What Are We Meeting For?

The Consequences of Private Meetings with Investors

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Abstract: Using a dataset of all one-on-one meetings between senior management and investors for an NYSE-traded firm, we investigate the impact of private meetings on fund investment decisions. We find that hedge funds, large block holders, geographically close investors, and higher turnover funds meet more frequently with management. Investors who meet with management have trades that are unusually correlated with each other and such trades better predict future stock returns. The improved timing ability is concentrated in hedge funds, but not present for investment advisors or pension funds. Our results suggest that private meetings help some investors make more informed trading decisions.

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Managers of publicly traded firms spend a significant amount of time meeting investors. A 2010 survey showed that chief executive officers and chief financial officers spent 17 and 26 days on average per year respectively on investor meetings (Cross Border Group (2010)). Despite the significant amount of managerial time consumed, these meetings have garnered little academic attention. An important reason for this, as noted by Bebchuk and Weisbach (2010), is that "informal contact between institutional investors and firms is by its nature private and difficult to quantify". While some of these interactions occur at publicly known conferences sponsored by investment banks, others occur at investors' offices and the headquarters of firms.

The prevalence of these private interactions in the United States is surprising in light of the passage of Regulation Fair Disclosure (i.e. Reg FD) in 2000. This regulation was created in response to the perception by regulators that certain investors were gaining an unfair advantage in the financial markets by having preferential access to information. While Reg FD did not prohibit private one-on-one meetings with management, it did specify that all material information disclosed by managers had to be publicly available and accessible to all investors (SEC File No.S7-31-99).

Despite this regulation, investors continue to covet meetings with senior management, suggesting that they perceive some benefits from them. However, if these meetings convey no additional information "that a reasonable shareholder would consider … important in making an investment decision" (SEC), it is not immediately obvious why investors would expend significant effort and resources to meet with firm management.

In this paper, we investigate the type of investors that meet with management and the consequences of these meetings on investor trades. Through the acquisition of a unique set of records from a mid-cap, NYSE traded firm, we have an exhaustive compilation of all meetings between senior management and investors over a six-year period, covering over 900 meetings with 340 different institutional investors. This allows us to analyze not only the impact of meetings, but also how such impact varies across investors.

We find that investors who have greater turnover in their holdings and have larger positions in the firm gain more access to management. We also find that investors located farther away from the firm are somewhat less likely to meet. Across fund types, hedge funds are the most likely to meet management regularly. Intermediaries, and in particular sell-side analysts, play a crucial role in setting up meetings between management and investors. As discussed in Groysberg, Healy, and Maber (2011), analysts are largely compensated for activities that increase brokerage and investment banking activity. The factors influencing access to management across investors are consistent with these incentives.

We also examine the consequences of these meetings for investors' trading activity, both in terms of the likelihood of trading and the direction of trading. If investors who meet are gaining access to information that is useful for their investment decisions, they are likely to update their beliefs about the company and thus be more likely to trade the firm's stock. In addition, we hypothesize that investors who meet management around the same period of time are likely to receive similar information from management and thus update their beliefs about the firm in the same direction (i.e. positively or negatively). As a result, we examine whether funds attend meetings exhibit unusually correlated trades relative to funds that did not meet privately with management.

We find that meetings are strongly associated with the direction of trades. Specifically, our results indicate that funds that meet management in a given quarter tend to have trades that are significantly more correlated relative to other funds with similar characteristics. In other words, funds that meet with management are more likely to all buy the stock or all sell the stock in a given quarter, relative to comparable funds who did not meet with management during the period. These correlations are strongly significant and economically large – we find that a meeting, on average, changes the probability of increasing a fund's position by 21% on average.

We then investigate whether private meetings result in improved timing ability in the trades made by investors. To do so, we examine whether investors who meet with management are more likely to increase their position before periods of high returns and decrease their position before periods of low returns. We find evidence supporting this. Specifically, for funds that meet, a 10% increase in next quarter's stock returns is associated with a 33% increase in the size of the investor's position, relative to the trades of funds with similar characteristics. When the trades of funds are aggregated, a one standard deviation increase in purchases by funds who met with management predicts an increase in stock returns of 3.7% over the following

month. By contrast, the trades of funds who did not meet with management show little predictive power for future stock returns.

We also examine a number of alternative explanations for the increase in timing ability related to meetings with management. Our results are unlikely to be driven by fund skill, as funds who meet at some point do not appear to have better timing ability in periods when they do not meet. The effect of meetings does not appear to be the result of funds communicating with *each other* during meetings, as the increase in timing ability after meetings is lower for funds who met on the same day as many of other funds. We also consider whether the results may be caused by funds endogenously choosing to meet with management when they already possess valuable information. We examine the effect of conference meetings, where the timing of the meeting is largely determined exogenously to both the firm and the fund, and find that, if anything, conference meetings have a larger effect on timing ability.

Importantly, we find that the value of management meetings is not uniform across fund types. Instead, the informativeness of meetings appears limited to groups of investors that are often viewed as being more informed: hedge funds, and to a lesser extent, banks. The increased correlation in trades after meetings is limited to hedge funds that meet, while the increased timing ability is strong for hedge funds, and weakly present for banks. Both investment advisors and pension funds show no increase in timing ability or correlation of trades after meeting with management. These differences also appear unlikely to be solely caused by portfolio constraints that prevent other fund types from acting on their information – investment advisors display the same volatility in trade sizes as hedge funds, but such trades do not seem to benefit from meeting with firm management.

The fact that the value of meetings varies across fund types also speaks to the nature and value of the information being discussed in private meetings. Conveying information that is unambiguously material, like news of a takeover or a future earnings surprise, allows an investor to make a more informed investment decision without significant additional information or analysis. However, even if meetings do not contain material information, it is still possible for investors who meet management to make more informed investment decisions. Specifically, the information discussed may not be material on its own, but can become material

once it is interpreted together with other sources of information that the investor has collected. Under this view, information acquired during meetings is only useful within the larger context of an investor's investigation and for investors who know how to appropriately process the information. From the standpoint of Reg FD, this "mosaic theory" of information gathering is excluded from the scope of the regulation. Our results are consistent with the mosaic theory – inasmuch as hedge funds are often considered more sophisticated investors, they may be better able to process the information in meetings, or in possession of other information which makes the discussions in meetings especially valuable.¹ Hedge funds may also be more skillful in extracting useful information from management, such as by asking better questions.

Our results offer several broader implications about the nature of private interaction in the post Reg-FD environment. First, the analysis unambiguously shows that some investors continue to privately meet on a regular basis with firm management. The frequency of these interactions, as often as on a quarterly basis for some investors, indicates that they function as more than a simple "meet and greet" opportunity for the investor before making an initial investment. Second, our empirical results suggest that a subset of investors is able to garner information from meetings that is useful for their trading decisions. Both of these conclusions provide insights into the current environment for private interaction between investors and management. Specifically, even post Reg-FD, there exists some investors who continue to gain privileged access to information from firm management that other investors cannot.

Given that we observe data from a single firm, there is the risk that the magnitude of the empirical estimates may not be representative of different firms with different meeting preferences and investors. The fact that the sample firm was willing to provide us with their meeting records (albeit with a confidentiality agreement that the name of the firm and its investors would not be revealed) suggests that they did not feel that they were potentially acting in violation of SEC regulation, or that they were unusually forthcoming to their investors compared with their peers. To this extent, the firm's conservative approach towards disclosing potentially material information would bias us against finding that the meetings offer useful

¹ See, for instance, Kosowski, Naik, and Teo (2007), Brown, Goetzmann and Ibbotson (1999), Ibbotson, Chen and Zhu (2011), who find that hedge funds appear to earn abnormal returns. This view is not universal, however - see section 2.2.1 for more discussion.

information. It also suggests that our results may understate the impact of meetings in the general population of firms. Extensive interviews with management indicate that they feel that their firm follows a conservative approach to disclosing potentially material information. Our results are not necessarily inconsistent with the firm's claims, either. For instance, Hobson, Mayew and Venkatachalam (2012) analyze the level of emotion in the speech of CEOs during earnings conference calls and find that this predicts the chance of subsequent earnings restatements (something which CEOs are probably trying to hide). Such results raise the question of whether it is even *possible* for a CEO to speak with investors and not reveal anything important.

This paper contributes to research on the impact of interactions between insiders and market participants. A number of papers have examined how social and professional networks facilitate information transfer in financial markets. Cohen, Frazzini and Malloy (2008) document that mutual fund managers make more informed trades in companies where they went to school with board members, while Cohen Frazzini and Malloy (2010) document that an analyst's social network, via educational connections, influences the quality of their recommendations. Bushee, Jung, and Miller (2010) and Bushee, Jung, and Miller (2011), investigate interactions between managers and investors at conferences. They provide evidence of increases in trade size when off-lines access is offered to investors and the CEO is present, which suggests conference meetings confer some preferential access to those in attendance. Our paper differs from the previous works in that we are able to observe both the timing of meetings and the identities of all parties present. This allows us to explore the effects of meetings themselves (rather than just fixed connections between individuals), and also how such effects vary across investors.

Our paper also contributes to the literature on the behavior and investing choices of institutional investors. A number of papers (e.g. Hong, Kubik, and Stein (2005), Coval and Moskowitz (1999, 2001)) present evidence that shows that institutional investors make decisions based on word-of-mouth and proximity to others. Private meetings, a pervasive venue for creating interactions, provide a previously unexamined mechanism for different funds to develop similar beliefs and facilitate discussion between different institutional investors.

Our investigation should also be of interest to regulators. Recent regulation, like Reg FD, specifically sought to level the informational playing field for all investors. The number of indictments by the SEC for breaches of these regulations is small, however, partly because of the difficulty of observing and prosecuting breaches during such interactions.² Our analysis suggests that private meetings confer benefits to a select group of investors who are able to gain access to management. It is important to note that managers need not be in violation of any regulation while conveying information to investors. Moreover, our analysis does not address whether private meetings lead to overall gains in financial markets or instead merely transfer surplus between participants.

Nonetheless, our results support the position that permitting private meetings between management and investors undermines regulators' objective of wanting all investors to have equal access to information. To the extent that our results are consistent with the mosaic theory, they suggest that the distinction between 'material' and 'non-material' information is subtler than what is typically envisaged in regulations.

The remainder of the paper is as follows: Section 2 describes the setting in which managers and investors meet privately, and the hypothesized consequences of these meetings. Section 3 describes the meetings dataset. Section 4 examines which investors gain access to management. Section 5 investigates the impact of meetings on trading. Section 6 concludes.

2. One-on-One Meetings and the Predicted Effects of Meeting

2.1 Institutional Background

Information asymmetry exists in publicly traded firms between insiders (i.e. management) who manage firms and outsiders (i.e. investors) who provide capital. To mitigate this asymmetry, investors demand firms disclose information about their performance and operations. Firms satisfy this demand for information by providing news and reports to investors (e.g. financial statements, press releases, conference calls) and information intermediaries including media and analysts.

² Since 2000, the SEC has brought enforcement actions against five firms for violating Regulation FD in regards to private meetings with investors. These include Secure Computing Company (2002), Siebel Systems (2002), Schering-Plough (2003), Siebel Systems (2004), and Presstek (2010).

One of the most direct ways of satisfying investors' demand for timely firm news is for management to privately meet with investors. Historically, both formal and informal one-onone meetings between CEOs, CFOs, and others in senior management with investors have played an important role in communicating information to investors. These meetings offer an opportunity for managers to directly address investors' questions while also offering investors a more intimate opportunity to engage directly with a firm's leaders.

Recognizing that some investors get preferential access to information, the Securities and Exchange Commission (SEC) passed Reg FD in the fall of 2000. This regulation prohibits managers from privately conveying material information to investors. In creating this regulation, the SEC sought to stanch the perceived widespread flow of "selective disclosure" to favored investors and analysts (Bailey et. al. (2003)).

During the passage of Reg FD, some investors voiced concerns that the regulation would ban private discussions with management. Nonetheless, the final regulation did not explicitly prohibit private meetings with investors. However, according to the regulation, the contents of any private conversation between investors and management must be in compliance with Reg FD (i.e. no new material information). Relatively limited guidance has been offered by the SEC as to what types of questions and responses might violate the regulation. One instance where the SEC has offered guidance is investor models. The SEC has noted that management may review an investor's model, however any adjustments to the model need to be simply changes of "historical facts that were a matter of public record" (SEC, Compliance and Disclosure Interpretation June 4, 2010). In the end, managers are given considerable latitude to interpret what information constitutes as material. Several panel discussions held by the National Investor Relations Institute suggest that this continues to be an active topic of discussion among managers who conduct these meetings (e.g. NIRI Annual Conference panels 2010). Managers' willingness to engage in discussions around specific topics varies considerably between firms.

Ultimately, in spite of the changes mandated by Reg FD, private meetings continue to occur regularly. Survey evidence suggests that 97% of CEOs of publicly traded firms meet privately with investors (Thomson Reuters Survey of IR Best Practices (2009)). A wide range of

investors attend these meetings, including investment advisory firms who oversee mutual fund selection (i.e. the "buy-side"), pension managers, and hedge funds.

These one-on-one meetings occur at several different venues including conferences, investors' offices ("road shows"), and firms' headquarters ("in-house").³ Conference meetings occur at industry and bank conferences that bring together multiple firms in one location. Most often a member of senior management will speak to all attendees at the conference and investors will have the opportunity to speak with firm managers either prior to or following these remarks. Other conferences consist of full days of meetings between managers and investors. Although most of these meetings will be one-on-one (i.e. management meets with one investor), there is an increasing trend to have several investors meet management at once in a small group. Meetings tend to be relatively brief and last 30 minutes. Many managers and investors see these conferences as a convenience since it allows each to meet with multiple constituents within a short span of time. For most institutional investors, and especially those at larger asset management firms, meetings occur with buy-side analysts covering the firms, rather than portfolio managers. Investors sign up to meet with particular managers. Depending on the conference sponsor, firm management is given varying degrees of discretion about who they have the opportunity to meet with. While in some cases, they will not be given any choice (i.e. selection done by conference sponsor), in other cases management may be offered the opportunity to give input about with whom they would like to meet.

Investor office meetings (also known as road show meetings) provide management the opportunity to visit investors in their own offices. These meetings offer a particular convenience to investors since they incur little travel or commuting cost. As compared with conference meetings, road show meetings typically offer more time for investors and managers to interact. Unlike conference meetings, firm management will usually meet with the portfolio managers who directly make decisions about whether to buy or sell a position in the firm. Investment

³ The discussion of how meetings operate is based on firm management's description of its own processes, as well as conversations with several professionals in the investor relations industry. According to the investor relations professionals we spoke with, the mechanics of the different types of meetings at this firm are fairly typical of public companies in general.

banks will often, although not always, pay for expenses (e.g. a private jet) associated with making the trip.

Finally, in-house meetings occur at the firm's headquarters. These meetings provide a small group of investors the opportunity to visit the firm's corporate headquarters. Analysts will send invitations to their clients offering the opportunity to visit the firm's headquarters. This visit is an opportunity to both meet members of senior management and observe plant operations. While these meetings consume more time, they offer firm management a greater convenience by not needing to travel. In-house meetings are typically set-up and funded by intermediaries (e.g. investment banks) for their clients.

2.2 Meeting Hypotheses and Tests

The incentives of managers, investors, and sell-side analysts' offer several predictions about which investors will gain access to management and what the consequences of these interactions will be.

2.2.1 Who Meets Management

Investors who perceive the greatest opportunity to profit from conversations with management while incurring the least cost in doing so are most likely to desire private one-onone meetings. Consequently, on the benefits side, investors who hold relatively larger positions in the firm will have a greater desire to meet, as they stand to make greater dollar profits from any information they receive.

Private information acquired during management meetings may be a substitute or a complement to other sources of public information. If sophisticated investors have the ability to discern the true the value of the company through better analysis of public information, private information would only confirm their existing knowledge. In such a case, private meetings with management would be less valuable to more sophisticated investors, and more valuable to less sophisticated investors who might not otherwise understand the existing disclosures. Alternatively, sophisticated investors may be better able to process signals conveyed by management during private meetings and better utilize their own research in conjunction with information provided by management. In this case, investors who can more successfully

process information would be more likely to benefit from private meetings with management. Across the fund types we observe, hedge funds are often considered to be more informed investors, inasmuch as they appear to earn abnormal returns (Kosowski, Naik, and Teo (2007), Brown, Goetzmann and Ibbotson (1999), Ibbotson, Chen and Zhu (2011))⁴, whereas the average mutual fund does not appear to earn abnormal returns (see, for instance, Carhart (1997), Fama and French (2010), and numerous others).

On the cost side, larger funds with more personnel and greater resources can more readily send a research analyst to meet with management. In addition, firms located father away from the firm (for an in-house meeting) or from a conference will incur greater travel time and/or financial cost to get to the meeting and therefore be less likely to meet or attend.

While the focus of this paper is on the consequences of meetings for investors, rather than the consequences for the firm, the incentives of the firm are nonetheless important in understanding who meets with management. In addition to the factors that affect how much investors are likely to demand meetings, an important consideration is the supply of meetings – that is, the willingness of managers to meet different investors. Managers engage in private meetings with investors because of the perceived importance of developing relationships with investors. A 2010 report by the Bank of New York found that "more intimate one-on-one meetings with investors and road shows set up by the sell-side are the primary venues at which investor relations executives receive introductions to investment professionals. This trend is evident regardless of market cap, region, or industry" (Bank of New York (2010)).

In the current context, our sample firm will seek to accommodate all requests by investors for private meetings. While few institutional investors will be turned down, the management does use its discretion in deciding when to offer the private meeting (i.e. immediately or in several months). If management desires to better accommodate a given group of investors, these investors are likely to be able to meet more regularly. In this regard, if

⁴ There are, however, other papers that dispute the view that hedge fund managers have more skill than mutual fund managers – see, for instance, Griffin and Xu (2009), Deuskar, Pollet, Wang and Zheng (2011), and Fung and Hsieh (2001). In addition, the data on hedge fund returns is largely self-reported and poses a number of empirical challenges (Fung and Hsieh (2000), Liang (2000,2003), Bollen and Kreply (2006), Agarwal, Daniel and Naik (2010), Asness, Krail and Liew (2001), among others).

managers are seeking to maximize the impact of meetings, they may prefer to meet with larger holders of their firm's securities since their trading decisions will have a disproportionally larger effect on the stock price.

It is also important to consider the incentives of the sell-side firms, who organize meetings. These firms are interested in rewarding clients that generate the most brokerage business through trading. Consequently, investors who conduct more trades and have higher turnover are more likely to be given the opportunity to meet with management. Some types of investors (e.g. hedge funds) generate more trading commissions for banks and thus will be more likely to be given the opportunity to meet with management. Although firms tend to avoid investors who have high turnover, the relationship between sell-side firms who arrange meetings and the firm appears to be largely amicable. In reference to a firm's relationship with a sell-side analyst, one mid-cap investor relations officer noted that "certainly we get a lot of introductions through the sell-side. That is where most of our investors get to hear about us, and then invest" (Bank of New York (2010)).

2.2.2 Consequences of One-on-one Meetings

We investigate whether private management meetings convey information and whether this information is useful for making more informed trading decisions. Our first two tests primarily focus on understanding whether meetings convey information and our third test seeks to address whether meetings help investors make more informed trades.

We begin by investigating the association between having a meeting with management and an investor's decision to trade in the firm's securities. If investors update their priors during meetings with management, they may feel compelled to trade in the security. Evidence that investors are more likely to trade would be consistent with meetings conveying information (e.g. Bamber et al. (1999), Hong and Stein (2007)).

While a greater tendency to trade is consistent with meetings conveying information, the relationship is not necessarily straightforward. A meeting could also convey information that leads an investor to choose not to trade (e.g. an investor planned to sell before the meeting, but management convinced him or her otherwise). Moreover, if uninformed investors are

overconfident in their own trading abilities (as found in Odean (1998)), then such overconfidence may cause the uninformed investors to trade as much as investors who received information at a meeting. Thus, even if private meetings convey information to investors, there may be no statistical relationship between meetings and the tendency to trade. Although this reduces the power of the test, we investigate as a preliminary test whether there is an association between investors who meet and those who trade.

Our second set of analyses provides a more powerful test of whether information is conveyed in meetings. We examine whether investors who meet are more likely to make correlated trading decisions. Survey evidence suggests that investors' questions largely focus on management's vision for the future, financial statement items, and results from specific business segments (Thomson Reuters Investor Relations Practices Study (2009)). In responding to these questions, management seeks to clarify and improve investors' understanding of these issues. Assuming management provides consistent answers to all investors who meet during the same time period, investors who meet with management are more likely to herd around a similar investment thesis. If managers are conveying similar information to a set of investors over the course of meetings, we would expect the trades of those investors to be more correlated with each other than with the rest of the market.

If investors are making trades based on information from meetings, then this suggests that they view the information from meetings as being relevant to their investment decisions. This does not however speak directly to the matter of whether this information actually improves the performance of the funds who act on it. It is possible that information is conveyed through meetings, but that the information is either not relevant or is used in a way that does not generate superior profits. Our third set of tests seeks to address this question.

To do so, we investigate the timing ability of investors who meet privately with management. Specifically, we examine the extent to which investors increase their position before periods of high returns and decrease their position before periods of low returns. If the information conveyed during meetings is useful for investment decisions, we expect investors who meet with management to increase (decrease) their position more in advance of higher (lower) future returns on the firm's stock.

<u>3. Data</u>

3.1 Meetings Data

The confidential nature of senior executives' schedules and meetings with specific investors significantly hinders researchers' ability to investigate interactions between managers and investors. Discussions with numerous investor relations officers suggest that many firms do not maintain archival electronic records of these interactions for liability reasons, while others maintain strict internal policies that prohibit distributing this information.⁵

With the condition of firm anonymity, we were given access to the detailed meeting records for the senior management of a mid-capitalization (i.e. \$2-\$10 billion in market capitalization) NYSE traded firm. These records provided data on which members of senior management (e.g. CEO, CFO, COO and IRO) attended the meeting, the name and type of event (e.g. investor conference, road show), the location of the event, and the names of investors with whom the firm met.

Our meeting sample begins in November 2004 and continues until March 2010. Over this time period, the firm conducted meetings at 70 venues. At these events, the firm met with a 340 different institutional investors during 935 one-on-one meetings. In terms of attendance, the IRO was present at 858 meetings, the CEO at 831 meetings, the CFO at 511 meetings, and the COO at 74 meetings. In terms of the distribution across time, the mean number of meetings per quarter is 9.8, with a standard deviation of 9.

An annual survey conducted by the Bank of New York Mellon on investor relations practices offers a chance to compare our firm to a larger sample of firms to understand how representative it is of the larger population of firms. Their survey results shows that the average CEO, CFO, and IRO have 46, 72, and 147 meetings per year (BNY Mellon Analysis of IR Practices, 6th Edition). If we annualize the number of meetings for our sample firm, this would correspond to 153, 94, 166 meetings annually for the CEO, CFO, and IRO respectively. This suggests that our sample firm, and particularly its CEO, is somewhat more engaged in meeting with investors than the average firm.

⁵ There are no regulations that require a firm to maintain records of these meetings or provide any public disclosure around their occurrence. The authors are not aware of any firms that have disclosed who they meet with privately on a voluntary basis.

Although the number of meetings is higher in our sample, the number of days on the road appears somewhat more comparable to an average firm. Nearly 30% of firms surveyed by Thomson Reuters saw their CEO's take more than 5 trips per year to meet investors, as does our sample CEO. Our sample CEO also spent an average of 15 days per year on the road meeting investors. In the Thomson Reuters Survey, 66% of CEOs spent less time than this per year traveling while 16% spent more days traveling per year to meet investors.

3.2 Additional Data

In our cross-sectional analysis, we include several variables to investigate differences in the types of funds that meet. We utilize Thomson One Banker to determine the amount of equity assets, investment style, turnover, and location of each investor. Equity assets for each investor are provided in millions of dollars as of the end of 2009. To reduce the possible bias associated with using this end of period measure of assets, and to account for possible nonlinearity in the effect of fund size, we divide funds into four size quintiles. ⁶ Investment style shows the fund's type designation as recognized by investors and firm management. We classify funds according to whether they are an investment advisor, hedge fund, pension fund, bank and trust or research firm, and other (endowment fund, insurance company, private equity, independent research, sovereign wealth fund, venture capital, or foundation). The latter are grouped together because the very small number of observations in each category makes individual controls impractical in most of the regressions.

Turnover indicates the frequency that equity holdings are traded at the firm. For each firm, Thomson designates turnover of each firm as low, medium, or high. Finally, the location of the fund is the zip code of the investment manager's corporate headquarters. For data on quarterly equity ownership, we utilize data from the Form 13F documents. Institutions with over \$100 million under management are required to file this document quarterly with the SEC for all U.S equity positions over \$200,000 or more than 10,000 shares in size (Griffin and Xu (2009)). In cases where a particular asset or turnover variable is missing from Thomson One

⁶ If asset size measures are excluded from the regressions the results are substantially similar, suggesting that survivorship bias from the assets measure is not driving our results.

Banker, we use a dummy variable to group firms with missing data, in order to preserve as much of the sample data as possible for our tests.

Table I Panel A offers descriptive statistics about our sample by firm quarter. The average investor in our sample manages nearly \$27 billion in equity assets and is located 815 miles away from our sample firm's headquarters. 21% of investors turn over their assets at a high rate (i.e. more than 100% per year). In most cases, the amount of the firm's equity held by an investor is significantly less than 1%. Panel B provides a correlation table with asterisks indicating statistical significance at the 5% level.

4. Results on Access to Management

The frequency of meetings for different investors in our sample is heterogeneous. Figure I displays a histogram of the number of meetings per investor. The histogram is positively skewed with many firms only meeting once and a small number of firms meeting many times. We find that 56% of firms meet only once during our six-year sample period. In contrast, 13% of investors meet at least once per year. In addition, a small number of investors meet much more frequently. Seven investors in our sample met at least 15 times. Of these investors, the four most active were hedge funds and the remaining three investors were large buy-side investment firms. The regularity of these meetings for certain investors seems to indicate that these meetings offer more than just an opportunity to receive an introduction to management. Figure II displays the number of meetings in each month of the sample period. While the number of meetings increases somewhat over the course of the sample period, the data do not reveal any particular pattern of seasonality in the timing of meetings.

Univariate statistics also show considerable variation in the quantity and quality of the different types of events. Table II shows that investor conferences are the most frequent venue (64%) for the firm to meet investors. The number of meetings with different investors at inhouse events is higher than at conferences or road shows. This difference between the number of meetings per in-house event is statistically higher than that for conferences or road shows, but the magnitude of the difference is small (i.e. less than two meetings).

Access to senior management varies by event. As expected by the natural convenience offered by bringing investors to the firm's headquarters, senior executives are more likely to be available at in-house events than for road shows or investor conferences. This variation is particularly significant for investor access to the CFO and COO. Both the CEO and IRO are available and the majority of meetings regardless of the venue of the meetings. The unconditional probability of a fund meeting with management in a given quarter is 4.3%.

To examine the types of investors who gain access to management, Table III provides three sets of multivariate regressions. Panel A examines the characteristics of who meets. The dependent variable is *Meet*, a dummy variable that equals one if the fund met with firm management that quarter, and zero otherwise. Observations are included for every fund that holds shares in the firm in that quarter, running from March 2004 to December 2009. The regressions are a probit specification, and standard errors are clustered by fund and quarter. The regression equation is:

$$Meet_{i,t} = a + b_1^* HedgeFund_{i,t} + b_2^* PensionFund_{i,t} + b_3^* Bank_{i,t} + b_{4-6}^* Asset_{2-4:i,t} + b_{7-8}^* Turnover_{2-3:i,t} + b_9^* FracCompany_{i,t} + b_{10}^* LDrivedist_{i,t} + b_{11}^* AssetMiss_{i,t} + b_{12}^* TurnoverMiss_{i,t} + e_{i,t}$$
(1)

In terms of independent variables, *HedgeFund*, *PensionFund* and *Bank* correspond to dummy variables for hedge funds, pension funds, and banks and research firms (respectively), with investment advisors being the omitted category, *Asset*₂₋₄ are dummy variables for quartiles of fund asset size in 2009, with group 4 being the largest, *Turnover*₂₋₃ are dummy variables for medium and high turnover funds. *FracCompany* is the fraction of the company's shares held by the fund, *LDrivedist* is the log of the driving distance from the fund headquarters to the company headquarters, *AssetMiss* and *TurnoverMiss* are dummy variables that equal one if information on asset size and turnover, respectively, are missing.

We find that firms with high turnover are more likely to meet. Specifically, a high turnover firm is 5% more likely to meet than a low turnover firm. Firms that hold a greater fraction of the firm's shares (fraction firm) are also more likely to meet. We also find evidence that the distance from the firm's headquarters to an investor's headquarters is related to the probability of meeting. In particular, we find a negative and statistically significant coefficient on log distance that indicates that investors whose headquarters are located farther away from the firm are less likely to meet. A one standard deviation increase in distance (i.e. nearly 800 miles) lowers the likelihood of meeting by 2%.

In regression (4) of Panel A, we also investigate different types of investors. The base specification consists of investment advisors with dummy variables for hedge fund, pension funds, and banks included in the regression. We find that hedge funds are nearly 2% more likely to meet with management than investment advisors. Overall, the results in Panel A are consistent with both the incentives of investors who have the most to benefit from meeting management at the least cost, and the incentives of analysts to arrange meetings for clients that are likely to generate the most brokerage trading business.

In Table III, Panel B we examine the determinants of funds meeting at different venues. Funds with higher turnover and holding a larger fraction of the firm are more likely to meet at conferences. Firms located farther away are less likely to meet at conferences and in-house meetings. However, distance does not influence the likelihood of meeting at road shows. This is consistent with investors not bearing any travel cost associated with a roadshow meeting as the firm travels to the investor's place of work.

In Panel C, we investigate the determinants of which funds meet specific executives at private meetings. Higher turnover and greater holdings of the firm's stock increase the likelihood of meeting all three top C-suite executives. Hedge funds are more likely to meet with the CEO and CFO. The results are somewhat more limited for the COO. One explanation for this is the limited availability of the COO at most meetings.

5. The Impact of Meeting with Management

5.1 Likelihood of Trading Around Meeting

To understand the impact of meetings on investors' trading decisions, we first examine the association between meeting with management and the probability of the fund making a trade in the firm's shares. If meetings are conveying information that results in funds updating their priors, this may be likely to increase the chance of them making a trade. In Table IV, we examine the likelihood that an investor will trade in the quarter surrounding its meeting with the firm's management. The regression uses a probit specification, and is as follows:

 $Trade_{i,t} = a + b_1^* Meet_{i,t} + b_1^* HedgeFund_{i,t} + b_2^* PensionFund_{i,t} + b_3^* Bank_{i,t} + b_{5-7}^* Asset_{2-4:i,t} + b_{8-9}^* Turnover_{2-3:i,t} + b_{10}^* FracCompany_{i,t} + b_{11}^* LDrivedist_{i,t} + b_{12}^* Asset Miss_{i,t} + b_{13}^* Turnover Miss_{i,t} + b_{14}^* Date + e_{i,t}$ (2)

The dependent variable is *Trade*, a dummy variable that equals one if the fund changed its position in the company's shares that quarter and zero otherwise. The main independent variable is *Meet*, taken over the same quarter as the trade. Additional controls are included for fund style, asset size, turnover, the fraction of the company's shares held by the fund, log distance from the company headquarters, as well as fixed effects for each quarter (*Date*). Standard errors are clustered by fund and quarter.

Table IV presents these results. In both a univariate specification and after controlling for fund style, we find that investors who meet are statistically more likely to trade. The coefficient on meet is 0.728 in the univariate regression, and 0.627 when controlling for fund style, both significant at a 1% level. When adding the full controls, the coefficient on *Meet* is 0.402 and marginally significant at a 10% level. In terms of the economic magnitude of the coefficient, firms who meet are approximately 7% more likely to trade in the firm's security.

As well as the theoretical ambiguity of the test as noted earlier, the association between meeting and likelihood of trade also has limited power, due to over 90% of funds trading in each quarter. The marginally significant relationship between meetings and trade is suggestive of information being conveyed in meetings, but not conclusive.

5.2 Correlation of Trading Among Investors

A more powerful test to examine whether meetings convey information is to identify similarities in trading between investors who meet with management and those that do not. To do this, we examine whether the trades of investors who attend meetings are more correlated than those who do not privately meet with management. While the information in the meeting may lead to the purchase or sale of the stock, investors at a particular meeting ought to be more likely to trade in the same direction relative to other funds. The distinction of 'relative to other funds' is crucial – the question is not whether the trades of funds who meet are correlated, but whether they are *more* correlated than the trades of other funds.

To address this question, we apply a two-step methodology. First, we examine the crosssection of trades at each point in time to see if funds who meet are more likely to trade in a given direction during that quarter. Second, we aggregate the p-values from each of the crosssectional tests into an overall test statistic for the abnormal correlation of trades of funds who meet with management. This process allows us to determine whether trades of funds who meet are more likely to go in a particular direction, while allowing for the fact that the direction of the effect will likely vary from quarter to quarter.

We consider three different dependent variables which define the direction of change in the investors' position. *'Increase'* is a dummy variable equal to 1 if the investor bought shares over the quarter and zero otherwise and *'Decrease'* is a dummy variable that equals 1 if the fund sold shares over the quarter and zero otherwise. We also consider a bidirectional variable, *TradeDir* that equals 1 if the fund bought shares, 0 if the fund did not change its position, and -1 if the fund sold shares.

Using these variables, we run several tests to evaluate whether the positional changes for investors who meet are correlated. The first test utilizes the binomial method. For this test, each quarter we compute the *n* funds who held the stock at the start of the quarter, *m* funds who met with the company, *j* funds who increased their position in the stock, and *k* funds who both met and increased their position in the stock. Following this, the unconditional probability that an investor will increase his position that quarter is j / n. Under the null hypothesis that meeting the fund is uncorrelated with the direction of the position change, if we select *m* funds, the probability distribution for the number of funds that increased their position is given by a binomial distribution Bin(m, j/n). As a result, under the null hypothesis that funds who meet have the same chance of buying the stock as other funds, the cumulative distribution function for observing *k* increases given the population probability *q* is given by: Because both a very high cumulative distribution (lots funds who meet are buying) or a very low cumulative distribution (very few funds who meet are buying) are both rejections of the null, we are interested in the overall p-value. To obtain this, we take the minimum of $(\Pr(X \le k), \Pr(X > k))$, and multiply this by 2 to reflect the two-sided nature of the test. This corresponds to the overall *p*-value in that quarter for the null hypothesis that funds who meet are equally likely to increase their position. We compute this statistic for both the 'increase' position and 'decrease' position variables. After computing this statistic for each quarter, we aggregate the time series p-values (as described below).

The second method for obtaining the time-series of p-values is through regression analysis. For the univariate regression, the model is:

$$Increase [or Decrease or TradeDir] = a + b_1^*Meet + e$$
(4)

For the multivariate regression, we also include the additional controls as discussed in Section 4. In doing so, we are able to examine whether funds that met were more likely to trade in a given direction given the other attributes of the fund. This regression is:

 $Increase [or Decrease or Tradedir] = a + b_1^*Meet + b_1^*HedgeFund_{i,t} + b_2^*PensionFund_{i,t} + b_3^*Bank_{i,t} + b_{5-7}^*Asset_{2-4: i,t} + b_{8-9}^*Turnover_{2-3: i,t} + b_{10}^*FracCompany_{i,t} + b_{11}^*LDrivedist_{i,t} + b_{12}^*AssetMiss_{i,t} + b_{13}^*TurnoverMiss_{i,t} + b_{14}^*Date + e_{i,t}$ (5)

For both the univariate and multivariate regressions, we primarily focus on the p-value associated with the *t*-statistic on b_1 , the coefficient on *Meet*. Like the binomial test, the regression models create a time-series of p-values describing whether funds who meet with management are more likely to trade in a given direction.

After creating the time-series of *p*-values through the binomial or regression method, we aggregate these values into an overall test statistic. This is done by combining the *p*-values into a single test statistic as described in Maddala and Wu (1999). If we have *p*-values from *n* quarters, then $K = \sum_{i=1}^{n} -2 \ln p_i$ is distributed according to a Chi-Squared distribution with 2n

degrees of freedom. This is the overall test of significance for correlation of trades that we examine.

The results of these tests are presented in Table V. The magnitude and direction of the correlation varies from period to period, but the results show a consistent pattern that funds who meet are more likely to trade in a particular direction. For example, out of the 20 periods for the 'bidirectional' trade analysis, 9 are significant at a 10% level, 4 are significant at a 5% level, and 2 are significant at a 1% level. As discussed, these quarter by quarter *p*-values are aggregated to create one overall test statistic. In this example, the coefficient on *Meet* is directionally positive in 11 quarters and directionally negative in 9 quarters, indicating that there is considerable variation over time in whether meetings tend to increase or decrease stock purchases by funds.

Panels A and B present the results of these formal aggregated tests and the aggregated *p*-values. The values displayed are the *p*-values for the chi-squared test on the aggregate test-statistic. This value provides the overall probability of observing this much correlation in position changes by chance alone.

Overall, the results in Table V provide evidence that the trades of investors who attend meetings are significantly more correlated than those of investors who do not meet with management. Under the binomial test, the overall *p*-value is less than .01 for both increases and decreases in position. The univariate and multivariate *p*-values are similar, with *p*-values for *increase, decrease,* and *tradedir* specifications significant at the 1% level.

In terms of the economic magnitude, a meeting changes the overall probability of a fund increasing or decreasing its position by approximately 21% (for instance, if the base probability of a fund increasing its position in a particular quarter is 20%, funds that meet would have a 41% chance of an increase). This observation results from the average absolute value of the coefficient on *meet*, which is between 0.20 (univariate regression of *decrease* on *meet*) and 0.22 (univariate regression of *increase* on *meet*). When the overall trade direction variable is considered, the coefficient is 0.42. The larger coefficient here reflects the fact that in any given quarter, funds that meet will be simultaneously more likely to buy *and* less likely to sell, or vice versa (as opposed to just switching from buying to not changing position).

To explore the source of this correlation in trading behavior, we also examine several additional specifications in Panels B by fund type. In this setting, the regression is testing whether a particular type of investor (e.g. investment advisor) is more likely to have correlated trades relative to other funds. The results indicate that the correlation in trades among funds that meet is driven mainly by the hedge funds in the sample. They exhibit a correlation in trades that is significant at the 1% level in all specifications. By contrast, none of the other fund types show significant correlation in their trades. This result suggests that private meetings have a greater influence on certain types of investors. In this case, hedge funds, who are usually considered among the most informed investors, exhibit highly correlated trades, whereas other investors do not.

5.3 Informativeness of Trades

The results in section 5.2 suggest that meetings convey information to some investors, as evidenced by the increased tendency for investors who meet to conduct their trades in a more correlated fashion. If traders tend to trade in the same direction after meeting, it suggests that they view the information as being predictive for future returns. However, it is possible that information is conveyed through meetings, but this information does not actually improve future investment decisions. In this section, we seek to examine whether meetings offer investors the opportunity to make more informed trading decisions. To do so, we investigate the timing ability of investors who meet privately with management versus those who do not. Specifically, we examine whether and to what extent investors increase their position before periods of high returns and decrease their position before periods of low returns.

Our analysis of this issue examines the relationship between the percentage change in the investor's position and the next quarter's stock return for the firm. The regression is:

 $Fracchange_{i,t} = a + b_1^*Meet_{i,t} + b_2^*Return_{t+1} + b_3^*Meet^*Return_{t+} + b_4^*HedgeFund_{i,t} + b_5^*PensionFund_{i,t} + b_6^*Bank_{i,t} + b_7^*HedgeFund_{i,t}^*Return_{t+1} + b_8^*PensionFund_{i,t}^*Return_{t+1} + b_9^*Bank_{i,t}^*Return_{t+1} + b_{10-12}^*Asset_{2-4:i,t} + b_{13-15}^*Asset_{2-4:i,t}^*Return_{t+1} + b_{16-17}^*Turnover_{2-3:i,t} + b_{18-19}^*Turnover_{2-3:i,t}^*Return_{t+1} + b_{20}^*FracCompany_{i,t} + b_{21}^*FracCompany_{i,t}^*Return_{t+1} + b_{22}^*AssetMiss_{i,t}$

+ b_{23} *AssetMiss_{i,t}*Return_{t+1} + b_{24} *TurnoverMiss_{i,t} + b_{25} *TurnoverMiss_{i,t}*Return_{t+1} + b_{26} *AnyMeet_{i,t} + b_{27} *AnyMeet_{i,t}*Return_{t+1} + b_{28} *FracMeet_{i,t} + b_{29} *AnyMeet_{i,t}*Return_{t+1} + b_{30} *Date + e_i , (6)

The dependent variable, *fracchange*, is the percentage change in the fund's holdings from period *t*-1 to period *t*. The measure of timing ability for the average fund is the coefficient on *Return*_{*i*,*t*+1}. A positive coefficient would indicate that the average fund has positive timing ability, as they increase their position before positive returns and decrease their position before negative returns. The main variable of interest is the coefficient on *Meet***Return*_{*i*+1} – this indicates whether funds that meet in that particular quarter have better timing ability relative to other funds. A positive coefficient on this variable indicates that funds who meet in a given quarter are more likely to increase their positions before high returns and decrease their position before low returns, as compared to a fund with equivalent characteristics that did not meet that quarter.

The other controls (*HedgeFund*, *PensionFund*, *Bank*, *Asset*, etc.) capture the possibility that these characteristics may be associated with an overall trend in purchasing, while the interactions (*HedgeFund*Return* etc.) are included to capture the possibility that the control variables may be associated with better timing ability. New controls include *AnyMeet*, a dummy variable that equals one if the fund ever met with management, and *FracMeet*, the number of quarters that the fund met with management as a fraction of the number of quarters that the fund held the stock.

Table VI Panel A presents the results of these regressions. At a univariate level, the coefficient on *Meet*Ret*₁₊₁ is 3.572, and significant at the 1% level. The positive coefficient indicates that funds that meet have significantly better timing ability than other funds. Adding in fund controls and date fixed effects (column 4) reduces the effect to 2.622, still significant at the 1% level. The magnitude of the coefficient indicates that a one standard deviation increase in next quarter's returns is associated with a 19% increase in the size of the investor's position in the current quarter.

One identification concern is the possibility that investors who meet with management are more skilled along some fixed dimension that we are not measuring. In this regard, meetings with the management may be a sign of underlying skill of the investor, not information being conveyed in the meeting itself.

Columns 5 and 6 address this question. Funds that meet often may simply have better timing ability generally and the apparent effect of meetings would be picking up this effect. To test this, we include the controls for *AnyMeet* and *FracMeet*, as well as their interactions with *Return*. The addition of *AnyMeet*Return* tests whether funds that meet at some point have better overall timing ability as a group, and including this control means that the coefficient on *Meet*Return* measures whether meetings increase their timing ability relative to this base level. The addition of *FracMeet*Return* tests whether the effect is limited to funds that meet frequently with the fund, which may be also correlated with other fund characteristics.

Including these controls increases the coefficient on *Meet*Ret*₁₊₁ to 3.260, significant at the 5% level. In addition, the coefficient on *AnyMeet*Return*₁₊₁ is actually negative: -2.180, significant at a 10% level. The interpretation of this is that funds that meet only seem to have better timing ability in the quarters when they meet. In quarters where they do not meet (i.e. *Meet=*0 and *AnyMeet=*1), funds that have met at least once with the company appear to display directionally *worse* timing ability than funds that never met. While we do not seek to place strong emphasis on the negative sign as it is only weakly significant, this is compelling evidence that the results are not driven by funds who meet at any point simply being more skillful overall (i.e. that the *AnyMeet* coefficient is not in fact positive).

The second test we examine for whether meetings are proxying for fixed fund ability is even more stringent – we replace the fund-level controls with individual fund fixed effects and interactions of these fixed effects with *Return*_{*l*+1}. This has the effect of controlling for the fixed timing ability of every individual fund and measuring the overall increase in timing ability associated with meetings relative to that particular fund's base timing ability. Because this involves the addition of a large number of fixed effects, the statistical significance of the *Meet*Return*_{*l*+1} coefficient drops to the 10% level, but the coefficient itself is similar in magnitude, at 3.624. The fact that that funds that meet privately with management continue to show enhanced timing ability provides additional robust support that the effect is indeed a timeseries one related to funds who met in that particular quarter, rather than an omitted variable related to underlying investor skill.

While Table VI Panel A shows that the increase in timing ability associated with meetings does not seem to be a fixed attribute of the funds who meet, there are other alternative hypotheses that warrant investigation. One possibility is that funds have *time-varying* levels of information, and the meetings are a result of this information, not the cause. In such a case, funds might be meeting with the firm in order to confirm the validity of private information already in their possession. Such an explanation still implies that meetings are conveying some information, since the confirmation is itself a source of information. If the meetings conveyed literally no information, then one would need an alternative explanation for why the existing private information would make funds want to meet with the firm. Nonetheless, it is possible that the apparent information advantage associated with meetings is a function of the fund's endogenous choice of timing that coincides with existing private information.

While this possibility is hard to rule out entirely, we can shed some light on the issue by examining a set of meetings for which the potentially endogenous choice of timing is less likely to be a problem, namely conference meetings. Theoretically, either the firm or the fund could organize an in-house or road show meeting on a short time frame to take advantage of short-lived private information. For conferences, however, the timing of the conference itself is largely exogenous to both the firm and the fund. As a result, the fixed schedule of these meetings makes the fund's possession of short-lived private information less likely as a motivating reason to meet. To test whether this endogeneity of timing is driving our results, we repeat our analysis from Panel A using only conference meetings.

A second possibility that may be driving our results is that the valuable information in meetings comes from funds having the chance to meet with *each other*, rather than firm management. In this view, funds use the meetings as a chance to exchange private information with each other, improving their trades. If such meetings are value-producing, it is not clear what prevents the funds from talking to each other without the firm present, but nonetheless the chance to interact with other funds may be driving our results. One prediction of this hypothesis is that meetings should be more valuable when they allow a larger transfer of information between funds. To test this, we examine the impact of the number of funds who met on the same day. Meeting days that involve many funds should provide more opportunities for information transfer.

We test both these hypotheses in Table VI Panel B. In column (1), the regressions are similar to column (4) of Panel A, namely including all style and fund controls and date fixed effects. The only difference is that the *Meet* variable is replaced with *Conference*, a dummy variable for whether the fund attended a conference meeting that quarter. The coefficient on *Conference*Return* is 6.644, significant at a 1% level. Indeed, the coefficient is larger than the base effect of meetings in Panel A. The fact that a subset of meetings with largely exogenous timing displays, if anything, greater impacts on timing ability suggests that the main results are not being driven by funds choice of when to meet with the firm.

In column (2), the regressions are again similar to Panel A column (4), but with the addition of the variable *NumberAtMeeting*, which measures the number of funds who meet on the same day for each given meeting, and zero otherwise. This is included as an interaction with returns, namely *NumberAtMeeting *Return*. This measures whether the base effect of meetings on timing ability increases with the number of funds who met on the same day. The coefficient on *NumberAtMeeting *Return* is actually negative (-1.008, significant at a 5% level). Meetings on days when lots of funds meet appear somewhat less valuable, inconsistent with the hypothesis that the main value of meetings is to facilitate information transfer between funds.

5.4 Alternative Measures of the Informativeness of Meetings

The regressions in Table VI consider the impact of meetings on fund-level timing ability, using future stock returns as the independent variable and current trades as the dependent variable. This regression design allows us to control for a large number of potential factors that may drive timing ability. In Table VII, we examine a related question of informativeness, namely whether the aggregated information from the trades of funds that met with management predicts future stock returns. This ensures that our results are not driven by the choice of specification, or by potential outliers in the *fracchange* variable.

The dependent variable is the excess stock returns of the company in that given month. For independent variables, we examine the average value of *fracchange* from the most recent quarter. This is split into two parts – *AvgfracchangeMeet*, the average value of *fracchange* for funds who met during the quarter over which *fracchange is* measured, and *AvgfracchangeNoMeet*, the average of *fracchange* for funds who didn't meet. In an alternative specification, we use the dummy variable *AvgfracchangeMeetHigh* that equal one when the value of *AvgfracchangeMeet* is above its median and zero otherwise (and similarly for *AvgfracchangeNoMeet*), to ensure that the results are not driven by the distribution of the *fracchange* variable. Finally, the value-weighted market return (*MktRet*) is also included as a control.

These results are presented in Table VI. In Column (1), when the only independent variables are *AvgfracchangeMeet* and *MktRet*, the coefficient on *AvgfracchangeMeet* is 0.023, significant at the 5% level. A one standard deviation increase in *AvgfracchangeMeet* is 1.604, which is thus associated with an increase in stock returns of 3.7% during the next month. In column (2), *AvgfracchangeNoMeet* shows no similar predictive power for stock returns, nor does it change the impact of *AvgfracchangeMeet* when both are included in column (3).

In columns (4) through (6), the dummy versions of the variables are used instead. In column (4), (with *AvgfracchangeMeetHigh* and *MktRet*) the coefficient on *AvgfracchangeMeetHigh* is 0.066, significant at the 5% level. The intercept is roughly -0.04, meaning that months following low purchasing have returns of roughly -4%, and months following high purchasing have returns of roughly 3%. Again, controlling for the trades of funds who didn't meet does not affect the result, although in this specification the trades of funds who didn't meet with the company have marginally significant predictive power as well.

Finally, columns (7) to (9) repeat the same regressions as columns (1) to (3), but excluding months after June 2008. Because the financial crisis was an unusual period for market returns and volatility, we wish to make sure that the effects are not limited to the period of the crisis. Excluding this latter period does not reduce the effects – the coefficient on *AvgfracchangeMeet* is slightly higher than before, at 0.029, and significant at the 1% and 5% level in the two regressions. This suggests that the impact of meetings on timing ability is not driven by unusual returns during the financial crisis.

5.5 Informativeness of Trades by Fund Type

The results in Table V suggest that the correlation in trades appears driven only by the hedge funds in the sample. To examine this question further, we examine whether the increased informativeness of trades after meetings is also concentrated among hedge funds. The regressions are the same as those in section 5.3, except that *Meet*Return* is replaced by four variables corresponding to meetings held by each fund type (*InvestmentAdvisor*Meet*Return*, *HedgeFund*Meet*Return* etc.), and the simple *Meet* variable is also replaced by *InvestmentAdvisor*Meet* etc. In addition, the controls for *AnyMeet*, *FracMeet*, *AnyMeet*Return*, and *FracMeet*Return* are similarly replaced with interactions for each fund type: *AnyMeet*InvestmentAdvisor, AnyMeet*InvestmentAdvisor*Return*, etc.

The interpretation of these variables is that the overall meeting effect is split into four variables corresponding to meetings by each fund type, and the coefficient has the interpretation of whether meetings by that particular fund type are associated with increased timing ability over that fund type generally.

Table VIII presents these results. Consistent with Table V, the increase in timing ability due to meetings is driven mainly by hedge funds. The coefficient on *HedgeFund*Meet*Return*_{l+1} (i.e. the increased timing ability for meetings by hedge funds) is 5.809 and significant at a 1% level in column 1, which includes only fund type controls and interactions. Adding in all controls except *AnyMeet* and *FracMeet* interactions in column 3 (corresponding to column 4 in Table VI) results in a coefficient on *HedgeFund*Meet*Return*_{l+1} of 5.121, significant at a 5% level. As in Table VI, the effect again does not appear to be associated with a higher overall timing ability for hedge funds who meet, but instead better timing ability in periods after meeting. This is seen in column 4, where the addition of the *AnyMeet*HedgeFund* and *FracMeet*HedgeFund* interactions (along with interactions for other fund styles) results in a somewhat larger effect meetings on hedge fund timing ability, with the coefficient increasing to 6.133, significant at the 5% level.

In terms of the other fund types, investment advisors and pension funds show no significant increase in timing ability in any specification. Banks show a marginally significant increase in timing ability after meetings when only fund type controls are included, with the coefficient on *Bank*Meet*Return*¹⁺¹ being 3.053 and significant at a 10% level. However, this effect loses its significance as additional controls are added, and becomes smaller in size when the *AnyMeet*Bank* and *FracMeet*Bank* interactions are included.

As noted earlier, one significant difference between hedge funds and other types of funds is that hedge funds tend to be considered more informed. Another potential explanation for the difference in timing ability across fund types is that non-hedge funds face additional portfolio constraints that prevent them acting upon the information in private meetings. The correlated trades analysis in Table V is less likely to be affected by this concern, as that test considers only the direction of trade rather than the magnitude, and even relatively constrained funds are likely to be able to make some sort of trade in each direction. Nonetheless, we can test the portfolio constraint explanation more directly by examining empirically whether other fund types tend to make as large trades as hedge funds. If other types of funds are making trades as large as hedge funds, it becomes difficult to argue that the difference in timing ability after meetings is due to the inability to make large or aggressive trades.

To test whether different fund types make equivalently large trades, in Table IX we examine the level of volatility of the *fracchange* variable. We use two specifications. The first is to examine the same panel of fund by quarter holdings used in the main analysis, taking the dependent variable as the absolute value of *fracchange*. This variable is then regression on fund styles, turnover, assets, log distance, fraction of the firm held, and date fixed effects. The second method is to calculate the standard deviation of *fracchange* for each fund, and then regress this variable on the same set of independent variables (excluding date fixed effects, and taking the average value of the fraction of the firm held). In both cases, the variables of interest are the fund style fixed effects, and the omitted category is now hedge funds. Each style variable thus tests whether the volatility of *fracchange* for the other fund styles is significantly different from that of hedge funds.

The results indicate that pension funds have significantly less volatility in their trades, but that other styles do not show any significant effects. As a result, we cannot rule out the possibility that pension funds face constraints that prevent them from fully acting on the information revealed in meetings. By contrast, portfolio constraints do not seem to explain the difference in timing ability after meetings for investment advisors and banks.

5.6 Discussion

The analysis in sections 5.1 to 5.5 offers evidence consistent with meetings both conveying information and facilitating more informed trades. In addition, the effect of meetings on both trade correlation and trade informativeness are concentrated largely in hedge funds who meet with management. Hedge funds are often considered as being relatively sophisticated investors, and more likely to have skill than mutual funds or pension funds. If the increased trade correlation and informativeness is a sign of valuable information being conveyed, this raises the question of why these effects are not present for all funds.

Our results are consistent with two possible interpretations. The first is that investors are receiving the same information, but that the information is not equally valuable to all investors. Hedge funds may have more ability to parse out the meaning of ambiguous information conveyed by management, or the information conveyed may only be valuable in conjunction with other pieces of information that informed investors have. Meetings with management might convey the missing piece in the puzzle that helps informed investors understand the company's prospects, but may not be useful on its own to less sophisticated investors. This view would be consistent with the mosaic theory of investing.

An alternative hypothesis is that hedge funds are being told different and inherently more valuable information. Under this interpretation, management would need to disclose more valuable information to hedge funds than to other fund types.

While we cannot conclusively determine which explanation is true with the available empirical data, there are some anecdotal reasons to suggest that, at a minimum, disclosing more valuable material information to hedge funds is unlikely to be a *deliberate* policy by management. First, it seems improbable that the firm would be willing to provide us with their meetings data if they felt that they were deliberating disclosing information that would blatantly violate Reg-FD. This does not rule out the possibility that the firm inadvertently discloses such information, but it militates against the possibility of management having a quidpro-quo arrangement with hedge funds to disclose valuable material information.

Second, if firm management were to choose a favored group of investors to give private information to, it is not clear that hedge funds would be the natural group for them to reward. The anecdotal reasons for the company's willingness to hold such meetings center around a desire to build relationships with the company's long term investors and large block holders. To the extent that hedge funds tend to have high turnover and a short-term focus, they are not the most obvious group to receive preferential treatment from management.

Given this, our results seem to be most appropriately interpreted as implying either that hedge funds are better able to utilize the information conveyed during private meetings or alternatively that they are better able to extract useful information from management, such as by asking better questions.

6. Conclusion

Private meetings between executives and investors consume a significant amount of managerial time and offer investors a potentially unique window into a firm's operations. We find that certain types of investors are more likely to privately meet with management including those with more assets, greater turnover, closer physical proximity to the firm, and greater holdings of the firm. We also find that hedge funds are also more likely to meet with management. These findings are consistent with the incentives of both sell-side analysts (who arrange meetings for investors that offer the greatest revenue opportunities for the sell-side analysts' firm) and investors who have the most to gain from meetings with management.

We also examine whether private meetings convey information to investors and whether this information is useful for making more informed investment decisions. We find that investors who meet with management trade in a more correlated fashion. We also find evidence that investors who meet with management make more informed trades by increasing the size of their position before periods of high returns and reducing their position before periods of low returns. In addition, the increases in both correlation and timing ability are concentrated among hedge funds and are not evident for mutual funds or pension funds. Our results are based on detailed records from a mid-cap NYSE traded firm. However, the results relating to the differences in effects across funds rely on the larger cross-section of funds. Our findings align with the incentives of the parties involved, mitigating some concern that our firm is unusual. Although we provide survey evidence from several institutions to understand similarities and differences in the meeting behavior between our firm and others, future research that could gain access to additional data would prove fruitful to reexamine our analysis and results in a larger sample.

The spirit underlying Reg FD might suggest that meetings would not convey information useful for making more informed trading decisions. However, evidence suggests that collecting nonmaterial nonpublic information is quite common. For example, a recent *New York Times* piece described one major hedge fund as being "known for relentlessly pressing sources for information about companies in the hopes of building what they call a 'mosaic' to gain an information edge" (*New York Times*, Dealbook). Our analysis is consistent with this idea of a 'mosaic theory' of investing.

Our analysis on the consequences of meetings focuses on the issue from the perspective of an investor. Another angle that deserves additional examination is the consequences for management. A recent paper on how chief executives spend their time (Bandiera et al. (2011)) suggests that time spent with outsiders (including investors) is on average less beneficial for the firm. This is in contrast to survey evidence which suggests that executives meet with investors because of its perceived benefits for the firm. Future research addressing the implications of spending more or less time with outside stakeholders, like investors, would prove useful in better understanding whether such interactions are beneficial for the firm.

REFERENCES

Agarwal, Vikas, Naveen D. Daniel, and Narayan Y. Naik, 2010, "Do Hedge Funds Manage Their Reported Returns?", *Review of Financial Studies*, Forthcoming.

Asness, Clifford S., Robert Krail, and John M. Liew, 2001, "Do Hedge Funds Hedge?: Be Cautious in Analyzing Monthly Returns," *Journal of Portfolio Management*, 28, 6–19.

Bailey, Warren, Haitao Li, Connie X. Mao and Rui Zhong, 2003, "Regulation Fair Disclosure and Earnings Information: Market, Analyst, and Corporate Responses," *Journal of Finance*, 58, 2487-2514.

Bamber, Linda Smith, One E. Barron, and Thomas L. Stober, 1999, "Differential Interpretations and Trading Volume," *Journal of Financial and Quantitative Analysis*, 34, 369-386.

Bandiera, Oriana, Luigi Guiso, Andrea Prat, and Rafaella Sadun, 2011, "What Do CEOs Do?" Harvard Business School Working Paper, No. 11-081.

Bebchuck, Lucian A., and Michael S. Weisbach, 2010, "The State of Corporate Governance Research," *The Review of Financial Studies*, 23, 939-961.

Bollen, Nicholas P.B., and Veronika Krepley Pool, 2008, "Conditional Return Smoothing in the Hedge Fund Industry," *Journal of Financial and Quantitative Analysis* 43, 267-298.

BNY Mellon, "Global Trends in Investor Relations A Survey Analysis of IR Practices Worldwide", 6th ed., 2010.

Brown, Stephen J., William N. Goetzmann, and Roger G. Ibbotson, 1999. "Offshore hedge funds: survival and performance 1989-95", *Journal of Business* 72, 91–117.

Bushee, Brian, Michael Jung, and Greg Miller, 2010, "Conference Presentations and Selective Access to Disclosure," Working Paper.

Bushee, Brian, Michael Jung, and Greg Miller, 2011, "Do Investors Benefit from Selective Access to Management," Working Paper.

Carhart, Mark, 1997, "On Persistence in Mutual Fund Performance", Journal of Finance 52, 57-82.

CFA Institute, 2011 Level 1 CFA Program Information, 2011.

Cohen, Lauren, Andrea Frazzini, and Christopher J. Malloy, 2008, "The Small World of Investing: Board Connections and Mutual Fund Returns," *Journal of Political Economy* 116, 951-979.

Cohen, Lauren, Andrea Frazzini, and Christopher J. Malloy, 2010, "Sell-Side School Ties." *Journal of Finance*, 65, 1409-1437.

Coval, Joshua D., and Tobias J. Moskowitz, 1999, "Home bias at home: Local equity preference in domestic portfolios", *Journal of Finance* 54, 2045–2073.

Coval, Joshua D., and Tobias J. Moskowitz, 2001, "The geography of investment: Informed trading and asset prices", *Journal of Political Economy* 4, 811–841.

Cross Borders, Global Survey on Roadshow Practices, 2010.

Deuskar, Prachi, Joshua M. Pollet, Z. Jay Wang and Lu Zheng, 2011, "The Good or the Bad: Which Mutual Fund Managers Join Hedge Funds?", *Review of Financial Studies* 24, 3008-3024.

Fama, Eugene F. and Kenneth R. French, 2010, "Luck versus Skill in the Cross-Section of Mutual Fund Returns", *Journal of Finance* 65, 1915–1947.

Fung, William, and David A. Hsieh, 2000, "Performance Characteristics of Hedge Funds and Commodity Funds: Natural vs. Spurious Biases," *Journal of Financial and Quantitative Analysis* 35, 291-307.

Fung, William, and David A. Hsieh, 2001, "The Risk in Hedge Fund Strategies: Theory and Evidence from Trend Followers," *Review of Financial Studies* 14, 313-341.

Griffin, John M., and Jin Xu, 2009, "How Smart Are the Smart Guys? A Unique View from Hedge Fund Stock Holdings," *Review of Financial Studies* 22, 2531-2570.

Groysberg, Boris, Paul M. Healy, and David A. Maber, 2011, "What Drives Sell-Side Analyst Compensation at High-Status Investment Banks?", *Journal of Accounting and Research*, forthcoming.

Hirshleifer, David and Siew Hong Teoh, 2009, "Thought and Behavior Contagion in Capital Markets," *Handbook of Financial Markets: Dynamics and Evolution*, Handbooks in Finance series (William Ziemba, ed.), Elsevier/North-Holland, 1-56.

Hobson, Jessen L., William J. Mayew, and Mohan Venkatachalam, 2012, "Analyzing Speech to Detect Financial Misreporting", *Journal of Accounting Research* 50, 349-392.

Hong, Harrison, and Jeremy C. Stein, 2007, "Disagreement and the Stock Market," *Journal of Economic Perspectives* 21, 109-128.

Hong, Harrison, Jeffrey Kubik, and Jeremy Stein., 2005, "Thy Neighbor's Portfolio: Word-of-Mouth Effects in the Holdings and Trades of Money Managers", *Journal of Finance* 55, 2801–2824.

Ibbotson, Roger G., Peng Chen, and Kevin X. Zhu, 2011, "The ABCs of hedge funds: alphas, betas, and costs", *Financial Analysts Journal* 67, 15-25.

Kosowski, Robert, Narayn Y. Naik and Melvyn Teo, 2007, "Do hedge funds deliver alpha? A Bayesian and bootstrap analysis", *Journal of Financial Economics* 84, 229 - 264.

Lattman, Peter, and Andrew Ross Sorkin, 2011, "A Titan Under a Microscope," *New York Times*, May 7, 2011.

Liang, Bing, 2000, "Hedge Funds: The Living and the Dead," *Journal of Financial and Quantitative Analysis*, 35, 309–326.

Liang, Bing, 2003, "The Accuracy of Hedge Fund Returns: Auditing Makes a Real Difference," *Journal of Portfolio Management*, 29, 111–122.

Maddala, G.S, and Shaowen Wu, 1999, "A Comparative Study of Unit Root Tests with Panel Data and a New Simple Test," *Oxford Bulletin of Economics and Statistics*, 631-652.

Odean, Terrence, 1998, "Do Investors Trade Too Much?", American Economic Review 89, 1279-1298.

Rotterdam School of Management, 2011, RSM Global Analyst and Investor Survey.

Thomson Reuters, 2009, IR Best Practices Executive Summary.

Figure I - Number of Meetings per Investor

The histogram shows the number of meetings (i.e. conferences, in-house, and road shows) that each investor attends over our sample period from November 2004 until March 2010.



Figure II - Number of Meetings per Month

The histogram shows the number of meetings (i.e. conferences, in-house, and road shows) in each month of the sample period from November 2004 until March 2010.



Table I - Descriptive Statistics

Panel A: Variables

The table displays summary statistics for the variables used in the regression analysis. Investor assets refers to the value of equity assets (in millions) at the end of 2009 from Thomson One Banker. Distance is the number of miles from the zip code of the firm's headquarters to the zip code of the investor's headquarters. Turnover (med/high) is a dummy variable showing whether the firm has medium or high turnover on Thomson Banker. Fraction firm is the fraction of the firm held by the investor. Meet is a dummy variable showing whether the firm met during the quarter. Trade is a dummy variable showing whether the firm traded during the quarter. Fraction change is the percentage change in the investor's position of the firm over a quarter winsorized at the 0.5% level in each tail.

| _ | Mean | Standard Dev | Q1 | Median | Q3 |
|------------------|--------|--------------|-------|--------|--------|
| Assets (M) | 26,893 | 70,745 | 649 | 4,656 | 23,701 |
| Distance (miles) | 815 | 777 | 298 | 470 | 1053 |
| Turnover (med) | 0.30 | 0.46 | 0 | 0 | 1 |
| Turnover (high) | 0.21 | 0.41 | 0 | 0 | 0 |
| Fraction firm | 0.005 | 0.013 | 0.000 | 0.001 | 0.003 |
| Meet | 0.06 | 0.23 | 0.00 | 0.00 | 0.00 |
| Trade | 0.91 | 0.29 | 1.00 | 1.00 | 1.00 |
| Fraction change | 0.43 | 4.47 | -0.68 | -0.03 | 0.06 |

Panel B: Correlation Matrix

The table shows the correlation of variable used in the analysis. A '*' indicates statistical significance at the 5% level. See Panel A for variable definitions.

| | Assets (M) | Distance (miles) | Turnover (med) | Turnover (high) | Fraction firm | Meet | Trade | Fraction change |
|------------------|------------|---------------------|-------------------|--------------------|---------------|---------|----------|--------------------|
| Assets (M) | 1.0000 | | | | | | | |
| Distance (miles) | -0.1123* | 1.0000 | | | | | | |
| Turnover (med) | 0.0498* | -0.0827* | 1.0000 | | | | | |
| Turnover (high) | -0.3476* | -0.0900* | -0.4263* | 1.0000 | | | | |
| Fraction firm | 0.4495* | -0.0603* | 0.0530* | -0.2076* | 1.0000 | | | |
| Meet | 0.0865* | -0.1049* | 0.0251 | 0.0471* | 0.1734* | 1.0000 | | |
| Trade | 0.1051* | -0.0946* | 0.0797* | 0.0367* | 0.0977* | 0.0621* | 1.0000 | |
| Fraction change | 0.1981* | 0.0194 | 0.0223 | -0.1637* | 0.5516* | 0.0262 | -0.1118* | 1.0000 |

Table II - Meetings Statistics

The table displays summary statistics for different venues – meetings held at public conferences ('Conference'), meetings held at the investor's offices ('Road show') and meetings held at the firm's headquarters ('In-House'). A meeting is the individual interaction between the investor and the firm on a given day. An event refers to any day where a meeting occurs, so that there may be multiple meetings in a given event (i.e. multiple investors meet with the firm on a given day).

| Event Type | % of Events | % of Meetings | | | |
|------------|-------------|---------------|-------------------|--------|----|
| Conference | 64% | 64% | | | |
| Road-Show | 23% | 21% | | | |
| In-House | 13% | 15% | | | |
| | | | | | |
| | | <u># M</u> | eetings per E | vent | |
| Event Type | Mean | Std | Q1 | Median | Q3 |
| Conference | 13 | 8 | 7 | 12 | 17 |
| Road-Show | 12 | 9 | 6 | 12 | 17 |
| In-House | 15 | 11 | 6 | 14 | 22 |
| | | | | | |
| | | Likelihood of | <u>Attendance</u> | | |
| Event Type | CEO | CFO | COO | IRO | |
| Conference | 0.93 | 0.51 | 0.04 | 0.96 | |
| Road-Show | 1 | 0.63 | 0.06 | 1 | |
| In-House | 1 | 0.89 | 0.56 | 1 | |

Table III - Access to Management

This table examines the determinants of which investors meet with managers at what location. Observations are by fund and quarter for all investors who held shares in the company in that quarter, from November 2004 until March 2010. In Panel A, the dependent variable is Meet, a dummy variable that equals one if the fund met privately with the firm that guarter. In Panel B, the dependent variables are dummy variables for conference meetings, in-house meetings, and roadshow meetings, respectively. In Panel C, the dependent variables are dummy variables for whether the fund met with the Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Operating Officer (COO) and Investor Relations Officer (IRO), respectively. Hedge fund, pension fund, and bank are dummy variables (1/0) for each fund type. 'Turnover (med)' and 'Turnover (high)' are dummy variables for the fund's turnover, as classified by Thomson One Banker. Asset Quartile variables are dummy variables for quarterlies of the fund's assets at the end of 2009, with quartile 4 being the largest 25%. Fraction Firm is the fund's number of shares in the company divided by the number of shares outstanding. Log distance is the log of the distance between the fund's zip code and the firm headquarters zip code. Turnover (miss) and Asset (miss) are dummy variables that equal one if turnover and asset information (respectively) are missing. All regressions are probit models and standard errors clustered by firm and quarter are shown in parentheses below the coefficients. *,**,*** indicate statistical significance at the 10%. 5%, and 1% level. 1 A. Mastin a Determinant

| Panel A: Meeting Determinants | | | | | | | | | | |
|-------------------------------|-----------|-----------|-----------|-----------|--|--|--|--|--|--|
| | (1) | (2) | (3) | (4) | | | | | | |
| - | meet | meet | meet | meet | | | | | | |
| hedge fund | 0.306** | 0.319** | 0.242* | 0.346*** | | | | | | |
| | (0.130) | (0.124) | (0.124) | (0.132) | | | | | | |
| pension fund | -0.260 | -0.0462 | -0.0582 | 0.0305 | | | | | | |
| | (0.303) | (0.300) | (0.310) | (0.331) | | | | | | |
| bank | 0.119 | 0.194 | -0.145 | -0.105 | | | | | | |
| | (0.208) | (0.226) | (0.253) | (0.282) | | | | | | |
| turnover (med) | | 0.417*** | 0.498*** | 0.520*** | | | | | | |
| | | (0.153) | (0.160) | (0.178) | | | | | | |
| turnover (high) | | 0.543*** | 0.598*** | 0.555** | | | | | | |
| | | (0.198) | (0.212) | (0.234) | | | | | | |
| asset quartile 2 | | -0.0361 | 0.0365 | 0.000682 | | | | | | |
| | | (0.186) | (0.182) | (0.203) | | | | | | |
| asset quartile 3 | | -0.164 | -0.181 | -0.210 | | | | | | |
| - | | (0.185) | (0.190) | (0.213) | | | | | | |
| asset quartile 4 | | 0.234 | 0.209 | 0.204 | | | | | | |
| _ | | (0.180) | (0.188) | (0.211) | | | | | | |
| fraction firm | | 22.20*** | 21.19*** | 25.29*** | | | | | | |
| | | (2.683) | (2.595) | (3.429) | | | | | | |
| log distance | | | -0.203*** | -0.201** | | | | | | |
| | | | (0.0789) | (0.0911) | | | | | | |
| turnover (miss) | | -0.454 | -0.152 | -0.181 | | | | | | |
| | | (0.524) | (0.487) | (0.563) | | | | | | |
| asset (miss) | | 0.507 | 0.800** | 0.921** | | | | | | |
| | | (0.460) | (0.373) | (0.451) | | | | | | |
| constant | -1.828*** | -2.401*** | -1.075* | -5.933*** | | | | | | |
| | (0.128) | (0.194) | (0.600) | (0.806) | | | | | | |
| Date Fixed Effects | No | No | No | Yes | | | | | | |
| # Observations | 5,431 | 5,431 | 4,106 | 3,666 | | | | | | |
| R^2 | 0.02 | 0.14 | 0.14 | 0.23 | | | | | | |

| | (1) | (2) | (3) |
|--------------------|------------|-----------|-----------|
| | conference | roadshow | inhouse |
| hedge fund | 0.196 | 0.427*** | 0.433*** |
| | (0.147) | (0.159) | (0.148) |
| pension fund | -0.0346 | - | 0.610 |
| | (0.310) | | (0.469) |
| bank | -0.0473 | -0.234 | -0.0625 |
| | (0.278) | (0.320) | (0.400) |
| turnover (med) | 0.535*** | 0.420** | 0.470** |
| | (0.197) | (0.191) | (0.214) |
| turnover (high) | 0.525** | 0.452* | 0.593** |
| | (0.233) | (0.272) | (0.240) |
| asset quartile 2 | 0.0224 | 0.0977 | -0.172 |
| | (0.226) | (0.279) | (0.337) |
| asset quartile 3 | -0.134 | 0.0684 | -0.738* |
| | (0.216) | (0.307) | (0.440) |
| asset quartile 4 | 0.268 | 0.241 | -0.127 |
| | (0.188) | (0.262) | (0.229) |
| log distance | -0.164** | -0.0364 | -0.549*** |
| | (0.0710) | (0.139) | (0.155) |
| fraction firm | 23.16*** | 23.70*** | 15.88*** |
| | (3.116) | (2.828) | (4.425) |
| turnover (miss) | 0.0607 | -0.581 | -0.0728 |
| | (0.548) | (0.571) | (0.707) |
| asset (miss) | 0.572 | 1.575*** | 0.00645 |
| | (0.407) | (0.295) | (0.602) |
| constant | -6.060*** | -7.110*** | -3.212*** |
| | (0.684) | (1.128) | (1.014) |
| Date Fixed Effects | Yes | Yes | Yes |
| # Observations | 2,830 | 1,740 | 1,145 |
| \mathbb{R}^2 | 0.21 | 0.21 | 0.20 |

Panel B: Venue Determinants.

| | (1) | (2) | (3) | (4) |
|--------------------|-----------|-----------|-----------|-----------|
| | CEO | CFO | COO | IRO |
| hedge fund | 0.391*** | 0.402*** | 0.113 | 0.353*** |
| | (0.122) | (0.148) | (0.344) | (0.130) |
| pension fund | 0.0788 | -0.0261 | 0.224 | 0.0604 |
| | (0.325) | (0.329) | (0.554) | (0.331) |
| bank | -0.0799 | -0.0808 | 0.287 | -0.144 |
| | (0.282) | (0.295) | (0.257) | (0.267) |
| turnover (med) | 0.491*** | 0.537*** | 0.426 | 0.552*** |
| | (0.170) | (0.150) | (0.299) | (0.177) |
| turnover (high) | 0.512** | 0.533** | 0.343 | 0.590** |
| | (0.228) | (0.216) | (0.319) | (0.232) |
| asset quartile 2 | -0.0183 | -0.110 | -0.00732 | -0.0231 |
| | (0.198) | (0.224) | (0.383) | (0.205) |
| asset quartile 3 | -0.287 | -0.161 | -0.706* | -0.204 |
| | (0.203) | (0.241) | (0.428) | (0.214) |
| asset quartile 4 | 0.174 | 0.169 | -0.475 | 0.197 |
| | (0.206) | (0.186) | (0.350) | (0.214) |
| log distance | -0.186** | -0.273*** | -0.568*** | -0.194** |
| | (0.092) | (0.100) | (0.211) | (0.092) |
| fraction firm | 25.14*** | 18.82*** | 18.34*** | 25.22*** |
| | (3.419) | (2.912) | (5.608) | (3.514) |
| turnover (miss) | -0.196 | -0.651* | ? | -0.143 |
| | (0.559) | (0.341) | | (0.554) |
| asset (miss) | 0.903** | 1.019*** | 2.164*** | 0.930** |
| | (0.443) | (0.249) | (0.171) | (0.442) |
| constant | -5.991*** | -4.968*** | -3.612*** | -5.970*** |
| | (0.806) | (0.724) | (1.293) | (0.810) |
| Date Fixed Effects | Yes | Yes | Yes | Yes |
| # Observations | 3,666 | 3,060 | 994 | 3,666 |
| \mathbb{R}^2 | 0.22 | 0.19 | 0.27 | 0.23 |

Panel C: Senior Management Determinants

Table IV - The Likelihood of Trading

This table examines the likelihood of an investor trading in the firm's security. Observations are by fund and quarter for all investors who held shares in the company in that quarter, from November 2004 until March 2010. The dependent variable is *Trade*, a dummy variable that equals one if the fund traded the firm's shares that quarter. The main independent variable is *Meet*, a dummy variable that equals one if the fund met privately with the firm that quarter. Controls include variables for fund type (*Hedge fund, pension fund,* and *bank*), the level of fund turnover (*'Turnover (med)'* and *'Turnover (high),'* with *Turnover (miss)* being for missing data), fund size (*Asset Quartile variables* and *Asset (miss)*), the size of the fund's holdings (*Fraction Firm*), and the distance between the fund and the firm (*Log distance*). All regressions are probit models and standard errors clustered by firm and quarter are shown in parentheses below the coefficients. *,**,*** indicate statistical significance at the 10%. 5%, and 1% level.

| | (1) | (2) | (3) | (4) |
|--------------------|----------|----------|-----------|-----------|
| | trade | trade | trade | trade |
| meet | 0.728*** | 0.627*** | 0.388* | 0.402* |
| | (0.184) | (0.192) | (0.206) | (0.213) |
| hedge fund | | 0.380*** | 0.266** | 0.268** |
| | | (0.109) | (0.129) | (0.130) |
| pension fund | | -0.471** | -0.586*** | -0.588*** |
| | | (0.211) | (0.219) | (0.222) |
| bank | | 0.244 | 0.222 | 0.247 |
| | | (0.176) | (0.235) | (0.235) |
| turnover (med) | | | 0.362** | 0.373*** |
| | | | (0.143) | (0.143) |
| turnover (high) | | | 0.419** | 0.411** |
| | | | (0.172) | (0.174) |
| asset quartile 2 | | | -0.0912 | -0.106 |
| | | | (0.183) | (0.183) |
| asset quartile 3 | | | 0.178 | 0.172 |
| | | | (0.180) | (0.179) |
| asset quartile 4 | | | 0.437** | 0.447** |
| | | | (0.192) | (0.191) |
| log distance | | | -0.108 | -0.112 |
| | | | (0.069) | (0.070) |
| fraction firm | | | 13.96 | 14.58 |
| | | | (9.797) | (9.982) |
| turnover (miss) | | | 0.171 | 0.143 |
| | | | (0.225) | (0.233) |
| asset (miss) | | | -0.0493 | -0.0305 |
| | | | (0.326) | (0.340) |
| constant | 1.302*** | 1.231*** | 1.598*** | 1.561*** |
| | (0.060) | (0.078) | (0.504) | (0.550) |
| Date Fixed Effects | No | No | No | Yes |
| # Observations | 5,431 | 5,431 | 4,106 | 4,106 |
| R^2 | 0.01 | 0.04 | 0.09 | 0.11 |

Table V - Correlated Trading Analysis

This table examines the correlation among trades made by investors who meet and do not meet with management. In the first stage, regressions are run separately for each quarter to determine the association between the meeting with the firm and the direction of trade. The dependent variable is either a dummy variable for whether the fund increased its position (the 'Increase' columns), decreased its position (the 'Decrease' columns), or a bi-directional variable that equals 1 for increases, -1 for decreases, and 0 for no trades. The independent variable is *Meet*, a dummy for whether the fund met with the firm that quarter. 'Binomial' uses the binomial test to determine the probability of meetings being unrelated to trade direction, 'Univariate' uses univariate regressions of trade direction on the *Meet* variable, and 'Multivariate' includes controls for fund type, asset size, turnover, position size, and distance from the firm in the cross-sectional regressions. From these cross-sectional regressions, the average of the absolute value of the coefficient on *Meet* is reported in the *Abs. Coeff'* column. In the second stage, the individual *p*-values on the *Meet* coefficient from each cross-sectional regression are aggregated into a single overall test-statistic, $K = \sum_{i=1}^{n} -2 \ln p_i$ using the

Madalla and Wu (1999) test. This is tested against a Chi-Squared distribution with 2*n* with 2*n* degrees of freedom. The test statistic and the overall *p*-value associated with the test statistic are reported in the 'Test Statistic' and '*p*-value' columns. See section 5.2 for more details. Panel A considers the effect of meetings for all funds. Panel B considers the effect of meetings for each fund type separately.

| | | Increase | | | Decrease | | | Increase/Decrease | |
|---------------------------------------|-----------|----------|-------|-----------|----------|-------|-----------|-------------------|-------|
| | Test | | Abs. | Test | | Abs. | Test | | Abs. |
| Model | Statistic | p-value | Coeff | Statistic | p-value | Coeff | Statistic | p-value | Coeff |
| <u>Panel A: Meet Binary</u> | | | | | | | | | |
| Meet(Binomial Test) | 72.64 | 0.001 | - | 67.53 | 0.004 | - | - | - | - |
| Meet (Univariate) | 73.93 | 0.001 | 0.22 | 65.74 | 0.006 | 0.20 | 72.03 | 0.001 | 0.42 |
| Meet(Multivariate) | 65.19 | 0.007 | 0.21 | 62.39 | 0.013 | 0.21 | 67.78 | 0.004 | 0.42 |
| Panel B: By Investor Type | | | | | | | | | |
| Meet Investment Advisor(Multivariate) | 44.74 | 0.210 | 0.33 | 40.52 | 0.360 | 0.30 | 44.02 | 0.232 | 0.63 |
| Meet Hedge Fund(Multivariate) | 62.09 | 0.008 | 0.30 | 66.42 | 0.003 | 0.32 | 68.16 | 0.002 | 0.61 |
| Meet Pension Fund(Multivariate) | 16.50 | 0.284 | 0.50 | 12.56 | 0.561 | 0.39 | 15.32 | 0.357 | 0.89 |
| Meet Bank (Multivariate) | 18.22 | 0.573 | 0.36 | 18.96 | 0.525 | 0.38 | 19.53 | 0.488 | 0.74 |

Table VI - Informativeness of Trades

This table examines the relationship between meeting and fund timing ability. Panel A examines whether the meetings are associated with better timing ability. The dependent variable is *fracchange*, the percent change in the fund's holding this quarter. *Return* is the return of the stock in the next quarter, a measure of average timing ability. The main independent variable is *Meet*Return*, the interaction of next quarter's stock returns with a dummy for whether the investor met with management during the quarter. *Any Meeting* is a dummy variable that equals one if the fund met with the firm any time during the sample. *Fraction Meeting* is the number of quarters where the fund met with the company, divided by the number of quarters where the fund held the stock. Panel B examines whether the effect of meetings on timing ability varies for conference meetings, or according to the number of investors who meet on the same day. The regressions are similar to Panel A. *Conference* is a dummy variable that equals one if fund attended a conference meeting with the firm that quarter, and zero otherwise. *Number At Meeting* is the number of funds that met on the same day as the fund (and equals zero if the fund did not meet that quarter). See Table I for other variable definitions. All regressions are OLS models and standard errors clustered by firm and quarter are shown in parentheses below the coefficients. ***,**,**** indicate statistical significance at the 10%. 5%, and 1% level.

| Panel A - The Effect of Meetings on Trade Informativeness | | | | | | | | |
|-----------------------------------------------------------|------------|------------|------------|------------|------------|------------|--|--|
| | (1) | (2) | (3) | (4) | (5) | (6) | | |
| | fracchange | fracchange | fracchange | fracchange | fracchange | fracchange | | |
| return | 0.0522 | -2.733 | -2.593 | -2.980 | -3.274 | -6.818 | | |
| | (0.132) | (2.949) | (3.090) | (3.264) | (3.520) | (4.602) | | |
| meet*return | 3.572*** | 3.138*** | 2.981*** | 2.622*** | 3.260** | 3.624* | | |
| | (1.028) | (0.761) | (0.840) | (0.920) | (1.571) | (2.160) | | |
| fraction firm * return | | 32.64 | 33.45 | 36.52 | 44.66 | 125.6 | | |
| | | (24.06) | (26.54) | (27.25) | (30.24) | (78.78) | | |
| turnover (med) * return | | 1.038* | 1.001* | 1.032* | 1.370* | | | |
| | | (0.626) | (0.604) | (0.610) | (0.755) | | | |
| turnover (high) * return | | -0.0948 | -0.382 | -0.521 | -0.415 | | | |
| | | (1.023) | (1.142) | (1.187) | (1.114) | | | |
| log distance * return | | 0.331 | 0.267 | 0.249 | 0.285 | | | |
| | | (0.414) | (0.414) | (0.424) | (0.453) | | | |
| asset quartile 2 * return | | 0.457 | 0.475 | 0.452 | 0.418 | | | |
| | | (0.682) | (0.720) | (0.717) | (0.735) | | | |
| asset quartile 3 * return | | -0.218 | -0.175 | -0.219 | -0.114 | | | |
| - | | (0.532) | (0.523) | (0.547) | (0.578) | | | |
| asset quartile 4 * return | | -0.289 | -0.281 | -0.308 | 0.174 | | | |
| - | | (0.861) | (0.892) | (0.868) | (0.838) | | | |
| turnover (miss) * return | | -2.528*** | -2.747*** | -2.826*** | -2.622*** | | | |
| | | (0.825) | (0.353) | (0.628) | (0.978) | | | |
| asset (miss) * return | | 4.718* | 4.715** | 4.847** | 5.182** | | | |
| | | (2.442) | (2.276) | (2.389) | (2.498) | | | |
| hedge fund * return | | | 0.929 | 0.939 | 0.959 | | | |
| 0 | | | (0.638) | (0.659) | (0.663) | | | |
| pension fund * return | | | 0.360 | 0.461 | 0.262 | | | |
| 1 | | | (0.724) | (0.738) | (0.669) | | | |
| bank * return | | | -1.166 | -1.169 | -1.279 | | | |
| | | | (1.408) | (1.437) | (1.474) | | | |
| other style * return | | | 1.491** | 1.384* | 0.955 | | | |
| | | | (0.686) | (0.731) | (0.623) | | | |
| any meeting * return | | | | | -2.180* | | | |
| | | | | | (1.314) | | | |
| fraction meeting * return | | | | | 2.742 | | | |
| 0 | | | | | (3.019) | | | |
| Turnover, Distance, Asset, | | | | | · · · | | | |
| Fraction Firm | No | Yes | Yes | Yes | Yes | No | | |
| Meet | Yes | Yes | Yes | Yes | Yes | Yes | | |
| Style Control | No | No | Yes | Yes | Yes | No | | |
| Date FE | No | No | No | Yes | Yes | Yes | | |
| Fund FE, Fund FE * Return | No | No | No | No | No | Yes | | |
| # Observations | 4,468 | 3,420 | 3,420 | 3,420 | 3,420 | 4,468 | | |
| R ² | .01 | .01 | .02 | .02 | .03 | .19 | | |

Table VI - Informativeness of Trades

| Panel B - The effect of conferences and meeting size | | | | | | | |
|------------------------------------------------------|------------|------------|--|--|--|--|--|
| | (1) | (2) | | | | | |
| | fracchange | fracchange | | | | | |
| return | -2.936 | -3.023 | | | | | |
| | (3.28) | (3.23) | | | | | |
| conference*return | 6.644*** | | | | | | |
| | (1.42) | | | | | | |
| meet*return | | 7.443*** | | | | | |
| | | (2.50) | | | | | |
| number at meeting*return | | -1.008** | | | | | |
| | | (0.45) | | | | | |
| Style, Turnover, Distance, Asset, | | | | | | | |
| Fraction Firm | Yes | Yes | | | | | |
| (Style, Turnover, Distance, Asset, | | | | | | | |
| Fraction Firm)*return | Yes | Yes | | | | | |
| Meet | No | Yes | | | | | |
| number at meeting | No | Yes | | | | | |
| Conference | Yes | No | | | | | |
| Date FE | Yes | Yes | | | | | |
| # Observations | 3420 | 3,420 | | | | | |
| R ² | 0.027 | .01 | | | | | |

Table VI - Informativeness of Trades

Table VII - Alternative Measures of the Informativeness of Trades

This table examines the extent to which the trades of funds who met with management are able to predict future company stock returns. The dependent variable is the monthly excess returns of the stock, from November 2004 to March 2010. The independent variable considers the average across funds of the percent change in holdings between the most recent reporting date and the quarter prior. This average percent change is taken for funds that met during the quarter of trades (*Avg fracchange. of meeting funds*), and funds that did not. (*Avg fracchange. of non-meeting funds*). A second dummy version takes a value of 1 when the average percent change of funds who met is above its historical median, and zero otherwise (and similarly for funds that didn't meet). The value weighted market returns in the same month as the returns are also included as a control. Columns (7) through (9) exclude all returns after June 2008. All regressions are OLS models and standard errors are shown in parentheses below the coefficients. *,**,*** indicate statistical significance at the 10%. 5%, and 1% level.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) | (9) |
|----------------------------------|----------|---------|----------|----------|---------|----------|-----------|---------|----------|
| | Return | Return | Return | Return | Return | Return | Return | Return | Return |
| Avg. fracchange of meeting funds | 0.023 ** | | 0.023 ** | | | | 0.029 *** | | 0.029 ** |
| | (0.009) | | (0.010) | | | | (0.011) | | (0.011) |
| Avg. fracchange of non-meeting | | 0.012 | 0.012 | | | | | 0.013 | 0.009 |
| funds | | (0.037) | (0.040) | | | | | (0.041) | (0.044) |
| Avg. fracchange of meeting funds | | | | 0.066 ** | | 0.069 ** | | | |
| above median (dummy) | | | | (0.030) | | (0.030) | | | |
| Avg. fracchange of non-meeting | | | | | 0.044 | 0.053 * | | | |
| funds above median (dummy) | | | | | (0.027) | (0.030) | | | |
| Market Return | 0.464 | 0.553 * | 0.462 | 0.347 | 0.490 * | 0.291 | 0.860 | 0.990 * | 0.864 |
| | (0.299) | (0.289) | (0.302) | (0.303) | (0.286) | (0.298) | (0.616) | (0.581) | (0.624) |
| # Observations | 57 | 69 | 57 | 57 | 69 | 57 | 43 | 52 | 43 |
| \mathbb{R}^2 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.11 | 0.12 | 0.12 | 0.12 |

Table VIII - Informativeness of Trades by Style

This table examines the relationship between meeting and fund timing ability across fund types. The dependent variable is *fracchange*, the percent change in the fund's holding this quarter. *Return* is the return of the stock in the next quarter, a measure of average timing ability. The main independent variables are interactions of fund type, whether the fund met with the firm, and next quarter's returns (*Investment Manager*Meet*Return, Hedge Fund*Meet*Return*, etc.), which measure the impact of meetings on timing ability for that fund type. See Table I for other variable definitions. All regressions are OLS models and standard errors clustered by firm and quarter are shown in parentheses below the coefficients. *,**,*** indicate statistical significance at the 10%. 5%, and 1% level.

| | (1) | (2) | (3) | (4) |
|-----------------------------------------|------------|------------|------------|------------|
| | fracchange | fracchange | fracchange | fracchange |
| investment manager * meet * return | 0.229 | -1.509 | -2.184 | -1.865 |
| , i i i i i i i i i i i i i i i i i i i | (1.160) | (1.784) | (1.806) | (1.356) |
| hedge fund * meet * return | 5.809*** | 5.391*** | 5.121** | 6.133** |
| | (2.055) | (2.045) | (2.054) | (2.764) |
| pension fund * meet * return | 0.104 | 0.331 | 0.487 | -0.157 |
| | (0.342) | (0.432) | (0.471) | (0.558) |
| bank * meet * return | 3.053* | 4.049 | 3.595 | 2.024 |
| | (1.620) | (2.978) | (2.730) | (2.507) |
| return | -0.424 | -2.464 | -2.780 | -2.661 |
| | (0.498) | (2.988) | (3.115) | (3.498) |
| hedge fund * return | 0.134 | 0.679 | 0.679 | 0.474 |
| | (0.572) | (0.654) | (0.669) | (0.724) |
| pension fund * return | -0.401 | 0.320 | 0.408 | -0.161 |
| | (0.495) | (0.694) | (0.705) | (0.607) |
| bank * return | -1.590 | -1.182 | -1.186 | -1.940 |
| | (1.358) | (1.434) | (1.469) | (1.724) |
| other style * return | -0.682 | 1.412** | 1.299** | 0.672 |
| | | (0.613) | (0.659) | (0.654) |
| turnover (med) * return | | 0.946 | 0.976 | 1.302* |
| | | (0.613) | (0.617) | (0.749) |
| turnover (high) * return | | -0.425 | -0.573 | -0.534 |
| | | (1.142) | (1.187) | (1.105) |
| turnover (miss) * return | | -2.760*** | -2.845*** | -2.859*** |
| | | (0.728) | (0.920) | (0.832) |
| log distance * return | | 0.264 | 0.246 | 0.261 |
| | | (0.412) | (0.422) | (0.463) |
| fraction firm * return | | 42.01 | 45.80 | 58.74 |
| | | (34.53) | (35.68) | (42.65) |
| Asset, Asset * Return, Style | Yes | Yes | Yes | Yes |
| Turnover, Distance, Fraction | No | Yes | Yes | Yes |
| Date Fixed Effect | No | No | Yes | Yes |
| Any Meeting * Style (* Return) | No | No | No | Yes |
| Fraction Meeting * Style (* Return) | No | No | No | Yes |
| # Observations | 4,468 | 3,420 | 3,420 | 3,420 |
| \mathbb{R}^2 | 0.011 | 0.020 | 0.027 | 0.029 |

Table IX - Tests of Portfolio Volatility by Style

This table examines whether different fund styles have different levels of volatility of holdings in the sample company. In column (1), the data is a panel of fund/quarter observations, with the dependent variable being the absolute value of the percentage change in the fund's holding in the sample company between the current quarter and the previous quarter. In column (2), the dependent variable is the standard deviation (for each fund) of the percentage change in the fund's holding in the sample company between the current quarter and the previous quarter. In both cases the main independent variables are dummy variables for the type of fund – 'investment manager', 'pension fund', 'bank' and 'other style' (with hedge fund being the omitted category. See Table I for other variable definitions. All regressions are OLS models and standard errors are in parentheses, clustered in column (1) only (the panel setting) by firm and quarter. *,**,*** indicate statistical significance at the 10%. 5%, and 1% level.

| | (1) | (2) |
|--------------------|---------------|----------------|
| | Abs. value of | Fund Std. Dev. |
| | fracchange | of fracchange |
| investment manager | 0.0431 | -0.168 |
| | 0.187 | 0.399 |
| pension fund | -0.695*** | -1.843** |
| | 0.208 | 0.839 |
| bank | 0.434 | 0.760 |
| | 0.433 | 0.715 |
| other style | -0.434 | -0.899 |
| | 0.277 | 1.321 |
| fraction firm | -1.697 | -11.506 |
| | 5.494 | 19.828 |
| turnover (med) | 0.407** | 0.347 |
| | 0.178 | 0.455 |
| turnover (high) | 0.959*** | 0.852* |
| | 0.274 | 0.516 |
| log distance | 0.0271 | 0.113 |
| | 0.0892 | 0.225 |
| asset quartile 2 | 0.225 | 0.637 |
| | 0.195 | 0.536 |
| asset quartile 3 | 0.356** | 1.135** |
| | 0.162 | 0.541 |
| asset quartile 4 | 0.716*** | 2.260*** |
| | 0.168 | 0.575 |
| turnover (miss) | -0.357 | -1.066 |
| | 0.411 | 1.217 |
| asset (miss) | 1.085 | 1.609 |
| | 0.669 | 1.288 |
| Date Fixed Effect | Yes | No |
| # Observations | 3420 | 369 |
| R^2 | 0.021 | 0.070 |