Blockholders Diversity and Company Value*

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January 31, 2017†

Abstract

According to my new and extensive data on all US public companies, the majority of them have multiple blockholders (large shareholders). These blockholders could differ along several characteristics even within one company. Diversity between blockholders within a firm could have a positive and synergistic impact on its value. Alternatively, conflicting objectives and interests may cause diversity to adversely impact company operations. To investigate the resulting impact of blockholders diversity on company value, I construct diversity measures reflecting their heterogeneity in identity, portfolio size and investment horizon. Using shocks from blockholder acquisitions of financial firms and unexpected increases in payouts they receive from other positions to identify the causality channel, I find that block diversity has a strong negative influence on company value and operations. This result is robust to a variety of specifications and to exclusion of different groups of blockholders. Additionally, simulated placebo tests reject alternative explanations related to other observed and unobserved characteristics of block ownership.

Keywords: Large shareholders, Blockholders, Governance, Monitoring, Interaction

JEL: G31, G32, G34, G35

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1 Introduction

"Perhaps the most important evidence about blockholders is their wide prevalence" (Edmans and Holderness [2016], p. 42). Indeed, according to a new and extensive dataset, a typical US public company has four blocks on average.[1] These blocks are held by different types of owners. Block owners may differ in whether they are the agent or the owner, and they may also vary in the size of their portfolio and investment horizon. The theoretical and empirical literature covers the impact of the level of block ownership on company characteristics.[2] And while some evidence suggests variation in the influence between certain groups of blockholders, there is no research on how the simultaneous presence of different blockholders affects company value.[3] This paper investigates the causal effect of blockholders' diversity on company value and performance.

This work has four main contributions to the literature. First, I show that diversity among blockholders has a negative impact on form value. This impact has a strong statistical significance and is economically meaningful: one-standard-deviation increase in block diversity lowers company value by 0.27 standard deviations. Second, the paper constructs a comprehensive and unique dataset that covers every block position in all US public companies between 1998 and 2013. Block ownership information is extracted with a sequence of custom parser scripts from the disclosures under Section 13 of The Securities and Exchange Act of 1934 ("SEA"). In total, the constructed dataset contains details of 179,120 block positions and 35,024 blockholders in 15,157 companies. Third, I build three measures of block diversity that capture differences in preferences between company blockholders. Lastly, this paper constructs two instrumental variables for the level of block ownership and block diversity. One instrumental variable exploits time variation in the payouts that blockholders receive on their other block positions. The second instrument captures the creation of new blocks and the increase in existing block positions from the acquisition of financial firms. Both instruments are

[1] Throughout the paper, I use the term "blockholder" to refer to an entity that owns more than 5% of firm's shares outstanding, and thus files Schedule 13D or Schedule 13G forms. Share ownership is defined in Rule 13d-3(a) (§ 240.13d-3(a)) of the Securities Exchange Act of 1934.

[2] Admati, Pfleiderer, and Zechner [1994], Kahn and Winton [1998], Shleifer and Vishny [1986] theoretically explore the ability of a single large blockholders to influence the company. Konijn, Kraussl, and Lucas [2011], Laeven and Levine [2008], Maury and Pajuste [2005] empirically investigate how block ownership and block concentration are relate to company value.

[3] Cronqvist and Fahlenbrach [2009] detect a significant heterogeneity in between the impact of blockholders on company value. Brav, Jiang, Pertnoy, and Thomas [2008] explore the special role of hedge funds in monitoring, Faccio, Marchica, and Mura [2011] show how influence of a blockholder depends on his level of diversification, Fich, Harford, and Tran [2015] suggest that a blockholder's incentives to monitor a company is determined by the relative weight of the company in his portfolio.

valid for a set of block ownership characteristics and could be used in other studies.

Diversity between blockholders could have a two-sided effect on company governance and value. On the one hand, interactions between blockholders that possess different information and skills might have a synergistic effect. Having variety in their expertise might help them detect and implement policies that would maximize company value. For instance, Appel, Gormley, and Keim [2016] show that passive institutional ownership increases the chances of activists gaining board representation. Also, the presence of one type of blockholder could discipline the behavior of other types of blockholders. For example, the model in Dhillon and Rossetto [2015] suggests that entrance of a diversified blockholder could offset the value-destructive influence of a non-diversified blockholder.

Alternatively, diversity among a company's blockholders could adversely impact their influence on company value. While all shareholders prefer higher returns on their investment, differences in their beliefs, horizons, and risk attitudes could create discrepancies in their views on the desired policies. For instance, long-term investors favor investment in R&D, while investors with short horizons prefer acquisition from external sources (Hoskisson, Hitt, Johnson, and Grossman [2002]). Blockholders with higher heterogeneity in characteristics are more likely to vary in their objectives, and consequently prefer different corporate policies. Disparity and potential contradictions in blockholders' agendas may lower each blockholder's chances to achieve their desired changes.

Building on the previous literature, I measure diversity across three components: blockholder identity, portfolio size, and investment horizon.

The first measure, diversity in identity, divides blockholders into three groups: financial institutions, individuals, and other corporations. This division of blockholders originates in the work of Barclay and Holderness [1989]. Blockholders in these groups differ in their regulatory constraints, fiduciary responsibilities and agency problems (Diamond [1984]). And according to Cronqvist and Fahlenbrach [2009] these groups have a pronounced difference in their impact on the corporate policies. More than two-thirds of US companies have blockholders from two of the groups described above, and around one-fifth of companies have blockholders from all three groups.

The second diversity component accounts for differences in portfolio size among company blockholders. The size of a blockholder's portfolio influences his preferences over the desired level of company diversification (Faccio, Marchica, and Mura [2011]), and affects the intensity and power of his monitoring. Blockholders with larger portfolios could be less involved in the monitoring of a particular company because their portfolio returns are less sensitive to the performance of any particular company (Fich, Harford, and Tran [2015]) or because they shift attention to other stocks

in his portfolio (Kempf, Manconi, and Spalt [2016]). The power of monitoring, on the other hand, might increase with the number of blocks in the portfolio (Edmans, Levit, and Reilly [2016]). Thus, blockholders with different portfolio sizes vary in both whether they prefer a company to take additional risk and in their monitoring approach. I divide blockholders into four groups based on their portfolio size, and estimate the second measure of diversity based on this group division.

The third measure of diversity divides blockholders into groups by their investment horizon. Investors with different horizons vary in their preferences over investment and payout policies (Derrien, Kecskes, and Thesmar [2013]), opinions about company acquisition (Gaspar, Massa, and Matos [2005]) and monitoring styles (Gallagher and Gardner [2013] and Chen, Harford, and Li [2007]). To capture described heterogeneity in preferences, I separate blockholders into four groups based on their investment horizons, and measure the diversity among these groups.

Each diversity component represents the variation in skills and preferences between investors. Described heterogeneity between blockholders could either enhance or impair their impact on the company. In the initial predictions, I am agnostic about the resulting effect of diversity. For each source of diversity, I construct a variable that captures differences in the control rights between blockholders of various types.

I establish the causal effect of diversity with the use of instrumental variables. Ideal instruments should provide identification for two variables: level of block ownership and diversity between blocks. These two variables change when either a new block enters a company or some of the existing blocks change in size. I capture the described changes with two instruments that are built on the payouts blockholders receive from cross-held companies and their acquisitions of financial firms.

The first instrument captures exogenous variation from payouts blockholders receive on their positions in other companies. Received payouts would predict changes in block positions under the following two conditions: 1) at least a part of a payout is allocated back into the blockholder's portfolio, and 2) larger payouts result in more reinvestment. Reinvestment of payouts could result either in the creation of new blocks in different companies or in a change of the size of existing blocks. And both of these changes would affect the level of block ownership and diversity between blocks.

The construction of the instrument relies only on payouts from other companies and does not include payouts from the company itself; thus, the instrument is unlikely to be affected by any characteristics of the company of interest. To further ensure that the exclusion restriction holds and that the instrument is not related to unobserved characteristics of blockholders, I measure the

instrument based only on payouts received by blockholders whot are less prone to affect corporate policies.

The idea for the second instrumental variable originates from the work of Hong and Kacperczyk [2010]. This instrument indicates whether one of the company's blockholders acquired a financial firm during the previous year. After the acquisition, the portfolio of the target company would be combined with the portfolio of the acquirer. If a target firm has any holdings in the companies where the acquirer had a block, then the size of his block position would increase. Additionally, combining both portfolios might result in new blocks. My analysis shows that company block ownership increases by almost 3% when one of its blockholders acquires a financial firm. An increase in the position of one of the company's blockholders would impact measures of block diversity. Statistical tests also support the intuition for the relevance condition for both instruments.

Acquisition is a long, complex, and costly process, and it is implausible that a blockholder would initiate it mainly to increase one of his portfolio positions. Therefore, this instrument is unlikely to be correlated with any characteristics of the company. I limit the instrument construction to a subset of blockholders that are less prone to have a distinctive impact on corporate policies. The independence of the instrument from both companies' and blockholders' characteristics suggests that the exclusion restriction should hold.

My analysis finds that diversity among company blockholders negatively affects its value. This effect has a strong statistical significance across all diversity measures. Economic magnitude is similar for all three measures: one-standard-deviation increment in diversity lowers company value by 0.27 standard deviations. My results also suggest that value of the company with homogeneous blocks will go down if a new blockholder of a different type enters it. Diversity between blockholders also adversely influences company performance. One-standard-deviation increase in the level of diversity between blockholders leads to a 0.24 standard deviation drop in return on assets and a 0.30 standard deviation drop in free cash flow of the company.

To ensure that the results are not driven by the presence of one particular type of blockholder, I repeat the entire analysis excluding certain groups of blocks. The first test estimates diversity measures, block ownership, and instrumental variables for a subsample of non-institutional blockholders only, and repeats my paper's analysis for this new set of variables. This test detects that even diversity between non-institutional blockholders lowers the value of the company. The second test investigates the impact of diversity when blockholders from the top quantile (by the size of their portfolio) are excluded. And the third test omits blockholders in the top quantile of their investment

horizon from the analysis. Furthermore, the second and third tests also show that diversity between selected subsamples of blocks has a negative impact on company value.

Additionally, I verify that my results are not driven by other components of block ownership, such as block concentration or unobserved characteristics of the blocks. To reject this set of alternative explanations, I use 100,000 simulations of placebo diversity; in each simulation, I randomly divide company blocks into four groups and calculate the placebo diversity measure based on these groups. For every generated placebo diversity I estimate its influences on company value. Comparing the main results of my paper with the results of simulations, I find that the effects of three "real" diversity variables are stronger than 98% of simulations. These simulations address concerns that my results could be explained by omitted variables that are related to company block ownership.

Another contribution of my paper is a collection of detailed information about block ownership in every US public company between 1998 and 2013. To the best of my knowledge, this is the first study of block ownership that includes all publicly listed US companies. To construct this dataset, I download and process 579,249 forms filed under Sections 13(d) and 13(g) of SEA using a set of custom parser scripts. My dataset extends the conclusions in Holderness [2009]: not only are blocks present in the majority US companies, but more than 80% of companies have multiple blocks. And both the average number of blocks and the level of block ownership in US companies has risen over time. Surprisingly, blocks are more common in medium-size companies than in small or large companies. And only half of all blocks belongs to institutional investors. Compared to the European data on block ownership, US blocks are relatively small in size and rarely held by both inside and outside individuals.

2 Hypotheses

Blockholders can influence the value of the company and affect its policies. They can exert the governance through intervention (Shleifer and Vishny [1986] and Admati, Pfleiderer, and Zechner [1994]) and discipline the management with the threat of exit (Admati and Pfleiderer [2009]; Edmans [2009]; Bharath, Jayaraman, and Nagar [2013]). Several models suggest that the power of a single large shareholder to improve the value of the company rises with the size of his stake (Shleifer and Vishny [1986]; and Admati, Pfleiderer, and Zechner [1994]; and Kahn and Winton [1998]). But cases of sole large blockholders are relatively rare: less than 10% of US companies in the recent years

have just one block.[4] The majority of US companies have several blockholders, and interactions between them could also affect the ability of this group to control the management (Crane, Koch, and Michenaud [2015]).

A number of previous studies have documented a correlation between the value of the company and the characteristics of its block ownership in multiple countries. The value of the company is positively related to block ownership concentration in US companies (Konijn, Kraussl, and Lucas [2011]), the presence of the second large blockholder in European companies (Laeven and Levine [2008]) and a more equal distribution of cash flow rights between two largest block sizes in Finnish companies (Maury and Pajuste [2005]). In addition to company value, the presence of the multiple blockholders has been linked to changes in dividend payouts (Faccio, Lang, and Young [2001]), an increase in corporate risk taking (Mishra [2011]) and a higher level of shareholders protection (Barroso Casado, Burkert, Dávila, and Oyon [2015]). Bharath, Jayaraman, and Nagar [2013] show that the power of the "threat of exit" monitoring increases with the number of blocks.

The previously cited papers have mostly focused their analysis on the characteristics of the block position, and rarely account for the characteristics of the block owner. However, large investors vary in the their beliefs, expertise, preferences, and also in the way they influence the company. This is supported by Cronqvist and Fahlenbrach [2009], who discovered that there is significant heterogeneity in the investment and governance styles between different types of blockholders. To the best of my knowledge, this is the first paper that estimates the effect of block diversity on the value of the company.

The idea that shareholders are heterogeneous is not new to the finance literature. For instance, shareholders vary in their valuation of a company (Bagwell [1992]) and in their reaction to corporate news (Hotchkiss and Strickland [2003]). This idea also finds reflection in other business disciplines. Paper in the strategy literature indicate the variety of the effects different investors have on the innovations (Hoskisson, Hitt, Johnson, and Grossman [2002]), international diversification (Tihanyi, Johnson, Hoskisson, and Hitt [2003]), and firm strategy (Connelly, Tihanyi, Certo, and Hitt [2010]).

What should the direction of diversity impact on the outcome? Review paper by Williams and O'Reilly [1998] suggests that diversity in a group could have a dual impact on the outcome: it can either improve it through the synergy between the group members, or worsen it because of communication difficulties. Similar predictions hold in the application of diversity influence to

[4]This estimate is based on the data in my sample; see Figure 1.

a group of blockholders. On the one hand, a more diverse group of stakeholders posses a wider set of potentially relevant information, and they could employ multiple methods to influence the company. On the other hand, a diverse group of blockholders could have the opposite views on the company's optimal growth and development strategy. Additionally, the more diverse the group is, the higher are the coordination difficulties between agents. And, consequently, the aggregate power of governance could be lower with a diverse group of blockholders.

Hypothesis I (Benefits of Diversity)

Diversity between blockholders could have a synergistic impact on their effectiveness. Studies in the organization behavior find that more heterogeneous groups of agents have an advantage in problem solving. The studies originated from Hoffman and Maier [1961] experiment, in which a more heterogeneous group of agents outperformed a homogenous group. Theoretical model by Hong and Page [2004] shows that a heterogeneous group of agents even outperforms a homogeneous group of agents that have better problem-solving abilities. This conclusion suggests that diversity in a group of blockholders could enhance their abilities to resolve potential problems in the company, such as extraction of private benefits by management. Heterogeneous blockholders could also cross-monitor each other's actions and diminish potential negative influence (Dhillon and Rossetto [2015]).

Additionally, blockholders in a more heterogeneous groups tend to have greater variance in their levels of expertise. For instance, passive mutual funds could impact the management through private communication, and an individual blockholder could expert in the gathering of information about the company. As a result, a group of diverse blockholders in the company could possess more information and have more potential expertise in monitoring the management, which could enhance the power of their governance. For instance, Appel, Gormley, and Keim [2016] find that the presence of passive investors increases the chances of activist investors to improve governance of the company.

Lastly, heterogeneous blockholders could also vary in their valuation of the company. Miller [1977] model states that higher heterogeneity of in the beliefs about the company value makes short positions more expensive, and thus increases the price of the stock. Studies by Chen, Hong, and Stein [2002] and Diether, Malloy, and Scherbina [2002] find empirical support for this model the based on breadth of mutual fund positions in the company and analysts disagreements.

Hypothesis I.*Higher heterogeneity among large investors has a positive impact on the value of the company.*

Hypothesis II (Costs of Diversity)

Alternatively, diversity between blockholders could adversely impact value of the company. An adverse effect of heterogeneity could come through two main channels: conflict of interests between blockholders and coordination/communication difficulties between them.

Diversity between large shareholders signals that they are heterogeneous in their beliefs, skills, and preferences. Their views on whether a company should take a project or adopt a new policy could vary as well. For instance, Hoskisson, Hitt, Johnson, and Grossman [2002] find that in respect to innovation policies, public pension funds favor investments in R&D, while professional investment fund managers support the acquisition of innovations from external sources. Such a range of opinions creates a conflict of interests between the blockholders, and could decrease their governance.

Coordination difficulties between the different type of blockholders could also potentially decrease their ability to monitor the company. Laeven and Levine [2008] study suggests that large shareholders are less likely to cooperate when they vary in type. Crane, Koch, and Michenaud [2015] find that closely connected groups of investors have greater chances of improving the governance of the company. Coordination problems could appear even within the same class of investors: Huang [2016] finds that institutional investors' monitoring power increases as communication between them becomes easier. Communications difficulties for blockholders could play an even larger role because these agents do not have special meetings or other discussion platforms.

The homogeneity of blockholders' preferences could also lead to a more uniform exit decision. This similarity in the exit decisions could also improve the "threat of exit" governance of the group (Edmans and Manso [2011]).

This hypothesis is also consistent with the findings of Kandel, Massa, and Simonov [2011]. They find that Swedish companies whose small investors are more similar in terms of age, wealth, and location have higher profitability and returns.

Hypothesis II. *Heterogeneity between the blocks in the company lowers its value.*

3 Data

Data

My sample is pulled from CRSP-Compustat Merged database over the period from 1998 through 2013. The start of the sample coincides with the earliest availability of reliable information about block purchases. The blockholders' information was collected using the Electronic Data Gathering,

Analysis, and Retrieval system (EDGAR) of the U.S. Securities and Exchange Commission (SEC). Institutional and insider ownership is obtained from Thompson Reuters database. Information about M&A deals is taken from SDC Platinum database.

Data Collection

I collect block ownership information from the disclosures under Sections 13(d) and 13(g) of SEA. These sections obligate shareholders to file a Schedule 13 when their position in a public company rises above 5%. In case of material changes, they have also to file amendements to the schedules. There are two types of Schedule 13 filings: the more extensive Schedule 13D and the short-form Schedule 13G. The type of form and reporting rules depend on multiple factors, such as identity of investor, size of his stake, and the intentions of his purchase. Despite the variation in the disclosure rules, all forms include detailed information about the investor, block size, date of the event, name, and CUSIP code of the company. Amendments to both types of forms have to be filed at least once a year if substantial changes occur.

I download all Schedules 13 and their amendments filed between 1995 and 2014 from the EDGAR system and remove duplicated filings and filings triggered by stock buybacks.[5] The described parameters limit the dataset of raw filings to 579,249 forms. All filings follow SEC guidance and have a similar structure; however, the exact wording of the form may vary across blockholders. I develop a set of custom parser scripts that accounts for the variation in the form templates. My scripts are adjusted for more than 200 different templates in the Schedule 13 filings. With the use of these parser scripts, I extract details about the company, blockholder, and size of the block position. On the next step, I construct a dataset that indicates the position of every blockholder at the end of each calendar year.[6]

In total, the extracted data includes information about 35,024 blockholders in 15,157 different companies. Most of these blocks have medium size: 96% of blockholders hold less than 20% of shares outstanding.

I append block ownership information to the dataset pulled from CRSP-Compustat Merged Database between 1998 and 2013. I use the following criteria to construct my sample:

[5] Most of the filings appear in the EDGAR server at least twice: in the directory of the investor and the directory of the company.

[6] A more detailed description of the data collection and git hub directory with the code is available on my website www.evolkova.info

1. Shares of the company are traded on NYSE, NASDAQ, and AMEX exchanges.

2. I use following variables in my analysis: price and number of shares at the year end, sales, total assets, fixed assets, capital expenditures, Tobin's Q, ROA and FCF. I exclude observations in which this information is missing.

3. Every company in my sample should disclose their information with the SEC. I exclude companies that do not have annual reports in their SEC directory.

4. I exclude companies in the finance (SIC between 6000 and 6999) and utilities (SIC between 4900 and 4999) industries.

My sample contains 51,708 observations between 1998 and 2013 for 6,316 unique firms. Figure 1 provides the distribution of the number of the blocks per company by year. Panel (A) suggests that the average number of blocks in US public companies increases over the years. The portion of companies without a block drops from 14% in 1998 to 5% in 2013. At the start of my sample less than one third of companies had four or more blocks, and this number rises to 59% by the sample's end.[7]Panel (B) shows similar dynamics in the constant sample of 1,865 companies.

According to Panel (A) of Figure 2, the average number of blocks in a US public company rises from 2.9 in 1998 to 4.1 in 2013. Institutional investors hold around half of the blocks on average. Panel (B) shows that the average block ownership increases from 24% in 1998 to 31% in 2013. Institutional block ownership increases form 10% to 17% and non-institutional block ownership varies between 12% and 14% during the sample years.

Figure 3 presents the average number of blocks and the level of block ownership for twenty size quantiles of 4,090 companies in the last year of my sample. Median-size companies have the highest number of blocks and the highest level of block ownership on average. Both of the characteristics follow an inverse U-shape pattern along the size quantiles.

[7]This result is similar to Holderness [2009] who explored the proxy statements of 376 US public companies and documented that 96% of them have at least one blockholder. Potential disparity with regarding the portion of companies without any blocks could be related to the matching SEC and Compustat information for these companies. As for the companies with at least one block I use CUSIP information from Schedule 13, but for the companies with 0 blocks I rely on the WRDS link database between Compustat and SEC EDGAR.

4 Dimensions of Diversity

To test my hypothesis, I derive three measures of blockholder diversity. The first measure focuses on the heterogeneity in blockholders' identities, the second measure captures differences in their portfolio sizes, and the last measure examines variation in the blockholders' horizons. Heterogeneity across these dimensions represent the potential differences in skills and preferences between blockholders in a company.

Diversity in Identity

In the first dimension, I divide blockholders into three groups based on their identity: individual investors, financial institutions, and all other blockholders. Blockholders in these groups differ in the type of their ownership type, regulations, fiduciary responsibilities, and potential agency problems. Study by Cronqvist and Fahlenbrach [2009] finds that investors in these groups differ significantly in the impact they have on the company policies.

The first group, individual blockholders, hold the position for their own account. Unlike institutions, individuals are not concerned with the potential fund outflow, and they face fewer agency problems (Diamond [1984]). Also, individual blockholders face less regulation constraints and are not subject to fiduciary responsibilities. Study by Becker, Cronqvist, and Fahlenbrach [2011] finds that individual blockholders significantly impact a range of company characteristics, including payouts, investments, return on assets, and leverage.

The second group of blockholders includes institutional investors, defined as financial intermediaries that are regulated under Section 13(f) of SEA. A body of academic literature stresses the involvement of institutions in monitoring and their influence on a company. Institutional investors have an advantage in information gathering (Michaely and Shaw [1994]) and are viewed as better monitors (Grinstein and Michaely [2005]). The presence of institutional investors has an impact on the different aspects of company governance (shareholders proposals Gillan and Starks [2000], executive compensation Hartzell and Starks [2003], board independence Appel, Gormley, and Keim [2014], private communications with the management McCahery, Sautner, and Starks [2016]), and corporate policies (R&D Bushee [1998], payouts Grinstein and Michaely [2005], and leverage Michaely, Vincent, and Popadak [2015]).

The third group includes all other blockholders. This group did not receive any focused attention in the academics literature, and we do not have any knowledge about its influence on the company

policies.

These three groups differ in their incentives and preferences. They also vary in their investment and governance styles (Cronqvist and Fahlenbrach [2009]). Panel (A) of Figure 4 show the dynamics of the average holdings of each group over the years. In the first diversity measure, I capture the difference in the control rights between the described identity groups.

Diversity in Portfolio Size

In the second diversity measure, blockholders are divided into groups based on the size of their portfolio. The size of their portfolio reflects blockholders' preferences regarding company's risk taking behavior and their involvement in monitoring. I proxy the size of a blockholder's portfolio with the number of blocks that he holds.

The number of blocks in a portfolio is a crude proxy for the level of a blockholder's diversification. Faccio, Marchica, and Mura [2011] show that the diversification of large shareholders influences company's risk taking. They find that companies with more diversified blockholders undertake riskier investments than companies with less diversified blockholders.

The number of blocks contained in his portfolio influences the monitoring approach of a blockholder. Edmans, Levit, and Reilly [2016] model suggests that governance impact increases with the number of blocks in a portfolio. They show that decision to sell one particular block sends a signal to the market about the future performance of a company. The more blocks an investor holds, the less likely it is for him to exit the position due to a liquidity shock. On the other hand, investors with fewer blocks have more incentives to monitor, because they can focus their attention (Kempf, Manconi, and Spalt [2016]), and the overall performance of their portfolio is more sensitive to the returns of each stock (Fich, Harford, and Tran [2015]).

I divide blockholders into four quantiles based on the number of blocks in their portfolio. The first group includes investors that have a single block, the second those that have 2-20 blocks, the third those that have 21-220 blocks, and the last group those that have more than 220 blocks. Panel (B) of Figure 4 presents the dynamics of the average ownership by each group over the years. I use these four groups to construct the second diversity measure.

Diversity in Investment Horizon

The third measure of diversity divides blockholders into groups based on their investment horizon. The finance literature suggests that short-term and long-term investors vary in their preferences

regarding company payouts and monitoring styles.

In terms of corporate policies, long-term blockholders prefer higher investments and lower payouts (Derrien, Kecskes, and Thesmar [2013]), while short-term blockholders favor company acquisitions, even when the premium is lower (Gaspar, Massa, and Matos [2005]). Short-term blockholders tend to discipline management through trading (Gallagher and Gardner [2013]), while long-term blockholders are more involved in monitoring (Chen, Harford, and Li [2007]).

I use portfolio turnover as a proxy for a blockholder's investment horizon. Portfolio turnover is defined as a weighted average of absolute changes in all blockholders' positions.

$$Turnover_{i,t} = \frac{\sum_{i=1}^{N} M_{j,t} \cdot |B_{i,j,t} - B_{i,j,t-1}|}{0.5 \cdot \sum_{i=1}^{N} (M_{j,t} \cdot B_{i,j,t} + M_{j,t-1} \cdot B_{i,j,t-1})} \tag{1}$$

Where $Turnover_{i,t}$ is a turnover measure of blockholder i in the year t, that holds N blocks, $M_{j,t}$ is a market capitalization of company j in the year t and $B_{i,j,t}$ represents the percent of shares outstanding controlled by blockholder i in the company j at the end of the year t. Variable $B_{i,j,t}$ is set to zero in the years before the enter or after the exit. Thus, when a blockholder enter or exit one of the companies, turnover of his portfolio increases.

I divide blockholders into four groups based on the quantiles of the portfolio turnover. Panel (C) of Figure 4 shows the dynamics of the average ownership of each group over the years. I estimate the third measure of diversity based on these groups.

Construction of Diversity Measures

This paper explores the effect of diversity between blockholders. However, any definition of diversity is reasonable only for companies with at least two blocks. Thus, I limit my dataset to the companies with multiple blocks. This restriction decreases my sample from 51,708 to 40,935 company-year observations. For each observation, I construct three measures of diversity based on the described groups using the formula:

$$Diversity_c = 1 - \sum_{k=1}^{N_c} \left(\frac{H_{k,c}}{BH} \right)^2 \tag{2}$$

Where $Diversity_c$ is one of three diversity measures ($c \in$ {identity, size, horizon}), N_c is the

number of groups in the component c, $H_{k,c}$ is a percent of shares outstanding controlled by the group k, and BH is a percent of shares outstanding controlled by all blockholders in a company.

Diversity variables are based on Herfindahl-Hirschman Index (HHI) between diversity groups. HHI is taken with a negative sign in the formula for a more intuitive interpretation of the measures: the higher value of the diversity variable corresponds to higher heterogeneity between blocks. If all blocks in a company are homogeneous, then the diversity variable equals zero. Diversity in the company is the highest when all the groups have the same size.

Figure 6 illustrates the construction of diversity in identity for a company with three blocks. When a company has three blockholders – individual, institution, and corporation – and each of them holds a block of 6%, diversity in identity equals to 0.67 (Panel (A)). Diversity measure is affected by the changes in the types of its blockholders and by the changes in the sizes of their positions. For instance, if an individual block in a company from the previous example would be replaced by a new institutional block of the same size, diversity measure would decrease to 0.44 (Panel (B)). Diversity measure would also change after changes in the block sizes. If instead of having three different blocks of 6% (as in Panel (A)), a company would has three blocks with sizes of 5%, 6% and 12% (Panel (C)), diversity in identity would decrease from 0.67 to 0.61.

I calculate three diversity variables: $Diversity\_identity$, $Diversity\_size$, and $Diversity\_horizon$ using the same principal. Figure 7 presents a histogram for all constructed variables.

Each of the three diversity dimensions captures a different aspect of heterogeneity between blockholders. Figure 7 shows correlations and heat map of the distributions of the three diversity variables. Correlation of $Diversity\_identity$ variable with $Diversite\_size$ and $Diversity\_horizon$ is 0.23 and 0.20 respectively. Correlation between $Diversite\_size$ and $Diversity\_horizon$ is 0.49. Relatively low level of correlation between the variables suggests that these variables captures different characteristics of the block diversity. Additionally, I construct an aggregate diversity index, using these three variables. This index is constructed as a first principal component of three previously defined variables.[8]

$$Diversity\_Index = PCA(Diversity\_identity, Diversity\_size, Diversity\_horizon) \quad (3)$$

The resulting variable of the principal component analysis explains the highest portion of vari-

[8]I select the direction of the main principal component such, that it has a positive correlation with at least two diversity measures. If correlation is positive with less than two measures, diversity index is multiplied by -1.

ance of three diversity variables and allows me to control for variation in all three measures at once.

5 Results

Partial Correlation

Starting in this section, I focus on the analysis of diversity between blockholders. Diversity between blocks can only be measured in the companies where there are two or more blockholders. Therefore, I exclude companies without a block or with only one block from my analysis. This restriction cuts my sample to 40,935 company-year observations. Panel (A) of Table 1 provides summary statistics of all companies in my initial sample and Panel (B) describes the summary information after the exclusion companies with less than two blocks. All variables in my sample are winsorized at the 1% level from the top and the bottom.

As a first step, I estimate a non-causal relationship between company value and block diversity. In this step, I use a multivariable regression defined by the following equation:

$$Tobin_{i,t+1} = \beta_1 \cdot Diveristy_{i,t} + \beta_2 \cdot block\_hold_{i,t} + B \cdot X_{i,t} + f_i + h_{ind,t} + \varepsilon_{i,t} \tag{4}$$

Where $Tobin_{i,t}$ is a Tobin's Q of firm i in a year t, $Diversity_{i,t}$ corresponds to one out of four diversity measures described in the previous section (three dimensions and the aggregate index) and $block\_hold_{i,t}$ is the percent of shares outstanding controlled by all blockholders. $X_{i,t}$ is a set of firm specific controls, and variables f_i and $h_{ind,t}$ corresponds to firm and industry-year fixed effects. I control for the aggregate level of institutional ownership to separate its influence from effect of block ownership. Other firm specific controls include growth, size, fixed assets, capital expenditures, leverage and Amihud illiquidity measure. The Appendix provides detailed definitions of the variables. All errors in all regressions are robust and double clustered on the company and year level.

Model (1) of Table 2 shows the relationship between firm value and the level of block ownership. This model does not control for any measures of diversity. The results of this model do not detect any significance of correlation between the overall level of block ownership and firm value. This lack or relation is consistent with McConnell and Servaes [1990] and Mehran [1995] findings.

Model (2) shows the results of the regression of firm value on the level of block ownership and

diversity in the blockholders identity. In this specification, measure of diversity in identity does not have a significant predictive power toward the value of the company. Model (3) and Model (4) show a significant negative link between the value of the company and diversity in the size of the blockholder's portfolio and in his investment horizon. Model (5) consistently suggests a negative relationship between firm value and aggregate diversity index. Overall, partial correlations suggest a weak negative link between block diversity and company value.

Identification Strategy

Endogeneity Problem

The results of multivariate regressions detect a negative relationship between some measures of block ownership diversity and the value of the company. In this section I explore a causal relationship between these variables using identification with instrumental variables. My goal is to instrument two endogenous variables: level of block ownership and diversity between holders of these blocks. I identify exogenous variation in these variables with two instruments: payouts from cross-held companies and acquisitions of financial firms.

The first stage regressions are described by the following system of equations:

$$\begin{aligned} block\_hold_{i,t} &= \kappa_1 \cdot payouts_{i,t} + \kappa_2 \cdot acquisitions_{i,t} + K \cdot X_{i,t} + f_i + h_{ind,t} + \xi_{i,t} \\ Diversity_{i,t} &= \lambda_1 \cdot payouts_{i,t} + \lambda_2 \cdot acquisitions_{i,t} + L \cdot X_{i,t} + f_i + h_{ind,t} + \zeta_{i,t} \end{aligned} \tag{5}$$

$block_hold_{i,t}$is the percent of shares outstanding controlled by all blockholders in the company, and $Diversity_{i,t}$ corresponds to one out of four diversity measures described in the previous section. Variables $payouts_{i,t}$ and $acquisitions_{i,t}$ are the constructed instruments. Variables $X_{i,t}$ represent company specific controls, and variables f_i and $h_{ind,t}$ corresponds to firm and industry-year fixed effects.

Payouts Instrument

Description

The first instrument reflects how much blockholders receive in payouts from their positions in other companies. To construct this instrument, I obtain the list of all blockholders in a company. I estimate how much each blockholder receive in payouts from all other companies in his portfolio. After I normalize this amount to the number of stocks in blockholder's portfolio and the market

capitalization of the company and sum all these amount across all blockholders. Formally, the first instrument is defined with the following formula:

$$payouts_{i,t} = \sum_{k=1}^{K} \frac{1}{M_{i,t} \cdot N_k} \cdot \sum_{j=1, j \neq i}^{N_K} (DVC_{j,t} + PRSTKC_{j,t}) \cdot B_{j,t} \tag{6}$$

Where $M_{i,t}$ is the market capitalization of the company i which has K blockholders in a year t. Blockholder k has blocks in N_k companies, $B_{j,t}$ is a size of his position in the company j; $DVC_{j,t}$ and $PRSTKC_{j,t}$ is the dollar amount of dividends and repurchases paid by the company j.

Relevancy

To verify the use of this instrumental variable I have to show that it satisfies the relevance condition and the exclusion restriction. The first condition requires the payout instrument to have a predictive power toward the level of block ownership and diversity measures.

The payout instrument would predict the level of block ownership if two conditions are satisfied: 1) a blockholder reinvests at least part of the payouts back into the companies in his portfolio, and 2) reinvestment into each company is monotonic in the amount of payouts. Consistent with the described assumptions, the results of the first stage regression in the Model (1) of Table 3 show that the payouts variable has a strong positive correlation with the level of block ownership in the company. T-statistics of the instrument coefficient is 20.6, and this value is significant at the 1% level. One standard deviation increase in the level of payouts corresponds to approximately 3% of an increase in the level of company block ownership.

The size of the blocks tend to increase if a blockholder receives more payouts during the year. I find, that the marginal propensity to increase a block position decreases with the size of a block. A blockholder is more likely to increase a 8% size block by 10% (i.e. increase it to 8.8%), than increase a 10% size block by 10% (i.e. increase it to 11%). Due to such properties of a blockholder's preferences, a payout instrument could also identify exogenous variation in the level of block diversity.

Indeed, if the relative size of a diversity group changes, the level of diversity would change as well. For instance, block diversity would increase, if the relative size of the smallest diversity group rises. Empirically I find, that the smallest block in a company tend to belong to a smaller diversity group. This fact, in conjunction with the decreasing marginal propensity to reinvest into a block, predicts a positive correlation between block diversity and payout instrument. Decreasing marginal propensity to reinvest leads to higher relative increase in smaller blocks in response to payouts. And

if smaller blocks tend to be in smaller diversity groups, then smaller diversity group would increase relatively more after payouts. Thus, diversity measure would rise. First stage analysis shows high correlation between diversity measures and the instrument. T-statistics of the instrument coefficient in the first stage varies between 8.43 and 11.86 and is significant at 1% level.

Exclusion Restriction

The exclusion restriction requires the instrument to influence the dependent variable of the analysis only through the level of block ownership or block diversity, conditional on the controlled variables. This condition could not be tested statistically, and I can only argue that the instrumental variable is unlikely to influence the value of the company through other channels.

The payout instrument is constructed based on the actions of other companies. Thus, it is less likely to be affected by any anticipated changes in the company of interest. Controlling for firm level fixed effects in the regression analysis additionally accounts for impact of initial characteristics of the company. In sum, the constructed instrument is unlikely to be correlated with any company-specific omitted variables. All 2SLS regressions also control for the industry-year fixed effects, and thus account for the potential dependence of company value and payout instrument on the market conditions.

Another concern is that the payout instrument could be affected by unobserved characteristics of blockholders. For instance, a blockholder who is a strong monitor could be more successful in the demand for dividends in one company and improvement of the value of another company at the same time. To address this issue I scale received payouts by the number of blocks in the portfolio, and thus penalize more companies with large portfolio. Also, according to Kempf, Manconi, and Spalt [2016] findings shareholders have a limited attention in monitoring, and thus it is less likely that one blockholder would be highly involved into the monitoring of several companies at the same time.

Acquisitions Instrument

Description of the Acquisitions Instrument

The second instrument is constructed based on the acquisition of financial firms by blockholders. The initial idea of this instrument comes from Hong and Kacperczyk [2010], who used the mergers of brokerage houses as a shock to the competition between stock analysts. I adopt their design, and

construct an instrument that indicates whether one of the blockholders in a company acquired a financial firm during the previous year.

Information about mergers and acquisitions (M&A) is taken from the SDC Platinum database. I download all M&A deals between 1996 and 2013 where the target company is in the finance industry (meaning that two digit SIC code is 60, 61, 62, 63, 64 or 67) and the value of the deal is above $1 million. There are 6,655 deals completed by 3,313 different acquirers that satisfy the described conditions. I manually match SDC acquirers with blockholders in my sample and check that the matched investor is a blockholder in my sample the year after the deal. These two conditions restrict the selection to 550 acquisitions. Similar to the previous instrument, I omit the events where a blockholder-acquirer controls more than 100 blocks in a year.

For the next step, I construct a variable that equals to one when one blockholder in a company was involved in the selected acquisitions and zero otherwise. In total, this instrument equals to one in 1472 company-year observations.[9]

Relevancy of Acquisition Instrument

Why acquisition of financial firms would be relevant for the level of block ownership or block diversity? First, in case of acquisition, assets of acquired firm would be added to blockholder's portfolio. And if the firm had any positions in the company where acquirer has a block, then the size of this block will increase. Also, combined position of the blockholder and the target firm could result in new blocks in other companies. Table 3 indicates that the level of block ownership rises by 2.9% on average in the response to described acquisitions.

The constructed instrument affects the diversity measure through the relative change in the size of one group of blocks in the company. Empirically, I detect that smaller blocks tend to have a higher relative increase than larger blocks in response to acquisitions. Because smaller blocks tend to be in the smaller diversity groups, smaller diversity groups would increase more in response to acquisitions. And a relative increase in a smaller diversity group leads to an increase in the level of diversity. Therefore, diversity in a company, on average, would increase after an acquisition. Results in the Table 3 support the proposed relation between the instrument and diversity measures.

Relevancy of the instrument could also be established using the statistical tests in the first stage regressions. Table 3 presents the results of the first stage regressions. Model (1) shows a strong

[9] As an alternative investment, I use a target size instead of a dummy variable. This selection does not change my results.

positive correlation of the level of block ownership in the company with both payout and acquisition instruments. Both of the instruments are significant at the one percent level, with t-statistics of 20.60 for payout instrument and 5.72 for acquisitions instrument. Both of these statistics indicate the presence of a strong link between the block ownership variable and two instruments. The value of F-test for the joint significance of two instruments is 624.53, which also supports the relevancy of the instruments for the level of block ownership.

Models (2) - (5) in the Table 3 also suggest relevancy of the constructed instruments in the explanations of the diversity measures. T-statistics of the instrument for first stage regressions of diversity measures range between 5.03 and 7.80, and are significant at the 1% level for all measures.

The value of F-test for the joint significance of the instruments for diversity measures varies between 117.11 and 245.10 and also suggests a high correlation between the instruments and diversity measures.

Exclusion Restriction of Acquisition Instrument

Acquisition of a financial firm is a long, regulated and complex process. If a shareholder wants to increase one of his block positions or obtain a new block, then direct purchase of the shares would be an easier option than a firm acquisition. Therefore, acquisition variable should be independent from the blockholder's expectations of the future performance of the company.

As in the previous instrument, I exclude the acquisition activity of investors with more than 100 blocks for the instrument. Large blockholders are more prone to acquire financial firms, and also might have a stronger impact on a company. To avoid the effect of these blockholders on my instrumental variables, I omit their activity in the construction of the instrument.

Company Value

I estimate the causal effects of block diversity on company value with the following equation:

$$Tobin_{i,t+1} = \beta_1 \cdot \widehat{Diveristy}_{i,t} + \beta_2 \cdot \widehat{block\_hold}_{i,t} + B \cdot X_{i,t} + f_i + h_{ind,t} + \varepsilon_{i,t} \tag{7}$$

Where $Tobin_{i,t+1}$ is a Tobin's Q of firm i in a year t, $\widehat{Diversity}_{i,t}$ corresponds to one out of four diversity measures (instrumented on the first stage), and $\widehat{block\_hold}_{i,t}$ is the portion of shares outstanding controlled by all blockholders (instrumented on the first stage). $X_{i,t}$ is a set of firm specific controls, and variables f_i and $h_{ind,t}$ corresponds to firm and industry-year fixed

effects. I control for the aggregate level of institutional ownership to separate its influence from effect of block ownership. Other firm specific controls include growth, size, fixed assets, capital expenditures, leverage and Amihud illiquidity measure. The Appendix provides detailed definitions of the variables. All errors in all regressions are robust and double clustered on the company and year level.

The level of block ownership and block diversity are treated as endogenous and instrumented with payouts and acquisitions variables constructed in the previous section. Model (1) of Table 4 shows that diversity in the identity of block owners lowers the value of the company. The coefficient of the variable equals to -2.90 and is statistically significant at the 5% level. According to the results, one-standard-deviation increase in the level of this diversity measure leads to a 0.42 standard deviation drop in the value of the company($-0.42 = -2.90 \cdot 0.24/1.65$). The magnitude of the effect of the block diversity is large in comparison to the standard deviation. However, the second stage coefficients reflect predicted *causal* effect of the diversity. The difference between two-stage and one-stage coefficients suggest a strong sample selection bias in block ownership and block diversity. Indeed, the estimated value of the selection bias is 2.57.[10] Large positive value of the selection bias suggests that a new blockholder would enter a company with blockholders who different from him mostly in the cases when he believes that the company is overvalued or would outperform in the future.

Model (2) shows the relationship between heterogeneity in the size of blockholders' portfolios and company value. The coefficient of this diversity dimension is -2.79 and it is significant at the 1% level. The economic effect of diversity in size is very similar to the effect of the diversity in identity: one-standard-deviation increase in the size diversity corresponds to a drop of 0.36 standard deviations in the value of the company ($-0.36 = -2.79 \cdot 0.21/1.65$). Model (3) presents a negative relation between the diversity of blockholders in investment horizon and value of the company. This relation is statistically significant at the 1% level and the economic magnitude of the effect is very similar to estimates from the previous models: one-standard-deviation rise in the diversity in investment horizon corresponds to a 0.32 ($-0.32 = -2.51 \cdot 0.20/1.65$) standard deviation drop in the value of the company.

Model (4) suggests that the aggregate level of diversity also has a negative impact on the value of the company. The described effects is statistically significant at the 1% level and is economically

[10] 2.57 is a difference between -0.30 (the coefficient on Diversity in identity in Model (1), Table 2) and -2.90 (the coefficient on Diversity in identity in Model (1) Table 4).

meaningful: one standard deviation increase in the diversity index leads to 0.27 ($-0.27 = 0.68 \cdot 0.66/1.65$) drop in company value. The value of the economic effect of the aggregate index is lower than the value of the effect of three previous measures of diversity, suggesting that diversity within the group has stronger impact on company value than diversity between the groups. Similar to the Table 2, Table 4 suggests that the level of block ownership does not have a statistically significant predictive power towards the future value of the company.

Table 5 explores the relationship between block ownership diversity and return on company assets. Model (1) of Table 5 shows that diversity in the identity dimension leads to lower returns on company assets. One-standard-deviation decrease in this component of diversity leads to 0.38 ($-0.38 = -0.31 \cdot 0.24/0.19$) of a standard deviation drop in the ROA of the company. This effect is statistically significant at 10% level. Model (2) and Model (3) detect the similar impact of diversity in the size of a blockholder's portfolio and his investment horizons and ROA. Consistently, Model (4) suggests a negative impact of the aggregate diversity index and ROA. In the last three models diversity variables is statistically significant at 5% level. The level of block ownership, on other hand, has a strong positive effect on company value. One standard deviation increase in the level of block ownership leads to 0.22 to 0.28 standard deviation rise in the ROA of the company. Similarly, to the previous analysis, large magnitude of the economic significance suggest a high positive value of the sample selection bias between the first stage and second stage.

Table 6 shows the impact of block ownership and diversity between blocks on free cash flows of the company. Model (1) suggests that block ownership in the company has a positive impact on company performance. One-standard-deviation increase in block ownership leads to a 0.35 standard deviation rise in the company free cash flows. Diversity in identity, on the other hand, lower free cash flows: one standard deviation increase in this diversity measure lowers company free cash flows by 0.46 of a standard deviation. The scale of the economic impact of diversity on company performance is almost identical to estimates of its effects on ROA of the company. Model (2) - Model (4) similarly present a negative impact of other diversity estimate on free cash flows.

Robustness Checks

Diversity between Subsamples of Blockholders

In this section, I want to ensure that the results of the analysis reflect the influence of block diversity and are not driven by the presence of one particular type of blockholders. Indeed, if one group of

blockholders would have a pronounced positive or negative impact, then diversity measures would capture it, and the results could be significant merely due to the impact of one group alone.

To account for this concern, I repeat my analysis excluding several groups of blocks. First, I exclude all institutional blockholders from my analysis. I reestimate the level of block ownership, four diversity measures, and two instrumental variables for all non-institutional blockholders and repeat the analysis from Table 4. Panel (A) of Table 7 investigates how diversity between non-institutional blockholders is related to company value. Consistently, I find that diversity across all measures has a negative effect on the company value. Model (1) on Panel (A) investigates the impact of diversity between individual and non-institutional corporate blocks. According to the results, diversity between these two groups has a statistically significant negative impact on company value. Model (2) measures diversity in portfolio size between non-institutional blocks. I divide blockholders into size groups using the same threshold as in original analysis. Model (2) shows that diversity in portfolio size between non-institutional blocks negatively affects company value and this effect is significant at the 1% level. For analysis in Model (3), I divide non-institutional blockholders into groups by their portfolio turnover. According to Model (3), diversity in investment horizon negatively impacts company value. Lastly, I construct a new diversity index as a first principal component of three redefined diversity variables. Model (4) suggests that the new aggregate diversity index also negatively impact company value. While all new diversity variables have a strong statistical significance on company value, but their economic impact is lower: one-standard-deviation increase in these variables leads to a 0.07 to 0.15 standard deviation drop in company value.

In the second robustness check, I perform the same analysis excluding blockholders in the largest group by portfolio size (this group includes blockholders with more than 220 blocks per year). Similarly, I reestimate the level of block ownership, three diversity measures and aggregate diversity index without the excluded investors. I did not use any of these large blockholders in the construction of instrumental variables, and thus they are not affected. Panel (B) of Table 7 presents the effect of diversity between selected blockholders on company value. According to the panel, all diversity variables in the subgroup of blockholders have a negative impact of company value and this effect is at least 5% significant. One-standard-deviation increase in reconstructed diversity variables leads to a 0.1-0.15 standard deviation drop in company value.

Lastly, I repeat the analysis excluding long-term blockholders. In this test, I estimate block ownership, diversity variables and instrumental variables without blockholders in the lowest turnover quantile. Panel (C) suggests that all reconstructed diversity variables have a negative impact on the

company value. Diversity in the size of blockholders' portfolios is significant at 10% level and other diversity measures have statistical significance of 5%. One-standard-deviation increase in diversity variables leads to a 0.13 - 0.17 standard deviation drop in company value. Thus, the analysis in the Table 7 suggests that diversity in at all levels lowers the value of the company.

Placebo Diversity

I check the robustness of the results using a placebo test. Preferably, the placebo diversity measure should not be related to heterogeneity between blockholders. I create placebo diversity measure between blockholders based on their position in the alphabetically ordered list. This construction relies on the assumption that any potential source of heterogeneity between blockholders is not correlated with the position of their name in the list. In the placebo diversity measure, blockholders with names in the first quarter of the alphabetically ordered list are assigned to placebo group 1. Blockholders in the second, third, and fourth quarter of the list are assigned to groups 2, 3 and 4 respectively. Similar to the previous cases, placebo diversity is constructed using **Equation 2**. Table 8 compares the effect of diversity in the size of the portfolio between investors and the constructed placebo measure on company value, return on assets and free cash flows. I use two stage analysis in all models to establish the causal references. According to the Table 8 , instrumental variables have strong predictive power towards generated placebo diversity. First-stage t-statistics of the payouts instrument and acquisitions instrument equals to 3.92 and 3.46 respectively, and are significant at 1% level. F-statistics value of 23.76 also suggests relevancy of the instrument for placebo diversity.

Model (1) and Model (2) shows the impact of diversity in size and placebo diversity on company value. As discussed previously, diversity in size has a strong negative impact on company value. The value of R-squared in Model (1) suggests, that diversity in size, together with other variables, can explain 49.5% of variation in company value. However, the negative values of R-squared in the Model (2) implies that a combination of placebo diversity and other controls explains less variation in company value, than a constant prediction. The decrease in R-squared from Model (1) to Model (2) indicates, that diversity in size has a more explanatory power towards company value, than generated placebo measure of diversity. Drop in R-squared from Model (3) to Model (4) and from Model (5) and Model (6) also suggests, that diversity in size explains more variation in return on assets and free cash flows than the placebo variable. Table 8 also suggests a lower impact of the placebo variable on company value, return on assets, and free cash flows.

Simulated Diversity

One challenge of this paper is the construction of a proxy variables for blockholders' diversity. The diversity variables proposed in this work by no means captures all aspects of heterogeneity between blocks in the company. Study by Cronqvist and Fahlenbrach [2009] suggests that the effect on corporate policies varies from a blockholder to a blockholder. My analysis aims to captures part of blockholders heterogeneity associated with their identity, size of portfolio, or investment horizon. But if what the main variation between block types arises from characteristics that are not related to their identity, size of portfolio, or horizon? For instance, in the identity dimension, I measure the diversity between individuals, institutions, and corporations, assuming that a pair of individuals on average is more similar to each other than a pair of an individual and an institution. But if this assumption does not hold, then constructed diversity in identity would not be a reasonable proxy for blockholders' heterogeneity. In sum, my analysis relies on the assumption, that on average, a pair of blocks from the same group is more homogeneous than a pair of blocks from different groups. This assumption could not be tested directly, but I can support it with indirect evidences. The analysis in this part implies, that diversity between selected groups of blocks has a stronger impact on company value than diversity between randomly created groups of blocks.

In this exercise, all blocks are assigned to one out of four simulated groups with a one-fourth chance of being in each group. Consistently with the previous analysis, I create a simulated diversity measure between generated groups of blocks using **Equation 2**. I estimate the impact of simulated diversity on the company value using two stage analysis from Table 4. If statistical significance of both instrumental variables in the first stage is greater than 2%, I record the results of this simulation. If at least of the instrumental variables is not significant at the 2% level, I drop the results in this simulation and proceed to the next one. Simulations are repeated until I reach 100,000 results. The impact of simulated diversity measures has a lower statistical significance in the majority of cases. Only 1,982 out of 100,000 simulated variables have stronger statistical significance than any of the original diversity variables. Formally I compare t-statistics of simulated variables coefficient with the t-statistical of the least significant diversity variable. In my case, diversity in identity has the lowest absolute value of t-statitics, and thus I compare significance of simulation with it. Figure 8 illustrates the comparison of "real" diversity measure with the generated placebo variables. The hypothesis that the simulated results have a stronger statistical significance than diversity in identity is rejected at the 2% level.

The simulated results also allow us to rule out a set of alternative explanations. For instance, if the results shown in this paper were driven by other characteristics of blockholders, such as the concentration of block ownership or the maximum size of a company's blocks, then the results of simulations would be similar to results of the original analysis. Importantly, simulated tests suggest that my results are not driven by unobserved characteristics of company block ownership.

Potential Channel of Diversity Influence

In the previous sections, I've explored how diversity affects company value and performance. In this part of the paper, I investigate one potential channel through which diversity between blockholders affects the company. As mentioned in the hypotheses section, higher diversity between blockholders could lead to a disagreement among them on the optimal policies which the company should take. Although, it is hard to measure a disagreement on each policy decision, I can measure a general level of disagreement between company blockholders about its future performance. As one measure of disagreement, I use a dummy variable which indicates whether blockholders trade in the opposite direction in the following year. Panel (A) in Table 9 shows how diversity between blockholders impacts a future level of disagreement among them. This table indicates, that blockholders tend to trade in different directions after diversity between blocks increases. One-standard-deviation rise in diversity increases the chances of blockholders of making opposite trades by 8.3%-8.5%. Panel (B) of Table 9 explores how an increase in diversity influences the level of disagreement among all shareholders in the company. I proxy the aggregate level of disagreement using the stock volatility in the following year. Model(1) to Model (3) of Panel (B) shows that one standard deviation rise in the level of block diversity increases stock volatility by 0.34-0.38 of standard deviations.

In the Table 10 I explore how increase in the blockholder diversity is related to the number and support for shareholder proposals. Model (1) suggest that shareholders are more likely to file an additional proposals after an increase in blockholder diversity. Model (2) additionally suggests that support for each proposal is lower when diversity increases. These results indicates that a company with more diversity set of blockholders receives more suggestions about the potential change in strategy, but each of the proposals receives less support.

Lastly, I check how diversity between blocks influences investment policies in the company. I investigate how increase in diversity impacts capital expenditures and acquisition activity of the company in the future. According to the results in the Table 11, an increase in diversity has a weak negative influence on the capital expenditures and a strong negative influence on the number of all

acquisitions and the number of diversified acquisitions.

6 Conclusion

According to my new and comprehensive data on block ownership, the majority of US public companies in recent year have several blockholders. These blockholders may differ from each other in multiple ways. I explore the impact of diversity among blockholders on company value. Using shocks to block ownership from the acquisitions of financial firms and unexpected increase payouts in other companies to identify the causality channel, I find that block diversity has a strong negative influence on company value and performance. These results are consistent for all diversity measures: diversity in blockholders identity, diversity in the size of a blockholder's portfolio, and diversity in investment horizon of a blockholder.

My analysis separates the impact of the level of block ownership and block diversity. The results of my paper suggest that the potential positive effect of the level of block ownership could be offset by the negative influence of diversity among the blocks. Block diversity has a negative impact, even when diversity is measured after the exclusion of institutional blockholders, long-term blockholders and large blockholders. The analysis of the placebo simulations, implies that negative influence of blockholders comes mainly from diversity in their characteristics, rather than the size of block position or block concentration, or other unobserved parameters.

My results highlight the limitations of theoretical and empirical research, that focuses primarily on the aggregate level of block ownership or on the presence of one particular type of the investor. A promising avenue for the future research includes the theoretical predictions of block diversity, together with the investigation of potential mechanism behind its influence.

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8 Figures

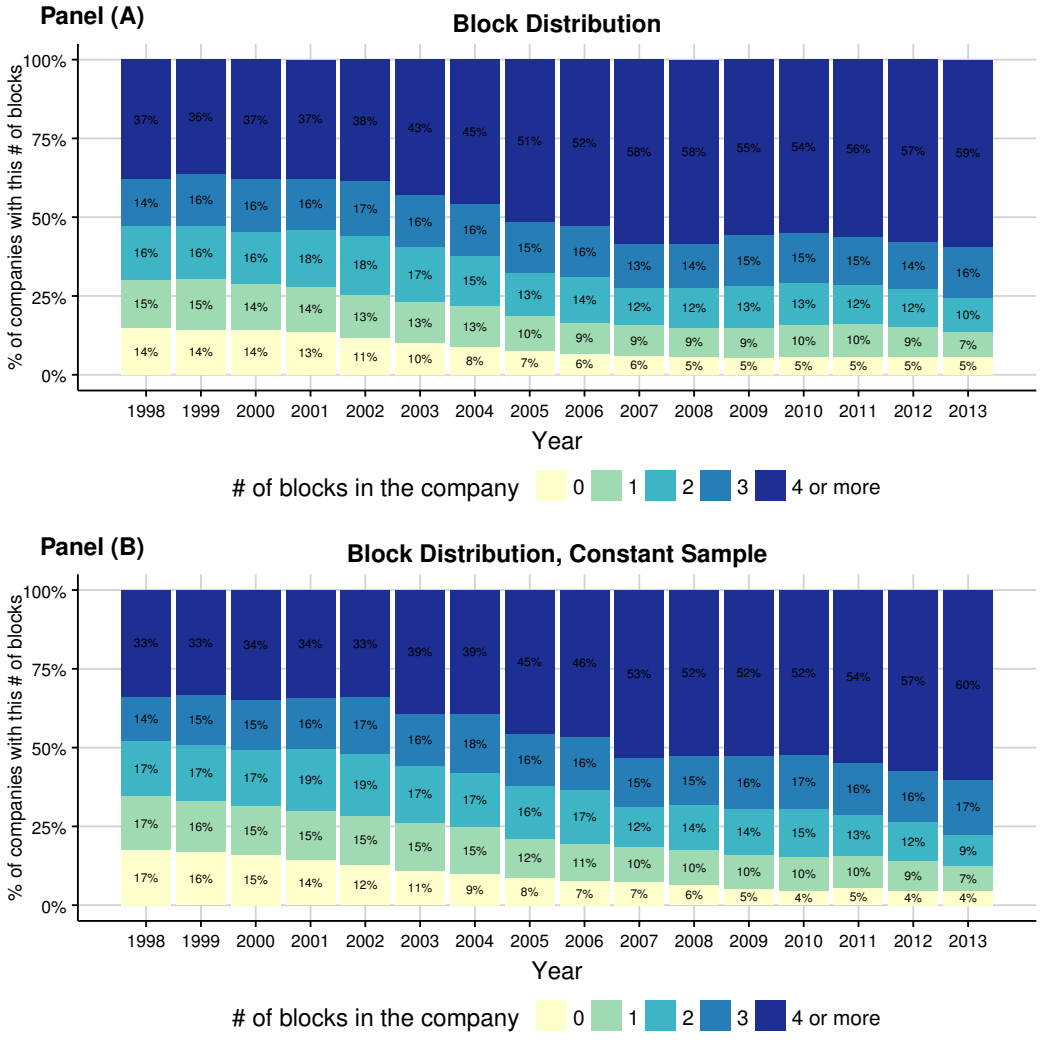

Figure 1: Plot in Panel (A) shows the distribution of the number of blocks for all firms that are covered by CRSP, Compustat, and SEC EDGAR databases from 1998 through 2013. Information about block ownership is collected from disclosures under Sections 13(d) and 13(g) of the Securities and Exchange Act of 1934. Panel (B) shows the distribution of the number of blocks for the firms that are present in our sample in all years between 1998 and 2013. In total, constant sample on the lower panel includes 1,865 firms.

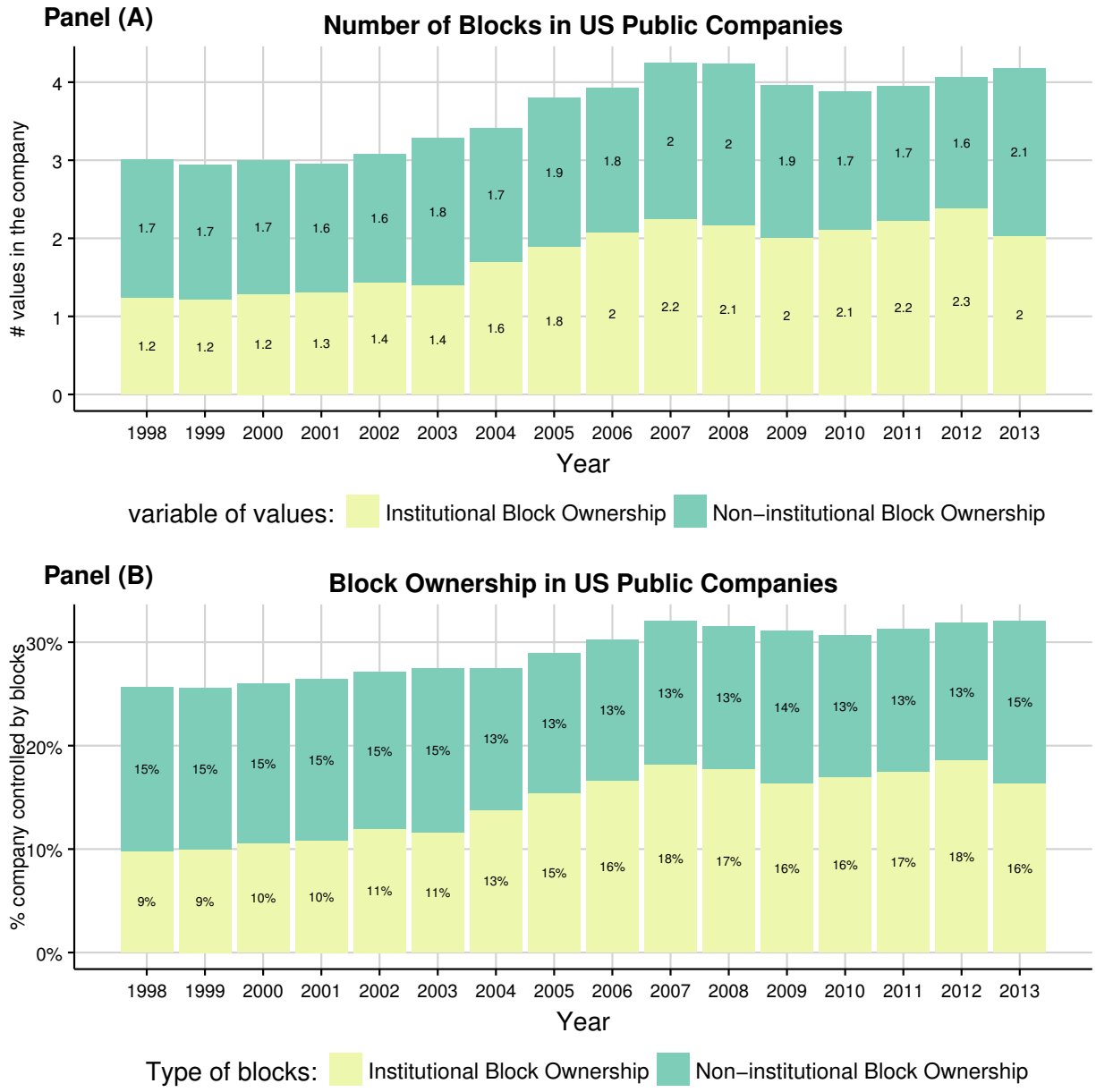

Figure 2: Panel (A) shows the average number of institutional and non-institutional blocks over time. Panel (B) shows the average percent of shares outstanding controlled by institutional and non-institutional blocks over time. Sample includes all firms that are covered by CRSP, Compustat, and SEC EDGAR databases from 1998 through 2013. Data for institutional block ownership is taken from Thompson Reuters database. Information about total block ownership is collected from disclosures under Sections 13(d) and 13(g) of the Securities and Exchange Act of 1934. Non-institutional block ownership is calculated as the difference between total block ownership and institutional block ownership.

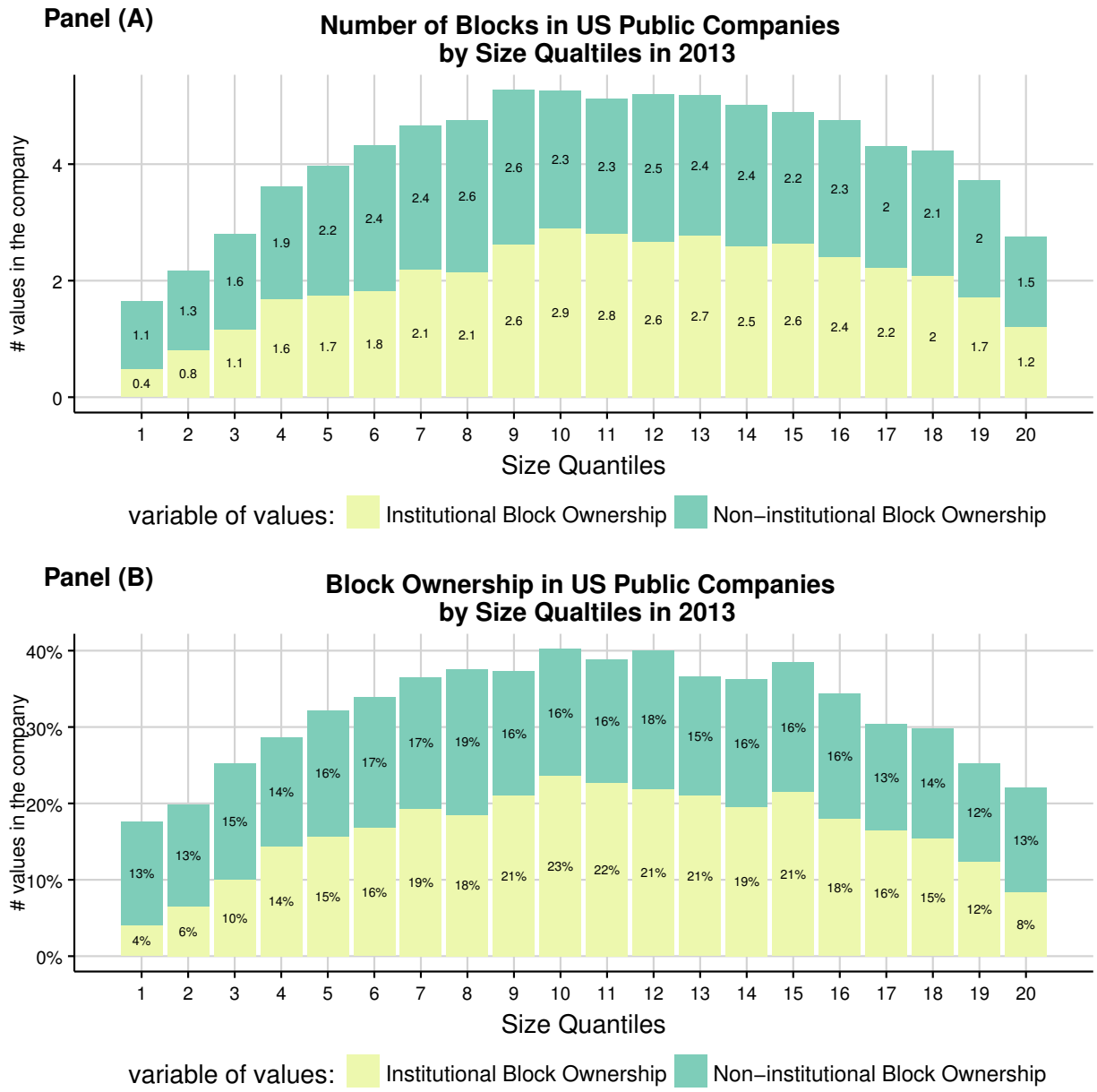

Figure 3: Panel (A) shows the average number of institutional and non-institutional blocks over twenty size quantiles of market capitalization in 2013. The first left column corresponds to the companies of the smallest size. Panel (B) shows the average percentage of shares outstanding controlled by institutional and non-institutional blocks over twenty size quantiles of market capitalization in 2013. Sample includes all firms that are covered by CRSP, Compustat, and SEC EDGAR databases from 1998 through 2013. Data for institutional block ownership is taken from Thompson Reuters database. Information about total block ownership is collected from disclosures under Sections 13(d) and 13(g) of the Securities and Exchange Act of 1934. Non-institutional block ownership is calculated as a difference between total block ownership and institutional block ownership.

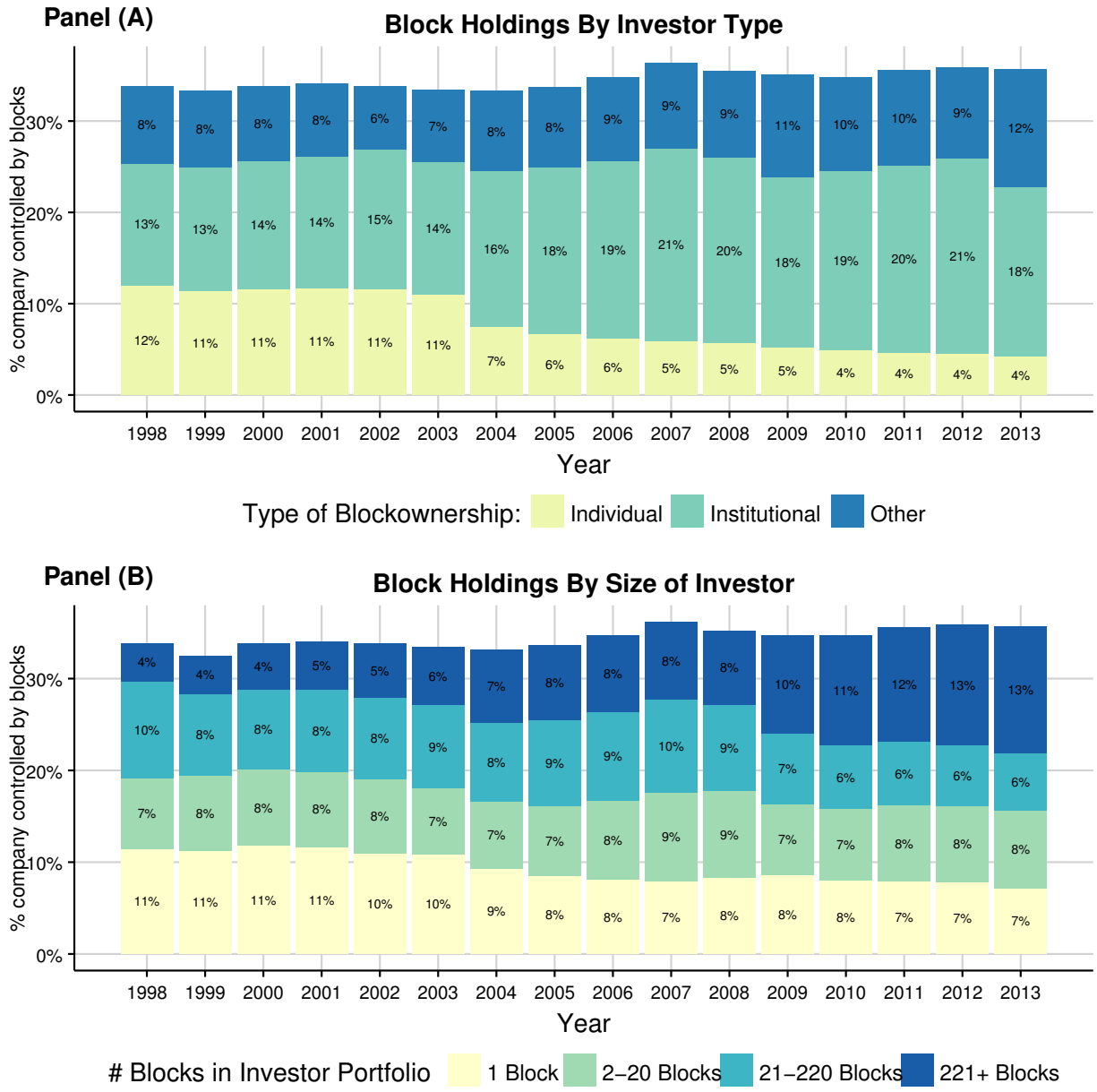

Figure 4: Panel (A) presentage average ownership of institutional blockholders, individual blockholders, and all other blockholders over time. Panel (B) shows an average ownership by blockholders that belong to the different groups by the size of their portfolio. The first group includes blockholders with just one block, the second group includes blockholders with 2-20 blocks, the third group includes blockholders with 21-220 blocks and the last group includes blockholders with > 220 blocks. Sample includes companies with at least two blocks that are covered by CRSP, Compustat and SEC EDGAR databases from 1998 through 2013. Data for institutional block ownership is taken from Thompson Reuters database. Information about total block ownership is collected from disclosures under Sections 13(d) and 13(g) of the Securities and Exchange Act of 1934. We determine whether a blockholders is an individual from the information disclosed in the Schedule 13D or 13G filing.

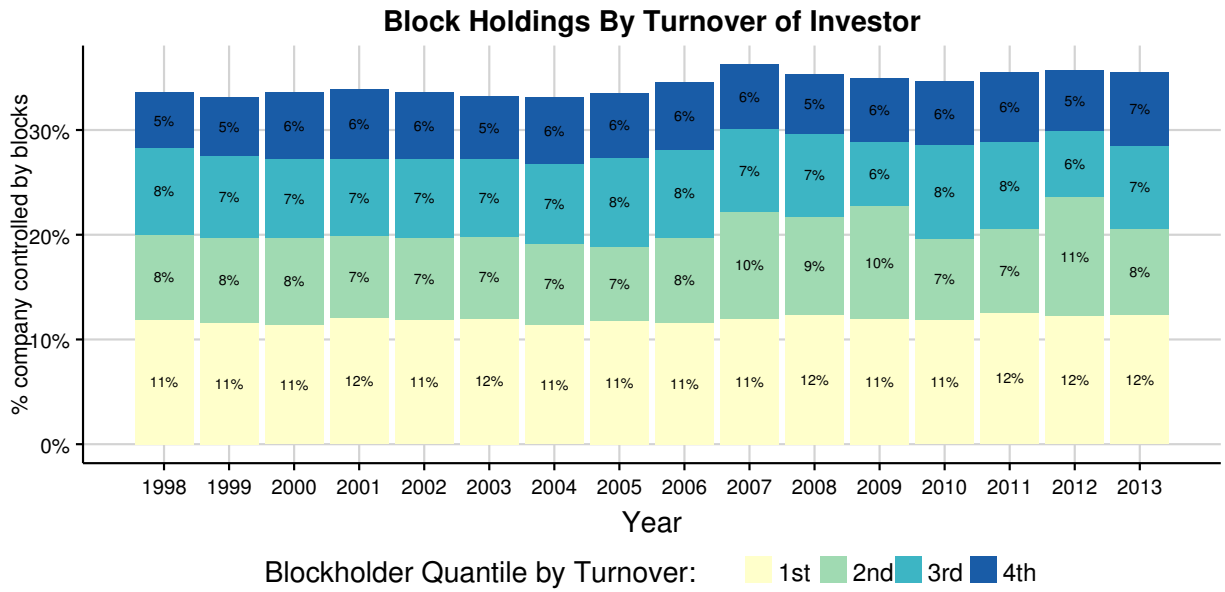

Figure 5: Panel (A) presentage average ownership by four groups constructed from quantiles of block ownership turnover. Sample includes companies with at least two blocks that are covered by CRSP, Compustat and SEC EDGAR databases from 1998 through 2013. Data for institutional block ownership is taken from Thompson Reuters database. Information about block ownership is collected from disclosures under Sections 13(d) and 13(g)

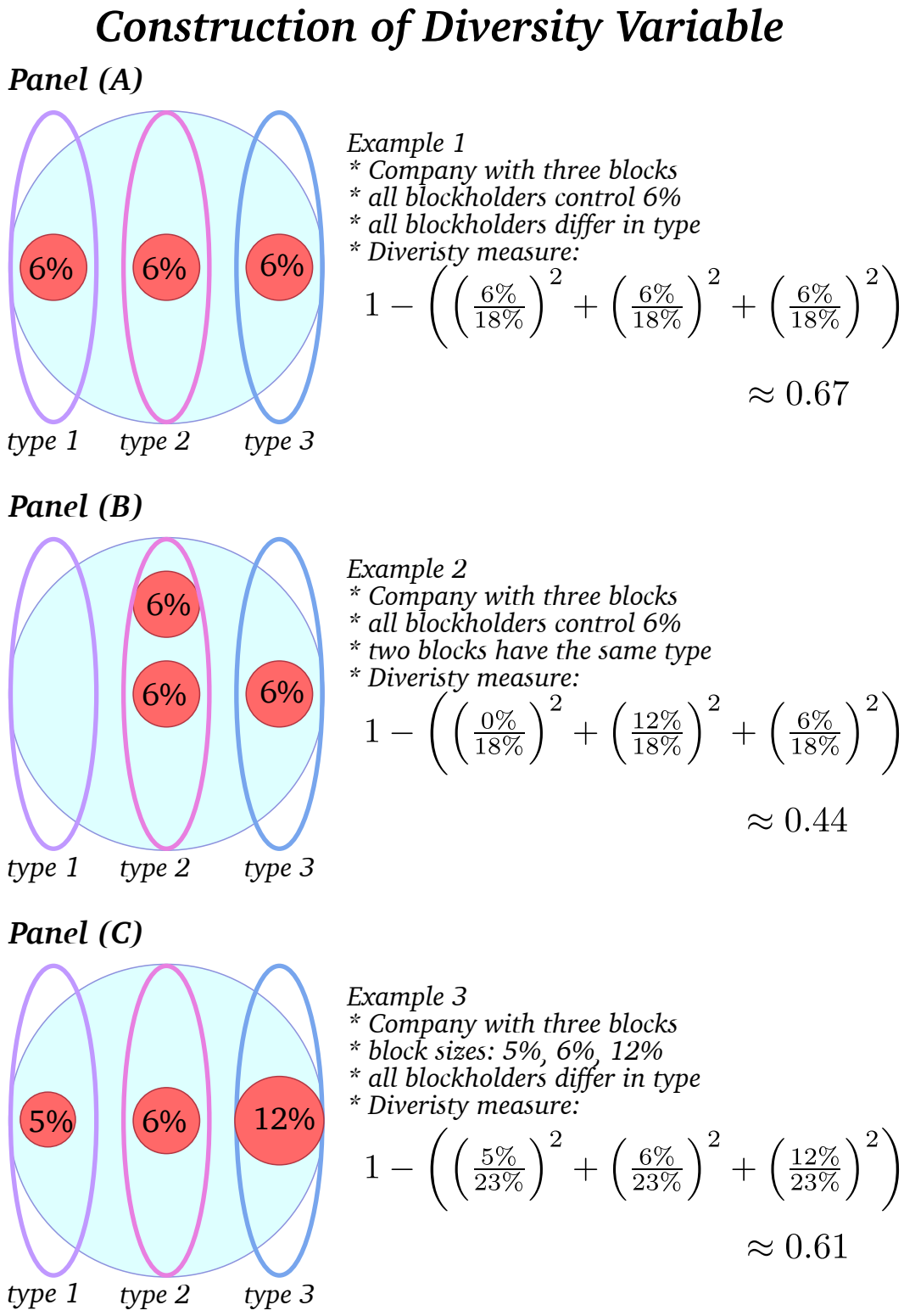

Figure 6: This figure illustrates the construction of the diversity measure. Panel (A) shows the construction of the measure when all company blocks have the same size of 6% and belong to three different types. Panel (B) shows the construction of the measure when three blocks have the same size, but two of the blocks have the same type. Panel (C) shows the construction of the measure when company blocks differ in size and belong to three different types.

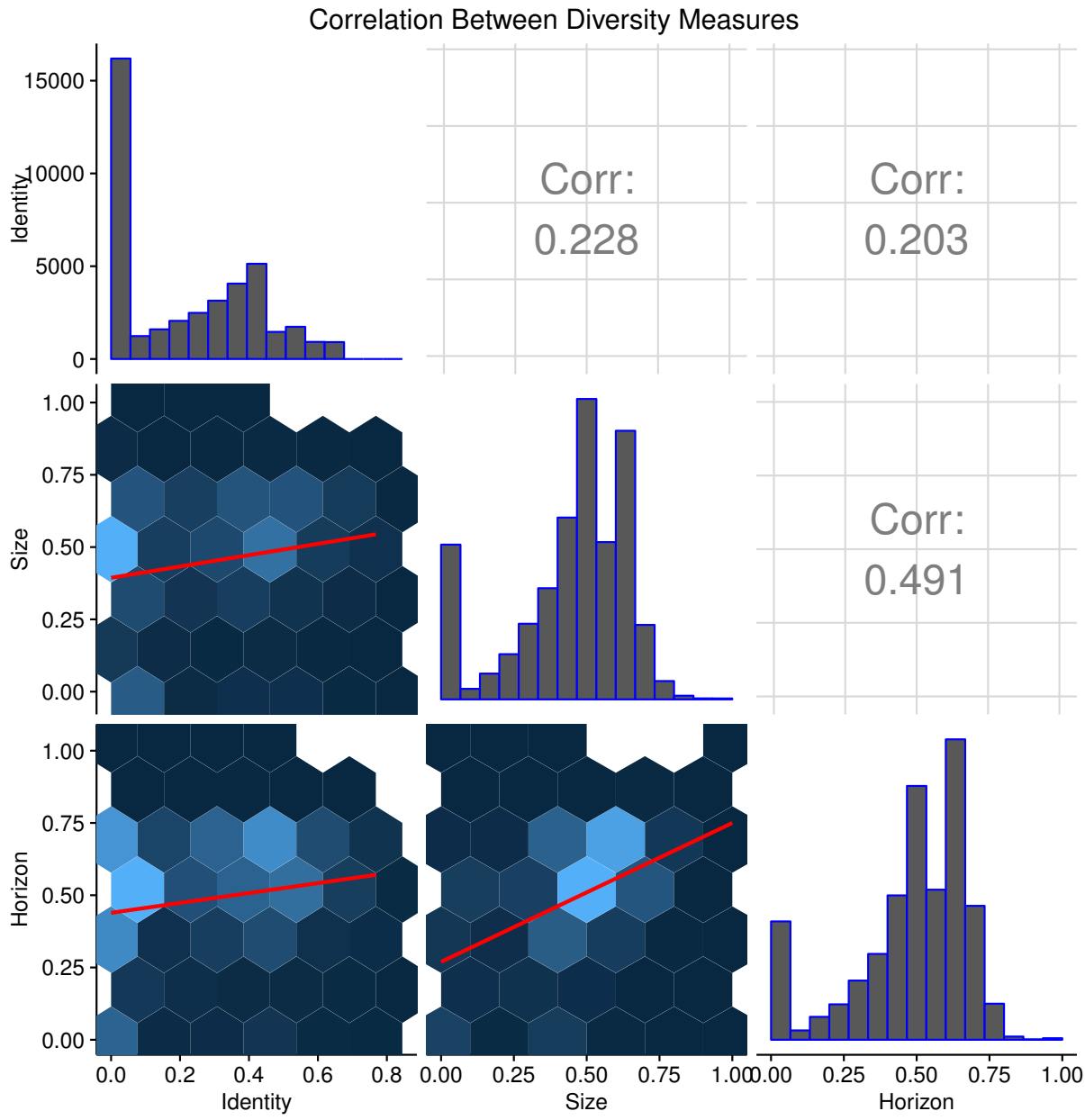

Figure 7: This figure presents a joint distribution of constructed diversity measures. Cells above the diagonal show a pairwise correlation between pairs of diversity measures. Diagonal cells plot the histogram of the distribution of each measure of diversity. Cells below the diagonal show a heat map of joint distribution between the measures, together with fitted minimum least estimate (red line). Brighters color of hexagon cells on the heat map correspond to the more frequent value of the joint distribution.

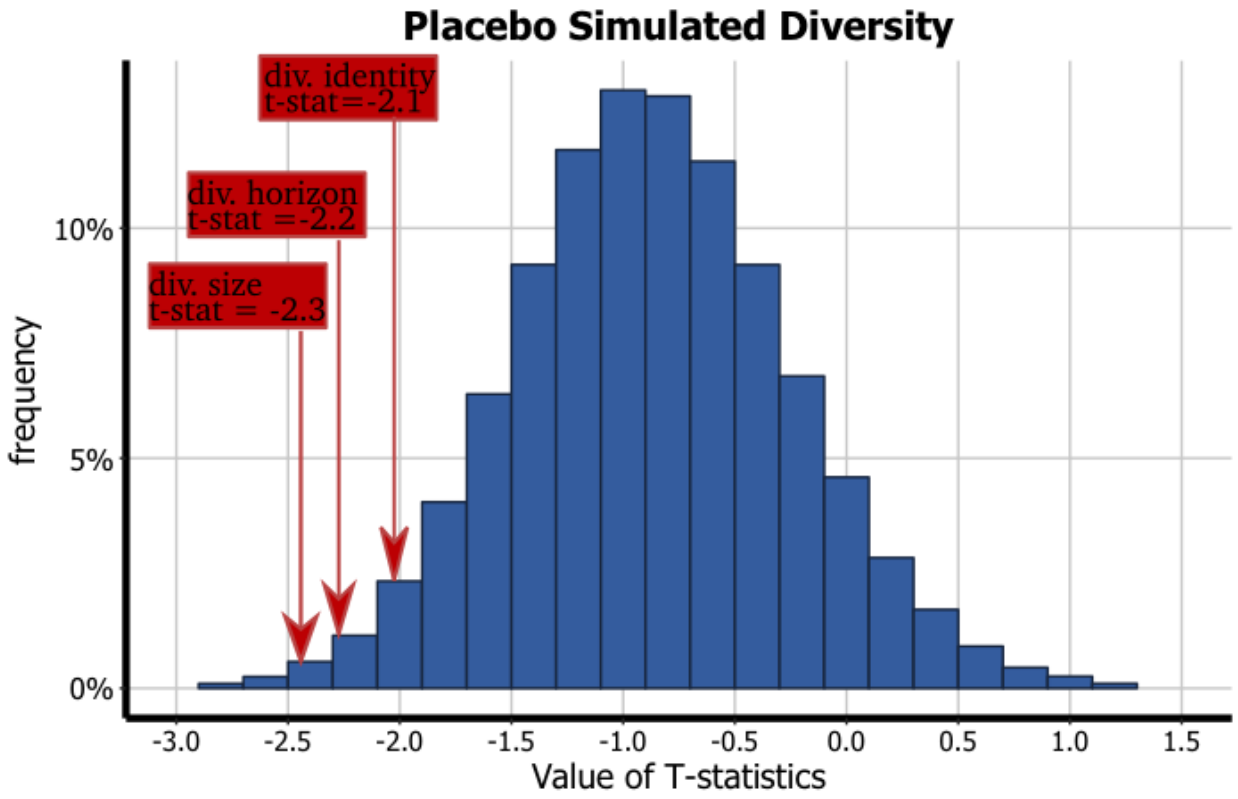

Figure 8: This figure presents shows the distribution of the statistical significance of placebo simulated diversity dimension and compares this significance with significance of diversity variables from Table 4.

9 Tables

Table 1: Summary Statistics.

This table reports summary statistics for a number of firm-specific characteristics from 1998 through 2013. Sample in Panel (A) consists of firm-year observations for all US public firms between 1998 and 2013 after exclusion of 1) firms in financial and utilities industries, 2) firms without annual reports in SEC EDGAR, 3) observations with negative or zero value of market capitalization and total assets or missing value of any the listed variables. Panel (B) restricts the sample to firms with at least two blockholders. Accounting information is obtained from CRSP-Compustat Merged database, institutional ownership is obtained from Thompson Reuters, and blockholders data is collected from Schedule 13D and Schedule 13G filings obtained from SEC EDGAR. Appendix I provides precise definitions for the variables.

Statistic	N	Pctl(25)	Mean	Median	Pctl(75)	St. Dev.
Block Holdings	51,708	0.130	0.290	0.264	0.418	0.207
Number of Blocks	51,708	2	3.604	3	5	2.355
Institutional Holdings	51,708	0.135	0.471	0.504	0.768	0.337
Number of Institutional Blocks	51,708	0	1.782	1	3	1.702
Sales Growth	51,708	0.978	1.178	1.082	1.224	0.551
Firm Size	51,708	4.713	6.189	6.102	7.539	2.011
Fixed Assets	51,708	0.168	0.483	0.373	0.724	0.393
Capital Expenditure	51,708	0.015	0.051	0.033	0.064	0.058
Leverage	51,708	0.012	0.210	0.165	0.336	0.211
Amihud Illiquidity	51,708	0.001	0.769	0.013	0.171	2.281
Tobin's Q	51,708	1.095	2.046	1.487	2.242	1.711
ROA	51,708	−0.016	−0.012	0.035	0.077	0.197
FCF	51,708	0.014	0.021	0.065	0.108	0.200

Statistic	N	Pctl(25)	Mean	Median	Pctl(75)	St. Dev.
Block Holdings	40,935	0.205	0.346	0.315	0.453	0.182
Number of Blocks	40,935	3	4.404	4	6	1.968
Institutional Holdings	40,935	0.277	0.537	0.599	0.807	0.324
Number of Institutional Blocks	40,935	1	2.158	2	3	1.697
Sales Growth	40,935	0.980	1.180	1.083	1.223	0.549
Firm Size	40,935	4.965	6.300	6.206	7.532	1.851
Fixed Assets	40,935	0.166	0.473	0.365	0.703	0.384
Capital Expenditure	40,935	0.016	0.051	0.033	0.063	0.057
Leverage	40,935	0.012	0.210	0.165	0.334	0.211
Amihud Illiquidity	40,935	0.001	0.517	0.009	0.097	1.792
Tobin's Q	40,935	1.101	2.025	1.494	2.232	1.645
ROA	40,935	−0.015	−0.010	0.035	0.076	0.191
FCF	40,935	0.016	0.024	0.065	0.108	0.192
Acquisition Instrument	40,935	0	0.032	0	0	0.175
Payouts Instrument	40,935	0.000	0.003	0.0002	0.002	0.008
Diversity, identity	40,935	0.000	0.254	0.249	0.466	0.239
Diversity, size	40,935	0.355	0.443	0.488	0.602	0.206
Diversity, horizon	40,935	0.405	0.483	0.500	0.635	0.201
Diversity, index	40,935	1.394	1.748	1.887	2.236	0.657

Table 2: Firm Value and Diversity of Block Ownership. Partial Correlations.

This table reports non-causal relations between company value and diversity among company blockholders. The dependent variable in all models is $Tobins\_Q$. The sample consists of firm-year observations for all U. S. public firms with at least two blocks after exclusion of 1) firms in financial and utilities industries, 2) firms without annual reports in SEC EDGAR, 3) observations with negative or zero value of market capitalization and total assets or missing value of any other listed the variables. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	Tobin's Q				
	(1)	(2)	(3)	(4)	(5)
Institutional Holdings	0.360***	0.361***	0.370***	0.370***	0.375***
	(0.074)	(0.074)	(0.074)	(0.073)	(0.074)
Sales Growth	0.419***	0.419***	0.418***	0.419***	0.418***
	(0.070)	(0.070)	(0.070)	(0.070)	(0.070)
Firm Size	−0.105**	−0.106**	−0.105**	−0.104**	−0.104**
	(0.048)	(0.048)	(0.048)	(0.048)	(0.048)
Fixed Assets	−0.739***	−0.739***	−0.737***	−0.737***	−0.736***
	(0.094)	(0.094)	(0.094)	(0.094)	(0.094)
Capital Expenditure	3.881***	3.882***	3.885***	3.884***	3.886***
	(0.392)	(0.392)	(0.392)	(0.392)	(0.392)
Leverage	−0.583***	−0.583***	−0.579***	−0.581***	−0.578***
	(0.117)	(0.117)	(0.117)	(0.117)	(0.117)
Amihud Illiquidity	−0.081***	−0.081***	−0.082***	−0.082***	−0.082***
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
Block Holdings	−0.063	−0.054	−0.027	−0.030	−0.009
	(0.081)	(0.083)	(0.082)	(0.080)	(0.082)
Diversity, identity		−0.030			
		(0.033)			
Diversity, size			−0.114**		
			(0.048)		
Diversity, horizon				−0.111**	
				(0.046)	
Diversity, index					−0.045***
					(0.015)
Firm and Industry-Year FE	YES	YES	YES	YES	YES
Observations	40,935	40,935	40,935	40,935	40,935
R^2	0.611	0.611	0.612	0.612	0.612
Adjusted R^2	0.549	0.549	0.549	0.549	0.549

Note: *p<0.1; **p<0.05; ***p<0.01

Table 3: Validity of Instruments. First-stage Regression.

This table reports results from a linear regression of the level of block ownership and four measures of diversity among firm blockholders on instrumental variables. The first instrumental variable, payouts, estimates the total value of payouts received by firm blockholders from their positions in other companies relative to firm market capitalization. The second instrument is a dummy variable that equals to one when one of firm blockholders acquires a financial firm. The sample consists of firm-year observations for all U. S. public firms with at least two blocks after exclusion of 1) firms in financial and utilities industries, 2) firms without annual reports in SEC EDGAR, 3) observations with negative or zero value of market capitalization and total assets or missing value of any other listed the variables. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	Endogenous Variable				
	Block Hold	Div Ident	Div Size	Div Hor	Div Index
	(1)	(2)	(3)	(4)	(5)
Payouts Instrument	4.488^{***}	2.324^{***}	1.929^{***}	1.426^{***}	6.723^{***}
	(0.218)	(0.250)	(0.170)	(0.169)	(0.567)
Acquisition Instrument	0.029^{***}	0.040^{***}	0.038^{***}	0.038^{***}	0.148^{***}
	(0.005)	(0.008)	(0.006)	(0.006)	(0.019)
Institutional Holdings	0.082^{***}	0.031^{***}	0.108^{***}	0.115^{***}	0.414^{***}
	(0.009)	(0.011)	(0.010)	(0.008)	(0.028)
Sales Growth	0.003	0.004	−0.0002	−0.001	−0.002
	(0.003)	(0.003)	(0.003)	(0.002)	(0.008)
Firm Size	-0.019^{***}	−0.006	0.0003	0.006	0.009
	(0.004)	(0.004)	(0.004)	(0.004)	(0.013)
Fixed Assets	-0.021^{*}	-0.025^{*}	0.013	0.015	0.044
	(0.012)	(0.013)	(0.013)	(0.012)	(0.038)
Capital Expenditure	-0.105^{***}	−0.012	0.010	−0.019	−0.018
	(0.033)	(0.044)	(0.041)	(0.036)	(0.126)
Leverage	0.071^{***}	0.036^{**}	0.053^{***}	0.045^{***}	0.188^{***}
	(0.012)	(0.014)	(0.013)	(0.011)	(0.038)
Amihud Illiquidity	0.002^{**}	-0.002^{*}	-0.004^{***}	-0.002^{**}	-0.012^{***}
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)
Firm and Industry-Year FE	YES	YES	YES	YES	YES
Observations	40,935	40,935	40,935	40,935	40,935
R^2	0.571	0.316	0.402	0.370	0.434
Adjusted R^2	0.492	0.190	0.292	0.254	0.330

Note: *p<0.1; **p<0.05; ***p<0.01

Table 4: Firm Value and Diversity of Block Ownership. 2SLS Analysis.

This table explores the influence of diversity among blockholders on company value using two stage analysis. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. Table 3 provides the results of the first stage estimates. The dependent variable in all models is *ROA*. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	Tobin's Q			
	(1)	(2)	(3)	(4)
Institutional Holdings	0.449***	0.685***	0.705***	0.680***
	(0.066)	(0.092)	(0.101)	(0.087)
Sales Growth	0.400***	0.391***	0.389***	0.391***
	(0.061)	(0.064)	(0.061)	(0.062)
Firm Size	−0.161***	−0.150***	−0.144***	−0.148***
	(0.039)	(0.041)	(0.041)	(0.040)
Fixed Assets	−0.887***	−0.784***	−0.791***	−0.794***
	(0.079)	(0.085)	(0.083)	(0.082)
Capital Expenditure	3.753***	3.783***	3.665***	3.723***
	(0.346)	(0.325)	(0.323)	(0.321)
Leverage	−0.337***	−0.270***	−0.278***	−0.278***
	(0.089)	(0.090)	(0.087)	(0.087)
Amihud Illiquidity	−0.081***	−0.085***	−0.078***	−0.081***
	(0.009)	(0.009)	(0.008)	(0.008)
Block Holdings	0.363	0.063	−0.339	−0.115
	(0.818)	(0.615)	(0.456)	(0.525)
Diversity, identity	−2.896**			
	(1.406)			
Diversity, size		−2.790**		
		(1.204)		
Diversity, horizon			−2.510**	
			(1.125)	
Diversity, index				−0.682**
				(0.287)
Firm and Industry-Year FE	YES	YES	YES	YES
Block Hold, F-stat	624.53	624.53	624.53	624.53
Diversity, F-stat	117.11	210.39	112.94	245.1
Observations	40,935	40,935	40,935	40,935
R^2	0.525	0.573	0.583	0.602
Adjusted R^2	0.438	0.495	0.506	0.529
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 5: Return on Assets and Diversity of Block Ownership. 2SLS Analysis.

This table explores the influence of diversity among blockholders on company ROA using two stage analysis. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. Table 3 provides the results of the first stage estimates. The dependent variable in all models is *ROA*. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	ROA			
	(1)	(2)	(3)	(4)
Institutional Holdings	0.027^{***}	0.052^{***}	0.054^{***}	0.052^{***}
	(0.007)	(0.012)	(0.013)	(0.012)
Sales Growth	-0.033^{***}	-0.034^{***}	-0.034^{***}	-0.034^{***}
	(0.004)	(0.004)	(0.004)	(0.004)
Firm Size	0.062^{***}	0.064^{***}	0.064^{***}	0.064^{***}
	(0.004)	(0.004)	(0.004)	(0.004)
Fixed Assets	-0.109^{***}	-0.098^{***}	-0.099^{***}	-0.099^{***}
	(0.011)	(0.011)	(0.011)	(0.010)
Capital Expenditure	0.427^{***}	0.430^{***}	0.418^{***}	0.424^{***}
	(0.034)	(0.034)	(0.033)	(0.033)
Leverage	-0.169^{***}	-0.162^{***}	-0.163^{***}	-0.163^{***}
	(0.011)	(0.012)	(0.011)	(0.011)
Amihud Illiquidity	-0.010^{***}	-0.010^{***}	-0.010^{***}	-0.010^{***}
	(0.001)	(0.001)	(0.001)	(0.001)
Block Holdings	0.309^{***}	0.277^{***}	0.235^{***}	0.258^{***}
	(0.097)	(0.072)	(0.051)	(0.061)
Diversity, identity	-0.307^{*}			
	(0.172)			
Diversity, size		-0.296^{**}		
		(0.147)		
Diversity, horizon			-0.266^{**}	
			(0.130)	
Diversity, index				-0.072^{**}
				(0.035)
Firm and Industry-Year FE	YES	YES	YES	YES
Block Hold, F-stat	624.53	624.53	624.53	624.53
Diversity, F-stat	117.11	210.39	112.94	245.1
Observations	40,935	40,935	40,935	40,935
R^2	0.525	0.570	0.587	0.599
Adjusted R^2	0.438	0.491	0.511	0.525
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 6: Firm Free Cash Flow and Diversity of Block Ownership. 2SLS Analysis.

This table explores the influence of diversity among blockholders on free cash flows of the company using two stage analysis. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. Table 3 provides the results of the first stage estimates. The dependent variable in all models is *ROA*. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	FCF			
	(1)	(2)	(3)	(4)
Institutional Holdings	0.027^{***}	0.057^{***}	0.060^{***}	0.057^{***}
	(0.008)	(0.012)	(0.013)	(0.012)
Sales Growth	-0.023^{***}	-0.024^{***}	-0.024^{***}	-0.024^{***}
	(0.004)	(0.004)	(0.004)	(0.004)
Firm Size	0.069^{***}	0.071^{***}	0.071^{***}	0.071^{***}
	(0.005)	(0.006)	(0.005)	(0.005)
Fixed Assets	-0.074^{***}	-0.061^{***}	-0.062^{***}	-0.063^{***}
	(0.013)	(0.013)	(0.013)	(0.013)
Capital Expenditure	0.308^{***}	0.312^{***}	0.296^{***}	0.304^{***}
	(0.034)	(0.035)	(0.032)	(0.032)
Leverage	-0.203^{***}	-0.194^{***}	-0.195^{***}	-0.195^{***}
	(0.014)	(0.014)	(0.013)	(0.013)
Amihud Illiquidity	-0.011^{***}	-0.011^{***}	-0.011^{***}	-0.011^{***}
	(0.001)	(0.001)	(0.001)	(0.001)
Block Holdings	0.382^{***}	0.343^{***}	0.292^{***}	0.321^{***}
	(0.104)	(0.079)	(0.058)	(0.067)
Diversity, identity	-0.372^{**}			
	(0.179)			
Diversity, size		-0.358^{**}		
		(0.151)		
Diversity, horizon			-0.323^{**}	
			(0.132)	
Diversity, index				-0.088^{**}
				(0.035)
Firm and Industry-Year FE	YES	YES	YES	YES
Block Hold, F-stat	624.53	624.53	624.53	624.53
Diversity, F-stat	117.11	210.39	112.94	245.1
Observations	40,935	40,935	40,935	40,935
R^2	0.462	0.525	0.549	0.566
Adjusted R^2	0.363	0.438	0.466	0.486
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 7: Firm Value and Diversity of Block Ownership. Exclusion of Specific Groups of Blocks.

This table explores the influence of diversity in the subgroups of blockholders on company value using two stage analysis. Panel (A) shows the influence of the diversity among non-institutional blockholders on company value. Panel (B) presents the impact of the diversity among blockholders that hold less than 220 blocks in a year on company value. Panel (C) estimates changes in company value caused by diversity in the subsample of blocks that excludes blockholders in the top quarter by investment horizon. All panels control for the aggregate ownership of a subgroup of blockholders. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. Instrumental variables are measured based on the data of the group of blockholders included in the specification. The dependent variable in all models is $Tobins\_Q$. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

Panel (A), excl. institutional investors	(1)	(2)	(3)	(4)
Diversity in identity	-2.794^{**}			
	(1.220)			
Diversity in size		-4.600^{**}		
		(1.965)		
Diversity in horizon			-5.281^{**}	
			(2.295)	
Diversity index				-2.182^{**}
				(0.946)
Observations	40,935	40,935	40,935	40,935
R^2	0.625	0.626	0.621	0.626
Panel (B), excl. investors > 220 blocks	(1)	(2)	(3)	(4)
Diversity in identity	-3.474^{**}			
	(1.552)			
Diversity in size		-7.092^{**}		
		(3.138)		
Diversity in horizon			-9.901^{**}	
			(4.178)	
Diversity index				-3.001^{**}
				(1.312)
Observations	40,935	40,935	40,935	40,935
R^2	0.614	0.606	0.603	0.618
Panel (C), excl. long-term blockholders	(1)	(2)	(3)	(4)
Diversity in identity	-5.784^{**}			
	(2.668)			
Diversity in size		-12.752^{**}		
		(5.893)		
Diversity in horizon			-8.997^{**}	
			(3.952)	
Diversity index				-4.577^{**}
				(2.032)
Observations	40,935	40,935	40,935	40,935
R^2	0.582	0.546	0.604	0.595
Note:				*p<0.1; **p<0.05; ***p<0.01

Table 8: Plabebo Test of Block Diversity Impact on Company Value and Performance.

This table explores the impact of diversity on company value and performance with a placebo test. We create a placebo diversity measure based dividing investors into diversity groups based on an alphabetic order of their names. Lower significance of falsified block diversity in conjuction with a negative value of R^2 suggests absence of its impact on the company. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix provides precise definitions for all variables.

	Placebo Tests					
	Tobin's Q	Tobin's Q	ROA	ROA	FCF	FCF
	(1)	(2)	(3)	(4)	(5)	(6)
Institutional Holdings	0.685^{***}	0.027^{***}	0.057^{***}	0.448^{***}	0.052^{***}	0.027^{**}
	(0.092)	(0.010)	(0.012)	(0.100)	(0.012)	(0.012)
Sales Growth	0.391^{***}	-0.031^{***}	-0.024^{***}	0.419^{***}	-0.034^{***}	-0.021^{***}
	(0.064)	(0.006)	(0.004)	(0.072)	(0.004)	(0.006)
Firm Size	-0.150^{***}	0.053^{***}	0.071^{***}	-0.251^{***}	0.064^{***}	0.058^{***}
	(0.041)	(0.009)	(0.006)	(0.081)	(0.004)	(0.011)
Fixed Assets	-0.784^{***}	-0.127^{***}	-0.061^{***}	-1.057^{***}	-0.098^{***}	-0.096^{***}
	(0.085)	(0.026)	(0.013)	(0.208)	(0.011)	(0.030)
Capital Expenditure	3.783^{***}	0.477^{***}	0.312^{***}	4.221^{***}	0.430^{***}	0.368^{***}
	(0.325)	(0.070)	(0.035)	(0.653)	(0.034)	(0.081)
Leverage	-0.270^{***}	-0.161^{***}	-0.194^{***}	-0.255^{*}	-0.162^{***}	-0.192^{***}
	(0.090)	(0.017)	(0.014)	(0.149)	(0.012)	(0.020)
Amihud Illiquidity	-0.085^{***}	-0.008^{***}	-0.011^{***}	-0.060^{***}	-0.010^{***}	-0.008^{***}
	(0.009)	(0.002)	(0.001)	(0.015)	(0.001)	(0.002)
Block Holdings	0.063	0.121^{***}	0.343^{***}	-1.408^{***}	0.277^{***}	0.154^{***}
	(0.615)	(0.041)	(0.079)	(0.413)	(0.072)	(0.052)
Diversity, size	-2.790^{**}		-0.358^{**}		-0.296^{**}	
	(1.204)		(0.151)		(0.147)	
Diveristy, placebo		-1.145		-10.807		-1.389
		(1.069)		(9.502)		(1.232)
Firm and Industry-Year FE	YES	YES	YES	YES	YES	YES
Block Hold, F-stat	624.53	624.53	624.53	624.53	624.53	624.53
Diversity, F-stat	210.39	0.67	210.39	0.67	210.39	0.67
Observations	40,935	40,935	40,935	40,935	40,935	40,935
R^2	0.573	−0.105	0.525	−0.257	0.570	−0.450
Adjusted R^2	0.495	−0.309	0.438	−0.489	0.491	−0.718

Note: *p<0.1; **p<0.05; ***p<0.01

Table 9: Blockholder's Disagreement and Block Diversity

This table explores the influence of diversity on the disagreement between blockholders in the next year. Panel (A) shows the likelihood that blockholders will trade in different directions next year. Panel (B) shows the influence of diversity on stock volatility in the next year. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

Panel (A), Disagreement Between Blockholders	(1)	(2)	(3)	(4)
Block Holdings	−0.214	−0.167	−0.104	−0.139
	(0.139)	(0.110)	(0.078)	(0.092)
Diversity in identity	0.452*			
	(0.248)			
Diversity in size		0.435*		
		(0.224)		
Diversity in horizon			0.392**	
			(0.199)	
Diversity index				0.106**
				(0.053)
Observations	40,935	40,935	40,935	40,935
R^2	0.068	0.184	0.207	0.246
Panel (B), Stock Volatility	(1)	(2)	(3)	(4)
Block Holdings	−0.717***	−0.658***	−0.579***	−0.623***
	(0.169)	(0.131)	(0.092)	(0.109)
Diversity in identity	0.571*			
	(0.292)			
Diversity in size		0.550**		
		(0.260)		
Diversity in horizon			0.495**	
			(0.220)	
Diversity index				0.134**
				(0.059)
Observations	40,935	40,935	40,935	40,935
R^2	0.534	0.595	0.624	0.639

Note: *p<0.1; **p<0.05; ***p<0.01

Table 10: Shareholders Proposals and Block Diversity

This table explores the influence on diversity between blockholders on shareholder's voting. Model (1) explores the relation between the number of shareholder proposals each year and blockholder charateristics, Model (2) shows the link between the support for each proposal and blockholder diversity. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

	Sheholders Proposals (SP)	
	Number of of SP	Portion of Votes for SP
	(1)	(2)
Institutional Holdings	−0.032	−0.008
	(0.025)	(0.024)
Sales Growth	−0.020***	0.032***
	(0.007)	(0.011)
Firm Size	0.077***	−0.010
	(0.013)	(0.007)
Fixed Assets	0.139***	0.014
	(0.047)	(0.023)
Capital Expenditure	−0.282**	−0.136
	(0.134)	(0.108)
Leverage	0.011	0.037
	(0.033)	(0.028)
Amihud Illiquidity	0.002	−0.009
	(0.005)	(0.012)
Block Holdings	0.039	0.062**
	(0.029)	(0.028)
Diversity, index	0.016**	−0.009***
	(0.008)	(0.004)
Firm and Industry-Year FE	YES	YES
Observations	20,262	2,185
R^2	0.594	0.709
Adjusted R^2	0.510	0.546
Note:		*p<0.1; **p<0.05; ***p<0.01

Table 11: Investment Policies and Block Diversity

This table explores the influence of diversity on investment policies in the company in the next year. Panel (A) shows the influence of the diversity on the level of investment. Panel (B) shows the influence of diversity on the number of acquisitions next year. Panel (C) shows the influence of diversity on the number of diversified acquisitions next year. Block ownership and diversity measures are instrumented with payouts from other companies and acquisition of financial firms. The vector of firm controls includes institutional holdings, sales growth, firm size, fixed assets, capital expenditures, leverage, Amihud illiquidity measure, firm fixed effects, and industry-year fixed effects. Standard errors are robust and double-clustered on firm and year level. Appendix I provides precise definitions for all variables.

Panel (A), Capital Expenditures	(1)	(2)	(3)	(4)
Diversity in identity	-0.076^{*}			
	(0.046)			
Diversity in size		-0.073^{*}		
		(0.044)		
Diversity in horizon			-0.066^{*}	
			(0.039)	
Diversity index				-0.018^{*}
				(0.010)
Observations	40,935	40,935	40,935	40,935
R^2	0.642	0.677	0.684	0.696
Panel (B), Number of Acquisitions	(1)	(2)	(3)	(4)
Diversity in identity	-3.257^{**}			
	(1.576)			
Diversity in size		-3.137^{**}		
		(1.306)		
Diversity in horizon			-2.823^{**}	
			(1.158)	
Diversity index				-0.767^{**}
				(0.302)
Observations	40,935	40,935	40,935	40,935
R^2	0.130	0.277	0.312	0.361
Panel (C), Number of Diversified Acquisitions	(1)	(2)	(3)	(4)
Diversity in identity	-1.426^{**}			
	(0.680)			
Diversity in size		-1.374^{**}		
		(0.585)		
Diversity in horizon			-1.236^{**}	
			(0.521)	
Diversity index				-0.336^{**}
				(0.136)
Observations	40,935	40,935	40,935	40,935
R^2	0.077	0.224	0.253	0.300
Note:				*p<0.1; **p<0.05; ***p<0.01

10 Appendix I: Variable Definitions

Block Holdings – *T*otal percentage of shares outstanding controlled by all blockholders. Data is constructed from Schedule 13D and 13G filings obtained from SEC EDGAR.

Diversity identity $= 1 - \sum_{k=1}^{3} \left(\frac{H_k}{Block\_Holdings}\right)^2$, where *H1, H2, H3* represent the percentage of shares outstanding controlled by institutional, individual and other blockholders respectivelly.

Diversity size $= 1 - \sum_{k=1}^{4} \left(\frac{H_k}{Block\_Holdings}\right)^2$, where *H1, H2, H3, H4*represent the percentage of shares outstanding controlled by blockholders with a block in one company, 2-20 blocks, 21-220 blocks and >221 blocks respectivelly.

Diversity horizon $= 1 - \sum_{k=1}^{4} \left(\frac{H_k}{Block\_Holdings}\right)^2$, where *H1, H2, H3, H4* represent the percent of shares outstanding controlled by blockholders in each quantile of portfolio turnover.

Diversity index is the first principal component of *Diversity identity, Diversity size,* and *Diversity horizon*. If extract principal component has a negative correlation with more than one diversity measure, I multiply it by -1.

Turnover $= \frac{\sum_{i=1}^{N} M_{j,t} \cdot |B_{i,j,t} - B_{i,j,t-1}|}{0.5 \cdot \sum_{i=1}^{N} M_{j,t} \cdot B_{i,j,t} + M_{j,t-1} \cdot B_{i,j,t-1}}$, the given formula measures turnover of blockholder i in the year t that holds blocks in N different companies, $M_{j,t}$ is a market capitalization of company j in the year t and $B_{i,j,t}$ represents percent of shares outstanding controlled by blockholder i in the company j at the end of the year t. If investor becomes a blockholder in a year t then $B_{i,j,t-1}$ is set to 0 and if his position drops below 5% after the year t then $B_{i,j,t+1}$ equals to 0.

Tobin's Q $= \frac{at - ceq - txdb + market\ capitazation}{at}$

ROA $= \frac{ib}{at}$

FCF $= \frac{ib + dp}{at}$

Institutional Holdings – *T*otal percentage of shares outstanding controlled by all institutional investors. Data comes from Thompson Reuters.

Sales Growth $= 100\% \cdot \frac{Sale_t - Sale_{t-1}}{Sale_{t-1}}$

Firm Size $= log(at)$

Fixed Assets $= \frac{ppegt}{at}$

Capital Expenditures $= \frac{capxv}{at}$

Leverage $= \frac{dltt + dlc}{at}$

Amihud Illiquidity is defined as the annual average of $10^6 \cdot \frac{|ret|}{prc \cdot volume}$

Payouts is a ratio of the amount of payouts blockholders receive from their other block positions, scaled by the market capitalization of the company. The construction of this measure excludes payouts received by blockholders that have > 100 blocks in their portfolio.

Acquisitions is a dummy variable that equals 1 when one of the company blockholders acquires a financial firm. The construction of this measure excludes payouts received by blockholders that have > 100 blocks in their portfolio.

11 Appendix II. Regulatory Difference Between Schedule 13D and Schedule 13G

Rule 13d-1(a) of the Securities Exchange Act of 1934 ("SEA") obligates an investor or a group of investors that acquired a beneficial ownership of five percent in a public company to file a Schedule 13D within 10 days after crossing five percent threshold. This filing includes information about the investor's identity and background, the purpose of the transaction, the number of shares beneficially owned and the source of fund for the transaction. If the investor's position changes by more than one percent of shares outstanding or there are any other material changes he has to file an amendment form within ten days after the triggered event.

Schedule 13D requires frequent updates and disclosure of the transaction purpose. Rule 13d-1 allows certain types of investors to file a short-form Schedule 13G instead. This option could be used by three groups of investors: 1) qualified institutional investors (rule 13d-1b(b)), 2) passive investors (rule 13d-1(c)) and 3) exempt investors (rule 13d-1(d)).

Qualified institutional investors ("QII") are determined by the rule 13d-1(b). The first requirement of this rule is that shares should be purchased "in the ordinary course of business". The second requirement is that investors should belong to one of the categories in the list, which includes: broker or dealer (registered under section 15 of the Act), bank (defined in section 3 of the Act), investment company or investment advisor (registered under the Investment Act of 1940), and some other types. QII has to report their block acquisition within 45 days after end of the calendar year. If QII position does not exceed ten percent of the company, he can file an amendment within 45 days after the year end. When QII position exceeds ten percent of the company, he has to file amendments within ten days after the end of the month.

To use "passive investor" exemption, a blockholder should hold a position below twenty percent, and should not influence the control of the company. Additional blockholder should not be a part of transaction that seeks to influence the company control. "Passive investors" should file their form and amendments within ten days after the end of the month of the triggered event.

"Exempt investors" include shareholders who obtained the block in a company before it IPO and also investors who acquired shares before December 22, 1970. Exempt investors should file Schedule 13G within 45 days after the end of the calendar year.

Forms that are filed within 45 days from the end of the calendar year include ownership information on the last days of the year, and forms that are filed within ten days after the end of the month include ownership on the last day of the month.