

The Benefits of Access: Evidence from Private Meetings with Portfolio Firms

Finance Working Paper N° 751/2021 May 2023 Marco Becht

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Abstract

We analyze over 4,700 private meetings between a large active asset manager and portfolio firms, unobservable to outsiders. These meetings are conducted by both fund managers and governance specialists; both generate insights and information advantages that influence trading decisions of fund managers. Meetings contain soft rather than hard information, and fund managers trade on and around meeting dates, generating excess returns. Trading is more pronounced for i) high level meetings, (ii) meetings with very positive or negative tone, (iii) meetings rated as unusually good or bad, and (iv) meetings changing internal recommendations to buy, hold or sell. Overall, meetings generate profitable trading decisions.

Keywords: active investors, trading, institutional investors, corporate governance, stewardship, active ownership, shareholder voting, analysts, fund managers

JEL Classifications: G11, G14, G23, G34

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Abstract

We analyze over 4,700 private meetings between a large active asset manager and portfolio firms, unobservable to outsiders. These meetings are conducted by both fund managers and governance specialists; both generate insights and information advantages that influence trading decisions of fund managers. Meetings contain soft rather than hard information, and fund managers trade on and around meeting dates, generating excess returns. Trading is more pronounced for i) high level meetings, (ii) meetings with very positive or negative tone, (iii) meetings rated as unusually good or bad, and (iv) meetings changing internal recommendations to buy, hold or sell. Overall, meetings generate profitable trading decisions.

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1. Introduction

Calls for institutional shareholder engagement with boards of directors and management have grown worldwide and private dialogue is now a key instrument of institutional investor stewardship. The main way to achieve it includes private discussions between the asset manager and the companies they are invested in. However, there is a concern that the tendency of asset managers to meet privately with institutional investors conflicts with rules on fair disclosure and related regulation, particularly when such private meetings are not disclosed to all shareholders (Bradley, Jame, and Williams, 2022; Enriques and Strampelli, 2023). This raises the important question, what is the nature and content of these meetings, and can the asset manager use them for profitable trading opportunities?

Using proprietary data from the equity investments of one of the world's 25 largest active asset managers—abrdn (henceforth "SLI"), this paper addresses this question.¹ The paper uses data on over 4,700 private meetings between the asset manager's fund managers and governance specialists with portfolio companies and links these meetings with trading decisions. Our dataset contains detailed records of the internal day-to-day activities inside the asset management organization for a period of nine years. The narratives of meetings include data for all attendees, numerical ratings for the quality of the meeting and (revised) recommendations to buy, hold or sell the particular stock. The meetings, their content and quality are analyzed in relation to daily trading activity of individual funds of SLI and their associated stock market returns.

Given the significant resources devoted by asset managers to meetings with portfolio firms, our null hypothesis is that valuable information is being collected and that it enables informed trading by fund managers. However, we do not know the nature and quality of the information being collected, for example is it hard or soft information? In addition, we do not know the size of those trading opportunities. Further, not all meetings are the same. We expect fund manager meetings with portfolio firms to differ from those with governance specialist meetings. With respect to meetings of governance specialists, our null hypothesis is more nuanced since these meetings are about environmental, social, and governance (ESG) issues, and these specialists do not themselves trade securities. The question then is, to what extent do fund managers care about ESG issues and do they trade on information gathered at such meetings?

¹ Our data relate to the operations of Standard Life Investments (SLI)—the asset management arm of Standard Life Plc that was set up in 1998—and cover the period 2007-2015. SLI became Aberdeen Standard Investments, the asset management arm of Standard Life Aberdeen Plc, that was created in March 2017 by the merger of Standard Life Plc and Aberdeen Asset Management Plc. In 2021 Standard Life Aberdeen was rebranded abrdn Plc. The ranking cited is the Pension and Investment's ranking of asset managers by total worldwide institutional assets under management as of 31 December 2021. www.pionline.com/largest-money-managers/2022-full-list.

The primary finding of this paper is that for this active investor—who as we argue below appears similar in its processes and procedures to other large, research focused active asset managers—meetings generate insights and information advantages that influence the views of fund managers and are used by them for trading decisions. The usefulness of meetings appears to be driven by soft, rather than hard information, and trades informed by meetings generate abnormal returns. To better understand our approach, consider the following example of Carillion plc, a multinational construction firm, with most of its turnover of US\$ 7.0 billion in 2015 generated in the UK. The firm was widely held by dozens of international institutional investors; SLI held the largest stake of around 10 percent. On Dec 1, 2015, the governance specialist met with the Chairman of the board. An extract from the meeting notes leaves little doubt about the specialist's concerns:

"The shares have modestly lagged the wider market since the inconclusive approach to Balfour Beatty and forecasts have also drifted. But if the market seems apathetic about Carillion, [the Chairman] was on chipper form. Looking unfeasibly tanned for this time of year, he [...] had just returned from Lesotho by way of a break at a spa in Thailand. He had been out in southern Africa as Chairman of [... a] children's charity. [The Chairman] had had a busy time and was justifiably proud of the polo match that the charity had staged, and which had raised over £1m. Meanwhile, he remains "Chairman designate" of [...]. He is also Chairman of [...] and sits on the board of [...]. He is a busy man. Perhaps as a consequence, [his] style would appear to be "light touch". He averred that his predecessor [...] had been "old school" but while he [...] was "different ... they had similar approaches". It all sounded rather confusing. His main contribution was to have refreshed the board and to have focused on the mentoring of the CEO, with whom he sounds to have an avuncular relationship. About the outlook for Carillion he seemed rather vague – strategically he [...] 'had an intuition that there were opportunities in developed and developing economies'. The force of this insight was somewhat diminished by the admission that 'they hadn't really made any progress on that front' (notwithstanding that the CEO received almost a full bonus for that measure of performance in 2014)."

The meeting strengthened concerns from previous meetings with SLI's internal analyst and fund managers around Carillion's strategy and financial management. As a result, two weeks later the internal analyst covering the firm downgraded it, from "Hold" to "Sell".

On the day of the downgrade, 38 funds held the stock. One of those funds, a global equity fund, started reducing its position, selling 6.1 percent of its holdings on the day. The fund continued selling each day, for a cumulated reduction of 22.9 percent during the seven-day window, [-1+5] days, around the downgrade. The majority of funds, but not all, traded down the stock as well during this period, by an average of 26 percent. Subsequently the asset manager said it had lost faith in Carillion's management and the "willingness of the board to alter the strategic direction of the company to address our concerns".² The company eventually went into insolvency. The meeting notes cited above suggest a lack of

² See www.parliament.uk/globalassets/documents/commons-committees/work-and-pensions/ carillion/letter-from-standard-life-to-the-chairs-regarding-carillion-2-february-2018.pdf (accessed 3 December 2020).

confidence in the Chairman which influenced the analyst's downgrade of the stock from "Hold" to "Sell" and the sell trades by the majority of fund managers.

The case study shows how insights from private meetings can inform trading decisions. Using our full sample, we demonstrate that meetings with portfolio firms are associated with strong trading patterns. Fund managers heavily trade portfolio firms precisely *on meeting days*, and trading remains elevated for some days subsequently.

Not all meetings are the same. Meetings with fund managers generate both buy and sell trades, whereas meetings with governance specialists generate largely sell trades. This asymmetry reflects different engagement patterns of fund managers and governance specialists. Fund managers meet with portfolio firms at more regular intervals, often after earnings announcements, and the issues that best discriminate fund manager meetings from governance specialist meetings revolves around the assessment of the business model of the firm and its valuation. In comparison, governance specialists meet only a subset of portfolio firms, where aggregate stakes held exceed a given size and where concerns have already been raised. The meetings frequently focus on compensation, shareholder voting issues, board structure, audit-related issues, and socially responsible investing. The strongest indication of governance specialist concerns is when they flag a firm and place it on an internal "governance health warning" list.

A large number of meetings have meeting notes written by the internal analyst who organized the meeting. The meeting notes will contain not only a detailed narrative but also a rating of the meeting quality, on a five-point scale from poor to excellent. In addition, the notes will contain a recommendation to buy, hold or sell the stock based on the analyst's takeaways from the meeting, and will include the prior recommendation, thereby allowing us to record recommendation changes.

As an illustration, the asset manager met with Severn Trent plc, a water utility, on 15 June 2007, at the offices of the asset manager. The portfolio firm's attendees included the CEO, the CFO and a managing director, and the asset manager's attendees included five portfolio managers, one of whom covered the firm in her role as internal analyst. The analyst rated the meeting quality as 3 out of 5 and wrote up meeting notes of roughly 2 pages. The meeting covered a broad range of topics, including, a future change of CEO, slow restructuring efforts by the company, an uncertain future regulatory fine for a serious sewage incident, the delay of a planned share buyback, the operational specifics of current cost-cutting efforts, and how the firm is hedging energy prices. At one point, fund managers explicitly questioned management whether stock markets might be missing any upside about the firm but learned nothing of substance. The analyst noted:

"A relatively uninspiring meeting. [...] Management seemed happy with consensus forecasts and therefore sees little scope for upgrades. [...] We pushed quite hard at the end of the meeting in terms of where the market may be too pessimistic, but it sounded like they were happy with consensus forecasts."

Prior to the meeting, the analyst had a "Buy" recommendation for the stock. On the day of the meeting—and as a result—she downgraded it to a "Hold", and of the 54 funds holding the stock, 14 sold down their stakes, on average by 30.2 percent, within 5 trading days of the meeting.

We find that trading on meeting days is significantly more pronounced (i) for unusually high or low quality meetings, (ii) for meetings that are high profile with respect to either attendees by the portfolio firm or the asset manager, (iii) for meetings that are attended in person by fund managers (iv) for meetings notes that reflect a very positive or very negative tone of voice, and (v) for certain key meetings that are recalled and highlighted by the internal analyst in subsequent industry reports. We conclude that meetings broadly serve the purpose of transmitting soft information, rather than hard information. Further, while some meetings reinforce prior beliefs, others change them. Both cases generate valuable trading opportunities.

We conjecture that meetings are sufficiently significant that they enable informed trading. We consider several trading strategies around the actual meeting day of fund managers and governance specialists. First, we consider whether meetings enhance performance, following similar tests in Bradley, Jame, and Williams (2022), and find strong support. We find that the long-short portfolio including long positions of the tercile of stocks most heavily purchased by fund managers on meeting dates and short positions of the tercile of stocks most heavily sold on meeting days outperforms the corresponding longshort portfolio without meetings by 180 bps over the subsequent 20 trading days, and by roughly 260 bps over the subsequent 40 trading days. In contrast, the outperformance for governance specialist meetings is far smaller at around 65 bps over 40 trading days. Second, we use standard monthly time-series regressions of long-short portfolios with and without meetings in FF3 and Carhart 4 factor specifications and find that monthly Sharpe ratios are economically and statistically significant, averaging 0.49. Third, we calculate short-term outperformance based upon actual trades, instead of hypothetical portfolios. Across all meetings, fund managers generate roughly 10 to 20 bps of abnormal returns in an average position during the [-1, +5] day window around their meetings with portfolio firms, if we assume fast intraday trading. With slow intraday trading assumptions abnormal returns are close to zero. Again, fund managers also trade profitably around governance specialist meetings—which fund managers do not attend. These abnormal returns accrue over short intervals and they are statistically significant—but they are much more modest economically than the hypothetical long-short portfolio. The reason for these relatively more modest returns is that abnormal returns from trading are by definition constrained by the size of trades made by fund managers relative to their existing positions. Since many positions do not trade around meetings, even in response to apparently particularly informative meetings, the actual outperformance achieved is far smaller than the performance implied by hypothetical portfolios. To illustrate this effect, we estimate that all short-term trades around meetings and internal analyst recommendation changes in our sample generate aggregate trading gains of roughly US\$ 420 million assuming fast trading, and US\$170 million assuming slow trading. Now, assume that all funds that do *not* trade around these events *instead* traded like the average fund that *does* trade. Under this scenario, aggregate trading gains increase considerably, to US\$ 1,270 million and US\$ 470 million, assuming fast and slow trading, respectively. What might explain the apparent under-trading by fund managers? Among the possible explanations is that fund managers underreact to information and leave money on the table.

Are meetings therefore informative and enable informed trading? We believe they are. The significant abnormal returns to trading rule out the possibility that fund managers *believe* that the meetings are informative, while in reality they are not. Further, we show for earnings reports that the (endogenous) choice of timing of both fund manager and governance specialist meetings rule out that meetings simply coincide with the release of public information but are not themselves informative.

An important question is how these results fit in with the current regulatory framework concerning private meetings with portfolio firms. In the UK, like in the US, listing rules do not permit selective disclosure of price sensitive information.³ In private meetings companies are not allowed to discuss such information, unless it has been disclosed to the market already.⁴ For example, companies must disclose event-driven 'precise' information such as a loss of a major contract, an upcoming equity issue, or a profit warning. However, meetings do take place that involve price sensitive information, for example, an impending equity issue where the portfolio company wishes to know if the asset manager will participate in the issue. In such cases, the asset manager is notified in advance that it will be made

³ Fair disclosure rules are applied in the US through the SEC's Regulation Fair Disclosure (Reg FD) since 2000, and in the UK through the FSA's UK Listing Rules that transpose the European Union's Council Directive 79/279/EEC of 5 March 1979, the "Admissions Directive". In addition, the EU Market Abuse Regulation (MAR) (Regulation (EU) No 596/2014) prohibits insider dealing, unlawful disclosure of inside information, and market manipulation. These provisions go beyond "fair disclosure" because all price sensitive information must be disclosed to the market; in the US the disclosure must be "fair", but full disclosure is not mandatory (Georgiou 2016).

⁴ The Market Abuse Regulation (MAR) prohibits unlawful disclosure but explicitly allows private meetings. Article 19 of MAR states that "This Regulation is not intended to prohibit discussions of a general nature regarding the business and market developments between shareholders and management concerning an issuer. Such relationships are essential for the efficient functioning of markets and should not be prohibited by this Regulation." (eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX:32014R0596).

an insider. Such meetings are frequently attended by the company's broker to record the discussion. In these cases, the asset manager does not trade. There are other cases where the company inadvertently discloses private information in the meeting. In one such case, we are informed SLI notified the company of this breach and the company rushed out a public announcement. Such cases, we are informed, are rare.

Notwithstanding the regulations, information from meetings could still have value by providing "soft information" (Liberti and Petersen 2019). First, fund managers may be able to combine nonmaterial information obtained in the meetings with other information they have collected. This wellknown practice is the basis of mosaic theory and the CFA Institute, for example, provides detailed guidance to its members about its definition (CFA 2014, Standard II(S)) and practical application. Second, personal interaction may be valuable in judging individuals, including their character and ability, and provide insights that generate an information advantage, a reason that is stressed in interviews with fund managers (Barker, Hendry, Roberts and Sanderson 2012). Third, fund managers and analysts can use the meeting to challenge or confirm prior beliefs. These explanations are illustrated in the examples of Severn Trent and Carillion. Finally, private meetings may simply break the disclosure rules.

While we cannot comment on the industry overall, in the case of SLI we are informed that there are strong formal internal rules that are intended to prevent illegal trading from happening and an active compliance function; we include in the Internet Appendix a detailed internal memorandum that describes how potentially confidential information is to be handled.

An important contribution of our paper is that we can explicitly link the monitoring efforts of an active institutional investor vis-à-vis its portfolio firms—through high-level meetings that are private and thus unobservable to outsiders—with the trading decisions of portfolio managers. Some studies, such as Bushee, Gerakos, and Lee (2018) have cleverly inferred potential meetings between asset managers and portfolio forms using travel patterns of particular asset managers, while others such as Bushee, Jung, and Miller (2011), Green, Jame, Markov, and Subasi (2014) and Bradley, Jame and Williams (2022) have used investor conferences, public meetings with portfolio firms and non-deal roadshows to infer if valuable information is disclosed from trading and stock price reactions, However, to our knowledge, no prior study has been able both to examine the content of those meetings and how their quality may generate trading and abnormal returns by the fund managers participating in those meetings. Another contribution of the paper is, a detailed description of the various interactions between the different parties in the asset management organization, including those of internal analysts, other fund managers and the governance specialists. These interactions influence trading.

Some of these results will not surprise, for example, that active managers trade on private meetings with portfolio firms and earn excess returns. After all, if they did not trade profitably, why would they invest so many resources in engagements? However, the size of the gains is informative, and it may surprise that fund managers appear to leave so much money on the table, since a large number of the funds do not trade at all on meetings, even when they are rated as of very high or very low quality, or, when there is a switch in the internal recommendation to buy or sell a stock. Finally, the fact that fund managers trade on governance specialist meetings and, do so profitably, is informative and may surprise if one believes that they engage only to fulfill the requirements of the UK Stewardship Code to 'monitor and hold to account managers [...] and engage issuers'.

2. Prior Literature

Our work relates to several literature strands, especially to papers that explore the interactions of fund managers and analysts with portfolio companies, but also those that study active ownership, stewardship and responsible investment (ESG).

The area of the investor-firm interaction literature is most closely related to our paper and examines the role of meetings and other interactions that fund managers and analysts have with portfolio companies. Bushee, Jung, and Miller (2011) show that public meetings at investor conferences are associated with increased trading volume. Green, Jame, Markov, and Subasi (2014) find that hosting such conferences improves the quality of analysts' research. Bushee, Gerakos, and Lee (2018) use corporate jet flight patterns to plausibly identify private meetings and find increases in analyst recommendation changes and trading volume around such meetings. Bradley, Jame and Williams (2022) analyze private roadshows published by an online news aggregator and find profitable changes in subsequent quarterly holdings by investors following such meetings. Our analysis is based on confirmed private meetings and knowledge of their contents. We also emphasize the role of governance specialists, who are becoming an integral part of the investment process.

Since our paper uses private engagement data, it is also related to the few papers that use proprietary data to explore different, but related issues in investor activism. Carleton, Nelson and Weisbach (1998) document the engagement process of TIAA-CREF, the pension fund; Becht, Franks, Mayer, and Rossi (2008) analyze engagements of the Hermes UK Focus Fund, an activist hedge fund; Dimson, Karakas and Li (2015) use proprietary engagement data from an institutional investor with a responsible investment commitment; while Hoepner, Oikonomou, Sautner, Starks and Zhou (2020) consider another investor's ESG engagements and their effect on portfolio downside risk. The latter

papers benefit from data access that allows identifying the start of an engagement and distinguish between successful and unsuccessful campaigns; the data do not include fund trades.⁵ These papers are important because they provide direct evidence on the interactions between institutional investors, company boards and executives.

Many papers document how asset managers or sell-side analysts generate information advantages in equity markets. Investors have been shown to generate outperformance from macro variables (Avramov and Chordia, 2006), geographic proximity and country knowledge (Coval and Moskowitz, 1999; Banegas, Gillen, Timmermann, and Wermers, 2013), past educational ties (Cohen, Frazzini, and Malloy, 2008, 2010), and stock picking skills (Chen, Jegadeesh, and Wermers, 2000), and public and private roadshows (Bushee, Gerakos, and Lee, 2018; Bradley, Jame and Williams, 2022). We add to this literature by showing how and why personal meetings with portfolio firms contribute to outperformance through trading.

Our paper is also closely related to a large literature examining the information content of analyst recommendations and fund manager trading outcomes.⁶ We contribute to this prior research by explicitly considering how buy-side analysts gather information directly from high-level engagements with portfolio firms.

Finally, our paper is related to the literature where blocks of shares form endogenously and blockholders can exert influence through exit (e.g. Admati and Pfleiderer, 2009; Edmans, 2009; Edmans and Manso, 2011).⁷ In these latter theory papers, smaller blockholders have incentives to gather costly information about a firm's fundamentals, and as such impound information into prices; our empirical evidence supports that view.

3. Opening the Active Asset Manager "Black Box"

We know relatively little about the internal organization of asset managers and their engagements with portfolio firms, despite asset management being the largest segment of the global financial services

⁵ In related empirical work, Li, Maug, Schwartz, and Ziv (2018) using fund trades data show that investor trades are significantly related to shareholder votes. The paper does not explore private engagement data.

⁶ See, for example, Elton, Gruber, and Grossman (1986); Womack (1996); Barber, Lehavy, McNichols and Trueman (2001, 2003); Jegadeesh, Kim, Krische, and Lee (2004). This literature is mostly based on sell-side analysts typically working for brokers; only a few papers have focused on buy-side analyst recommendations working for the asset managers themselves (e.g., Cheng, Liu, and Qian, 2006; Groysberg, Healy, Serafreim, Shanthikumar, and Gui, 2013; Rebello and Wei, 2014; Brown, Call, Clement, and Sharpe, 2016).

⁷ In this context, our paper is also related to work on the voting behavior of mutual funds (Iliev and Lowry, 2015) and theories of shareholder voting (Maug and Rydqvist, 2009; Levit and Malenko, 2011; Van Wesep, 2014; Malenko and Malenko, 2019; Bar-Isaac and Shapiro, 2020; Cvijanovic, Groen-Xu, and Zachariadis, 2020), especially those that relate voting directly to trading behavior (Levit, Malenko and Maug, 2019; Meirowitz and Pi, 2020).

industry. Although asset managers publish annual stewardship and sustainability reports, their disclosure is voluntary and usually consists of case studies and aggregate data at annual frequency. In this Section, we provide a detailed description of the internal organization of a major active asset manager and explain the connections between monitoring, engagement, and trading by the asset manager.

In 2015, Standard Life Investments, our data provider, was the largest active asset manager in the UK. The asset manager's investment style mostly relied on actively managed portfolios. The asset manager had invested in corporate governance, stewardship and sustainability since the inception of the Cadbury Code in 1992 and had high visibility among investors and companies.⁹ All variable definitions and data sources are provided in Appendix A and Internet Appendix 2 provides details of our proprietary data sources. An important question is the extent to which our results apply to other active asset managers. First, conversations with the Head of Equities of SLI indicate that during our sample period the asset manager's processes and procedures were relatively standard and comparable to other asset managers. In his "frank" opinion, SLI's asset management practice did not significantly differ from other asset managers, with obvious exceptions, including for example asset managers that were purely quantdriven, and unlikely to believe in meetings and their value. However, SLI might have better funded and staffed its engagement activities relative to other organizations. In addition, the strict separation into fund managers/analysts and a team of governance specialists was, and is, not ubiquitous. Many asset managers organizationally embed the responsibility for ESG directly with the fund manager, making it challenging to assess the impact of ESG on trading and fund performance. We are fortunate that in SLI, ESG related issues were dealt with separately by the team of governance specialists. Second, a prior literature (e.g. Barker et al. 2012; Soltes, 2014; Ahblom and Christner, 2021) has used structured interviews to shed light on the internal organization of asset managers, and our conclusion from those papers is again that the processes and procedures at SLI during our sample period were similar to other UK active managers.

3.1 Engagements With Portfolio Firms

Figure IA1-1 in the Appendix shows the stylized activities and roles of the UK equities desk of the asset manager in relation to engagements with portfolio firms and trading activity. Consider first the internal organization of the UK equities desk. There are typically 12-13 fund managers—and 18 unique individuals during the sample period—who managed between 43 and 64 UK funds, which in turn held

⁹ For example, in 2013 the Head of the asset manager's governance specialists was elected Chair of the UK's Corporate Governance Forum, an informal network comprising leading UK institutional investors "committed to best practice principles of governance and stewardship". In a joint effort with the GC100, a grouping of the UK's largest 100 listed companies, the Forum published influential remuneration guidance; see Jones (2013).

in excess of 90 percent of all the asset manager's UK equities throughout the sample period. The remainder of UK equities AUM was held by other funds that own (some) UK equities; these include European or Asian funds, multi-strategy funds, and alternative investments with a listed equity component. All trading transactions analyzed in the paper include all holdings of UK equities—restricted to stocks within the FTSE All Share index—irrespective of whether the fund manager is a member of the UK equities desk.

3.2 Fund Managers, Internal Analysts and Governance Specialists

Fund managers are responsible for all trading decisions and trade stocks within their fund mandates. Fund managers are also responsible for analysis of equities in specific industries, and thus have a second role as internal analysts.¹⁰ As internal analysts, they invariably attend meetings with portfolio firms and issue meeting notes for those firms within their sector, or sectors. They also produce analyst reports, which analyze a specific industry as well as the individual companies in that industry.¹¹ In both meeting notes and company reports analysts make recommendations on individual stocks to "Buy", "Hold", or "Sell". In addition, they make recommendations on an ad hoc basis, triggered by new insights. These insights can be based on both public and private information. Analyst recommendations are for internal consumption only and are not made public. All information produced by analysts is made available to fund managers and governance specialists. These internal analysts are buy-side analysts, in contrast to sell-side analysts, whose recommendations are for the consumption of clients, and as such are usually made public.

The analyst meeting notes include indicators of the quality of the meeting, the venue of the meeting, the name and position of participants including both portfolio companies and fund manager attendees, and a full text summary and analysis of the meeting. The analyst rates the meeting from "poor" to "excellent" on a 1 to 5 scale. The rating of the meeting reflects how positive or negative the analyst perceives the information received and the interaction with the company. We interpret the rating as a signal by the internal analyst to other fund managers who did not attend the meeting. The rating serves to harden information from the meeting which is perceived as inherently soft. Following Liberti and Petersen (2019), hard information we consider as information that is likely quantitative, based on numbers, easily transmissible, and interpreted identically by sender and receiver. Soft information we

¹⁰ During the sample period, all UK equities desk fund managers were also internal analysts; a small number of individuals in the early years of their career had purely analyst roles, before later taking on fund management responsibilities.

¹¹ Industry reports are usually produced on a quarterly basis and include the relevant company reports.

consider to be information that is likely not quantitative, based on text, not easily transmissible, and requires interpretation that the receiver may lack. Further, as stated above, the meeting notes almost always contain a recommendation to "Buy", "Hold", or "Sell" based on the analyst's takeaways from the meeting and the previous recommendation.

Finally, there are 23 governance specialists throughout the sample period. Governance specialists engage with portfolio companies on governance and socially responsible investing issues, with the goal of gathering information and identifying risks. The information gathered by governance specialists is passed on to analysts and fund managers both in writing and at joint meetings. Governance specialists write up their interactions with portfolio firms in meeting notes, that are separate from the fund manager meeting notes. Governance specialists can place a company on an internal "governance health warning" list when there are significant concerns about governance. The warning is a significant event and prominently shared with fund managers and analysts. Fund managers and governance specialists sit on the same floor so there are frequent informal interactions.

3.3 Meeting Characteristics

Both the fund manager meeting notes, analyst reports and governance specialist meeting notes have been made available to the authors. Fund manager meetings usually take place at a high level, involving, among others, the respective CEO, CFO, and Chairperson of portfolio firms. Governance specialists mostly engage with the Chairperson and non-executive directors, especially the Chairs of remuneration, nomination, and audit committees.

In Table 1, Panel A, we report various measures of meeting characteristics for those between fund managers and governance specialists, respectively and portfolio firms. There are 3,423 fund manager meetings. Among these meetings, 68 percent have fund manager meeting notes available in the sample. For those 68 percent, 10 percent of meeting notes indicate a low rating (rating of 1 or 2), 47 percent indicate a medium rating (rating 3), and 12 percent indicate a high rating (rating 5). We also measure the tone of voice in the meeting notes— we use the total number of negative words divided by the total number of positive and negative words in those notes, where negative and positive words are based on the dictionary by Loughran and McDonald (2011). At the time of the meeting, 13 percent of firms are on average subject to a governance health warning, issued by governance specialists.

Fund manager meetings are on average attended by 3.7 representatives of the asset manager and 1.8 representatives of the portfolio firm. The portfolio firm's CEO and CFO each attend roughly half of all meetings, the Chairperson of the board attends rarely, in 3 percent of meetings. Of all fund manager

meetings, 65 percent are high level meetings, where at least two among the CEO, CFO or Chair of the portfolio firm attend the meeting.

In comparison with fund manager meetings, there are 1,288 governance specialist meetings, making governance specialist meetings roughly a third as frequent as those of fund managers (governance specialist meetings have information on attendance and composition, but not systematically for all meetings). Among these meetings, 55 percent have governance specialist meeting notes available, the meeting tone is on average negative. Roughly a third of the meetings at least mention a discussion of CSR/SRI themes, and 7 percent of meetings have a detailed sustainability-focused note attached. These notes illustrate how the asset manager already in 2007 had integrated sustainability screening and engagement into its stewardship activities.¹² A high share, 27 percent, of meetings are subject to an outstanding health warning at the time of the meeting. Meetings with governance specialists involve larger stakes, both in dollar and percentage terms (see Figure IA1-2 in the Internet Appendix). Governance specialist resources are allocated to more important stock positions, consistent with Bebchuk, Cohen, and Hirst (2017)'s predictions and with prior evidence of Fich, Harford, and Tran (2015), Kempf, Manconi and Spalt (2017), and Liu, Low, Masulis and Zhang (2020). In the figure, we aggregate stakes held across funds, and show that governance meeting intensity, measured both in dollar terms and fraction of shares outstanding held, is positively and mostly monotonically related to stake size. Fund manager meetings exhibit the same pattern, with a strong positive association to stake size.

3.4 Meeting Content

In Panel B we report data about meeting topics. First, we use supervised machine learning with randomized logistic regressions as in Hovy, Melumad, and Inman (2021), to identify the words that best discriminate fund manager meetings and governance specialist meetings from each other. We analyze the full sample of meetings with available notes and extract all words above a suitable threshold of discrimination. The best discriminating words for governance specialist meetings are "governance",

¹² The sustainability engagements are detailed, systematic, focus on a wide range of industries, and appear to receive significant resources. For example, an 18 June 2007 meeting with Anglo American, a mining firm, discusses five fatalities that occurred during the previous two weeks, with the specialist noting "the company is clearly failing to get safety under control"; the meeting was followed up by a site visit to South Africa, with the specialist noting "the most striking feature of site visits to the [coal and platinum mines] was the enthusiasm of local management for what is seen as a new direction [from the incoming CEO] on safety". As another example, a 25 November 2008 meeting with BP, an oil firm, mentions pessimistically in its conclusion that "the importance of sustainable development issues has clearly waned under Tony Hayward [the CEO], either as a result of a slimming down of resources and/or a deliberate effort to move away from the high profiling of the issues under [the prior CEO]"; less than 2 years after the meeting, the BP-operated Macondo well caused the largest marine oil spill in history.

"board", "chairman", "ed' (for executive director), "discuss", "remuneration", "sri" (for socially responsible investing), "letter", "engagement", "the company", and "audit". In comparison, the best discriminating words for fund manager meetings are "broker", "growth", "margin", "cost", "buy" and "recommendation". The machine learning analysis shows very intuitively how the content of what governance specialists discuss with portfolio firms differs from the content of fund managers' discussions. In subsequent tests, we relate this machine learning labeling of meetings to trading by fund managers.

Second, as an alternative to natural language processing we tabulate the topics that governance specialists themselves assign their meetings with portfolio firms. Governance specialists use roughly 40 tags indicating meeting topics, as well as a 50-character text field that summarizes meeting keywords (we do not have similar human labeling for fund manager meetings). Meetings can have more than one topic, and most meetings do. We aggregate all human classification data into eight broad topics: "compensation" is the most important topic, and is discussed in 40.7 percent of all governance specialist meetings, followed by shareholder voting (27.1 percent), board related issues (22.8 percent), audit related issues (16.7 percent), statutory issues (15.2 percent), socially responsible investing (13.1 percent), other topics (11.3 percent), and other broad governance issues not included above (6.1 percent). 0.9 percent of meetings do not have any human classification attached to them.

To illustrate the granularity of the data, we summarize several of these key events and data items in Figure 1 for two of our sample stocks, AstraZeneca and Barclays. Both stocks are held by a changing array of funds throughout the sample period. The figure shows six timelines: i) fund manager meetings, ii) the rated quality of those meetings, iii) the attendees of the asset manager, iv) the attendees of the portfolio firm, v) governance specialist meetings and other contacts and vi) internal analysts' stock recommendations. Some of the data features already discussed, and highlighted by the figure are: first, the more regular schedule of fund manager meetings, and the less regular schedule of governance specialist meetings; second, that the majority of fund manager meetings are judged as average quality by analysts; third, that while the CEO and CFO regularly attend meetings with fund managers, Chairperson attendance is very rare, and fourth, analysts opinions are relatively sticky over time, and downgrades and upgrades of stocks are infrequent and thus important events.

3.5 Fund Holdings and Trades

Fund holdings and trades made by fund managers are shown in Table 2. Panel A shows the asset manager's UK equity holdings. We restrict our sample to stocks within the FTSE All Share index, which

at year-end in 2007 includes 706 stocks, declining over time to 646 stocks. The number of funds in our sample increases from 96 in 2007 to 133 funds by the end of 2015. Of those funds, between 39 and 49 are managed by the UK equities desk. These UK equities desk-managed funds hold stakes in about half of the FTSE All Shares index constituents in 2015. The average stake held in a stock, aggregated across all funds, increases over time, from roughly 1.8 percent to 3.0 percent. During our sample period, 1 January 2007 to 31 December 2015, the data include 10.4 million fund-stock positions in UK equities. In the majority of our tests, the unit of observation is the individual daily position of a fund. Panel B shows summary statistics; median portfolio firm size is US\$ 4.5 billion, the average stake held in a stock, now disaggregated per fund, is 0.16 percent.

From these daily positions we calculate daily trades as the net change in the number of shares held in a portfolio company by a given fund; it is described as a net change since the day-to-day change in shares held may include offsetting intraday buy and sell trades. The average trade probability is 2.3 percent, indicating that the average position is traded almost six times per year, with buy and sell trades being equally likely. Trade characteristics are shown in Panel C. There are roughly 120,000 sell trades and 119,000 buy trades. The average initial size of positions prior to trading is US\$ 10 million for positions where there is a sell trade and US\$ 7.5 million where there is a buy trade. Average trade size is about 0.6 million for both sell and buy trades. Throughout the paper, all continuous variables are winsorized at the 1st and 99th percentiles. Unwinsorized, the largest positions held are around US\$ 170 million, the largest sell trade is around US\$ 270 million, and the largest buy trade is around US\$ 170 million.

4. Meetings and Trading

In this section, we examine how meetings in general influence trading decisions by fund managers. To better understand our analysis, consider the following example of a fund, which we call the discretionary equity (DE) fund. The DE fund held between 57 and 76 stocks at any one time. The fund's style incorporated active but not aggressive stock picking, with an active share of 51.8 and annual turnover of 82.5 percent. During our sample period the fund manager executed about 62 trades per month.

One of the stocks held by the fund was BBA Aviation plc, an aviation services company. On March 8, 2007, a meeting was scheduled at the offices of the asset manager. The meeting was attended by BBA's Acting CEO and the Financial Director (CFO). The analyst covering the stock was bullish about the meeting and the stock. The analyst stated that it was a "good meeting with management" and provided a 4 rating on the five-point scale from good to excellent. He also commented that from the

meeting "... it was clear that the management and the business are back on the front foot" and "that it is hard to see these shares underperforming". As a result of the meeting, the analyst upgraded the internal recommendation from a "Hold" to a "Buy".

The DE fund on the day of this meeting was a buyer of the stock and increased its position in BBA by 6.8 percent, followed by another 3.3 percent the next day. Among the other funds holding BBA, several others similarly increased their positions on the meeting day. This pattern— trading precisely on meeting days with portfolio companies—applied to many of the trades of the manager of the DE fund. For a given stock, the probability of trading on a normal day—i.e. a day without a meeting with executives of the specific firm—was 4.7 percent. On a meeting day with the same firm, however, this probability was over three times higher, at 15.7 percent.

It is worthwhile noting that of the 18 funds holding BBA on the day of the meeting, the majority of funds, and 4 out of the 5 largest positions, did not trade around the recommendation change. We discuss the reasons and implications of such non-trading below. This highlights how the granularity of the data enables better tests. The modest change in the aggregate stake held across all funds disguises very different reactions of individual fund managers to a meeting related recommendation change.

Trading for the whole sample

We extend this setting to our whole sample in Table 3, Panel A. We examine the relation between fund manager meetings and governance specialist meetings with portfolio firms and trading activity. We use the following specification:

$$Trade_{ijt} = \alpha + \beta' X_{it} + \gamma' Y_{ijt} + \Lambda + e_{ijt}, \qquad (1)$$

where the dependent variable is the daily percentage change in the number of shares held in portfolio company *i* by fund *j* on trading day *t* in Columns (1) to (3) and in Columns (4) and (5) a dummy variable indicating either a sell trade or a buy trade taking place (1) or not (0), in company *i* by fund *j* on trading day *t*.¹³ All columns use the full unbalanced panel of fund-stock positions during the 2007-2015 sample period, except in Column (3) where the sample is restricted to those fund positions with non-zero trading activity. Our main variables of interest are the dummy variables that indicate meetings with portfolio firms; X_{it} is set to one on day *t* when a fund manager or a governance specialist meet with a portfolio

¹³ Recall that fund managers are invariably in charge of multiple funds, and frequently hold multiple positions in the same stock across the various funds they manage and may trade these positions differently. For example, the fund manager of the DE fund cited above managed 13 funds in March 2007, 11 of which held positions in BBA stock.

company. Y_{ijt} is a set of stock-fund-level controls on day *t*, and Λ are stock, fund, and trading day fixed effects, as indicated.

The baseline regression in Column (1) shows that on the day where governance specialists meet with a portfolio firm, the average fund reduces its position by a small amount, 9.8 basis points; in comparison we see an increase in the positions for meetings held by fund managers of a similar magnitude, 10.2 basis points. These coefficient estimates are similar once fund-stock level control variables and stock, fund, and trading day fixed effects are added to the specification (Column 2). When we condition on a trade occurring, the coefficient estimates rise sharply (Column 3). For governance specialist meetings, the decrease in positions held is 421 basis points and for fund manager meetings, the increase in positions held is 196 basis points. Note that since trading extends beyond the specific meeting day, as we show later, the cumulative decreases and increases in positions are magnitudes larger.

Whereas the buying or selling statistic aggregates buys and sells, the probability of a sell or of a buy is indicative of the disparity between buying and selling activity, which we show next. In Columns (4) and (5) the dependent variable is, respectively, a sell or a buy trade in a given position (1/0).¹⁴ The estimates show that governance specialist meetings are not only in aggregate, but also individually negative events; they both significantly increase the probability of selling in Column (4) by 21 percent, and significantly decrease the probability of buying in Column (5) by 37 percent.¹⁵ Therefore, the preponderance of trading in the stock is on the sell side. In contrast, while fund manager meetings in aggregate lead to net buying, they are individually associated with more mixed trading patterns, with a strong increase in the probability of buying (72 percent), but also a small and significant increase in the likelihood of selling (16 percent). If trades are motivated by meeting-related insights, then governance specialist meetings are on average interpreted as negative, while fund manager meetings lead to greater differences in opinion. This result is consistent with discussions with SLI management that suggest governance specialist meetings are triggered by concerns about governance issues, and that they are usually not routine.

Meetings with and without notes

¹⁴ We estimate linear probability models, results are similar using probit specifications, although we note their well-known bias with large numbers of fixed effects (Greene, 2004). We report results from linear probability models to provide economic interpretations consistent with the other columns, and to reduce computational time.

¹⁵ The coefficient estimate of 0.183 for FM in Column (4) implies a fund manager meeting day having a 16 percent higher likelihood of having a sell trade based on the baseline mean of 1.155 (0.183/1.155), while the estimate of 0.916 for FM in Column (5) implies a 72 percent higher likelihood of a buy trade based on the sample mean of 1.275 (0.916/1.275).

In Panel B, we separately consider meetings for which meeting notes exist in our sample from those without notes. Our conjecture is that meetings without notes are less important and are associated with less trading. The results clearly support that view, both for governance specialist and for fund manager meetings. Considering the conditional estimates in Column 3, meetings with notes for GS are associated with more than twice the selling than those meetings without notes (5.3 versus 2.2 percent). Even more sharply, trading for FM meetings with notes are net buy trades of 2.8 percent compared with almost zero net trades for FM meetings without notes. These results strongly suggest meetings with notes are more important than meetings without notes, and less subject to contrarian trading. Many of our later tests are based specifically on those meetings with notes. The patterns in Columns 4 and 5 are predictable. For GS meetings, the probability of a sell with notes is very much higher than a sell without notes. For FM meetings without notes.

Beyond governance specialist and fund manager meetings

Trading on meeting days only is likely to be an imperfect indictor of meeting-related trades because, execution of trades of fund managers may stretch over multiple days, meetings may occur late in the day and close to or after market-close, or fund managers may wish to take time to reflect on the information they have learnt. To capture any such liquidity-induced or information processing-related delays, we consider windows of 20 trading days in length. As Panel C shows, trading extends beyond the specific meeting day for both governance specialist and fund manager meetings. On average, fund managers continue to sell down positions following governance specialist meetings and continue to increase their bets on stocks following fund manager meetings. In Table IA1-1 in the Appendix we divide the post-meeting trading activity into shorter 5-day intervals. The results show that the subsequent aggregate buying activity of fund managers appears at least partially motivated by market timing, since buying ends after day +5, and fund managers start selling positions again, however in far smaller magnitudes. In contrast, for governance specialist meetings, selling continues uninterrupted and extends up to day +25 following the meeting date. Fund managers therefore appear to trade relatively faster on any insights received from their own meetings with portfolio firms (and on the meetings of their fund manager colleagues), and more slowly on any insights received from the meetings of governance specialists.

Overall, the results confirm persistent trading patterns that match and amplify the very short windows around meeting days. We nevertheless rely primarily on the meeting day estimates in our

subsequent analyses, since their interpretation is straightforward, given that each trading day has at most one meeting and thus estimates are free of overlaps with each other.

Earnings reports

To exclude the possibility that meeting dates merely capture public information releases, we check how the meetings are timed relative to earnings announcements. We use this setting for two reasons. First, earnings reports are among the most important public signals for analysts and fund managers. Second, they occur on pre-determined dates and with regular frequency, so meetings can be scheduled deliberately around those dates. The scheduling of meetings relative to earnings reports is shown in Figure 2, where the probability of an earnings report is shown in event time relative to meetings. Fund manager meetings, on the left, occur with significant probability after earnings reports. Fund manager meetings, we are informed, are deliberately arranged to occur after earnings announcements, and not before, to avoid risks of insider trading. This relative timing of meetings is again consistent with the value of meetings being generated by soft, rather than hard information, such as clarification questions. In contrast, governance specialist meetings are scheduled independently of earnings report dates, and show no relation in the figure, on the right. The differences are quantified in Table 4, which shows, in Panel A, the average number of meetings scheduled with portfolio firms compared with the average number of meetings scheduled over time if meetings hypothetically were uniformly distributed. Considering fund manager meetings, the probability of a meeting scheduled on the day of earnings reports is 1.5 percent. Since the probability is not zero, we verify from the meeting notes that these meetings, despite being on the same day, occur at a time after the earnings report release. Then, within 3 days after the report, the probability of a meeting is 27.6 percent, while it would be only 3.3 percent if meetings were randomly scheduled. Within 20 days, the probability of a meeting increases to 66.3 percent, compared with 17.2 percent if chosen randomly. In comparison, the incidence of governance specialist meetings scheduled is not different from a random schedule.

Panel B illustrates the mean waiting time between key events in the data. In 2015, the average time between fund manager meetings is 136 trading days, for governance specialist meetings it is 108 days, and for analyst recommendations it is 33 days. Clearly, not all meetings are scheduled to coincide with earnings reports, and not all analyst recommendations are based on insights from either type of meeting.

The difference in how fund manager and governance specialist meetings are scheduled is helpful. Since fund manager meetings frequently occur immediately after earnings announcements, the trading

patterns on fund manager meeting days cannot only reflect public information. This is confirmed by the trades—as we show later—being associated with significant abnormal performance. Further, since governance specialist meetings appear to be timed randomly with respect to earnings announcements, the sharp spikes in trading on meeting days are equally unlikely to be explained by public information, at least as far as earnings reports are concerned.

Finally, in Panel C of the Table, we consider for both fund manager and governance specialist meetings whether their trading spikes depend on proximity to an earnings report. For this, we repeat our baseline trading specifications from Table 3, Panel A, and split meetings by whether they occur close to earnings reports (within a -5 to +5 day window). The results show that proximity to earnings reports is unimportant for trading on meeting days. For fund manager meetings in Columns (1) and (2), trading is similar in magnitudes on meeting days, whether they are close to earnings calls or not, and trading that is distant from meeting days appears, if anything, slightly more pronounced. While the probability of both selling and buying in Columns (3) and (4) is higher for meetings that are close to earning reports, the increases are modest, and since both sell and buy trades increase, this suggests greater differences in opinion among fund managers close to earnings reports. Results for governance specialist meetings are similar. Overall, earnings reports do not undermine our baseline result that meetings and trading are related.

Meeting quality

In Table 5, we relate meeting quality to trading activity. Recall that analysts rate meetings on a scale of 1 (poor) to 5 (excellent). The advantage of the ratings is that it is an attempt to convert soft information into hard information for the benefit of fund managers (primarily for those who did not attend the meeting), and therefore we can more easily relate it to trading activity of both the analyst who wrote the report and the other fund managers who attended, or did not attend, the meeting. We repeat the Table 3 specifications, dropping Column (1) for the estimates without controls. We estimate the impact of the assessed meeting quality on trading by regressing daily trading activity on three indicator variables: low rating (1,2), medium rating (3) and high rating (4,5). Our conjecture is that an average quality meeting confirms analysts' priors, rather than changes them. Instead, a low or high quality meeting plausibly changes analysts' prior opinions.

The results show that quality and trading activity are positively and monotonically correlated. Low quality meetings are on average associated with selling, rather than buying, by fund managers, although they are statistically significant only for the conditional sample of trades that take place. For

medium quality meetings, the incremental trading activity is positive, indicating net buying, both for the whole sample and the conditional sample. For high quality meetings, buying is positive for both samples, but is most pronounced for the conditional sample, where it is 7.8% of buying. Focusing on contrarian trading by some fund managers—who sell when many fund managers are buying—a similar pattern emerges: Low quality meetings lead to both buying and selling by fund managers at the same time— although selling is three times the probability of buying, 139 percent (1.605/1.155) versus 46 percent (0.589/1.275). Instead, high quality meetings lead almost universally to buy trades. As might be expected, medium quality meetings are associated with both high probabilities of buy and sell trades—although buying is more likely than selling. As such, average meetings appear to confirm fund managers' priors, with the priors being relatively diverse.

In summary, we find that low quality meetings lead to aggregate selling, high quality meetings lead to aggregate buying, and average meetings lead to both buying and selling—consistent with fund managers' priors being diverse.

Meeting Attendance

Table 6, Panel A, provides estimates of trading activity related to whether the attendees of the portfolio firm indicate a high or low level meeting. A high level meeting (CEO+) is one where at least two of the CEO, CFO or Chair of the portfolio firm attend the meeting, where less than two is a low level meeting (CEO). For high level meetings, there is consistently a high level of buying, whereas low level meetings are associated with net selling, but on a much smaller and often an insignificant scale. This suggests that low level meetings with portfolio firms are more routine and less important than high level meetings.

In the same panel, we show trading activity for high and low numbers of fund managers attending and classify Low Attendance as those meetings below the median sample attendance of fund managers, and High Attendance equal to or above the median. The coefficient estimates in Columns (5) and (6) show that net aggregate buying around fund manager meetings is associated with high attendance. Low attendance meetings instead do not lead to net buying and are even associated with selling. With high attendance meetings, there is substantially more buying than selling, both in levels and in probabilities, in Columns (7) and (8).

As an illustration of these results, consider the stock of Charter International, an engineering business. On February 26, 2010, four fund managers met with the CEO and CFO, making this a high-level meeting from the side of the portfolio firm. At the time, 29 funds held the stock, and the analyst

had an outstanding "Hold" recommendation in place. The meeting was of high quality—it received a "4" meeting quality rating—and the analyst noted in the conclusion that "this meeting was reassuring both on [a whistle blowing case] at a subsidiary as well as on [sales growth]. [...] All too cheap down here in my view not to be a buyer". As a result of the meeting, and consistent with the meeting note, the analyst upgraded the stock from "Hold" to "Buy" and on the day of the meeting 13 of the 29 funds holding the stock increased their positions in Charter International; the other funds did not trade.

Panel B partitions trading around meetings for those fund managers who do not attend the meeting in person, and for those that do attend. The results are unambiguous—where fund managers attend a meeting in person, their level of trading increases to a much larger extent than for fund managers who hold the stock but did not attend. For example, with attendance, fund managers are net buyers at 3.9 percent, compared with no attendance, where fund managers on average sell an insignificant amount. Columns (3) and (4) suggest that there is a high probability of attendees buying, with a much lower probability of a sell. This pattern is repeated for non-attendees, but with lower probabilities of buy trades. One interpretation is that these meetings contain soft as well as hard information, and being absent from such a meeting deprives the fund manager of such information. An alternative interpretation is that absentee fund managers exhibit a low level of interest in trading in the stock.

5. Meeting Induced Recommendation Changes

In this Section, we consider trading decisions that are related to meeting induced recommendation changes and compare them with other recommendation changes. In Section 3 we described how the fund manager/analyst includes stock recommendations in analyst reports after meetings, company reports, and on an ad-hoc basis. In our sample, there are in total 33,696 recommendations, of which 14,724 are "Buy" recommendations, 12,944 are "Hold", and 6,025 are "Sell" recommendations. Most important are *changes* in analyst recommendations. If internal analyst recommendations contain information, then an upgrade or downgrade of a specific stock should coincide with trading by fund managers. A downgrade of a stock indicates one of the three possible cases, "Buy" to "Hold", "Sell" to "Buy", "Hold" to "Sell", while an upgrade indicates one of the three cases of "Sell" to "Hold", "Sell" to "Buy", "Hold" to "Buy". The event dates of the sell and buy signals are the internal publication dates of the updated internal analyst recommendations. In our data, there are 1,556 unique downgrades of a stock—which we refer to as a Sell Signal—and 1,433 unique upgrades of a stock, which we refer to as a Buy Signal.

In Table 7, we relate these analyst recommendation changes to trading activity. In Panel A, we consider all recommendation changes made by analysts. The results confirm that analyst signals and fund

manager trades are strongly related and are consistent with analyst signals being informative. We distinguish positions where the analyst making the recommendation change is holding those positions as a fund manager from those positions where the fund manager is not an analyst for that stock. This separation is relevant, as in the first case the fund manager is essentially trading on her own signal and thus would be expected to have a stronger conviction to trade, while in the second case the fund manager is trading on the signal of someone else.

The conditional estimates in Column (2) show that on days where analysts issue a sell signal and a different fund manager trades on that signal, that fund manager reduces their position by a significant amount, 16.1 percent, while buy signals with the same setting lead to increases in positions of 9.6 percent. The changes in positions are magnified when we consider the analyst's own positions. An analyst issuing a sell signal trades down her position by a comparable 16.0 percent, but upon issuing a buy signal increases her position by 25.2 percent.

Since trading is infrequent, the unconditional baseline estimates are scaled down in comparison. In Column (1), the trades in fund holdings for positions on days with sell signals of others indicate a modest decrease of 125 basis points and for others' buy signals an increase of 59 basis points. The changes are larger when we consider the analyst's own positions, with sell signal trades decreasing positions by 291 basis points, and buy signals increasing positions by 367 basis points.

Columns (3) and (4) show that buy signals have some dispersion in how they translate into trades, while sell signals do not. Buy signals by others increase the probability of a buy trade by 302 percent (3.847/1.275), but also increase the probability of a sell trade by a far smaller but notable 41 percent (0.469/1.155), indicating a significant share of contrarian traders. There is no comparable dispersion in trading for sell signals, which increase selling by 631 percent (7.293/1.155) and reduce buying by 27 percent (-0.349/1.275). Consistent with our earlier results, this dispersion of trading on the same buy signal, and stronger trading on analysts' own convictions compared with convictions of others, suggests that soft information, which fund managers interpret differently, plays a role in trading.

In Panel B, we consider how analyst signals are generated. We know that meetings with portfolio firms can generate information advantages that influence those signals. Here, we focus on those recommendation changes that are explicitly recorded in the meeting notes of fund managers. To be clear, these are cases where the meeting notes explicitly mention a change in recommendation *as a result* of the meeting. There are 106 such meeting-triggered sell signals and 141 meeting-triggered buy signals. This sample is a lower bound of such cases in the data, since it seems plausible that there are cases where a meeting influences an analyst to issue a recommendation change, without this being explicitly

mentioned as such in the meeting notes. We consider this possibility in our later tests of trading performance.

Panel B shows that for the conditional sample (Column 2), the recommendation changes that are explicitly attributable to a meeting are associated with selling and buying of slightly smaller, but are overall comparable magnitudes to the entire cross-section of recommendation changes in Panel A. We conclude that recommendation changes based on meetings are on average informationally comparable to non-meeting based recommendation changes.

6. Trading Performance Around Meetings

The large volume of trading around meetings with portfolio companies documented above is more important if it contributes to fund performance. Thus, we investigate the information content of meetings by analyzing the performance of trades made by fund managers. We conjecture that meetings are sufficiently significant that they enable informed trading. We consider several trading scenarios around the actual meeting day of fund managers and governance specialists.

First, we consider whether meetings enhance performance, following the approach of Bradley, Jame, and Williams (2022). The results are shown in Figure 4. We find that the portfolio going long in the tercile of stocks most heavily purchased by fund managers on meeting dates and shorting the tercile of stocks most heavily sold on meeting days outperforms the corresponding long-short portfolio *without* meetings by 180 bps over the subsequent 20 trading days, and by about 260 bps over the subsequent 40 trading days. This outperformance is for fund manager meetings; the outperformance for governance specialist meetings is lower at around 65 bps over 40 trading days.

Second, we use standard monthly time-series regressions of long-short portfolios with and without meetings in FF3 and Carhart 4 factor specifications. The results are shown in Table IA1-2 in the Internet Appendix. For each trading day during the sample period, we again sort all stocks into terciles based on the aggregate net trading across all funds that hold the stock on that day. The buy portfolio each day includes all stocks that have a meeting day within the past 10 trading days and are in the top tercile of buy trades, the sell portfolio includes all stocks in the bottom tercile of sell trades within the same 10 meeting day (we consider both shorter and longer alternative windows and obtain similar results). Daily value-weighted (by market cap) returns are then compounded to yield the monthly return. The monthly return difference with meetings averages 134 bps per month (t-statistic: 4.87), reported in Column (1). This strong performance is not explained by exposures to size, value and momentum factors of Fama and French (1993) and Carhart (1997), respectively, which are provided for UK equities by Gregory,

Tharayan and Christidis (2013). In all cases, the alpha of meeting-based portfolios (regression constant) is economically and statistically significant, with monthly Sharpe ratios ranging from 0.47 to 0.51. The alphas of non-meeting-based portfolios are also economically and statistically significant—proxying for skill of fund managers—but lower at 75 bps per month (t-statistic 4.36), reported in Column (5). Across all specifications, meeting-based portfolios exhibit larger alphas than non-meeting-based portfolios.

Third, we calculate the performance based upon actual trades, instead of a hypothetical portfolio. To better understand our approach, consider the example of Provident Financial Plc, a sub-prime lending firm. In early 2009 the asset manager held a sizeable stake fluctuating around 7 percent. Between March 23 and April 28, 2009, governance specialists engaged with the firm in a series of meetings, which revolved around a controversial new executive compensation plan. The specialists expressed strong dissatisfaction with many aspects of the plan, one of which was a one-time bonus payment for "exceptional performance" to a group of executives, including the CEO. After one meeting with the company, the governance specialist in charge, wrote that "this arrangement seems opportunistic, unjustified, and unnecessary. Such one-off awards are not consistent with the broader economic environment." Importantly, the specialist also noted a negative impression about how the portfolio firm was handling the engagement process itself:

"That some of these significant changes have already been made without consultation is unwelcome and we should not support the Rem Report or the re-election of the Rem Com Members. [...] We discussed the consultation process and the changes with the company [...]. They listened to our views but did not seek to make any changes to their approach to these matters. During these discussions it transpired that the company had provided different investors with different stories as justification for the changes."

Our interpretation of the event is that the asset manager gained significant insights of a negative nature into the portfolio firm during those meetings. They contributed to the internal analyst covering the firm downgrading it from "Buy" to "Hold" on May 8, 2009, 11 days after the final meeting (the analyst report mentions the compensation controversy). We consider performance through trading during the [-1,+5] day window around the event, where day 0 is the day of the meeting. On the day of the downgrade, 50 funds held the stock, of which 17 sold down the stock during the [-1,+5] day window around the downgrade; 33 did not trade, and none were buyers. During the window, the share price declined by 7.1%, which hypothetically assuming a passive strategy is the raw return the position would have incurred. From this, we calculate the abnormal return due to active trading—adjusted for inflows and

outflows due to trading—as the actual value change during the same window, net of the passive strategy, expressed as a percentage return on the position value (as at the closing price on day t-2).¹⁶

Since we know the size of the position at the end of the day only, we do not know the intraday timing of trades, so we make assumptions about when fund managers are executing their trades during the day. The asset manager is a large and sophisticated institution, with all equity trading executed internally, with no outsourcing. Orders are typically internally aggregated and then executed by the dealing desk, on the day, or subsequent days, depending on the liquidity of the stock. Execution potentially stretching over multiple days is relevant for our tests since we consider the trading response of fund managers on specific event days. We consider up to 5 days post event, to allow liquidity-induced execution delays.

We assume that trades occur at the opening price (fast trading) or at the closing price (slow trading). We observe daily positions, and therefore the slow trading assumption is the lower bound of realized performance. For Provident Financial, we observe an abnormal return due to trading of between 29 to 91 bps, under slow and fast trading assumptions, respectively.

For the entire sample, we consider performance resulting from trading around meetings, in Table 8. We consider four scenarios. First, across *all* meetings, fund managers generate 10 to 21 bps of abnormal returns on an average position during the [-1, +1] and [-1,+5] day windows around their meetings with portfolio firms, assuming fast trading. Second, fund managers also trade profitably around governance specialist meetings—which they do not attend—of about 8 bps of abnormal returns during the [-1, +1] and [-1, +5] day windows around those meetings. Slow trading assumptions reduce these returns to close to zero. Third, we consider trading around analyst recommendation changes, starting with analyst sell signals, i.e. downgrades of stocks, which are obviously impactful and not routine. Assuming fast trading, trades that sell down positions in stocks that analysts downgrade generate 28 to 55 basis points abnormal returns during the [-1, +1] and [-1, +5] day windows around the recommendation change, respectively; slow trading assumptions reduce these excess returns to between 6 and 29 bps. Finally, trades in stocks that analysts upgrade generate 22 to 35 basis points abnormal returns during returns to close to zero. We further split sell and buy signals into whether they are meeting-related or not. First, consider analyst recommendation

¹⁶ For any position *i* in stock *j* the abnormal return is $AR_{i,j} = [(S_{i,j,T} - S_{i,j,t-2})P_{j,T} - \sum_{t=1}^{T} (\Delta S_{i,j,t})P_{j,t}] / (S_{i,j,t-2}P_{j,t-2})$, where t=0 is

the recommendation change, $S_{i,j}$ is number of shares held, P_j is price, and $\Delta S_{i,j}$ is number of shares traded. The first term is the capital gain over the period; the second term is the net investment in the stock over the period, the denominator is initial position value. Our measure overstates the returns for buy trades and understates the returns for sell trades, since we are scaling by the initial holding.

changes that occur *as a result* of a meeting with a portfolio firm. We aggregate into *close to meeting* all recommendation changes that are either explicitly mentioned in the meeting notes or occur within 5 trading days of a meeting, and therefore close enough in time to be plausibly influenced by insights from the meeting. Alternatively, recommendation changes that occur without meetings with portfolio firms by construction are unlikely to be based on insights that analysts obtain from meetings, those changes should be based on *other*, non-meeting based information, most likely public information. In both settings, sell and buy signals yield comparable abnormal returns, that are higher with fast trading, and lower with slow trading assumptions. Overall, meetings with portfolio firms, and especially recommendation changes around those meetings, generate profitable trading decisions. As such, the majority of meetings plausibly confirm analysts' prior opinions rather than sharply changing them. Importantly, meetings are valuable even if they confirm analysts' priors, perhaps because they reinforce priors, and that reinforcement signals greater conviction. Notwithstanding, meetings that alter analysts' priors are more valuable than those that confirm them.

These abnormal returns appear modest when compared to the hypothetical long-short portfolios, but they accrue over short intervals and, as the table shows, in aggregate the short-term trades around meetings and internal analyst recommendation changes in our sample generate trading gains of roughly US\$ 420 million assuming fast trading, and US\$170 million assuming slow trading.

An important difference between the hypothetical portfolios and the realized trading is that abnormal returns from actual trading are constrained by the size of trades made by fund managers relative to their existing positions. A potential puzzle is that many positions do not trade around meetings, even in response to apparently particularly informative meetings.

What might explain the apparent under-trading by fund managers? First, funds may not trade to avoid taking extreme positions against their benchmark indices. We find some support for this for internal recommendation changes, which have clear implications for the expected direction of trades of fund managers. Figure IA1-3 in the Appendix compares the incidence of negative and positive portfolio tilts around recommendation changes and shows that funds which do *not* trade are already under- or overweight those positions—relative to funds that *do* trade—*prior* to the recommendation change.¹⁷ Second, a lack of liquidity might make higher levels of trading too costly. Third, fund managers may be

¹⁷ The top panel of Figure IA1-3 shows that for sell signals those positions that do not sell are already more likely to be underweight the stock relative to positions that sell upon the sell signal. As one would expect, this relation is stronger in the subsample where the fund manager holding the position is at the same time the analyst issuing the recommendation change, that is, the analyst is trading (here: selling) on her own sell signal. The bottom part of the figure shows that the same patterns, inverted, apply for buy signals.

closet indexers and underreact to information. To illustrate this, assume that all funds that do *not* trade around these events *instead* traded like the average fund that *does* trade. Under this assumption, aggregate trading gains increase considerably, to US\$ 1,270 million and US\$ 470 million, assuming fast and slow trading, respectively. This suggests that fund managers leave money on the table.

While meetings with portfolio firms are informative and generate significant alpha, fund managers adjust their positions modestly in response to meetings and are nowhere close to hypothetical hedge portfolios in terms of trading frequency and active share. Meetings also have limits, since the number of meetings that can plausibly be scheduled and attended by fund managers is finite.

7. The Content of Meetings and Trading

In prior literature there is evidence that personal interactions may be valuable and generate information advantages. However, there is no large sample evidence of the content of these meetings, nor how the content may influence trading activity. In this section, we analyze the tone and content of meetings and how they influence trading activity.

Table 9 reports estimates of how the tone of voice in meetings is related to trading activity. We measure the tone of voice in the meeting notes as the total number of negative words divided by the total number of positive and negative words in those notes, where negative and positive words are based on the dictionary by Loughran and McDonald (2011). Meetings with negative tone are meetings where there is a ratio larger than 0.5, and less than or equal to 0.5 are classified as positive meetings. If the tone of the meeting is positive, fund manager meetings are associated with much larger buying activities by fund managers, relative to negative meetings. In Column (1), fund manager meetings with negative tone are associated with net buy trades of 9 basis points, while positive tone is associated with buy trades of 28 basis points. Similarly, the selling that we have shown to be associated with governance specialist meetings, is concentrated among negative meetings; negative tone meetings are associated with selling of 12 basis points, while there is close to zero selling for meetings with positive tone. These results are magnified for the estimates in Column (2) conditional on trades occurring, where positive fund manager meetings lead to buy trades of 610 basis points, and negative fund manager meetings lead to reduced buy trades of only 143 basis points, with disagreement among fund managers as the next columns show: The probabilities of sell and buy trades in Column (3) and (4) indicate that positive fund manager meetings lead to broad agreement among fund managers in the sense that they result only in increased buy trades. In contrast, negative fund manager meetings are associated with significant disagreement among fund managers and contrarian trading, with the probability of buy trades increasing by more (131 percent, 1.674/1.275) than the probability of sell trades (57 percent, 0.657/1.155)

To illustrate positive and negative meetings, consider the example of a fund manager meeting with Cineworld, a cinema operator, on 15 March 2013, with the meeting note being in the top tercile of positive meetings. The fund manager notes about the meeting state:

"Reliable as ever, Cineworld continues to go from strength to strength [...] set to continue its strong performance under remarkably highly motivated management team. The forthcoming [transaction] may help drive further rerating. A clear buy with scope for earnings upgrades and re-rating."

In contrast, consider the example of a fund manager meeting with Close Brothers, a financial services firm, on 4 October 2007, which was a meeting in the bottom tercile of negative meetings. The fund manager notes that:

"Our meeting was poor, with further earnings downgrades likely. Earnings are likely to go backwards [...] and make limited progress in [...], the highest growth division, asset management has underperformed its peers [...] with very low organic growth. This seems likely to persist given management weakness."

Having established that the tone of a meeting is related to trading, we next consider whether the same applies to specific topics. Recall from Table 1 that meeting topics have been classified by governance specialists for their meetings, but the same labeling does not exist for fund manager meetings.

We first consider for governance specialist meetings whether meeting topics are associated with meaningful differences in trading, but do not find support for this. We then consider, for both fund manager and governance specialist meetings, whether topics assigned by machine learning techniques are associated with differences in trading. We use latent Dirichlet allocation for topic modelling and assess for a range of parameters that topics are not reliably associated with directional trading by fund managers.¹⁸ Third, we use a data mining approach, and consider whether the meetings associated with the largest trading responses by fund managers exhibit different topics from meetings that are not tied to trading, using supervised machine learning as in Table 1. As before, we find no consistent evidence that this is the case. Having also read through several hundreds of the meeting notes ourselves, our conclusion is the following. First, what is being discussed may in many scenarios be less important than how it is being discussed, with a focus on soft rather than hard information. Second, meeting notes frequently use indirect speech, including humor and irony, which creates well-known challenges in natural language processing, as even detecting humor and sarcasm is a complex task, as it often relies on understanding

¹⁸ We estimate topic models both in R and Stata and experiment with a range of possible topics, using the pre-processed meeting notes—normalized, tokenized, with stop words removed, as inputs. We use the identified topics to label meetings and run regressions similar to our baseline estimates in Table 3, with topics as index variables. These index variables have generally low explanatory power for trading by fund managers. Results are available upon request.

the context and the tone of the text. For example, the analyst's assessment that we cite in the Introduction that "[the Chairman] had had a busy time and was justifiably proud of the polo match that the charity had staged" to an NLP algorithm suggests positive character traits of the Chairman, likely misinterpreting that the true intention of the statement is to point out that the Chairman is out of touch, and actively distracting himself with irrelevant activities elsewhere.¹⁹

To increase the information to noise ratio, we focus on a specific setting in our data—the previously mentioned company reports contained in quarterly industry reports written by internal analysts. These reports offer a potentially helpful feature. They on occasion mention past meetings with portfolio firms. Since these reports are on average written up with considerable delay, we conjecture that meetings explicitly mentioned by analysts are likely to be important meetings, and as such may increase our chances of detecting trading-relevant content. A key constraint is that we cannot cleanly measure how strongly the analyst attributes information to past meetings, as opposed to other (contemporary) information.

We parse all company reports, use suitable text mining algorithms to identify each firm in the report, and within each report assess whether a meeting with a portfolio firm is plausibly referenced. This yields 3,700 candidates in 5,670 firm reports, for each of which we attempt to identify the meeting that the report is referring to. This match of mentions to meetings is easier for meetings that are explicitly referenced by their exact date (for example "the 12 Jan meeting confirmed"), and harder for other meetings that are referenced loosely (for example "in our last meeting the CEO mentioned"). We identify 186 such recalled meetings. Recalled meetings we further split into good and bad meetings (by tone).

In Table 10, we report estimates of trading activity for these meeting measures. We find, first, that recalled fund manager meetings are associated with significantly more trading, specifically more buying, than standard meetings. There is no consistent difference for governance specialist meetings. Second, bad and good recalled meetings do not differ for fund manager meetings in their trading impact. However, bad recalled governance specialist meetings seem to lead to selling. This is consistent with the view that governance meetings are focused on negative issues related to governance. We note the comparatively small sample size in these tests.

8. Conclusion

¹⁹ Advanced machine learning tools perform much better with indirect speech. For example, OpenAI's ChatGPT as of January 2023 correctly labelled our Introduction quote as likely being sarcastic.

Institutional investors frequently express their commitment to active ownership in public, yet since their interactions with portfolio firms are private and the very fact that they take place is undisclosed, we have limited evidence about the content and the quality of private meetings between asset managers and their portfolio firms, and the extent to which the asset manager uses these meetings for profitable trading opportunities. We find that meetings broadly serve the purpose of transmitting soft information rather than hard information. We conclude that meetings both confirm/reinforce prior beliefs and change them, both scenarios creating valuable trading opportunities. The topics of meetings are potentially less important than how that content is being discussed. For example, we find that the tone of voice of the meeting is significantly related to trading, as well as who attends the meeting, using both data from the asset manager and the portfolio firm.

Surprisingly, one of our results is to highlight that the majority of positions do not trade around meeting dates, even in response to apparently particularly informative meetings. There are two possible implications. First, the results inform prior studies which have hypothetically assumed that asset managers trade positions aggressively around potential information-based meetings, and therefore would appear to overstate the actual gains. Second, our results may be interpreted as the asset manager leaving economically significant amounts of money on the table, through under trading. The latter interpretation would suggest that the well-known concern that active asset managers typically fail to outperform is at least partially explained by insufficient use of information advantages gained from meetings. This is also consistent with the well-documented outperformance of active management being low or zero (e.g. Busse, Goyal and Wahal, 2010; Gerakos, Linnainmaa and Morse (2021).

The results also shed light on another advantage to the asset manager of active versus passive funds. The analysis in this paper suggests that active management makes stewardship activities profitable. In comparison, the returns to stewardship for passive funds are likely to be smaller since the trading benefits that we document do not accrue to them.

This paper considers the benefits of meetings accruing to the asset manager and its clients from informed trading. It does not examine the outcomes of engagements with portfolio firms—which is receiving considerable attention, especially in the ESG space. Such outcomes might well improve the share prices of portfolio firms and thereby benefit all shareholders of those companies—whereas the trading benefits we document only accrue to the shareholders of the funds managed by the asset manager. This is an important issue for both regulators and researchers, who are interested in the value of private meetings, and who benefits from them.

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Table 1Meetings with Portfolio Firms

This table reports summary statistics for the frequency with which fund managers (FM) and governance specialists (GS) meet with portfolio firms' directors and executives in Panel A and aggregate topics of those meetings in Panel B. Topics in Panel B are classified using 1) randomized logistic regression following Hovy, Melumad, and Inman (2021) to identify the words that best discriminate texts drawn from GS and FM meetings, where the sample includes 1,176 GS and 2,287 FM meetings and 2) topic labels assigned to meetings by GS, where percentages do not sum to 100, since meetings can have more than one topic assigned to them.

| Variable | Mean | Median | Min | Max | SD | Obs |
|------------------------------|------|--------|------|-------|------|-------|
| FM Meetings (N) | | | | | | 3,423 |
| FM Meeting | | | | | | |
| w/meeting note | 0.68 | 1.00 | 0.00 | 1.00 | 0.47 | 3,423 |
| w/low rating | 0.10 | 0.00 | 0.00 | 1.00 | 0.30 | 3,423 |
| w/medium rating | 0.47 | 0.00 | 0.00 | 1.00 | 0.50 | 3,423 |
| w/high rating | 0.12 | 0.00 | 0.00 | 1.00 | 0.32 | 3,423 |
| Meeting tone | 0.63 | 0.64 | 0.00 | 1.00 | 0.11 | 2,382 |
| Active health warning | 0.13 | 0.00 | 0.00 | 1.00 | 0.13 | 3,423 |
| Fund manager attendees (N) | 3.70 | 3.00 | 1.00 | 15.00 | 2.94 | 3,126 |
| Portfolio firm attendees (N) | 1.84 | 2.00 | 0.00 | 6.00 | 0.91 | 3,041 |
| PF CEO attends | 0.50 | 1.00 | 0.00 | 1.00 | 0.50 | 3,423 |
| PF CFO attends | 0.51 | 1.00 | 0.00 | 1.00 | 0.50 | 3,423 |
| PF Chair attends | 0.03 | 0.00 | 0.00 | 1.00 | 0.18 | 3,423 |
| PF High level meeting | 0.65 | 1.00 | 0.00 | 1.00 | 0.48 | 3,423 |
| GS Meetings (N) | | | | | | 1,288 |
| GS Meeting | | | | | | |
| w/meeting note | 0.55 | 1.00 | 0.00 | 1.00 | 0.50 | 1,288 |
| Meeting tone | 0.64 | 0.65 | 0.00 | 1.00 | 0.17 | 1,248 |
| w/discussion of CSR/SRI | 0.35 | 0.00 | 0.00 | 1.00 | 0.48 | 1,288 |
| w/CSR/SRI note | 0.07 | 0.00 | 0.00 | 1.00 | 0.26 | 1,288 |
| Active health warning | 0.27 | 0.00 | 0.00 | 1.00 | 0.44 | 1,288 |
| FM and GS Joint Meeting | 1.00 | 1.00 | 1.00 | 1.00 | 0.00 | 148 |

Panel A: Meetings with Portfolio Firms

| Supervised machine learning regress | | Human classified meeting topics | | | |
|--|------------------|---------------------------------------|------|--|---------------|
| GS Meeting – best discriminating words | | | 6 | | Frequency (%) |
| "governance" | "broker" | Compensation | 40.7 | | |
| "board" | "growth" | Shareholder voting issues | 27.1 | | |
| "chairman" | "margin" | Board structure | 22.8 | | |
| "ed" | "cost" | Audit-related issues | 16.7 | | |
| "discuss" | "buy" | Statutory issues | 15.2 | | |
| "remuneration" | "recommendation" | Socially responsible investing issues | 13.1 | | |
| "sri" | | Other issues | 11.3 | | |
| "letter" | | Broad/structural governance issues | 6.1 | | |
| "engagement" | | No topic assigned | 0.9 | | |
| "the company" | | | | | |
| "audit" | | | | | |

Panel B: Topics from Natural Language Processing and Human Labelling

Table 2Fund Holdings and Trades

This table reports summary statistics for fund holdings and trades. The sample period is 2007-2015. In Panel A, funds are included if they hold at least one UK stock. Statistics are shown at the end of each period. In Panel B, positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. Panel C shows the sample of all daily trades.

| Date | FTSE All | Stocks held | | Nun | nber of fu | nds | Number of | Average |
|-----------|-----------------|-------------|---------------------|-----|------------|-------------|----------------------------------|-------------------------|
| | Share Stocks | All | UK Equities Desk | All | UK Eq | uities Desk | Positions across all Funds | Aggregate Stake Held |
| 31-Dec-07 | 706 | 703 | 287 | 9 | 96 | 49 | 5646 | 1.79 |
| 31-Dec-08 | 672 | 670 | 305 | 9 | 98 | 46 | 6402 | 2.04 |
| 31-Dec-09 | 626 | 625 | 298 | 9 | 98 | 45 | 6410 | 2.06 |
| 31-Dec-10 | 630 | 629 | 304 | 9 | 94 | 43 | 6203 | 1.96 |
| 31-Dec-11 | 629 | 628 | 293 | 9 | 90 | 42 | 5911 | 1.88 |
| 31-Dec-12 | 606 | 353 | 279 | 9 | 92 | 40 | 5082 | 2.83 |
| 31-Dec-13 | 623 | 371 | 279 | 1 | 17 | 39 | 5192 | 2.63 |
| 31-Dec-14 | 647 | 404 | 296 | 1. | 36 | 46 | 6060 | 2.91 |
| 31-Dec-15 | 646 | 390 | 306 | 1. | 33 | 43 | 5722 | 2.99 |

Panel B: Fund Holding Characteristics and Trades

| Variable | Mean | Median | Min | Max | SD | Obs |
|------------------------|--------|--------|-------|---------|--------|------------|
| MCap \$ portfolio firm | 20,658 | 4,470 | 6.241 | 251,258 | 35,095 | 10,447,982 |
| Position stake held | 0.162 | 0.0336 | 0.000 | 2.225 | 0.355 | 10,447,982 |
| P(Trade) | 0.023 | 0.000 | 0.000 | 1.000 | 0.15 | 10,447,982 |
| P(Sell Trade) | 0.012 | 0.000 | 0.000 | 1.000 | 0.107 | 10,447,982 |
| P(Buy Trade) | 0.011 | 0.000 | 0.000 | 1.000 | 0.106 | 10,447,982 |

Panel C: Trade Characteristics

| Variable | Mean | Median | Min | Max | SD | Obs |
|-----------------------------|--------|--------|--------|-------|-------|---------|
| Sell Trades (N) | | | | | | 120,367 |
| Initial Position \$ million | 10.01 | 2.646 | 0.0409 | 163.3 | 23.40 | 120,367 |
| Size of Trade \$ million | -0.588 | -0.176 | -5.684 | 0.00 | 1.096 | 120,367 |
| Trades (SH) | -12.07 | -6.993 | -53.18 | -0.00 | 13.24 | 120,367 |
| Buy Trades (N) | | | | | | 118,921 |
| Initial Position \$ million | 7.462 | 1.784 | 0.0409 | 163.3 | 19.48 | 118,921 |
| Size of Trade \$ million | 0.577 | 0.171 | 0.00 | 5.732 | 1.081 | 118,921 |
| Trades (SH) | 24.77 | 9.154 | 0.00 | 186.7 | 40.59 | 118,921 |

Table 3Meetings and Trading

The table reports regression estimates of daily trading activity following meetings between governance specialists or fund managers and internal analysts with portfolio companies. In all panels, the dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1)-(3); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in Columns (4) and (5). All variables are described in Appendix A. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

| | (1) | (2) | (3) | (4) | (5) | |
|--------------|------------|----------------|-----------|---------------|--------------|--|
| | Trades | Trades | Trades | P(Sell Trade) | P(Buy Trade) | |
| GS Meeting | -0.0977*** | -0.101*** | -4.211*** | 0.242*** | -0.473*** | |
| | [0.0145] | [0.0145] | [0.658] | [0.0498] | [0.0449] | |
| FM Meeting | 0.102*** | 0.102*** | 1.964*** | 0.183*** | 0.916*** | |
| | [0.0243] | [0.0251] | [0.619] | [0.0477] | [0.130] | |
| Ln(Shrout) | | 0.00146 | 0.136 | 0.0676* | -0.0392 | |
| | | [0.00952] | [0.388] | [0.0352] | [0.0453] | |
| Stake Held | | 4.392*** | 72.99** | -1.469 | 34.58*** | |
| | | [1.244] | [36.73] | [7.077] | [8.470] | |
| Day Return | | 3.658*** | 76.85*** | -8.756*** | 11.89*** | |
| - | | [0.401] | [5.818] | [0.828] | [1.240] | |
| Sample | Full | Full | Trades | Full | Full | |
| Observations | 10,447,982 | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 | |
| FE | None | Stock-Fund-Day | | | | |

Panel A: GS and FM Meetings

Panel B: Meetings with and without Meeting Notes

| | (1) | (2) | (3) | (4) | (5) |
|----------------------|------------|------------|-----------|---------------|--------------|
| | Trades | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| GS Meeting With Note | -0.122*** | -0.135*** | -5.279*** | 0.464*** | -0.508*** |
| - | [0.0227] | [0.0224] | [0.859] | [0.0740] | [0.0539] |
| GS Meeting No Note | -0.0621*** | -0.0522*** | -2.158** | -0.0751 | -0.423*** |
| | [0.0150] | [0.0154] | [0.909] | [0.0660] | [0.0663] |
| FM Meeting With Note | 0.140*** | 0.138*** | 2.810*** | 0.128** | 1.025*** |
| | [0.0262] | [0.0267] | [0.687] | [0.0562] | [0.136] |
| FM Meeting No Note | 0.0175 | 0.0241 | -0.0331 | 0.303*** | 0.680*** |
| | [0.0375] | [0.0371] | [1.066] | [0.0837] | [0.139] |
| Ln(Shrout) | | 0.00141 | 0.139 | 0.0679* | -0.0393 |
| | | [0.00952] | [0.387] | [0.0352] | [0.0454] |
| Stake Held | | 4.393*** | 72.97** | -1.471 | 34.58*** |
| | | [1.244] | [36.69] | [7.077] | [8.470] |
| Day Return | | 3.658*** | 76.83*** | -8.757*** | 11.89*** |
| - | | [0.401] | [5.817] | [0.829] | [1.240] |
| Sample | Full | Full | Trades | Full | Full |
| Stock, Fund, Trading | Yes | Yes | Yes | Yes | Yes |
| Day FE | | | | | |
| Observations | 10,447,982 | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |

| Panel C: Long | Windows 2 | After GS | and FM | Meetings |
|---------------|-----------|----------|--------|----------|
| | | | | |

| | Trades | Trades | Trades | P(Sell Trade) | P(Buy Trade |
|---------------------|------------|------------|-----------|---------------|-------------|
| GS Meeting | -0.0936*** | -0.102*** | -4.281*** | 0.244*** | -0.479*** |
| | [0.0145] | [0.0145] | [0.657] | [0.0499] | [0.0450] |
| GS Meeting [+1,+20] | -0.0990*** | -0.0963*** | -3.483*** | 0.122*** | -0.438*** |
| | [0.00635] | [0.00572] | [0.260] | [0.0216] | [0.0301] |
| FM Meeting | 0.104*** | 0.105*** | 2.033*** | 0.180*** | 0.924*** |
| | [0.0244] | [0.0252] | [0.617] | [0.0484] | [0.131] |
| FM Meeting [+1,+20] | 0.0192*** | 0.0251*** | 0.559*** | -0.0272* | 0.0640*** |
| | [0.00451] | [0.00462] | [0.185] | [0.0164] | [0.0209] |
| Ln(Shrout) | | 0.00409 | 0.159 | 0.0644* | -0.0283 |
| | | [0.00949] | [0.388] | [0.0353] | [0.0451] |
| Stake Held | | 4.443*** | 76.94** | -1.538 | 34.86*** |
| | | [1.252] | [36.82] | [7.077] | [8.473] |
| Day Return | | 3.661*** | 76.58*** | -8.758*** | 11.90*** |
| | | [0.401] | [5.821] | [0.829] | [1.240] |
| Sample | Full | Full | Trades | Full | Full |
| Observations | 10,447,982 | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |
| FE | None | | Stock-I | Fund-Day | |

Table 4 Earnings Reports and Meetings with Portfolio Firms

Panels A and B of the Table show the frequency of fund manager and governance specialist meetings with portfolio firms following the public earnings reports of portfolio firms. In Panels A and B, the sample includes all firms with available dates of earnings reports on Worldscope, where on the date of the public release at least one fund holds a position in the firm. There are 8,080 such earnings reports. Panel A compares the average number of meetings scheduled with portfolio firms in the data with the average number of meetings scheduled if meetings (hypothetically) were uniformly scheduled. Panel B reports mean trading days between FM meetings, GS meetings, changes in or reiterations of internal analyst recommendations. Panel C reports regression estimates of daily trading activity following meetings between governance specialists or fund managers and internal analysts with portfolio companies, split by whether or not they occur within a -5 to +5 day windows around earnings reports. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1) and (2); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in Columns (3) and (4). All variables are described in Appendix A. Positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

Panel A: Incidence of fund manager and governance specialist meetings scheduled within 0 to +20 days following earnings reports

| | Day 0 | Days 0 to 1 | Days 0 to 3 | Days 0 to 5 | Days 0 to 10 | Days 0 to 20 |
|------------------------|-------|-----------------|------------------|-------------|--------------|--------------|
| | | Fund Manage | er meetings | | | |
| As scheduled | 1.5% | 6.5% | 27.6% | 42.9% | 57.1% | 66.3% |
| If uniformly scheduled | 0.8% | 1.6% | 3.3% | 4.9% | 9.0% | 17.2% |
| | | Governance Spec | cialist meetings | | | |
| As scheduled | 1.0% | 1.8% | 3.8% | 6.0% | 10.9% | 18.7% |
| If uniformly scheduled | 1.0% | 1.9% | 3.9% | 5.8% | 10.7% | 20.4% |

Panel B: Mean trading days between FM meetings, GS meetings, changes in or reiterations of internal analyst recommendations

| Year | FM | GS | Int. analyst recommendation |
|------|-----|-----|-----------------------------|
| 2007 | 88 | 41 | 26 |
| 2008 | 116 | 85 | 24 |
| 2009 | 123 | 92 | 29 |
| 2010 | 123 | 129 | 30 |
| 2011 | 121 | 131 | 26 |
| 2012 | 124 | 125 | 24 |
| 2013 | 127 | 110 | 32 |
| 2014 | 129 | 108 | 27 |
| 2015 | 136 | 108 | 33 |

Panel C: Meetings close to earnings reports

| | (1) Trades | (2) Trades | (3) P(Sell Trade) | (4) P(Buy Trade) |
|-----------------------------|---------------|---------------|----------------------|---------------------|
| FM Close to Earnings | 0.0887** | 1.273 | 0.325*** | 1.136*** |
| | [0.0413] | [0.977] | [0.0780] | [0.170] |
| FM Distant | 0.110*** | 2.432*** | 0.100** | 0.786*** |
| | [0.0212] | [0.584] | [0.0472] | [0.120] |
| GS Close to Earnings | -0.133*** | -5.426*** | 0.845*** | -0.193 |
| | [0.0433] | [1.437] | [0.217] | [0.156] |
| GS Distant | -0.0974*** | -4.032*** | 0.180*** | -0.502*** |
| | [0.0151] | [0.735] | [0.0547] | [0.0474] |
| Sample | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |
| Adjusted R^2 | 0.003 | 0.103 | 0.011 | 0.033 |

Table 5 Analyst Evaluation of Fund Manager Meetings and Trading

The table relates daily trading activity to the internal analysts' evaluation of fund manager meetings contained in meeting notes. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1) and (2); and whether (1) or not (0) a sell trade or buy trade is made on day t in Columns (3) and (4). Meetings are rated between 1 (poor) and 5 (excellent), based on this meeting quality is defined as low (1, 2), median (3) or high (4,5). All variables are described in Appendix A. Control variables are included but not reported. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

| | (1) Tradaa | (2) Tradac | (3) D(Sall Trada) | (4) D(Duu Trada) |
|-----------------------------|---------------|---------------|----------------------|---------------------|
| | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| FM Meeting No Note | -0.0500 | -2.602** | 0.528*** | 1.111*** |
| | [0.0390] | [1.056] | [0.0807] | [0.130] |
| FM Low Rating | -0.147** | -6.227*** | 1.605*** | 0.499*** |
| | [0.0587] | [1.538] | [0.206] | [0.128] |
| FM Medium Rating | 0.101*** | 1.447* | 0.589*** | 1.550*** |
| | [0.0322] | [0.778] | [0.0641] | [0.173] |
| FM High Rating | 0.435*** | 7.753*** | -0.173 | 3.125*** |
| | [0.0825] | [1.970] | [0.112] | [0.270] |
| Sample | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes |
| Observations | 10,431,466 | 240,028 | 10,445,436 | 10,445,436 |
| Adjusted R^2 | 0.003 | 0.103 | 0.011 | 0.034 |

Table 6Meeting Attendance and Trading

The table reports regression estimates of daily trading activity on meeting attendance of meetings between portfolio companies and fund managers. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1), (2), (5) and (6); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in Columns (3), (4), (7) and (8). All variables are described in Appendix A. Control variables are included but not reported. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|-------------------------|------------|----------|------------------|-----------------|------------|-----------|------------------|-----------------|
| | Trades | Trades | P(Sell Trade) | P(Buy Trade) | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| CEO | -0.109* | -2.201 | -0.0598 | -0.410*** | | | | |
| | [0.0570] | [1.416] | [0.0826] | [0.155] | | | | |
| CEO+ | 0.139*** | 2.463*** | 0.599*** | 1.867*** | | | | |
| | [0.0427] | [0.862] | [0.0813] | [0.197] | | | | |
| High Attendance | | | | | 0.198*** | 3.367*** | 0.384*** | 2.041*** |
| | | | | | [0.0389] | [0.831] | [0.0668] | [0.203] |
| Low Attendance | | | | | -0.0522 | -2.746*** | 0.754*** | 0.987*** |
| | | | | | [0.0329] | [0.899] | [0.0704] | [0.112] |
| Sample | Full | Trades | Full | Full | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Stock, Fund, | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Trading Day FE | | | 10 111 017 | | 10 101 100 | | 10 117 10 1 | 10 117 10 1 |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 | 10,431,466 | 240,028 | 10,445,436 | 10,445,436 |
| Adjusted R ² | 0.003 | 0.103 | 0.011 | 0.034 | 0.003 | 0.103 | 0.011 | 0.034 |

Panel A: Fund Manager Meeting Composition

Panel B: Meeting Attendance by Fund Managers

| | (1) Trades | (2) Trades | (3) P(Sell Trade) | (4) P(Buy Trade) |
|---|---------------|---------------|----------------------|---------------------|
| FM Not Attending | 0.0202 | -0.604 | 0.575*** | 1.196*** |
| | [0.0261] | [0.667] | [0.0658] | [0.121] |
| FM Attending | 0.332*** | 3.897*** | 0.546*** | 3.104*** |
| | [0.0794] | [1.314] | [0.0985] | [0.363] |
| Sample | Full | Trades | Full | Full |
| Controls Stock, Fund, Trading Day FE | Yes Yes | Yes Yes | Yes Yes | Yes Yes |
| Observations | 10,431,466 | 240,028 | 10,445,436 | 10,445,436 |
| Adjusted R^2 | 0.003 | 0.103 | 0.011 | 0.034 |

Table 7 Fund Manager Meetings, Recommendation Changes and Trading

The table reports regression estimates of daily trading activity following meeting induced changes in analyst recommendations compared to all recommendation changes. The dependent variable is the daily percentage change in the number of shares held in the portfolio company per fund in Columns (1) and (2); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in Columns (3) and (4). Sell Signal Own indicates, on day *t*, any downgrade of the stock ("Buy" to "Hold", "Buy" to "Sell", "Hold" to "Sell") where the analyst covering the stock owns the position as fund manager on day *t*; Buy Signal Own indicates any upgrade of the stock ("Sell" to "Hold", "Sell" to "Buy", "Hold" to "Buy") on day *t*. Sell Signal Other and Buy Signal Other indicates those same downgrades and upgrades where the position is held by a different fund manager. The sample includes 1,556 unique Sell Signals and 1,433 unique Buy Signals in Panel A, and 106 unique Sell Signals and 141 unique Buy Signals in Panel B. All variables are described in Appendix A. Control variables are included but not reported. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

Panel A: All Recommendation Changes

| | (1) | (2) | (3) | (4) |
|-----------------------------|------------|-----------|---------------|--------------|
| | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| Sell Signal Own | -2.906*** | -15.97*** | 16.30*** | -0.664*** |
| | [0.264] | [1.170] | [1.215] | [0.166] |
| Sell Signal Other | -1.251*** | -16.14*** | 6.339*** | -0.316*** |
| | [0.107] | [0.805] | [0.496] | [0.0666] |
| Buy Signal Own | 3.674*** | 25.21*** | 0.687** | 13.80*** |
| | [0.593] | [3.353] | [0.342] | [1.105] |
| Buy Signal Other | 0.590*** | 9.624*** | 0.469*** | 3.847*** |
| | [0.101] | [1.327] | [0.0817] | [0.370] |
| Sample | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |
| Adjusted R^2 | 0.003 | 0.101 | 0.013 | 0.035 |

Panel B: FM Meeting Induced Recommendation Changes

| | (1) | (2) | (3) | (4) |
|-----------------------------|------------|-----------|---------------|--------------|
| | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| Sell Signal | -0.813*** | -10.95*** | 7.258*** | -1.109*** |
| | [0.123] | [1.868] | [0.808] | [0.166] |
| Buy Signal | 0.614*** | 6.615** | 0.543** | 5.469*** |
| | [0.173] | [2.758] | [0.273] | [0.699] |
| Sample | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |
| Adjusted R^2 | 0.003 | 0.097 | 0.011 | 0.034 |

Table 8Trading and Performance

The table reports performance metrics around trading events. The sample in Panel A includes all fund positions and events during the sample period 2007-2015, positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. The sample in Panel B is identical to Panel A, except assuming that all funds trade the average trade of trading funds, where the average trade is calculated by excluding contrarian trades (fund manager trades that buy upon a Sell signal, sell upon a Buy signal). Initial Position is the average US\$ amount held on day t-1; AR indicates the -1 to +1 [-1 to +5] abnormal return due to active trading, net of passive returns and net of trade flows, where fast assumes that intra-day trades all occur at opening prices and slow assumes closing prices. All *Sell signals* indicates any downgrade of a stock ("Buy" to "Hold", "Buy" to "Sell", "Hold" to "Sell"); *All Buy signals* indicates any upgrade of a stock ("Sell" to "Buy", "Hold" to "Buy"); Sell signal and Buy signal samples exclude contrarian trades. Close to meeting indicates a recommendation change explicitly mentioned as occurring because of a meeting or a recommendation change occurring within 5 trading days following a meeting. Money made is the US\$ product of abnormal returns times initial positions times number of positions. All other variables are described in Appendix A. All variables are winsorized at the 1st and 99th percentiles. Standard errors are clustered at the stock level and *t*-statistics are shown in brackets.

| | Initial | N. of | _ | AR, fast | trading | AR, slow | trading |
|------------------|--------------|-----------|-------|----------|---------|----------|----------|
| | Position | positions | | [-1,+1] | [-1,+5] | [-1,+1] | [-1,+5] |
| | \$m | | | (1) | (2) | (3) | (4) |
| FM meeting | 12.3 | 5,391 | Coef. | 0.096 | 0.21 | 0.0095 | 0.074 |
| | | | | [6.07] | [4.00] | [1.71] | [2.16] |
| GS Meeting | 18.4 | 3,027 | Coef. | 0.082 | 0.077 | 0.016 | -0.0026 |
| | | | | [3.97] | [1.12] | [2.74] | [-0.059] |
| All Sell signals | 12.4 | 2,552 | Coef. | 0.28 | 0.55 | 0.058 | 0.29 |
| | | | | [7.05] | [6.49] | [3.98] | [4.44] |
| Close to meeting | | | Coef. | 0.34 | 0.72 | 0.093 | 0.40 |
| | | | | [4.68] | [4.87] | [3.64] | [3.80] |
| Far from meeting | | | Coef. | 0.26 | 0.50 | 0.052 | 0.25 |
| | | | | [6.39] | [5.81] | [3.45] | [3.78] |
| All Buy signals | 12.1 | 1,495 | Coef. | 0.22 | 0.35 | 0.025 | 0.14 |
| | | | | [5.09] | [4.59] | [2.36] | [1.57] |
| Close to meeting | | | Coef. | 0.13 | 0.55 | 0.039 | 0.39 |
| | | | | [1.77] | [2.87] | [0.95] | [2.26] |
| Far from meeting | | | Coef. | 0.22 | 0.36 | 0.026 | 0.11 |
| | | | | [4.22] | [2.16] | [1.51] | [0.90] |
| Money made, \$ | FM meetin | ıg | | 63.7 | 139.2 | 6.3 | 49.1 |
| million | GS meetin | g | | 45.7 | 42.9 | 8.9 | -1.4 |
| | All Sell sig | gnals | | 88.6 | 174.0 | 18.4 | 91.8 |
| | All Buy sig | gnals | | 39.8 | 63.3 | 4.5 | 25.3 |
| | Total | | | 237.7 | 419.5 | 38.1 | 164.7 |

Panel A: In-sample position size, abnormal returns, and money made

| | | | AR, fast trading | | | AR, slow trading | |
|----------------|--------------|-----------|------------------|---------|---------|------------------|---------|
| | Initial | N. of | _ | [-1,+1] | [-1,+5] | [-1,+1] | [-1,+5] |
| | Position \$m | positions | | (1) | (2) | (3) | (4) |
| FM meeting | 9.9 | 33,039 | Coef. | 0.11 | 0.15 | 0.024 | 0.057 |
| GS Meeting | 14.7 | 28,961 | Coef. | 0.10 | 0.09 | 0.04 | 0.03 |
| Sell signals | 10.3 | 5,841 | Coef. | 0.15 | 0.22 | -0.024 | 0.059 |
| Buy signals | 10.2 | 4,169 | Coef. | 0.40 | 0.61 | 0.17 | 0.32 |
| Money made, \$ | FM meeting | | | 358.3 | 488.6 | 78.2 | 185.7 |
| million | GS Meeting | | | 425.7 | 387.4 | 161.8 | 114.9 |
| | Sell signals | | | 90.2 | 132.4 | -14.4 | 35.5 |
| | Buy signals | | | 170.1 | 259.4 | 72.3 | 136. |
| | Total | | | 1044.4 | 1267.8 | 297.8 | 472.2 |

Panel B: Hypothetical average trade strategy - position size, abnormal returns, and money made

Table 9Meeting Tone and Trading

The table reports regression estimates of daily trading activity following meetings between governance specialists or fund managers and internal analysts with portfolio companies. In all panels, the dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1) and (2); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in Columns (3) and (4). All variables are described in Appendix A. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

| | (1) Trades | (2) Trades | (3) P(Sell Trade) | (4) P(Buy Trade) |
|-----------------------------|---------------|---------------|----------------------|---------------------|
| FM Meeting No Note | -0.123*** | -3.736*** | -0.188** | -0.507*** |
| - | [0.0437] | [1.270] | [0.0898] | [0.0979] |
| FM Meeting Neg Tone | 0.0901*** | 1.433* | 0.657*** | 1.674*** |
| | [0.0332] | [0.790] | [0.0691] | [0.161] |
| FM Meeting Pos Tone | 0.281*** | 6.104*** | -0.00649 | 2.373*** |
| | [0.0901] | [2.104] | [0.133] | [0.264] |
| GS Meeting No Note | -0.0527 | -4.493 | -0.259 | -0.286 |
| | [0.0778] | [3.078] | [0.277] | [0.230] |
| GS Meeting Neg Tone | -0.118*** | -4.823*** | 0.460*** | -0.366*** |
| | [0.0213] | [0.846] | [0.0596] | [0.0484] |
| GS Meeting Pos Tone | -0.00517 | 0.501 | -0.124 | -0.195* |
| | [0.0261] | [1.586] | [0.0942] | [0.101] |
| Sample | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 |
| Adjusted R^2 | 0.003 | 0.101 | 0.013 | 0.035 |

Table 10Recalled Meetings and Trading

The table reports regression estimates of daily trading activity following meetings between governance specialists or fund managers and internal analysts with portfolio companies. In all panels, the dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund in Columns (1), (2), (5), and (6); and whether (1) or not (0) a sell trade or buy trade is made on day *t* in columns (3), (4), (7), and (8). All variables are described in Appendix A. The sample period is 2007-2015; positions without at least one fund manager meeting, at least one governance specialist meeting and without a trade by any fund during the sample period are excluded. All variables are winsorized at the 1st and 99th percentiles. Sample Trades restricts the sample to only those observations with non-zero trading activity. Standard errors clustered at both fund and trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
|-----------------------------|------------|-----------|---------------|--------------|------------|-----------|---------------|--------------|
| | Trades | Trades | P(Sell Trade) | P(Buy Trade) | Trades | Trades | P(Sell Trade) | P(Buy Trade) |
| GS Standard Mtg | -0.104*** | -4.274*** | 0.219*** | -0.477*** | -0.0566** | -5.562*** | -0.279 | -0.181 |
| - | [0.0153] | [0.682] | [0.0509] | [0.0473] | [0.0281] | [1.708] | [0.182] | [0.128] |
| FM Standard Mtg | 0.0996*** | 1.850*** | 0.194*** | 0.869*** | -0.0918 | -3.190 | 0.426*** | -1.401*** |
| | [0.0244] | [0.609] | [0.0486] | [0.130] | [0.118] | [3.056] | [0.163] | [0.471] |
| GS Recalled Mtg | -0.0563** | -3.370** | 0.511*** | -0.396*** | | | | |
| | [0.0282] | [1.467] | [0.180] | [0.126] | | | | |
| FM Recalled Mtg | 0.224* | 6.109** | -0.336** | 2.613*** | | | | |
| - | [0.122] | [3.046] | [0.140] | [0.507] | | | | |
| GS Recalled Bad Mtg | | | | | -0.0699** | -5.234*** | 0.557*** | -0.490*** |
| | | | | | [0.0303] | [1.673] | [0.179] | [0.129] |
| GS Recalled Good Mtg | | | | | -0.0430 | 2.172 | 0.487*** | -0.259** |
| | | | | | [0.0289] | [1.741] | [0.187] | [0.125] |
| FM Recalled Bad Mtg | | | | | 0.191 | 5.135* | -0.113 | 2.710*** |
| | | | | | [0.128] | [2.928] | [0.164] | [0.495] |
| FM Recalled Bad Mtg | | | | | 0.191 | 5.018 | -0.253 | 2.193*** |
| | | | | | [0.124] | [3.241] | [0.161] | [0.475] |
| Sample | Full | Trades | Full | Full | Full | Trades | Full | Full |
| Controls | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Stock, Fund, Trading Day FE | Yes | Yes | Yes | Yes | Yes | Yes | Yes | Yes |
| Observations | 10,447,982 | 240,164 | 10,461,965 | 10,461,965 | 10,447,982 | 240,164 | 10,461,970 | 10,461,970 |
| Adjusted R^2 | 0.003 | 0.103 | 0.011 | 0.033 | 0.003 | 0.096 | 0.011 | 0.033 |

Figure 1 Private Meetings–Cases AstraZeneca and Barclays

The figure provides an aggregate view of daily private data based on two of the stocks in our sample, AstraZeneca plc and Barclays plc. The stocks are held by multiple funds during the entire sample period, from 2007 to 2015. The figure shows signals and events in the data, in six data clusters: i) fund manager meetings, ii) the rated quality of those meetings, iii) the attendees of the asset manager, iv) the attendees of the portfolio firm, v) governance specialist meetings and other contacts and vi) internal analysts' stock recommendations.

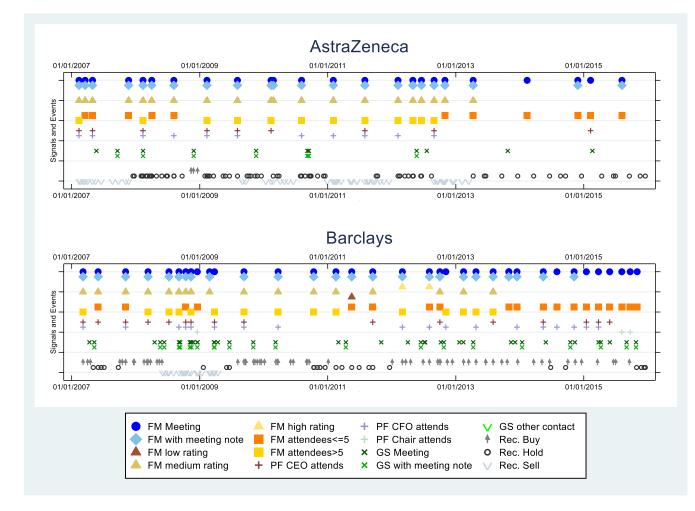
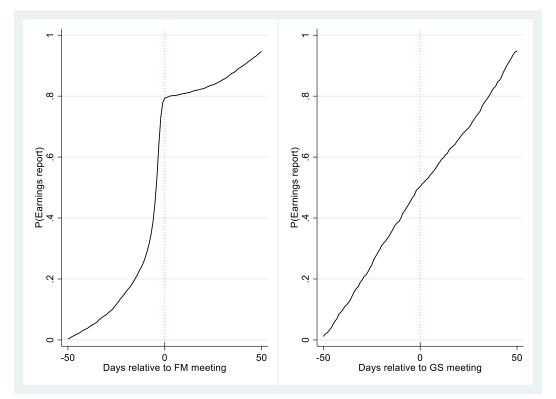


Figure 2 Earnings Reports and Meetings with Portfolio Firms

The figure shows the probability of public earnings reports during the -50 to +50 day window around the fund manager and governance specialist meeting dates with portfolio firms. We identify all sample firms with available dates of earnings reports on Worldscope, where on the date of the public release at least one fund holds a position in the firm. There are 104,251 such positions and 8,080 earnings reports. For each meeting we verify, for the -50 to +50 day window straddling the meeting date, whether the portfolio firm releases a public earnings report. We average and cumulate the number of earnings report releases for each firm over the 101-day window.



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Figure 3 Recommendation Changes and Meetings with Portfolio Firms

The figure shows the frequency of recommendation changes that are downgrades (Sell) or upgrades (Buy), during the -50 to +50 day window around meetings with portfolio firms by fund managers and governance specialists. For each recommendation change date we verify, for a -50 to +50 day window straddling the recommendation change, whether fund managers and governance specialists schedule meetings with the portfolio firm. The number of meetings is cumulated for each firm over the 51-day window.

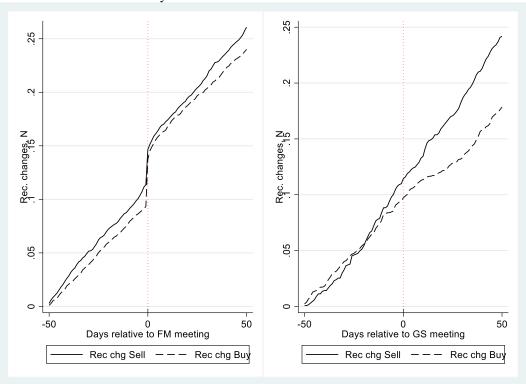
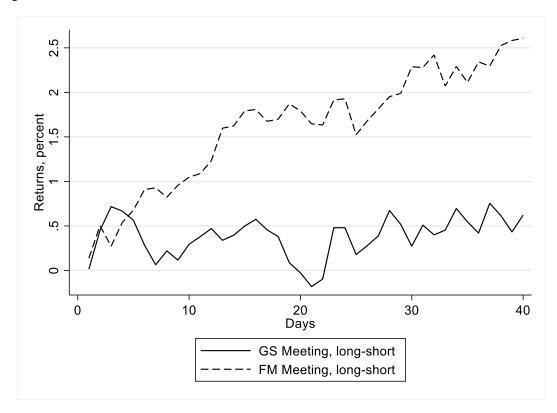


Figure 4 Performance of Buy and Sell Trades on Meeting Days

The figure shows the relative long-term performance of portfolio firms with and without meetings. Our procedure follows Bradley, Jame and Williams (2022). For each trading day during the sample period 2007-2015 we sort all stocks into terciles based on the aggregate net trading across all funds that hold the stock on that day; we do so separately for stocks for which a fund manager (FM) or governance specialist (GS) meeting takes place (Meeting) and for stocks without any meeting (No meeting). We define *FM Meeting Aggregate Trade* as the total market cap of portfolio firm *i* bought by all funds on day *t* with a FM meeting, less the total market cap of firm *i* sold by all funds on that day; *GS Meeting Aggregate Trade* is defined analogously for days with a GS meeting, while *No Meeting Aggregate Trade* is the same metric on a day t without any meeting. Next, we calculate (1) the cumulative market-adjusted return to a hedge portfolio that buys stocks in the top tercile of *FM Meeting Aggregate Trade* and sells stocks in the bottom tercile of *FM Meeting Aggregate Trade*, for horizons ranging from 1 to 60 trading days after the day t, and (2) the same return to a hedge portfolio that buys stocks in the top tercile of *No Meeting Aggregate Trade* and sells stocks in the bottom tercile of *No Meeting Aggregate Trade*. We define *FM Meeting long-short* as (1) minus (2), i.e. the performance of portfolio firms with FM meetings relative to the performance for GS meetings, are defined in analogous fashion.



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Appendix A: Variables and Data Descriptions

The table provides a summary description of the variables reported in tables and figures. A comprehensive description can be found in Internet Appendix 2 - Database Construction. Indicates is shorthand for a dummy variable set to 1 if a certain condition is met and zero otherwise.

| | N | ~ |
|--------------------------------|--|-------------------------|
| Variable | Description | Source |
| Aggregate TA (\$ | Aggregate total assets held in UK equities across all funds, | SLI internal data, FTSE |
| billions) | calculated as the number of shares held times the price per share. | |
| Aggregate Stake Held | Number of shares held across all funds over number of shares outstanding. | SLI internal data, FTSE |
| MCap \$ portfolio firm | Number of shares outstanding times price per share. | FTSE |
| Position stake held | Number of shares held by a fund over number of shares outstanding. | SLI internal data, FTSE |
| Initial Position \$ million | Number of shares held by a fund times price per share, on day t-1 of a trade. | SLI internal data, FTSE |
| Trades (SH) | The daily net percentage change in the number of shares held in a single portfolio company per fund. | SLI internal data |
| Size of Trade \$ million | The daily US\$ amount change held in a single portfolio company per fund. | SLI internal data |
| Sell Trade | Indicates Trade (SH) is negative. | SLI internal data |
| Buy Trade | Indicates Trade (SH) is positive. | SLI internal data |
| Sell Signal | Indicates an internal analyst revises a recommendation downwards (Hold to Sell, Buy to Hold, Buy to Sell). | SLI internal data |
| Buy Signal | Indicates an internal analyst revises a recommendation upwards (Hold to Buy, Sell to Hold, Sell to Buy). | SLI internal data |
| GS Meeting | Indicates a governance specialist meeting with a portfolio firm taking place on day t. | SLI internal data |
| Sell signal, no meeting | Indicates a sell signal that does not coincide with a fund manager meeting. | SLI internal data |
| Sell signal from meeting | Indicates the meeting notes of a fund manager meeting stating that the meeting leads the analyst to issue a sell signal. | SLI internal data |
| Sell signal with prior meeting | Indicates a sell signal within 5 trading days of a fund manager meeting. | SLI internal data |
| Buy signal, no meeting | Indicates a buy signal that does not coincide with a fund manager meeting. | SLI internal data |
| Buy signal from meeting | Indicates the meeting notes of a fund manager meeting stating that the meeting leads the analyst to issue a buy signal. | SLI internal data |
| Buy signal with prior meeting | Indicates a buy signal within 5 trading days of a fund manager meeting. | SLI internal data |
| FM Meeting | Indicates a fund manager meeting with a portfolio firm taking place on day t. | SLI internal data |
| Meeting With Note | Indicates a governance specialist or fund manager meeting summary note being available. | SLI internal data |

| Meeting No Note | Indicates a GS or FM meeting taking place with no summary | SLI internal data |
|------------------------------------|---|--|
| FM Low Rating | note. Indicates a FM meeting rating 1 or 2 ($1 = poor$, $5 =$ | SLI internal data |
| FM Medium Rating FM High Rating | excellent). Indicates a FM meeting rating 3. Indicates a FM meeting rating 4 or 5. | SLI internal data SLI internal data |
| Negative tone | The total number of negative words in a fund manager or governance specialist meeting note divided by the total number of positive and negative words in the note is larger than 0.5. Negative and positive words are based on the dictionary by Lougran and McDonald (2011). | SLI internal data |
| Positive tone | The total number of negative words in a fund manager or governance specialist meeting note divided by the total number of positive and negative words in the note is equal to or smaller than 0.5. | SLI internal data |
| Active health warning | Indicates a portfolio firm being on the internal governance health warning list on day t. | SLI internal data |
| CEO | Indicates a fund manager meeting attended by one of the following: Chair, CEO, CFO. | SLI internal data |
| CEO+ | Indicates a fund manager meeting attended by at least two of the following: Chair, CEO, CFO. | SLI internal data |
| High Attendance | Indicates a fund manager meeting attended by a number of fund managers larger or equal to the median for all meetings. | SLI internal data |
| Low Attendance | Indicates a fund manager meeting attended by a number of fund managers below median for all meetings. | SLI internal data |
| Ln(Shrout) FM Not Attending | Natural log of the number of shares outstanding. Indicates a fund manager meeting that the fund manager holding the position does not attend in person. | FTSE SLI internal data |
| FM Attending | Indicates a fund manager meeting that the fund manager holding the position attends in person. | SLI internal data |
| Stake Held | Aggregate percentage stake held across all funds, calculated as total number of shares held over the total number of shares outstanding. | SLI internal data, FTSE |
| Day Return | Daily stock return of stock i. | FTSE |
| Earnings report | Indicates the day of the public release of an earnings report of a portfolio firm. | Worldscope |
| FM Close to Earnings | Indicates a fund manager meeting within a -5 to +5 day windows around earnings reports. | SLI internal data, Worldscope |
| FM Distant | Indicates a fund manager meeting outside a -5 to +5 day windows around earnings reports. | SLI internal data, Worldscope |
| GS Close to Earnings | Indicates a governance specialist meeting within a -5 to +5 day windows around earnings reports. | SLI internal data, Worldscope |
| GS Distant | Indicates a governance specialist meeting outside a -5 to $+5$ day windows around earnings reports. | SLI internal data, Worldscope |
| Fund Manager-Analyst | Indicator when the fund manager holding a position is also the internal analyst covering the sector/stock. | SLI internal data |
| GS Standard Mtg | Indicates a governance specialist meeting not referenced in subsequent quarterly analyst reports. | SLI internal data |
| FM Standard Mtg | Indicates a fund manager meeting not referenced in subsequent quarterly analyst reports. | SLI internal data |

| FM Recalled Mtg | Indicates a fund manager meeting recalled and referenced in at least one subsequent quarterly analyst report. | SLI internal data |
|-----------------|---|-------------------------|
| GS Recalled Mtg | Indicates a governance specialist meeting recalled and referenced in at least one subsequent quarterly analyst report. | SLI internal data |
| Active share | Represents a fund manager's deviation from the fund's benchmark; calculated as in Cremers and Petajisto (2009), at daily frequency, using FTSE All Share Index weights. | SLI internal data, FTSE |

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