	The study finds higher Tobin's Q and RNOA correlated with founding family ownership, in line with previous papers. The dependent variables are also found to be higher with more concentrated ownerhsip but reduces with an ownership by long-term non-founding-family ownership

Appendix 1: Literature Review, Cont.

Authors	Year	Purpose of Study	Period	Geographic Area	Database	Sample Size	Variables	Method	Summary of Findings
Jara-Bertin, López-Iturriaga & López-de-Foronda	2008	Aim to analyze the influence of coalition and shareholder activisim on firm value.	1996-2000	France, Spain, Holland, Belgium, Greece, Great Britain, Germany, Austria, Denmark, Sweden, Finland	Compustat, Amadeus	1208 firms	Dependent: Market-to-book ratio. Independent: Ownership of the largest shareholder-to-sum of ownership by the 2nd and 3rd shareholder, dummy if cash flow rights are in the first tercile, Herfindahl index, dummy for family ownership, accumulated ownership, dummy for common law. Control variables: Firm size, Leverage, Dividend payout ratio, Proportion of shares held by directors, Industry dummies, Year effects dummies	Pooled cross-sectional regression	Finding suggests a beneficial firm value effect when the largest shareholder is not a family and contestability between shareholders is strong. Consequently, there is a negative firm value effect if the biggest shareholder is a family. If the second largest shareholder concurrenlty is a family if affects firm value negativly, but the relationship is reversed it the second largest shareholders is an institutional owner. However, this relationship is only true when the largest shareholder holds less than 50% of equity
Konijn, Kräussl & Lucas	2011	Investigate correlation between Tobin's Q and blockholder dispersion	1996-2001	U.S	Compustat & Center for Research in Security Prices (CRSP)	3722 firm-year observations	Dependent: Tobin's Q. Independent: Amihud liquidity measure, Bid-ask spread, Share turnover, GIM, Insider, ESOP, Outsider, Herfindahl index, Gini index.Control variables: ROA, Leverage, Asset tangibility, Firm size, Delaware incorp.	Fixed firm effects multivariate regression	The study finds a negative correlation between firm value and blockholder dispersion, and between firm value and presence and total ownership stake of blockholders. The results indicate support for the theory that blockholder dispersion is detrimental to firm value
Laeven & Levine	2008	Examines valuations of firms with complex ownership structures, and compare firms with multiple large shareholders to those with a single or no large shareholders	2000	Austria, Belgium, Finland, France, Germany, Ireland, Italy, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom	Ownership data from Faccio and Lang (2002). Financial data from Worldscope	1657 firms	Dependent: Tobin's Q. Independent: Control rights largest owner, Control rights second largest owner, Cash flow rights largest owner, Cash flow rights second largest owner, Control and cash flow rights dispersion between largest and second largest owner. Control variables: Sales growth, Firm size, Asset tangibility, Investment ratio, Leverage.	Multivariate regressions	Finds a strongly negative relationship between firm Tobin's Q and dispersion of cash-flow rights among blockholders. The negative relationship becomes more pronounced when the largest blockholders are of different types.
Lehmann & Weigand	2000	Examines the relation between firm performance and forms of corporate governance, among them ownership dispersion	1991-1996	Germany	Three data sources: the databank Hoppenstedt Bilanzdatenbank, the gazette Bundesanzeiger and corporate reports	361	Dependent: ROA. Independent: Herfindahl index, Largest shareholder stake, Management Board Representation dummy. Control variables: Sales, Number of Employees, Firm size (Assets), Sales growth, Capital Intensity, Capital Structure, Market Concentration	Panel regression	Finds that ownership concentration is negatively related to firm performance in the sample used. Also finds indications that firms with institutional owners as their largest owner exhibit better performance

Appendix 1: Literature Review, Cont.

Authors	Year	Purpose of Study	Period	Geographic Area	Database	Sample Size	Variables	Method	Summary of Findings
Maury & Pajuste	2005	Investigates the value effects of vote distributions among large shareholders	1993-2000	Finland	Yearbook: Po¨rssitieto for ownership data. Datastream for financial data	136 firms, 804 firm-year observations	Dependent: Tobin's Q. Independent: Voting rights largest shareholder, VR 2nd largest shareholder, VR 3rd largest shareholder, Capital rights largest shareholder, CR 2nd largest shareholder, CR 3rd largest shareholder, Herfindahl index, Contenstability dummy. Control variables: ROA, Leverage, Sales growth, Asset tangiblity, Firm size, industry dummies.	OLS Regression	The results indicate a positive value effect of a more equal distribution of votes among blockholders. This suggest that value may be enhanced when blockholders monitor each other. The relationship between value and the number of blockholders is also affected by the identity of the blockholders
Thomsen, Pedersen & Kvist	2006	Examines relation between corporate valuations and blockholder ownership using a novel way to measure ownership concentration	1990-1998	US and Continental Europe	Worldscope	863 firms, of which 587 Anglo-American firms and 276 firms from Continental Europe	Dependent: Tobin's Q, ROA Independent: Granger test for Block Ownership. Control Variables: Sales change, Sales/Asset change, Equity/Assets change, System [Control/Market-based]	OLS Regression	The results indicate no significant relationship between blockholder ownership and firm values in the US, but a negative relation in Continental Europe. The results are primarily significant for firms with a high level of blockholder ownership