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

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Marco Becht
Solvay Brussels School of Economics and Management, Université libre de Bruxelles, CEPR and ECGI

Julian R. Franks
London Business School, CEPR and ECGI

Hannes F. Wagner
Bocconi University, IGIER, and ECGI

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Abstract

We use large language models to analyze the content of 4,700 private meetings between a large active asset manager and its portfolio firms. The high-level meetings convey mostly soft information about the firm, and little about industry or market. Fund manager meetings focus on business models and financial metrics, while governance specialist meetings focus on ESG risks. 0.4% of meetings discuss material non-public information. Trades by fund managers increase with meetings attended by senior management, rated as unusually good or bad, where the tone is significantly positive or negative, or assessed as creating consensus. Meeting-informed portfolios can generate significant outperformance.

Keywords: active investing, corporate governance, direct access, financial analysts, fund managers, generative pre-trained transformers, large language models, natural language processing, stewardship

JEL Classifications: G11, G14, G23, G34

Marco Becht
Goldschmidt Professor of Corporate Governance
Université Libre de Bruxelles
42 Avenue F. D. Roosevelt
1050 Brussels, Belgium
phone: +32 2650 4466
e-mail: marco.becht@ulb.ac.be

Julian R. Franks
Emeritus Professor
London Business School
Sussex Place, Regent's Park
London NW1 4SA, United Kingdom
phone: +44 20 7262 5050 x3449
e-mail: jfranks@london.edu

Hannes F. Wagner*
Associate Professor
Bocconi University
Via Roentgen 1
20136 Milano, Italy
e-mail: hannes.wagner@unibocconi.it

*Corresponding Author

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Marco Becht
Solvay Brussels School, Université libre de Bruxelles, CEPR, and ECGI

Julian Franks
London Business School, CEPR, and ECGI

Hannes F. Wagner
Bocconi University and ECGI

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Abstract

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Private meetings of institutional investors with boards of directors and management have grown substantially worldwide as investors comply with stewardship codes and engage in active ownership, both to gather information and influence outcomes. At the same time, private meetings are frequently undisclosed, and they raise concerns about rules on fair disclosure and related regulation. Using proprietary data from the equity investments from the world's 30th largest active asset manager in 2017—Standard Life Investments (henceforth "SLI")[1]—the paper lifts the lid on private meetings. It addresses four questions: What *types* of information do meetings convey—soft versus hard, firm versus industry and market, and most important from a regulatory perspective, material non-public information? How is this information *processed*? What are the *characteristics* of meetings? And, how do these answers affect *trading* decisions and *performance*?

Our paper attempts to answer these questions by using detailed notes taken from 4,700 private meetings between the asset manager and its portfolio companies over a period of nine years. Analyzing the meeting notes at scale is challenging—hundreds of meetings take place each year, and meeting notes are long. Extracting complex text-based information such as the amount of soft information contained in a meeting has been beyond the reach of researchers—until the advent of the revolutionary large language models (LLM), a subset of generative AI focused specifically on text, in particular GPT-4. Different from all previous natural language processing (NLP) tools, GPT can be prompted to read a specific text and perform detailed analysis, often at the level of a human expert reader. We combine the expert-like LLM processing with traditional NLP and human labelling.

Regarding different *types* of information, information *processing* and meeting *characteristics*, consider the following example of Carillion plc, a multinational construction firm, widely held by dozens of international institutional investors in December 2015. On Dec 1, 2015, the governance specialist responsible for this portfolio firm met with the Chairman of the board.

[1] The ranking is by global assets under management from P&I/Willis Towers Watson (2018) and represents data as of year-end 2017. Our data cover the period 2007-2015 and relate to the operations of SLI, the asset management arm of Standard Life Plc. Standard Life Plc and Aberdeen Asset Management Plc merged in March 2017 to become Standard Life Aberdeen Plc, and SLI was renamed Aberdeen Standard Investments. In 2021, Standard Life Aberdeen was rebranded abrdn Plc. In 2025 abrdn Plc changed its name to Aberdeen Investments Plc.

We quote from the meeting note below to show the usefulness of the information gathered, the high share of soft information, and the challenge of interpreting the information both for the human reader and LLMs. We follow Liberti and Petersen's (2019) definition of hard information likely being quantitative, based on numbers, easily transmissible, and interpreted identically by sender and receiver, while soft information is likely not quantitative, based on text, not easily transmissible, and requires interpretation. GPT4 assesses the information in the meeting note, from which we quote, to be 80% soft and 20% hard information:

> "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 [name] 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 [name]. He is also Chairman of [name] and sits on the board of [name]. <u>He is a busy man.</u> 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. […]. 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)."

Consider the soft information sentence above 'He is a busy man'. GPT correctly assesses this to mean that the Chairman is 'busy' for the wrong reasons since he appears to do everything *but* monitor the CEO. This assessment aligns closely with the concerns of the UK Equities Desk: Two weeks after the meeting, the internal analyst covering the firm downgraded it, from "Hold" to "Sell". On the day of the downgrade, 38 funds of SLI held the stock. One of those funds, a global equity fund, sold 6.1% of its holdings on the day. The fund continued selling each day, for a cumulative reduction of 22.9% during the [0, 5] day window around the downgrade. The majority of funds traded down the stock during this period, by an average of 26%. Subsequently the asset

manager cited the above internal meeting note to voice publicly that it had lost faith in the "willingness of the board [of Carillion] to alter the strategic direction of the company to address our concerns".[2] The reference to the competence of the Chairman is soft information, and is likely to have influenced the recommendation by the analyst and trading by fund managers. The LLM classifies the topics contained in the quote as "leadership dynamics", "CEO mentoring", "strategy", "governance and reporting" and "market performance". The quote also illustrates the absence of what regulators describe as material non-public information. GPT assesses the meeting note as 'completely unlikely' to contain such information.

While cluster analysis identifies thousands of distinct topics discussed in meetings[3], we show that a key determinant of both the information content of meetings and their trading impact is who convenes them, with two main types: Meetings convened by fund managers (FMs) occur at more regular intervals, often after earnings announcements, disclose a lower share of soft information, and focus on the financial aspects of the business model of the firm. Governance specialist (GS) meetings occur at less regular intervals and only with a subset of portfolio firms where it is likely that concerns have already been raised either by GSs or FMs, contain a higher share of soft information, and focus on assessing ESG risks, especially those related to remuneration and board composition.

Using our entire sample of both meeting types, we examine the relation between private meetings with portfolio firms and trading activity. Our baseline regressions show that during the [0, 5] day window where FMs meet with portfolio firms, the average fund that trades increases its position by 3.2% per day; in comparison we see a decrease of 2.3% per day in the positions around GS meetings. Importantly, while there is on average buying after FM meetings, and on average selling after GS meetings, we later show in a set of tests that both the size and the sign of the trading response depends on the information content of meetings, particularly soft information.

[2] This quote was reproduced by the asset manager in evidence given to the House of Commons Select Committee hearings on the failure of Carillion, which collapsed in January 2018, after struggling with debt and failing to secure funding. 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).
[3] From now on, we refer to 'meeting notes' as 'meetings' for the sake of brevity.

Also, our estimates of the trading response to private meetings are based on daily data and are larger than in prior evidence which uses inferred trades from institutional quarterly holdings from 13-F filings. In Bradley, Jame and Williams (2022), local institutional investors that participate in non-deal roadshow meetings increase their implied daily trading by about 1.36%; this compares with our FM meeting daily trading estimates of 3.2%. In Bushee, Gerakos, and Lee (2018), local investors that experience a corporate jet visit increase their implied daily trading by roughly 1/7th of our estimated daily effect.[4]

What is discussed in private meetings? For the entire sample, we assess that 33% of meeting information is hard information, and 67% is soft information. For FM meetings the proportion of soft information is 62%, for GS meetings it is 77%. We further decompose soft information into its subject matter and find that 72% is about the firm, 19% about the industry, and 9% about the market. When we analyze the 'conclusion' in FM meeting notes, information about the firm is even more dominant, comprising up to 79% of all information. We also analyze the differences between individual fund managers, and find significant differences in the proportion of soft versus hard information extracted by those individuals from meetings, and in subsequent trading by FMs. Our interpretation is that they differ in their perceived ability to extract information from private meetings.

In analyzing the previously discussed LLM-assessed soft and hard information content of meetings, we find soft information is associated with significant trading for both meeting types, but in opposite directions. Fund manager meetings dominated by soft information are associated with significant buying of 1.5 to 1.8% per day, and GS meetings dominated by soft information are associated with selling of 2.6% per day. In comparison, hard information meetings yield a larger trading response for FM meetings of 7.5 to 8.0% daily buy trades and 7.5% daily sell trades for GS meetings.

Using more traditional NLP techniques, we assess other characteristics of meetings and their importance for trading. We show that trading on meeting days is significantly more

[4] See Bradley, Jame and Williams (2022), Table III, Panel B and Bushee, Gerakos, and Lee (2018), Table 6.

pronounced for those that are assessed as unusually high or low quality by FMs, that are high profile with respect to attendees by the portfolio firm, and, that are unusually positive or negative based upon meeting sentiment.

Our estimates show that only a minority of positions trade in response to the information from private meetings. We suggest that one reason for non-trading is that meetings differ in the degree to which they generate consensus on how to trade on them. We prompt the LLM to assess the likelihood that the interpretation of information from a meeting will differ between fund managers and find that a high likelihood of no consensus is associated with significantly less trading. We further sharpen these tests by focusing on recommendation changes made by internal analysts, which have clear predictions for the direction of trading by fund managers. These relatively fewer events also have the empirical advantage that they proxy for distinct and measurable changes in the priors of internal analysts. We combine these recommendation changes with the LLM assessment of meeting information and confirm that even apparently clear-cut analyst signals have a significantly reduced trading impact if the information in private meetings is assessed as subject to interpretation, that is, an absence of consensus.

Our results so far highlight how trading around private meetings is primarily related to soft information. We next provide evidence that the information advantage that meetings appear to generate is not gained through material non-public information. In these cases, the asset manager explicitly makes itself an insider. For these tests, we use the LLM to systematically search for non-public information across all meeting notes. We follow the SEC and consider as material non-public any information which, if known, could reasonably be expected to move a firm's stock price, and prompt the LLM to assess the likelihood of such information being discussed. The LLM assesses 98% of meetings as "not at all likely" to discuss non-public information, and 1% as "slightly likely". We read the remaining roughly 1% of meeting notes and after adjusting for several false positives, we confirm that 17 meetings, or 0.4% of the total, discuss non-public information. We show in a detailed analysis that possession of material non-public information is associated with zero levels of trading by FMs.

We investigate the information content of meetings by analyzing the performance of trades. In time-series regressions we show that the monthly risk-adjusted outperformance of a long-short portfolio combining both FM and GS meetings—the long position in the top tercile of buy trade stocks after meetings and the short position in the bottom tercile of sell trade stocks after meetings—is economically and statistically significant at 180 bps per month. FM meetings on their own have a slightly larger alpha of 198 bps per month, while GS meetings on their own have a smaller and insignificant alpha of 83 bps per month. In comparison, a corresponding long-short portfolio without meetings exhibits a much smaller, but significant, alpha of 49 bps per month. The no-meeting portfolio outperformance suggests significant skills by FMs, while the larger outperformance of the meeting based portfolios is consistent with the information obtained in meetings enabling profitable trading opportunities.

Although this performance is economically significant, the long-short portfolios are hypothetical.[5] As we have shown, funds adjust their positions by single digit percentage points per day after meetings, and thus trade less aggressively in response to meetings than implied by the hypothetical portfolios used in prior work, and by us. In an alternative set of tests, we calculate the money made by the asset manager through active trading per position. For FM meetings, during a [0, 5] window around the meeting, money made is 19 bps if we assume fast trading by the asset manager, or 6 bps if we assume slow trading; while for GS meetings, money made is 7 bps or minus 1 bps, respectively.

A broader question is how our results fit in with the current regulatory framework concerning private meetings with portfolio firms. We show that private meetings convey mostly soft information, which is used for profitable trading. Where we identify meeting notes that contain material non-public information, we find no evidence of trading. Since our analysis relies on the meeting notes, we cannot exclude the possibility that they do not reflect the full conversation that passes between portfolio firms and the asset manager. If the regulatory goal is a level playing field, then allowing private meetings seems to be inconsistent with that goal, since we show that even

[5] These results are not necessarily evidence of outperformance of active management, which is well-documented to be low or zero (see, for example, Busse, Goyal and Wahal, 2010; Gerakos, Linnainmaa and Morse, 2021).

soft information obtained in private meetings can provide a competitive edge to active asset managers. Our evidence informs the debate as to the balance between transparency and the need for private, candid interactions between asset managers and portfolio firms.

A related question is external validity with respect to other asset managers and different regulatory environments. Our data are based upon one asset manager, albeit a large one. Notwithstanding, according to the Head of UK Equities the asset manager's organization and processes do not significantly differ from those of other asset managers. In comparison with other countries, the UK represents a strong disclosure and insider trading regulatory environment. Portfolio firms cannot selectively disclose material non-public information (MNPI), and asset managers cannot trade while in possession of such information. Formally, it is based upon a statutorily defined 'parity of information' system, requiring listed companies to disclose all MNPI, 'as soon as possible', making it unlawful to privately disclose such information, or for recipients to trade. In the US, insider trading law relies primarily on judicial interpretations of SEC Rule 10b-5, an antifraud provision, while disclosure obligations of firms and their officials are governed by Regulation Fair Disclosure (Reg FD), where enforcement is confined to 'unfair' disclosure of hard information. In comparison, the US environment appears less strict.[6]

The most closely related recent paper to ours is Bradley, Jame and Williams (2022), who analyze the timing of non-deal roadshows, a type of private meeting organized by sell-side analysts. They find that institutional investors' trades increase significantly around private meetings, that such trading is profitable and that sponsoring analysts in return appear to exhibit opportunistic biases in the opinions they express about the firms they meet. Our paper builds on theirs and differs in three main ways. First, our data include the actual meeting notes, which allow us to analyze the specific information content of meetings, using generative AI, rather than just observing the timing of meetings, without knowing their content. Second, we observe meeting

[6] See, for example, Greene and Schmid (2013) for a UK-US comparison. The UK's strict regulatory approach is considered as too far reaching for US purposes by some scholars. For example, Coffee (2013) explains that "most securities law scholars and practitioners have resisted a parity-of-information approach [like the UK] to defining the scope of the insider trading prohibition because it would dull market efficiency by chilling the incentive to search for new information". For a discussion of the challenges around Reg FD, see Fisch 2013.

characteristics in detail, down to the names and roles of attendees and their trading decisions. Observing those characteristics matters, since, for example, meetings convened by FMs versus GSs lead on balance to opposite trading decisions. Third, rather than inferring institutional trades from quarterly 13-F filings, we observe daily trades of individual FMs. The higher frequency data show significantly stronger trading results on meeting days, and higher returns from trading. More broadly, our paper contributes to the literature on private meetings between portfolio firms and their investors. Bushee, Gerakos, and Lee (2018) use jet flight patterns to infer potential meetings between asset managers and portfolio firms, while Bushee, Jung, and Miller (2011) and Green, Jame, Markov, and Subasi (2014) use investor conferences and public meetings to infer if valuable information is disclosed from trading and stock price reactions; they find that such meetings often precede significant investor trading. Barker, Hendry, Roberts and Sanderson (2012) and Ahblom and Christner (2021) provide interview and narrative evidence from 37 individuals and 39 meetings, respectively, while Park and Soltes (2021) analyze questions that two portfolio firms receive from their investors; their evidence suggests that meetings help investors assess management and gather insights that complement public information. Finally, Durney, Kyung, Park and Soltes (2023) combine survey and experimental data and highlight the importance of both verbal and non-verbal communication in meetings.

Our paper is also closely related to the literature using proprietary data on meetings between asset managers and portfolio firms to explore investor activism; Carleton, Nelson and Weisbach (1998) document the engagement process of the TIAA-CREF pension fund; Becht, Franks, Mayer, and Rossi (2009) analyze engagements of a UK activist hedge fund; Dimson, Karakas and Li (2015) use proprietary engagement data from an institutional investor with an ESG commitment; while Hoepner, Oikonomou, Sautner, Starks and Zhou (2024) consider another investor's ESG engagements and their effect on portfolio downside risk. However, to our knowledge, no prior study has been able to both examine the information content of those meetings for a large sample and show how such information may generate actual trading by the FMs participating in those meetings.

Finally, our paper contributes to the fast-growing literature that analyzes corporate disclosures and especially earnings calls using AI[7] and the literature of how sell-side and buy-side analysts create information advantages.[8]

The rest of the paper is as follows. Section I explains the context of private meetings with portfolio firms, describes our data in detail, and presents summary statistics; Section II outlines our empirical strategy and presents the results of the paper; and Section III concludes.

I. Data and Sample Characteristics

Standard Life Investments (SLI), our data provider, was the largest active asset manager in the UK in 2015 and in 2017 became the 23rd largest asset manager worldwide through a merger with Aberdeen Asset Management. The asset manager's investment style mostly relies on actively managed portfolios.[9] SLI was well known for the quality of its investment analysis and, meetings convened by its internal analysts with portfolio firms were an important part of its investment process. The asset manager also invested in a separate corporate governance, stewardship and sustainability function since the inception of the Cadbury Code in 1992 and, was highly visible among investors and companies.[10] An important question is the extent to which our results apply to other active asset managers. Conversations with the Head of UK Equities of SLI indicate that in his "frank" opinion, SLI's asset management practice does not significantly differ from other

[7] See, for example, Cao, Jiang, Yang, and Zhang (2023); Cook, Hansen, Kazinnik, and McAdam (2023); Kim, Muhn, and Nikolaev (2023); Jha, Qian, Weber, and Yang (2024).

[8] See, for example, Elton, Gruber, and Grossman (1986); Barber, Lehavy, McNichols and Trueman (2001, 2003); Jegadeesh, Kim, Krische, and Lee (2004); Bradshaw, Lock, Wang, and Zhou (2021). This literature mostly focuses on sell-side analysts, typically working for brokers. Some papers instead focus on the setting in our paper, that is, buy-side analysts working for the asset managers themselves (e.g., Cheng, Liu, and Qian, 2006; Groysberg, Healy, Serafeim, Shanthikumar, and Gui, 2013; Rebello and Wei, 2014; Brown, Call, Clement, and Sharpe, 2016).

[9] SLI was the investment arm of Standard Life Plc and was created in 2006 through the demutualization of Standard Life Assurance, one of the largest life insurance mutual companies in the world. The asset manager built on the reputation of the parent company for in depth research (Moss, 2000). Black and Coffee (1994) provide a detailed description of the significant role played by insurance companies and the asset managers they own in the governance of U.K. companies, unlike their U.S. counterparts.

[10] For example, in 2013 the Head of Governance and Stewardship of the asset manager 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).

asset managers, with obvious exceptions, such as purely quant-driven funds, who are unlikely to believe in meetings and their value.[11] However, SLI might have better funded and staffed its investment research and engagement activities relative to other organizations, and, the strict separation into FMs and GSs is not ubiquitous. Many asset managers organizationally embed the responsibility for ESG directly with the FM, making it challenging to assess separately the impact of ESG on trading and fund performance.

A. Internal Organization – Fund Managers, Internal Analysts, and Governance Specialists

Consider first the respective activities and roles of the asset manager and its portfolio firms in Figure 1. Our analysis is based on the private meetings of the members of the UK Equities Desk with their portfolio firms. The UK Equities Desk comprises 18 FMs and 23 GSs during the sample period, who sit on the same floor and have frequent informal interactions. Trades in UK equities are undertaken by those 18 FMs—who manage between 40-50 funds accounting for over 90% of all UK equity holdings—and by FMs on other desks, such as Asian and European funds who make up for the remaining 8-10% share. The trading activities of the latter are included in our sample since they can access all meeting notes of the UK Equities Desk. As the figure shows, we observe fund level holdings at the daily level totaling 10.45 million positions.[12] Fund managers attend meetings with portfolio firms. Each meeting is usually convened and chaired by the FM who is responsible for the analysis of equities in the portfolio firm's industry. Thus, FMs have a second role as internal analysts. The FM/analyst writes up the meeting notes and produces quarterly reports for those firms within their sector. Analysts also make recommendations on individual stocks to "Buy", "Hold", or "Sell", both in the meeting notes and their analyst reports, and on an ad hoc basis. Recommendations are for internal consumption only.

[11] The opinion is consistent with prior literature (e.g. Barker, Hendry, Roberts, and Sanderson, 2012; Soltes, 2014; Ahblom and Christner, 2021) that uses 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 are similar to other UK active managers.

[12] We restrict our sample to stocks in the FTSE All Share Index. We exclude other small cap stocks, such as London Stock Exchange Group's market for small and medium size growth companies (AIM), which has much weaker governance standards than the main market.

GSs—of whom there are 23 in the sample—engage with portfolio companies on governance and socially responsible investing issues, with the goal of conveying views, gathering information and identifying risks. The information gathered is passed on to analysts and FMs both in writing and at joint weekly meetings. A company can be placed on an internal "governance health warning" list when there are significant concerns about governance. The warning is a significant event and prominently shared within the UK Equities Desk. The interactions with portfolio firms are written up in GS meeting notes, and are separate from FM meetings.

B. The Characteristics of Private Meetings

In Table I we report the characteristics of private meetings between FMs and GSs, respectively and portfolio firms (Panel A). There are 3,410 FM meetings, attended on average by 3.7 representatives of the asset manager and 1.8 representatives of the portfolio firm. Fund manager meetings usually take place at a high level, involving, among others, the respective CEO, CFO, and less frequently the Chairperson of portfolio firms. The portfolio firm's CEO and CFO each attend roughly half of all meetings. The average firm with a FM meeting has a market capitalization of US$ 7.7 billion (median US$ 1.5 billion) and the average stake held in the stock, across all funds, is 3.5%.

Panel B shows GS meeting characteristics. There are 1,285 GS meetings, making them roughly a third as frequent as FM meetings. GS meetings contain information on attendance and composition, but not for all meetings. Meetings are mostly with the Chairperson and non-executive directors, especially the Chairs of remuneration, nomination, and audit committees. A high share, 26%, of meetings involve a company with an outstanding health warning. GS resources are allocated to more important stock positions, both in dollar and percentage terms, with an average

(median) market capitalization of US$ 15.8 billion (2.6 billion), and an average aggregate stake of 4.3%.[13]

C. The Content of Private Meetings

Meeting notes form the basis of our analysis of the substance of meetings. Analyzing meeting notes at scale is challenging—hundreds of meetings take place each year, and meeting notes are long (up to 2,200 words). We assign the role of finance expert to Generative Pre-trained Transformer (GPT) and parse all meeting notes using OpenAI's Application Programming Interface (API) with GPT-4 Turbo, GPT-4, and GPT-4o. All prompts are in the Internet Appendix.

C.1. Fund Manager Meetings

Table II, Panel A, shows descriptive statistics for FM meetings. Among those meetings, 68% have meeting notes available in the sample. As a human-assessed metric, FMs evaluate the quality of meetings, ranging from "poor" to "excellent" on a 1 to 5 scale. For the 68% with meeting notes, 10% indicate a low rating (rating of 1 or 2), 47% indicate a medium rating (rating 3), and 12% indicate a high rating (rating 5). The rating of the meeting reflects how positive or negative the analyst perceives the information received and the quality of the interaction with the company. We interpret the rating as a signal by the internal analyst to other FMs who did not attend the meeting, and as serving to harden meeting information.

We use GPT to assess the information content of meetings, prompting it with Liberti and Petersen's (2019) definition of hard and soft information. "Hard information" is the GPT-assessed information content of a meeting note that is hard, rather than soft information. The LLM assesses that 38% of the information in FM meetings is hard information, and 62% is soft information. We

[13] We aggregate stakes 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 (Figure IA-A1 in the Internet Appendix). Fund manager meetings exhibit the same pattern, with a strong positive association to stake size. Meeting intensity being related to the financial incentives deriving from stake size is consistent with Bebchuk, Cohen, and Hirst (2017)'s predictions and with prior evidence on investor motivation and attention by Fich, Harford, and Tran (2015), Kempf, Manconi and Spalt (2017), and Liu, Low, Masulis and Zhang (2020).

further decompose soft information into its subject and find that 70% is about the firm, 20% about the industry, and 10% about the market. To illustrate the ability of the LLM to distinguish these two types of information, the table provides a sample of randomly drawn quotes that are representative of phrases that contain hard and soft information. Hard information quotes include "With the shares trading on 14.5x 2008 earnings they just look too expensive", "Their 2014 guidance of 4 6bn sales from pipeline products is a risk adjusted number", and "The PE remains at a significant discount to [Firm name] on 11.9x"; they are factual and provide background information. Soft information quotes include "[Person name] was probably most animated when talking about the opportunity in UK government outsourcing", "Overall, I was impressed with both the assets, which were better than I expected, and by the individuals I met", and "Management came across as highly self confident, bordering on arrogant".

Next, we use the LLM to systematically search for material non-public information (MNPI) in the meeting notes. We follow the SEC and consider as material non-public any information which, if known, could reasonably be expected to move a firm's stock price. Using our prompt, the LLM assesses meetings on a 1 to 5 Likert scale ("not at all likely", slightly likely", "moderately likely", "very likely", "completely likely"), and classifies 98% as "not at all likely" to discuss non-public information, and 1% as "slightly likely". We read the remaining roughly 1% of meeting notes, since they are LLM-assessed as "moderately likely" and "completely likely" to discuss non-public information (zero meetings are assessed as "very likely"). Our human review reveals several false positives, which we relabel as "not at all likely", where the LLM falsely flags unusual information or language as being potential non-public information.[14] After our review, we confirm

[14] Examples of false positive are i) a meeting where the Chairperson is "eager" to share M&A information about "a 'very value enhancing' transaction that they were contemplating for the autumn (but about which i declined to be put 'inside')"; the GS rejects the discussion to avoid becoming an insider; ii) a meeting note stating that a "repair contract was structured as an 'acquisition' and was described by [PERSON] as an 'official bribe' to get the business", where the author is using 'bribe' in a colloquial way as an incentive outside normal rules; iii) a meeting note that references a sharp profit warning days before the meeting that was made public "the board's credibility had also been undermined by the significant insider selling that had taken place in the two weeks before the warning"; those insider trades were public information at the time.

that 9 meeting notes, or 0.3% of the FM total, discuss MNPI.[15] We show in a detailed analysis in Section II.D that these meetings are associated with zero levels of trading on the day of the meeting.

C.2. Governance Specialist Meetings

Panel B of Table II shows descriptives for GS meetings, 96% of which have meeting notes available. Roughly a third of the meetings at least mention a discussion of CSR/SRI themes, and 7% 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. For example, an 18 June 2007 meeting with Anglo American, a South African mining firm, discusses recent fatalities, 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". In a meeting with BP on 25 November 2008, an oil firm, the notes mention pessimistically that "the importance of sustainable development issues has clearly waned under [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 two years after the meeting, the BP-operated Macondo well caused the largest marine oil spill in history.

The share of hard information in GS meetings is LLM-assessed at 23%, the share of soft information at 77%. A decomposition of soft information shows that 75% is information about the firm, 16% is about the industry, and 9% is about the market. As before, to illustrate the ability of the LLM to distinguish between hard and soft information, the table provides randomly drawn quotes representative of both types of information. Further, for GS meetings, the LLM assesses 94% of meeting notes as "not at all likely" to discuss MNPI and 6% as "slightly likely". As before, we read the remaining notes and relabel false positives as "not at all likely". We confirm that 8

[15] Cases where an investor is made an insider are referred to as wall-crossings, see, for example, Clifford Chance (2014).

meeting notes, or 0.6% of the GS total, discuss MNPI. Again, the asset manager on the day on which they discuss MNPI did not trade; we provide in Section II.D a detailed analysis of those meetings.

The LLM processing in this subsection raises an important question: is there a serious risk that the LLM misclassifies the data? We consider two examples—soft and hard information and detection of MNPI—to draw conclusions. For soft and hard information, we are confident that the risk of the model incorrectly classifying meeting notes is low. This confidence stems from our iterative refinement of prompts, where we provide the LLM with meeting information, manually confirm the precision of the model's classifications, adjust the prompts, and repeat the process as necessary. In contrast, detecting MNPI poses greater challenges, particularly due to the model's tendency to provide false positives. For example, it does not properly classify the colloquial meaning of the word 'bribe'. Since the purpose of using the LLM is to detect the few, or rare, instances of MPNI, refining the prompt to eliminate false positives is impractical, and instead we use manual checks to eliminate them. Therefore, in both examples, potential misclassifications can only be assessed on a case-by-case basis. The tasks we have given the LLM are relatively straightforward and verifiable. However, we could imagine more complex tasks that lead to significant misclassifications with existing technology. [16]

C.3. What is Discussed in Meetings?

Having established that information contained in meeting notes is predominantly soft rather than hard, we now determine which subjects are discussed at private meetings. Figure 2 combines

[16] Several independent studies have confirmed GPT-4's capabilities in assisting with text analysis. For example, Dell'Acqua et al. (2023) randomly assigned 758 BCG consultants to three groups: no AI support, GPT-4 AI access, or GPT-4 AI access with a prompt engineering overview that included instructional videos and documents. The consultants were asked to perform standard tasks, and the third group produced significantly higher quality results. Like the third group, we had GPT-4 AI access in conjunction with the prompt engineering overview. When compared to other large language models, GPT-4 performs well in summarizing meeting transcripts (Laskar et al., 2023). We expect future LLMs to further improve accuracy of textual analysis, and tackle more complex tasks.

all meeting notes and uses the LLM to perform cluster analysis, in two passes. In the first pass, we prompt the LLM to identify for each meeting mutually exclusive and collectively exhaustive human-readable meeting topics, with a maximum of 10 topics per meeting. This yields 17,452 unique topics, such as "CEO leadership style". We then deconstruct topics into single words. Panel A shows these words, where the size of a word reflects its frequency within the respective meeting types. The panel shows that the topics of private meetings differ significantly between FM and GS meetings. FM meetings frequently focus on the business model of the firm, and factors affecting the firm's financial performance. GS meetings discuss the board of directors, compensation and performance of management, and related governance topics.

To sharpen this distinction, we perform a second pass, where we prompt the LLM to aggregate topics and perform cluster analysis. This second step is iterative; after nine iterations, the results are 53 unique categories, with a further category "other" including a remaining number of 8,077 topics or approximately 31% of the total (not shown). Panel B shows the relative frequency of the 53 unique meeting subject categories, for both meeting types. The figure shows that the LLM is capable of creating subject categories that are intuitive in a finance context. Using these categories, it becomes clear that GS meetings dominate certain subject areas; they include "Audit and compliance", "Sustainability and corporate responsibility", and "Remuneration and compensation". Fund managers dominate subject areas such as "Cost and operations", "Cost and efficiency" and "Growth and expansion".

To clearly distinguish between the topics discussed at FM and GS meetings, we use supervised machine learning with randomized logistic regressions (Hovy, Melumad, and Inman 2021), to identify the words that best *discriminate* the two types of meetings (see Table IA-AII in the Internet Appendix). GS meetings are best discriminated by the words "governance", "board", "chairman", "ed' (for executive director), "remuneration", "sri" (for socially responsible investing), "engagement", and "audit". In comparison, FM meetings are best discriminated by "broker", "growth", "margin", "cost", "buy" and "recommendation". Again, the machine learning

analysis shows how the content of meetings with portfolio firms differs depending on who convenes the meeting.[17]

Finally, we consider the direction of information flows in the meetings. Private meetings provide a unique opportunity for "shareholder dialogue", where investors and companies can exchange views. The LLM enables us to identify the direction of this two-way information flow. We prompt GPT to assess and count the number of views communicated by portfolio firm representatives during a meeting, and conversely the number of views communicated in FM and GS meetings. The results are shown in Panel C of Figure 1. Again, both meeting types significantly differ; FM meetings are primarily one-sided, while GS meetings often capture dialogue. A detailed analysis in Table IA-AIII in the Internet Appendix shows that GS meetings not only convey more views, but also engage with the company by expressing opinions and demands, requesting actions or change. In contrast, FMs rarely express any views and are mostly focused on information gathering; they rarely explicitly push for decisions, request actions or change.

D. Timing of Meetings

We use two approaches to illustrate the timing of private meetings. First, we use calendar time and pick two sample stocks, AstraZeneca and Barclays, that are held by at least one fund at any given time. Since both stocks are held throughout the entire sample period, they illustrate how private meetings, and other events in our data, occur over time. The timeline for both stocks (Figure IA1-A2 in the Internet Appendix), highlights several features already discussed: (i) the more regular schedule of FM meetings, and the less regular schedule of GS meetings; (ii) while the CEO and CFO regularly attend FM meetings, Chairperson attendance is rare, and (iii) analyst recommendations are relatively sticky over time, and downgrades and upgrades of stocks are infrequent and thus significant events.

[17] GS meetings contain (human-assigned) topic tags, which we consider as an alternative to natural language processing (FM meetings do not assign any topics to their meetings). GS meetings use roughly 40 tags indicating meeting topics, as well as a 50-character text field that summarizes meeting keywords. We aggregate all human classification data into eight broad topics, in Table IA-AII: "compensation" is the most frequent topic, discussed in 40.7 percent of all GS meetings, followed by shareholder voting (27.1 percent), and board related issues (22.8 percent).

Second, we use event time to show how private meetings are timed relative to earnings announcements. We use earnings reports since they are among the most important public signals for analysts and FMs, and because they occur on pre-determined dates and with regular frequency, meetings can be scheduled deliberately around those dates. We calculate the probability of earnings reports around private meetings in event time (see Figure IA-A3 in the Appendix). Fund manager meetings are scheduled to occur *after* earnings reports, and not before, to deliberately avoid risks of insider information. In contrast, GS meetings are scheduled independently of earnings report dates.

E. Fund Holdings and Trades

Fund holdings and trades made by FMs are shown in Table III. 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 to 646 stocks by 2015. The number of funds in our sample rises from 96 in 2007 to 133 in 2015. Of these, 39 to 49 funds are managed by the UK Equities Desk, holding 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 from 1.8% to 3.0%.

In most 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, at the individual fund level, is 0.15%. 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 daily probability of trading is 2.3%, translating into an average position trading almost six times per year (assuming 250 trading days per year), with buy and sell trades being equally likely. There are roughly 121,000 sell trades and 119,000 buy trades. The average initial size of positions prior to trading is US$ 11 million for positions where there is a sell trade and US$ 8.4 million where there is a buy trade. Average trade size is about US$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$1 billion, the largest sell trade is around US$ 270 million, and the largest buy trade is around US$ 170 million.

II. Meetings and Trading

We first analyze how private meetings influence trading decisions by FMs. The goal of these baseline tests is to establish the relation between private meetings and trading at daily frequency; prior studies inferred trading from quarterly filings. 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 annual turnover of 82.5%, and about 62 trades per month. One stock 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, attended by BBA's CEO and CFO. The analyst covering the stock was bullish and stated that it was a "good meeting with management" and provided a 4 rating on the five-point scale from good to excellent, commenting that "… 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, 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 by 6.8%, followed by another 3.3% the next day. Among the other funds holding BBA, several others increased their positions on the meeting day. This pattern— trading spikes that begin 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%. On the meeting day for BBA, however, this probability was over three times higher, at 15.7%.

We extend this setting to our whole sample in Table IV. We examine the relation between meetings with portfolio firms and trading activity. We use the following specification:

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

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 and 2, and a dummy variable indicating either a sell trade or a buy trade in company *i* by fund *j* on trading day *t* in columns 3 and 4.[18] All columns use the full unbalanced panel of fund-stock positions during the 2007-2015 sample period, except in column 1, 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 trading day *t* and the five subsequent days for FM and GS meetings. We choose the [0,5] day window because trading on the meeting day is likely to be an imperfect indictor of meeting-related trades; execution of trades may stretch over multiple days, meetings may occur late in the day and be close to or after market-close, or FMs may wish to take time to reflect on information. Y_{ijt} is a set of stock-fund-level controls on day *t*, and Λ are date and stock fixed effects; standard errors are clustered at both fund and trading day level.

The baseline regression in column 1 shows that during the [0,5] day window of an FM meeting, the average fund increases its position each day by 3.2%; in comparison, we see a decrease in positions for GS meetings of 2.3%. When we do not condition on a trade occurring, the coefficient estimates decline (column 2) as expected. For FM meetings, the average increase in positions held is 15 basis points and for GS meetings, the average decrease is 8 basis points. Regarding our controls, in column 1, changes in shares outstanding or stake size are only marginally related to trading, while a day return increase of 1% is associated with strong buy trades of 76%.

Since the buying or selling statistic averages buys and sells across trades during the day, we show the probabilities of buy and sell trades separately.[19] The coefficient estimate of 0.134 for *FM* in column 3 implies during the [0,5] day window a 11.6 percent higher likelihood per day of

[18] Recall that FMs 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 FM of the DE fund cited above managed 13 funds in March 2007, 11 of which held positions in BBA stock.

[19] 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.

having a sell trade based on the sample mean of 1.154 (0.134/1.154), while the estimate of 0.760 for *FM* in column 4 implies a 66.5 percent higher likelihood of a buy trade per day based on the sample mean of 1.143 (0.760/1.143). In comparison, the coefficient estimates for *GS* show a 15.9% (0.184/1.154) increase in the daily likelihood of sell trades and a 41.8% (-0.478/1.143) decrease in the likelihood of buy trades. If trades are motivated by information obtained in meetings, then GS meetings are on average interpreted as negative, while FM meetings are interpreted as positive, but with greater differences in opinion. We return to trading patterns related to differences in opinion in further tests below.

How do these baseline tests compare to prior evidence? Our estimates of the trading response to private meetings are based on daily data and are orders of magnitude larger than prior evidence which uses inferred trades from institutional quarterly holdings from 13-F filings. In comparing our trading with other work, our numbers should be regarded as indicative since they are based upon one asset manager. In Bradley, Jame and Williams (2022), local institutional investors that participate in non-deal roadshow meetings increase their implied daily trading by about 1.36%; thus, compared with our daily trade estimates of 3.2% for FM meetings, their estimate represents roughly 43% of our estimated effect. In Bushee, Gerakos, and Lee (2018), local investors that experience a corporate jet visit increase their implied daily trading by roughly 0.45%, or about 1/7th of our estimated effect.

In the first row of Figure 3, we plot the coefficient estimates and their 95% confidence intervals around the point estimates from column (1). In the same figure, in rows 2 and 3 we repeat those estimates but introduce a set of time indicator variables for the five days before and after the meeting. The event time coefficient estimates show that for FM meetings trading significantly increases starting on meeting dates, while for GS meetings trading levels are elevated even before the meeting dates. We believe the abnormal trading prior to GS meetings is explained by those meetings on average taking place against a background of concern about the portfolio firm, shared by both GSs and FMs. Thus, the trading prior to the GS meetings likely reflects FM concerns.

In Panel B of Table IV, we consider longer windows of 20 trading days. As the estimates show, both trading and aggregate selling extends beyond the [0,5] window for GS meetings, but

not for FM meetings. On average, sell trades continue following GS meetings, but trading on stocks following FM meetings ceases. 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 colleagues, and more slowly on any insights received from GS meetings.

A. Soft Information

We next analyze the degree to which trading depends on soft and hard information in meetings. We use the previously discussed LLM-assessed soft and hard information content of meetings and divide FM and GS meetings by their soft information content. We repeat the Table IV specifications and estimate the impact of GS meeting notes that contain the sample median or more of soft information (*GS Soft*) and those that contain less (*GS Hard*), as well as the same split for FM meetings (*FM Soft, FM Hard*). For brevity, we do not report the unconditional sample estimates from column 2 in Table IV. The results in Table V show that soft information is associated with significant trading for both meeting types. FM meetings with a large amount of soft information are associated with significant aggregate buying of 1.8% in column 1, with 49% (0.570/1.154) more likely sell trades in column 2, and 83% (0.949/1.143) more likely buy trades in column 3. Soft information in GS meetings is associated with significant aggregate selling of 2.6% in column 1, with 25% more likely sell trades in column 2, and 39% less likely buy trades in column 3. In FM meetings, hard information yields a larger trading response compared with soft information—hard information lead to buys of 7.5%, compared with the 1.8% of soft information meetings. However, hard information in GS meetings yield coefficient estimates that by magnitude and statistical significance are very similar to those for soft information. In columns 4 to 6 we alternatively split meetings into soft and hard information by whether 50% or more of information is LLM-assessed as soft and obtain very similar coefficient estimates.

Given that soft information from private meetings is related to trading decisions, we now consider whether there are differences between analysts in information gathering, writing style and trading decisions, how FMs process information, and whether meetings convey information differently across industries. We address these questions in turn, for both meeting types.

A.1. Soft Information Generated by Individual Internal Analysts and Governance Specialists

First, we analyze how individual FMs in their dual role as internal analysts and GSs capture information, and how that information relates to trading. Figure 4 shows, for each analyst and specialist (excluding those with limited experience), the share of soft versus hard information, the degree to which this share changes over time, and how the differences across individuals are related to trading. The figure's key insights are first, that there is significant variation between analysts with respect to the proportion of soft information contained in their meeting notes, with the lowest around 50% and the highest around 85%. Second, although there is significant variation within the FMs/analysts and GSs, the proportion of soft information is highest among GSs; FMs as a group appear noticeably less focused on soft, and more focused on hard information.[20] Third, for most individuals there is significant variability between meetings in the amount of soft information they report. This matches with the large number of unique meeting topics identified by the LLM, previously described in Section I.C. Fourth, in the figure the symbol size indicates the average trade size for a given FM/analyst or GS. For example, "FM-1" refers to the internal analyst with the largest average trade size of all fund managers, where he or she has written up the meeting notes. The pattern is consistent with the view that FMs believe that some internal analysts and GSs provide more valuable assessments of private meetings than others. In summary: There are significant individual differences among internal analysts and GSs in the proportion of soft versus hard information that they extract from meetings, and in the trading that the notes generate across all FMs. In comparison, the variability in trading generated by GSs is smaller than the trading generated by internal analysts. There is however one exception, labeled "GS-2" in the figure, whose meeting notes generate larger trades than the average FM/analyst.

A.2 How Analysts Process Soft Information

[20] Recall that the dominant subjects of discussion in FM meetings are business models and financial metrics.

We now describe how investors process and interpret information. For this purpose, we focus on FMs, and exploit a key feature of a subsample of FM meeting notes that contain a section called "Conclusion". It provides an overall assessment of the meeting and synthesizes the key insights, as perceived by the author of the notes. In addition, it often contains a motivation for the FM's post-meeting recommendation to buy, hold or sell. We require a minimum length of 20 words to allow the LLM to reliably assess its content; the median length of the section is 70 words. A typical conclusion is: "Another very strong meeting with [FIRM]. Management remains confident on being able to deliver similar levels of top line growth and price increases next year. Expansion plans remain on track and competitive position stable. This remains one of my top picks in the sector. Buy." There are 830 FM meeting notes that feature a conclusion that meets the minimum length requirements. For this sample, we analyze how much of the conclusion is soft or hard information, and the extent to which it relates to the firm, the industry or the market.

Table VI shows that the conclusions of fund managers mostly contain soft information, at 78.7%, with hard information representing only 21.3%. In addition, when we disaggregate the soft information—which the LLM succeeds in doing for almost all meetings—a large share of information is about the firm (81.2%), while the information share of the firm's industry and the market is small at 12.0% and 6.9%, respectively. Hard information is even more focused on the firm (95.4%), with only negligible shares about industry and market (2.5% and 2.1%, respectively). Because hard information is sparse to begin with, the LLM succeeds in only 65% of meetings with this disaggregation of hard information. Overall, soft information about the firm is the main influence on FM conclusions from meetings.

A.3. Soft information across industries

We analyze the degree to which soft information matters across industries, specifically focusing on growth industries. We run cross-sectional regressions, where the dependent variable is the LLM-determined share of soft information in FM and GS meetings. Table VII indicates growth industries based upon whether a firm is in a top tercile Fama French 49 industry (by market to book) in the meeting year (1), or in a bottom tercile (0) industry. Industry terciles are ranked

using the *Compustat* population of UK firms. Importantly, given the significant differences between individual FMs shown earlier in Figure 4, and to account for the fact that FMs as analysts are assigned to specific industries, we use FM fixed effects in column 2 and GS fixed effects in column 4. The results confirm that soft information is more pronounced in growth industries for FM meetings (column 1), but not in GS meetings in column 4. For example, in column 1, FM meetings with growth industry firms have 2.0% higher soft information, equivalent to a 3.0 percentage point increase from the baseline of 67%. Overall, the results provide weak evidence of differences across industries, which seems in line with our earlier results that industry-level information is relatively less important in meetings.

B. How trading is affected by meeting quality and attendance

In Table VIII, we relate the characteristics of FM meetings to trading activity. In Panel A, we analyze the human-assessed quality of meetings and whether FMs physically attend a meeting or not, while in Panel B we analyze the composition of meeting participants. For Panel A, recall that FMs rate meetings on a scale of 1 (poor) to 5 (excellent). One interpretation of the rating is that it is an attempt to convert soft into hard information, possibly for the benefit of FMs who do not attend the meeting. In columns 1 to 3, we estimate the impact of the assessed meeting quality on trading by regressing daily trading activity on indicators for *Low Rating* (1 or 2), *Average Rating* (3) and *High Rating* (4 or 5). 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 FMs. High quality meetings are associated with the strongest buy trades.

In the same Panel, columns 4 to 6 provide estimates of trading activity related to the tone of a meeting. We measure meeting tone by dividing the total number of negative words by the total number of positive and negative words, using the dictionary by Loughran and McDonald (2011). With negative tone (ratio larger than 0.5), FM meetings are associated with sell trades of 9.2% per day, while with positive tone FM meetings are instead associated with buy trades of 7.4% per day (column 1). For GS meetings, negative tone is associated with larger sell trades than positive tone (-3.2% and -2.5%, respectively), but even positive tone leads to selling. The

probability estimates in columns 5 and 6 confirm that negative tone increases sell trades; positive tone increases buy trades for FM meetings, but even positive tone is insufficient to increase buy trades for GS meeting. The latter result suggests that, from the perspective of fund managers, information from GS meetings differs in the extent to which it is negative, but it is rarely positive.

Next, in Panel B, we analyze the relation of trading to the composition of meetings. In columns 1 to 3, we split FM meetings by whether the attendees from the portfolio firm's side indicate a high-level meeting or not. A high-level meeting (*CEO+*) is one where at least two of the CEO, CFO or Chair of the portfolio firm attend the meeting, while a low-level meeting indicates only one among them attending (*CEO*). For high level FM meetings, there is consistently a high level of buying, whereas low level meetings are not significantly associated with trading, suggesting that the perceived information content of meetings depends on how close the portfolio firm attendees are to decision making. To further illustrate this, separate specifications (not reported) show that meetings attended only by portfolio firms' investor relations personnel are not associated with trading.

In the same Panel, columns 4 to 6 provide estimates of trading activity related to FMs attending a meeting in person. The results show that while the level of trading increases to a larger extent with attendance, the difference is modest. For example, with attendance, FMs execute buy trades of 3.8% per day, compared with no attendance, where FMs buy 3.2% per day. Lower trading volumes in case of non-attendance may be driven by lower interest levels or by the difficulty of transmitting the soft information present in meetings. The key result is that communication between FMs—and the information captured in the meeting notes we base our NLP analysis on—enable FMs to trade on the information from meetings even in the absence of attendance.

C. Differences in Interpretation of Meeting Information and Trading Activity

An interesting feature of our baseline results is that only a minority of positions trade in response to the information from private meetings. We show that one reason for reduced trading is that meetings differ in the degree to which they lead to (a lack of) consensus on how to trade on them. The information from meetings may lead fund managers to update their priors about the

portfolio firm, but the degree to which this happens will depend upon the information in the meeting relative to the expectations of fund managers. The empirical challenge is that while the LLM is capable of identifying the beliefs that the fund manager writing the meeting notes holds *after* the meeting, fund managers do not usually state what their priors were *before* the meeting and thus the LLM has insufficient basis to detect those priors. We proceed in two steps to overcome this challenge and analyze how the information in meetings may or may not change the priors of fund managers.

First, we consider all fund manager meetings and redact them such that any information about the analyst's recommendation is replaced with a placeholder ("redacted"). This ensures that the LLM cannot simply rely on the analyst assessment of a change in recommendation, and thus a (human) indication of how to trade following the meeting. Second, we prompt the LLM to assess the likelihood, based on the redacted meeting notes only, that the meeting will lead to a lack of consensus on how to trade on it (5-point Likert scale, "not at all likely", to "completely likely"). We label meetings with *No Consensus* if this likelihood is assessed as "very likely" or "completely likely", and as *Consensus* otherwise.

The results of these tests are shown in Table IX. In the baseline regression in column 1, during the [0,5] day window of a *Consensus* FM meeting, the average fund increases its position each day by 3.4%; for a *No Consensus* meeting, funds instead do not trade significantly. In columns 2 and 3 the estimates show that a *Consensus* meeting increases the probability of buying (column 3) by 99%, while the probability of selling also increases by 37%. Conversely, a *No Consensus* meeting increases the probability of sell trades by 102%, while increasing buy trades by 85%. These results suggest that trading by fund managers strongly depends on whether the information in a meeting leads to consensus on how it should be interpreted, with consensus about the information from the meeting being associated with significantly more trading and more buying; a lack of consensus is associated with less trading, and buys and sells roughly netting out.

As our second step, we combine the LLM-based assessment of consensus with internal analyst recommendation changes. The key advantage of upgrades and downgrades of stocks over FM meetings is—since analyst recommendations are sticky over time—that they indicate a distinct

and measurable change in the priors of the internal analyst. For FM meetings, as discussed above, we can infer the beliefs after meetings, but not the changes in priors per se. This is illustrated by FM meetings with consensus being associated with buy trades on average, but significant variation in the direction of trading. Instead, recommendation changes have an obvious expected prediction for trades. An upgrade—that is, a change in the analyst's recommendation from "Sell" to "Hold", or "Sell" to "Buy" or "Hold" to "Buy" of which there are 279 in the sample—should be associated with significant buy trades by FMs, while a downgrade—a change from "Buy" to "Hold" or "Buy" to "Sell" or "Hold" to "Sell" of which there are 322—should be associated with significant sell trades. Since we know that FM meetings influence recommendation changes, we combine the information content of meetings with recommendation changes to analyze how consensus in meetings influences trading activity by FMs. We split both upgrades and downgrades by whether they are preceded within 30 trading days by a fund manager meeting, with and without consensus.

The results of these estimates are shown in columns 4 to 6 of the same Table IX. Among upgrades, the interaction of (*Upgrade*) x (*Consensus*) is associated with buy trades of 15.5% per day, while the interaction of (*Upgrade*) x (*No Consensus*) is even associated with *sell* trades of 14.7%. For downgrades, the trading response for meetings that the LLM assesses as *Consensus* is much larger at minus 19.2% compared with the trading response for *No Consensus* meetings at minus 13.2%. In columns 5 and 6, where again we consider the probabilities of both selling and buying, the estimates confirm a differential trading response depending on meeting consensus. An upgrade increases the probability of buy trades for a *Consensus* meeting, but not for a *No Consensus* meeting. For downgrades, the probabilities of selling and buying in columns 5 and 6 are roughly similar between *Consensus* and *No Consensus* meetings, but as shown in column 4, the magnitude of selling is much larger with *Consensus*.

In summary, we find that consensus about the information in FM meetings is reflected in the actual trading activity, both in the general setting where we consider all fund manager meetings and in the more specific setting where we condition on a detectable change in priors of the analyst that leads to a recommendation change.

D. Material Non-Public Information (MNPI)

We next provide evidence about whether the information advantage that meetings appear to generate is gained through material non-public information. In a novel approach, we use the LLM to systematically search for material non-public information (MNPI) in the meeting notes. We follow the SEC's description and consider as material non-public any information which, if known, could reasonably be expected to move a firm's stock price. As previously reported in Table II, the LLM assesses 98% of meetings on a 1 to 5 Likert scale ("not at all likely", slightly likely", "moderately likely", "very likely", "completely likely") as "not at all likely" to discuss non-public information, and 1% as "slightly likely". We review each meeting among the remaining roughly 1% of meeting notes and relabel as "not at all likely" all false positives. After our review, we confirm that 17 meetings discuss MNPI. To our knowledge, this is the first sample of MNPI-related private meetings between an institutional investor and its portfolio firms.

Table X reports descriptive statistics for these meetings. Topics of the meetings include equity issues, quarterly earnings, board changes, executive turnover, and acquisitions and divestitures. The meetings are roughly equally split between FM and GS meetings. Portfolio firms range from US$ 100 million—the lowest end of FTSE All Share index members—all the way to US$ 36 billion. The number of funds holding the stock at the time of the meeting averages about 40, with a maximum of 67 funds. The average stake held is 4.5%, well above the sample average stake of 2.3%.

To assess trading around these events, we again estimate trading regressions as in Table IV, Panel A. The sample includes all stocks from Table X. For each meeting, we introduce a set of time indicator variables for the five days before and after the date of a meeting containing MNPI. The results are shown in Figure 5, where the dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund. The event time indicator coefficients are plotted with a 95% confidence interval around the point estimates. *BOTH* is an indicator variable whether the meeting contains MNPI, *FM* (*GS*) indicates only FM (only GS) meetings. The figure excludes two meeting events from Table X, where MNPI coincides with

earlier same-day releases of material public information (one earnings report and one M&A announcement).

The estimates show that possession of MNPI is associated with zero levels of trading by fund managers.[21] These estimates provide direct tests of insider information, which we find do not translate into insider trading. The non-trading result is especially noteworthy given that each stock is typically held by dozens of funds.

We wish to be careful in our interpretation of these results and avoid overclaiming. We cannot rule out the possibility that meetings might discuss non-public information but not be recorded in the meeting notes; however, even transcripts or recordings could plausibly be interrupted or sanitized, or communication could be non-verbal, as in Durney, Kyung, Park and Soltes (2023).

E. 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 FMs. We conjecture that the insights from meetings are sufficiently significant that they enable profitable trading decisions. We consider alternative trading scenarios based on the meetings of FMs and GSs.

Our first two sets of results are in Table XI. In Panel A, we measure the performance of trades with and without meetings. The table reports monthly time-series regressions, where the dependent variable is the return on a long-short portfolio with and without meetings, constructed as follows. For each trading day during the sample period, stocks are sorted into terciles based on the aggregate net trading across all funds that hold the stock on that day. The long portfolio each day includes all stocks that have had a FM meeting (column 1), a GS meeting (column 2), either a

[21] While all coefficients until $t+1$ are statistically insignificant, there is in the raw data non-zero trading after t_0, as the insider status of the asset manager expires after t_0. In some cases, we know the length of the insider period is exactly one day, in other cases we do not observe the exact length. That the coefficient of t_0 is not exactly zero in the figure is an artefact of the estimation; in the raw data, the daily net percentage change in the number of shares held in the portfolio company per fund on day t_0 is exactly zero.

FM or GS meeting (column 3), or have not had any meeting (column 4) within the past 20 trading days and are in the top tercile of buy trades. The short portfolio includes all stocks in the bottom tercile of sell trades on the respective meeting or non-meeting days, respectively. Portfolios that contain less than three stocks are replaced with the market return. For each portfolio their value-weighted (by market cap) daily excess returns are calculated, and for each month the daily returns for each portfolio are compounded over the *n* trading days of the month to yield the monthly return.

The monthly return difference with FM meetings is 198 bps per month, 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). The alpha of the GS meeting-based portfolio in column 2 is economically smaller at 83 bps per month and statistically insignificant. The all-meetings portfolio that captures both FM and GS meetings in column 3 has a significant alpha of 180 bps. In comparison, the portfolio without any meetings in column 4 exhibits a smaller but significant alpha of 49 bps per month. The no-meeting portfolio outperformance suggests that FMs have significant skill, while the even larger outperformance of the portfolios based on private meetings is consistent with the information obtained in meetings enabling profitable trading opportunities.

We augment these monthly calendar time portfolios with daily portfolios in event time, shown in Figure 6. As before, for each meeting day we sort all stocks into terciles based on the aggregate net trading across all funds that hold the stock on that day, separately for stocks for which a FM or GS meeting takes place (*Meeting*), and for stocks without any meeting (*No meeting*). Next, we calculate the cumulative market-adjusted return to a hedge portfolio (*FM Meeting, long-short* in the figure) that buys stocks in the top tercile of buy trades on FM meeting days and sells stocks in the bottom tercile of sell trades on FM meeting days, for horizons ranging from 1 to 60 trading days after the day t. We define the same portfolio for GS meetings (*GS Meeting, long-short*), and no-meeting stocks (*No Meeting, long-short*) in analogous fashion. The *FM Meeting long-short* portfolio generates a return of 213 bps over the subsequent 20 trading days and 314 bps over 40 trading days. The performance for the *GS Meeting long-short* portfolio is

lower at 121 bps over 20 trading days and 128 bps over 40 trading days. The *No Meeting* returns are much lower at 30 bps and 52 bps over 20 and 40 trading days, respectively.

The performance magnitude of our results illustrates the benefits of our meeting and trading data at daily frequency enabling more precise estimates than would otherwise be possible. Our long-short portfolios imply annualized rates of return from meetings of 19.6% and 8.0%, respectively, which are an order of magnitude larger than the annualized rates of return of around 2.0% in Bradley, Jame, and Williams (2022) for non-deal roadshow meetings, whose methodology we follow.

Finally, in Panel B of Table XI, we calculate the amount of money made on actual trades, instead of hypothetical long-short portfolios. As we have shown, funds adjust their positions by single digit percentage points per day after meetings, and thus trade far less aggressively in response to meetings than implied by hypothetical portfolios. We calculate the money made through active trading by the asset manager for each position, that is, the cumulative percentage change in the dollar amount held on the day prior to the meeting due to active trading, net of passive returns and net of trade flows, during the [0, 5] window around private meetings.[22] Since we do not know the intraday timing of trades, we make assumptions about intraday trade execution. The asset manager is a large and sophisticated institution, with all trading executed internally and no outsourcing. Orders are typically aggregated and then executed by the dealing desk, on the day, or subsequent days, depending on liquidity. Execution potentially stretching over multiple days is relevant for our tests since we consider the trading response of FMs on specific event days. As before, we consider a [0,5] day window for trades following meetings, to allow liquidity-induced execution delays. We assume that trades occur at the opening price (fast trading) or at the closing

[22] For any position i in stock j the cumulative percentage change in the dollar amount held is $CPC_{i,j} = [(S_{i,j,T} - S_{i,j,t})P_{j,T} - \sum_t^T \left(\Delta S_{i,j,t}\right) P_{j,t}] / (S_{i,j,t} P_{j,t})$, where $t=0$ is the meeting day, $S_{i,j}$ 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.

price (slow trading). We observe daily positions, and therefore the slow trading assumption is the lower bound of realized performance.

For FM meetings, money made is 19 or 6 bps, depending on whether we assume fast or slow trading, while for GS meetings, money made is 7 or minus 1bps, respectively. On the combined sample, the asset manager makes 15 bps. To provide a benchmark, we compare these numbers with money made around the downgrades and upgrades of stocks by internal analysts, and previously discussed in Table IX. As we have shown, these downgrades and upgrades unsurprisingly are associated with much larger trades by fund managers, and thus are plausibly a high watermark for how much money the asset manager can make, given a clean signal and an intent to trade. To ensure no spillovers between both event types, in the table we keep only downgrades and upgrades that do not overlap with any FM or GS meeting. For downgrades, money made is 41 or 19 bps, depending on the trading assumption, for upgrades, money made is 34 or 12 bps, and across both signal types, money made is 39 or 16 bps, respectively. Thus, per position, fund managers make at best roughly half as much from active trading informed by meetings compared with the downgrades and upgrades produced by analysts.

III. Conclusion

Institutional investors frequently interact with portfolio firms in private, with the timing and content of these meetings frequently undisclosed. As a result, we have limited evidence about the information content of private meetings between asset managers and their portfolio firms. Our results, using large language models' sophisticated parsing of thousands of private meeting notes, show that meetings predominantly convey soft information, which in turn significantly influences trading decisions of fund managers. One conclusion from our paper is that qualitative insights are important. Given the impressive advances in generative AI, an interesting question for future research is whether the distinction between hard and soft information will blur so significantly as to make all information hard information.

In the absence of a recording, generative AI cannot yet replace the human expert, but our analysis shows that LLMs can augment the expert’s ability to extract and analyze soft information.

Once active managers have integrated LLMs into the investment process, the trading response to meetings should increase, since the LLM makes it easier to harden soft information. This would be particularly useful in our setting, in particular for those fund managers that do not participate in a meeting. When meetings are recorded, AI technology can improve the extraction and hardening of soft information even further.[23] However, since executives and board members would be aware of these recordings, we would expect them to alter their behavior, possibly decreasing the supply of soft information.

Our findings highlight the differential impact of meetings conducted by fund managers compared with governance specialists, which prior work has not discussed. Fund manager meetings tend to focus on financial metrics and business models, leading to aggregate buying, while in contrast, governance specialist meetings emphasize ESG risks, and lead to aggregate selling. Another conclusion from our paper is therefore that while it is helpful for outsiders to know whether a private meeting between another investor and a portfolio firm takes place, without the information content of the meetings, it is difficult for outside investors to assess their impact.

The regulatory implications of our findings are important. Given the UK's strict regulatory regime, our study suggests that even soft information obtained in private meetings can be sufficient to provide a competitive edge to active asset managers. At the same time, private meetings satisfy commitments to active ownership and investor stewardship. Our evidence informs the debate as to the balance between transparency and the need for private, candid interactions between asset managers and portfolio firms.

The results also demonstrate that active management makes stewardship activities profitable. In comparison, the returns to stewardship for passive funds are smaller since the trading benefits that we document do not accrue to them. Active management, through direct engagement and the gathering of soft information, can create opportunities for profitable trading that passive

[23] The finance literature uses AI technology to analyse recordings and transcripts, for example earnings calls (Bai et al. 2023, Beckmann et al., 2024) and central bank announcements (Curti and Kazinnik, 2023).

strategies cannot benefit from. This is likely to be relevant in the ongoing debate about the efficacy and value of active management.

Our paper does not examine the outcomes of engagements with portfolio firms—which recently is receiving considerable attention in ESG-focused research. 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, other than through improved market efficiency. This is an important issue for both regulators and researchers, who are interested in the value of private meetings and to whom this value accrues.

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Figure 1
The Asset Manager and Portfolio Firms

The figure shows the stylized activities and roles of the asset manager and its portfolio firms. The UK Equities Desk consists of fund managers, internal analysts, and governance specialists. The number of individuals shown and their roles are defined cumulatively over the entire sample period for each individual; individuals with multiple roles can hold them simultaneously or sequentially. All data sources are described in the Appendix.

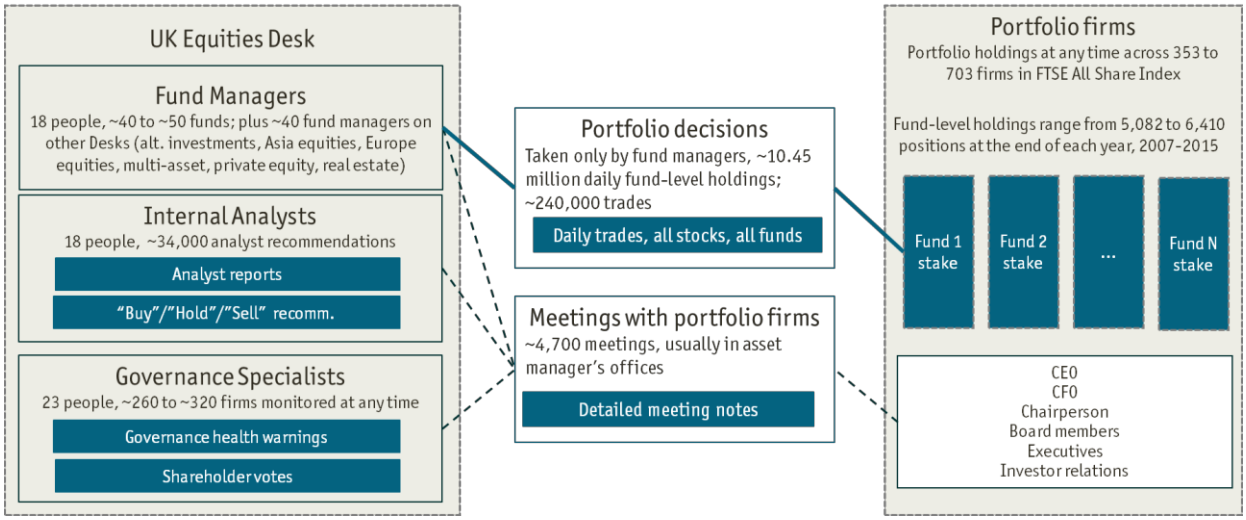


Figure 2
The Substance of Discussions in Meetings

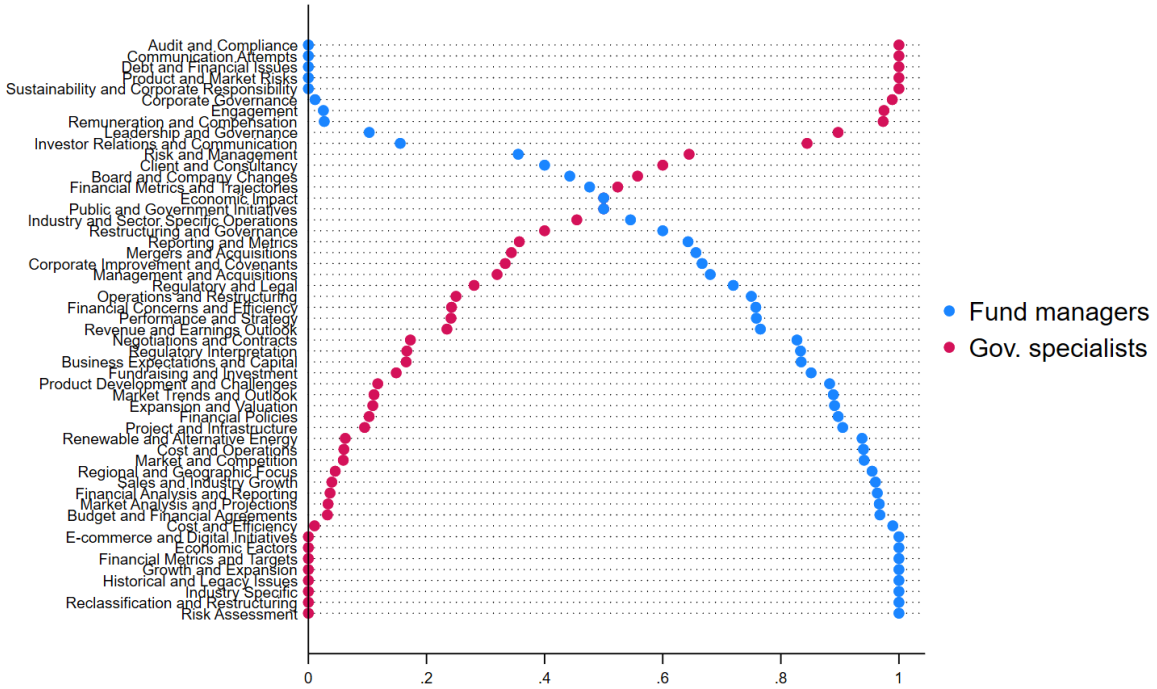
This figure shows topic and cluster analysis for FM and GS meetings with portfolio firms using GPT4. The sample period is 2007-2015 and includes 3,363 FM and GS meeting notes that meet the minimum conditions for LLM processing. Meeting notes are parsed with OpenAI's API; all prompts are in the Internet Appendix. In Panel A, the first pass, we prompt the LLM to identify for each meeting mutually exclusive and collectively exhaustive human-readable meeting topics, with a 10 topic maximum. This yields 17,452 unique topics, such as "CEO leadership style". Topics are then deconstructed into single words. In the Panel, the size of each word reflects its frequency within the respective meeting types. In Panel B, the second pass, we prompt the LLM to obtain categories by performing cluster analysis. It uses both manual analysis of observed themes and NLP techniques to categorize topics. This second step is iterative and, in each iteration, reduces the number of previously uncategorized topics, while aggregating similar categories. After nine iterations, the result are 53 unique categories, with a further category "other" including a remaining number of 8,077 topics or approximately 31% of the total (not shown). The Panel shows the relative frequency of the 53 unique categories, for FM and GS meetings. In Panel C, we prompt the LLM to assess and count the number of views communicated by FMs (GSs) during a meeting versus the number of views communicated by portfolio firm representatives, for the same meeting. The colour shading and symbol size reflect the fraction among the total number of meetings and indicate the extent of dialogue between the asset manager and the portfolio firms. All data sources are described in the Appendix.

Panel A: First Pass – Meeting Topics

Fund manager meetings

Governance specialist meetings

Panel B: Second Pass – Meeting Categories Split between FM and GS Meetings



Panel C: The Extent of Dialogue between Asset Manager and Portfolio Firms

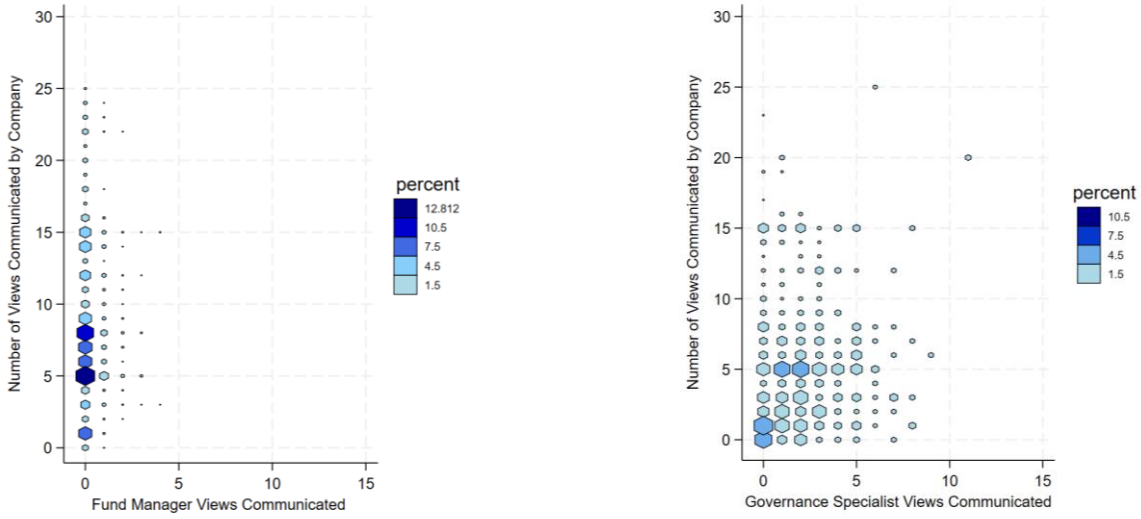


Figure 3
Event Time Trades Around Meetings

The figure shows event time indicator coefficient estimates for FM and GS meetings. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund; the sample is restricted to only those observations with non-zero trading activity. In row 1, estimates are from Table IV, Panel A, column 1. In rows 2 and 3, for each meeting, we introduce a set of time indicator variables for the five days before and after the meeting. The figure plots the event time indicator coefficients with a 95% confidence interval around the point estimates. All data sources are described in the Appendix.

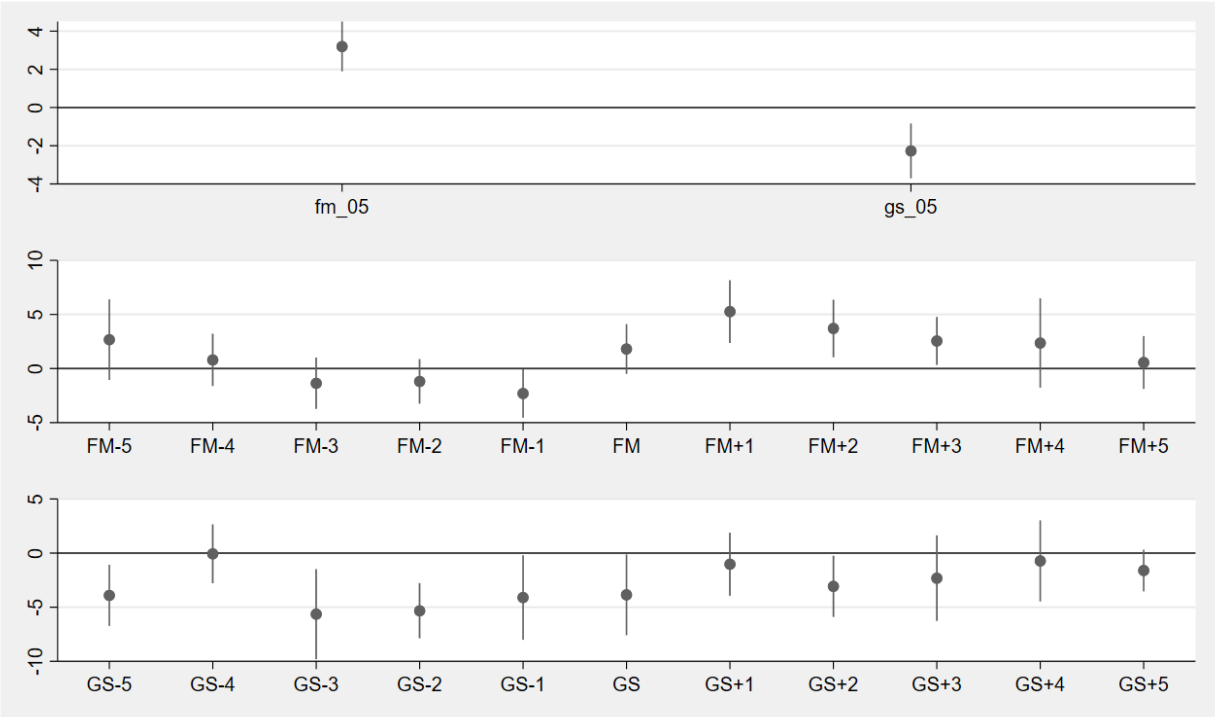


Figure 4
Soft Information Generated Per Individual

The figure reports the soft information generated by the authors of meeting notes as a fraction of total information on the vertical axis versus the within-author variation in the fraction of soft information on the horizontal axis. Authors with a consistently high soft information content appear on the upper left. All data sources are described in the Appendix. Symbol size indicates the average trade size (average daily net percentage change in the number of shares held). The sample period is 2007-2015; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Meeting notes are parsed with OpenAI's API; all prompts are in the Internet Appendix. We prompt the LLM to quantify the share of soft information. Internal analysts and GSs with authorship of less than 10 meeting notes are excluded.

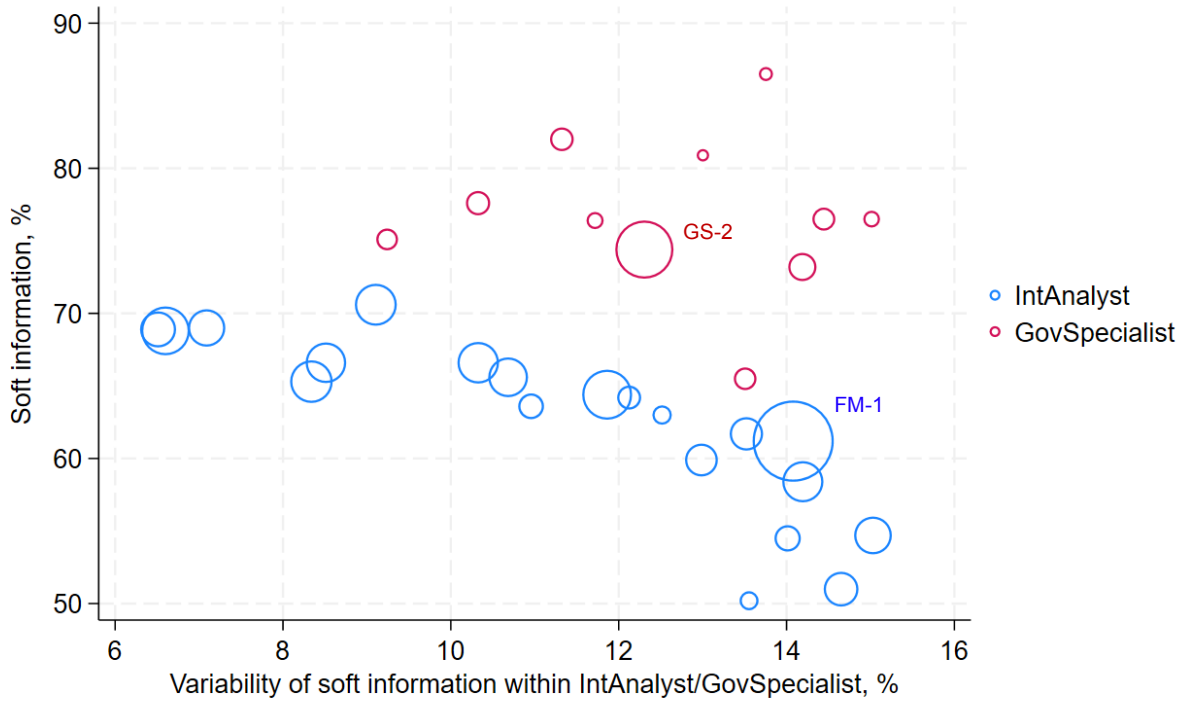


Figure 5
Event Time Trades Around Material Non-Public Information

The figure shows event time indicator coefficient estimates for the sample of FM and GS meeting notes that contain material non-public information (MNPI) in Table X. Regressions are estimated as in Table IV, Panel A. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund. The sample includes the period 2007-2015 and all stock positions with at least one meeting that discusses MNPI. For each meeting, we introduce a set of time indicator variables for the five days before and after the date of a meeting containing MNPI. The figure plots the event time indicator coefficients with a 95% confidence interval around the point estimates. *BOTH* is an indicator variable whether the meeting contains MNPI, *FM* (*GS*) indicates only FM (only GS) meetings. The figure excludes two meeting events from Table X, where MNPI coincides with the earlier same day release of MNPI (earnings report, M&A announcement). All other variables and all data sources are described in the Appendix.

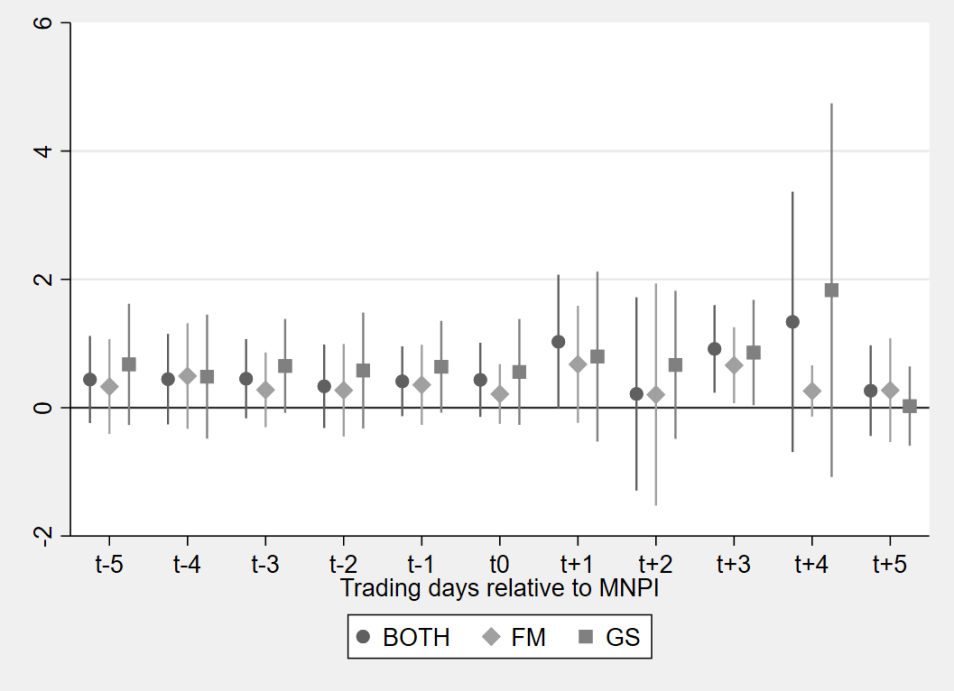


Figure 6
Performance of Buy and Sell Trades on Meeting Days

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 FM or 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. We calculate the cumulative market-adjusted return to a hedge portfolio *FM Meeting LS* 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. We define the same portfolio for GS meeting stocks (*GS Meeting LS)*, and for no-meeting stocks (*No Meeting LS*) in analogous fashion. All data sources are described in the Appendix.

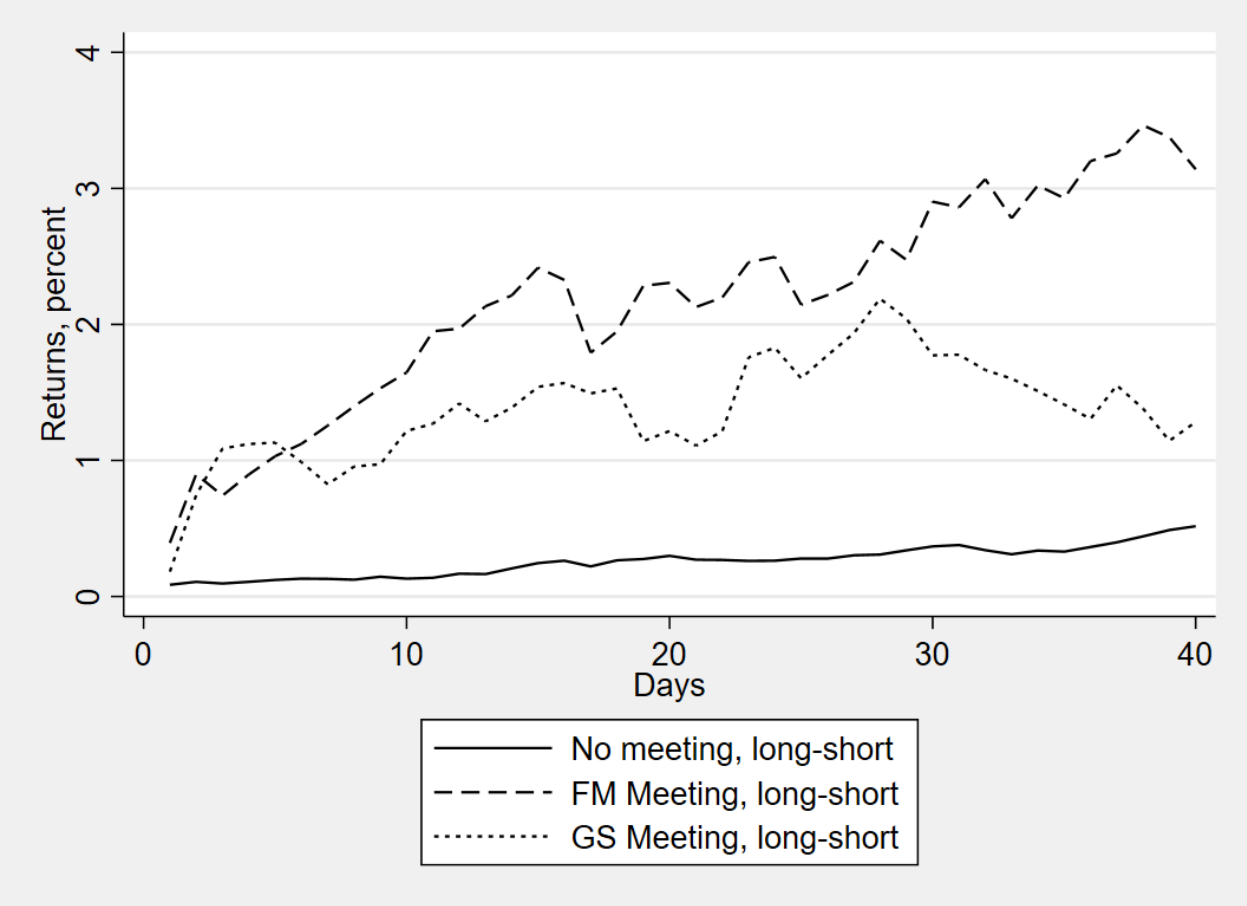


Table I
Characteristics of Private Meetings with Portfolio Firms

This table reports summary statistics for fund manager (FM) and governance specialist (GS) meetings with portfolio firms' directors and executives in Panels A and B, respectively. All variables and data sources are described in the Appendix and summarized here. *Active health warning* is an indicator whether a governance health warning is active; *FM attendees* indicates the number of FMs attending; *Portfolio firm attendees* indicates the number of portfolio firm representatives attending; *Portfolio firm CEO/CFO/Chair* is a dummy variable set to one if any one of these roles attend; *PF CEO+* meeting indicates that at least two among CEO/CFO/Chair attend; *MCap $ firm* measures the US$ market capitalization of the portfolio firm on the meeting day in millions; *Avg. agg. stake held* measures the asset manager's stake held as a fraction of shares outstanding, aggregated across all funds, on the meeting day.

Panel A: FM Meetings with Portfolio Firms

Variable	Mean	Median	Min	Max	SD	Obs
FM Meeting	1.00	1.00	1.00	1.00	0.00	3,410
Active health warning	0.13	0.00	0.00	1.00	0.34	3,410
FM attendees	3.70	3.00	1.00	15.00	2.94	3,119
Portfolio firm attendees	1.84	2.00	0.00	6.00	0.91	3,030
Portfolio firm CEO	0.50	0.50	0.00	1.00	0.50	3,410
Portfolio firm CFO	0.51	1.00	0.00	1.00	0.50	3,410
Portfolio firm Chair	0.03	0.00	0.00	1.00	0.17	3,410
PF CEO+	0.65	1.00	0.00	1.00	0.48	3,410
MCap $ firm, million	7737	1547	40	137057	16292	3,410
Avg. agg. stake held	0.04	0.02	0.00	0.20	0.04	3,410

Panel B: GS Meetings with Portfolio Firms

Variable	Mean	Median	Min	Max	SD	Obs
GS Meeting	1.00	1.00	1.00	1.00	0.00	1, 285
Active health warning	0.26	0.00	0.00	1.00	0.44	1, 285
MCap $ firm, million	15842	2561	14	130166	26851	1,285
Avg. agg. stake held	0.04	0.03	0.00	0.20	0.04	1,285

Table II
The Content of Private Meetings with Portfolio Firms

This table reports summary statistics and representative quotes drawn randomly; Panel A shows FM meetings, Panel B shows GS meetings with portfolio firms. All variables and data sources are described in the Appendix and summarized here. Meeting notes are parsed with OpenAI's API (using GPT4-Turbo and GPT-4o); all prompts are reported in the Internet Appendix. *Meeting with meeting note* indicates a meeting note is available; *Low/Avg/High rating* indicates the analyst's meeting assessment on a 1 ("poor") to 5 ("excellent") scale; *Hard (soft) information* is the fraction of hard (soft) information in the meeting note; *Soft – firm (industry, market)* is the fraction of soft information specific to the firm (industry, market*). Non-public information "not at all likely" ("slightly likely", "moderately likely", "very likely", "completely likely")* measure the probability of a meeting discussing MNPI; *Meeting with discussion of ESG* (*with ESG note*) indicates a GS meeting discussing at least one ESG issue (being an ESG meeting). The samples of random quotes each include 20 observations. To conserve space, the table shows five quotes; Table IA-AI in the Internet Appendix shows the full sample. The names of entities and people are anonymized.

Panel A: FM Meetings with Portfolio Firms

Variable	Mean	Median	Min	Max	SD	Obs
Meeting with meeting note	0.68	1.00	0.00	1.00	0.47	3,410
Low rating	0.10	0.00	0.00	1.00	0.30	3,410
Avg rating	0.47	0.00	0.00	1.00	0.50	3,410
High rating	0.12	0.00	0.00	1.00	0.32	3,410
Hard information	0.38	0.30	0.00	0.70	0.13	2,251
Soft information	0.62	0.70	0.30	1.00	0.13	2,251
Soft - firm	0.70	0.70	0.20	1.00	0.03	2,251
Soft - industry	0.20	0.20	0.00	0.30	0.02	2,251
Soft - market	0.10	0.10	0.00	0.60	0.02	2,251
Non-public information						
...not at all likely	0.98	1.00	0.00	1.00	0.21	2,251
...slightly likely	0.01	0.00	0.00	1.00	0.09	2,251
...moderately likely	0.00	0.00	0.00	1.00	0.02	2,251
...very likely	0.00	0.00	0.00	0.00	0.00	2,251
...completely likely	0.00	0.00	0.00	1.00	0.06	2,251

Hard information representative quotes	
1	"The broad terms include 260bn of assets, on which 10bn of impairment has already been recognised, so a net asset total of 250bn."
2	"With the shares trading on 14.5x 2008 earnings they just look too expensive."
3	"[Firm name]'s MoU with government covers 1.4bn of [Product name] revenue, most of which is from contracts which were renegotiated in Q410 or Q111 in any cases."
4	"Their 2014 guidance of 4 6bn sales from pipeline products is a risk adjusted number."
5	"The PE remains at a significant discount to [Firm name] on 11.9x Sept 12, but is similar on EV EBITDA."

Soft information representative quote	
1	"[Person name] was probably most animated when talking about the opportunity in UK government outsourcing, where GFS has had some recent successes in the prisons market."
2	"It was good to finally meet [Person name], but I didn't feel that I learnt much new in terms of the investment case as there was a lot of chat about brand momentum intangible benefits [Person name] but very little on numbers."
3	"Overall, I was impressed with both the assets, which were better than I expected, and by the individuals I met, who were high calibre asset managers, and conveyed a positive sense of collegiate entrepreneurialism."
4	"It is difficult to know what is truly going on the ground because he tends to talk up the prospects for the business"
5	"Management came across as highly self confident, bordering on arrogant, although this is understandable given their achievements."

Panel B: GS Meetings with Portfolio Firms

Variable	Mean	Median	Min	Max	SD	Obs
Meeting with meeting note	0.96	1.00	0.00	1.00	0.20	1,285
…w/discussion of ESG	0.35	0.00	0.00	1.00	0.48	1,285
…w/ESG note	0.07	0.00	0.00	1.00	0.26	1,285
Hard information	0.23	0.25	0.00	1.00	0.12	1,120
Soft information	0.77	0.75	0.00	1.00	0.12	1,120
Soft - firm	0.75	0.70	0.60	1.00	0.09	1,107
Soft - industry	0.16	0.20	0.00	0.30	0.06	1,107
Soft - market	0.09	0.10	0.00	0.20	0.03	1,107
Non-public information						
...not at all likely	0.94	1.00	0.00	1.00	0.25	1,115
...slightly likely	0.06	0.00	0.00	1.00	0.22	1,115
...moderately likely	0.00	0.00	0.00	1.00	0.03	1,115
...very likely	0.00	0.00	0.00	0.00	0.00	1,115
...completely likely	0.01	0.00	0.00	1.00	0.08	1,115

Hard information representative quotes

1 "Our meeting came day after profits warning due to order delays"

2 "[Person name] signs all invoices over 20K"

3 "Year end debt euro 126m worse than expected. FY loss of euro 314m."

4 "The senior US executives who presented to the board in 2006 misled the board."

5 "When they set their aspirational target to double eps in the 5 years to 2015, the two big areas of opportunity were growing internationally and moving more into frontline services."

Soft information representative quotes

1 "[Person name] did not come across well. He lacked a reasonable grasp of basic governance details."

2 "[Firm name] is undoubtedly an entrepreneurially led company. Steps have been and are being taken to strengthen the management infrastructure."

3 "CEO [Person name] did much of the talking and the SID [Person name] looked as if he was thoroughly cheesed off at having to talk to a shareholder."

4 "[Person name] is quickly understanding how to interact in the boardroom by taking time to listen and then determine the best way forward."

5 "He spoke with confidence and conviction and it was notable that he chose to fly solo rather than have the company secretary or other in attendance."

Table III
Fund Holdings and Trades

This table reports summary statistics for fund holdings and trades. The sample period is January 1, 2007 to December 31, 2015. In Panel A, all statistics are shown at year-end. Funds are included if they hold at least one UK stock. *FTSE All Share* indicates the number of stocks in the index. *Stocks held All (UK Equities Desk*) is the sum of stocks held by all funds (by all UK Equities Desk funds). *Number of funds All (UK Equities Desk)* shows the total number of funds that hold UK stock (the number of funds managed by the UK Equities Desk). *Number of positions across all funds (average aggregate stake held*) shows the total number of positions (sum of all stakes) held across all funds. In Panel B, positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. *Fund position, stake held* is the size of a single fund position held in percent; *P(Trade)* is the probability of a trade occurring in a position on any day; *Initial Position $ million* shows the value of the initial position ahead of a buy or sell trade in US$ millions; *Size of Trade $ million* is the value of the trade; *Trade %* is the daily net percentage change in the number of shares held in the portfolio company per fund. All data sources are described in the Appendix.

Panel A: Fund Holdings

Date	FTSE All Share Stocks	Stocks held		Number of funds		Number of Positions across all Funds	Average Aggregate Stake Held
		All	UK Equities Desk	All	UK Equities Desk		
31-Dec-07	706	703	287	96	49	5646	1.79
31-Dec-08	672	670	305	98	46	6402	2.04
31-Dec-09	626	625	298	98	45	6410	2.06
31-Dec-10	630	629	304	94	43	6203	1.96
31-Dec-11	629	628	293	90	42	5911	1.88
31-Dec-12	606	353	279	92	40	5082	2.83
31-Dec-13	623	371	279	117	39	5192	2.63
31-Dec-14	647	404	296	136	46	6060	2.91
31-Dec-15	646	390	306	133	43	5722	2.99

Panel B: Trade Characteristics

Variable	Mean	Median	Min	Max	SD	Obs
Fund-position, stake held %	0.15	0.03	0.00	2.23	0.39	10,450,068
P(Trade)	0.02	0.00	0.00	1.00	0.15	10,450,068
Sell Trades (N)						120,639
Initial Position $ million	10.95	2.69	0.04	178.40	26.20	120,639
Size of Trade $ million	-0.61	-0.18	-5.99	0.00	1.15	120,639
Trade %	-14.21	-7.65	-63.28	0.00	14.09	120,639
Buy Trades (N)						119,419
Initial Position $ million	8.41	1.83	0.04	178.40	22.72	119,419
Size of Trade $ million	0.60	0.18	0.00	5.96	1.13	119,419
Trade %	26.51	9.09	0.00	280.20	49.96	119,419

Table IV
Meetings and Trading

The table reports regression estimates of daily trading activity following FM and GS meetings with portfolio firms. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund (columns 1, 2) and an indicator whether a sell trade or buy trade occurs on day *t* (columns 3, 4). $FM_{0,5}$ ($GS_{0,5}$) is an indicator whether a FM (GS) meeting takes place within a [0, 5] trading day window. $FM_{6,20}$ ($GS_{6,20}$) indicates a FM (GS) meeting within a [6, 20] trading day window. All other variables and all data sources are described in the Appendix. The sample period is 2007-2015; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Sample Trades restricts the sample to observations with non-zero trading activity. All specifications include control variables (Log of shares outstanding, stake held, day return) and stock and date fixed effects; 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: FM and GS Meetings

	(1)	(2)	(3)	(4)
Dep. variable	Trade	Trade	P(Sell Trade)	P(Buy Trade)
$FM_{0,5}$	3.197***	0.149***	0.134***	0.760***
	[0.660]	[0.0258]	[0.0479]	[0.0898]
$GS_{0,5}$	-2.272***	-0.0729***	0.184***	-0.478***
	[0.727]	[0.0157]	[0.0622]	[0.0529]
Ln(Shrout)	0.228	0.00267	0.0755	-0.0241
	[1.009]	[0.0280]	[0.0511]	[0.0727]
Stake Held	-49.07*	1.734*	39.81***	48.92***
	[25.34]	[0.922]	[10.77]	[11.38]
Day Return	75.79***	3.658***	-8.726***	11.93***
	[10.19]	[0.603]	[1.018]	[1.492]
Sample	Trades	Full	Full	Full
Stock, Date FE	Yes	Yes	Yes	Yes
N	240,058	10,436,084	10,450,063	10,450,063
Adjusted R^2	0.096	0.003	0.009	0.031

Panel B: Longer Windows After FM and GS Meetings

Dep. variable	Trade	Trade	P(Sell Trade)	P(Buy Trade)
$FM_{0,5}$	3.197***	0.148***	0.123**	0.743***
	[0.667]	[0.0261]	[0.0482]	[0.0898]
$FM_{6,20}$	-0.0716	-0.00673	-0.114***	-0.165***
	[0.472]	[0.0122]	[0.0293]	[0.0392]
$GS_{0,5}$	-2.339***	-0.0729***	0.186***	-0.476***
	[0.724]	[0.0157]	[0.0622]	[0.0529]
$GS_{6,20}$	-4.266***	-0.111***	0.171***	-0.419***
	[0.556]	[0.0125]	[0.0449]	[0.0445]
Sample	Trades	Full	Full	Full
Controls	Yes	Yes	Yes	Yes
Stock, Date FE	Yes	Yes	Yes	Yes
N	240,058	10,436,084	10,450,063	10,450,063
Adjusted R^2	0.097	0.003	0.009	0.031

Table V
Soft and Hard Information

The table relates daily trading activity to the soft and hard information content of private meeting notes. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund (columns 1, 4) and an indicator whether a sell trade or buy trade occurs on day *t* (in columns 2, 3, 5, 6). Meeting notes are parsed with OpenAI's API; all prompts are in the Internet Appendix. We prompt the LLM to quantify the share of soft information. *FM (GS) Soft (≥$\tilde{x}$)* is an indicator whether a FM (GS) meeting takes place within a [0, 5] trading day window that contains the sample median or more of soft information, while *FM (GS) Hard (≥$\tilde{x}$)* indicates soft information below the sample median. For the same four variables *(≥50%)* indicates that meetings are alternatively split by whether they contain 50% or more of soft information. All data sources are described in the Appendix. The sample period is 2007-2015; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Sample Trades restricts the sample to only those observations with non-zero trading activity. All specifications include control variables (*No FM Meeting Notes, No GS Meeting Notes, Log of shares outstanding, stake held, day return*) and stock and date fixed effects; 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.

Dep. variable	(1) Trade	(2) P(Sell Trade)	(3) P(Buy Trade)	(4) Trade	(5) P(Sell Trade)	(6) P(Buy Trade)
FM Soft$_{0,5}$ (≥$\tilde{x}$)	1.810**	0.570***	0.949***			
	[0.772]	[0.0721]	[0.0935]			
FM Hard$_{0,5}$ (≥$\tilde{x}$)	7.526***	0.0563	1.619***			
	[1.373]	[0.0941]	[0.210]			
GS Soft$_{0,5}$ (≥$\tilde{x}$)	-2.566***	0.289***	-0.441***			
	[0.827]	[0.0723]	[0.0570]			
GS Hard$_{0,5}$ (≥$\tilde{x}$)	-7.513*	0.145	-0.425**			
	[4.125]	[0.317]	[0.186]			
FM Soft$_{0,5}$ (≥50%)				1.536	0.695***	0.969***
				[1.004]	[0.0913]	[0.115]
FM Hard$_{0,5}$ (≥50%)				7.980***	-0.203***	1.623***
				[1.385]	[0.0761]	[0.223]
GS Soft$_{0,5}$ (≥50%)				-2.616***	0.271***	-0.364***
				[0.907]	[0.0749]	[0.0570]
GS Hard$_{0,5}$ (≥50%)				-7.498*	0.181	-0.364*
				[4.341]	[0.326]	[0.191]
Sample	Trades	Full	Full	Trades	Full	Full
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Stock, Date FE	Yes	Yes	Yes	Yes	Yes	Yes
N	240,058	10,450,063	10,450,063	240,058	10,450,063	10,450,063
Adjusted R^2	0.097	0.009	0.032	0.097	0.009	0.032

Table VI
How Do Fund Managers Process Soft Information?

The table shows information content of conclusions drawn from private meetings. The sample period is 2007-2015 and includes all 830 FM meeting notes that meet the minimum conditions for LLM processing and contain a conclusion section. Conclusions are parsed with OpenAI's API; the prompt is in the Internet Appendix. We prompt the LLM to quantify the shares of hard and soft information in the conclusion of the meeting notes and classify their focus (firm, industry, or market). All data sources are described in the Appendix.

"Conclusion" present in FM meeting notes	830
Percent of conclusion that is soft information	78.7%
Percent of conclusion that is hard information	21.3%
Considering only soft information - what does it concern?	826 (99.5%)
Soft - firm	81.2%
Soft - industry	12.0%
Soft - market	6.9%
Percentages cannot be identified by LLM	4 (0.5%)
Considering only hard information - what does it concern?	537 (64.7%)
Hard - firm	95.4%
Hard - industry	2.5%
Hard - market	2.1%
Percentages cannot be identified by LLM	293 (35.3%)

Table VII
Soft Information Across Analysts and Industries

This table shows cross-sectional regressions where the dependent variable is the LLM-determined percentage share of soft information in FM and GS meetings, respectively. Meeting notes are parsed with OpenAI's API; the prompt is in the Internet Appendix. We prompt the LLM to quantify the share of soft information. Column (2) includes Analyst fixed effects; column (4) includes GS fixed effects. *Growth Industry* indicates whether a firm is in a Fama French 49 industry that in the meeting year is a top tercile (1) or bottom tercile (0) industry by market-to-book. Industry terciles are ranked using the *Compustat* population of UK firms each fiscal year, and market-to-book is (total assets - book equity + shares outstanding x closing price)/total assets. All data sources are described in the Appendix. Standard errors clustered at trading day level are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively.

Dep. variable	LLM-determined share of soft information (%)			
	(1)	(2)	(3)	(4)
Sample	FM meetings		GS meetings	
Growth Industry	2.004**	2.265***	-1.735*	-0.152
	[0.820]	[0.827]	[0.986]	[0.931]
Log($MCap)	0.225	1.016***	0.128	-0.161
	[0.230]	[0.258]	[0.225]	[0.261]
Analyst FE	No	Yes	No	No
GovSpecialist FE	No	No	No	Yes
N	1,286	1,283	673	671
Adjusted R^2	0.005	0.175	0.002	0.130

Table VIII

Fund Manager Meeting Assessment, Attendance, and Composition

The table relates daily trading activity to internal analysts' evaluation and sentiment derived from the meeting notes in Panel A, and FM meeting composition and attendance in Panel B. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund (columns 1, 4) and an indicator whether a sell trade or buy trade occurs on day *t* (columns 2, 3, 5, 6). All control variables of interest shown are indicator variables set to one within a [0, 5] trading day window of FM and GS meetings, respectively. All variables and data sources are described in the Appendix. The sample period is 2007-2015; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Sample Trades restricts the sample to only those observations with non-zero trading activity. All specifications include control variables (*No FM Meeting Notes, No GS Meeting Notes, Log of shares outstanding, stake held, day return*) and stock and date fixed effects; 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: Meeting Assessment and Sentiment

Dep. variable	(1) Trade	(2) P(Sell Trade)	(3) P(Buy Trade)	(4) Trade	(5) P(Sell Trade)	(6) P(Buy Trade)
FM Low Rating$_{0,5}$	-5.485***	1.267***	0.399**			
	[1.729]	[0.247]	[0.173]			
FM Average Rating$_{0,5}$	2.499**	0.550***	0.977***			
	[1.045]	[0.0841]	[0.127]			
FM High Rating$_{0,5}$	9.466***	-0.0642	2.108***			
	[1.585]	[0.141]	[0.266]			
FM Neg Tone$_{0,5}$				-9.196***	2.274***	-0.0303
				[1.793]	[0.277]	[0.151]
FM Pos Tone$_{0,5}$				7.389***	-0.0428	1.471***
				[0.909]	[0.0490]	[0.137]
GS Neg Tone$_{0,5}$				-3.195***	0.399***	-0.288***
				[0.892]	[0.116]	[0.0963]
GS Pos Tone$_{0,5}$				-2.497*	0.185*	-0.401***
				[1.366]	[0.0958]	[0.0698]
Sample	Trades	Full	Full	Trades	Full	Full
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Stock, Date FE	Yes	Yes	Yes	Yes	Yes	Yes
N	240,058	10,450,063	10,450,063	240,058	10,450,063	10,450,063
Adjusted R^2	0.098	0.009	0.032	0.100	0.009	0.032

Panel B: Meeting Composition and Attendance by Fund Managers

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. variable	Trade	P(Sell Trade)	P(Buy Trade)	Trade	P(Sell Trade)	P(Buy Trade)
PF $CEO_{0,5}$	0.802	0.0633	-0.0483			
	[1.390]	[0.134]	[0.183]			
PF $CEO+_{0,5}$	2.212**	0.403***	1.183***			
	[1.000]	[0.0928]	[0.158]			
FM $Attending_{0,5}$				3.758***	0.677***	1.902***
				[0.910]	[0.140]	[0.240]
FM Not $Attending_{0,5}$				3.175***	0.396***	0.951***
				[0.741]	[0.0634]	[0.0919]
Sample	Trades	Full	Full	Trades	Full	Full
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Stock, Date FE	Yes	Yes	Yes	Yes	Yes	Yes
N	240,058	10,450,063	10,450,063	240,058	10,450,063	10,450,063
Adjusted R^2	0.096	0.009	0.031	0.096	0.009	0.032

Table IX
Meeting Consensus and Trading Activity

The table shows estimates of trading activity following FM meetings with and without consensus. The dependent variable is the daily net percentage change in the number of shares held in the portfolio company per fund (columns 1, 4) and an indicator whether a sell trade or buy trade occurs on day *t* (columns 2, 3, 5, 6). FM meeting notes are parsed with OpenAI's API, the prompt is in the Internet Appendix. We prompt the LLM to assess for each meeting the likelihood of leading to no consensus on how to trade on it. *No Consensus* (*Consensus*) indicates an FM meeting that the LLM assesses as "very likely" or "completely likely" ("completely unlikely", "very unlikely", "moderately likely") to lead to no consensus (consensus) on trading within a [0, 5] trading day window. *Upgrade* indicates any positive analyst recommendation change ("Sell" to "Hold", "Sell" to "Buy", "Hold" to "Buy") within a [0, 5] trading day window; *Downgrade* indicates any negative recommendation change ("Buy" to "Hold", "Buy" to "Sell", "Hold" to "Sell") for the same window. The interaction terms consider the most recent FM meeting during up to 30 trading days preceding the recommendation change. All other variables and all data sources are described in the Appendix. The sample period is 2007-2015; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Sample Trades restricts the sample to only those observations with non-zero trading activity. All specifications include control variables (*Buy Signal x No FM Notes, Sell Signal x No FM Notes, Log of shares outstanding, stake held, day return*) and stock and date fixed effects; 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.

Dep. variable	(1) Trade	(2) P(Sell Trade)	(3) P(Buy Trade)	(4) Trade	(5) P(Sell Trade)	(6) P(Buy Trade)
FM Consensus$_{0,5}$	3.412***	0.425***	1.136***			
	[0.890]	[0.0714]	[0.116]			
FM No Consensus$_{0,5}$	0.123	1.173***	0.977***			
	[1.801]	[0.199]	[0.241]			
Upgrade$_{0,5}$ x Consensus$_{-30,0}$				15.48***	-0.616***	4.266***
				[3.983]	[0.195]	[1.156]
Upgrade$_{0,5}$ x No Cons.$_{-30,0}$				-14.70***	2.677	0.850
				[5.158]	[2.645]	[1.253]
Downgrade $_{0,5}$ x Consensus$_{-30,0}$				-19.15***	5.687***	-1.189***
				[2.871]	[1.108]	[0.170]
Downgrade$_{0,5}$ x No Cons.$_{-30,0}$				-13.19***	7.639***	-1.233***
				[2.228]	[2.538]	[0.161]
Sample	Trades	Full	Full	Trades	Full	Full
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Stock, Date FE	Yes	Yes	Yes	Yes	Yes	Yes
N	240,058	10,450,063	10,450,063	240,058	10,450,063	10,450,063
Adjusted R^2	0.098	0.009	0.031	0.096	0.009	0.031

Table X
Assessment of Material Non-Public Information

The table reports descriptive statistics for all private meetings containing material non-public information (MNPI) in our sample. MNPI is any "precise" information which, if known, could reasonably be expected to move a firm's stock price. Meeting notes are parsed with OpenAI's API, the prompt is in the Internet Appendix. We prompt the LLM to assess for each meeting its potential to contain MNPI. We review each meeting that the LLM flags as at least "moderately likely" to contain MNPI by hand and eliminate false positives. This yields the sample of 17 meetings. All data sources are described in the Appendix.

Date of information	Non-public information type	Meeting type	MCap $ firm, bn	FF49 industry	Funds holding the stock	Agg stake held
14-Mar-07	Next-day quarterly earnings and equity issue	FM	1.3	banks	39	7.2%
1-Feb-08	Allegations of human rights violations and environmental damages (ESG meeting)	GS	5.6	mines	65	3.9%
18-Dec-08	Decision to sell part of business	FM	0.1	banks	55	13.2%
21-Apr-09	Rights issue	FM	0.7	fin	35	7.2%
8-May-09	Plan to issue equity	FM	0.9	rtail	24	3.7%
23-Jun-09	CEO succession and board changes	GS	4.6	rtail	42	0.4%
26-Feb-10	Discussion of subsequently failed M&A deal	FM	0.1	txtls	14	10.0%
18-May-10	Rights issue	FM	15.6	util	48	1.1%
9-Aug-10	Announcement of M&A deal with competitor	FM	5.8	util	67	3.7%
25-Feb-11	Rights issue	FM	0.1	txtls	9	8.0%
22-May-12	Financial terms of CEO departure	GS	33.8	drugs	40	1.0%
15-Jun-12	Wide-ranging discussion of potentially	GS	2.0	fin	61	7.2%
15-Jun-12	material issues with overlapping board	GS	15.6	telcm	56	2.1%
15-Jun-12	member	GS	24.5	trans	39	1.9%
11-Dec-12	Announcement of CEO change	GS	35.9	oil	48	1.4%
4-Mar-13	Rights issue	FM	1.8	oil	17	3.3%
22-Oct-13	Surprise departure of CFO	GS	1.5	bussv	8	1.3%

Table XI
Trading and Performance

The table reports the performance of trades with and without meetings in Panel A and money made from active trading in Panel B. In Panel A, the table reports monthly time-series regressions, where the dependent variable is the return on a long-short portfolio with (without) meetings. The portfolios with meetings (without meetings) are constructed as follows: For each trading day during the sample period all stocks are sorted into terciles based on the aggregate net trading across all funds that hold the stock on that day. The long portfolio each day includes all stocks that have had a meeting (no meeting) either by FMs or GS within the past 20 trading days and are in the top tercile of buy trades, the short portfolio includes all stocks in the bottom tercile of sell trades on meeting days (on non-meeting days). Portfolios that contain less than three stocks are replaced with the market return. After determining the composition of both portfolios, their value-weighted (by market cap) return is calculated, and for each month the daily returns for each portfolio are compounded over the *n* trading days of the month to yield the monthly return. Mkt-Rf is the excess market return. SMB, HML and UMD are the size, value and momentum factors of Fama and French (1993) and Carhart (1997), respectively, and calculated for UK equities by Gregory, Tharayan and Christidis (2013). Returns are in percent per month. Robust standard errors are shown in parentheses. 1%, 5%, and 10% statistical significance are indicated with ***, **, and *, respectively. In Panel B, dollar amounts are shown for four types of events—FM and GS meetings, downgrades and upgrades of stocks by internal analysts; any downgrades and upgrades that coincide with a FM or GS meeting are dropped from the sample. *Initial Position* is the average fund position on day t-1 in US$ million; *Money made* is the rate of return in basis points across all sample positions due to active trading, net of passive returns and net of trade flows during the [0, 5] window around an event, where fast (slow) assumes that intraday trades all occur at opening (closing) prices. All data sources are described in the Appendix.

Panel A: Performance of Meetings vs No Meetings

Portfolio	FM Meetings LS (1)	GS Meetings LS (2)	All Meetings LS (3)	No Meetings LS (4)
Constant	1.983**	0.828	1.802**	0.493***
	(0.695)	(0.495)	(0.610)	(0.105)
Mkt-Rf	-0.367	-0.133	-0.354	-0.069
	(0.242)	(0.131)	(0.224)	(0.035)
SMB	-0.295	-0.226	-0.249	-0.015
	(0.190)	(0.182)	(0.180)	(0.028)
HML	0.034	0.502	0.408	0.106
	(0.342)	(0.299)	(0.283)	(0.056)
UMD	-0.075	0.090	-0.195	-0.029
	(0.216)	(0.120)	(0.133)	(0.025)
N	108	108	108	108
Adjusted R^2	0.064	0.067	0.097	0.108

Panel B: Money Made from Active Trading

	Initial Position $m	N. of positions	Money made on initial position, bps Fast trading [0, 5]	Slow trading [0, 5]
FM meeting	9.79	5,429	19	6
GS meeting	14.1	3,057	7	-1
All meetings	11.4	8,260	15	4
Downgrade	9.7	3,512	41	19
Upgrade	8.8	2,416	34	12
All recommendation changes	9.3	5,921	39	16

Appendix: Variables Definitions

The table provides a summary description of the variables reported in tables and figures. A detailed description of the internal data of SLI and how we translate them into databases is provided in the Internet Appendix.

Variable	Description	Source
FM Meeting	Indicates a FM meeting with a portfolio firm taking place on day t.	SLI
GS Meeting	Indicates a GS meeting with a portfolio firm taking place on day t.	SLI
$FM_{0,5}$, $FM_{6,20}$	Indicator variables set to one if a FM meeting takes place within a [0, 5] and [6, 20] trading day window, respectively	SLI
$GS_{0,5}$, $GS_{6,20}$	Indicator variables set to one if a GS meeting takes place within a [0, 5] and [6, 20] trading day window, respectively	SLI
Active health warning	Indicates a portfolio firm being on the internal governance health warning list on day t.	SLI
FM attendees	Indicates the number of FMs attending a FM meeting.	SLI
Portfolio firm attendees	Indicates the number of portfolio firm attendees in a FM meeting.	SLI
Portfolio firm CEO	Indicates a FM meeting attended by the CEO of the portfolio firm.	SLI
Portfolio firm CFO	Indicates a FM meeting attended by the CFO of the portfolio firm.	SLI
Portfolio firm Chair	Indicates a FM meeting attended by the Chairperson of the portfolio firm.	SLI
PF $CEO_{0,5}$	Indicates a FM meeting attended by one of Chair, CEO, CFO within a [0, 5] trading day window.	SLI
PF $CEO+_{0,5}$	Indicates a FM meeting attended by at least two of Chair, CEO, CFO within a [0, 5] trading day window.	SLI
MCap $ firm, million	Number of shares outstanding times price per share, in US$ million.	FTSE
Avg. agg. stake held	Number of shares held across all funds over number of shares outstanding.	SLI, FTSE
Meeting with meeting note	Indicates a GS or FM meeting note being available.	SLI
FM Low rating	Indicates a FM meeting rating of 1 or 2 (1 = poor, 5 = excellent).	SLI
FM Avg rating	Indicates a FM meeting rating of 3.	SLI
FM High rating	Indicates a FM meeting rating of 4 or 5.	SLI
Hard information	LLM-assessed fraction of hard information in a meeting note	GPT, SLI
Soft information	LLM-assessed fraction of soft information in a meeting note.	GPT, SLI
Soft - firm	LM-assessed fraction of soft information in a meeting note specific to the firm.	GPT, SLI
Soft - industry	LM-assessed fraction of soft information in a meeting note specific to the industry.	GPT, SLI
Soft - market	LM-assessed fraction of soft information in a meeting note specific to the market.	GPT, SLI
Non-public information	LLM-assessed probability that a meeting note discusses material non-public information ("not at all likely", "slightly likely", "moderately likely", "very likely", "completely likely").	GPT, SLI
Meeting w/discussion of ESG	Indicates a GS meeting discussing at least one ESG issue	SLI
Meeting w/ESG note	Indicates a GS meeting being an ESG meeting	SLI
FTSE All Share Stocks	Number of stocks included in the FTSE All Share index	FTSE
Stocks held All	Sum of an indicator variable set to one if a stock is held by at least one fund	SLI
Stocks held UK Equities Desk	Sum of an indicator variable set to one if a stock is held by at least one fund managed by the UK Equities Desk	SLI
Number of funds All	Total number of funds that hold UK stock	SLIs
Number of funds UK Equities Desk	Number of funds managed by the UK Equities Desk	SLI
Number of Positions across all Funds	The total number of positions held across all funds	SLI
Fund-position, stake held %	Number of shares held by a fund over number of shares outstanding.	SLI, FTSE
P(Trade)	Probability of a trade occurring in a position on any one day	SLI
Initial Position $ million	the value of the initial position ahead of a buy or sell trade, in US$ million	SLI, FTSE
Size of Trade $ million	Value of a trade, in US$ million	SLI, FTSE
Trade %	Daily net percentage change in the number of shares held in the portfolio firm per fund	SLI
Ln(Shrout)	Log of shares outstanding	FTSE
Day Return	Daily stock return of stock i.	FTSE

FM Soft$_{0,5}$ ($\geq\tilde{x}$)	An indicator variable set to one if a FM meeting takes place within a [0, 5] trading day window that contains the sample median or more of soft information	GPT, SLI
FM (GS) Hard$_{0,5}$ ($\geq\tilde{x}$)	Indicator whether a FM (GS) meeting takes place that contains the sample median or more of soft information within a [0, 5] trading day window	GPT, SLI
FM(GS) Soft$_{0,5}$ ($\geq\tilde{x}$)	Indicator whether a FM (GS) meeting takes place that contains less than the sample median of soft information within a [0, 5] trading day window	GPT, SLI
FM (GS) Soft$_{0,5}$ (≥50%)	Indicator whether a FM (GS) meeting takes place that contains the sample average or more of soft information within a [0, 5] trading day window.	GPT, SLI
FM (GS) Hard$_{0,5}$ (≥50%)	Indicator whether a FM (GS) meeting takes place that contains less than the sample average of soft information within a [0, 5] trading day window	GPT, SLI
Growth Industry	Indicates whether a firm is in a Fama French 49 industry that in the meeting year is a top tercile (1) or bottom tercile (0) industry by market-to-book. Industry terciles are ranked using the *Compustat* population of listed UK incorporated firms each fiscal year, and market-to-book is (total assets - book equity + shares outstanding x closing price)/total assets.	Compustat
FM No Rating$_{0,5}$	Indicates a FM meeting without rating within a [0, 5] trading day window.	SLI
FM Low Rating$_{0,5}$	Indicates a FM meeting rating 1 or 2 (1 = poor, 5 = excellent) within a [0, 5] trading day window.	SLI
FM Average Rating$_{0,5}$	Indicates a FM meeting rating 3 within a [0, 5] trading day window.	SLI
FM High Rating$_{0,5}$	Indicates a FM meeting rating 4 or 5 within a [0, 5] trading day window.	SLI
FM (GS) Neg Tone$_{0,5}$	The total number of negative words in a FM (GS) 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 Loughran and McDonald (2011) within a [0, 5] trading day window.	SLI
FM (GS) Pos Tone$_{0,5}$	The total number of negative words in a FM (GS) meeting note divided by the total number of positive and negative words in the note is equal to or smaller than 0.5 within a [0, 5] trading day window.	SLI
FM Attending$_{0,5}$	Indicates a FM meeting that the FM holding the position attends in person within a [0, 5] trading day window.	SLI
FM Not Attending$_{0,5}$	Indicates a FM meeting that the FM holding the position does not attend in person within a [0, 5] trading day window.	SLI
Upgrade$_{0,5}$	Indicates any positive analyst recommendation change ("Sell" to "Hold", "Sell" to "Buy", "Hold" to "Buy").	SLI
Downgrade$_{0,5}$	Indicates any negative recommendation change ("Buy" to "Hold", "Buy" to "Sell", "Hold" to "Sell").	SLI
Consensus$_{0,5}$	No Consensus indicates an FM meeting that the LLM assesses as "completely unlikely", "very unlikely", "moderately likely" to lead to no consensus on trading.	GPT, SLI
NoConsensus$_{0,5}$	No Consensus indicates an FM meeting that the LLM assesses as "very likely" or "completely likely" to lead to no consensus on trading.	GPT, SLI
Mkt-Rf, SMB, HML, UMD	Mkt-Rf is the excess market return. SMB, HML and UMD are the size, value and momentum factors of Fama and French (1993) and Carhart (1997), respectively calculated for UK equities.	Gregory, Tharayan and Christidis (2013)

Internet Appendix

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

Marco Becht
Solvay Brussels School, Université libre de Bruxelles, CEPR, and ECGI

Julian Franks
London Business School, CEPR, and ECGI

Hannes F. Wagner
Bocconi University and ECGI

January 2025

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Internet Appendix A

Additional Figures and Tables

Figure IA-A1
Monitoring Incentives

The figure shows meeting intensity as a function of stake size. The horizontal axis shows the aggregate stake sorted by size; the vertical axis shows the daily incidence of meetings. The sample is as in Table IV in the paper; positions without at least one FM meeting, at least one GS meeting and without a trade by any fund during the sample period are excluded. Aggregate stake size in GBP indicates the aggregate holdings across all funds, in millions of British Pounds. Aggregate stake size percent indicates the aggregate holdings across all funds, as a percentage of shares outstanding. Daily GS (FM) meeting incidence indicates the average daily probability of a GS (FM) meeting.

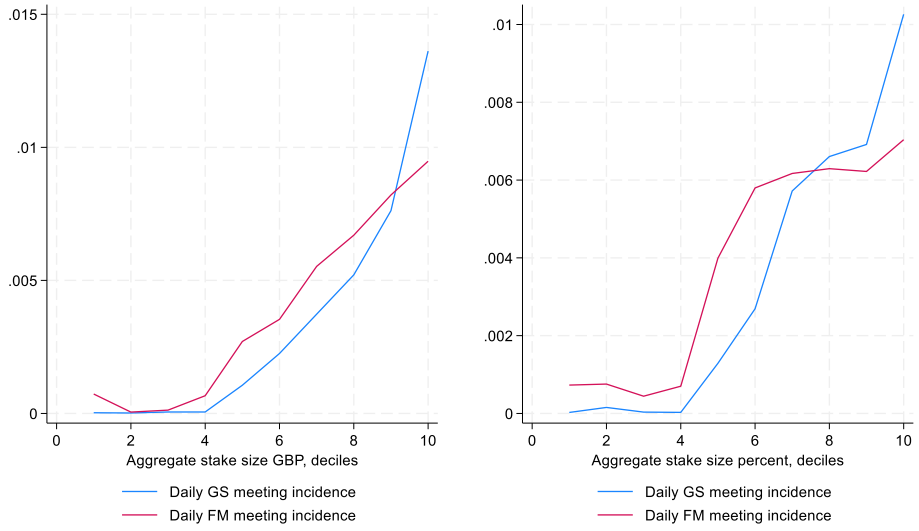

Figure IA-A2
The Timing of Private Meetings –AstraZeneca and Barclays

The figure provides a time series view of daily private data for 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 grouped into six clusters: i) FM meetings, ii) the FM/internal analyst's rating of those meetings, iii) the number and seniority of asset manager attendees, iv) the number and seniority of portfolio firm attendees, v) GS meetings and contacts and vi) internal analysts' stock recommendations.

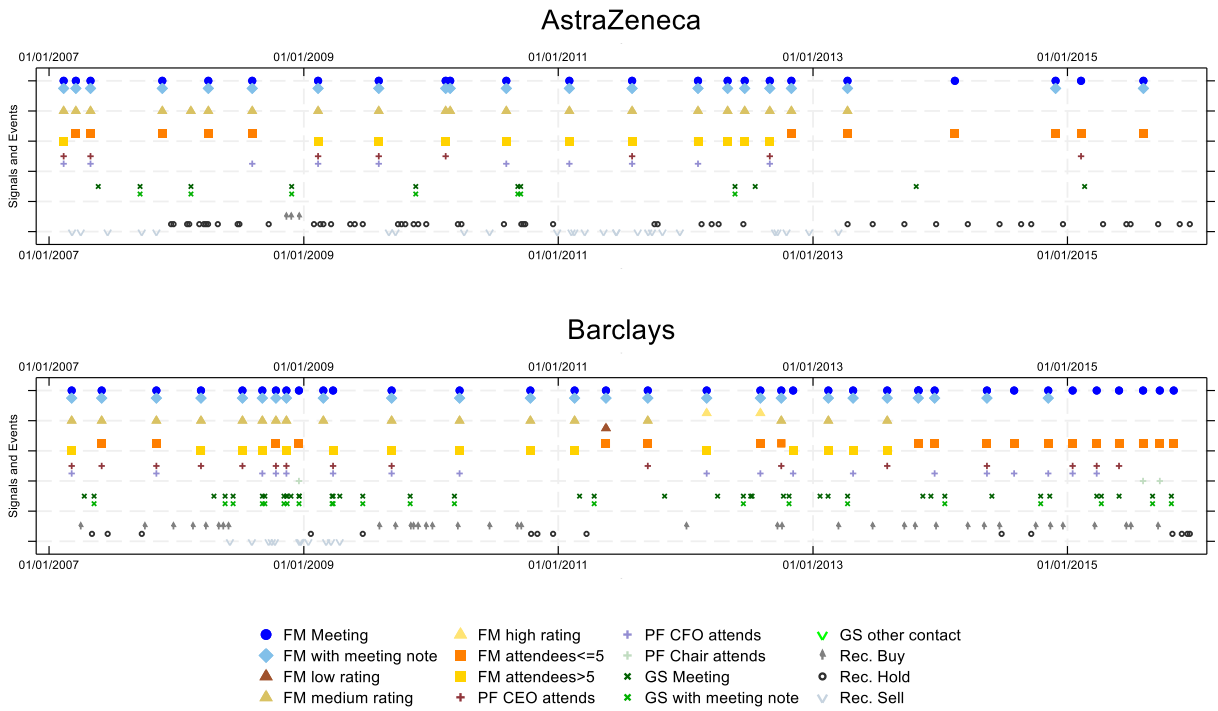

Figure IA-A3
The Timing of Earnings Reports and Fund Manager Meetings

The figure shows the cumulative probability of earnings report publication from 50 days before to 50 days after a portfolio company meeting. We identify all sample firms with available earnings report dates 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 that the portfolio firm released a public earnings report over the 101-day observation window. We average and cumulate the number of earnings releases for each firm. For FM meetings the distribution is highly skewed; 80% of meetings took place after earnings announcements, suggesting that these meetings were deliberately planned to take place after the publication of the earnings reports. For GS meetings the distribution is symmetric, suggesting that the timing of earnings announcements did not play a role is scheduling these meetings.

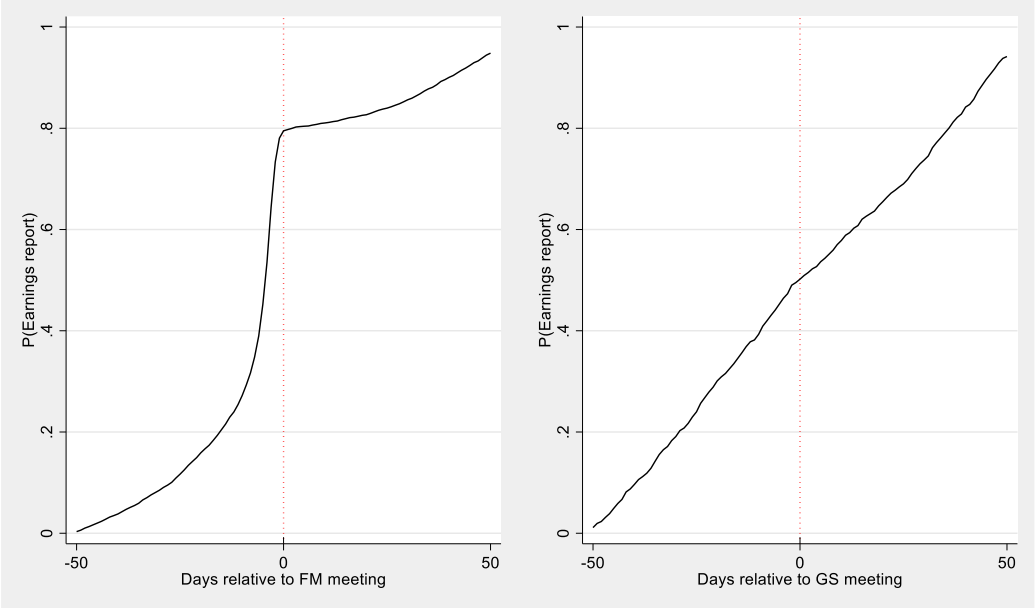

Table IA-AI
Soft and Hard Information

The table shows soft and hard information quotes from private meeting notes. Meeting notes are parsed with OpenAI's API; the prompt is in the Internet Appendix. We prompt the LLM to extract a representative quote of hard (soft) information with up to 20 words. Random samples of 20 quotes are drawn from each category for FM (GS) meetings. Entities and person names are anonymized. Table II in the paper is the abbreviated version of this table.

Panel A: FM Meetings

	Hard information representative quote
1	"The broad terms include 260bn of assets, on which 10bn of impairment has already been recognised, so a net asset total of 250bn."
2	"With the shares trading on 14.5x 2008 earnings they just look too expensive."
3	"[Firm name]'s MoU with government covers 1.4bn of [Product name] revenue, most of which is from contracts which were renegotiated in Q410 or Q111 in any cases."
4	"Their 2014 guidance of 4 6bn sales from pipeline products is a risk adjusted number."
5	"The PE remains at a significant discount to [Firm name] on 11.9x Sept 12, but is similar on EV EBITDA."
6	"Bad debts fell from 2.5 of revenue to 2.1."
7	"If sales were growing 3 to 5 the FD said that only 10 to 15 would drop through to profits"
8	"Capex will remain at c10m above depreciation for the next couple of years"
9	"[Firm name] make 25 of their profits during September and on this basis their visibility is limited."
10	"In terms of the 962 staff that have gone it has cost about 200,000."
11	"Turnover was up 23 with profits up 26."
12	"[Firm name] has the lowest financing cost with an average of 3.8."
13	"[Product name] volumes have fallen sharply will make 2m now vs previous expectation of 3m."
14	"Digital is expected to be 50 of the market by 2012."
15	"Post the recent fall the shares trade on just over 10x this year s earnings, 6x peak and have a net cash balance sheet."
16	"FY11 revenues were up 14%, driven by strong growth in wireless device 28% GPS testing 37%, mobile backhaul 60% and datacentre testing equipment 20%."
17	"Like for like net income was down 35 in the year"
18	"They are trading on 11x this year\'s earnings, and on roughly 6x normalised earnings."
19	"Shares now trading on 8 free cash flow yield."
20	"Their most recent 5 year CAGR to FY14 was 17."
	Soft information representative quote
1	"[Person name] was probably most animated when talking about the opportunity in UK government outsourcing, where GFS has had some recent successes in the prisons market."
2	"It was good to finally meet [Person name], but I didn't feel that I learnt much new in terms of the investment case as there was a lot of chat about brand momentum intangible benefits [Person name] but very little on numbers."
3	"Overall, I was impressed with both the assets, which were better than I expected, and by the individuals I met, who were high calibre asset managers, and conveyed a positive sense of collegiate entrepreneurialism."
4	"It is difficult to know what is truly going on the ground because he tends to talk up the prospects for the business"
5	"Management came across as highly self confident, bordering on arrogant, although this is understandable given their achievements."
6	"A good meeting with management very solid with scope still to push the margins higher."
7	"[Person name] was reasonably convincing that they can grow book value while generating lots of cash, giving them scope for substantial dividend rises."
8	"This was an encouraging meeting with [Person name], helped by the fact that for the first time since the rights issue 18 months ago they have managed to show some progress in deploying the proceeds to generate some value for the business."
9	"Remains a well run, high returns business with a strong roll out story, but won't be immune from the weaker consumer confidence."
10	"[Person name] admitted that when he and the rest of the former [Firm name] team took over at [Firm name] in 2008, they underestimated the size of the job that needed to be done."
11	"[Firm name] brand yield recovery delusional that no one died means that people have overreacted holidays clearly ruined."
12	"[Person name] concluded that [Firm name] can defend its margin intellectually and commercially."
13	"They have listened to customers who have said that they find shopping at [Firm name] difficult."
14	"Overall this was a good meeting, leaving one with the strong impression that [Firm name] will be a company to emerge as a winner"
15	"This meeting with [Person name] added a little colour to the takeover approach from [Firm name] although it remained unclear whether or not they would be returning with a higher offer."
16	"[Person name]'s expectation for H2 is for revenue to be between 5 and 5 y y, based on some unspecified early signs of stabilisation"
17	"Management highlighted that yields in prime assets have flattened, while rental growth remains in line with previous guidance."
18	"The second half should be better and if management are to be believed then the earnings potential of the business remains in the 25 35p range in which case the company is v cheap vs most other industrials, especially when the clean balance sheet not much debt, no pension is included in the equation."

19	"They think the [Firm name] recipe isn't very good it is cake based and injected with steam and that [Firm name] will have a bad Christmas pudding season this year as a result."
20	"Management have not seen any effect from the economic slowdown and they expect that they could even benefit from sub prime litigation."

Panel B: GS Meetings

	Hard information representative quote
1	"Our meeting came day after profits warning due to order delays"
2	"[Person name] signs all invoices over 20K"
3	"Year end debt euro 126m worse than expected. FY loss of euro 314m."
4	"The senior US executives who presented to the board in 2006 misled the board."
5	"When they set their aspirational target to double eps in the 5 years to 2015, the two big areas of opportunity were growing internationally and moving more into frontline services."
6	"on the ftse 20 they were right in the middle."
7	"[Person name] inherited a board of 13 members, including him."
8	"Bonuses for 2010 were scaled back by 15 by the rem co."
9	"A further independent non exec was appointed in May, taking the number to 4."
10	"The head office is intentionally small ie only 60 people"
11	"[Firm name] lost a recent tax case with HMRC over a tax scheme put in place in 2003 by [Auditor name]."
12	"They plan to increase salary by appropriate amounts after a 2 year standstill."
13	"we note the increased responsibilities of certain executive directors and [Firm name]'s wish to re balance remuneration arrangements away from variable towards fixed compensation."
14	"Implementation of the [Person name] recommendations has been progressing well, with the initial programme of work expected to be complete by May this year."
15	"payout likely to be c25 of sal and anything above 50K will be deferred for 3 years."
16	"our holding has been almost halved"
17	"Holding 0.4 Re [Person name]'s departure"
18	"They said that the co had a value of around 15 just now 12.50 in the market"
19	"EGM on 2nd July to approve the proposed new scheme."
20	"Said that most fag packets were now totally covered with gruesome images"
	Soft information representative quote
1	"[Person name] did not come across well. He lacked a reasonable grasp of basic governance details."
2	"[Firm name] is undoubtedly an entrepreneurially led company. Steps have been and are being taken to strengthen the management infrastructure."
3	"CEO [Person name] did much of the talking and the SID [Person name] looked as if he was thoroughly cheesed off at having to talk to a shareholder."
4	"[Person name] is quickly understanding how to interact in the boardroom by taking time to listen and then determine the best way forward."
5	"He spoke with confidence and conviction and it was notable that he chose to fly solo rather than have the company secretary or other in attendance."
6	"[Person name] is a receptive chairman and his responses were broadly reassuring in respect of the direction of travel."
7	"[Person name] came across as a down to earth chairman with the capacity to be tough when required."
8	"[Person name] comes across as a thoughtful and involved chairman and has led the board during a period of substantial and successful growth."
9	"In terms of culture we have seen a change in the tone from the top."
10	"[Person name] believes [Person name]'s experience as a manager at [Firm name] where a number of people died in a mining accident is the genesis of his strong interest in safety."
11	"It is difficult to imagine a step change in the governance of [Firm name] while [Person name] remains chairman."
12	"A reassuring meeting with [Person name] who appears to have settled into the role of chairman well."
13	"The new ce [Person name] has settled in well and is breaking down the silos"
14	"her judgement was now perceived as questionable."
15	"The recent five arrows acquisition provides further diversification to the business model in line with their stated strategy."
16	"Risk management appears sound, particularly its approach to legislative risk."
17	"[Firm name] acknowledges this and one of its priorities for this year is to develop [Firm name] wide performance measures and targets."
18	"the launch of the [Initiative name] puts [Firm name] at the forefront of the household goods sector s response to sustainability issues."
19	"[Person name] said that they are trending towards the [Firm name] rather than the [Firm name] culture."
20	"[Person name]'s appointment has not helped re board independence he has known the execs and one of the non execs for many years."

Table IA-AII
Meeting Topics – Discriminant Analysis and Human Labelling

The table shows i) FM and GS meeting topics classified using traditional NLP and ii) GS meeting topic labels assigned by (human) GSs. The NLP classification is based on a randomized logistic regression analysis, following Hovy, Melumad, and Inman (2021). This method identifies the words that best discriminate texts drawn from GS and FM meetings. The human assigned GS topic labels do not sum to 100, since meetings can have more than one topic assigned to them.

Supervised machine learning using randomized logistic regression		Human classified meeting topics	
GS Meeting – best discriminating words	FM Meeting – best discriminating words	GS Meeting topic	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"			

Table IA-AIII
Dialogue and Engagement

The table provide sample phrases of investor views. The counts and phrases are extracted from the full sample of 3,363 3,363 FM and GS meeting notes that meet the minimum conditions for LLM processing. Meeting notes are parsed with OpenAI's API; all prompts are in the Internet Appendix. We prompt the LLM to count the number of company views, the number of investor views and to extract phrases with investor views. In addition, we instruct the LLM to distinguish between views expressed by the writer after the meeting and views the investor participants expressed during the meeting. To avoid the LLM falsely attributing company views to the asset manager we further restrict the investor view phrases to sentences that contain "we" or "I" and adjust the counts accordingly. We use ChatGPT to abbreviate GS phrases and to sort FM and GS phrases into categories.

Sample phrases FM meeting notes	Sample phrases GS meeting notes
Pushing for Decisions: – "We left them with the message not to bother, unless returns look very compelling and they were sure of them as cost of equity is currently very high." – "We gave them a number of 20m which they said was aggressive." – "We had a very robust meeting with the management of []."	Expressions of Strong Opinions or Demands: "We assert", "We believe strongly", "We emphasized strongly", "We insisted firmly", "We voiced our concerns", "We made it clear", "We strongly urged", "We expressed frustration", "We are frustrated", "I fear", "I registered mild criticism", "I reiterated", "I mentioned importance", "I stressed", "I noted", "I emphasized", "I pointed out"
Requests for Action or Change: – "We urged them to give business unit detail on cash and capital." – "We expressed a preference for buying back debt or equity at a steep discount as long as these opportunities persist." – "When I suggested they need to cut the dividend and change the non execs he said they would be the first two things he would do if he ran it."	Requests for Action or Change: "We asked for", "We called for", "We demanded changes", "We pushed for", "We lobbied for", "We pressed for", "We recommended changes", "We requested", "We encouraged", "I suggested", "We conveyed the need", "We discussed the benefits", "We highlighted the need", "We conveyed our views", "We indicated", "We questioned", "We drew attention", "We expressed some initial views", "We gave some gentle encouragement", "We urged", "We prompted"
Expressing Concern or Surprise: – We expressed surprise [] was staying as group FD, given they failed to deliver in Ireland and arguably overpaid in France. – We expressed concern that previously management had repeatedly denied the requirement for a rights issue despite market skepticism. – We again expressed our concern re the rationale for the merger given the company's history of missing forecasts, high debt levels, and [] product recall issues.	Acknowledging or Agreeing: "We acknowledged", "We agreed that", "We recognized", "We accepted", "We supported fully", "We backed", "We would be supportive", "We confirmed our support", "We welcomed", "I welcomed", "I complimented", "I encouraged", "They accepted", "We gave some encouragement", "We concurred", "We confirmed"
Seeking Information or Clarification: – We asked [] to define success from here, and his answer was woolly and lacked any financial targets or KPIs to focus on. – When asked why they aren't growing the business even faster, they explained how they built up a much bigger infrastructure. – When we questioned management on this, this was being driven by their lawyers' comments around their IPO and general lack of experience from the management in terms of what they should and shouldn't say.	Other views expressed: "I indicated", "We signaled", "I reminded", "We informed", "We reserved our position", "I explained", "I noted", "We highlighted", "We commented", "We confirmed"

Internet Appendix B – Large Language Model Prompts

1. Hard and Soft Information

FM meeting note prompt	GS meeting note prompt
You are a finance expert assisting in structuring data into a table format. Given meeting notes with various information pieces, your task is to analyze and output the data in a CSV-friendly format.	
The meeting notes are taken by a fund manager from meetings with senior executives of the target firm, that is, the firm that the fund manager is investing in.	The meeting notes are taken by a governance specialist from meetings with board members and senior executives of the target firm. The governance specialist is working for a fund manager, who invests in this target firm.
They are high level meetings, attended by multiple people from both sides. The meeting notes are a summary of the meeting, not a transcript. The meeting notes have a common format following a template, but every meeting is different.	
During the meeting, fund managers are potentially obtaining different types of information.	During the meeting, governance specialists are potentially obtaining different types of information.
Hard information is almost always recorded as numbers. In finance, we think of financial statements, the history of payments that were made on time, stock returns, and the quantity of output as being hard information. Soft information is often communicated as text. It includes opinions, ideas, rumors, economic projections, statements of management's future plans, and market commentary. Based on the meeting notes only, perform the following analysis:	
1. Determine the share of hard versus soft information obtained by the fund manager in the meeting (mostly hard, more hard than soft, equal split, more soft than hard, mostly soft).	1. Determine the share of hard versus soft information obtained by the governance specialist in the meeting (mostly hard, more hard than soft, equal split, more soft than hard, mostly soft).
2. Quantify the share of soft information as a percentage of total information obtained (0 to 100) 3. Show the most representative quote of hard information with up to 20 words. 4. Show the most representative quote of soft information, with up to 20 words. 5. Considering only the soft information, quantify the percentages that are about the firm, the industry, and the market (three numbers, must sum to 100) If specific information is unavailable, use "NA".	

2. Dialogue and Engagement

FM meeting note prompt
Context:
Analyze meeting notes provided by a fund manager, summarizing meetings between board members and executives of a target firm and investor representatives. Each note follows a common template, including names and roles of participants for speaker identification.
Instruction:
Extract direct quotes where participants express opinions or views using specific keywords (e.g., "recommended," "believed," etc.). Avoid phrases beginning with subjective reflections of the writer or indicating temporal shifts post-meeting to ensure content represents actual discussions.
Key Points of Analysis:

1. Company Views (R1):
   - 1.1. Quantify the number of times company representatives expressed views or opinions.
   - 1.2. Identify phrases such as "they said that," "management commented," "according to our CEO," etc.
   - 1.3. Count each occurrence of such phrases.
2. Investor Views and Demands (R2):
   - 2.1. Tally instances where investors express their views.
   - 2.2. Look for phrases such as "we suggested," "recommended," "believed," "felt," "hoped," "advised," "stated," "claimed," "expressed," "emphasized," "noted," "remarked," "insisted," "affirmed," "assumed," "questioned," "wondered," "suspected," "appreciated," "criticized," "commended," "acknowledged," "welcomed," "accepted," "disputed," "argued," "explained," "clarified," "highlighted," "stressed," "reiterated," "described," "conveyed," "indicated," "commented".
   - 2.3. Count each expression within direct quotes.
3. Investor Tone (R3):
   - 3.1. Assess the tone of Investor Views and Demands (if R2 > 0) on a scale from 0 (very friendly) to 10 (very aggressive).
   - 3.2. Provide examples of what constitutes different levels on this scale. If not applicable, return "null."
4. Investor Demand Phrases (R4):
   - 4.1. Extract specific phrases from Investor Views and Demands (if R2 > 0), limited to 50 words.
   - 4.2. Use verbatim excerpts. If not present, return "null."

GS meeting note prompt
Context:
Analyze meeting notes provided by a governance specialist, summarizing high-level meetings between board members and executives of the target firm and the governance (ESG) specialist. The notes were written by the governance specialist and vary per meeting.
Instruction:
Extract direct quotes from meeting participants discussing agenda items or opinions. Avoid subjective reflections or temporal shifts post-meeting to ensure content represents actual discussions.
Key Points of Analysis:

1. Company Views (R1):
   - 1.1. Quantify the number of times the company representative spoke.
   - 1.2. Identify phrases indicating management speaking (e.g., "they said that," "management commented that," "according to our CEO," "the CFO mentioned").
   - 1.3. Count such phrases.
2. Investor Views and Demands (R2):
   - 2.1. Tally instances of investor participants expressing views.
   - 2.2. Look for phrases demonstrating opinions, feedback, requests, or dissatisfaction (e.g., "we believe," "suggest," "we request," "concerned," "I conveyed our position," or "I emphasized/reiterated our concerns").
   - 2.3. Exclude post-meeting summaries or evaluations by the writer.
3. Investor Tone (R3):
   - 3.1. Assess the tone of investor views or demands on a scale from 0 (very friendly) to 10 (very aggressive). If not applicable, return "null."
4. Investor Demand Phrases (R4):
   - 4.1. Write out specific phrases counted in investor views and demands, limited to 50 words. If not present, return "null."

3. Material Non-Public Information

FM meeting prompt version	GS meeting prompt version
You are a finance expert assisting in structuring data into a table format. Given meeting notes with various information pieces, your task is to analyze and output the data in a CSV-friendly format.	
The meeting notes are taken by a fund manager from meetings with senior executives of the target firm, that is, the firm that the fund manager is investing in.	The meeting notes are taken by a governance specialist from meetings with board members and senior executives of the target firm. The governance specialist is working for a fund manager, who invests in this target firm.
They are high level meetings, attended by multiple people from both sides. The meeting notes are a summary of the meeting, not a transcript. The meeting notes have a common format following a template, but every meeting is different.	
During the meeting, fund managers are potentially obtaining different types of information.	During the meeting, governance specialists are potentially obtaining different types of information.
Are there indications that the meeting is discussing insider information? Insider information is material non-public information. If known, it could reasonably be expected to affect the value of the target firm's stock (not at all likely, slightly likely, moderately likely, very likely, completely likely). If specific information is unavailable, use "NA".	

4. FM/Internal Analyst Conclusions

FM meeting prompt
You are a finance expert assisting in structuring data into a table format. Given meeting notes with various information pieces, your task is to analyze and output the data in a CSV-friendly format. The meeting notes are taken by a fund manager from meetings with senior executives of the target firm, that is, the firm that the fund manager is investing in. They are high level meetings, attended by multiple people from both sides. The meeting notes are written up by the fund manager and therefore capture how the fund manager experiences the meeting. They are a summary of the meeting, not a transcript. The meeting notes have a common format following a template, but every meeting is different. During the meeting, fund managers are potentially obtaining different types of information. Hard information is almost always recorded as numbers. In finance, we think of financial statements, the history of payments that were made on time, stock returns, and the quantity of output as being hard information. Soft information is often communicated as text. It includes opinions, ideas, rumors, economic projections, statements of management's future plans, and market commentary. You are being given not the full meeting notes, but only a conclusion that the fund manager writes up at the end of those meeting notes. Based on this conclusion only, perform the following analysis: 1. Quantify the share of soft information and the share of hard information as percentages of total information contained in the conclusion (two numbers, must sum to 100, separated by semicolon) 2. Considering only the soft information, quantify the percentages that are about the firm, the industry, and the market (three numbers, must sum to 100, separated by semicolon) 3. Considering only the hard information, quantify the percentages that are about the firm, the industry, and the market (three numbers, must sum to 100, separated by semicolon) If specific information is unavailable, use "NA".

5. LLM Generated Recommendation

FM meeting prompt version
You are a finance expert assisting in structuring data into a table format. Given meeting notes with various information pieces, your task is to analyze and output the data in a CSV-friendly format. The meeting notes are taken by a fund manager from meetings with senior executives of the target firm, that is, the firm that the fund manager is investing in. They are high level meetings, attended by multiple people from both sides. The meeting notes are written up by the fund manager and therefore capture how the fund manager experiences the meeting. They are a summary of the meeting, not a transcript. The meeting notes have a common format following a template, but every meeting is different. During the meeting, fund managers are potentially obtaining different types of information. The analyst makes a recommendation to "buy", "hold", or "sell" the stock, based on the meeting. This information is contained in the meeting notes, but has been redacted, indicated by [REDACTED]. Based on the meeting notes only, perform the following analysis: 1. Would you issue a "buy", "hold" or "sell" recommendation for the stock after the meeting? 2. Imagine that other fund managers disagree with your recommendation and trade different from your recommendation. For example, when you recommend "buy" they sell, or when you recommend "hold" they trade. Are there indications that this could happen (not at all likely, slightly likely, moderately likely, very likely, completely likely)? 3. Can you explain your reasoning for Q2 in up to 20 words? If specific information is unavailable, use "NA".

Internet Appendix C - Database Construction

This Appendix provides a detailed description of the internal data of SLI and how we translate them into databases.

1 Data Sources

Most of the data was provided by SLI. The data come from two different information systems that were not linked, for historic and regulatory reasons. We also benefitted from historic logs and other files that the UK equities team compiled for internal use. The main security identifier we use throughout our analysis is the security identifier from the London Share Price Database (LSPD).

All data were processed using Python, R, Stata, GPT4 (GPT4-Turbo, GPT-4 and GPT-4o), Unix system tools and a range of other utilities. Text file types were frequently supplied in binary format (.doc, .docx, .pdf) and suitably converted.

The remainder of this section provides a short summary of each data source and a full description of the main data. Unless indicated otherwise, each data source covers the full sample period (2007-2015).

1.1 FM-Analyst Meetings

- Historic Meeting Logs of Analyst meetings (spreadsheet): Analyst meeting dates; date, venue, name and position of participants including both portfolio companies and FM attendees.
- For a subset of meetings in the spreadsheet, we have Meeting Notes: Notes written up by the analyst after meetings; the notes were based on a template. Where are advised that where there is a meeting but no 'meeting notes' they are the less important ones.

1.2 Internal Analyst Recommendations (subset of meetings include analyst recommendation changes)

- Historic Recommendation Logs: Company name, date, recommendation, analyst name, daily. Called 'black book'. Only some of these recommendation changes follow a meeting. We know from the CIS file (see below) which recommendation changes are associated with 'important' meetings, defined as those meetings where there is an analyst note. Note the recommendation change is recorded in the black book with some delay. We can compute that delay and test for its impact on trading and excess returns.
- Quarterly Reports and Investment Notes: Quarterly reports published by the internal analysts; collates investment notes for the main companies in an industry, pulling together all relevant information from external and internal sources.

1.3 GS Meetings

- GS team contacts in database: Separate entries for each issue raised by the team with portfolio firms at the point of engagement; separate entries for corporate governance and SRI.
- Corporate governance meeting notes: Meeting memoranda written after corporate governance meetings with portfolio firms; based on a template.
- SRI meeting notes: Meeting memoranda written after SRI meetings; based on the same template as the corporate governance notes.

1.4 Central Information System (CIS) Index File (2007-2013)

- Index of all internal documents; company name, document type, analyst recommendation, document header, document publication date, analyst name, ISIN, Sedol, company name. We have used the index to fill in gaps and as a cross check.

1.5 Funds and Holdings

- Portfolio Holdings of SLI Funds: UK equities; monthly and daily frequency.

- FM Names: Map of FM names and fund codes; annual.
- London Stock Price Database (LSPD) identifiers: Stock identifier remains unchanged.
- FTSE Index constituent files: Prices, shares outstanding, index weights, Sedol identification numbers; daily.[1]

1.5 Stock Prices and Earnings Announcements

- Stock Prices: FTSE; daily.
- Earnings Announcements and Forecasts: Worldscope; daily.

2 Analyst-FM Meetings

2.1 Analyst Meeting Notes

- SLI provided us with access to the full set of notes the analyst produced after each meeting with a company. They were available to all members of the UK equities team immediately after publication. During the period 2007-2013, meeting notes usually contain: company name and sector; name of the author, typically the analysts who had convened the meeting; recommendation after the meeting ("buy", "hold", "sell"); the analyst recommendation before the meeting;[2] the meeting date; a meeting rating (from 1 – poor to 5 – excellent);[3] the venue of the meeting (physical or conference call; SLI's offices or elsewhere); the attendees (internal and external), including their positions (CEO, CFO, Chairman); a full text summary of the meeting under the heading "comments"; a full text conclusion.
- In 2014 the IT system changed, a new template was introduced, and some information was no longer recorded. The numeric rating and the recommendation change were dropped, and the document structure changed, making data processing more challenging.

2.2 Analyst Meeting Historic Log

In addition to storing analyst meeting notes on its internal database, SLI also kept a historic log of meetings in spreadsheet format. They contained: The meeting date; name of the company; name of the sector analyst who had arranged the meeting; name of the broker, if a broker had helped to set up the meeting; attendance (internal and external, including titles); a flag if a meeting note had been filed on the internal information system; the meeting place, typically the name of a room at the SLI offices.

2.3 Quarterly Analyst Reports and Investment Notes

The quarterly reports each contained an industry overview, an industry summary and company reports called "investment notes". The information from these quarterly reports included dozens or hundreds of pages, with mixes of figures, tables and text, lack of unique identifiers.[4] Investment notes are produced throughout the year and published on the internal information system; the latest version is collated in the quarterly report. Investment notes are produced selectively for the most important companies in an industry. The investment notes and the quarterly reports use a template format, but the text is unstructured.

The investment notes provide a way to determine if the analyst sees a meeting as important in retrospect, especially when put together with other information. Some meetings are mentioned explicitly, and in many cases we can match the mention with our meetings log by company name and date. Analyst mentions indicate that a meeting was important. The

[1] We are grateful to Philip Lovelace and his colleagues at FTSE in London for making this data available to us.
[2] The format changed in 2014 and this information was no longer included in the note. The information for 2014 and 2015 is available from other SLI records; see the discussion of recommendation (changes).
[3] This information is available for 2007-2013. It is not available from other data sources.
[4] Complexity of merging with our other data was high for the period 2007-2013 and increased further for 2014-2015 because of the changed IT system

investment notes also incorporate ESG information provided by the GS team. Again, this provides an indicator which information was considered important by the two groups (GS, FMs/analysts) in retrospect.

Each note starts with a description of company's business and an ESG box that shows if a governance health warning (GHW)—a warning flag raised by the GS team, discussed in detail below—is active or not. The ESG box might also contain a description of potential ESG issues and concerns. The information in the box is contributed by the ESG specialists. The remainder of the report is written by the analyst. It usually contains sections on key drivers, "what's changing", what expectations the analyst believes are priced in, positives, negatives, differences in opinion from market consensus (divided into positives and negatives), a conclusion and the analyst recommendation. The reports also contain tables and figures.

Meetings with portfolio companies can be found in all sections of the report. Mentions of meetings can be very specific including a date, or more generic referring to "a recent meeting" or meetings. The ESG box can also refer to meetings, for example with the Chairman. The box was usually dated, while the reference to the meeting is not. There is a subtle but important distinction in where meetings are mentioned: ESG meeting mentioned in the ESG box are considered important by the GS team; meetings mentioned in the remainder of the document are considered important by the analyst.

3. ESG Meetings

3.1 Governance and Stewardship Engagements Database

This database captures all engagements and all contacts between the GS team and portfolio companies in a special database. It was specifically developed for the GS team at the initiative of the Head of Corporate Governance, who held that position throughout the sample period. The unit of observation in the data is the issue underlying the engagement, so there can be multiple entries for the same engagement point (meeting, email, call). The information in the database was not directly accessible to analysts and FMs because some entries could be ring fenced, i.e. the firm would create "an ethical barrier of information between one division and another in order to avoid conflict of interest." (SLI 2013 internal compliance document). For most of our analyses, we aggregate the units of observation into single engagements at daily frequency, such that a target company has either one or zero engagements per day.

For each engagement we know, (1) the type of contact, (2) the company that was engaged, (3) the subjects raised at the point of engagement (board structure, remuneration, etc.), (4) outcomes that were achieved, again at the point of engagement (issue resolved, feedback received, further action required, etc.).

The most relevant data fields we use or construct are the date of the contact; the type of contact (meeting, phone-call, e-mail, letter); the name of the company; the security identifier (Sedol); initiator of the contact (the portfolio firm or SLI); name of the team member who made the database entry; a text field with a summary of the meeting or contact; a pointer to a full text document (letter, meeting note), if one was associated with the point of engagement (see below).

Information from the database was distributed to FMs and analysts at the discretion of the GS group. The full text summary of meetings was usually published on the internal information system. The header of investment notes written by analysts contained extracts from meeting notes prepared by the GS team for the analyst (see GHW below and the section on investment notes).

3.2 ESG Meeting Notes

SLI provided us with the documents referenced in the database in binary format (.pdf, .doc., .docx.). There were two sets of meeting notes: One, corporate governance meeting notes; two, SRI (socially responsible investment) meeting notes. The SRI notes are extensive and show that SLI was an early mover on what later became mainstream ESG.

Using the list of pointers referenced in the database, we generated lists of all referenced files (meeting notes, letters, research memoranda etc.) and their likely location on secure network drives. The GS team made best efforts to locate and share all files. This task was substantial since IT systems and file locations had changed multiple times and legacy systems had been archived. We received binary files from the GS team, which sometimes contained more file pointers, and through multiple iterations we worked to obtain the largest possible stock of files. We estimate that our final sample includes around 80 percent of all ESG meeting notes written up for the 2007-2011 period.

The meeting notes used the same template and contained the following information: The company name; The size of SLI's aggregate holding in percent; The venue (location, conference call); The meeting date; "Confidential" (boldface), if the note was confidential; A list of the names and titles of those attending the meeting; The date the meeting note was written; The name of the author; A summary conclusion; A full text section (other topics discussed); The GHW status (see below); Tabular check lists for making database entries--Reason for Engagement (19 check boxes), Outcome (12 check boxes), Topic Discussed (13 check boxes)

3.3 Engagement Points and Documents

To illustrate the information contained in the database and in the meeting notes, consider an SRI meeting with a food retailer that a GS team member attended in 2007. The specialist wrote up the SRI meeting note and filled in the database from the appended checklist. There were 33 lines for this single meeting in the database: there were multiple reasons for the engagement (ethical funds, criteria issues; feedback to the company; high impact sector; required by SRI guidelines) and multiple outcomes (conveyed views to company, company agreed to consider requests on CSR). We collapsed all (33) lines into one engagement for that company and that date.

3.4 Governance Health Warnings (GHW)

The FM/analyst investment notes prominently display what SLI internally refer to as "governance health warnings", a warning flag raised by the GS team. Companies with a health warning receive heightened scrutiny from the GS team. Insights from meetings for companies with and without a health warning might take on a different meaning. The GHW methodology is set out in a series of internal notes that have the character of a "how to" manual for GS. The notes describe the philosophy and the mechanics of the GHW process. We had access to the 2010, 2011, 2012 and 2013 versions of the manual and conducted interviews with former and current GS team members; our conclusion is that the procedure was very stable from 2010 to 2015 for UK equities.

The history of GHWs goes back to the beginnings of the governance (and later stewardship) group of the firm, which came into existence around 1992/93 and had the role to engage in conversations with companies and to vote the shares in the SLI portfolio. Internally the team kept a list of corporate governance "saints and sinners". The criteria that defined a "sinner" were subjective and the actuarial tradition of Standard Life, an insurance company, suggested a quantitative measure to communicate the "sinner" status more effectively to FMs. The response was the binary "Governance Health Warning" flag that was raised when the governance team had fundamental concerns. The first GHWs were raised around 1997, for example for the Royal Bank of Scotland, for board structure and remuneration concerns.

A GHW was first raised during a regular contact with a company. The raising of a new GHW was a significant event. The decision had to be approved by the head of the GS team. The information was then sent by email to the entire SLI hierarchy, including the Head of UK and global equities, the Head of fixed income and the CEO.

The internal notes recommend that the GHWs were reviewed annually for all UK companies and discussed quarterly at GS team meetings. The review took the form of a 1-1 meeting for holdings of 5% or more of a company's stock. In other cases, there should be at least a desktop review. Primarily the review used records stored in the internal GS team's engagement database, but also information from other sources.

The GS responsible for the review formed an opinion based on several areas that might have given rise to concerns. These included, but were not limited to, lack of independent directors, lack of integrity, inappropriate remuneration policies, poor environmental and regulatory record, resistance to suggested governance improvements, external criticism (regulators, press, others) and related party transactions. The presence of significant family or other controlling shareholder was a specific area of concern.

The outcome of the review was recorded in four databases: (i) the GS team engagement database used extensively throughout the study, including a review note, when warranted; (ii) a health warning summary spreadsheet; (iii) the Central Information System (CIS) accessible across all desks via a Bloomberg terminal, including the fixed income desk; (iv) a "Black Book" summary sheet linking health warnings to stock performance. FMs had access to (iii) and (iv) but not to the GS team engagement database, since it might contain information that is privileged under the UK's strict insider trading rules. As mentioned before, the basic GHW information was further communicated by internal analysts in investment notes and industry reports and appeared in the voting database, maintained by a vote manager. A subsequent review of a GHW was scheduled automatically once the data entry was complete. The procedure ensured that all members of the UK equities, fixed income and ESG specialists had accurate data on GHW status for all portfolio firms.

We obtained GHW information from the GS team engagement database, the "Black Books" and occasional copies of summary spreadsheets. The "Black Book" was the result of an internal project, started in 2007 and maintained until 2014, that sought to establish a direct link between GHWs and firm performance. The "Black Book" remained unchanged until 2014. From the combined information we construct time series of active GHWs for portfolio firms.

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