



Ownership Concentration and its Effects on Firm Performance: A Study of the Finnish Corporate Sector

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Abstract

Since Berle and Means (1932) ownership structure and ownership concentration are viewed as an important influence on firm performance. It also has close linkages to the agency theory which is an immensely important financial principle. Empirical evidence on the topic is controversial with different researchers finding positive, negative, or no effects of ownership concentration on firm performance. Despite Finland having interesting characteristics as a case country, evidence from Finland is rare. What makes Finland stand out as a case country are its Nordic corporate governance model, its comparatively high ownership concentration, and its high state ownership. The goal of the underlying research was to give additional empirical evidence to the controversial topic of ownership concentration from a relatively unexplored case country Finland. Additionally, the hope was to find relations and rules that the findings follow to give a more streamlined explanation of the effect of ownership concentration on firm performance.

With a quantitative, longitudinal research approach, secondary data was gathered from all companies listed in the NASDAQ Helsinki. The timeframe for this research was the financial years from 2018 to 2021. Financial institutions and incomplete data sets were excluded from the analysis. EPS, ROA, and Tobin's Q were used to describe firm performance. The percentage of monetary ownership and voting rights of the biggest and second-biggest owners (separately and combined), as well as the amount of all ten percent owners, were used as ownership concentration proxies. The data was analysed via SPSS statistical software. Descriptive statistics, pairwise correlation analysis, and OLS regression analysis are used.

The analysis found that the monetary ownership of the biggest owner has a negative impact on EPS and ROA but a positive impact on Tobin's Q. The findings were inverted for the percentage of voting rights. The second biggest owner generally did not have an effect on firm performance.

Keywords/tags (subjects)

Ownership concentration, Ownership structure, Firm performance, Agency cost, Finland

Miscellaneous (Confidential information)

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1 Introduction

Since Berle and Means (1932) ownership structure and ownership concentration (or “OC” hereafter) is viewed as an important influence on firm performance. Currently, the effects of ownership concentration are mostly seen as positive but empirical data is controversial. While Berle and Means state that OC has a positive effect on firm performance since strong owners can reduce agency cost, other important literature on the topic states different outcomes. Another strongly influential paper on the topic is done by Demsetz (1983) who states there should be no effect of OC on firm performance since all investors should strive to maximize profits of their investments. Demsetz later publishes a study in which empirical evidence supports his theory. Contrary to these findings, multiple studies find negative effects of OC on firm performance. Some of these studies find negative effects in the UK (Gogineni, 2020), and in Finland (Keinonen, 2021; Khan, 2021). Researchers speculate that the negative impact stems from large blockholders being able to gain personal benefits of their control over the company. Since OC can have a substantial impact on firm performance it is immensely important to fully understand its effect for, for example, market analyses or investment decisions. For this, the following core questions are identified:

1. How do the biggest and second biggest owners, and their interaction affect firm performance?
2. How do state ownership and institutional ownership affect firm performance?

To find answers to these questions, the effect of ownership of large blockholders and the amount of voting rights of large blockholders on EPS, ROA, and Tobin’s Q of companies listed on the NASDAQ Helsinki from 2018-2021 are analysed in this thesis. It is found that the higher the monetary ownership of the largest owner the worse firm's performance. On the other hand, the higher the voting rights of the biggest owner the better the firm performance. The findings are inverted for Tobin’s Q. Additionally, the second biggest owner is found to generally not have a significant impact on firm performance. The identity of owners only impact EPS significantly. Namely, institutional owners effect the proxy negatively while state ownership has a positive effect. Apart from giving empirical evidence on the topic, this research gives insight into how ownership and voting power affect firm performance differently.

Finland as a case country is unique because of the Nordic corporate governance model, the generally high OC, and the high percentage of state ownership. This research aims to shine a light on the

rather unexplored topic of the effect of OC on firm performance in Finland by giving additional empirical evidence.

Firstly, key literature on the topic is reviewed and hypotheses are made. Following this chapter, this thesis's methodology is explained and finally findings are discussed.

2 Literature Review

Below, the theoretical literature used in this research is reviewed. This section is followed by empirical studies of OC in different markets including global, German, Japanese and Anglo-American studies.

2.1 Theoretical Literature Review

The financial concepts and theories that lay the foundation for this thesis are ownership structure, ownership concentration and the agency theory. In the following this research reviews important literature explaining these concepts and how they are interlinked. Additionally, the firm performance indicators and why they were used are elucidated and finally hypotheses are made.

Ownership structure and the agency theory have close linkages. For that reason, to understand the effects of OC one needs to understand the agency theory. As Mitnick (1973) and Ross (1973) discuss, the agency theory describes that when a person or entity acts on behalf of another person/entity a conflict of interest arises which leads to costs. In case of the framework of the modern corporation these costs stem from the separation of ownership and management. In detail, managers are not as incentivized to work for the interest of the company as owners because their return is not as high as the owners because of the degree to which owners are invested. Jensen and Meckling (1976) separate agency cost into three types. Monitoring costs, bonding costs, and residual loss. Monitoring costs are the resources it takes for the owners to monitor managerial actions. These costs arise because owners need to ensure management follows their given tasks according to the owner's vision. Additional to agency costs, monitoring has shown to influence managerial initiative negatively. Additional monitoring interferes with managerial activity and makes the decision-making process more rigid (Burkart et al. 1997). Bonding costs are defined as the resources it takes to establish trust between the owners and management of a company. For exam-

ple, management's efforts of providing financial statements to the owners. Residual loss is the final cost of opportunistic managerial behaviour. In conclusion, resources are invested into monitoring and bonding to reduce residual loss. This form of agency cost is called "vertical agency cost" since the costs arise from disparities in the hierarchy of a company vertically. Another form of agency cost is horizontal agency cost. Horizontal agency cost is defined as the conflict of interest between shareholders of a company. The conflict of interest might be especially high between majority and minority shareholders. Majority shareholders tend to be invested in a company for a long time and therefore strive for long term profits. The interest of minority shareholders might lie in short-term profits. Since the majority shareholders have more control over the decision-making of the company this can lead to them exercising private benefits of control. This form of agency cost is directly affected by ownership structure and can be a big factor in the impact of OC on firm performance (Gogineni et al. 2020). Since this research focuses on the effect of ownership structure on company's performance, horizontal agency cost is immensely important and plays a bigger role than vertical agency cost in this research.

While the agency theory was concretized by Mitnick and Ross in 1973 the steppingstones for it were laid by Berle and Means in 1932. The authors state that separation of ownership and management leads to disperse ownership and creates an unfair shift in the risk-to-return ratio since investors bare the risk for the company while management holds the power over it. Furthermore, this effect becomes stronger the more dispersed a company is owned because the lower the stakes of shareholders the lower the voting power they have over a company. This leads to high agency costs and affects firm performance. On the contrary, concentrated owners have more power over management and therefore lower agency costs.

The milestone work of Berle and Means stood straight for over 50 years and is the starting point for most research on ownership concentration. It was Demsetz (1983) who argued that no matter the OC, owners always thrive to maximize the profitability of their investment and therefore automatically choose the most fitting management for a company. Demsetz later underlines his theory with empirical evidence. Demsetz & Lehn (1985) and Demsetz & Villalonga (2001) find that there is no significant effect of OC on firm performance.

Since Demsetz, OC is the topic of much research, but empirical evidence shows inconsistent results. Looking at the ten best-performing shares in 2020, most companies have shareholders with stakes of at least 5% (considered blockholder in the USA) (statista.com, 2022). Several studies find a positive effect of OC on firm performance (e.g., Claessens & Djankov 1999; Hu & Izumida 2008; Alimehmeti & Paletta 2012) however there are other studies which, on the contrary, find negative effects (Filatotchev et al. 2001; Gogineni et al. 2020; Khan 2021; Keinonen 2021) and also no effects (e.g., Demsetz & Lehn 1985; Bhaumik & Selarka 2012; Keinonen 2021) on firm performance. While research outcomes are often different there have been certain similarities. Researchers find that the effect of OC on firm performance varies depending on the identity of the owners. For example, state blockholders and financial institutional blockholders have a negative effect on firm performance while family or institutional owners affect firm performance positively (Keinonen 2021; Laporsek et al. 2020). Research also finds a relationship between OC and corporate governance. Countries with the “Anglo-American Corporate Model” commonly have lower OC than countries that adopted the German or Nordic corporate governance model (Lekvall, 2014). While OC is defined as the percentage of large-blockholders compared to the total of shareholders there is no “one-size-fits-all” solution of measuring it. OC variables can for example be “size of largest shareholder” on one side and “amount of total shareholders of at least 5% of total shares” on the other, and everything between. Based on the measure used, results have shown to vary.

To ensure that the board of directors acts unbiased, the corporate governance code of Finland states, that the majority of board members shall be independent (Finnish Corporate Governance Code, 2020). Research on the effects of board independence on firm performance shows inconsistent results. For example, a study in India showed that board independence did not result in better firm performance (Garg, 2007). On the other hand, a study in China shows a positive correlation between board independence and firm performance (Liu et. al., 2015).

2.2 Firm Performance

The general goal of a company is to generate profit. This basic assumption lays the foundation of our economic system and the laws and theories derived from it (Boren, 2020). For example, Demsetz (1983) formulates his theory of OC not having an effect on firm performance on the assumption that shareholders, no matter the size, work towards maximizing their investment leading to maximal firm performance.

But firm performance is complex. It is defined as “the company’s ability to manage and control its resources” (Fatihundin et. al. 2018). To identify this ability, one must look at a company’s financial report which states all business activities of a company during a certain period of time. Once this data is gathered, calculations can be made which are most commonly called “financial ratios”. These ratios compare financial data and draw conclusions from the results. Financial ratios can be divided into five categories. Liquidity ratios, Leverage ratios, Turnover ratios, Profitability ratios, and Valuation ratios (Boren, 2020). Liquidity, leverage and turnover ratios focus on the financial stability and “healthiness” of a company, while profitability ratios show a company’s ability to generate profit and valuation ratios show how well a company performs in its market. This thesis uses profitability and valuation ratios as firm performance indicators. Additionally, external market factors can affect firm performance.

Namely, the three performance indicators used are earnings per share (EPS), return on assets (ROA) and finally Tobin’s Q.

ROA is calculated by dividing a company’s net income by its average total assets. It is a commonly used profitability measure (Alimehmeti and Paletta, 2012; Laporsek et al., 2020; Hu and Izumida, 2008; Keinonen, 2021) and it is the ratio of how much profit a company can generate per euro of asset it owns. It shows investors and analysts how efficiently a company uses its resources to generate profit. A drawback of this proxy is that certain industries have generally higher or lower ROAs. For example, manufacturing companies require more physical resources than software engineering companies and therefore might have lower ROAs.

EPS is calculated by dividing the net income of a company by its average outstanding shares. A high EPS shows investors and analysts that a company is financially strong. Additionally, an EPS with low fluctuation might be attractive for investors since it means stable paybacks for their investments. Since this research discusses the effect of ownership structure on firm performance, EPS is used as a firm performance indicator because it shows how the profit of a company is paid forward to its investors or owners. Also, it is an important and frequently used indicator of firm performance in accounting.

Tobin's Q is calculated by dividing a company's market value by its book value. This indicator is frequently used in the literature concerning OC (Gugler et al., 2008; Grosfeld, 2006; Hu and Izumida, 2008; Keinonen, 2021; Khan, 2021). By comparing a company's market value to its intrinsic value, Tobin's Q shows how the market perceives a company. A high Q-ratio would mean that a company is valued higher than its total assets. A low Q-ratio would mean the company is valued lower than its total assets. This firm performance variable is employed to show how the market perceives different ownership concentrations and to find out how OC affects firm market valuation.

2.3 Empirical Literature Review

For an overview of OC research, articles with case countries from around the world and with different corporate governance models were reviewed. The review starts with a global research, followed by the German model, followed by the Anglo-American model, and finally the Japanese model.

Gugler et al. (2008) analyse the effects of OC on firm performance with vast data from around the world. With data from 3614 US firms, 1560 firms of English-origin countries (not USA), and 1730 firms in Continental Europe it is the research with the widest data in this thesis's literature review. Their approach was to separate positive and negative effects of OC on firms to give a clearer picture of the topic. In the end, they combined positive and negative effects to calculate the actual effect. They find that firm value in US firms increases to the point that OC reaches sixty percent. In Anglo-Saxon countries, this effect was true to about forty-five percent, and in civil law countries to forty percent. They measure firm performance with Tobin's Q and "marginal Q".

Claessens and Djankov (1999) analyse the effect of OC on firm performance in the Czech Republic from 1992-1997. During this time the Czech Republic launched a mass privatization program that took place between 1992 and 1994. 1849 Czech companies participated. This setting gives a unique inside on the topic because of the sudden change in the ownership structure of firms. Firm performance proxies are "profitability" which is defined as "gross operating profit over net fixed assets plus inventory" and "labour productivity" which is defined as "value-added per employee". As the OC indicator the equity of the top five owners combined was used. The results show that OC has a positive impact on both, performance, and labour productivity. Companies with OC

above fifty percent had a thirty percent higher labour productivity in 1996 and show similar trends with the profitability variable.

Alimehmeti and Paletta (2012) research the effect of OC on firm value in Italy. They collected data from all firms in Italy from 2006-2009. They chose this time span to analyse if negative markets change the effect of OC on firms. They find a positive correlation between OC and return on assets (ROA). They state, "for each percentage point increasing in ownership concentration, firms have a better performance of 0.0581 (measured by ROA)". They assume this relationship to be linear which means at 100% OC, firm performance would only increase by 5.81%. During the financial crisis in 2008, they found the effect to be insignificant. This suggests that expropriation effects were stronger during the financial crisis. Other research shows that the effect of OC on firm performance is nonlinear (Gugler et al. 2008), which opens the questions if the assumption for the effect to be linear is correct.

A study by Irena Grosfeld (2006) studies the effect of OC on firm performance in Poland. Grosfeld collects data from companies listed in the Warsaw stock exchange excluding financial institutions. Grosfeld measures OC as the amount of voting rights owned by the largest shareholder and firm performance as Tobin's Q. Grosfeld finds a positive impact of OC on firm performance, especially after controlling for endogeneity. Her findings also support a hypotheses that firms in the technology sector have a more dispersed ownership structure than other sectors and that OC declines the older a company gets. Her findings align with those of Claessens and Djankov (1999).

In Slovenia, the relation between OC and firm performance is studied by Laporsek et al. (2020). The authors compare the performance of state-owned companies to privately owned companies. The data set consists of all Slovenian joint stock companies from 2005-2017. In their analysis, Laporsek et al. use ROE, ROA, and ROS as performance proxies and the Herfindahl index, ownership share of the biggest owner, and cumulated ownership of the five biggest owners as OC proxies. The findings show that there is no significant correlation between OC and firm performance. The authors conclude that "we do not observe an agency problem in Slovenia". To compare state- and private-owned companies they use three owner categories which are privately owned firms, firms with minority state ownership, and firms with majority state ownership. The authors find that state ownership has a negative impact on firm performance which aligns with other research. It

needs to be kept in mind that instead of agency problems being none existent in Slovenia, it could be possible that monitoring benefits of majority shareholders are equal to the costs of personal benefits of control.

Earle et al. (2003) study OC and its effect on firm performance in Hungary. Data was collected from firms listed on the Budapest stock exchange from 1996 to 2000. They use four OC measures which are the shareholdings of the biggest blockholder, summed shareholdings of the biggest and second biggest blockholder, and summed shareholdings of the biggest three blockholders. Finally, they use the sum of all shareholders that own at least 5% of the company. Profitability measures are ROE and OE (Operating Efficiency, which is defined as sales to the average number of employees). Results of this study show that OC has a positive effect on firm performance. It is important to note that the effect is significantly higher using only the biggest shareholder as a measure and declines the more blockholders are added to the model. This research is contradictory to findings from Gogineni et al. (2020) who found that second largest shareholders add value to the company and owners with more than 50% voting rights decrease firm performance in the U.K. but aligns with research from Europe. A reason for this might be differences in corporate governance. In this study, OC variables are rather similar. The authors state that the sum of the three largest blockholders and the sum of all holders of 5% or more is almost identical.

Research by Rubin (2006) is conducted to find out how OC affects the liquidity of a company. The background to this research was two contradictory hypotheses. The “adverse selection hypothesis” states that “when informed shareholders possess superior information compared to outside shareholders, an information asymmetry arises, which reduces liquidity”. On the other hand, the “trading hypothesis” states that “when investors turnover their portfolio more often, transaction costs are reduced, which increases liquidity” (Rubin 2006). Data was collected from the top 2000 firms by asset value in the U.S. from December 1998. Firms with multi-class shares were excluded. OC was measured by insider blockholdings and institutional blockholdings. Liquidity is measured by ten different proxies measuring volume and turnover, quoted spreads and depths, and effective spread and price impact measures. Rubin finds that liquidity is positively affected by total institutional ownings but negatively affected by total institution blockholdings.

Holderness (2006) studies the ownership structure of firms in the U.S. He argues that empirical research on ownership structure in the US focuses on insider ownership but not ownership as a whole. Holderness states that different types of companies have different ownership structures. He suggests that the companies that data is collected from should be chosen at random to get a true average of ownership concentration. Data on US firms is collected from the "1995 disk of Compact Disclosure". From this source, 428 companies are chosen at random. Data of none US firms is collected from thirteen European and nine East-Asian countries. He compares the firms by using the overall holdings of blockholders as well as if the company has blockholders or not. Holderness finds that ninety-six percent of public firms in the U.S. have blockholders and these blockholders aggregate thirty-four percent of stock, on average. In comparison to the data of other countries, this places the U.S. in the middle.

Gogineni et al. (2020) studies vertical and horizontal agency problems in the U.K. They conduct very broad research that includes 42000 U.K. companies. In their analysis, they use three firm performance variables: Sales to assets ratio, operating expenses to sales ratio, and earnings before interest, tax, and depreciation to assets ratio. Their first analysis finds that owner-managed firms perform better than non-owner-managed firms. Furthermore, they find that firms with equally distributed shares perform better. They also calculate which type of agency cost has a bigger impact on firm performance and find that horizontal agency costs are, in general, higher than vertical agency costs but if both agency costs coexist, they amplify their effects.

Calculating the relation between OC and firm performance they have three key findings. Firstly, firms without owners that have majority voting rights perform better than firms with majority owners. Secondly, the second largest shareholder plays a big role in mitigating the negative effects of the majority shareholder. Companies with strong second-largest blockholders perform better than companies without. The more percentage of shares the second-largest blockholder owns the stronger the effect. And lastly, the mitigating effect of having a strong second-largest blockholder is stronger than not having a majority shareholder. Additionally, the authors find that co-ownership (firms being blockholders in other firms) negatively affects firm performance and, in general, privately owned companies have less agency cost than publicly traded companies.

The authors conclude that, based on their analysis, agency costs decrease the U.K. GDP by 5.6% in 2006. This statement is correct when only considering agency cost but incorrect considering the

structure of the modern company has led to immense economic growth. One would need to compare agency costs to economic growth caused by the split of ownership and management to find a true result.

Their results are contrary to findings, for example, by Claessens and Djankov (1999) that find that after the mass privatization program in the Czech Republic firm performance increased.

Yabei Hu and Shigemi Izumida (2008), analyse the effect of OC on firm performance in Japan. They use data from manufacturing firms listed on the first section of the Tokyo stock exchange from 1980 to 2005. Performance variables used are ROA and Tobin's Q. Two variables for OC are used. The sum of the ten largest shareholders and the sum of the five largest shareholders. Both performance variables are positively affected by both OC variables. The authors also test if performance affects OC but do not find the correlation to be significant. Findings align with studies from Earle et al. (2003), Grosfeld (2006) and Claessens and Djankov (1999)

2.4 Evidence from Finland

The Finnish ownership structure in listed firms is, like other Nordic markets, characterized by high ownership concentration. A study by Per Lekvall (2014) compares the ownership structure of Nordic countries to those of the United Kingdom. Lekvall finds that fifty-four percent of Finnish PLCs have at least one owner with more than twenty percent voting rights while only twenty-seven percent of PLCs in the United Kingdom have at least one owner with more than twenty percent voting rights. Additionally, government ownership plays a big role in Finland. Faccio and Lang (2002) compare the government ownership of multiple countries and find that Finland had the highest government ownership in Western Europe with 15.8 percent. (Jakobsson and Korkeamäki, 2015)

Although these unique characteristics of ownership structure in Finnish companies make the country interesting for research, studies on ownership concentration are scarce. Keinonen (2021) studies blockholder effects on Finnish companies in the years 2001 – 2006. He uses Tobin's Q and ROA as main performance variables and finds that the higher the shareholding of the biggest owner the higher the negative effect of OC on Tobin's Q. The effect on ROA on the other hand was insignificant. Keinonen concludes that the Nordic corporate governance model leaves room for majority owners to use their control for personal benefits. For example, minority shareholders can be ex-

cluded from dividend payments should the company perform poorly. He also found a negative relationship between state ownership and firm performance. He concludes that states might follow political goals over maximizing firm performance (Keinonen 2021).

Khan studies the effect of OC on firm performance in Finland from 2017-2020. Data is gathered from 114 non-financial firms listed in the Helsinki stock exchange and, like Keinonen, he uses Tobin's Q as a variable for firm performance. Khan finds that the mere presence of a blockholder has a negative but statistically insignificant effect on firm performance. Furthermore, he investigates the impact of a blockholder owning at least fifty percent of a company and finds a significant negative impact on firm performance. Additionally, he finds a negative and statistically significant impact of an increase in total number of blocks held, cumulative ownership and the Herfindahl Index on Tobin's Q.

Based on the reviewed studies above, the following hypotheses have been formed:

1. *“Ownership concentration in Finnish firms has a negative effect on firm performance.”*
Increased monitoring and bonding costs connected to OC and Demsetz theory that owners find the most suitable ownership structure (and therefore OC shouldn't affect firm performance) lead me to think results will be negative or insignificant. Furthermore, findings in Finland that suggest negative or insignificant effects of OC on firm performance and the structure of the Nordic corporate governance model, which has a weaker minority shareholder protection and seems to leave more space for expropriation effects than other models make this hypothesis the most logical.

2. *“Strong second-largest shareholders have a positive effect on firm performance in Finland”*
Finnish ownership is very concentrated and majority shareholders might gain personal benefits of control. Strong second-largest shareholders might be able to mitigate this effect as mentioned in reviewed literature (Gogineni et al. 2020)

3. *“State ownership negatively affects firm performance in Finland”*
Previous studies show that state ownership can have a negative effect on firm performance (Keinonen, 2021; Laporsek et al. 2020). In Finland, the state plays a big role as blockholder in multiple publicly listed companies. Therefore, a significant negative impact of state ownership on firm performance should be observable.

4. *“Institutional ownership positively affects firm performance in Finland”*

Previous studies show that institutional ownership can have a positive effect on firm performance (Keinonen 2021; Laporsek et al. 2020). In Finland, institutional owners play a big role as blockholders in multiple publicly listed companies. Therefore, a significant positive impact of institutional ownership on firm performance should be observable.

3 Methodology

This study's methodology is a longitudinal, quantitative research. Throughout the research the philosophical stance of positivism is held.

This research follows previous literature on the topic and bases its hypotheses on those. Therefore, the research approach is deductive.

In contrast to cross-sectional research, longitudinal research analyses data across a certain period. It coheres to use this research approach since financial performance over a long period of time gives better insight on the topic than the performance of a single point in time (Patteri, 2022).

In the assumption that reviewed literature aims to understand the true effect of OC on firm performance, the philosophy of positivism is held in this research. Positivism in research holds that reality is same to everyone and things that exist are measurable facts (Donaldson, 1997). Additionally, the extreme positivists stance holds that all research that uses the philosophy of positivism analyse said facts using real data with the aim of finding correlations and relationships to form theories and laws (Patteri 2022).

Collecting and analysing a large amount of financial data is in line with the deductive approach of this research and the positivists' philosophy. Therefore, the quantitative research approach is used.

3.1 Data

Generally speaking, research data can be divided into two categories, primary and secondary data. Primary data refers to data that is collected firsthand by the researcher. Tools for collecting this form of data can be interviews, insider data, surveys, or questionnaires. Primary data is useful in

research since the researcher doesn't rely on external sources that, for one, might not align with the research questions and also, might not be correct. The downsides of primary data are that gathering the data can be time and resource consuming (Boren, 2020). Therefore, primary data is best used for qualitative research.

Secondary data has already been collected in previous studies but can be used by other researchers to find answers to their research questions. Secondary data can be divided into two categories. The first category is insider data. Insider data is data that is released directly from the source that is to be researched. This data is to be viewed with a grain of salt since the publisher of the data might want to be seen in a favourable light (Boren, 2020).

As the name suggests, external data is collected by external entities. External data includes financial statements, patents, government sources, etc. Oppositely to the benefits of primary data, secondary data might not align perfectly with the research questions. Additionally, when using secondary data, one needs to rely on the correctness of it. The benefits of secondary data are that it takes comparatively fewer resources to gather than primary data and the data pool is vast (Boren, 2020). Because of these reasons secondary data fits quantitative research well and is used for this thesis.

The data pool consists of all companies listed on the Helsinki stock and covers a four-year period from 2018-2021. Financial institutions and incomplete data sets are excluded. The accounting data is derived from annual reports, cash flow statements and balance sheets. The ownership data stems from annual reports and websites of the companies. The time span of four years was chosen because it is a long enough period to show functional results and data for this time span is easily accessible.

3.2 Description of Variables

In the data analysis process, three dependent, nine independent, and three control variables are employed. Furthermore, the independent variables can be broken down into four categories: percentage of monetary ownership, percentage of voting rights, number of blockholders, and identity of owners. The following table describes said variables, stating their name, label, and definition/formula. Additional variables used are " α " as the intercept variable, and " e " as the error term.

Table 1: Description of Variables

Name	Label	Defintion
Firm Performance Variables (Dependent Variables)		
Basic EPS	Y1	Net Profit / Total Shares Outstanding
ROA	Y2	Net Profit / Book Value of Assets
Tobin's Q	Y3	(Average share price x total outstanding shares)/total assets
OC Variables (Independent Variables)		
Percentage of monetary ownership		
% of biggest owner	Xi1	Share ownership of biggest owner / Total share ownership
%of second biggest owner	Xi2	Share ownership of second-biggest owner / Total share ownership
% of two biggest owners	Xi3	Share ownership of biggest and second-biggest owner / Total share ownership
Percentage of voting rights		
% voting rights biggest owner	Xi4	Voting rights of biggest owner / Total voting rights
% voting rights second biggest owner	Xi5	Voting rights of second-biggest owner / Total voting rights
% voting rights biggest and second biggest owner	Xi6	Voting rights of biggest and second-biggest owner / Total voting rights
Number of blockholders		
Number of all 10% owners	Xi7	Number of all 10% owners
Identity of owners		
%of Institutional owners	Xi8	Institutional ownership / Total ownership
% of State ownership	Xi9	State ownership / Total ownership
Control Variables		
% of Board independence	Xj1	Non managerial board members / total board members
MangCommit1	Xj2	Yearly R&D expenses / total assets
MangCommit2	Xj3	Intangible assets /total assets

3.3 Empirical Analysis Model

To determine the effect of OC on firm performance, the following empirical analysis model was chosen:

$$y_{1-3} = \alpha + \beta_{i1-i9} \sum x_{i1-i9} + \beta_{j1-j4} \sum x_{j1-j3} + e$$

To ensure data validity multiple actions are taken. Firstly, multiple reviewed studies use Tobin's Q as their only firm performance variable. While this proxy is an excellent indicator for market-firm performance, focusing only on Tobin's Q might not give accurate data on a company's intrinsic value. For this reason, three performance variables were used that include both, market, and accounting performance indicators.

Similarly, the outcome of the study could be strongly affected by one's definition of OC. OC variables are on two spectrums. The size of large blockholders and the number of large block holders. To get a general overview of the effect of OC, multiple variables from both spectrums are employed.

Another reason why multiple OC variables are employed is that reviewed literature shows that second largest blockholders might mitigate the effects of largest blockholders. To examine this effect further, the largest and second largest blockholders are examined separately and combined. This brings up another question. Using the largest and second-largest blockholders separately and together in one regression model might lead to multicollinearity. To solve this, two regressions for each dependent variable are made. One which excludes variables "x3" and "x6" and the second one, which excludes variables "x1", "x2", "x4", and "x5".

And finally, pure monetary ownership might have a different effect on firm performance than the percentage of voting rights of a large blockholder. In Finland, disparities in ownership and voting rights come from multi-class shares in several companies listed in the NASDAQ Helsinki. Therefore, separate variables for ownership and voting rights are taken into account. The variable "number of all 10% owners is employed since owners with more than 10% ownership can call an extraordinary shareholders meeting (Keinonen 2021).

4 Results

The expected results of the descriptive statistics are comparatively low firm performance indicators. This expectation stems from the fact that the Covid 19 pandemic affected the stock market negatively during the reviewed time period. The independent variables are expected to be high since Nordic countries have a general high OC. The analysis of the descriptive statistics table confirmed these expectations.

The correlation analysis shows that correlations between the dependent and independent variables are generally minor or insignificant. On the other hand, the intercorrelation of the independent variables is generally significant with a moderate to high correlation.

Out of twentyseven coefficients in the regression analysis, thirteen are statistically significant. Significant findings are equally divided with five significant findings in relation to EPS, four in relation to ROA, and four in relation to Tobin's Q.

The following chapter will state the findings of each analysis in detail.

4.1 Descriptive Statistics

The following table displays the descriptive statistics of all variables used in this study. The table's structure shows the dependent variables first, followed by the independent variables and finally the control variables. The rows of the table shows the number of observations, mean and median of the variables, the variance and range and finally minimum and maximum variables. It has to be noted that apart from the dependent variables all minimum observations are zero. This is because missing variables were substituted with zero.

Starting with the firm performance variables, the table shows that EPS is observed 371 times. The minimum is -5.6 while the maximum is 3.45. Therefore, the variable has a range of 9.05. Additionally, the mean is 0.33. ROA is observed 466 times. The minimum is -0.54 while the maximum is 0.46. Therefore, the range is 1.01. Additionally, the mean is 0.04. The number of observations of the final performance indicator Tobin's Q is 458. The minimum is 0.25 while the maximum is 2.15. Therefore, the range is 1.9. Additionally, the mean is 0.85.

The independent variable “percentage of biggest owner” has 472 observations, a maximum of 74.04 percent and a mean of 18.93 percent. The percentage of the second-biggest owner has 472 observations. The highest being 30.48 percent and the mean being 8.04 percent. The percentage of the two biggest owners has 472 observations with the maximum being 80.26%. The mean is 26.98 percent. The voting rights of the biggest owner have 472 observations with the maximum being 74.04 percent, which is identical to the maximum monetary ownership. The mean of this variable’s observations is 20.45 percent. The voting rights of the second biggest owner have 472 observations. The highest observation being 56.47 percent and the mean being 8.89 percent. The voting rights of the biggest and second biggest owner combined have 472 observations also. The maximum being 85.98 percent and the mean being 29.34 percent. The number of all 10 percent owners has 471 observations. The highest observation is five while the mean is 1.25. Concerning ownership identity, the percentage of institutional ownership has 442 observations. The maximum being 89.63 percent and the mean being 15.21 percent. state ownership is observed 422 times. The maximum is 67.65 percent, and the mean is 7.71%.

Table 2: Descriptive Statistics

	N	Mean	Median	Variance	Range	Minimum	Maximum
Y1	371	0.3274	0.2000	0.842	9.05	-5.60	3.45
Y2	466	0.043764	0.052727	0.012	1.0067	-0.5432	0.4635
Y3	458	0.8478	0.8432	0.050	1.90	0.25	2.15
X1	472	18.9329	15.3000	235.043	74.04	0.00	74.04
X2	472	8.0421	7.5900	40.936	30.48	0.00	30.48
X3	472	26.9756	25.5050	353.575	80.26	0.00	80.26
X4	472	20.4505	16.0200	300.771	74.04	0.00	74.04
X5	472	8.8895	7.8500	77.361	56.47	0.00	56.47
X6	472	29.3400	25.9400	463.596	85.98	0.00	85.98
X7	471	1.2548	1.0000	1.024	5.00	0.00	5.00
X8	442	15.2082	7.1000	350.382	89.63	0.00	89.63
X9	422	7.7078	4.8100	107.708	67.65	0.00	67.65
Xj1	447	74.6098	100.0000	1365.262	100.00	0.00	100.00
Xj2	334	0.030268	0.007730	0.003	0.3647	0.0000	0.3647
Xj3	461	49.446958	0.052297	1123399.482	22757.2164	0.0000	22757.2164

4.2 Correlation Analysis

The following table shows the correlation analysis of variables used in this study. The variables are listed in order of hierarchy, starting with the dependent variables, followed by the independent variables, and finally control variables. Every correlation with a significance level of 90% or higher is considered valid. The correlation analysis excludes independent variables X_{i3} and X_{i6} since they are the additions of variables X_{i1} and X_{i2} , and X_{i4} and X_{i5} .

Starting with the intercorrelation of the dependent variables, EPS has a strong positive correlation with ROA but an insignificant correlation with Tobin's Q. ROA and Tobin's Q have a negative correlation. The correlation is minor but significant. The intercorrelation of monetary ownership of the biggest and second biggest owners shows a positive correlation. The correlation is significant. Similarly, the intercorrelation of the percentage of voting rights of the biggest and second-biggest owner show a positive correlation. The correlation is small to moderate and significant. Generally, the correlations of all OC variables are moderate to high and significant.

Looking at the results for the correlation between dependent and independent variables, EPS shows a significant correlation only with the percentage of voting rights of the second-biggest owner, the number of ten percent owners, and the percentage of institutional ownership. The correlation in all significant categories was positive but minor. ROA correlates significantly only with the percentage of the biggest owner and the percentage of state ownership. The correlation with the percentage of the biggest owner is negative but minor. The correlation with the percentage of state ownership is positive but minor. Tobin's Q correlates significantly with the percentage of the biggest owner, the percentage of the second-biggest owner, and the percentage of voting rights of the biggest owner. Each correlation is minor, whereas the correlation with the percentage of ownership and voting rights of the biggest owner is negative. The correlation between Tobin's Q and the percentage of ownership of the second biggest owner is positive. Other than EPS and ROA, Tobin's Q doesn't show a correlation with the identity of owners.

Table 3: Correlation Analysis

		Y1	Y2	Y3	Xi1	Xi2	Xi4	Xi5	Xi7	Xi8	Xi9	Xj1	Xj2	Xj3
Y1	P. Corr.	1	,531**	-0.075	0.059	0.083	0.083	0.092	0.091	-0.038	,176**	,145**	-0.11	-0.019
	Sig.		0	0.157	0.26	0.111	0.112	0.075	0.081	0.477	0.001	0.007	0.075	0.715
Y2	P. Corr.	,531**	1	-,118*	-0.077	0	-0.044	-0.048	0.026	-0.073	0.083	,257**	-0.083	-,188**
	Sig.	0		0.011	0.096	0.999	0.343	0.301	0.572	0.127	0.092	0	0.128	0
Y3	P. Corr.	-0.075	-,118*	1	-0.089	0.078	-,142**	0.07	0.005	0.044	0.004	-,217**	-,227**	0.077
	Sig.	0.157	0.011		0.056	0.093	0.002	0.135	0.909	0.359	0.939	0	0	0.101
Xi1	P. Corr.	0.059	-0.077	-0.089	1	,395**	,917**	,318**	,403**	,348**	,295**	,210**	0	-0.059
	Sig.	0.26	0.096	0.056		0	0	0	0	0	0	0	0.999	0.204
Xi2	P. Corr.	0.083	0	0.078	,395**	1	,311**	,825**	,756**	,447**	0.074	,223**	0.086	-0.06
	Sig.	0.111	0.999	0.093	0		0	0	0	0	0.13	0	0.118	0.199
Xi4	P. Corr.	0.083	-0.044	-,142**	,917**	,311**	1	,280**	,350**	,349**	,236**	,212**	-0.04	-0.056
	Sig.	0.112	0.343	0.002	0	0		0	0	0	0	0	0.47	0.226
Xi5	P. Corr.	0.092	-0.048	0.07	,318**	,825**	,280**	1	,646**	,357**	0.02	0.076	0.085	-0.048
	Sig.	0.075	0.301	0.135	0	0	0		0	0	0.686	0.108	0.121	0.304
Xi7	P. Corr.	0.091	0.026	0.005	,403**	,756**	,350**	,646**	1	,432**	,147**	,224**	,145**	-0.059
	Sig.	0.081	0.572	0.909	0	0	0	0		0	0.002	0	0.008	0.205
Xi8	P. Corr.	-0.038	-0.073	0.044	,348**	,447**	,349**	,357**	,432**	1	0.066	,118*	0.027	-0.04
	Sig.	0.477	0.127	0.359	0	0	0	0	0		0.175	0.016	0.64	0.408
Xi9	P. Corr.	,176**	0.083	0.004	,295**	0.074	,236**	0.02	,147**	0.066	1	,283**	-,126*	-0.037
	Sig.	0.001	0.092	0.939	0	0.13	0	0.686	0.002	0.175		0	0.028	0.449
Xj1	P. Corr.	,145**	,257**	-,217**	,210**	,223**	,212**	0.076	,224**	,118*	,283**	1	,247**	-,101*
	Sig.	0.007	0	0	0	0	0	0.108	0	0.016	0		0	0.035
Xj2	P. Corr.	-0.11	-0.083	-,227**	0	0.086	-0.04	0.085	,145**	0.027	-,126*	,247**	1	-0.029
	Sig.	0.075	0.128	0	0.999	0.118	0.47	0.121	0.008	0.64	0.028	0		0.6
Xj3	P. Corr.	-0.019	-,188**	0.077	-0.059	-0.06	-0.056	-0.048	-0.059	-0.04	-0.037	-,101*	-0.029	1
	Sig.	0.715	0	0.101	0.204	0.199	0.226	0.304	0.205	0.408	0.449	0.035	0.6	

** Correlation is significant at the 0.01 level (2-tailed).

* Correlation is significant at the 0.05 level (2-tailed).

4.3 Effect of OC on EPS

In relation to EPS, the percentage of ownership of the single biggest owner has a significant negative impact. The percentage of the second biggest owner is insignificant. The percentage of voting rights of the single biggest owner has a significant positive impact on EPS while the percentage of voting rights of the second biggest owner is insignificant. The number of all owners with ownership of ten percent or more does not have a significant impact on EPS. The identity of owners has a significant effect on EPS. Institutional owners have a negative effect while state ownership's effect is positive.

Table 4: Regression Coefficients EPS 1

Independent Variable	Unstandardized Beta (t-Value)
Xi1	-0.020* (-1.904)
Xi2	0.015 (0.780)
Xi4	0.022** (2.569)
Xi5	0.006 (0.513)
Xi7	-0.007 (-0.072)
Xi8	-0.011** (-2.327)
Xi9	0.016** (2.200)
Xj1	0.004** (2.197)
Xj2	-2.461* (-1.934)
Xj3	-0.000 (-0.011)
Adjusted R-squared	0.099
F-Statistic	3.259
Durbin-Watson	1.879
Number of Observations	371

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

The second regression analysis shows that the effect of the percentage of monetary ownership of the two biggest owners on EPS is insignificant but the percentage of voting rights of the two biggest owners has a significant positive effect.

Table 5: Regression Coefficients EPS 2

Independent Variable	Unstandardized Beta (t-Value)
Xi3	-0.010 (-1.295)
Xi6	0.015** (2.349)
Xi7	0.031 (0.375)
Xi8	-0.008* (-1.936)
Xi9	0.014** (1.996)
Xj1	0.005*** (2.775)
Xj2	-2.684** (-2.131)
Xj3	0.000 (0.004)
Adjusted R-squared	0.098
F-Statistic	3.753
Durbin-Watson	1.895
Number of Observations	371

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

4.4 Effect of OC on ROA

In relation to ROA the impact of the percentage of ownership of the single biggest owner is significant and negative. The percentage of ownership of the second biggest owner is found to be insignificant. The effect of the percentage of voting rights of the single biggest owner is significant and positive while the effect of the percentage of voting rights of the second biggest owner is significant and negative. Additionally, the number of all owners with 10 percent or more, and the identity of the owners all have insignificant effects on ROA.

Table 6: Regression Coefficients ROA 1

Independent Variable	Unstandardized Beta (t-Value)
Xi1	-0.002** (-2.284)
Xi2	0.001 (0.384)
Xi4	0.002* (1.800)
Xi5	-0.002* (-1.669)
Xi7	0.005 (0.540)
Xi8	0.000 (-0.758)
Xi9	0.001 (1.069)
Xj1	0.001*** (4.592)
Xj2	-0.082 (-0.627)
Xj3	-0.000*** (-3.788)
Adjusted R-squared	0.186
F-Statistic	5.792
Durbin-Watson	1.886
Number of Observations	466

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

The second regression analysis shows that the percentage of monetary ownership of the two biggest owners have a significant negative impact on ROA. The percentage of voting rights of the two biggest owners does not show a significant impact on firm performance.

Table 7: Regression Coefficients ROA 2

Independent Variable	Unstandardized Beta (t-Value)
Xi3	-0.001* (-1.631)
Xi6	0.000 (0.541)
Xi7	0.000 (0.008)
Xi8	-0.000 (-0.186)
Xi9	0.001 (1.116)
Xj1	0.001*** (5.312)
Xj2	-0.133 (-1.023)
Xj3	-0.00*** (-3.743)
Adjusted R-squared	0.143
F-Statistic	6.385
Durbin-Watson	1.907
Number of Observations	466

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

4.5 Effect of OC on Tobin's Q

In relation to Tobin's Q, the impact of the percentage of ownership of the single biggest owner is significant and positive. The percentage of ownership of the second biggest owner is insignificant. The amount of voting rights of the biggest owner has a significant negative impact while the amount of voting rights of the second biggest owner is not significant. The effect of the number of all owners with ten percent ownership or more and the identity of owners do not have a significant effect on Tobin's Q.

Table 8: Regression Coefficients Tobin's Q 1

Independent Variable	Unstandardized Beta (t-Value)
X1	0.006*** (2.658)
X2	0.002 (0.515)
X4	-0.007*** (-3.664)
X5	0.001 (0.554)
Xi7	-0.017 (-0.837)
Xi8	0.000 (0.469)
Xi9	0.001 (0.353)
Xj1	-0.001 (-1.488)
Xj2	-0.965*** (-3.267)
Xj3	0.089 (0.601)
Adjusted R-squared	0.100
F-Statistic	3.904
Durbin-Watson	1.961
Number of Observations	458

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

The percentage of monetary ownership of the two biggest owners combined has a significant positive impact on Tobin's Q while the amount of voting rights of the two biggest owners combined has a significant negative impact.

Table 9: Regression Coefficients Tobin's Q 2

Independent Variable	Unstandardized Beta (t-Value)
Xi3	0.004** (2.452)
Xi6	-0.004*** (-3.172)
Xi7	0.006 (0.318)
Xi8	0.000 (0.043)
Xi9	0.000 (0.095)
Xj1	-0.001* (-1.939)
Xj2	-0.855*** (-2.888)
Xj3	0.100 (0.664)
Adjusted R-squared	0.077
F-Statistic	3.652
Durbin-Watson	1.998
Number of Observations	458

*** Correlation is significant at the 0.01 level (2-tailed).

** Correlation is significant at the 0.05 level (2-tailed).

* Correlation is significant at the 0.1 level (2-tailed).

5 Conclusion

Studying the effect of OC on firm performance, the goal of this thesis is to give more empirical evidence on the topic using Finland as a case country. The hope is that the findings show logical patterns that align with previous studies and might show a streamlined effect of OC on firm performance. The findings, in fact, align with many previous studies but also disassociate from others. This leaves space for future studies, discussions, and concluding thoughts.

To reach this goal, four main hypotheses are made. The first hypothesis, *“Ownership concentration in Finnish firms has a negative effect on firm performance”*, was answered as follows:

The biggest owner has a significant effect on all variables. That is the biggest indicator that OC does in fact have an important influence on firm performance.

The effect of OC on firm performance can be split into two categories. In the category “monetary ownership” OC has a negative effect on firm performance for variables EPS and ROA. The effect on Tobin’s Q is positive. In the category “voting rights” OC has a positive effect on EPS and ROA while the effect on Tobin’s Q is negative.

This means the findings are inversed for the category “monetary ownership” and “voting rights”. To discuss the reasoning for this observation one might wonder if high monetary ownership makes decision makers more timid, worrying about what effect their decisions might have on the largest blockholder. The high voting power of one shareholder might lead to more efficient decision-making.

Additionally, the findings for Tobin’s Q are inversed in comparison to EPS and ROA.

Since the effect of a high percentage of voting rights on EPS and ROA are positive for both performance indicators it can be assumed that the effect of OC, in terms of voting rights, on the intrinsic value of a company, is positive. It is possible that this effect might not be displayed proportionally in the firm’s market value, leading to a lower Tobin’s Q. This observation questions the methodology of research articles that rely solely on Tobin’s Q as a performance indicator and show a negative impact of OC since the alleged effect might stem from the above-mentioned phenomenon.

Concerning monetary OC, a possible explanation for the inverted findings is that high monetary OC might be seen as positive by the market but the decision-making of one largest shareholder as negative. This supports the findings of the correlation analysis, which is discussed below.

The second hypothesis is *“Strong second-largest shareholders have a positive effect on firm performance in Finland”*. This is based on the theory that second-largest owners might mitigate the negative effects that a majority blockholder can bring. It is found that the second biggest owner has no significant impact in the category of monetary ownership. In the category of voting rights, only one variable is affected significantly. This might lead one to the conclusion that, in Finland, the second biggest owner does not impact a company's performance much. The same can be said about the number of all ten percent owners since no significant impact of this proxy on firm performance is found.

The effect of the largest and second-largest blockholder combined has a significant influence on firm performance in four out of six categories. In all categories, the effect is the same as that of the biggest owner. Therefore, it is highly plausible that the biggest owner's effect overpowers the

effect of the second biggest owner, and the mitigation effects of the second biggest owner are marginal.

The third and fourth hypotheses question the effect of ownership identity on firm performance. The hypotheses "*State ownership negatively affects firm performance in Finland*" and "*Institutional ownership positively affects firm performance in Finland*" are based on previous research that find the stated effects. This research's observations are inverted to the expectations since it finds that state ownership has a positive effect and institutional ownership has a negative effect on firm performance. Additionally, the effects are significant only for EPS. This gives room for speculation if different types of owners might be more interested in share performance compared to other performance measures.

Additionally to the main hypotheses, other observations are made:

The descriptive statistics show that the average performance indicator is comparatively low. This might be due to the Covid-19 pandemic affecting the stock markets during the observed period. The descriptive statistics concerning the independent variables had an expected outcome. The mean and maximum variables for OC are high and the biggest owner has a significantly higher amount of ownership and voting rights than the second-biggest owners. An interesting observation is that the voting rights of the biggest and second-biggest owners were on average 2.36 percent higher than the monetary ownership. The number of ten percent owners never exceeds 5. With a mean of 1.2 most companies listed on the NASDAQ Helsinki only have one ten percent owner.

Furthermore, the descriptive statistics of ownership identity show that institutional owners (15.2%) have around double the ownership of the state (7.7%). In 2015, Jakobsson and Korkeamäki found the state ownership in Finland to be 15.5%. This suggests that the Finnish government decreased its ownership of publicly listed Finnish companies strongly.

While the correlation analysis shows an insignificant or minor correlation between the dependent and independent variables, an interesting observation is the strong correlation between the dependent variables. All OC variables have a moderate to strong, positive, correlation which might

lead to the conclusion that large blockholders in a company attract other large blockholders. This might mean that investors like large blockholders as an indicator for a “healthy” company.

With these findings and observations in mind, this thesis achieved its goal to give additional empirical data on the topic and give ideas on how to categorize the effect of OC on firm performance more clearly. It is recommended for future research to use intrinsic and market performance indicators and a range of OC indicators for a more precise determination of the effect of OC on firm performance.

References

Alimehmeti G., Paletta A. (2012). *Ownership concentration and effects over firm performance: Evidences from Italy*, Retrieved from: <https://core.ac.uk/download/pdf/236412459.pdf>

Berle A. A., Means G. (1932). *The modern corporation and private property*, Retrieved from: https://edisciplinas.usp.br/pluginfile.php/106085/mod_resource/content/1/DCO0318_Aula_0_-_Berle_Means.pdf

statista.com (2020). *Companies included in the S&P 500 index whose share price grew the most during 2020*, Retrieved from: <https://www.statista.com/statistics/1251763/sandp-500-best-performing-stocks>

Bhaumik S. K., Selarka E. (2012). *Does ownership concentration improve M&A outcomes in emerging markets? Evidence from India*, Retrieved from: https://publications.aston.ac.uk/id/eprint/20303/1/Ownership_concentration_MandA_outcomes.pdf

Boren C. (2020). *Association between the Performance-based Compensation of CEOs and Firm Performance in the Nordic Corporate Sector*, Retrieved from: https://www.theseus.fi/bitstream/handle/10024/344028/Thesis_Boren_Christina.pdf?sequence=2&isAllowed=y

Burkart M. Panunzi F. (2004). *Agency conflicts, ownership concentration, and legal shareholder protection*, Retrieved from: http://eprints.lse.ac.uk/69547/1/Burkart_Agency%20conflicts,%20ownership%20concentration_author_2006%20LSERO.pdf

Burkart M. Gromb D. Panunzi F. (1997), *Large shareholders, monitoring, and the value of the firm*, Retrieved from: <http://denis.gromb.pagesperso-orange.fr/files/bgp1.pdf>

Clasessens S. Djankov S. (1999), *Ownership Concentration and Corporate Performance in the Czech Republic*, Retrieved from: <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/39613/wp227.pdf?sequence=3>

Demsetz H. Villalonga B. (2001). *Ownership structure and corporate performance*, Retrieved from: https://pages.stern.nyu.edu/~bvillalo/DemsetzVillalonga_JCF2001.pdf

Demsetz H. Lehn K. (1985). *The Structure of Corporate Ownership: Causes and Consequences*, Retrieved from: https://pages.stern.nyu.edu/~bvillalo/DemsetzVillalonga_JCF2001.pdf

Donaldson L. (1997). *A Positivist Alternative to the Structure-Action Approach*, Retrieved from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=94ffece054398ae551f7c5df236431a2e8a7a93c>

Earle J. S., Kucsera C., Telegdy Á. (2004). *Ownership Concentration and Corporate Performance on the Budapest Stock Exchange: Do Too Many Cooks Spoil the Goulash?*, Retrieved from: <https://www.econstor.eu/bitstream/10419/172428/1/wp2003-93.pdf>

Edwards J. S. S., Weichenrieder A. J. (2003). *Ownership Concentration and Share Valuation*, Retrieved from: <https://www.wiwi.uni-frankfurt.de/profs/weichenrieder/jeredw-aw.pdf>

Faccio M., Lang L. H. P. (2001). *The ultimate ownership of Western European corporations*, Retrieved from: <https://citeseerx.ist.psu.edu/document?repid=rep1&type=pdf&doi=c7193d2e27f7b362355603048aac1e43dc942809>

Fatihudin D., Jusni, Mochklas M. (2018). *How measuring financial performance*, Retrieved from: https://www.researchgate.net/publication/326141100_How_Measuring_Financial_Performance#fullText-FileContent

Filatotchev I. Mickiewicz T. (2001). *Ownership Concentration, 'Private Benefits of Control' and Debt Financing*, Retrieved from: <https://discovery.ucl.ac.uk/id/eprint/17577/1/17577.pdf>

Finnish Corporate Governance Code (2020). Retrieved from: <https://www.ecgi.global/sites/default/files/codes/documents/corporate-governance-code-2020.pdf>

Gadhoum Y., Noiseux M.H., Zeghal D. (2005), *Demystifying the Illusion of the Positive Effects of Ownership Concentration on Corporate Performance*, Retrieved from: https://www.researchgate.net/publication/265220204_Demystifying_the_Illusion_of_the_Positive_Effects_of_Ownership_Concentration_on_Corporate_Performance#fullTextFileContent

Garg A. K. (2007). *Influence of Board Size and Independence on Firm Performance: A Study of Indian Companies*, Retrieved from: https://www.researchgate.net/publication/265485244_Influence_of_Board_Size_and_Independence_on_Firm_Performance_A_Study_of_Indian_Companies

Gilson S.C. (1990). *Bankruptcy, boards, banks, and blockholders*, Retrieved from: <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.470.6092&rep=rep1&type=pdf>

Gogineni S., Linn S. C., Yadav P. K. (2020). *Vertical and Horizontal Agency Problems in Private Firms: Ownership Structure and Operating Performance*, Retrieved from: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/479E811BB52AC1B70DD6E2F41EBC6E5B/S0022109021000363a.pdf/vertical-and-horizontal-agency-problems-in-private-firms-ownership-structure-and-operating-performance.pdf>

Grosfeld I. (2006). *Ownership concentration and firm performance: Evidence from an emerging market*, Retrieved from: <https://deepblue.lib.umich.edu/bitstream/handle/2027.42/57214/wp834%20.pdf?sequence=1>

Gugler K., Mueller D. C., Yurtoglu B. B. (2008). *Insider ownership, ownership concentration and investment performance: An international comparison*, Retrieved from: https://www.wu.ac.at/fileadmin/wu/d/i/iqv/Gugler/Artikel/gmy_jcf.pdf

Holderness C. G. (2007). *Myth of Diffuse Ownership in the United States*, Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=991363

Hu Y. Izumida S. (2008). *Ownership Concentration and Corporate Performance: A Causal Analysis with Japanese Panel Data*, Retrieved from: https://www.academia.edu/7460169/Ownership_Concentration_and_Corporate_Performance_A_Causal_Analysis_with_Japanese_Panel_Data

Jakobsson U., Korkeamäki T. (2015). *Ownership and corporate governance in Finland: A review of development trends*, Retrieved from:

http://njb.fi/wp-content/uploads/2016/01/Jakobsson_Korkemaki-NJB_4-15.pdf

Jensen M. C., Meckling W. H. (1976). *Theory of the firm: Managerial behavior, agency costs and ownership structure*, Retrieved from: <https://www.sciencedirect.com/science/article/pii/0304405X7690026X>

Keinonen H. (2021). *Blockholders and Firm Performance within the Nordic Corporate Governance Model: Finnish Evidence*, Retrieved from: https://helda.helsinki.fi/dhanken/bitstream/handle/10227/437705/NJB2_21_Keinonen.pdf?sequence=1&isAllowed=y

Khan M.M. (2021). *The influence of blockholders on firm performance: Evidence from Finland*, Retrieved from: <http://jultika.oulu.fi/files/nbnfioulu-202106178449.pdf>

Laporšek S., Dolenc P., Grum A., Stubelj I. (2020). *Ownership structure and firm performance – The case of Slovenia*, Retrieved from: <https://hrcak.srce.hr/file/434889>

Lekvall P. (2014). *Nordic and European company law*, Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2534331

Liu Y., Miletkov M. K., Wie Z., Yang T. (2014), *Board independence and firm performance in China*, Retrieved from: <https://www.sciencedirect.com/science/article/abs/pii/S0929119914001564>

Ma S., Naughton T., Tian G. (2010). *Ownership and ownership concentration: which is important in determining the performance of China's listed firms?*, Retrieved from: https://www.researchgate.net/publication/227370522_Ownership_and_ownership_concentration_Which_is_important_in_determining_the_performance_of_China's_listed_firms#fullTextFileContent

Mitnick. B.M. (1973). *Fiduciary rationality and public policy: The theory of agency and some consequences*, Retrieved from: https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1020859

Pagano M., Röell A. (1998). *The choice of stock ownership structure: Agency costs, monitoring, and the decision to go public*, Retrieved from: https://www.researchgate.net/publication/24091603_The_Choice_Of_Stock_Ownership_Structure_Agency_Costs_Monitoring_And_The_Decision_To_Go_Public#fullTextFileContent

Patteri J. (2022). *Impact of CEO remuneration on corporate performance Comparisons between Nordic and U.S. corporations*, Retrieved from: https://www.theseus.fi/bitstream/handle/10024/785812/Thesis_Patteri_Jarkko.pdf?sequence=2&isAllowed=y

Ross S. (1973). *The economic theory of agency: The principal's Problem*, Retrieved from: https://www.researchgate.net/publication/4721698_The_Economic_Theory_of_Agency_The_Principal's_Problem#fullTextFileContent

Rubin A. (2006). *Ownership Level, Ownership Concentration and Liquidity*, Retrieved from: http://www.sfu.ca/~arubin/JFM_2006074.pdf

Schmalz M. C. (2018). *Common Ownership, Concentration and Corporate Conduct*, Retrieved from: https://www.econstor.eu/bitstream/10419/176927/1/cesifo1_wp6908.pdf