

# Shareholder Homogeneity and Firm Value

## The Disciplining Role of Non-Controlling Shareholders

Massimo Massa <sup>1</sup>

*INSEAD and CEPR*

Andrei Simonov

*Stockholm School of Economics*

### Abstract

We study how the shareholding structure of a firm affects its stock price and profitability. We argue that the degree of shareholder homogeneity affects firm value. Homogeneous shareholders act as a disciplining device on managers, inducing higher profitability, higher stock price, lower volatility and higher transparency. Shareholder homogeneity represents an alternative and indirect source of corporate governance based on the stock market. We test this hypothesis by using a dataset containing information on all the shareholders for each firm in Sweden from 1995 to 2001. We construct two novel proxies for shareholder homogeneity: the first is based on the age cohort of the shareholders, and the second on their degree of college interaction. For each firm, we measure the degree of homogeneity of *all* shareholders. Using this proxy, we show that greater homogeneity increases firm profitability and returns, and reduces analyst error, analyst dispersion, and stock volatility.

---

<sup>1</sup> Corresponding author: M. Massa, Finance Department, INSEAD, Boulevard de Constance, 77305 Fontainebleau Cedex, France. Tel: +33 160724481. Fax: +33 160724045. Email: massimo.massa@insead.edu. We thank Y.Amihud, M.Burkart, G.Huberman and C.Mayer for their useful comments. We are grateful to Sven-Ivan Sundqvist for numerous helpful discussions and for providing us with the data.

## Introduction

An important question in finance is how the value of the firm is affected by different classes of shareholders. Corporate finance stresses the role of controlling shareholders as the main supervisors of managers and therefore as key determinants of firm value and stock price (Holmstrom and Tirole, 1993, Kahn and Winton, 1998, Bolton and Von Thadden, 1998a, 1998b, Noe, 2002, Faure-Grimaud and Gromb, 2003). Asset pricing posits that a small number of investors with enough resources – not necessarily the controlling shareholders – can set prices at the “correct” equilibrium level, nullifying short-term fluctuations due to investor idiosyncratic shocks or biases. Recently, behavioral finance has introduced models in which the whole distribution of shareholders is relevant (Chen, Hong and Stein, 2001, Hong, Scheinkman, and Xiong, 2003, Hong, Kubik and Stein, 2003).

This paper aims to determine whether a relation exists between a firm’s (overall) shareholding structure and profitability, and between shareholding structure and stock price. In particular, we study how the distribution of *non-controlling shareholders* affects the behavior of managers and the value of the firm. We focus on shareholder homogeneity; homogeneity plays an important role in finance and in the agency literature in particular (Crawford and Sobel, 1982, Cremer, 1993, Aghion and Tirole, 1997, Dessein, 2002). Shared beliefs within an organization “decrease agency problems, lower the need to monitor and facilitate coordination” (Van den Steen, 2004).

We study homogeneity at the shareholder level and conjecture that the degree of homogeneity of shareholders affects firm value. Homogeneous shareholders are likely to interpret information about the firm in a similar way and as a result react in an (informally) coordinated fashion. This helps managers better understand shareholder needs and align to them. At the same time, this also acts as a disciplining device on managers, effectively limiting their ability to cater to a particular subset of needs and to play different classes of shareholders off against each other. Indeed, disappointing one group of shareholders implies disappointing all of them. Thus shareholder homogeneity may represent an indirect source of corporate governance based on the stock market.

If less leeway for managers and better alignment with shareholders translate into better management and more value-enhancing strategies, firms with homogeneous shareholders should be characterized by higher profitability, higher firm value and a higher stock price. Also, the higher cost of disappointing homogeneous shareholders – even a slight deviation from expectations may induce a significant stock price drop – and the increased ability to communicate with them suggest that greater homogeneity would entail greater transparency and disclosure, and more effective communication between managers and markets. This in turn would reduce analyst error, the dispersion of analyst forecasts, and stock price volatility.

We compare this hypothesis to two alternative hypotheses relating investor homogeneity to firm value. The first is a purely market-based explanation: the “sidelined market participation hypothesis” (*sidelined hypothesis*). This relies on the theories relating differences in beliefs to stock prices (Miller, 1977, Morris, 1996, Chen, Hong and Stein, 2001, Diether, Malloy and Scherbina, 2002, Scheinkman and Xiong, 2002 and Hong, Scheinkman, and Xiong, 2003). Differences in beliefs between shareholders in the presence of short-sale constraints increase stock price and volatility. In our set-up, this implies that an increase in investor homogeneity, by reducing differences in beliefs among shareholders, should *reduce* stock prices and volatility.

The second hypothesis is a corporate finance one: the “alignment between managers and shareholders hypothesis” (*alignment hypothesis*). This posits that firm value is an increasing function of the alignment between shareholders and managers (Boot and Thakor, 2004 and Dittmar and Thakor, 2005). Shareholder homogeneity plays a role if it is related to and proxies for the alignment between shareholders and managers. In this case, homogeneity should *increase* firm value.

What defines shareholder homogeneity and how do we proxy for it? We argue that a main source of heterogeneity is related to the cohort the investor belongs to. Indeed, investors of different ages have different objectives; different life-cycle considerations, for example, may induce them to give different weights to different types of shares (Poterba and Samwick, 1997). They also interpret information in different ways due, for example, to differences in education and experiences that offer a different way of looking at the world. Different cohorts of investors have been exposed to different fads and cultures, and have had different experiences. For example, in the evaluation of a firm, investors who have lived through a stock market bubble will react differently to information about

future cash flows than investors who have only experienced a stock market boom. Even the perception of the equity risk premium may be totally different. We argue that shareholders belonging to the same cohort are more homogenous.

Another source of heterogeneity is related to social interaction. Social interaction has been shown to affect stock market participation (Hong, Kubik and Stein, 2003) as well as portfolio choice (Massa and Simonov, 2005). As a source of social interaction, college both shapes the thinking of the investor and defines a lasting network of relationships. College-based interaction consists of two components: the bonding with other people attending the same school that persists over time on a friendship- or alumni-based relationship, and the common general imprinting due to the type and quality of education delivered by the school. People who went to the same college and received the same education should have a similar view of the world.<sup>2</sup>

This helps us define two novel – and likely exogenous – proxies for investor homogeneity. The first is based on the age cohort of the shareholders, and the second on their college interaction. For each firm, we measure the degree of homogeneity across *all* its non-controlling shareholders. Using this proxy, we show that greater homogeneity raises firm profitability and stock price. Firms with higher shareholder homogeneity have higher stock market valuations and are more profitable. In particular, in firms with homogeneity greater than the average by one standard deviation, stock prices are 7–28% higher, profit margins 8–22% higher, ROA 3–5% higher, ROE 1–8% higher and ROS 3–5% higher. Moreover, homogeneity reduces analyst error, analyst dispersion, and stock volatility. An increase in homogeneity of one standard deviation reduces the standard deviation of forecast estimates by 2–6% of its standard deviation and reduces volatility by 0.14% per month. This suggests the existence of a novel channel through which shareholder characteristics affect the value of the firm.

It is important to note that an extensive literature (e.g., Blau, 1977, Bourgeois, Eisenhardt, and Kahwajy, 1997, Westphal and Zajac, 1995, Carter, Simkins and Simpson, 2003, Adams and Ferreira, 2005) has analyzed the impact of board diversity/homogeneity on firm value. In general, the idea is that the main benefit of a diverse team is that “team members are able to provide different perspectives on

---

<sup>2</sup> It could be argued that the opposite is true, i.e., that people with the same view of the world chose to attend the same college. The very same socioeconomic factors that determine the choice of college also affect portfolio choice. What matters to us here is that college attendance may be used as a way of identifying differences in investors’ views.

important issues, which may reduce the probability of complacency in decision-making...[diversity] may add value by bringing different perspectives, experiences and opinions to the table” (Adams and Ferreira, 2005). It could be the case that shareholder homogeneity may in fact proxy for board homogeneity. We directly account for this possibility by running a horse race between measures of board and shareholder homogeneity. The results show that shareholder homogeneity affects firm value in a way that is independent and *more important* than board homogeneity.

One problem the literature has encountered is the endogenous nature of ownership structure (Demsetz, 1983, Demsetz and Lehn, 1985). In our case, we use proxies for shareholder homogeneity that are, by construction, less subject to the potential issue of endogeneity. Moreover, we also employ a methodology that controls for residual endogeneity. Relying on the recent findings on local investment bias (Huberman, 2001, Coval and Moskowitz, 1999, 2001) we exploit the location of shareholders as an identifying restriction.

Our findings contribute to the literature on corporate governance and the literature on asset pricing and dispersion of opinion. In particular, our results are related to the theory on the determinants of corporate governance and to the literature on the role of blockholders and institutional investors. It has been argued that managers are disciplined by either direct governance (Gompers, Ishii and Metrick, 2003) or by indirect governance. Indirect governance has in general been associated with blockholders or institutional shareholders – i.e., investors who have the resources to monitor managers and the power to correct them (Holmstrom and Tirole, 1993, Cremers and Nair, 2004). For example, Kahn and Winton (1998), Bolton and Von Thadden (1998a, 1998b), and Noe (2002) describe the role played by concentrated shareholdings and show how these shareholdings emerge. Faure-Grimaud and Gromb (2003) describe how concentrated shareholdings engage in value-increasing activities.

Our main contribution is to provide evidence of a “hidden” source of governance and a more indirect form of managerial discipline, i.e., one that is related to the degree of shareholder homogeneity. The more homogeneous the shareholders are, the more they can influence managers’ behavior. This has relevant normative implications. If the degree of shareholder homogeneity acts as a disciplining device, better governance does not necessarily require institutions and major shareholders.

Second, we contribute to the literature that relates shareholder composition (i.e., ownership structure) to firm performance (Morck, Shleifer and Vishny, 1988, McConnell and Servaes, 1990, Holderness, Kroszner and Sheenan, 1999, Himmelberg, Hubbard, and Palia, 1999). Unlike the standard approaches that focus on subsets of relevant shareholders (e.g., blockholders, institutional investors), we show the role played by the overall set of investors – including minority shareholders. More specifically, we show that it is not a subset of qualified shareholders that affects firm performance, but that the entire ownership structure matters.

Third, we provide a new way of looking at how dispersion of opinion may affect financial markets. We complement the existing literature on differences of opinion in the case of short-sale constraints as well as the literature on the alignment between shareholders and managers. Starting with Williams (1977), the literature has studied the impact of differences of opinion on stock prices. In the case of sidelined investors or limited market participation due to short-sale constraints, differences of opinion should lead to overvaluation (Miller, 1977, Morris, 1996, Chen, Hong and Stein, 2001, Diether, Malloy and Scherbina, 2002, Scheinkman and Xiong, 2002 and Hong, Scheinkman, and Xiong, 2003). Our proxy for shareholder homogeneity provides an additional and novel way of studying dispersion of opinion and its impact on stock prices.

Fourth, we complement the literature on social interaction by providing evidence on the impact of social interaction on firm value, stock price and volatility. The literature on social interaction has mostly focused on the way social interaction affects individual behavior (e.g., Ellison and Fudenberg, 1995, Bala and Goyal, 1998, Bertrand, Luttmer and Mullainathan, 1999). Only recently has social interaction been shown to affect stock market participation and portfolio choice (Hong, Kubik and Stein, 2003). However, this paper is, to our knowledge, the first to show the direct impact of social interaction on firm value and stock price.

Our findings have relevant implications. Indeed, if the investor’s choice is “hard-coded” through mental imprinting that takes place during college, or related to the cohort to which he or she belongs, current stock market behavior may be explainable in terms of past interactions and new cohorts coming to the market. Even “anomalies” may be rationalized in terms of the type of shareholder interaction. A stock (e.g., a growth stock) may have a price that appears to be inflated – i.e., too high compared to fundamentals – simply because of higher shareholder homogeneity. This would also

suggest that bubbles – i.e., the temporary divergence of stock prices from fundamentals – can be related to different cohorts of investors coming to the market, characterized in terms of the type of interaction they had at school, and the networks and friendship they developed there. The stronger the relationship among shareholders, the higher shareholder homogeneity is, and the higher the stock price and firm value will be.

The analysis is empirical and is based on a new and unique dataset on Sweden that has information on *all* the shareholders for *each* firm. Moreover, for a representative sample of the Swedish population we also have detailed demographic and historical characteristics of the shareholders, including the college they went to. This allows us to group investors into college-based cohorts.

The paper is structured as follows. In the next section we set out the hypotheses. In Section II, we describe the data. In Section III, we provide empirical evidence of the impact of shareholder homogeneity on stock price, return and volatility. In Sections IV and V, we relate shareholder homogeneity to firm profitability and to asymmetry of information between the firm and the market. A brief conclusion follows in Section VI.

## I. Hypotheses

We begin by presenting our working hypothesis and contrasting it to two alternative hypotheses. We posit that greater homogeneity among shareholders is instrumental in disciplining managers. Our “*homogeneity hypothesis*” posits that homogeneous shareholders are more likely to react to corporate news in a similar way.

Let us consider the case in which information contained in a corporate event – e.g., an earnings announcement – conveys fundamental information and acts as a focal point for better coordination. The reaction to information depends on the initial beliefs of the investors and the degree of imperfect communication among them. Investors with similar characteristics will interpret information in a similar way and react analogously.

Given that each investor is concerned about having to liquidate shares after other investors have sold, he or she will try to outguess whether other investors will sell. In this context, a piece of news provides a sort of focal point that allows investors to (informally) coordinate. The more similar the investors are, the more they will be able to correctly guess other investors’ behavior. Therefore, even a slight deviation from expectations may induce a stock price drop, since an investor “may prefer selling today

at the average in-run price, thereby causing the run itself” (Bernardo and Welch, 2004). Contagion arises naturally. Subsequent sales occur faster and faster. Moreover, if the markets are not perfectly elastic and the demand for stocks slopes down, shareholders are not substitutable for each other and dissatisfied shareholders cannot be easily replaced.

In this context, managers have to heed shareholders’ requests carefully, because dissatisfaction will bring about a sharp drop in stock price and make the firm more contestable. In other words, the implicit threat of a shareholder sell-out would induce managers to cater to their shareholders by implementing value enhancing strategies and by better conveying firm-specific information to them and improving transparency.

At the same time, shareholder homogeneity makes it easier for managers to understand shareholders’ views and to align themselves to them. Indeed, it is easier to learn what a single homogeneous group of shareholders wants (e.g., in terms of payout policy) than it is to understand the wishes of many different shareholders. This effectively enhances the potential for communication between shareholders and managers, helps to reduce information asymmetry in the market, and is also likely to reduce fluctuations in stock price. This suggests that shareholder homogeneity increases profitability and market value of the firm, reduces the firm’s stock volatility, and improves its relation with analysts.

We test this hypothesis against two alternative hypotheses. The first hypothesis is the “sidelined market participation” (*sidelined hypothesis*) and relies on the theories relating differences in beliefs to stock prices in the presence of short-sale constraints (Miller, 1977, Morris, 1996, Chen, Hong and Stein, 2001, Diether, Malloy and Scherbina, 2002). Given that investors with pessimistic views are reluctant to participate in the stock market, the stock price is a function of the view of relatively more optimistic investors. This implies that the higher the dispersion of opinions across investors, the higher the stock price should be. A more recent version of this theory (Scheinkman and Xiong, 2002 and Hong, Scheinkman, and Xiong, 2003) also has direct implications for volatility. Scheinkman and Xiong (2002), in line with Harrison and Kreps (1978), show that stock prices incorporate a speculative component when investors have heterogeneous beliefs about the fundamental value of the stock and short sales are costly. If investors are overconfident about the precision of their signal, heterogeneity of beliefs induces

excessive volatility. This suggests a *negative correlation between* shareholder homogeneity *and both stock prices and volatility*.<sup>3</sup>

The second hypothesis is based on the “alignment between managers and shareholders” (alignment hypothesis) and has been brought forward by Boot and Thakor (2004) and Dittmar and Thakor (2005). According to this hypothesis, firm value is a function of the alignment between shareholders and managers. The more aligned they are, the higher the option value of the firm. Therefore, shareholder homogeneity plays a role if it is related to differences of opinion between shareholders and managers, and matters inasmuch as it proxies for alignment with managers. In this case, homogeneity should *increase* firm value.

Let us consider the main observable features and analyze them in terms of our working hypothesis and of the alternative hypotheses. Let us start with stock market value. Our hypothesis posits that shareholder homogeneity is positively correlated to stock prices and negatively related to volatility. How does this compare to the alternative hypotheses? The *sidelined hypothesis* posits that a greater homogeneity of views in the presence of short-sale constraints reduces stock prices and volatility. The *alignment hypothesis* does not have direct implications for stock prices different from the ones on firm value we will consider below. This allows us to lay out the first testable restriction.

*H1. The homogeneity hypothesis posits that firms characterized by greater homogeneity among shareholders have higher stock prices and lower volatility, while the sidelined hypothesis posits that firms characterized by greater homogeneity among shareholders have lower stock prices and lower volatility.*

Let us now consider the effect on profitability. Our hypothesis posits that more homogeneous investors are able to impose better discipline on the management. This implies a positive correlation between shareholder homogeneity and firm profitability. How does this compare to the other hypotheses? The *sidelined hypothesis* does not have direct implications for firm profitability. The *alignment hypothesis*, instead, posits a positive relation between the alignment of shareholder and manager views. Therefore, a

---

<sup>3</sup> An alternative theory assumes that dispersion of beliefs proxies for uncertainty. In this case, given that it is a component of risk, we would expect it to increase the volatility and the required rate of return of the stock and to reduce its price (Kraus and Smith, 1989, DeTemple and Murthy, 1994). It would also imply a *negative* correlation between the intensity of college-based interaction and both returns and volatility, and a *positive* correlation between the dispersion of college-based interaction and both returns and volatility.

positive (negative) relation between profitability and shareholder homogeneity exists if homogeneity is positively (negatively) related to alignment. This allows us to lay out our second testable restriction.

*H2. The homogeneity hypothesis posits that firms characterized by greater homogeneity among shareholders are more profitable, while the alignment hypothesis posits that firms characterized by greater homogeneity among shareholders are more profitable if greater homogeneity among shareholders implies greater alignment between them and the managers.*

We can now consider the relation between shareholder homogeneity and information asymmetry. Our hypothesis posits that homogeneous investors induce managers to be more transparent. This implies a positive correlation between shareholder homogeneity and measures of firm transparency. Neither the sidelined hypothesis nor the alignment hypothesis posits a direct relation between transparency and shareholder homogeneity. We can lay out our third testable restriction.

*H3. The homogeneity hypothesis posits that firms characterized by greater homogeneity among shareholders are more transparent.*

Before proceeding to the tests, we will describe the data and methodology used.

## II. Data, construction of the variables and methodology

### *A. Data sources*

We use data obtained from a number different sources. For each investor we have detailed information on individual stockholdings broken down at the stock level. For each stock we have detailed information on the company, and on the price, volume and volatility at which it trades. For a representative subset of investors we also have demographic information. We will now describe these data sources in more detail.

#### *Individual stockholdings*

We use the data on individual shareholders collected by Swedish Security Register Center (*Värdepapperscentralen VPC AB*). The data contain both stockholding held directly and in street name, including holdings of US-listed ADRs. In addition, SIS

Ägarservice AB collects information on ultimate owners of shares held via trusts, foreign holding companies and the like (for details, see Sundin and Sundquist, 2002). Our data cover the period 1995–2000. Overall, the records provide information on the owners of 98% of the market capitalization of publicly traded Swedish companies. We have information on at least 81.6% of market capitalization of each company; for the median company, we have information on 97.9% of the equity. The data provided by SIS Ägarservice AB were linked by Statistics Sweden with the LINDA dataset described below.

### *Demographic information*

For 25,500 investors who are part of 18,663 households, we also have information on the college they attended. In addition, for each college we have data on enrollment, average GPA, location and national ranking. From the total of 102 colleges we used only 54, since for the 48 smallest colleges the sample was too small<sup>4</sup>. Moreover, for 10,974 students we have background information on the parental household (“heritage variables”), including the size, wealth and income of the household during their childhood.

### *Firm-level information and other data*

For individual security returns (including dividends) and the overall market index (SIX market index), we use the SIX Trust Database. For information on firm-level characteristics we use Market Manager Partners Database. These two databases are the equivalent of CRSP and COMPUSTAT, respectively. In addition, Market Manager Partners Database contains information at the plant level, including municipality location of the plant. We derive information on firm profit margins, ROA, ROS and ROE, as well as other firm variables. We also use information on analysts following a firm derived from the international section of the I/B/E/S dataset. In particular, we collect data on the dispersion of analysts’ forecasts as well as analysts’ forecast errors, based on the difference between analyst earnings forecasts and earnings announcements.

### *B. Construction of the proxy for shareholder homogeneity*

---

<sup>4</sup> For example, we excluded the university colleges of drama, opera and dance, and other small colleges, since their yearly intake is normally between 15 and 25 students.

To test our hypothesis, we need a proxy for shareholder homogeneity. As we mentioned earlier, a natural proxy can be based either on the age cohort the investor belongs to or on the college he or she attended. Note that in the case of college-based interaction, it could be argued that people with the same view of the world chose to attend the same college. The very same socioeconomic factors that determine the choice of the college also affect portfolio choice. What matters to us here is that college attendance may be used to identify heterogeneity among investors.

We therefore construct our measure of shareholder homogeneity on the basis of either the age cohort of the investor or the degree of college interaction. The former proxy is based on the age of the investor, while the latter is based on the number of people who attended the same college. The age-based proxy has an additional advantage: while for the college-based proxy, we have information only on a sample of the overall population, for the age-based proxy, we have information on the overall Swedish population. This increases the power of our tests.

The higher the proportion of the shareholding structure of a company that is represented by investors who are the same age or attended the same school, the stronger the degree of shareholder homogeneity. This implies that a proxy for shareholder homogeneity for a company is the representation of either the different cohorts or the different colleges among its shareholders. That is, for each company  $j$ , we may construct our proxy for homogeneity as an index of “concentration” of the cohorts (colleges) in the company. The degree of shareholder homogeneity for the  $j$ th company is:

$$H_j = \sum_{c=1}^C \left( \frac{\sum_{i=1}^I \frac{N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2,$$

where  $N_{ijc}$  is the number of shares that individual  $i$  who belongs to the same age cohort (graduated from college)  $c$  holds in company  $j$ .

This measure can be interpreted as a Herfindahl index in which the “market share” of cohort (college)  $c$  in company  $j$  is given by the number of shares in the  $j$ th company held by investors belonging to the same  $c$ th age cohort (attended the  $c$ th college). The intuition is that the impact of shareholder homogeneity should be stronger for companies whose stocks are mostly held by investors of the same age (same college).

Cohorts are defined on the basis of age. We consider investors who, in 1995, were under 30 years of age, between 31 and 40, between 41 and 50, between 51 and 60, and 61 and older. For the college subsample, we have information on investors who graduated between 1977 and 1996.

We define a raw measure of homogeneity (Shareholder Homogeneity1) and two weighed measures. The latter are constructed by weighing the raw measure by either the proportion of individual shareholders in the firm (non-controlling shareholders minus institutions) or by the level of free float (i.e., non-controlling shareholders). We call the former “Shareholder Homogeneity2” and the latter “Shareholder Homogeneity3”. The idea is to separately assess the impact of shareholder homogeneity for the small non-controlling shareholders, and for the non-controlling shareholders overall (i.e., small shareholders and institutions).

We provide some descriptive statistics of the sample and the main variables in Table 1. We report firm-related variables in Panel A. Panel B reports the distribution of the sample based on graduation year.

### *C. Endogeneity*

One potential issue is endogeneity. It is indeed possible that firm characteristics attract a specific type of shareholder. In general, the endogenous nature of the ownership structure (Demsetz, 1983, Demsetz and Lehn, 1985) makes it hard to study its impact on firm value. For example, firms with higher profitability may attract more homogeneous shareholders. Therefore, it may be the case that instead of shareholder homogeneity making firms more profitable by disciplining managerial behavior, firm profitability results in shareholder homogeneity by attracting similar individuals. Given the way we have constructed our variables – i.e., based on sources of heterogeneity rooted in the past – this is not very likely.

However, to control for any residual endogeneity we consider two alternative approaches. First, we use an instrumental variable estimation and instrument the potentially endogenous variables using different sets of instruments. We use a combination of strictly exogenous variables (i.e., demographic variables, industry and time dummies) and, as suggested by Arellano and Bond (1991) and Arellano and Honore (2001), the lagged values of the explanatory variables. Moreover, we include variables that describe the distribution of the investor base over capital and labor income of the

investors' parental family when they were between 10 and 15 years old. To do this, we traced individual investors via the LINDA dataset to the parental household (or their own if they were adults in 1970). Then, we built standard deviations of labor/capital income either in monetary values (1970 Swedish kronor) or the decile of the labor/capital income distribution they belonged to.

The second approach exploits the identification restriction provided by the location of the shareholders. Investors have been shown to invest in the stocks of companies headquartered close to where they live (Huberman, 2001, Coval and Moskowitz, 1999, 2001) or of the country they come from (Bhattacharya and Groznic, 2001). Therefore, location explains why investors invest in a firm that is *exogenous with respect to the main observable characteristics of the firm we want to study, such as profitability and stock returns*. We therefore construct measures of homogeneity – as defined above – *only for “local” shareholders*, whom we define as shareholders living within a 100-kilometre radius of either the firm's headquarters or its closest subsidiary. We call this measure local age-based homogeneity.

### III Shareholder homogeneity and stock price

We now proceed to test the relation between shareholder homogeneity and stock price, and volatility. Our first hypothesis links stock price and volatility to shareholder homogeneity. We take a two-pronged approach, looking either at the relation of prices and volatility to homogeneity, or to the relation between return (i.e., change in prices) and changes in homogeneity. We will consider both.

#### *A. Shareholder homogeneity, stock returns and volatility*

We start by considering stock returns and volatility. We recall that if greater homogeneity increases prices, a positive *change in homogeneity* should be positively related to stock *returns*. In other words, the *level of homogeneity* explains operating performance and prices, while *changes in homogeneity* explain changes in prices (i.e., financial returns) and changes in operating returns. We start by considering how changes in homogeneity affect stock returns, and how the level of homogeneity affects volatility; we then move on to look at how the level of homogeneity is related to price levels.

We apply the standard methodology and regress stock returns and volatility on our proxies for homogeneity and a set of control variables. For consistency and

comparability with the literature, we adopt a specification analogous to the one employed by Gompers, Ishii and Metrick (2003) and Coval and Moskowitz, (1999 and 2001). We estimate:

$$R_{jt} = \alpha + \beta \Delta H_{jt} + \gamma C_{jt} + \varepsilon_{jt} \quad \text{and} \quad \sigma_{jt} = \alpha + \beta H_{jt} + \gamma C_{jt} + \varepsilon_{jt}, \quad 1)$$

where  $R_{jt}$  and  $\sigma_{jt}$  are, respectively, the return and volatility of the  $j$ th stock at time  $t$ ,  $H_{jt}$  is our proxy for the degree of shareholder homogeneity of the  $j$ th firm at time  $t$ , while  $\Delta H_{jt}$  represents the change over such a period, and  $C_{jt}$  is a vector of control variables for the  $j$ th stock at time  $t$ . The estimation frequency is monthly.

We consider alternative specifications based on the different measures of shareholder homogeneity. As we mentioned above, we employ three alternative measures of shareholder homogeneity: a raw measure (Shareholder Homogeneity1) and two weighed measures (Shareholder Homogeneity2 and Shareholder Homogeneity3). The latter help to separately assess the impact of shareholder homogeneity for small non-controlling shareholders and for non-controlling institutions.

The control variables are defined exactly the same way as Gompers, Ishii and Metrick (2003). They include: size, measured as the logarithm of the market value of the company; the amount of cash held by the firm (measured as logarithm); leverage, measured as the ratio of debt to sum of equity and debt as at the end of the previous fiscal year; employees, measured as the number of employees; and market-to-book. These variables are defined as at the end of the previous calendar year. We also include the bid-ask spread, defined as the bid-ask spread as at month  $t-2$ ; a high-tech dummy equal to 1 if the company belongs to a high-tech industry and zero otherwise; and a dummy equal to 1 if the company is part of a selected number of companies with higher disclosure requirements (A-list) and zero otherwise; turnover, defined as the logarithm of the ratio of shares traded to shares outstanding at month  $t-2$ ; and dividend yield, defined as the ratio of dividends paid in the previous fiscal year divided by the share price at year-end.

Following Gompers, Ishii and Metrick (2003), we also include measures of past stock returns. Return 23 is the compounded gross return for the period between months  $t-2$  and  $t-3$ , Return 46 the compounded gross return for the period between months  $t-4$  and  $t-6$ , and Return 712 the compounded gross return for the period between months  $t-7$  and  $t-12$ . The frequency is monthly.

We augment this set of control variables by adding our measures of board homogeneity as well as a measure of the quality of corporate governance (corporate governance index), a variable that represents the size of the firm’s free float (share of free float), and a variable that proxies for the part of the shares not held by either the controlling shareholders or the institutional investors (share of individuals). The free float allows us to proxy for the presence of blockholders (i.e., 1-free float is the controlling group). The corporate governance index is defined similarly to Gompers, Ishii and Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if: (a) there are differential share classes, (b) controlling shareholders have preemption rights on high-voting shares, (c) voting restrictions are in place, and (d) voting pact exists between large shareholders, and zero otherwise.

We consider different econometric methodologies and specifications. In particular, we use both a heteroscedastic- and time-series consistent panel estimation implemented with and without time fixed effects and a standard Fama-MacBeth estimation. We estimate alternative specifications that differ either in terms of the control variables used, or in terms of the variable that proxies for shareholder homogeneity. For the specification based on returns, we use the raw returns, the market-adjusted returns (residual of the CAPM market model) and the industry-adjusted return (residual of the regression of stock returns on the industry value-weighted returns).

We recall that our working hypothesis requires  $\beta > 0$  in the case of returns, and  $\beta < 0$  in the case of volatility. The results for the returns are reported in Table 2, while those for volatility are reported in Table 3. For brevity we only display the results of the pooled and Fama-MacBeth estimation based on the fully fledged specification.<sup>5</sup> In Panels A, C and E we report the results of the pooled estimation, while in Panels B, D and F we report the results of the Fama-MacBeth estimation. In Panels A and B we report the results for the age-based shareholder homogeneity proxy, in Panels C and D we report the results for college-based shareholder homogeneity, while in Panels E and F we report the results for local age-based shareholder homogeneity.

The results show that returns are positively and significantly related to a change in shareholder homogeneity, while volatility is negatively related to shareholder homogeneity. These results hold across all the specifications, both in the case of the

---

<sup>5</sup> The additional robustness checks based on alternative specifications that differ either in terms of the control variables used or by the usage of year/quarter fixed effects are available upon request from the authors. The results do not differ from the reported ones.

pooled specification and the Fama-MacBeth specification. Moreover, the results are also robust when we use shareholder homogeneity weighed by either the measure of free float (Shareholder Homogeneity2) or by the proportion of individuals (Shareholder Homogeneity3). This finding, coupled with the fact that the control variables include alternative governance measures and board homogeneity measures, suggests that shareholder homogeneity is not proxying for any external measure of governance (i.e., governance index) or internal measure of governance (i.e., blockholders, insider or controlling shareholders ) nor for board homogeneity. Shareholder homogeneity has its own separate role in affecting stock returns.

Not only are our results statistically significant, they are also economically significant. An increase in homogeneity of one standard deviation increases returns by 0.44% per month for the age-based homogeneity measure (0.45% for the local age-based and college-based homogeneity measures) and reduces volatility by 0.27% per month (0.18% and 0.14% for the alternative measures of homogeneity). The Fama-MacBeth methodology produces similar estimates. That is, an increase in homogeneity of one standard deviation increases returns by 0.36% per month for the age-based homogeneity measure (0.31% for the local age-based homogeneity measure and 0.26% for the college-based homogeneity measure) and reduces volatility by 0.27% per month (0.10% and 0.06% for the alternative measures of homogeneity).

Among the other variables, it is important to note that neither direct governance (corporate governance index) nor indirect governance (share of free float and share of individual investors) is related to returns. Nor do they seem to provide any additional explanatory power with respect to our measures. However, their significant explanatory power if used independently (see also Cronqvist and Nilsson, 2003) would suggest that part of the explanatory power generally attributed to them may, in fact, be due to their relation to shareholder homogeneity. That is, firms with better governance are firms with higher shareholder homogeneity and not vice versa. Yet in the case of volatility, while indirect governance is still not significant, the corporate governance index is negative and significant.

Further, it is interesting to note the strong and persistent negative correlation (across specifications) between returns and turnover and returns and dividend yield. Bid-ask spread, market-to-book and lagged volatility are all positive and significant. The dummy that proxies for whether a stock is a high-tech stock is negatively related to

return and positively related to volatility. These results show that volatility decreases with homogeneity.<sup>6</sup> The results on volatility are also corroborated by the results on informational asymmetry in Table 6.

Overall, these findings suggest that shareholder homogeneity is positively related to returns and negatively related to volatility, which supports our hypothesis. It is important to stress that these findings also hold when we consider the local-homogeneity measure. Thus they could be interpreted as suggesting that homogeneity affects returns and volatility as opposed to volatility inducing changes in shareholder homogeneity.<sup>7</sup>

Why should returns be higher? Does this proxy for some kind of risk? And more interestingly, would the change in homogeneity be forecastable or just unexpected? We address this issue by performing the following experiment.<sup>8</sup> We decompose the change in homogeneity into its unexpected and expected components, and test whether the unexpected change affects stock prices. Indeed, increases in homogeneity will raise stock prices (i.e., positive return) only if they are unanticipated. Therefore, we first regress changes in homogeneity on the lagged company characteristics (size, book-to-market, leverage, number of employees, liquidity variables, industry and listing dummies, etc.). Then, the residuals of this regression are used as unexpected changes in homogeneity. The results (not reported) are consistent with the reported ones, suggesting that the impact of changes in homogeneity on stock prices is mostly related to unexpected shocks to homogeneity, hinting at a possible “homogeneity uncertainty”.

### *B. Shareholder homogeneity and market-to-book ratio*

We now directly focus on stock prices. In line with the literature (Gompers, Ishii and Metrick, 2003, Coval and Moskowitz, 2001, Hong, Kubik, and Stein, 2003, 2005), we use the *market-to-book ratio* and regress it on the level of homogeneity at year-end and a set of control variables. Given the lower (annual) frequency, we limit the set of control variables to those commonly used at this frequency. These are firm characteristics such

---

<sup>6</sup> We know that volatility is surprisingly negatively related to returns (Amihud, 2002, Ang *et al.*, 2005), and thus these results may suggest that the relation between shareholder homogeneity and returns is due to the negative impact of homogeneity on volatility.

<sup>7</sup> We also considered whether an increase in homogeneity reduces volatility. To address this issue, we re-estimate equation 1) in changes. That is, we regress the percentage change in volatility on the change in our proxies for shareholder homogeneity and a set of control variables defined as before. The results – not reported but available upon request – show a strong negative correlation between change in homogeneity and change in volatility, confirming the previous findings.

<sup>8</sup> We thank Y. Amihud for pointing this out to us.

as size, leverage, number of employees, dividend yield, cash, high-tech dummy, and A-list dummy. We also include our measures of direct and indirect governance (i.e., corporate governance index, share of free float and share of individuals). All the variables are defined as in the previous section.

As before, we estimate a heteroscedastic- and time-series consistent panel estimation implemented with and without time fixed effects, as well as an instrumental GMM estimate (as defined in Section II C). The lower frequency of the sample makes the use of the Fama-MacBeth methodology unreliable. We recall that our working hypothesis requires  $\beta > 0$ .

The results are reported in Table 4. They agree with the previous findings: firms with higher shareholder homogeneity command higher market valuation. Prices (i.e., market-to-book ratio) are positively and significantly related to shareholder homogeneity. As before, the results hold across specifications, both when we use a specification based on college interaction, and when we use one based on the age cohort. Moreover, the results are also robust when we use shareholder homogeneity weighed by the free float measure. A caveat is that, for the age-based measure of homogeneity, the results hold only in the GMM specification. Firms with homogeneity greater than the average by one standard deviation have prices that are 70% higher than average for the age-based homogeneity measure (19% for the college-based homogeneity measure). These results also hold when we consider the local-homogeneity measure. Firms with homogeneity greater than the average by one standard deviation have prices that are 61% higher than average.

Among the other variables, it is important to note that both direct governance (corporate governance index) and indirect governance (share of free float) are significantly related to stock prices. The higher the quality of corporate governance (i.e., the lower the value of the index) and the higher the proportion of controlling shareholders (i.e., the lower the free float), the higher the stock prices are. This is consistent both with the U.S. findings on corporate governance (Gompers, Ishii and Metrick, 2003) and with those for Sweden (Cronqvist and Nilsson, 2003). Taken together with the previous findings, these results suggest that the *level* of corporate governance is related to the *level* of stock prices. Also, there is a strong and persistent positive correlation (across specifications) between stock price and firm size.

Overall, these findings, coupled with the fact that our control variables include a measure of governance, suggest that shareholder homogeneity is not proxying for some external measure of governance (i.e., governance quality) or internal measure of governance (i.e., blockholders, insider or controlling shareholders). Shareholder homogeneity has a distinct and important impact on stock prices.

#### IV. Shareholder homogeneity and firm profitability

We now proceed to test the relation between shareholder homogeneity and firm profitability. We apply the standard methodology (Gompers, Ishii and Metrick, 2003) and estimate:

$$\Pi_{jt} = \alpha + \beta H_{jt} + \gamma C_{jt} + \varepsilon_{jt}, \quad 2)$$

where  $\Pi_{jt}$  is the measure of profitability of the  $j$ th firm at time  $t$ . We use four proxies for profitability: ROE, ROA, ROS and Profit Margins (as defined in the caption to Table 1).  $H_{jt}$  is our proxy for the degree of shareholder homogeneity of the  $j$ th firm at time  $t$ , and  $C_{jt}$  is a vector of control variables for the  $j$ th stock at time  $t$ . Both  $H_{jt}$  and  $C_{jt}$  are defined as above. That is, we consider both the raw measure of homogeneity and the two weighed measures. We use one measure of homogeneity based on age, one based on college interaction and one restricted to local investors. As before, we estimate both a heteroscedastic- and time-series consistent panel estimation implemented with and without time fixed effects at yearly frequency and an instrumental GMM estimation defined as in Section II C. We consider alternative specifications. We recall that our working hypothesis requires  $\beta > 0$ . The results are displayed in Table 5; we report the results for profit margin, ROA, ROE and ROS.

The results show that profitability is strongly affected by shareholder homogeneity. A strong and statistically significant positive relation is found between profitability and shareholder homogeneity. Firms characterized by more homogenous shareholders are more profitable. These results hold across all the specifications and are robust to the use of alternative weighing of the homogeneity measure.

Our results are both statistically and economically significant. An increase in homogeneity of one standard deviation increases profit margins by 22% – that is, by 31% of its standard deviation (7.6% and 8% for the college-based and local age-based homogeneity measures, respectively). It increases ROA by 5% (4% and 3% respectively

for the college-based and local age-based homogeneity measures), ROE by 7% (8% and 1% respectively for the college-based and local age-based homogeneity measures) and ROS by 4% (3% and 5% respectively for the college-based and local age-based homogeneity measures). The results also hold in the case of instrumental GMM. The fact that the results also hold when the proxy for shareholder homogeneity is restricted to local investors suggests that the results are not due to spurious correlation or reverse causality, but that more homogeneous shareholders are indeed able to induce higher firm profitability.

Moreover, the fact that we explicitly control for external and internal measures of governance (i.e., institutional and blockholding-based governance) as well as for board homogeneity suggests that our proxy for shareholder homogeneity is not proxying for other dimensions of governance. Among the other variables, size and the number of employees seem to be consistently positively in relation to profitability, while the corporate governance index is significant only in the case of ROS and ROE. In these cases, better governance (i.e., lower value of the index) increases profitability.

Overall, these findings suggest that, in general, firms with higher shareholder homogeneity are more profitable, and hence support our hypothesis. We will now move on to see how shareholder homogeneity is related to information asymmetry between the firm and the market.

## V. Shareholder homogeneity and information asymmetry between the firm and the market

We now proceed to test the relation between shareholder homogeneity and information asymmetry. We argue that higher shareholder homogeneity reduces information asymmetry between managers and markets. In particular, we expect a negative correlation between information asymmetry and shareholder homogeneity. We therefore estimate:

$$A_{jt} = \alpha + \beta H_{jt} + \gamma C_{jt} + \varepsilon_{jt}, \quad 3)$$

where  $A_{jt}$  is the measure of information asymmetry for the  $j$ th stock at time  $t$ ,  $H_{jt}$  is our proxy for the degree of shareholder homogeneity of the  $j$ th firm at time  $t$ , and  $C_{jt}$  is a vector of control variables for the  $j$ th stock at time  $t$ . We consider as measures of

information asymmetry the degree of “ignorance” of the analysts following the firm and, in particular, the dispersion of analysts’ forecasts, and their forecast errors. We focus on the yearly forecasts. The dispersion of analysts’ forecasts is the standard deviation of the forecasts across analysts, while the forecast error is the absolute value of the difference between analysts’ earnings forecasts and actual earnings standardized by actual earnings. We use monthly frequency and, for each stock, we calculate analysts’ forecast errors by using all the forecasts released within a month.

The other variables are defined in the same way as in the previous sections. We carry out a heteroscedastic- and time-series consistent panel estimation implemented with and without time fixed effects, as well as an instrumental variable GMM estimation as defined in Section II C. We estimate alternative specifications that differ either in terms of the control variables used or in terms of the proxy for shareholder homogeneity. As in the previous regressions, we consider measures of homogeneity based on age, college interaction, and restricted to local investors. We recall that our working hypothesis requires  $\beta < 0$ . The results are reported in Table 6. In Panel A, we focus on the standard deviation of analysts’ forecasts, and in Panel B on the absolute errors of analysts’ forecasts.

The results show that information asymmetry is negatively and significantly related to shareholder homogeneity. This holds across all the specifications. Moreover, the results are also robust when we use shareholder homogeneity weighed by either the measure of free float (Shareholder Homogeneity2) or by the proportion of individuals (Shareholder Homogeneity3). Not only are our results statistically significant, they are also economically relevant. An increase in homogeneity of one standard deviation reduces the standard deviation of the forecasts by 5.8% (5.1% and 1.5% respectively for the college-based and local age-based homogeneity measures) and reduces the absolute error of analysts’ forecasts by 81% (56% and 24% respectively for the college-based and local age-based homogeneity measures). The results also hold in the case of instrumental GMM. The fact that the findings are robust to the use of the homogeneity measure restricted to local shareholders (less than 100 km distance) suggests that more homogeneous shareholders are indeed able to induce greater firm transparency.

Among the other variables, it is worth noting that company size, leverage, turnover, past returns and the high-tech dummy are all negatively related to dispersion of analysts’ forecasts. This is consistent with an interpretation in which consensus is

easier to reach for “big and glamorous objects”. These are big companies, high-tech companies, companies experiencing increasing stock prices (e.g., momentum) and more trading volume, and, potentially, companies subject to greater scrutiny because they are more leveraged. However, greater consensus does not guarantee correct forecasts. In fact, the very same big (in terms of both assets and employees), highly leveraged and high-tech companies have higher analyst forecast error. Also, an increase in the share/proportion of controlling shareholders (i.e., higher free float) reduces standard analyst error and increases analyst forecast error.

Overall, these findings suggest that firms with higher shareholder homogeneity have higher stock prices, lower volatility, are more profitable and more transparent, as we had conjectured. In each case, these results hold regardless of the quality of governance of the firm – both internal and external – and of the degree of board homogeneity. This suggests that a key dimension is diversity of shareholders.

## VI Conclusion

We study how the type of shareholding structure of a firm affects its financial and operating performance. In particular, we argue that the degree of homogeneity of shareholders affects firm value. Homogeneous shareholders, by being able to coordinate their actions and monitor managers, should induce better governance as well as higher profitability, firm value and stock price.

We test this hypothesis by using a new and unique dataset containing information on all the shareholders for each firm in Sweden over the past decade. We exploit this information to construct two novel – and likely exogenous – proxies for shareholder homogeneity. The first is based on the age cohort of the shareholders, and the second on their degree of college interaction. For each firm, we measure the degree of homogeneity of its shareholders. Using this proxy, we show that greater homogeneity increases firm profitability and returns, while it reduces analyst error, analyst dispersion, and stock volatility.

This suggests the existence of a channel through which shareholder distribution affects the value of the firm. Homogeneity across shareholders acts as a sort of “hidden source of governance”. This has relevant normative implications. Indeed, if shareholder homogeneity is an effective disciplining device on managers, better governance may be less dependent on institutions and major shareholders.

Our findings have relevant implications. Indeed, they show that exogenous differences in age cohorts or education may have a potent effect on the value of the firm and its relation vis-à-vis the market. This suggests an explanation of stock returns and firm value based on past interactions and new cohorts coming to the market, providing food for thought for corporate as well as asset pricing theory.

## References

- Aghion, P. and Tirole, J., 1997, Formal and Real Authorities in Organizations, *Journal of Political Economy*, 105(1), 1-29.
- Adams, R. and D. Ferreira, 2005, Gender Diversity in The Boardroom, Mimeo.
- Amidud, Y., 2002, Illiquidity and Stock Returns: Cross-Section and Time-Series Effects, *Journal of Financial Markets*, ,
- Ang, A, Hodrick, R.J., Xing, Y. and Zhang, X., 2004, The Cross-Section of Volatility and Expected Returns; NBER Working Paper, 10852.
- Arellano, M. and S.R. Bond, 1991, Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations, *Review of Economic Studies* 58, 277-297.
- Arellano, M. and B. Honore, 2001, Panel data models: some recent developments, *Handbook of Econometrics*, Elsevier North-Holland.
- Bakshi, G. and Chen, Z., 1996, The Spirit of Capitalism and Stock Market Prices, *American Economic Review*, 86, 133-157.
- Bala, V., Goyal., 1998, S., Learning from neighbors, *Review of Economic Studies*, 65, 595-622.
- Barry, C.B. and Brown, S.J., 1985, Differential Information and Security Market Equilibrium, *Journal of Financial and Quantitative Analysis*, 20, 407-422.
- Bhattacharya, U. and Groznik, P., 2001, Melting Pot or Salad Bowl: Some Evidence from US Investments Abroad, Mimeo.
- Benartzi, S., 2001, Excessive Extrapolation and the Allocation of 401(k) Accounts to Company Stock, *Journal of Finance*, 56, 1747-1764.
- Betrand, M., Luttmer, E.F.P., and Mullainathan, S., 1999, Network Effects and Welfare Cultures, Mimeo.
- Berger, P.G. and Ofek, E., 1997, Managerial Entrenchment and Capital Structure, *Journal of Finance*, 1411-1439.
- Berle, A., and G. Means, 1932, *The modern corporation and private property*. New York: World.
- Bernardo, A.E. and Welch I., 2004, Liquidity and financial markets runs, *Quarterly Journal of Economics*, 119, 135-158.
- Bhide, A., 1993, The hidden costs of stock market liquidity, *Journal of Financial Economics* 34, 31-51.
- Blau, O.M., 1977, *Inequality and Heterogeneity*, The Free Press, New York.
- Bolton, P., and E.L. von Thadden, 1998a, Blocks, liquidity, and corporate control, *Journal of Finance* 53 (1), 1-25.
- Bolton, P., and E.L. von Thadden, 1998b, Liquidity and control: a dynamic theory of corporate ownership structure, *Journal of Institutional and Theoretical Economics*, 154, 177-211.
- Boot, A.W.A., and Thakor, A.V., 2004, Disagreement and Flexibility: A Theory of Optimal Security Issuance and Capital Structure. Mimeo.
- Bourgeois, L.J., Eisenhardt, K.M., and Kahwajy, J.L., 1997, Conflict and Strategic Choice: How Top Management Teams Disagree, *California Management Review*, 39, 42-62.
- Butler, Alexander W., Distance still matters: evidence from municipal bond underwriting, mimeo.

- Carter, D.A., Simkins, B.J. and W.G. Simpson, 2003, Corporate Governance, Board Diversity and Firm Value, *Financial review*, 38, 33-53.
- Chen, J., Hong, H. and J.C. Stein, 2001, Breadth of ownership and stock returns, *Journal of Financial Economics*.
- Coval, J. D. and Moskowitz, T. J., 1999, Home Bias at Home: Local Equity Preference in Domestic Portfolios, *Journal of Finance*, 54, 2045-2073.
- Coval, J. D. and Moskowitz, T. J., 2001, The Geography of Investment: Informed Trading and Asset Prices, *Journal of Political Economy*, 109, 811-841.
- Crawford, V. and J. Sobel, 1982, Strategic Information Transmission, *Econometrica*, 50, 1431-1452.
- Cremer, J., 1993, Corporate Culture and Shared Knowledge, *Industrial and Corporate Change*, 3(2), 351-386.
- Cremers, K.J.M., and Nair, V.B., 2004, Governance mechanisms and equity prices, *Journal of Finance*, forthcoming.
- Cronqvist, H., and M. Nilsson, 2003, Agency costs of controlling minority shareholders, *Journal of Financial and Quantitative Analysis*, 38, 695-719.
- Demsetz, H., 1983, The structure of ownership and the theory of the firm, *Journal of Law and Economics* 26, 375-390.
- Demsetz, H., and K. Lehn, 1985, The structure of corporate ownership: causes and consequences, *Journal of Political Economy* 93, 1155-1177.
- Demsetz, H., and B. Villalonga, 2001, Ownership structure and corporate performance, *Journal of Corporate Finance* 7, 209-233.
- Dessein, W., 2002, Authority and Communication in Organizations, *Review of Economic Studies*, 69, 811-838.
- Detemple J. and S. Murthy, 1994, Intertemporal asset pricing with heterogeneous opinion, *Journal of Economic Theory*, 62, 294-320.
- Diether, K.B., Malloy, C.J. and A. Scherbina, 2002, Differences of opinion and the cross section of stock returns, *Journal of Finance*, 57, 2113-2142.
- Dittmar, A. and A. Thakor, 2005, Why Do Firms Issue Equity?, Mimeo.
- Edin, P.A., and Fredriksson, P., 2000, LINDA: Longitudinal Individual Data for Sweden 1960-1997, Uppsala University Working Paper.
- Ellison, G. and Fudenberg, D., 1995, Word-of-mouth communication and social learning, *Quarterly Journal of Economics*, 93-126.
- Englund, P., Quigley, J.M., and Redfean, C., 1998, Improved Price Indexes for Real Estate: Measuring the Course of Swedish Housing Prices, *Journal of Urban Economics* 44, 171-196.
- Faure-Grimaud, A., and D. Gromb, 2003, Public trading and private incentives, *Review of Financial Studies*, forthcoming.
- Glaeser E., Scheinkman, J.A., and Sacerdote, B. 2003, The Social Multiplier, *Journal of The European Economic Association*.
- Gompers, P., Ishii, J., and Metrick, A., 2003, Corporate governance and equity prices, *Quarterly Journal of Economics*, 118, 107-156.
- Grinblatt, M. and Keloharju, M., 2000, The Investment Behavior and Performance of Various Investor Types: A Study of Finland's Unique Data Set, *Journal of Financial Economics*, 55, 43-67.
- Guiso, L. and Jappelli, T., 2002, Household Portfolios in Italy, in *Households Portfolios*, edited by Guiso, Jappelli and Haliassos, MIT Press, 250-289.

- Harrison, J.M. and D.M. Kreps, 1978, Speculative Investor Behavior in a Stock Market with Heterogeneous Expectations, *The Quarterly Journal of Economics*, 92, 323-336.
- Himmelberg, C., R.G. Hubbard and D. Palia, 1999, Understanding the determinants of managerial ownership and the link between ownership and performance, *Journal of Financial Economics* 53, 353-384.
- Holderness, C., R. Kroszner and D. Sheehan, 1999, Were the good old days that good? Evolution of managerial stock ownership and corporate governance since the Great Depression, *Journal of Finance* 54, 435-469.
- Holmstrom, B. and J. Tirole, 1993, Market liquidity and performance monitoring, *Journal of Political Economy* 101 (4), 678-709.
- Hong, H., Scheinkman, J.A, and Xiong, W., 2003, Asset Float and Speculative Bubbles, Mimeo.
- Hong, H., Kubik, J.D., and Stein, J.C., 2003, Social Interaction and Stock Market Participation, Mimeo.
- Hong, H., Kubik, J.D., and Stein, J.C., 2005, The Only Game in Town: Stock Price Consequences of Local Bias, Mimeo.
- Huberman, G., 2001, Familiarity Breeds Investment, *Review of Financial Studies*, 14, 659-680.
- Kahn, C., and A. Winton, 1998, Ownership structure, speculation and shareholder intervention, *Journal of Finance* 53(1), 99-129.
- Kraus A. and M. Smith, 1989, Market created risk, *The Journal of Finance*, 44, 557-569.
- Massa, M. and A. Simonov, 2005, Hedging, familiarity and portfolio choice, forthcoming *The Review of Financial Studies*.
- Maug, E., 1998, Large shareholders as monitors: is there a trade-off between liquidity and control?, *Journal of Finance* 53 (1), 65-98.
- McConnell, J.J. and H.Servaes, 1990, Additional evidence on equity ownership and corporate value. 27, 595-612.
- Mei, J., Scheinkman, J.A, and Xiong, W., 2003, Speculative Trading and Stock Prices: An Analysis of Chinese A-B Share Premia, Mimeo.
- Miller, E.M., 1977, Risk, uncertainty and divergence of opinion, *The Journal of Finance*, 32, 1151-1133.
- Morck, R., A. Shleifer and R. Vishny, 1988, Management ownership and market valuation: an empirical analysis, *Journal of Financial Economics* 20, 293-315.
- Morris, S., 1996, Speculative investor behavior and learning, *Journal of Financial Economics*, 111, 1111-1133.
- Noe, T.H., 2002, Investor Activism and Financial Market Structure, *Review of Financial Studies*, 15, 289-318.
- Novaes, W., 2003, Capital Structure Choice When Managers are in Control: entrenchment versus Efficiency, *Journal of Business*, 76, 49-82.
- Pastor, L. and Veronesi, P., 2002, Stock Valuation and Learning about Profitability, Mimeo.
- Poterba, J.M. and Samwick, A., 1997, Household Portfolio Allocation over the Life Cycle, NBER Working Paper: 6185.
- Scheinkman, J.A, and Xiong, W., 2002, Overconfidence and Speculative Bubbles, forthcoming, *Journal of Political Economy*.
- Shleifer, A. and R. Vishny, 1986, Large shareholders and corporate control, *Journal of Political Economy* 94, 461-488.

Sundin A. and Sundqvist, S.I., 2002, Owners and Power in Sweden s Listed Companies, SIS Ägarservice AB, 1986-2002.

Tookes, (2003), Cross-Sectional Implications of Insider Trading: Insider Gains and Product Market Dominance, Cornell University Johnson School of Business, Working Paper.

Van den Steen, E.J., 2004, Culture Clash: The Cost and Benefits of Homogeneity, Working Paper.

Vissing-Jorgensen, A., 2002, Towards an Explanation of Household Portfolio Choice Heterogeneity: Non-Financial Income and Participation Cost Structures, Mimeo.

Westphal, J.D., and E.J.Zajac, 1995, Who Shall Govern? CEO/Board Power, Demographic Similarity, and New Director Selection, *Administrative Science Quarterly*, 40, 60-83.

Williams J., 1977. Capital asset prices with heterogeneous opinion. *Journal of Financial Economics*, 219-277.

## Table 1: Descriptive statistics

This table contains the descriptive statistics of the sample. Panel A reports firm-level characteristics. *Market-to-Book Ratio* is the ratio of the market value of the company to the book value of common equity. *Size* is the logarithm of the market value of the company. *Leverage* is the ratio of debt to the sum of equity and debt. *Employees* is the number of employees (categories 1–8) as provided by MM Partners. *Bid-Ask Spread* is the bid-ask spread of the stock price. *Price* is the price (in SEK) of a share. *Return 23* is the compounded gross return for the period between months t-2 and t-3. *Return 46* is the compounded gross return for the period between months t-4 and t-6. *Return 712* is the compounded gross return for the period between months t-7 and t-12. *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at t. *Turnover* is defined as the logarithm of the ratio of shares traded to shares outstanding. *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. We also report the descriptive statistics for stock returns and the monthly standard deviation of daily returns, and do so for both raw and market-adjusted returns. Return on Assets (*ROA*) is defined as the ratio of earnings before interest, taxes and depreciation to book value of assets. Return on Equity (*ROE*) is defined as the ratio of earnings before interest, taxes and depreciation to book value of equity. Return on Sales (*ROS*) is defined as the ratio of earnings before interest, taxes and depreciation to sales. *Profit Margin* is defined as the ratio of net income to sales. *Cash* is defined as the logarithm of liquid assets in the company’s balance sheet (measured in thousands of Swedish kronor, SEK). We

define  $ShareholderHomogeneity1_j = \sum_{c=1}^C \left( \frac{\sum_{i=1}^I N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$ , where  $N_{ijc}$  is the number of shares that

individual  $i$  who is member of group  $c$  holds in company  $j$ . We define the groups on the basis of age cohort (age groups as 0–30, 31–40, 41–50, 51–60, 61+), college attendance, and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the proportion of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We define *Board Homogeneity1* as a Herfindahl index of the proportion of board members based on age group. We define age groups as 0–30, 31–40, 41–50, 51–60, 61+. We define *Board Homogeneity2* as the share of males among board members. *Corporate Governance Index* is defined similarly to Gompers, Ishii & Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. We also report the ratio of free float to market cap at the end of the previous calendar year. Similar to the Morgan Stanley free-float indices, we subtracted from market cap strategic blockholdings (information was provided by SIS Ågarservice AB). We also report the share of market cap owned by individual investors (excluding blockholders) at the end of the previous calendar year. Panel B reports the distribution of the sample based on graduation year. Unless noted otherwise, all monetary values are in thousands of Swedish kronor (SEK).

### Panel A: Firm-related Variables

<i>Variable</i>	<i>Mean</i>	<i>Median</i>	<i>Std Dev</i>	<i>IQR</i>
Market-to-Book Ratio	3.430	1.941	8.331	2.075
Size	9.473	9.411	0.928	1.425
Leverage	0.473	0.135	0.895	0.657
Employees	2.669	2.775	1.345	1.767
Bid-Ask Spread	2.258	0.928	5.458	1.311
Price	112.372	86.500	111.849	105.500
High-Tech Dummy	0.127	0.000	0.333	0.000
A-list Dummy	0.445	0.000	0.497	1.000
Turnover	-1.612	-1.498	0.642	0.700
Dividend Yield	0.031	0.014	0.084	0.033
Raw monthly returns	0.012	0.005	0.137	0.124
Corporate Governance Index	0.654	0.000	0.791	1.000
Market-adjusted returns	-0.014	-0.016	0.133	0.132
Std Dev daily stock ret. (monthly)	0.028	0.022	0.022	0.017
Std Dev daily mkt-adjusted stock ret. (monthly)	0.014	0.013	0.006	0.008
ROA	0.049	0.083	0.204	0.079
ROE	0.069	0.155	0.556	0.209
ROS	0.054	0.070	0.498	0.128
Cash	5.029	5.076	1.181	1.079
Profit Margin	0.038	0.091	0.695	0.147
Age-based Shr.Homogeneity	0.414	0.369	0.257	0.149
College-based Shr.Homogeneity	0.246	0.178	0.205	0.203
Local Age-based Shr.Homogeneity	0.445	0.402	0.168	0.179
Free Float/Market Capitalization	0.714	0.733	0.186	0.270
Share of Individual Investors (% market cap)	0.242	0.194	0.189	0.290
Board Homogeneity1	0.424	0.375	0.164	0.111
Board Homogeneity2	0.825	0.889	0.217	0.199

### Panel B: Graduation Year Distribution

<i>Graduation Year</i>	<i>% of Sample</i>
Before 1980	20.26%
1981–1985	24.64%
1986–1990	18.40%
1991–1994	15.96%
After 1995	20.74%

## Table 2: Shareholder Homogeneity and Stock Returns

This table reports the results of panel estimations (Panels A, C, E) and Fama MacBeth estimations (Panel B, D, F) of monthly returns on shareholder homogeneity, board homogeneity and a set of stock characteristics for the period January 1996–December 2000. We

define  $ShareholderHomogeneity_j = \sum_{c=1}^C \left( \frac{\sum_{i=1}^I N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$ , where  $N_{ijc}$  is the number of shares that individual  $i$  who is member of group  $c$  holds in company

$j$ . We define the groups on the basis of age cohort (Panels A and B), college attendance (Panels C and D), and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment, Panels E and F) for each year. Changes in homogeneity are defined from year  $t-1$  to year  $t$ . We use raw returns, market-adjusted returns (residuals of the CAPM market model) and industry-adjusted returns (residuals of the regression of excess returns on industry excess returns). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the share of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We use two alternative measures of board homogeneity: the first (*Board Homogeneity1*) is defined as the Herfindahl index based on the share of board members belonging to the same age cohort. We define age cohorts between 0 and 30 years of age, between 31 and 40, 41–50, 51–60, and 61 and over. The second measure (*Board Homogeneity2*) is defined on the basis of gender, i.e., the proportion of males among board members. *Market-to-Book Ratio* is the ratio of the market value of the company as at the end of the previous calendar year to the book value of common equity (previous fiscal year). *Size* is the logarithm of the market value of the company as at the end of the previous calendar year. *Leverage* is the ratio of debt to sum of equity and debt as at the end of the previous fiscal year. *Employees* is the number of employees (categories 1–8) as provided by MM Partners. *Bid-Ask Spread* is bid-ask spread as at month  $t-2$ . *Price* is the price (in SEK) of a share as at  $t-2$ . *Return 23* is the compounded gross return for the period between months  $t-2$  and  $t-3$ . *Return 46* is the compounded gross return for the period between months  $t-4$  and  $t-6$ . *Return 712* is the compounded gross return for the period between months  $t-7$  and  $t-12$ . *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at  $t$ . *Turnover* is defined as the logarithm of the ratio of shares traded to shares outstanding at month  $t-2$ . *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. *Corporate Governance Index* is defined similarly to Gompers, Ishii & Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. It is measured at the end of the previous fiscal year. *Share of Free Float* and *Share of Individuals* refer to the share of non-strategic investors and individual investors, correspondingly, at the end of the previous calendar year. All the reported estimates for the pooled regressions are done with yearly and quarterly dummies using a time-series and heteroskedastic-consistent estimator. We use 10,176 monthly observations (the number of firms is between 91 and 271). All the estimates are multiplied by 100. The  $t$ -statistics are reported in parentheses. We report the *Adjusted R-Square* for the pooled regression estimations.

**Panel A: Age-based Homogeneity Measures, Pooled Regression Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔAgeShr. Homogeneity1	6.118	(3.33)	6.398	(3.49)	5.793	(3.21)													
ΔAgeShr. Homogeneity2							10.143	(3.34)	10.607	(3.50)	9.078	(3.08)							
ΔAgeShr. Homogeneity3													14.785	(3.29)	25.920	(3.46)	12.083	(1.99)	
ΔBoard Homogeneity1	2.216	(2.06)	2.094	(1.89)	2.305	(2.02)	2.270	(2.11)	2.150	(1.94)	2.358	(2.06)	2.280	(2.11)	2.161	(1.95)	2.357	(2.06)	
ΔBoard Homogeneity2	0.836	(0.98)	0.863	(1.00)	1.113	(1.26)	0.834	(0.98)	0.861	(1.00)	1.116	(1.27)	0.918	(1.08)	0.949	(1.10)	1.192	(1.35)	
<i>Control Variables</i>																			
Market-To-Book	0.025	(1.18)	0.030	(1.54)	0.027	(1.64)	0.025	(1.17)	0.030	(1.53)	0.027	(1.62)	0.025	(1.19)	0.030	(1.55)	0.027	(1.58)	
Size	2.461	(10.45)	2.658	(11.23)	2.450	(10.59)	2.459	(10.44)	2.656	(11.22)	2.451	(10.58)	2.430	(10.27)	2.626	(11.04)	2.455	(10.56)	
Leverage	0.112	(0.66)	0.124	(0.75)	0.203	(1.12)	0.108	(0.63)	0.119	(0.72)	0.200	(1.10)	0.113	(0.66)	0.125	(0.75)	0.213	(1.17)	
Employees	-0.209	(-1.70)	-0.185	(-1.45)	-0.390	(-3.22)	-0.206	(-1.67)	-0.182	(-1.43)	-0.387	(-3.20)	-0.211	(-1.71)	-0.188	(-1.47)	-0.395	(-3.26)	
Bid-Ask Spread	0.008	(0.17)	0.083	(1.71)	0.074	(1.49)	0.007	(0.15)	0.081	(1.69)	0.073	(1.47)	0.004	(0.09)	0.079	(1.62)	0.071	(1.42)	
Price	-0.012	(-4.93)	-0.014	(-5.53)	-0.010	(-4.10)	-0.012	(-4.88)	-0.013	(-5.48)	-0.010	(-4.06)	-0.012	(-4.80)	-0.013	(-5.40)	-0.010	(-4.04)	
Return 23	0.672	(0.87)	-0.239	(-0.27)	0.309	(0.33)	0.664	(0.86)	-0.248	(-0.28)	0.305	(0.32)	0.676	(0.89)	-0.235	(-0.27)	0.358	(0.38)	
Return 46	-0.576	(-1.19)	-1.280	(-2.59)	-0.462	(-0.94)	-0.582	(-1.21)	-1.286	(-2.61)	-0.464	(-0.95)	-0.597	(-1.24)	-1.302	(-2.65)	-0.437	(-0.89)	
Return 712	-0.644	(-2.04)	-0.325	(-1.12)	-0.489	(-1.73)	-0.638	(-2.02)	-0.318	(-1.10)	-0.486	(-1.72)	-0.660	(-2.09)	-0.342	(-1.17)	-0.489	(-1.72)	
High-Tech Dummy	-2.704	(-4.47)	-2.448	(-4.01)	-1.435	(-2.42)	-2.663	(-4.39)	-2.406	(-3.93)	-1.405	(-2.36)	-2.615	(-4.29)	-2.356	(-3.84)	-1.448	(-2.44)	
A-list Dummy	-0.317	(-0.86)	-0.569	(-1.47)	-0.441	(-1.07)	-0.319	(-0.86)	-0.570	(-1.47)	-0.446	(-1.08)	-0.322	(-0.87)	-0.573	(-1.48)	-0.466	(-1.12)	
Turnover	-1.260	(-4.46)	-1.317	(-4.69)	-1.315	(-4.76)	-1.239	(-4.39)	-1.296	(-4.62)	-1.297	(-4.70)	-1.263	(-4.46)	-1.320	(-4.69)	-1.327	(-4.79)	
Dividend Yield	-2.914	(-2.08)	-3.295	(-2.39)	-3.731	(-2.58)	-2.944	(-2.10)	-3.325	(-2.41)	-3.751	(-2.60)	-2.970	(-2.12)	-3.353	(-2.43)	-3.696	(-2.56)	
Corporate Governance Index	-0.114	(-0.61)	-0.197	(-1.00)	-0.068	(-0.35)	-0.124	(-0.66)	-0.207	(-1.05)	-0.076	(-0.39)	-0.126	(-0.66)	-0.209	(-1.06)	-0.065	(-0.33)	
Share of Free Float	-0.798	(-1.08)	-0.756	(-1.00)	-2.165	(-2.74)	-0.742	(-1.00)	-0.698	(-0.92)	-2.131	(-2.70)	-0.709	(-0.95)	-0.663	(-0.87)	-2.246	(-2.84)	
Share of Individuals	0.821	(0.84)	1.460	(1.43)	1.568	(1.50)	0.879	(0.90)	1.522	(1.49)	1.631	(1.56)	0.716	(0.73)	1.351	(1.31)	1.596	(1.52)	
Intercept	-21.013	(-7.74)	-26.415	(-9.80)	-24.127	(-8.82)	-21.038	(-7.75)	-26.442	(-9.82)	-24.177	(-8.83)	-20.804	(-7.65)	-26.197	(-9.71)	-24.241	(-8.83)	
Adj R2	0.103		0.118		0.069		0.103		0.119		0.069		0.100		0.116		0.068		

**Panel B: Age-based Homogeneity Measures, Fama-MacBeth Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔAgeShr. Homogeneity1	5.079	(2.49)	5.481	(2.60)	6.933	(2.82)													
ΔAgeShr. Homogeneity2							8.949	(3.00)	9.393	(3.11)	9.668	(2.66)							
ΔAgeShr. Homogeneity3													14.976	(2.09)	15.284	(2.05)	17.921	(2.09)	
ΔBoard Homogeneity1	1.368	(1.25)	1.226	(1.08)	1.719	(1.56)	1.520	(1.42)	1.281	(1.15)	1.652	(1.54)	1.435	(1.28)	1.383	(1.19)	1.760	(1.58)	
ΔBoard Homogeneity2	2.216	(2.21)	2.390	(2.34)	1.194	(1.38)	2.249	(2.27)	2.374	(2.33)	1.155	(1.34)	2.388	(2.38)	2.562	(2.50)	1.346	(1.55)	
<i>Control Variables</i>																			
Market-To-Book	-0.011	(-0.21)	-0.017	(-0.29)	0.017	(0.37)	-0.004	(-0.07)	-0.009	(-0.16)	0.021	(0.44)	-0.007	(-0.15)	-0.015	(-0.26)	0.017	(0.37)	
Size	1.749	(5.67)	2.187	(6.44)	2.292	(6.84)	1.759	(5.78)	2.182	(6.44)	2.245	(6.70)	1.693	(5.60)	2.112	(6.25)	2.150	(6.59)	
Leverage	0.329	(1.95)	0.088	(0.57)	0.126	(0.74)	0.297	(1.77)	0.071	(0.46)	0.132	(0.78)	0.328	(1.96)	0.090	(0.59)	0.140	(0.82)	
Employees	-0.215	(-1.91)	-0.091	(-0.86)	-0.274	(-1.75)	-0.207	(-1.84)	-0.093	(-0.86)	-0.285	(-1.80)	-0.225	(-2.02)	-0.117	(-1.10)	-0.307	(-1.96)	
Bid-Ask Spread	-0.036	(-0.56)	-0.023	(-0.37)	-0.008	(-0.10)	-0.032	(-0.52)	-0.018	(-0.31)	-0.011	(-0.15)	-0.039	(-0.62)	-0.024	(-0.40)	-0.020	(-0.27)	
Price	-0.008	(-2.66)	-0.008	(-2.62)	-0.003	(-0.84)	-0.008	(-2.72)	-0.008	(-2.61)	-0.002	(-0.62)	-0.007	(-2.57)	-0.008	(-2.51)	-0.001	(-0.46)	
Return 23	1.603	(1.34)	2.207	(1.70)	2.211	(1.51)	1.417	(1.18)	2.052	(1.55)	2.139	(1.47)	1.672	(1.39)	2.236	(1.70)	2.281	(1.56)	
Return 46	-0.502	(-0.47)	-0.764	(-0.65)	-0.400	(-0.33)	-0.542	(-0.51)	-0.816	(-0.69)	-0.354	(-0.29)	-0.459	(-0.42)	-0.664	(-0.55)	-0.197	(-0.16)	
Return 712	0.884	(1.83)	0.437	(0.82)	0.142	(0.24)	0.829	(1.71)	0.401	(0.73)	0.171	(0.29)	0.912	(1.81)	0.495	(0.87)	0.237	(0.39)	
High-Tech Dummy	-2.110	(-3.16)	-1.922	(-3.61)	-0.982	(-1.43)	-2.007	(-2.97)	-1.836	(-3.44)	-0.938	(-1.35)	-2.096	(-3.10)	-1.907	(-3.56)	-1.005	(-1.45)	
A-list Dummy	-0.127	(-0.34)	-0.188	(-0.52)	0.326	(0.82)	-0.131	(-0.35)	-0.178	(-0.50)	0.345	(0.88)	-0.104	(-0.27)	-0.135	(-0.37)	0.443	(1.09)	
Turnover	-0.990	(-3.75)	-0.905	(-3.55)	-0.931	(-3.43)	-0.961	(-3.65)	-0.872	(-3.43)	-0.907	(-3.33)	-0.980	(-3.62)	-0.911	(-3.53)	-0.933	(-3.38)	
Dividend Yield	-2.597	(-2.16)	-1.884	(-1.53)	-2.726	(-2.17)	-2.439	(-2.00)	-1.834	(-1.49)	-2.929	(-2.33)	-2.808	(-2.34)	-2.163	(-1.74)	-3.223	(-2.57)	
Corporate Governance Index	-0.008	(-0.02)	-0.124	(-0.32)	-0.373	(-0.95)	-0.083	(-0.24)	-0.168	(-0.44)	-0.401	(-1.03)	-0.033	(-0.09)	-0.134	(-0.34)	-0.377	(-0.93)	
Share of Free Float	0.226	(0.32)	0.599	(0.85)	0.375	(0.58)	0.396	(0.56)	0.753	(1.08)	0.422	(0.66)	0.236	(0.33)	0.600	(0.83)	0.262	(0.40)	
Share of Individuals	-0.066	(-0.08)	1.276	(1.27)	1.552	(1.53)	0.050	(0.06)	1.365	(1.37)	1.619	(1.60)	-0.096	(-0.11)	1.190	(1.17)	1.467	(1.42)	
Intercept	-22.401	(-6.21)	-29.486	(-7.37)	-29.567	(-7.89)	-22.371	(-6.22)	-29.269	(-7.33)	-29.085	(-7.79)	-22.190	(-6.17)	-29.178	(-7.30)	-28.731	(-7.81)	

**Panel C: College-based Homogeneity Measures, Pooled Regression Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔCollegeShr. Homogeneity1	2.797	(2.92)	3.194	(3.23)	3.454	(3.45)													
ΔCollegeShr. Homogeneity2							3.930	(3.01)	4.374	(3.20)	4.536	(3.36)							
ΔCollegeShr. Homogeneity3													9.716	(2.34)	11.414	(2.71)	12.736	(2.98)	
ΔBoard Homogeneity1	1.654	(1.55)	1.727	(1.52)	1.843	(1.58)	1.593	(1.49)	1.669	(1.47)	1.799	(1.54)	1.668	(1.56)	1.737	(1.53)	1.845	(1.59)	
ΔBoard Homogeneity2	1.016	(1.19)	0.684	(0.78)	1.029	(1.14)	1.039	(1.21)	0.708	(0.81)	1.054	(1.17)	1.043	(1.22)	0.717	(0.82)	1.076	(1.20)	
<i>Control Variables</i>																			
Market-To-Book	0.035	(1.67)	0.040	(2.06)	0.042	(2.59)	0.035	(1.66)	0.040	(2.04)	0.042	(2.55)	0.033	(1.54)	0.038	(1.90)	0.039	(2.38)	
Size	2.265	(10.02)	2.412	(10.41)	2.260	(10.23)	2.260	(10.00)	2.408	(10.39)	2.256	(10.22)	2.253	(9.96)	2.399	(10.35)	2.244	(10.15)	
Leverage	0.479	(3.67)	0.435	(3.00)	0.522	(3.23)	0.477	(3.65)	0.434	(2.98)	0.522	(3.22)	0.499	(3.82)	0.459	(3.16)	0.547	(3.38)	
Employees	-0.274	(-2.21)	-0.193	(-1.51)	-0.416	(-3.51)	-0.279	(-2.25)	-0.198	(-1.54)	-0.421	(-3.55)	-0.273	(-2.20)	-0.191	(-1.49)	-0.416	(-3.51)	
Bid-Ask Spread	-0.021	(-0.43)	0.082	(1.60)	0.048	(0.96)	-0.022	(-0.44)	0.081	(1.58)	0.048	(0.95)	-0.022	(-0.43)	0.082	(1.60)	0.048	(0.96)	
Price	-0.012	(-4.77)	-0.013	(-5.09)	-0.010	(-4.09)	-0.011	(-4.73)	-0.013	(-5.06)	-0.010	(-4.04)	-0.011	(-4.71)	-0.013	(-5.05)	-0.009	(-4.03)	
Return 23	0.737	(0.90)	0.142	(0.16)	0.714	(0.78)	0.720	(0.88)	0.120	(0.13)	0.691	(0.75)	0.732	(0.90)	0.140	(0.15)	0.712	(0.78)	
Return 46	-0.545	(-0.97)	-1.113	(-1.92)	-0.134	(-0.23)	-0.552	(-0.98)	-1.124	(-1.94)	-0.143	(-0.25)	-0.550	(-0.98)	-1.126	(-1.94)	-0.142	(-0.25)	
Return 712	-0.471	(-1.26)	-0.260	(-0.77)	-0.617	(-1.90)	-0.470	(-1.26)	-0.262	(-0.78)	-0.622	(-1.91)	-0.486	(-1.30)	-0.277	(-0.82)	-0.631	(-1.94)	
High-Tech Dummy	-3.256	(-5.05)	-2.767	(-4.23)	-1.924	(-3.06)	-3.284	(-5.09)	-2.793	(-4.27)	-1.950	(-3.10)	-3.230	(-5.01)	-2.732	(-4.17)	-1.891	(-3.00)	
A-list Dummy	0.055	(0.15)	-0.433	(-1.11)	-0.222	(-0.54)	0.064	(0.17)	-0.423	(-1.08)	-0.211	(-0.51)	0.074	(0.20)	-0.413	(-1.06)	-0.199	(-0.48)	
Turnover	-1.480	(-5.30)	-1.211	(-4.33)	-1.458	(-5.37)	-1.476	(-5.28)	-1.206	(-4.31)	-1.453	(-5.36)	-1.467	(-5.25)	-1.196	(-4.28)	-1.441	(-5.32)	
Dividend Yield	-3.393	(-2.43)	-3.703	(-2.70)	-4.320	(-3.02)	-3.427	(-2.46)	-3.739	(-2.72)	-4.352	(-3.04)	-3.409	(-2.44)	-3.723	(-2.71)	-4.344	(-3.03)	
Corporate Governance Index	-0.068	(-0.37)	-0.012	(-0.06)	-0.013	(-0.07)	-0.074	(-0.40)	-0.020	(-0.10)	-0.021	(-0.11)	-0.053	(-0.29)	0.007	(0.03)	0.009	(0.04)	
Share of Free Float	-0.712	(-1.00)	-0.751	(-1.02)	-2.041	(-2.71)	-0.667	(-0.94)	-0.704	(-0.96)	-1.997	(-2.65)	-0.683	(-0.96)	-0.707	(-0.96)	-1.998	(-2.65)	
Share of Individuals	1.043	(1.07)	1.517	(1.47)	1.421	(1.37)	1.080	(1.11)	1.566	(1.52)	1.478	(1.42)	1.049	(1.07)	1.512	(1.46)	1.406	(1.35)	
Intercept	-20.928	(-7.74)	-24.465	(-9.07)	-23.248	(-8.55)	-20.873	(-7.72)	-24.409	(-9.05)	-23.204	(-8.53)	-20.876	(-7.71)	-24.411	(-9.04)	-23.183	(-8.52)	
Adj R2	0.102		0.100		0.070		0.101		0.100		0.071		0.100		0.099		0.070		

**Panel D: College-based Homogeneity Measures, Fama-MacBeth Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔCollegeShr. Homogeneity1	1.623	(2.04)	2.172	(2.44)	1.094	(2.01)													
ΔCollegeShr. Homogeneity2							2.208	(2.09)	2.916	(2.29)	1.367	(1.92)							
ΔCollegeShr. Homogeneity3													9.122	(2.42)	8.637	(2.14)	4.919	(2.23)	
ΔBoard Homogeneity1	1.043	(0.99)	0.633	(0.45)	0.488	(0.44)	0.974	(0.92)	0.657	(0.47)	0.449	(0.41)	0.802	(0.77)	0.500	(0.36)	0.352	(0.32)	
ΔBoard Homogeneity2	2.024	(1.86)	1.745	(1.50)	1.119	(1.26)	1.956	(1.81)	1.737	(1.51)	1.058	(1.19)	2.085	(1.92)	1.964	(1.71)	1.281	(1.42)	
<i>Control Variables</i>																			
Market-To-Book	-0.069	(-1.02)	-0.017	(-0.24)	0.006	(0.09)	-0.068	(-1.03)	-0.014	(-0.20)	0.007	(0.12)	-0.056	(-0.85)	-0.015	(-0.22)	0.013	(0.21)	
Size	1.655	(5.97)	2.029	(5.79)	2.014	(6.39)	1.682	(6.09)	2.038	(5.80)	2.031	(6.45)	1.665	(6.07)	2.053	(5.90)	2.028	(6.38)	
Leverage	0.553	(3.62)	0.476	(2.51)	0.394	(2.13)	0.540	(3.57)	0.476	(2.50)	0.390	(2.10)	0.550	(3.58)	0.506	(2.64)	0.402	(2.17)	
Employees	-0.278	(-2.28)	-0.065	(-0.48)	-0.382	(-2.41)	-0.288	(-2.36)	-0.064	(-0.48)	-0.385	(-2.43)	-0.286	(-2.32)	-0.083	(-0.62)	-0.402	(-2.53)	
Bid-Ask Spread	-0.086	(-1.27)	0.092	(1.27)	-0.036	(-0.48)	-0.090	(-1.32)	0.095	(1.30)	-0.037	(-0.49)	-0.083	(-1.18)	0.118	(1.44)	-0.027	(-0.34)	
Price	-0.009	(-3.09)	-0.013	(-4.27)	-0.003	(-0.83)	-0.009	(-3.09)	-0.013	(-4.22)	-0.002	(-0.77)	-0.009	(-3.20)	-0.014	(-4.34)	-0.003	(-0.84)	
Return 23	2.325	(1.82)	2.226	(1.43)	3.279	(2.19)	2.181	(1.70)	2.158	(1.39)	3.236	(2.17)	2.271	(1.81)	2.297	(1.53)	3.247	(2.20)	
Return 46	-0.658	(-0.58)	0.294	(0.24)	-0.402	(-0.32)	-0.762	(-0.67)	0.303	(0.25)	-0.421	(-0.34)	-0.694	(-0.60)	0.326	(0.26)	-0.440	(-0.35)	
Return 712	1.933	(3.23)	1.384	(2.48)	0.891	(1.39)	1.917	(3.26)	1.375	(2.48)	0.861	(1.36)	1.919	(3.23)	1.409	(2.55)	0.870	(1.39)	
High-Tech Dummy	-2.473	(-3.63)	-2.109	(-3.61)	-1.616	(-2.13)	-2.444	(-3.58)	-2.067	(-3.52)	-1.609	(-2.13)	-2.390	(-3.58)	-2.008	(-3.47)	-1.578	(-2.09)	
A-list Dummy	0.020	(0.05)	-0.400	(-0.97)	0.541	(1.33)	-0.010	(-0.03)	-0.401	(-0.98)	0.514	(1.27)	-0.064	(-0.16)	-0.398	(-0.98)	0.525	(1.30)	
Turnover	-1.044	(-3.37)	-0.833	(-2.98)	-1.070	(-3.55)	-1.044	(-3.33)	-0.846	(-3.00)	-1.083	(-3.57)	-1.061	(-3.41)	-0.840	(-2.98)	-1.076	(-3.54)	
Dividend Yield	-3.053	(-2.41)	-2.573	(-1.96)	-3.304	(-2.57)	-2.968	(-2.35)	-2.553	(-1.94)	-3.242	(-2.52)	-2.950	(-2.32)	-2.680	(-2.03)	-3.275	(-2.52)	
Corporate Governance Index	0.103	(0.31)	0.176	(0.47)	-0.109	(-0.29)	0.093	(0.28)	0.157	(0.42)	-0.123	(-0.33)	0.169	(0.51)	0.236	(0.62)	-0.068	(-0.18)	
Share of Free Float	-0.241	(-0.36)	-0.257	(-0.37)	-0.063	(-0.10)	-0.143	(-0.22)	-0.188	(-0.27)	-0.007	(-0.01)	-0.156	(-0.24)	-0.141	(-0.20)	-0.050	(-0.08)	
Share of Individuals	0.123	(0.14)	1.372	(1.19)	1.354	(1.28)	0.158	(0.18)	1.380	(1.20)	1.390	(1.32)	-0.020	(-0.02)	1.224	(1.06)	1.278	(1.22)	
Intercept	-22.311	(-6.42)	-27.271	(-6.46)	-27.977	(-7.51)	-22.235	(-6.37)	-27.385	(-6.48)	-28.043	(-7.50)	-22.293	(-6.35)	-27.848	(-6.61)	-28.106	(-7.46)	

**Panel E: Local Age-based Homogeneity Measures, Pooled Regression Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔLAgeShr. Homogeneity1	5.018	(3.15)	4.520	(2.79)	4.269	(2.71)													
ΔLAgeShr. Homogeneity2							8.309	(3.30)	7.070	(2.76)	6.089	(2.37)							
ΔLAgeShr. Homogeneity3													8.644	(1.82)	9.167	(2.05)	8.316	(2.06)	
ΔBoard Homogeneity1	2.204	(2.04)	2.006	(1.79)	2.302	(2.01)	2.236	(2.07)	2.037	(1.82)	2.333	(2.04)	2.280	(2.11)	2.076	(1.86)	2.363	(2.07)	
ΔBoard Homogeneity2	0.891	(1.05)	0.734	(0.85)	1.167	(1.32)	0.897	(1.06)	0.741	(0.86)	1.175	(1.33)	0.932	(1.10)	0.772	(0.89)	1.201	(1.36)	
<i>Control Variables</i>																			
Market-To-Book	0.025	(1.17)	0.025	(1.27)	0.027	(1.61)	0.024	(1.16)	0.025	(1.25)	0.027	(1.58)	0.024	(1.13)	0.024	(1.23)	0.026	(1.56)	
Size	2.463	(10.45)	2.651	(10.91)	2.456	(10.60)	2.461	(10.43)	2.652	(10.91)	2.460	(10.61)	2.482	(10.49)	2.664	(10.93)	2.469	(10.63)	
Leverage	0.113	(0.66)	0.093	(0.56)	0.205	(1.13)	0.107	(0.62)	0.089	(0.53)	0.204	(1.12)	0.125	(0.73)	0.103	(0.61)	0.214	(1.18)	
Employees	-0.205	(-1.66)	-0.140	(-1.09)	-0.387	(-3.20)	-0.201	(-1.63)	-0.137	(-1.07)	-0.386	(-3.19)	-0.214	(-1.73)	-0.147	(-1.15)	-0.395	(-3.26)	
Bid-Ask Spread	0.010	(0.20)	0.111	(2.17)	0.075	(1.51)	0.009	(0.18)	0.110	(2.15)	0.074	(1.48)	0.005	(0.11)	0.107	(2.09)	0.071	(1.43)	
Price	-0.012	(-4.99)	-0.014	(-5.27)	-0.010	(-4.14)	-0.012	(-4.94)	-0.014	(-5.24)	-0.010	(-4.11)	-0.012	(-4.89)	-0.014	(-5.20)	-0.010	(-4.06)	
Return 23	0.670	(0.87)	0.187	(0.21)	0.318	(0.34)	0.659	(0.86)	0.181	(0.21)	0.320	(0.34)	0.729	(0.95)	0.229	(0.26)	0.360	(0.38)	
Return 46	-0.584	(-1.21)	-1.143	(-2.35)	-0.461	(-0.94)	-0.591	(-1.22)	-1.144	(-2.35)	-0.457	(-0.93)	-0.551	(-1.13)	-1.120	(-2.29)	-0.439	(-0.89)	
Return 712	-0.646	(-2.05)	-0.138	(-0.40)	-0.490	(-1.73)	-0.642	(-2.03)	-0.136	(-0.39)	-0.487	(-1.72)	-0.649	(-2.05)	-0.141	(-0.40)	-0.491	(-1.72)	
High-Tech Dummy	-2.694	(-4.44)	-2.269	(-3.67)	-1.440	(-2.43)	-2.658	(-4.37)	-2.244	(-3.62)	-1.429	(-2.40)	-2.732	(-4.50)	-2.289	(-3.70)	-1.462	(-2.46)	
A-list Dummy	-0.389	(-1.05)	-0.774	(-1.96)	-0.506	(-1.22)	-0.414	(-1.12)	-0.797	(-2.01)	-0.524	(-1.27)	-0.387	(-1.05)	-0.774	(-1.95)	-0.504	(-1.22)	
Turnover	-1.252	(-4.43)	-1.043	(-3.69)	-1.311	(-4.75)	-1.227	(-4.35)	-1.023	(-3.62)	-1.296	(-4.70)	-1.281	(-4.51)	-1.068	(-3.76)	-1.333	(-4.81)	
Dividend Yield	-2.939	(-2.10)	-3.131	(-2.26)	-3.740	(-2.59)	-2.962	(-2.11)	-3.143	(-2.27)	-3.738	(-2.59)	-2.833	(-2.02)	-3.046	(-2.20)	-3.657	(-2.53)	
Corporate Governance Index	-0.101	(-0.53)	-0.095	(-0.48)	-0.056	(-0.29)	-0.106	(-0.56)	-0.099	(-0.50)	-0.059	(-0.30)	-0.106	(-0.56)	-0.102	(-0.51)	-0.061	(-0.31)	
Share of Free Float	-0.759	(-1.03)	-0.776	(-1.01)	-2.158	(-2.73)	-0.713	(-0.96)	-0.752	(-0.98)	-2.162	(-2.73)	-0.903	(-1.22)	-0.879	(-1.14)	-2.267	(-2.87)	
Share of Individuals	0.591	(0.60)	1.624	(1.55)	1.396	(1.33)	0.593	(0.60)	1.647	(1.58)	1.445	(1.37)	0.785	(0.79)	1.767	(1.68)	1.540	(1.46)	
Intercept	-20.989	(-7.73)	-26.249	(-9.62)	-24.149	(-8.81)	-20.972	(-7.72)	-26.262	(-9.62)	-24.195	(-8.82)	-21.266	(-7.81)	-26.465	(-9.68)	-24.356	(-8.87)	
Adj R2	0.102		0.101		0.068		0.103		0.101		0.068		0.101		0.100		0.068		

**Panel F: Local Age-based Homogeneity Measures, Fama-MacBeth Estimates**

	<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		<i>Raw Returns</i>		<i>Market-Adj. Returns</i>		<i>Industry-Adj. Returns</i>		
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	
ΔAgeShr. Homogeneity1	3.366	(1.99)	3.547	(2.11)	4.297	(1.98)													
ΔAgeShr. Homogeneity2							6.261	(2.50)	6.184	(2.35)	6.331	(2.02)							
ΔAgeShr. Homogeneity3													10.920	(2.02)	12.898	(2.07)	10.761	(2.04)	
ΔBoard Homogeneity1	1.300	(1.25)	1.104	(1.06)	1.417	(1.40)	1.452	(1.41)	1.212	(1.17)	1.410	(1.41)	1.430	(1.32)	1.273	(1.18)	1.493	(1.45)	
ΔBoard Homogeneity2	2.310	(2.32)	2.461	(2.43)	1.234	(1.43)	2.304	(2.32)	2.439	(2.42)	1.241	(1.45)	2.412	(2.43)	2.600	(2.54)	1.426	(1.64)	
<i>Control Variables</i>																			
Market-To-Book	-0.005	(-0.10)	-0.016	(-0.29)	0.012	(0.27)	-0.008	(-0.17)	-0.017	(-0.29)	0.014	(0.30)	-0.010	(-0.21)	-0.017	(-0.31)	0.013	(0.30)	
Size	1.726	(5.53)	2.183	(6.28)	2.252	(6.62)	1.747	(5.68)	2.180	(6.31)	2.205	(6.49)	1.722	(5.72)	2.135	(6.27)	2.135	(6.57)	
Leverage	0.337	(1.98)	0.108	(0.70)	0.154	(0.92)	0.311	(1.84)	0.092	(0.60)	0.156	(0.93)	0.330	(1.95)	0.101	(0.66)	0.162	(0.97)	
Employees	-0.224	(-2.02)	-0.107	(-1.02)	-0.294	(-1.87)	-0.210	(-1.86)	-0.100	(-0.96)	-0.301	(-1.90)	-0.220	(-1.97)	-0.112	(-1.07)	-0.322	(-2.02)	
Bid-Ask Spread	-0.036	(-0.58)	-0.028	(-0.44)	-0.012	(-0.16)	-0.034	(-0.56)	-0.024	(-0.39)	-0.017	(-0.22)	-0.042	(-0.68)	-0.031	(-0.52)	-0.028	(-0.37)	
Price	-0.008	(-2.75)	-0.008	(-2.62)	-0.002	(-0.76)	-0.008	(-2.84)	-0.008	(-2.65)	-0.002	(-0.55)	-0.008	(-2.69)	-0.008	(-2.53)	-0.001	(-0.34)	
Return 23	1.592	(1.32)	2.190	(1.65)	2.200	(1.49)	1.496	(1.24)	2.130	(1.59)	2.231	(1.52)	1.611	(1.33)	2.139	(1.60)	2.377	(1.62)	
Return 46	-0.414	(-0.39)	-0.792	(-0.66)	-0.363	(-0.30)	-0.489	(-0.46)	-0.809	(-0.67)	-0.352	(-0.29)	-0.391	(-0.36)	-0.697	(-0.57)	-0.277	(-0.22)	
Return 712	0.859	(1.72)	0.454	(0.82)	0.155	(0.25)	0.777	(1.60)	0.371	(0.67)	0.176	(0.29)	0.876	(1.71)	0.519	(0.90)	0.378	(0.61)	
High-Tech Dummy	-2.094	(-3.14)	-1.892	(-3.56)	-0.960	(-1.37)	-1.985	(-2.94)	-1.814	(-3.40)	-0.898	(-1.28)	-2.050	(-3.04)	-1.863	(-3.46)	-0.959	(-1.38)	
A-list Dummy	-0.199	(-0.53)	-0.275	(-0.77)	0.249	(0.63)	-0.219	(-0.58)	-0.289	(-0.80)	0.265	(0.67)	-0.173	(-0.46)	-0.243	(-0.67)	0.354	(0.88)	
Turnover	-0.996	(-3.76)	-0.914	(-3.58)	-0.945	(-3.43)	-0.963	(-3.60)	-0.881	(-3.43)	-0.922	(-3.29)	-0.971	(-3.54)	-0.904	(-3.48)	-0.972	(-3.43)	
Dividend Yield	-2.454	(-2.01)	-1.768	(-1.38)	-2.641	(-1.99)	-2.275	(-1.85)	-1.677	(-1.31)	-2.820	(-2.10)	-2.646	(-2.18)	-2.058	(-1.63)	-3.205	(-2.48)	
Corporate Governance Index	0.041	(0.12)	-0.056	(-0.15)	-0.307	(-0.82)	-0.029	(-0.09)	-0.110	(-0.30)	-0.336	(-0.89)	-0.005	(-0.01)	-0.090	(-0.23)	-0.294	(-0.74)	
Share of Free Float	0.257	(0.36)	0.648	(0.93)	0.397	(0.62)	0.389	(0.54)	0.748	(1.07)	0.371	(0.57)	0.232	(0.32)	0.698	(0.96)	0.276	(0.42)	
Share of Individuals	-0.219	(-0.26)	1.075	(1.06)	1.285	(1.27)	-0.143	(-0.17)	1.135	(1.13)	1.299	(1.27)	-0.020	(-0.02)	1.047	(1.02)	1.087	(1.05)	
Intercept	-22.285	(-6.19)	-29.425	(-7.37)	-29.127	(-7.92)	-22.307	(-6.25)	-29.260	(-7.37)	-28.719	(-7.85)	-22.413	(-6.25)	-29.280	(-7.33)	-28.740	(-7.93)	

**Table 3: Shareholder Homogeneity and Stock Volatilities**

This table reports the estimates of the regressions of stock volatilities on shareholder homogeneity, board homogeneity and a set of stock characteristics. We use heteroscedastic- and time-series consistent panel estimation (Panel A) and Fama MacBeth estimation (Panel B) for the period January 1996–December 2000. The observations are monthly. The dependent variable is the standard deviation of daily stock returns for month  $t$ . We

define  $ShareholderHomogeneity_j = \sum_{c=1}^C \left( \frac{\sum_{i=1}^I N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$ , where  $N_{ijc}$  is the number of shares that individual  $i$  who is member of group  $c$  holds in company  $j$ .

We define the groups on the basis of age cohort, college attendance and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment) for each year. We use raw returns, market-adjusted returns (residuals of the CAPM market model) and industry-adjusted returns (residuals of the regression of excess returns on industry excess returns). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the share of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We use two alternative measures of board homogeneity: the first (*Board Homogeneity1*) is defined as the Herfindahl index based on the share of board members belonging to the same age cohort. We define age cohorts between 0 and 30 years of age, between 31 and 40, 41–50, 51–60, and 61 and over. The second measure (*Board Homogeneity2*) is defined on the basis of gender, i.e., the share of males among board members. *Market-to-Book Ratio* is the ratio of the market value of the company as at the end of the previous calendar year to the book value of common equity (previous fiscal year). *Size* is the logarithm of the market value of the company as at the end of the previous calendar year. *Leverage* is the ratio of debt to sum of equity and debt as at the end of the previous fiscal year. *Employees* is the number of employees (categories 1-8) as provided by MM Partners. *Bid-Ask Spread* is bid-ask spread as at month  $t-2$ . *Price* is the price (in SEK) of a share as at  $t-2$ . *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at  $t$ . *Turnover* is defined as the logarithm of the ratio of shares traded to shares outstanding at month  $t-2$ . *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. *Corporate Governance Index* is defined similarly to Gompers, Ishii & Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. It is measured at the end of the previous fiscal year. *Share of Free Float* and *Share of Individuals* refer to the share of non-strategic investors and individual investors, correspondingly, at the end of the previous calendar year. We also use two lags of dependent variable to control for volatility persistence. We use 10,176 monthly observations (number of firms is between 91 and 271). The estimates are multiplied by 1000. The  $t$ -statistics are reported in parentheses. We report the *Adjusted R-Square* for pooled regression estimations.

**Panel A: Pooled Regression Estimates**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat				
Shr.Homogeneity1	-10.73	(-10.07)					-6.50	(-5.42)					-10.88	(-6.69)				
Shr.Homogeneity2			-22.87	(-11.50)					-8.13	(-5.44)				-15.07	(-6.73)			
Shr.Homogeneity3					-29.14	(-8.44)					-21.22	(-5.37)			-22.25	(-5.71)		
Board Homogeneity1	-7.57	(-4.64)	-7.28	(-4.62)	-7.96	(-5.04)	-8.71	(-5.23)	-8.86	(-5.31)	-8.73	(-5.25)	-7.61	(-4.62)	-7.45	(-4.71)	-7.67	(-4.84)
Board Homogeneity2	-4.27	(-2.85)	-4.41	(-3.35)	-5.03	(-3.80)	-5.17	(-3.39)	-5.17	(-3.39)	-4.82	(-3.17)	-4.44	(-2.94)	-4.51	(-3.40)	-4.78	(-3.61)
<i>Control Variables</i>																		
Market-To-Book	0.16	(2.96)	0.16	(5.73)	0.17	(5.87)	0.18	(3.25)	0.18	(3.24)	0.19	(3.35)	0.18	(3.10)	0.18	(6.32)	0.18	(6.12)
Size	-1.55	(-4.41)	-1.60	(-4.12)	-2.16	(-5.65)	-3.49	(-9.32)	-3.40	(-9.19)	-3.25	(-8.95)	-2.38	(-6.81)	-2.55	(-6.78)	-2.57	(-6.81)
Leverage	-0.94	(-3.38)	-0.94	(-4.31)	-0.81	(-3.70)	-1.01	(-3.53)	-1.00	(-3.49)	-0.99	(-3.50)	-0.97	(-3.46)	-0.97	(-4.42)	-0.87	(-3.97)
Employees	-0.10	(-0.52)	-0.11	(-0.53)	-0.06	(-0.29)	-0.34	(-1.69)	-0.32	(-1.63)	-0.32	(-1.59)	-0.14	(-0.72)	-0.16	(-0.80)	-0.12	(-0.56)
Bid-Ask Spread	0.56	(5.23)	0.56	(11.79)	0.59	(12.41)	0.59	(5.47)	0.58	(5.45)	0.57	(5.35)	0.57	(5.32)	0.57	(12.05)	0.58	(12.32)
Price	0.00	(-0.17)	0.00	(-0.14)	0.00	(-0.73)	0.00	(-0.76)	0.00	(-0.79)	0.00	(-0.58)	0.00	(-0.20)	0.00	(-0.26)	0.00	(-0.68)
High Tech Dummy	7.45	(9.48)	7.49	(11.11)	7.80	(11.51)	8.50	(11.07)	8.58	(11.21)	8.66	(11.35)	7.97	(10.19)	8.13	(12.02)	8.16	(12.02)
A-list Dummy	-6.58	(-12.06)	-6.31	(-10.47)	-6.90	(-11.45)	-7.04	(-12.65)	-7.02	(-12.64)	-6.87	(-12.41)	-6.48	(-11.78)	-6.34	(-10.41)	-6.69	(-11.06)
Dividend Yield	-0.78	(-0.39)	-0.84	(-0.46)	-0.27	(-0.15)	-0.21	(-0.11)	-0.10	(-0.05)	-0.65	(-0.34)	-0.57	(-0.28)	-0.53	(-0.29)	-0.09	(-0.05)
Corp. Governance Index	-0.95	(-3.41)	-0.93	(-3.19)	-0.79	(-2.70)	-0.77	(-2.69)	-0.76	(-2.65)	-0.81	(-2.83)	-0.81	(-2.87)	-0.76	(-2.60)	-0.71	(-2.41)
Share of Free Float	-1.92	(-1.64)	11.28	(7.93)	-1.93	(-1.59)	1.63	(1.55)	3.74	(3.20)	1.94	(1.83)	-0.30	(-0.26)	6.47	(4.74)	-0.69	(-0.57)
Share of Individuals	7.20	(3.95)	6.14	(3.44)	20.22	(6.22)	-3.51	(-2.45)	-3.25	(-2.26)	2.50	(1.33)	3.64	(1.94)	2.14	(1.19)	12.07	(3.79)
Lagged (-1) Dep. Var	10.96	(1.70)	10.90	(5.76)	11.21	(5.90)	11.25	(1.69)	11.22	(1.69)	11.19	(1.68)	11.48	(1.74)	11.48	(6.04)	11.53	(6.06)
Lagged (-2) Dep. Var	8.73	(2.03)	8.69	(4.78)	8.93	(4.90)	8.90	(2.01)	8.87	(2.01)	8.86	(2.00)	9.20	(2.09)	9.19	(5.03)	9.23	(5.05)
Intercept	57.37	(13.07)	49.38	(12.28)	56.40	(14.34)	70.94	(14.55)	68.30	(14.41)	66.42	(14.19)	61.39	(13.59)	58.23	(14.83)	59.48	(15.19)
Adj R2	0.170		0.169		0.163		0.160		0.160		0.159		0.161		0.161		0.159	

**Panel B: Fama – MacBeth Estimates**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat	Estim.	t-stat				
Shr.Homogeneity1	-10.39	(-5.31)					-2.97	(-3.26)					-5.64	(-3.86)				
Shr.Homogeneity2			-15.01	(-5.54)					-4.38	(-4.29)					-6.73	(-3.31)		
Shr.Homogeneity3					-26.12	(-4.87)					-6.58	(-2.62)					-18.48	(-4.33)
Board Homogeneity1	-2.41	(-1.60)	-2.45	(-1.63)	-2.42	(-1.57)	-2.96	(-1.93)	-3.16	(-2.06)	-2.95	(-1.93)	-2.26	(-1.50)	-2.35	(-1.55)	-2.05	(-1.33)
Board Homogeneity2	-4.78	(-1.66)	-4.76	(-1.65)	-4.81	(-1.66)	-4.90	(-1.71)	-4.94	(-1.72)	-4.79	(-1.67)	-4.62	(-1.63)	-4.59	(-1.62)	-4.51	(-1.61)
<i>Control Variables</i>																		
Market-To-Book	0.12	(2.37)	0.13	(2.62)	0.13	(2.60)	0.15	(3.08)	0.15	(3.03)	0.15	(3.13)	0.15	(2.94)	0.15	(3.12)	0.14	(2.92)
Size	-1.51	(-4.14)	-1.61	(-4.36)	-1.62	(-4.43)	-2.34	(-5.76)	-2.34	(-5.72)	-2.20	(-5.49)	-1.91	(-5.00)	-2.01	(-5.18)	-1.86	(-4.94)
Leverage	-0.50	(-2.60)	-0.49	(-2.56)	-0.43	(-2.28)	-0.55	(-2.71)	-0.56	(-2.77)	-0.54	(-2.65)	-0.53	(-2.70)	-0.52	(-2.65)	-0.46	(-2.42)
Employees	0.09	(0.51)	0.05	(0.27)	0.14	(0.80)	-0.02	(-0.14)	-0.02	(-0.14)	-0.03	(-0.16)	0.05	(0.30)	0.01	(0.05)	0.11	(0.62)
Bid-Ask Spread	0.37	(3.70)	0.37	(3.73)	0.39	(3.93)	0.38	(3.79)	0.38	(3.82)	0.37	(3.73)	0.37	(3.69)	0.37	(3.70)	0.39	(3.90)
Price	-0.01	(-1.85)	-0.01	(-1.88)	-0.01	(-2.43)	-0.01	(-2.42)	-0.01	(-2.47)	-0.01	(-2.24)	-0.01	(-1.89)	-0.01	(-2.00)	-0.01	(-2.27)
High Tech Dummy	3.07	(3.94)	3.19	(4.20)	3.00	(3.88)	3.44	(4.57)	3.46	(4.60)	3.55	(4.77)	3.30	(4.30)	3.45	(4.58)	3.13	(4.11)
A-list Dummy	-1.50	(-2.77)	-1.34	(-2.52)	-1.66	(-2.98)	-1.67	(-2.99)	-1.70	(-3.06)	-1.52	(-2.73)	-1.31	(-2.45)	-1.23	(-2.34)	-1.35	(-2.49)
Dividend Yield	-2.23	(-1.10)	-2.26	(-1.12)	-1.63	(-0.84)	-1.76	(-0.90)	-1.68	(-0.85)	-1.81	(-0.92)	-2.01	(-1.00)	-1.96	(-0.98)	-1.59	(-0.82)
Corp. Governance Index	0.06	(0.27)	0.11	(0.45)	0.15	(0.62)	0.19	(0.78)	0.19	(0.77)	0.22	(0.89)	0.13	(0.54)	0.16	(0.68)	0.20	(0.83)
Share of Free Float	-2.42	(-1.88)	3.80	(2.96)	-2.82	(-1.92)	0.13	(0.11)	1.27	(0.99)	0.26	(0.22)	-1.48	(-1.18)	1.79	(1.46)	-2.28	(-1.58)
Share of Individuals	5.58	(3.23)	4.56	(2.85)	15.86	(4.41)	-0.22	(-0.15)	-0.05	(-0.04)	1.67	(1.04)	3.91	(2.27)	2.63	(1.62)	12.94	(3.88)
Lagged (-1) Dep. Var	236.53	(7.52)	236.04	(7.52)	235.86	(7.54)	242.72	(7.58)	241.77	(7.55)	242.83	(7.51)	239.63	(7.56)	240.25	(7.57)	237.00	(7.57)
Lagged (-2) Dep. Var	206.87	(6.96)	207.05	(6.99)	207.74	(6.86)	210.17	(6.96)	209.35	(6.90)	209.55	(6.81)	210.22	(7.03)	210.98	(7.06)	210.64	(7.01)
Intercept	38.16	(6.21)	34.89	(5.93)	35.51	(6.06)	42.49	(6.69)	41.86	(6.55)	40.12	(6.33)	39.51	(6.31)	38.07	(6.24)	36.90	(6.20)

**Table 4: Shareholder Homogeneity and Market-to-book ratio.**

This table reports the result of the regression of market-to-book ratio on shareholder homogeneity, board homogeneity and a set of stock characteristics. The *Market-to-Book Ratio* is the ratio of the market value of the company as at the end of the current calendar year to the book value of common equity (current fiscal

year). We define *ShareholderHomogeneity<sub>j</sub>* =  $\sum_{c=1}^C \left( \frac{\sum_{i=1}^I N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$ , where  $N_{ijc}$  is the number of shares that individual  $i$  who is member of group  $c$  holds in

company  $j$ . We define the groups on the basis of age cohort, college attendance, and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment) for each year. We use raw returns, market-adjusted returns (residuals of the CAPM market model) and industry-adjusted returns (residuals of the regression of excess returns on industry excess returns). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the share of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We use two alternative measures of board homogeneity: the first (*Board Homogeneity1*) is defined as the Herfindahl index based on the share of board members belonging to the same age cohort. We define age cohorts 0 and 30 years of age, between 31 and 40, 41–50, 51–60, and 61 and over. The second measure (*Board Homogeneity2*) is defined on the basis of gender, i.e., the share of males among board members. *Size* is the logarithm of the market value of the company as at the end of the previous calendar year. *Leverage* is the ratio of debt to sum of equity and debt as at the end of the previous fiscal year. *Employees* is the number of employees (categories 1–8) as provided by MM Partners. *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at  $t$ . *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. *Cash* is defined as the logarithm of liquid assets in the company’s balance sheet at the end of the previous fiscal year (measured in thousands of SEK). *Corporate Governance Index* is defined similarly to Gompers, Isii & Metrick and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. It is measured at the end of the previous fiscal year. *Share of Free Float* and *Share of Individuals* refer to the share of non-strategic investors and individual investors, correspondingly, at the end of the previous calendar year. We report the estimates done with year fixed effects. The estimations are done using a heteroscedastic- and time-series consistent panel estimation and instrumental GMM estimation. Instruments are defined in the text, in Section II C. We use yearly and quarterly dummies. We use 848 yearly observations (number of firms is between 91 and 271). The *t-statistics* are reported in parentheses. We also report the *Adjusted R-Square* for the White estimator and p-value of Hansen overidentifying restrictions for the GMM estimator.

	Age-based Homogeneity Measures						College-based Homogeneity Measures						Local Age-based Homogeneity Measures					
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM
Shr.Homogeneity1	-1.111 (-1.55)	9.630 (2.33)					1.171 (2.72)	3.080 (2.25)					-0.544 (-0.97)	12.698 (3.57)				
Shr.Homogeneity2			0.696 (0.65)	23.683 (3.64)					1.349 (2.60)	3.951 (2.25)					-0.141 (-0.17)	20.404 (3.60)		
Shr.Homogeneity3					4.079 (1.77)	33.447 (3.26)						3.325 (2.85)	10.344 (2.35)				5.215 (2.26)	28.737 (2.93)
Board Homogeneity1	-1.040 (-1.78)	-1.559 (-2.20)	-1.061 (-1.82)	-1.983 (-2.15)	-1.065 (-1.83)	-1.551 (-1.39)	-0.909 (-1.56)	-0.872 (-1.47)	-0.901 (-1.54)	-0.808 (-1.35)	-0.934 (-1.60)	-0.909 (-1.47)	-1.116 (-1.87)	-2.308 (-2.44)	-1.143 (-1.92)	-2.640 (-2.50)	-1.062 (-1.79)	-2.531 (-2.27)
Board Homogeneity2	-0.424 (-0.82)	-1.320 (-1.82)	-0.483 (-0.94)	-1.413 (-1.70)	-0.466 (-0.91)	-1.118 (-1.32)	-0.382 (-0.75)	-0.569 (-0.84)	-0.397 (-0.78)	-0.574 (-0.85)	-0.443 (-0.87)	-0.626 (-0.93)	-0.799 (-1.57)	-1.542 (-2.10)	-0.819 (-1.61)	-1.532 (-2.02)	-0.806 (-1.59)	-1.136 (-1.45)
<i>Control Variables</i>																		
Size	1.444 (9.13)	0.833 (2.46)	1.412 (8.95)	0.576 (1.57)	1.426 (9.16)	0.788 (2.29)	1.440 (9.29)	1.422 (5.81)	1.421 (9.20)	1.373 (5.80)	1.392 (9.04)	1.266 (5.36)	1.342 (8.85)	0.647 (1.74)	1.319 (8.75)	0.740 (2.02)	1.363 (9.08)	0.734 (1.90)
Leverage	-0.345 (-4.02)	-0.268 (-2.69)	-0.338 (-3.94)	-0.223 (-1.69)	-0.333 (-3.90)	-0.385 (-2.96)	-0.308 (-3.60)	-0.237 (-2.88)	-0.310 (-3.62)	-0.235 (-2.85)	-0.310 (-3.62)	-0.227 (-2.83)	-0.352 (-4.30)	-0.258 (-2.24)	-0.348 (-4.24)	-0.226 (-1.78)	-0.343 (-4.21)	-0.416 (-3.20)
Employees	0.034 (0.33)	-0.154 (-1.00)	0.023 (0.22)	-0.239 (-1.30)	0.047 (0.44)	-0.371 (-1.93)	0.052 (0.50)	0.078 (0.58)	0.047 (0.45)	0.077 (0.57)	0.034 (0.33)	0.060 (0.46)	0.052 (0.51)	0.045 (0.28)	0.050 (0.50)	0.060 (0.34)	0.061 (0.61)	-0.039 (-0.27)
Dividend Yield	-1.141 (-1.63)	-0.961 (-1.78)	-1.131 (-1.62)	-0.700 (-1.22)	-1.123 (-1.61)	-1.078 (-1.55)	-1.129 (-1.62)	-1.255 (-2.01)	-1.143 (-1.64)	-1.309 (-2.10)	-1.070 (-1.54)	-1.059 (-2.01)	-1.206 (-1.69)	-0.112 (-0.17)	-1.171 (-1.64)	0.002 (0.00)	-1.199 (-1.69)	-0.692 (-0.92)
Cash	-0.134 (-1.56)	-0.303 (-1.83)	-0.147 (-1.71)	-0.366 (-2.10)	-0.135 (-1.58)	-0.389 (-2.26)	-0.167 (-1.96)	-0.191 (-1.69)	-0.163 (-1.92)	-0.185 (-1.63)	-0.149 (-1.75)	-0.145 (-1.34)	-0.169 (-1.94)	-0.483 (-2.58)	-0.179 (-2.07)	-0.487 (-2.64)	-0.155 (-1.79)	-0.496 (-2.71)
High-Tech Dummy	1.195 (4.13)	2.414 (4.56)	1.251 (4.33)	2.828 (4.96)	1.199 (4.18)	2.773 (4.33)	1.351 (4.79)	1.792 (4.20)	1.323 (4.70)	1.721 (4.08)	1.341 (4.77)	1.798 (4.21)	1.525 (5.97)	2.774 (4.73)	1.573 (6.19)	2.745 (4.66)	1.449 (5.69)	2.938 (3.87)
A-list Dummy	-1.152 (-5.02)	-1.054 (-3.23)	-1.147 (-4.99)	-1.154 (-2.88)	-1.176 (-5.11)	-0.837 (-1.91)	-1.126 (-4.92)	-1.021 (-3.61)	-1.129 (-4.94)	-1.032 (-3.61)	-1.141 (-4.99)	-1.092 (-3.71)	-1.265 (-5.43)	-1.660 (-3.91)	-1.271 (-5.44)	-1.864 (-4.03)	-1.251 (-5.38)	-1.695 (-3.72)
Corp. Governance Index	-0.832 (-4.69)	-0.883 (-3.52)	-0.833 (-4.69)	-0.923 (-2.96)	-0.829 (-4.68)	-0.942 (-3.08)	-0.745 (-4.15)	-0.591 (-2.35)	-0.753 (-4.20)	-0.590 (-2.30)	-0.769 (-4.32)	-0.606 (-2.47)	-1.026 (-5.74)	-1.009 (-3.26)	-1.022 (-5.72)	-1.036 (-3.08)	-1.014 (-5.69)	-1.158 (-3.65)
Share of Free Float	-1.572 (-3.50)	0.421 (0.42)	-1.191 (-2.25)	-8.184 (-3.80)	-1.727 (-3.65)	3.116 (1.96)	-1.417 (-3.28)	-1.295 (-2.18)	-1.756 (-3.87)	-2.318 (-3.11)	-1.497 (-3.46)	-1.535 (-2.54)	-1.535 (-3.45)	0.965 (1.02)	-1.381 (-2.76)	-8.000 (-3.79)	-1.802 (-3.92)	2.591 (1.66)
Share of Individuals	2.944 (4.33)	-2.146 (-1.08)	2.661 (3.98)	-3.636 (-2.05)	4.338 (3.58)	-23.611 (-2.95)	2.347 (3.83)	2.188 (3.05)	2.319 (3.77)	2.056 (2.83)	1.450 (2.04)	-0.903 (-0.59)	3.006 (4.33)	-6.184 (-2.31)	2.693 (4.07)	-5.503 (-2.29)	4.975 (4.19)	-24.041 (-2.59)
Intercept	-7.873 (-4.79)	-3.886 (-1.42)	-6.986 (-4.59)	3.099 (0.83)	-7.134 (-4.79)	0.308 (0.09)	-7.753 (-5.12)	-8.532 (-3.33)	-7.258 (-4.89)	-7.298 (-2.38)	-6.922 (-4.71)	-6.161 (-2.77)	-6.273 (-4.33)	-2.644 (-0.80)	-6.216 (-4.21)	2.214 (0.57)	-6.746 (-4.61)	1.418 (0.35)
Adj R2	0.323		0.321		0.323		0.328		0.327		0.329		0.323		0.322		0.327	
Hansen' p-value	0.760		0.195		0.292		0.167		0.158		0.219		0.224		0.235		0.254	

**Table 5: Shareholder Homogeneity and Operating Performance**

This table reports the results of the regression of Firm Profitability (Panel A), Return on Assets (Panel B), Return on Equity (Panel C) and Return on Sales (Panel D) on shareholder homogeneity, board homogeneity and a set of stock characteristics. Following Gompers, Ishii and Metrick (2003), we adjust dependent variable using industry

mean. We define  $ShareholderHomogeneity_j = \sum_{c=1}^C \left( \frac{\sum_{i=1}^I \frac{N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$ , where  $N_{ijc}$  is the number of shares that individual  $i$  who is member of group  $c$  holds in company

$j$ . We define the groups based on age cohort, college attendance, and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment) for each year. We use raw returns, market-adjusted returns (residuals of the CAPM market model) and industry-adjusted returns (residuals of the regression of excess returns on industry excess returns). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the share of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We use two alternative measures of board homogeneity: the first (*Board Homogeneity1*) is defined as the Herfindahl index based on the share of board members belonging to the same age cohort. We define age cohorts between 0 and 30 years of age, between 31 and 40, 41–50, 51–60, and 61 and over. The second measure (*Board Homogeneity2*) is defined on the basis of gender, i.e., the share of males among board members. *Size* is the logarithm of the market value of the company as at the end of the previous calendar year. *Leverage* is the ratio of debt to sum of equity and debt as at the end of the previous fiscal year. *Employees* is the number of employees (categories 1–8) as provided by MM Partners. *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at  $t$ . *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. *Cash* is defined as log10 of liquid assets in the company’s balance sheet at the end of the previous fiscal year (measured in thousands of SEK). *Corporate Governance Index* is defined similarly to Gompers, Ishii & Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. It is measured at the end of the previous fiscal year. *Share of Free Float* and *Share of Individuals* refer to share of non-strategic investors and individual investors, correspondingly, at the end of the previous calendar year. All the reported estimates are done with yearly dummies using a time-series and heteroskedastic-consistent panel estimator and instrumental GMM estimates. Instruments are defined in the text, in Section II C. We use 848 yearly observations (number of firms is between 91 and 271). The *t-statistics* are reported in parentheses. We also report the *Adjusted R-Square* for the White estimator and p-value of Hansen overidentifying restrictions for the GMM estimator.

**Panel A: Profit Margin**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM				
Shr.Homogeneity1	0.359 (2.47)	1.564 (2.15)					0.359 (2.47)	1.564 (2.15)					0.479 (2.63)	1.609 (2.62)				
Shr.Homogeneity2			0.452 (2.59)	2.389 (2.04)					0.452 (2.59)	2.389 (2.04)					0.705 (2.65)	2.456 (2.59)		
Shr.Homogeneity3					0.679 (1.72)	5.491 (3.04)					0.679 (1.72)	5.491 (3.04)					1.227 (2.64)	4.954 (2.41)
Board Homogeneity1	0.719 (3.59)	1.007 (2.90)	0.727 (3.62)	1.096 (2.91)	0.695 (3.47)	1.019 (2.87)	0.719 (3.59)	1.007 (2.90)	0.727 (3.62)	1.096 (2.91)	0.695 (3.47)	1.019 (2.87)	0.629 (3.16)	0.556 (2.25)	0.618 (3.09)	0.510 (2.07)	0.629 (3.15)	0.536 (2.13)
Board Homogeneity2	0.776 (4.53)	0.982 (1.98)	0.772 (4.51)	0.975 (2.00)	0.746 (4.36)	0.800 (1.72)	0.776 (4.53)	0.982 (1.98)	0.772 (4.51)	0.975 (2.00)	0.746 (4.36)	0.800 (1.72)	0.726 (4.25)	0.634 (1.54)	0.726 (4.25)	0.616 (1.48)	0.744 (4.36)	0.708 (1.70)
<i>Control Variables</i>																		
Size	0.304 (6.14)	0.405 (3.82)	0.298 (6.08)	0.374 (3.80)	0.289 (5.89)	0.314 (3.33)	0.304 (6.14)	0.405 (3.82)	0.298 (6.08)	0.374 (3.80)	0.289 (5.89)	0.314 (3.33)	0.261 (5.25)	0.195 (3.59)	0.266 (5.39)	0.208 (3.82)	0.266 (5.37)	0.196 (3.44)
Leverage	-0.002 (-0.66)	-0.001 (-0.20)	-0.002 (-0.65)	0.000 (-0.09)	-0.003 (-0.76)	-0.004 (-0.88)	-0.002 (-0.66)	-0.001 (-0.20)	-0.002 (-0.65)	0.000 (-0.09)	-0.003 (-0.76)	-0.004 (-0.88)	-0.002 (-0.68)	-0.001 (-0.21)	-0.003 (-0.75)	-0.002 (-0.33)	-0.002 (-0.64)	-0.001 (-0.09)
Employees	0.136 (4.98)	0.174 (3.41)	0.136 (4.97)	0.172 (3.41)	0.133 (4.87)	0.168 (3.33)	0.136 (4.98)	0.174 (3.41)	0.136 (4.97)	0.172 (3.41)	0.133 (4.87)	0.168 (3.33)	0.134 (4.92)	0.140 (3.77)	0.135 (4.95)	0.141 (3.71)	0.128 (4.71)	0.121 (3.40)
Dividend Yield	0.007 (0.22)	0.086 (1.05)	0.007 (0.19)	0.087 (1.01)	-0.001 (-0.02)	0.058 (0.88)	0.007 (0.22)	0.086 (1.05)	0.007 (0.19)	0.087 (1.01)	-0.001 (-0.02)	0.058 (0.88)	-0.005 (-0.15)	-0.005 (-0.12)	-0.004 (-0.12)	-0.001 (-0.02)	-0.009 (-0.26)	-0.020 (-0.48)
Cash	0.260 (1.18)	0.324 (1.37)	0.254 (1.15)	0.286 (1.27)	0.271 (1.22)	0.527 (2.02)	0.260 (1.18)	0.324 (1.37)	0.254 (1.15)	0.286 (1.27)	0.271 (1.22)	0.527 (2.02)	0.282 (1.28)	0.364 (2.12)	0.281 (1.28)	0.369 (2.09)	0.267 (1.21)	0.321 (1.94)
High-Tech Dummy	-0.038 (-1.30)	-0.055 (-1.83)	-0.037 (-1.26)	-0.048 (-1.51)	-0.034 (-1.16)	-0.018 (-0.56)	-0.038 (-1.30)	-0.055 (-1.83)	-0.037 (-1.26)	-0.048 (-1.51)	-0.034 (-1.16)	-0.018 (-0.56)	-0.048 (-1.62)	-0.077 (-2.31)	-0.047 (-1.58)	-0.073 (-2.28)	-0.048 (-1.61)	-0.084 (-2.41)
A-list Dummy	-0.042 (-0.50)	0.047 (0.40)	-0.047 (-0.57)	0.014 (0.12)	-0.053 (-0.64)	-0.020 (-0.16)	-0.042 (-0.50)	0.047 (0.40)	-0.047 (-0.57)	0.014 (0.12)	-0.053 (-0.64)	-0.020 (-0.16)	-0.007 (-0.09)	0.106 (0.85)	-0.013 (-0.16)	0.092 (0.76)	-0.006 (-0.08)	0.148 (1.04)
Corp. Governance Index	0.092 (1.19)	0.109 (1.10)	0.091 (1.18)	0.106 (1.00)	0.086 (1.12)	0.072 (0.61)	0.092 (1.19)	0.109 (1.10)	0.091 (1.18)	0.106 (1.00)	0.086 (1.12)	0.072 (0.61)	0.078 (1.01)	0.058 (0.80)	0.071 (0.92)	0.031 (0.43)	0.077 (1.01)	0.053 (0.74)
Share of Free Float	-0.090 (-1.48)	0.071 (0.62)	-0.091 (-1.51)	0.064 (0.52)	-0.103 (-1.70)	0.026 (0.22)	-0.090 (-1.48)	0.071 (0.62)	-0.091 (-1.51)	0.064 (0.52)	-0.103 (-1.70)	0.026 (0.22)	-0.108 (-1.81)	-0.087 (-0.95)	-0.110 (-1.84)	-0.092 (-0.98)	-0.113 (-1.89)	-0.105 (-1.12)
Share of Individuals	0.020 (0.14)	-0.117 (-0.63)	-0.099 (-0.66)	-1.001 (-2.13)	0.017 (0.12)	-0.217 (-1.12)	0.020 (0.14)	-0.117 (-0.63)	-0.099 (-0.66)	-1.001 (-2.13)	0.017 (0.12)	-0.217 (-1.12)	0.130 (0.90)	0.356 (1.49)	-0.188 (-1.14)	-0.736 (-2.51)	0.173 (1.16)	0.586 (1.85)
Intercept	0.326 (1.68)	0.121 (0.49)	0.314 (1.62)	0.024 (0.09)	0.156 (0.69)	-2.185 (-2.64)	0.326 (1.68)	0.121 (0.49)	0.314 (1.62)	0.024 (0.09)	0.156 (0.69)	-2.185 (-2.64)	0.038 (0.17)	-0.744 (-1.88)	0.091 (0.42)	-0.597 (-1.72)	-0.533 (-1.37)	-3.274 (-2.26)
Adj R2	0.144		0.144		0.140		0.144		0.144		0.140		0.145		0.146		0.145	
Hansen p-value		0.887		0.929		0.760		0.887		0.929		0.760		0.545		0.484		0.642

**Panel B: Return on Assets (ROA)**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM		
Shr.Homogeneity1	0.181 (2.82)	0.550 (2.61)					0.170 (4.15)	0.733 (2.33)					0.183 (1.75)	0.552 (2.47)				
Shr.Homogeneity2			0.326 (3.68)	0.811 (2.62)					0.188 (3.82)	0.991 (2.17)					0.374 (2.52)	0.839 (2.46)		
Shr.Homogeneity3					0.260 (1.82)	1.293 (2.28)					0.343 (3.08)	1.432 (3.57)					0.282 (1.65)	1.352 (2.10)
Board Homogeneity1	0.144 (2.57)	0.123 (2.46)	0.133 (2.60)	0.117 (2.35)	0.140 (2.73)	0.126 (2.43)	0.175 (3.13)	0.243 (3.39)	0.175 (3.12)	0.268 (3.28)	0.165 (2.94)	0.196 (3.38)	0.137 (2.65)	0.106 (2.00)	0.131 (2.55)	0.091 (1.65)	0.138 (2.68)	0.100 (1.83)
Board Homogeneity2	0.127 (2.70)	0.128 (2.08)	0.138 (3.22)	0.128 (2.11)	0.147 (3.41)	0.152 (2.49)	0.148 (3.17)	0.198 (2.82)	0.145 (3.10)	0.197 (2.74)	0.136 (2.90)	0.136 (2.19)	0.143 (3.30)	0.124 (1.96)	0.141 (3.27)	0.118 (1.89)	0.146 (3.38)	0.145 (2.37)
<i>Control Variables</i>																		
Size	0.078 (5.38)	0.045 (2.18)	0.070 (5.35)	0.048 (2.41)	0.078 (5.98)	0.055 (2.87)	0.097 (7.00)	0.116 (4.52)	0.094 (6.80)	0.107 (4.35)	0.090 (6.54)	0.086 (4.30)	0.079 (6.07)	0.050 (2.46)	0.078 (6.08)	0.055 (2.81)	0.081 (6.26)	0.056 (2.83)
Leverage	0.001 (0.82)	0.001 (0.92)	0.001 (0.82)	0.001 (0.84)	0.001 (0.76)	0.001 (0.96)	0.001 (0.81)	0.001 (0.81)	0.001 (0.82)	0.001 (0.89)	0.001 (0.64)	0.000 (0.28)	0.001 (0.72)	0.001 (0.83)	0.001 (0.68)	0.001 (0.69)	0.001 (0.71)	0.002 (1.00)
Employees	0.015 (1.97)	0.012 (1.92)	0.013 (1.78)	0.011 (1.86)	0.011 (1.56)	0.007 (1.09)	0.017 (2.26)	0.024 (2.77)	0.017 (2.19)	0.024 (2.64)	0.016 (2.09)	0.018 (2.63)	0.012 (1.75)	0.015 (2.22)	0.013 (1.82)	0.015 (2.19)	0.012 (1.62)	0.008 (1.22)
Dividend Yield	0.012 (1.25)	0.007 (0.80)	0.008 (0.97)	0.007 (0.76)	0.009 (0.99)	0.005 (0.63)	0.018 (1.93)	0.034 (1.98)	0.018 (1.83)	0.035 (1.81)	0.015 (1.57)	0.016 (1.66)	0.010 (1.10)	0.008 (0.89)	0.010 (1.12)	0.009 (0.98)	0.009 (1.06)	0.005 (0.62)
Cash	0.059 (0.94)	0.073 (1.79)	0.053 (0.93)	0.072 (1.77)	0.046 (0.80)	0.063 (1.60)	0.055 (0.88)	0.057 (0.92)	0.052 (0.83)	0.047 (0.76)	0.061 (0.97)	0.089 (1.77)	0.048 (0.83)	0.081 (1.78)	0.051 (0.87)	0.081 (1.74)	0.044 (0.76)	0.061 (1.51)
High-Tech Dummy	-0.016 (-1.89)	-0.020 (-2.01)	-0.014 (-1.88)	-0.018 (-1.92)	-0.013 (-1.73)	-0.019 (-2.03)	-0.014 (-1.71)	-0.015 (-1.63)	-0.014 (-1.64)	-0.013 (-1.33)	-0.012 (-1.47)	-0.005 (-0.64)	-0.014 (-1.79)	-0.025 (-2.07)	-0.015 (-1.87)	-0.024 (-2.02)	-0.013 (-1.68)	-0.024 (-2.03)
A-list Dummy	-0.012 (-0.50)	0.006 (0.15)	-0.015 (-0.69)	0.001 (0.04)	-0.023 (-1.03)	0.001 (0.03)	-0.020 (-0.86)	0.005 (0.12)	-0.023 (-0.98)	-0.005 (-0.12)	-0.025 (-1.07)	-0.016 (-0.45)	-0.023 (-1.04)	0.020 (0.46)	-0.021 (-0.95)	0.017 (0.39)	-0.026 (-1.18)	0.017 (0.37)
Corp. Governance Index	0.023 (1.06)	0.019 (0.86)	0.019 (0.93)	0.013 (0.63)	0.020 (1.00)	0.019 (0.88)	0.025 (1.14)	0.024 (0.92)	0.024 (1.11)	0.021 (0.77)	0.022 (1.02)	0.013 (0.55)	0.018 (0.88)	0.005 (0.22)	0.015 (0.77)	-0.003 (-0.12)	0.018 (0.90)	0.004 (0.19)
Share of Free Float	-0.031 (-1.86)	-0.026 (-1.42)	-0.033 (-2.12)	-0.027 (-1.50)	-0.033 (-2.13)	-0.029 (-1.57)	-0.021 (-1.23)	0.017 (0.56)	-0.023 (-1.34)	0.019 (0.54)	-0.026 (-1.55)	-0.007 (-0.32)	-0.032 (-2.06)	-0.020 (-1.01)	-0.032 (-2.07)	-0.022 (-1.13)	-0.033 (-2.11)	-0.025 (-1.31)
Share of Individuals	-0.026 (-0.63)	0.010 (0.22)	-0.174 (-3.92)	-0.325 (-3.09)	-0.055 (-1.40)	0.032 (0.57)	-0.070 (-1.76)	-0.117 (-2.34)	-0.117 (-2.78)	-0.376 (-2.65)	-0.071 (-1.79)	-0.110 (-2.62)	-0.065 (-1.72)	0.009 (0.19)	-0.137 (-3.19)	-0.363 (-2.86)	-0.066 (-1.70)	0.052 (0.76)
Intercept	0.094 (1.46)	-0.147 (-1.25)	0.064 (1.15)	-0.100 (-1.01)	-0.004 (-0.04)	-0.669 (-1.93)	0.171 (3.12)	0.077 (1.05)	0.168 (3.06)	0.045 (0.53)	0.085 (1.32)	-0.297 (-2.30)	0.102 (1.71)	-0.240 (-1.51)	0.092 (1.62)	-0.190 (-1.37)	0.065 (0.64)	-0.857 (-1.84)
Adj R2	0.142		0.160		0.147		0.154		0.150		0.144		0.140		0.156		0.144	
Hansen p-value		0.264		0.222		0.185		0.467		0.511		0.110		0.195		0.169		0.118

**Panel C: Return on Equity (ROE)**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM		
Shr.Homogeneity1	0.250 (1.99)	1.687 (2.92)					0.388 (4.25)	1.677 (2.15)					0.045 (0.38)	1.818 (2.88)				
Shr.Homogeneity2			0.554 (2.54)	2.533 (2.91)					0.433 (3.93)	1.165 (3.72)					0.441 (1.85)	2.747 (2.81)		
Shr.Homogeneity3					0.752 (2.16)	4.213 (2.69)					0.756 (3.03)	2.787 (3.39)					1.284 (2.28)	4.846 (2.63)
Board Homogeneity1	0.300 (2.38)	0.236 (1.69)	0.292 (2.32)	0.215 (1.56)	0.304 (2.41)	0.259 (1.77)	0.366 (2.92)	0.453 (2.45)	0.367 (2.92)	0.346 (2.46)	0.342 (2.72)	0.428 (2.95)	0.309 (2.44)	0.198 (1.29)	0.303 (2.39)	0.150 (0.94)	0.309 (2.44)	0.179 (1.13)
Board Homogeneity2	0.158 (1.49)	0.146 (1.05)	0.154 (1.46)	0.152 (1.12)	0.170 (1.61)	0.230 (1.75)	0.199 (1.90)	0.399 (2.51)	0.193 (1.84)	0.343 (2.38)	0.171 (1.63)	0.164 (1.23)	0.165 (1.56)	0.124 (0.83)	0.163 (1.54)	0.120 (0.80)	0.167 (1.58)	0.203 (1.46)
<i>Control Variables</i>																		
Size	0.181 (5.58)	0.083 (1.63)	0.175 (5.45)	0.091 (1.88)	0.187 (5.88)	0.110 (2.40)	0.215 (6.92)	0.261 (4.72)	0.208 (6.72)	0.217 (5.49)	0.199 (6.44)	0.202 (5.26)	0.195 (6.13)	0.102 (1.97)	0.193 (6.13)	0.118 (2.43)	0.195 (6.20)	0.115 (2.29)
Leverage	0.003 (1.47)	0.005 (1.87)	0.003 (1.48)	0.004 (1.80)	0.003 (1.45)	0.005 (1.98)	0.003 (1.55)	0.005 (1.82)	0.003 (1.55)	0.004 (1.71)	0.003 (1.36)	0.002 (1.28)	0.003 (1.39)	0.005 (1.62)	0.003 (1.39)	0.004 (1.35)	0.003 (1.40)	0.005 (1.91)
Employees	0.019 (1.10)	0.019 (1.17)	0.020 (1.13)	0.018 (1.12)	0.017 (0.98)	0.001 (0.06)	0.025 (1.44)	0.049 (2.23)	0.024 (1.37)	0.033 (2.18)	0.022 (1.26)	0.028 (1.78)	0.019 (1.08)	0.031 (1.72)	0.019 (1.11)	0.033 (1.74)	0.018 (1.05)	0.007 (0.34)
Dividend Yield	0.016 (0.75)	0.003 (0.11)	0.015 (0.71)	0.001 (0.05)	0.015 (0.72)	-0.006 (-0.26)	0.030 (1.41)	0.078 (1.84)	0.028 (1.31)	0.044 (1.83)	0.022 (1.03)	0.029 (1.24)	0.017 (0.78)	0.007 (0.25)	0.017 (0.78)	0.011 (0.37)	0.017 (0.77)	-0.006 (-0.21)
Cash	0.082 (0.58)	0.162 (1.53)	0.088 (0.62)	0.162 (1.56)	0.077 (0.54)	0.146 (1.33)	0.081 (0.58)	0.072 (0.45)	0.074 (0.53)	0.062 (0.48)	0.094 (0.66)	0.152 (1.29)	0.073 (0.51)	0.214 (1.71)	0.077 (0.54)	0.214 (1.67)	0.071 (0.50)	0.164 (1.40)
High-Tech Dummy	-0.037 (-1.97)	-0.058 (-2.42)	-0.038 (-2.00)	-0.051 (-2.36)	-0.036 (-1.92)	-0.056 (-2.60)	-0.036 (-1.93)	-0.045 (-2.10)	-0.035 (-1.86)	-0.036 (-1.92)	-0.032 (-1.69)	-0.023 (-1.38)	-0.035 (-1.81)	-0.077 (-2.48)	-0.036 (-1.87)	-0.073 (-2.44)	-0.034 (-1.79)	-0.078 (-2.57)
A-list Dummy	-0.123 (-2.29)	-0.006 (-0.06)	-0.116 (-2.17)	-0.017 (-0.17)	-0.127 (-2.36)	-0.005 (-0.05)	-0.128 (-2.45)	-0.061 (-0.63)	-0.135 (-2.58)	-0.086 (-0.96)	-0.140 (-2.67)	-0.123 (-1.33)	-0.138 (-2.55)	0.070 (0.57)	-0.134 (-2.49)	0.057 (0.47)	-0.139 (-2.57)	0.089 (0.67)
Corp. Governance Index	0.028 (0.57)	0.035 (0.69)	0.026 (0.52)	0.019 (0.38)	0.028 (0.58)	0.038 (0.77)	0.033 (0.68)	0.047 (0.86)	0.032 (0.65)	0.047 (1.06)	0.027 (0.56)	0.027 (0.56)	0.027 (0.55)	-0.001 (-0.01)	0.025 (0.50)	-0.026 (-0.41)	0.027 (0.55)	-0.004 (-0.07)
Share of Free Float	-0.036 (-0.94)	-0.032 (-0.76)	-0.036 (-0.96)	-0.038 (-0.88)	-0.037 (-0.98)	-0.043 (-1.03)	-0.011 (-0.29)	0.083 (1.10)	-0.015 (-0.40)	0.015 (0.32)	-0.024 (-0.64)	-0.009 (-0.18)	-0.035 (-0.92)	-0.015 (-0.31)	-0.035 (-0.92)	-0.022 (-0.45)	-0.035 (-0.93)	-0.035 (-0.74)
Share of Individuals	-0.166 (-1.78)	0.065 (0.52)	-0.372 (-3.42)	-0.979 (-3.38)	-0.164 (-1.72)	0.152 (0.97)	-0.235 (-2.65)	-0.338 (-2.79)	-0.345 (-3.64)	-0.537 (-3.61)	-0.238 (-2.66)	-0.291 (-2.86)	-0.206 (-2.23)	0.100 (0.70)	-0.261 (-2.48)	-1.125 (-3.16)	-0.205 (-2.15)	0.284 (1.38)
Intercept	0.179 (1.24)	-0.605 (-1.84)	0.149 (1.08)	-0.467 (-1.68)	-0.005 (-0.02)	-2.353 (-2.42)	0.270 (2.21)	0.114 (0.72)	0.263 (2.15)	0.166 (1.44)	0.082 (0.57)	-0.534 (-1.99)	0.276 (1.88)	-0.934 (-2.05)	0.251 (1.79)	-0.757 (-1.89)	0.244 (0.98)	-3.253 (-2.41)
Adj R2	0.136		0.141		0.136		0.155		0.152		0.144		0.132		0.138		0.139	
Hansen p-value		0.733		0.700		0.654		0.268		0.240		0.191		0.590		0.532		0.452

**Panel D: Return on Sales (ROS)**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures									
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM		
Shr.Homogeneity1	0.142 (2.58)	0.671 (2.30)					0.140 (4.04)	0.682 (2.49)					0.291 (1.66)	0.674 (2.20)				
Shr.Homogeneity2			0.190 (2.30)	0.983 (2.23)					0.162 (3.89)	0.842 (2.47)					0.238 (1.83)	0.974 (2.11)		
Shr.Homogeneity3					0.316 (2.38)	1.743 (2.15)					0.276 (2.92)	1.785 (2.27)					0.280 (1.71)	1.935 (2.01)
Board Homogeneity1	0.052 (1.08)	0.033 (0.57)	0.048 (1.02)	0.025 (0.42)	0.053 (1.10)	0.045 (0.74)	0.075 (1.58)	0.165 (2.38)	0.076 (1.60)	0.180 (2.53)	0.066 (1.39)	0.131 (1.82)	0.057 (1.19)	0.010 (0.16)	0.054 (1.12)	-0.003 (-0.04)	0.056 (1.18)	0.005 (0.08)
Board Homogeneity2	0.074 (1.86)	0.062 (1.18)	0.073 (1.82)	0.066 (1.27)	0.078 (1.95)	0.098 (1.92)	0.089 (2.23)	0.133 (2.32)	0.087 (2.18)	0.127 (2.23)	0.079 (1.97)	0.086 (1.64)	0.075 (1.88)	0.059 (1.06)	0.074 (1.85)	0.058 (1.05)	0.076 (1.91)	0.088 (1.67)
<i>Control Variables</i>																		
Size	0.042 (3.45)	0.007 (0.26)	0.040 (3.24)	0.011 (0.44)	0.044 (3.64)	0.015 (0.65)	0.053 (4.54)	0.080 (3.55)	0.051 (4.36)	0.070 (3.33)	0.048 (4.08)	0.053 (2.71)	0.046 (3.81)	0.014 (0.56)	0.045 (3.77)	0.021 (0.96)	0.046 (3.85)	0.014 (0.57)
Leverage	0.002 (2.03)	0.002 (1.63)	0.002 (2.05)	0.002 (1.58)	0.002 (2.02)	0.002 (1.75)	0.002 (2.12)	0.002 (1.44)	0.002 (2.13)	0.002 (1.47)	0.002 (1.95)	0.002 (1.11)	0.002 (2.00)	0.002 (1.46)	0.002 (1.99)	0.002 (1.29)	0.002 (2.02)	0.002 (1.75)
Employees	-0.005 (-0.75)	-0.004 (-0.54)	-0.005 (-0.72)	-0.004 (-0.59)	-0.006 (-0.85)	-0.011 (-1.41)	-0.003 (-0.43)	0.008 (1.04)	-0.003 (-0.49)	0.007 (0.94)	-0.004 (-0.59)	0.003 (0.47)	-0.005 (-0.71)	-0.001 (-0.11)	-0.004 (-0.66)	-0.005 (-0.05)	-0.005 (-0.76)	-0.010 (-1.18)
Dividend Yield	0.011 (1.40)	0.007 (0.86)	0.011 (1.35)	0.007 (0.78)	0.011 (1.36)	0.004 (0.56)	0.016 (2.03)	0.033 (2.20)	0.016 (1.95)	0.031 (2.10)	0.013 (1.66)	0.023 (1.87)	0.011 (1.38)	0.008 (0.87)	0.011 (1.39)	0.009 (0.92)	0.011 (1.35)	0.004 (0.49)
Cash	-0.044 (-0.82)	-0.004 (-0.04)	-0.041 (-0.77)	-0.003 (-0.03)	-0.045 (-0.84)	-0.014 (-0.18)	-0.043 (-0.82)	-0.029 (-0.31)	-0.046 (-0.86)	-0.040 (-0.42)	-0.039 (-0.72)	0.013 (0.16)	-0.044 (-0.83)	0.010 (0.11)	-0.042 (-0.79)	0.010 (0.11)	-0.045 (-0.84)	-0.012 (-0.15)
High-Tech Dummy	-0.006 (-0.90)	-0.016 (-1.73)	-0.007 (-0.96)	-0.013 (-1.60)	-0.006 (-0.88)	-0.016 (-1.83)	-0.006 (-0.89)	-0.010 (-1.40)	-0.006 (-0.82)	-0.008 (-1.10)	-0.005 (-0.66)	-0.001 (-0.12)	-0.006 (-0.85)	-0.022 (-1.82)	-0.007 (-0.92)	-0.020 (-1.74)	-0.006 (-0.85)	-0.024 (-1.81)
A-list Dummy	-0.040 (-1.95)	0.006 (0.15)	-0.036 (-1.79)	-0.002 (-0.04)	-0.041 (-1.98)	0.008 (0.20)	-0.040 (-2.02)	-0.011 (-0.31)	-0.042 (-2.13)	-0.020 (-0.56)	-0.044 (-2.23)	-0.038 (-1.08)	-0.041 (-2.03)	0.029 (0.63)	-0.039 (-1.94)	0.020 (0.45)	-0.041 (-2.01)	0.040 (0.74)
Corp. Governance Index	0.014 (0.74)	0.012 (0.53)	0.013 (0.70)	0.006 (0.26)	0.014 (0.75)	0.014 (0.64)	0.016 (0.85)	0.031 (1.34)	0.015 (0.83)	0.031 (1.31)	0.014 (0.73)	0.015 (0.61)	0.014 (0.77)	-0.003 (-0.10)	0.013 (0.70)	-0.010 (-0.34)	0.014 (0.77)	-0.005 (-0.19)
Share of Free Float	-0.033 (-2.34)	-0.030 (-1.56)	-0.034 (-2.36)	-0.032 (-1.68)	-0.034 (-2.36)	-0.034 (-1.80)	-0.025 (-1.71)	0.010 (0.33)	-0.026 (-1.80)	0.006 (0.20)	-0.029 (-2.04)	-0.008 (-0.31)	-0.032 (-2.25)	-0.023 (-1.06)	-0.032 (-2.24)	-0.026 (-1.22)	-0.032 (-2.27)	-0.030 (-1.44)
Share of Individuals	-0.091 (-2.57)	0.009 (0.15)	-0.159 (-3.85)	-0.400 (-2.88)	-0.089 (-2.46)	0.054 (0.66)	-0.112 (-3.34)	-0.137 (-2.94)	-0.154 (-4.29)	-0.352 (-3.25)	-0.114 (-3.35)	-0.159 (-3.30)	-0.100 (-2.86)	0.011 (0.17)	-0.132 (-3.33)	-0.429 (-2.64)	-0.096 (-2.68)	0.097 (0.93)
Intercept	0.128 (2.35)	-0.198 (-1.20)	0.110 (2.11)	-0.136 (-0.97)	0.067 (0.70)	-0.942 (-1.86)	0.152 (3.27)	0.100 (1.40)	0.149 (3.19)	0.082 (1.07)	0.082 (1.51)	-0.364 (-1.57)	0.144 (2.59)	-0.309 (-1.41)	0.131 (2.49)	-0.226 (-1.20)	0.105 (1.11)	-1.284 (-1.82)
Adj R2	0.087		0.092		0.086		0.106		0.105		0.096		0.086		0.090		0.086	
Hansen p-value		0.246		0.188		0.280		0.544		0.609		0.901		0.245		0.190		0.285

**Table 6: Shareholder Homogeneity and Informational Asymmetry**

This table reports the results of the regression of measures of market information asymmetry on shareholder homogeneity, board homogeneity and a set of stock characteristics. As measures of information asymmetry we use either the Standard Deviation of Analyst Yearly Forecasts (Panel A) or the Absolute Value of the Error of the Yearly Forecast Panel B). We removed all firm-month observations that have fewer than two analysts covering the company. We

define *ShareholderHomogeneity*<sub>*j*</sub> = 
$$\sum_{c=1}^C \left( \frac{\sum_{i=1}^I \frac{N_{ijc}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}}}{\sum_{c=1}^C \sum_{i=1}^I N_{ijc}} \right)^2$$
, where  $N_{ijc}$  is the number of shares that individual  $i$  who is member of group  $c$  holds in company  $j$ . We

define the groups on the basis of age cohort (Panels A and B), college attendance (Panels C and D), and age cohort for the sample of local investors (within a 100-km radius of the closest firm establishment, Panels E and F) for each year and use changes from year  $t-1$  to year  $t$ . We use raw returns, market-adjusted returns (residuals of the CAPM market model) and industry-adjusted returns (residuals of the regression of excess returns on industry excess returns). We use a raw measure of homogeneity (“*Shr.Homogeneity1*”) and two weighed ones. The latter are constructed by weighing the raw measure by either the share of individual shareholders in the firms (non-controlling shareholders minus institutions) or by the free float variable (i.e., non-controlling shareholders). We call the former “*Shr.Homogeneity2*” and the latter “*Shr.Homogeneity3*”. We use two alternative measures of board homogeneity: the first (*Board Homogeneity1*) is defined as the Herfindahl index based on the share of board members belonging to the same age cohort. We define age cohorts between 0 and 30 years of age, between 31 and 40, 41–50, 51– 60, and 61and over. The second measure (*Board Homogeneity2*) is defined on the basis of gender, i.e., the proportion of males among board members. *Market-to-Book Ratio* is the ratio of the market value of the company as at the end of the previous calendar year to the book value of common equity (previous fiscal year). *Size* is the logarithm of the market value of the company as at the end of the previous calendar year. *Leverage* is the ratio of debt to sum of equity and debt as at the end of the previous fiscal year. *Employees* is the number of employees (categories 1–8) as provided by MM Partners. *Bid-Ask Spread* is bid-ask spread as at month  $t-2$ . *Price* is the price (in SEK) of a share as at  $t-2$ . *Return 23* is the compounded gross return for the period between months  $t-2$  and  $t-3$ . *Return 46* is the compounded gross return for the period between months  $t-4$  and  $t-6$ . *Return 712* is the compounded gross return for the period between months  $t-7$  and  $t-12$ . *High-Tech Dummy* is a dummy equal to 1 if the company belongs to a high-tech industry. *A-list* is a dummy equal to 1 if the company is listed in the A-list at  $t$ . *Turnover* is defined as the logarithm of the ratio of shares traded to shares outstanding at month  $t-2$ . *Dividend Yield* is the dividend yield of stock, defined as the ratio of the dividends paid in the previous fiscal year divided by the share price at year-end. *Cash* is defined as  $\log_{10}$  of liquid assets in the company’s balance sheet at the end of the previous fiscal year (measured in thousands of SEK). *Corporate Governance Index* is defined similarly to Gompers, Ishii & Metrick (2003) and is based on Cronqvist and Nilsson (2003). It is the sum of four dummies that are equal to 1 if there are differential share classes, if there are preemption rights on high-voting shares, if there are voting restrictions in place, if there is a voting pact between large shareholders, and zero otherwise. It is measured at the end of the previous fiscal year. *Share of Free Float* and *Share of Individuals* refer to the share of non-strategic investors and individual investors, correspondingly, at the end of the previous calendar year. We report the estimates run with year fixed effects. The estimations are done using a heteroscedastic- and time-series consistent panel estimation and instrumental GMM estimation. Instruments are defined in the text, in Section II C. We use 5,332 monthly observations. The  $t$ -statistics are reported in parentheses. We also report the *Adjusted R-Square* for the White estimator and  $p$ -value of Hansen overidentifying restrictions for the GMM estimator.

**Panel A: Standard Error of Analyst Estimates**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures										
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	
Shr.Homogeneity1	-0.968 (-1.99)	-2.606 (-3.59)					-1.058 (-3.53)	-1.354 (-1.97)					-0.388 (-1.09)	-3.026 (-3.79)					
Shr.Homogeneity2			-0.897 (-1.48)	-7.709 (-4.34)					-1.451 (-3.95)	-1.922 (-2.18)						-0.241 (-0.48)	-6.699 (-4.53)		
Shr.Homogeneity3					-0.860 (-0.66)	-12.802 (-3.44)					-3.941 (-3.77)	-6.113 (-2.42)						-1.073 (-0.97)	-11.686 (-3.68)
Board Homogeneity1	-0.473 (-1.23)	-0.460 (-2.19)	-0.467 (-1.21)	-0.551 (-2.64)	-0.457 (-1.18)	-0.297 (-1.41)	-0.565 (-1.47)	-0.244 (-0.74)	-0.584 (-1.52)	-0.373 (-1.14)	-0.602 (-1.56)	-0.395 (-1.20)	-1.182 (-3.11)	-0.926 (-3.97)	-0.468 (-1.22)	-0.344 (-1.61)	-0.433 (-1.12)	-0.058 (-0.26)	
Board Homogeneity2	-0.507 (-1.76)	-0.474 (-2.85)	-0.505 (-1.76)	-0.639 (-3.63)	-0.526 (-1.83)	-0.640 (-3.22)	-0.607 (-2.11)	-0.591 (-2.02)	-0.600 (-2.09)	-0.518 (-1.84)	-0.531 (-1.85)	-0.363 (-1.18)	-0.512 (-1.76)	-0.169 (-0.96)	-0.527 (-1.83)	-0.426 (-2.28)	-0.515 (-1.79)	-0.359 (-1.87)	
<i>Control Variables</i>																			
Market-To-Book	0.014 (1.86)	0.000 (0.01)	0.015 (1.87)	0.001 (0.04)	0.015 (1.94)	0.006 (0.31)	0.013 (1.62)	-0.042 (-1.58)	0.013 (1.63)	-0.019 (-0.72)	0.015 (1.88)	-0.013 (-0.49)	0.017 (2.24)	0.010 (0.54)	0.015 (1.96)	0.014 (0.70)	0.015 (1.92)	0.010 (0.53)	
Size	-0.559 (-5.77)	-0.334 (-3.07)	-0.553 (-5.74)	-0.223 (-1.76)	-0.583 (-6.21)	-0.420 (-3.24)	-0.631 (-6.83)	-0.220 (-1.46)	-0.622 (-6.75)	-0.374 (-1.87)	-0.625 (-6.78)	-0.408 (-2.02)	-0.419 (-4.51)	-0.213 (-2.17)	-0.584 (-6.16)	-0.329 (-2.57)	-0.580 (-6.20)	-0.439 (-3.39)	
Leverage	-0.193 (-3.18)	-0.191 (-4.31)	-0.194 (-3.18)	-0.228 (-4.95)	-0.189 (-3.10)	-0.174 (-4.21)	-0.204 (-3.36)	-0.132 (-2.13)	-0.205 (-3.37)	-0.153 (-2.43)	-0.197 (-3.24)	-0.143 (-2.27)	-0.211 (-3.44)	-0.224 (-4.65)	-0.192 (-3.16)	-0.242 (-4.98)	-0.188 (-3.09)	-0.170 (-4.13)	
Employees	0.027 (0.48)	0.006 (0.20)	0.027 (0.48)	0.001 (0.03)	0.033 (0.58)	0.045 (1.63)	0.009 (0.15)	0.024 (0.55)	0.009 (0.15)	0.001 (0.01)	0.032 (0.56)	0.025 (0.58)	0.002 (0.03)	-0.042 (-1.14)	0.030 (0.53)	-0.029 (-0.81)	0.032 (0.56)	0.029 (1.03)	
Bid-Ask Spread	-0.050 (-2.20)	-0.031 (-0.95)	-0.051 (-2.22)	-0.042 (-1.27)	-0.050 (-2.18)	-0.037 (-1.13)	-0.048 (-2.11)	0.040 (1.19)	-0.049 (-2.14)	0.007 (0.17)	-0.050 (-2.21)	-0.001 (-0.02)	-0.026 (-1.15)	-0.025 (-0.87)	-0.050 (-2.19)	-0.055 (-1.66)	-0.049 (-2.15)	-0.042 (-1.28)	
Price	0.006 (6.85)	0.006 (9.61)	0.006 (6.88)	0.007 (9.95)	0.006 (6.77)	0.006 (9.85)	0.006 (6.66)	0.005 (6.38)	0.006 (6.59)	0.005 (6.40)	0.006 (6.76)	0.005 (6.74)	0.006 (7.01)	0.007 (9.05)	0.006 (6.73)	0.008 (9.77)	0.006 (6.79)	0.006 (9.86)	
Return 23	-0.944 (-4.62)	-0.801 (-2.10)	-0.941 (-4.61)	-0.876 (-2.37)	-0.939 (-4.60)	-0.869 (-2.29)	-0.864 (-4.22)	-0.161 (-0.50)	-0.857 (-4.19)	-0.426 (-1.10)	-0.871 (-4.26)	-0.476 (-1.22)	-0.909 (-4.48)	-0.857 (-2.36)	-0.941 (-4.61)	-1.057 (-2.78)	-0.940 (-4.61)	-0.938 (-2.45)	
Return 46	-0.595 (-4.43)	-0.560 (-3.24)	-0.593 (-4.42)	-0.629 (-3.56)	-0.592 (-4.41)	-0.608 (-3.42)	-0.561 (-4.18)	-0.242 (-1.48)	-0.559 (-4.16)	-0.342 (-1.86)	-0.562 (-4.19)	-0.345 (-1.85)	-0.675 (-5.05)	-0.612 (-3.73)	-0.593 (-4.42)	-0.619 (-3.46)	-0.589 (-4.39)	-0.563 (-3.20)	
Return 712	-0.233 (-3.10)	-0.257 (-2.14)	-0.234 (-3.11)	-0.262 (-2.21)	-0.232 (-3.08)	-0.226 (-1.90)	-0.206 (-2.73)	-0.138 (-1.25)	-0.205 (-2.72)	-0.165 (-1.59)	-0.210 (-2.78)	-0.167 (-1.61)	-0.257 (-3.49)	-0.231 (-2.17)	-0.233 (-3.10)	-0.260 (-2.20)	-0.230 (-3.06)	-0.208 (-1.75)	
High-Tech Dummy	-0.909 (-5.42)	-1.059 (-4.12)	-0.913 (-5.46)	-1.334 (-5.01)	-0.901 (-5.24)	-1.446 (-4.55)	-1.028 (-6.04)	-0.563 (-2.23)	-1.028 (-6.09)	-0.788 (-2.45)	-1.057 (-6.16)	-0.877 (-2.61)	-0.757 (-4.47)	-1.058 (-4.24)	-0.884 (-5.26)	-1.416 (-5.25)	-0.921 (-5.31)	-1.505 (-4.82)	

**Table 6 A (continued)**

A-list Dummy	-0.342	-0.318	-0.335	-0.304	-0.344	-0.321	-0.375	-0.225	-0.377	-0.269	-0.394	-0.292	-0.548	-0.326	-0.341	-0.115	-0.331	-0.157
	(-2.60)	(-3.26)	(-2.55)	(-3.13)	(-2.61)	(-3.27)	(-2.86)	(-1.50)	(-2.87)	(-1.79)	(-2.99)	(-1.93)	(-4.19)	(-3.70)	(-2.56)	(-1.16)	(-2.49)	(-1.64)
Turnover	-0.205	-0.073	-0.207	-0.067	-0.206	-0.179	-0.228	0.420	-0.234	0.125	-0.233	0.058	-0.145	-0.192	-0.200	-0.232	-0.207	-0.283
	(-2.26)	(-0.30)	(-2.29)	(-0.28)	(-2.26)	(-0.71)	(-2.52)	(1.68)	(-2.58)	(0.36)	(-2.57)	(0.17)	(-1.60)	(-0.83)	(-2.21)	(-0.93)	(-2.28)	(-1.10)
Cash	0.367	0.342	0.367	0.373	0.367	0.369	0.375	0.131	0.376	0.249	0.364	0.243	0.336	0.308	0.367	0.375	0.366	0.359
	(5.72)	(3.46)	(5.73)	(3.74)	(5.72)	(3.71)	(5.86)	(1.44)	(5.88)	(1.87)	(5.68)	(1.85)	(5.28)	(3.33)	(5.73)	(3.78)	(5.71)	(3.74)
Dividend Yield	0.139	0.179	0.132	0.076	0.147	0.156	0.164	0.726	0.179	0.498	0.107	0.348	0.111	-0.005	0.145	-0.024	0.145	0.084
	(0.39)	(0.76)	(0.37)	(0.32)	(0.41)	(0.67)	(0.46)	(2.63)	(0.50)	(1.49)	(0.30)	(1.01)	(0.31)	(-0.02)	(0.40)	(-0.10)	(0.40)	(0.36)
Corporate Governance Index	0.185	0.120	0.185	0.038	0.196	0.088	0.118	0.168	0.114	0.136	0.177	0.221	0.096	-0.038	0.194	-0.069	0.189	0.046
	(1.71)	(1.70)	(1.72)	(0.51)	(1.82)	(1.16)	(1.08)	(1.65)	(1.04)	(1.37)	(1.66)	(2.47)	(0.89)	(-0.42)	(1.78)	(-0.74)	(1.76)	(0.57)
Share of Free Float	0.892	0.485	1.258	3.321	0.923	0.047	1.016	0.688	1.359	1.322	1.035	0.933	0.899	0.358	1.066	3.138	0.896	-0.003
	(3.69)	(3.83)	(4.31)	(5.30)	(3.71)	(0.17)	(4.46)	(3.02)	(5.52)	(3.31)	(4.54)	(3.38)	(3.80)	(2.60)	(3.83)	(5.60)	(3.62)	(-0.01)
Share of Individuals	-0.735	0.916	-0.718	2.060	-0.524	7.233	-0.791	0.144	-0.757	-0.096	0.180	1.342	-0.597	1.982	-0.954	2.599	-0.270	7.821
	(-1.48)	(2.48)	(-1.51)	(3.25)	(-0.56)	(3.19)	(-1.91)	(0.31)	(-1.83)	(-0.19)	(0.34)	(1.58)	(-1.16)	(3.46)	(-1.93)	(3.59)	(-0.29)	(3.42)
Intercept	6.137	5.140	5.856	3.313	6.139	4.864	6.824	3.774	6.464	4.315	6.442	4.385	5.741	4.444	6.157	3.871	6.086	4.525
	(6.87)	(4.80)	(6.30)	(3.35)	(6.76)	(4.78)	(7.59)	(2.98)	(7.29)	(2.87)	(7.27)	(2.89)	(6.44)	(4.75)	(6.71)	(3.90)	(6.71)	(4.56)
Adj R2	0.061		0.060		0.060		0.063		0.063		0.063		0.044		0.060		0.060	
Hansen p-value		0.087		0.060		0.225		0.093		0.123		0.186		0.938		0.513		0.974

**Panel B: Absolute Error of Analyst Estimates**

	Age-based Homogeneity Measures				College-based Homogeneity Measures				Local Age-based Homogeneity Measures										
	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	Hwhite	GMM	
Shr.Homogeneity1	-0.722 (-4.27)	-2.086 (-9.14)					-0.613 (-4.88)	-0.836 (-2.92)					-0.325 (-2.27)	-2.021 (-8.22)					
Shr.Homogeneity2			-1.057 (-4.19)	-2.896 (-8.82)					-0.506 (-3.31)	-0.988 (-2.90)					-0.364 (-1.73)	-2.058 (-7.92)			
Shr.Homogeneity3					-1.368 (-2.52)	-5.768 (-7.86)					-2.505 (-5.64)	-3.014 (-2.93)					0.073 (0.16)	-5.733 (-7.34)	
Board Homogeneity1	-0.103 (-0.63)	-0.097 (-0.76)	-0.099 (-0.61)	-0.097 (-0.74)	-0.072 (-0.44)	0.137 (1.06)	-0.167 (-1.02)	-0.204 (-1.51)	-0.154 (-0.94)	-0.211 (-1.56)	-0.191 (-1.17)	-0.215 (-1.60)	-0.092 (-0.56)	0.085 (0.57)	-0.094 (-0.57)	0.159 (0.99)	-0.116 (-0.70)	0.586 (3.31)	
Board Homogeneity2	-0.449 (-3.64)	-0.324 (-2.49)	-0.457 (-3.71)	-0.349 (-2.69)	-0.475 (-3.85)	-0.403 (-3.08)	-0.522 (-4.24)	-0.528 (-3.99)	-0.506 (-4.12)	-0.517 (-3.91)	-0.474 (-3.86)	-0.467 (-3.50)	-0.471 (-3.82)	-0.252 (-1.80)	-0.479 (-3.88)	-0.318 (-2.25)	-0.492 (-3.99)	-0.263 (-1.82)	
<i>Control Variables</i>																			
Market-To-Book	-0.018 (-5.46)	-0.022 (-6.44)	-0.018 (-5.38)	-0.021 (-6.41)	-0.017 (-5.27)	-0.022 (-6.87)	-0.018 (-5.51)	-0.018 (-5.69)	-0.018 (-5.35)	-0.018 (-5.72)	-0.017 (-5.20)	-0.017 (-5.44)	-0.017 (-5.23)	-0.023 (-6.97)	-0.017 (-5.17)	-0.022 (-6.95)	-0.017 (-5.06)	-0.025 (-7.62)	
Size	0.229 (5.70)	0.411 (7.50)	0.226 (5.64)	0.408 (7.42)	0.195 (5.00)	0.326 (6.48)	0.155 (4.03)	0.142 (3.31)	0.167 (4.35)	0.153 (3.66)	0.155 (4.06)	0.148 (3.51)	0.200 (5.04)	0.749 (7.49)	0.192 (4.88)	0.466 (7.44)	0.175 (4.50)	0.404 (6.73)	
Leverage	-0.186 (-7.38)	-0.200 (-6.92)	-0.185 (-7.37)	-0.198 (-6.77)	-0.179 (-7.09)	-0.156 (-5.29)	-0.188 (-7.49)	-0.181 (-6.95)	-0.186 (-7.40)	-0.183 (-6.94)	-0.183 (-7.30)	-0.178 (-6.99)	-0.185 (-7.33)	-0.214 (-7.11)	-0.184 (-7.31)	-0.218 (-6.98)	-0.183 (-7.24)	-0.142 (-4.49)	
Employees	-0.110 (-4.67)	-0.133 (-5.21)	-0.108 (-4.60)	-0.125 (-4.89)	-0.102 (-4.34)	-0.093 (-3.85)	-0.116 (-4.90)	-0.118 (-4.69)	-0.110 (-4.66)	-0.116 (-4.66)	-0.102 (-4.38)	-0.102 (-4.32)	-0.107 (-4.52)	-0.158 (-5.64)	-0.105 (-4.47)	-0.160 (-5.47)	-0.102 (-4.33)	-0.105 (-4.02)	
Bid-Ask Spread	0.001 (0.05)	-0.002 (-0.26)	0.000 (0.00)	-0.004 (-0.58)	0.001 (0.15)	0.005 (0.73)	0.002 (0.22)	0.002 (0.33)	0.001 (0.14)	0.001 (0.22)	0.001 (0.09)	0.001 (0.10)	0.001 (0.12)	0.002 (0.31)	0.001 (0.10)	0.000 (-0.05)	0.001 (0.09)	0.013 (1.60)	
Price	0.000 (-0.33)	0.001 (1.63)	0.000 (-0.43)	0.001 (1.58)	0.000 (-0.81)	0.000 (0.40)	0.000 (-1.17)	0.000 (-1.28)	0.000 (-1.16)	0.000 (-1.39)	0.000 (-1.05)	0.000 (-1.07)	0.000 (-0.57)	0.001 (3.47)	0.000 (-0.70)	0.001 (2.90)	0.000 (-1.00)	0.001 (1.50)	
Return 23	0.061 (0.72)	0.059 (0.34)	0.065 (0.77)	0.071 (0.40)	0.070 (0.83)	0.105 (0.58)	0.112 (1.32)	0.144 (0.81)	0.096 (1.13)	0.138 (0.77)	0.114 (1.34)	0.131 (0.73)	0.063 (0.74)	0.034 (0.19)	0.065 (0.77)	0.057 (0.32)	0.067 (0.79)	0.096 (0.53)	
Return 46	0.126 (2.27)	0.124 (0.98)	0.128 (2.32)	0.135 (1.07)	0.131 (2.36)	0.161 (1.25)	0.148 (2.66)	0.159 (1.20)	0.140 (2.53)	0.156 (1.18)	0.150 (2.71)	0.157 (1.19)	0.128 (2.30)	0.126 (1.00)	0.128 (2.31)	0.144 (1.15)	0.127 (2.29)	0.199 (1.55)	
Return 712	0.138 (4.43)	0.144 (1.61)	0.137 (4.41)	0.138 (1.53)	0.141 (4.50)	0.167 (1.84)	0.155 (4.93)	0.157 (1.67)	0.148 (4.72)	0.154 (1.65)	0.155 (4.95)	0.155 (1.66)	0.139 (4.44)	0.144 (1.63)	0.138 (4.41)	0.150 (1.70)	0.138 (4.40)	0.183 (2.06)	
High-Tech Dummy	0.418 (6.01)	0.207 (2.01)	0.423 (6.11)	0.202 (1.94)	0.426 (5.97)	0.027 (0.23)	0.387 (5.49)	0.349 (3.09)	0.423 (6.03)	0.364 (3.28)	0.361 (5.08)	0.335 (2.93)	0.442 (6.29)	-0.019 (-0.16)	0.453 (6.49)	0.023 (0.20)	0.484 (6.72)	-0.354 (-2.20)	
A-list Dummy	0.142 (2.60)	0.181 (3.01)	0.147 (2.69)	0.217 (3.48)	0.140 (2.56)	0.230 (3.63)	0.115 (2.11)	0.103 (1.72)	0.120 (2.18)	0.104 (1.75)	0.102 (1.86)	0.093 (1.54)	0.146 (2.65)	0.343 (4.48)	0.145 (2.60)	0.393 (4.82)	0.127 (2.29)	0.435 (4.83)	
Turnover	0.073 (1.95)	0.039 (1.09)	0.072 (1.93)	0.026 (0.72)	0.071 (1.87)	-0.027 (-0.69)	0.066 (1.76)	0.056 (1.57)	0.071 (1.88)	0.056 (1.54)	0.062 (1.64)	0.055 (1.53)	0.081 (2.15)	0.041 (1.07)	0.081 (2.16)	0.043 (1.10)	0.084 (2.23)	-0.054 (-1.17)	
Cash	0.074 (2.80)	0.068 (2.82)	0.075 (2.83)	0.068 (2.86)	0.074 (2.80)	0.056 (2.39)	0.081 (3.05)	0.080 (3.42)	0.079 (2.98)	0.080 (3.38)	0.074 (2.82)	0.073 (3.16)	0.073 (2.75)	0.039 (1.55)	0.074 (2.81)	0.055 (2.20)	0.076 (2.86)	0.041 (1.64)	

**Table 6 B (continued)**

Dividend Yield	0.880	0.860	0.875	0.806	0.890	0.863	0.897	0.878	0.902	0.892	0.861	0.841	0.885	0.776	0.887	0.803	0.894	0.817
	(5.97)	(6.86)	(5.94)	(6.42)	(6.03)	(6.53)	(6.09)	(6.92)	(6.11)	(7.02)	(5.85)	(6.51)	(5.99)	(5.84)	(6.00)	(6.03)	(6.06)	(5.90)
Corporate Governance Index	-0.265	-0.361	-0.260	-0.348	-0.249	-0.326	-0.286	-0.298	-0.269	-0.295	-0.251	-0.249	-0.259	-0.505	-0.252	-0.480	-0.237	-0.443
	(-5.92)	(-6.15)	(-5.83)	(-5.96)	(-5.58)	(-5.57)	(-6.31)	(-5.06)	(-5.94)	(-5.04)	(-5.66)	(-4.67)	(-5.71)	(-7.31)	(-5.59)	(-6.73)	(-5.30)	(-5.91)
Share of Free Float	-0.339	-0.789	0.119	1.287	-0.302	-0.994	-0.177	-0.158	-0.069	0.066	-0.156	-0.141	-0.268	-1.021	-0.084	1.747	-0.195	-1.527
	(-3.39)	(-6.31)	(0.98)	(7.67)	(-2.94)	(-6.54)	(-1.87)	(-1.81)	(-0.67)	(0.54)	(-1.65)	(-1.61)	(-2.70)	(-6.54)	(-0.73)	(7.15)	(-1.90)	(-6.74)
Share of Individuals	3.311	5.044	3.239	4.922	3.693	10.003	2.959	2.995	2.912	3.005	3.577	3.719	3.108	6.670	3.006	6.329	2.744	14.975
	(16.02)	(10.04)	(16.32)	(9.89)	(9.40)	(9.11)	(17.26)	(8.39)	(16.94)	(8.40)	(16.45)	(7.78)	(14.36)	(9.14)	(14.54)	(9.39)	(7.04)	(8.08)
Intercept	-1.453	-2.144	-1.749	-3.515	-1.469	-2.880	-0.955	-0.806	-1.202	-1.112	-1.172	-1.129	-1.346	-2.302	-1.427	-4.116	-1.248	-3.899
	(-3.92)	(-4.14)	(-4.53)	(-5.90)	(-3.89)	(-5.05)	(-2.56)	(-1.54)	(-3.26)	(-2.25)	(-3.19)	(-2.29)	(-3.64)	(-4.19)	(-3.75)	(-6.14)	(-3.31)	(-5.75)
Adj R2	0.150		0.150		0.148		0.151		0.149		0.153		0.148		0.147		0.146	
Hansen p-value		0.792		0.801		0.296		0.884		0.928		0.969		0.979		0.660		0.918