The Review of Corporate Finance Studies

The Systemic Governance Influence of Expectation Documents: Evidence from a Universal Owner

Ruth V. Aguilera
Northeastern University, D'Amore-McKim School of Business

Vicente J. Bermejo
Universitat Ramon Llull, ESADE Business School

Javier Capapé
IE University

Vicente Cuñat
The London School of Economics

We examine expectation documents' effectiveness as an activism tool. We use the Norwegian sovereign wealth fund's release of a corporate governance expectation document as a natural experiment. We introduce a novel, three-way analytical decomposition of the firms, the fund, and their joint response to this document. Firms' governance practices adapt to the fund's new portfolio-wide governance preferences, with heterogeneous responses across ownership and firm characteristics. The fund's investment policies also change, even at the expense of financial returns. Overall, our research demonstrates the potential effectiveness of expectation documents as an emerging, low-cost activism tool for universal investors. (*JEL* F30, G32, G34)

Received: 29 June 2022; Editorial decision: 21 December 2023
Editor: Andrew Ellul
Authors have furnished an Internet Appendix, which is available on the Oxford University Press Web site next to the link to the final published paper online.

We would like to thank the Editor (Andrew Ellul) and two anonymous referees for their careful and constructive comments. We would also like to thank Renee Adams, Miguel Antón, Bruno Biais, Alon Brav, Catherine Cassamatta, Miguel Ferreira, Caroline Flammer, Denis Gromb, Oghuzan Karakas, Anya Mkrtchyan, and Rafael Zambrana, as well as the audiences at the London School of Economics, NOVA SBE, GCGC 2019-ECGI, Bocconi University, SAEE, ESADE, the Brattle Group, Toulouse School of Economics, HEC-Paris, Northeastern University, Cambridge University, The Seventh Public Investors Conference, Strategic Management Society, Refinitiv, AEFIN, CNMV, URiV, EDHEC, University of Manchester, ESCP, and University of British Columbia for their useful comments. We would also like to thank Albert Lazaro for the excellent research assistance provided. This paper received the CNMV Best Paper Award in the 25th Finance Forum at Pompeu Fabra University. Vicente J. Bermejo acknowledges financial support from Banc Sabadell and the Spanish Ministry of Science, Innovation and Universities under PGC2018-099700-A-100. Corresponding author: Vicente Cuñat, London School of Economics, Houghton St., London WC2 2AE, UK; email: v.cunat@lse.ac.uk.

The Review of Corporate Finance Studies 00 (2024) 1–36

https://doi.org/10.1093/rcfs/cfae009 Advance Access publication April 17, 2024

1. Introduction

Institutional investors have multiple governance mechanisms at their disposal to exert external control over their investees, including private negotiations with boards, shareholder proposals, requesting board representation, or launching proxy fights (Del Guercio and Hawkins 1999; Gillan and Starks 2000; Wahal 1996). While these traditional mechanisms that target specific firms tend to be costly and resource demanding (Gantchev 2013), expectation documents have emerged as a new and increasingly used low-cost activism tool that aims to influence an investor's entire portfolio. However, the finance literature has not studied expectation documents' systemic influence; nor do we know about their effectiveness as an activism tool to disseminate investor preferences. Regardless, their importance is growing, as universal owners such as BlackRock,[1] Vanguard, State Street, and the Japanese Government Pension Investment Fund, to cite just a few, increasingly rely on them.[2]

In this study, we examine the effectiveness of an expectation document released by the Norges Bank Investment Management (NBIM) fund to improve the corporate governance practices of the firms in its portfolio.[3] In November 2012, NBIM released an expectation document (hereafter, the "Note"), detailing its explicit preferences regarding the corporate governance practices of all its investee firms. NBIM's Note is an early example of an expectation document. It identifies a set of "good" corporate governance practices (i.e., effective board monitoring and strong minority shareholder rights) for which we have detailed data that we capture in a governance score which we use to analyze the Note's effectiveness as an activism tool.

This paper's conceptual framework can be summarized as follows: We aim to analyze whether firms in the NBIM fund aligned their governance in accordance with the Note. Second, we assess the breadth of this impact. Given that NBIM is a universal investor, the scope of the Note's impact is informative about its potential to trigger systemic governance changes. Third, we want to assess whether NBIM changed its own policies in line with the Note, in particular, whether the entry and exit of firms into the fund

[1] Larry Fink's "Dear CEO" letters (2018, 2019, 2020, and 2021) are a good example, describing how the CEO of BlackRock, the world's largest asset manager with over $7 trillion in assets under management, asked companies to change specific governance and risk management practices. BlackRock required specific changes in areas such as long-term strategy and purpose, board oversight responsibilities, and climate-change and sustainability reporting. Those who failed to comply would be signaled out and face higher capital costs in the future. Goldman Sachs (GS) provides another example of how universal owners and advisory firms can exert systemic influence in the market. With $1.5 trillion in assets under management, GS' CEO announced that the advisory firm would not take companies public if they had all-male corporate boards (Son 2020).

[2] Beyond these individual investor efforts, several platforms such as the Institutional Investors Group on Climate Change (IGCC) allow multiple investors to exert systemic influence by jointly adhering to collective expectation documents. IGCC has 230 members across 15 countries, with over €30 trillion in assets under management. Platforms that put together multiple investors share the limitations for active monitoring with large universal investors.

[3] The Norges Bank Investment Management (NBIM) is the asset manager of the Norwegian sovereign wealth fund (SWF). It is the largest SWF in the world and holds around 1.5% on average of all listed stocks globally.

increasingly correlated with the Note's objectives and also whether the fund was willing to forgo financial returns to align its portfolio holdings with the Note's objectives.

We introduce a novel quantitative decomposition of the overall effect of expectation documents that serves as a useful analytical roadmap. This decomposition serves both as an analytical framework to classify the Note's effects and as a means to organize our empirical analysis. It is also applicable to any investor activism tool that targets a broad population of firms. In this setting, the overall effect of the Note's announcement on the governance of NBIM's portfolio can be decomposed into three components: (1) the increase in the governance score among those firms that were already present in the fund's portfolio at the time of the announcement; (2) the change in the composition of the firms that integrated the fund's portfolio; and (3) the new joint correlation between the firms' governance changes and the fund's changes in investment strategy. We next summarize our results regarding each of these components.

Using the difference-in-differences estimation strategy, we first show how firms that were part of NBIM's portfolio at the time of the Note's release increased their corporate governance score to meet NBIM's corporate governance expectations. This effect monotonically increased the fund's shares in investee firms, showing NBIM's influence grew with its share of firm ownership. We provide ample evidence revealing that firm changes in their governance were effectively driven by the preferences established in the Note and not by aggregate governance trends or other alternative explanations. The rise in governance scores was consistent across all firms, regardless of their share in the fund's portfolio. This aligns with the expectation documents' goal to uniformly target all firms and in turn, achieve systemic influence.

We explore the heterogeneous reactions of investee firms according to different firm and institutional characteristics. We find that smaller, less liquid firms exhibiting worse financial performance changed their governance more to align with the Note's stated preferences. Interestingly, smaller firms are precisely those for which it is less cost-effective for a universal owner to conduct firm-specific engagement, and less liquid firms are also those for which the threat of exit is less credible (Edmans and Manso 2011). Our results, therefore, suggest that expectation documents can help offset some of the inherent limitations in the engagement tactics adopted by large universal owners. In addition, we uncover that, for investee firms to react to the Note, the firms' countries must provide a minimum threshold in terms of the governance quality demanded.

Second, we uncover that NBIM changed its investment policy to meet its preferences, as stated in its Note. The fund increased its investments in firms with higher preexisting governance scores and decreased them in those with lower preexisting governance scores. This effect is only significant when we focus on NBIM's discretionary investments and exclude the investments

driven by NBIM's benchmark investment policy, indicating that this outcome is a deliberate shift in investment strategy. We provide further evidence of NBIM's commitment to the Note's expectations by showing that the fund was willing to accept lower financial returns in exchange for 'better governance.' This set of results illustrates that the fund took actions that plausibly reinforced the Note's effectiveness. This also helps validate our study's identification strategy, showing that the Note's release coincided with the implementation of effective changes in the fund's investment policy.

Third, and in keeping with the last component of our decomposition analysis, we explore the new correlations between the firms' changes in governance and the changes in the fund's investment stance. We show that, after the Note was issued, the changes in governance and in investment weights were more closely correlated. Taken together, our results illustrate that all three components contributed to heighten the Note's influence. Quantitatively, the most important explanatory factor for the change in the governance score of NBIM's portfolio is the investee firms' reactions to the Note's announcement.

Our work contributes to existing literature in several ways. First, we develop a conceptual framework to examine the effectiveness of expectation documents, which are increasingly used as an element in the shareholder engagement toolbox and have not been explored in finance literature so far. Second, we introduce an analytical framework based on the decomposition methodology to analyze the overall impact of any portfolio-wide activism tool. Third, we show evidence of the firms' reaction to the Note. We discover a heterogeneous response by firms across ownership levels, firm characteristics, and country institutions, which speaks to the effectiveness of these expectation documents. Fourth, we show that the fund's investment strategy became more aligned with the Note's principles after its release. Fifth, our novel evidence reveals how expectation documents that disseminate changes in universal active owner preferences can modify firms' governance practices in a systemic and low-cost fashion. In this sense, we depart from most preexisting studies examining specific engagement interactions between given funds and given firms which could be driven by the firms' particular needs or properties.[4] Finally, we shed some light on the dual objectives of universal owners to maximize their financial returns and increase their global influence. We show that NBIM was indeed willing to sacrifice financial returns over the short term to extend its influence and increase the governance level of its portfolio over the long term. These dual objectives may allow other universal owners to affect global practices systemically.

[4] That is, by analyzing the effect that expectation documents have, we depart from the literature that focuses on individual firm interventions targeting firm-specific governance issues (see, e.g., Dimson, Karakas, and Li 2015), firms' social and environmental issues (see, e.g., Smith (1996) on CalPERS' targeted firms), and preferences that apply to subgroups of firms within a portfolio (see, e.g., Barber 2007).

2. Related Literature and Conceptual Framework

The influence of institutional investors on firms has been studied extensively (see Maug 1998; Bushee 2001; Gillan and Starks 2003; Ferreira and Matos 2008; Brav, Jiang, and Kim 2010; Denes, Karpoff, and McWilliams 2017; Kang et al. 2021). Some early work examines pension fund activism, such as the CalPERS' focus list, targeting specific companies (Smith 1996; Del Guercio and Hawkins 1999). However, recent attention has shifted to highly vocal institutional investors, such as hedge funds that accumulate substantive ownership and engage in aggressive shareholder activist campaigns (Gillan and Starks 2000; Klein and Zur 2009; Bebchuk, Brav, and Jiang 2015; Brav, Jiang, and Kim 2015). At the other end of the activism spectrum are some institutional owners passively managing their broad portfolios through index and exchange-traded funds. Hawley and Williams (2000) suggest complementarity between these two forms of influence when passive investors follow activist investors' voting strategies, and Appel, Gormley, and Keim (2019) provide some evidence consistent with this hypothesis. More generally, Appel, Gormley, and Keim (2016) show how some dimensions of firms' corporate governance tend to change when passive investors increase their holdings for exogenous reasons. Somewhere between these two poles –activist and passive investors– are those institutional investors who hold minority positions in thousands of firms (universal owners) and with the potential to exert systemic influence on the market, particularly on their portfolio firms, via *active institutional ownership* (Aghion, Van Reenen, and Zingales 2013).[5] These active owners often seek to improve their portfolio firms' corporate governance practices.

Active institutional owners tend to have long-term mandates and highly diversified holdings. They have incentives to monitor managers and strengthen minority shareholder rights (Del Guercio and Hawkins 1999). They can also engage with investees' managers and exercise 'voice' strategies in various ways, including formal engagements via proxy voting, informal behind-the-scene interactions with portfolio companies, and by releasing negative screening lists.[6] This literature studies private exchanges (i.e., conversations, letters, and phone calls) from a single investor, such as TIAA-CREF (Carleton, Nelson, and Weisbach 1998), the Hermes fund (Becht et al. 2009), an unidentified responsible investor (Dimson, Karakas, and Li 2015), or survey data research, detailing the behind-the-scene engagement strategies (McCahery, Sautner, and Starks 2016). Other studies analyze investors and focus on CalPERS, which targets

[5] Our paper can be included in the recent debate on the role of universal owners in systemic corporate governance. For example, Bebchuk and Hirst (2019) suggest that the renewed stewardship effort by Vanguard, BlackRock, and State Street should be insufficient due to their incentive structure. However, Fisch, Hamdani, and Salomon (2018) suggest that competition between passive and active managers for investors would foster stewardship among passive managers.

[6] These engagement strategies may vary across types of investors. For example, Briere, Pouget, and Ureche (2018) contrast NBIM's voting behavior to that of BlackRock. Parrino, Sias, and Starks (2003) explore the entry and management strategies of institutional investors.

a few selected firms. They show the negative screening effects on firms' financial performance (Smith 1996; Nelson 2006; Barber 2007), in this case, proving to be less effective as an engagement strategy (Kim et al. 2019).

The main hypothesis in our conceptual framework is that firms react to broad announcements of changes in investors' preferences targeted at their entire portfolios. We also seek to analyze the heterogeneous responses among firms and the expectation document's potential to provoke broad responses across firms. The breadth of these reactions among firms is particularly important in this setting as NBIM is a universal investor, with the potential to change firms' policies in a global and systemic way. Moreover, in our setting, we are able to measure the change in the investor's investment stance, capturing the two sides of the reaction to the expectation document. Our study differs from existing research exploring private interactions between active institutional investors and specific companies in that we investigate the response of thousands of companies to a novel, less costly, and universally disseminated engagement tool.

3. The Norges Bank Investment Management

Sovereign wealth funds (SWFs) are government-owned investment funds without explicit liabilities that typically adopt long-term investment strategies (Aguilera, Capape, and Santiso 2016). An important trait of these SWFs is that they often pursue multiple objectives (Clark, Dixon, and Monk 2013), pairing financial returns with broader goals (Bernstein, Lerner, and Schoar 2013; Megginson and Fotak 2015). In this study, we focus on NBIM, which manages the world's largest SWF by assets under management, the Government Pension Fund – Global.[7] As of June 2021, NBIM had assets worth 11,673 billion kroner (US$1.36 trillion) under management, with minority positions in more than 9,100 companies in 73 countries. Its equity investments represented more than 72% of its portfolio, and NBIM owns, on average, 1.5% of all equities listed globally.

NBIM publicly discloses its investment strategy. It follows the FTSE Global Cap index as a benchmark, excluding Norwegian firms and applying time-invariant country corrections based on each country's link with the Norwegian economy. However, the fund can *deviate* from this investment benchmark by including, excluding, overweighting, or underweighting any firm in its portfolio. Moreover, it can drop firms based on a lack of engagement with the fund or discrepancies with the fund's ethical guidelines. We are precisely interested in this fund's discretion as an engagement tool to shape systemic governance change. More formally, to examine how NBIM evaluates firms and decides to continue investing in them or, alternatively, drop

[7] In spite of the term "pension" in its name, it does not pay pensions; instead, it preserves and builds financial wealth for future generations to prepare for the time when the country's oil and natural gas reserves are depleted.

them from its portfolio, NBIM's investment intensity in firm *i*, from country *c*, at time *t* can be represented as follows:

$$\begin{aligned}\text{Investment}_{ict} = {} & \text{I}(\text{Ethics}_{it} = 1) \times \text{I}(\text{Engage}_{it} = 1) \\ & \times (\text{FTSE Global}_{it} \times \text{Country}_{c} + \text{Stance}_{it})\end{aligned} \tag{1}$$

where $\text{I}(\text{Ethics}_{it}=1)$ indicates that the firm fulfills the NBIM Council on Ethics' requirements; $\text{I}(\text{Engage}_{it}=1)$ indicates that the firm is not excluded due to a lack of individual engagement with the fund; FTSE Global_{it} is the firm's weight according to the FTSE Global Cap index; Country_{c} refers to time-invariant country adjustments; and Stance_{it} is the specific position (over-investment or underinvestment) that the fund has on a firm relative to the benchmark.

The rich information disclosed by NBIM allows us to: (1) identify why a firm is included/excluded in its portfolio; and (2) which changes in investment emanate from discretionary elements (Ethics_{it}, $\text{Engage}_{it,}$ or Stance_{it}) or from the fund's mechanical rebalancing (FTSE Global_{it} x Country_{c}). We use these discretionary and automatic elements in NBIM's investment policy as part of our identification strategy since they reveal the changes in investment that are exogenous or endogenous to NBIM's preferences.

3.1 A Natural Experiment: NBIM's Changed Focus on Corporate Governance in 2012

On November 19th, 2012, NBIM released an expectation document ("Note") entitled *Corporate Governance*, declaring that effective corporate governance had a direct, long-term, and positive impact on firm value.[8] This was a completely different tactic from NBIM's initial shareholder engagement efforts, which started in 2004 with the creation of its Council on Ethics and a focus on negative ethical targeted screening. In this Note, NBIM explicitly declared that, from that point onwards, it would request all its portfolio firms to meet certain 'corporate governance expectations.' The Note had two unique features: It was the first and only publicly available note requesting investee firms to adopt specific corporate governance practices during our sample period and it portrayed an unequivocal, universal expectation applicable to every single firm in which NBIM invested (NBIM 2012, 7).

The Note was the final step on a journey that started in October 2011, when NBIM announced that it was in the process of changing its corporate governance approach. Although most of these changes were initially internal, a key step in the process entailed the public release of the expectation document stating the fund's specific governance preferences in 2012. The Note's publication in November of said year crystalized this process of changing

[8] https://www.nbim.no/en/publications/discussion-notes/2012/corporate-governance/.

governance preferences and making them publicly available.[9] This illustrates that the Note represented a key turning point in the perception of the fund's internal governance preferences, making it a legitimate signal for external stakeholders on NBIM's governance expectations.[10]

We remain agnostic on whether the Note marked a critical turning point in NBIM's corporate governance strategy or if it served to publicly announce to the market an existing trend in its internal preferences.[11] Either of these two options is valid for our analysis.

Our use of the Note as a natural experiment also contributes to disentangle the impact of investor preferences on firm practices.

Isolating the direct systemic influence of active owners on investee firms' policies is often difficult. Investors' decisions and firms' policies are jointly codetermined, thus creating an inherent problem of endogeneity. Investors did not fully foresee the dissemination of the Note by the end of 2011, although changes in NBIM's approach towards governance had already started in October 2011. From the perspective of the portfolio companies, most of the changes in NBIM's preferences were perceived during 2012, a process that culminated with the Note's release in November 2012. The substantial change in NBIM's perceived preferences was clearly stated in the Note along with its significance within NBIM. The rapid change in its preferences (relative to the annual frequency of the data) and the Note's applicability to the entire portfolio universe provide us with a valuable source of variation that can be considered exogenous from the firms' point of view.[12]

3.2 NBIM in Relationship with Other Institutional Investors

It is worth considering NBIM's investment and stewardship policies in relation to other institutional investors. In particular, other universal investors

[9] Indeed, a few months before the Note's publication, NBIM dismantled its separate corporate governance unit, created in 2005, which had been supporting ethical issues, and incorporated governance professionals into its equity investment team.

[10] In fact, this strategy's novelty was covered by financial media in the weeks that followed the Note's release in November 2012. For example, *The Financial Times* mentioned, "It is a big change in how the oil fund operates and signifies a more active approach to its largest investments" (Milne 2013). CNBC wrote the following: "Norway has just published an important note on what it expects in terms of corporate governance from the companies it invests with" (Carney 2013). Comments from the CEO, Mr. Slyngstad, also reported in *The Financial Times*, stressed how the fund shifted into active ownership, as follows: "We think it is the responsibility of the larger investors to be more involved in what in the UK is referred to as stewardship and have a dialogue not just with the CEO and CFO but also the chairman of the board" (Milne 2013).

[11] The Note's language contains statements such as "NBIM's primary corporate-governance focus will consequently be on mechanisms shareholders can use directly and indirectly to influence companies toward sustained business success" and "NBIM operates a corporate-governance program. Setting out generic expectations for good corporate governance is one of several steps in this program and the topic of this discussion note" (NBIM 2012, 3).

[12] More generally, SWFs provide useful evidence about shareholder influence, as they often have public, time-varying preferences on issues beyond stock returns. In this paper, we focus on the Norwegian SWF's fostering of "good corporate governance" as part of our empirical strategy. Other examples include the open stance towards environmentally-friendly investments found in New Zealand's fund or the aim of diversifying the United Arab Emirate's economy in that country's funds.

such as SWFs, the Big Three (BlackRock, StateStreet, and Vanguard), and large pension funds serve as natural benchmarks for NBIM. These entities can be compared across several key dimensions, including: (1) the scope of their investment universe; (2) the degree of discretion they have over investments; (3) the presence of ethical and political mandates; (4) their approach to voting and activist campaigns; and (5) their engagement practices. These dimensions are all relevant to assess the content and effectiveness of expectation documents. Next, we discuss each of these dimensions in further detail.

First, as previously mentioned, NBIM benchmarks the FTSE Global Cap Index with some country corrections, and as of 2021 it invests in more than 9,000 companies in more than 70 countries. The Big Three, large pension funds, and other SWFs all have broad investment universes that are comparable to NBIM's. In Table 1, we show the ownership percentage of different investor types in firms in which NBIM was present and in firms in which NBIM was not present in 2011. We follow the Thomson Reuters investor classification to group investors into different types, such as investment advisors and holding companies, pension funds, SWFs, hedge funds, corporations, individual investors, asset managers, and others. We show that investor types are similar in firms in which NBIM is present and in firms in which NBIM is not present, except for the Big Three and pension funds that tend to have significantly more ownership in firms in which NBIM is also present.

Second, NBIM can opt to deviate from its benchmark by taking a specific stance about a given firm. Although the Big Three and large mutual fund families have indexed products that offer little investment discretion, they also have some more active and specialized funds within their families that provide, at a fund-family level, a comparable level of discretion to NBIM. Likewise, other SWFs have investment strategies that are either similar to or more flexible than NBIM's (Aguilera, Capape, and Santiso 2016). Moreover, pension funds typically have higher levels of discretion than NBIM (Megginson, Lopez, and Malik 2021).

Third, NBIM has emphasized the importance of having an investment portfolio that not only generates financial returns, but also aligns with political and ethical mandates. Similarly, other SWFs have mandates that reflect their respective values and interests (see Bernstein, S., J. Lerner, and A. Schoar 2013; Megginson and Fotak 2015). For instance, New Zealand's SWF focuses primarily on green investments, while Kuwait's SWF seeks to promote the country as a relevant global economy. The Big Three and large mutual fund families are gradually adopting more active ethical-governance mandates, although they may still be less active than NBIM (Azar et al. 2021; Gormley et al. 2023).[13] While pension funds are also

[13] For example, Gormley et al. (2023) report that the Big Three have successfully campaigned to increase gender diversity on firms' boards. Azar et al. (2021) find that Big Three ownership and engagement is increasingly linked to carbon emission reductions by firms.

Table 1
Institutional Investor Types

	(1) Non NBIM	(2) NBIM	(3) Mean differences
Inv Advisors & Holding Companies (Big 3)	13.36	17.18	−3.82***
	(16.07)	(15.92)	(0.95)
Pension Funds	1.74	2.29	−0.54***
	(2.52)	(3.91)	(0.16)
Sovereign Wealth Funds	2.28	1.53	0.75
	(10.51)	(4.67)	(0.59)
Hedge Funds	2.60	1.93	0.66
	(8.50)	(6.05)	(0.49)
Corporations, Individual Investors &	37.05	36.52	0.53
Asset Managers	(25.21)	(20.70)	(1.46)
Other Investors	24.20	26.54	−2.35
	(20.78)	(18.02)	(1.21)
Total Institutional Investor Ownership	66.45	66.30	0.15
	(24.63)	(23.73)	(1.45)

Notes: The first two columns of this table report mean and standard deviations of ownership percentages for several investor types for firms that do not belong to NBIM in 2011 and firms that belong to NBIM in 2011. The last column shows the difference and the standard error for the difference in means between the non-NBIM group and the NBIM group. The sample covers the year 2011. ***, **, and * indicate significance at the 1%, 5%, and 10% level, respectively.

increasingly vocal about their ethical mandates, they may still lag behind other investors in this regard. For example, Barber et al. (2021) shows that public pension funds (among other investor types) are willing to sacrifice financial returns in exchange for impact investment. It is worth noting that NBIM's ethical mandate is not included in the Note and that its principles are not based on corporate governance considerations, although there is the possibility that it interacts with NBIM's governance stance.

Fourth, when it comes to voting and activist campaigns, NBIM is not allowed to initiate any such campaigns; this is similar to the approach taken by the Big Three (Bebchuk and Hirst 2019). However, NBIM is mandated to participate in each shareholder vote, which is currently a common stewardship practice among most institutional investors. In fact, research by Briere, Pouget, and Ureche (2018) reveals that NBIM and Blackrock vote very similarly on governance issues, which is the focus of our study, although they differ greatly on non-governance related ESG proposals. This suggests that, in terms of this dimension, NBIM is quite similar to the Big Three and other mutual funds. In contrast, pension funds and other SWFs are more heterogeneous in terms of their approach to voting and activist campaigns, with some being very active in proposing campaigns and others tending to be more passive.[14]

Finally, NBIM is known for frequently engaging with its investee firms, as many pension funds, asset managers, and SWFs do.[15] By contrast, the Big

[14] See Del Guercio and Hawkins (1999) for evidence on the heterogeneous impact of pension fund proposals.

[15] See Becht, Franks, and Wagner (2019) for a detailed case study of stewardship and engagement activities in an asset management fund.

Three have been criticized for being less active in their stewardship practices (Bebchuk and Hirst 2019). However, it is difficult to draw definite conclusions about the engagement practices of different institutional investors due to the limited public disclosure of their activities in this area (Cuervo-Cazurra, Grosman, and Wood 2023).

4. Data Description and Model Specification

4.1 Sample

Our sample consists of a full panel of all the firms in the Eikon (Thomson Reuters) "Environmental, Social and Governance" (ESG) dataset, which provides firm-level data on governance, finance, ownership, and accounting. This includes ESG data for over 4,200 publicly-listed companies across various exchanges from 2002.[16] We merge the Eikon universe with NBIM's yearly equity holdings. The FTSE Global Cap Index constituents and weights come from the FTSE Russell Help Desk. Given the structure of our analysis and the Note's timing, we use yearly data (end of December) for the period 2009-2015.

Our main measure of firm-level corporate governance is Eikon's management score (https://eikon.refinitiv.com/), which, according to Eikon, "measures a company's commitment and effectiveness towards following best practice corporate governance principles." From the population of pre-constructed Eikon indexes, this is the one that most closely matches the content of NBIM's expectation document. The index incorporates 34 corporate governance indicators, including: board independence; CEO-Chairman separation; board diversity; board skills and background; staggered boards; and the existence of audit, nomination, and compensation committees.[17]

First, we transform each governance indicator into a percentile score, from 0 to 100, according to each company rank across the whole sample for a given year. The governance index then weights the 34 rank indicators equally to assign an overall governance score to each company. This re-ranking procedure is useful since it nets out aggregate trends in corporate governance and facilitates the interpretation of the results. Since we employ difference-in-differences specifications (comparing treatment and control firms), this re-ranking should not have any qualitative impact on results. As a robustness check, we also report results based on the indicators themselves, without the

[16] To avoid sample attrition, we drop firms with missing values for the governance index during the central period of analysis (2009-2015). We are left with a sample of approximately 15,000 observations.

[17] Eikon provides index scores at the firm level, grouped into the following 3 categories: environmental, social, and governance. Within the governance category, Eikon provides 3 indexes, as follows: Management, Shareholders, and CSR. We use the Management Score since it best matches the Note's focus on governance expectations, and it is Eikon's most complete governance index (it includes 34 indicators). The other 2 indexes within the Governance category are Shareholders and CSR, which are much more restrictive and only include 12 and 8 indicators, respectively. A detailed explanation on the construction of the *governance index* is provided in Table IA1 in the Internet Appendix.

ranking transformation.[18] We also run additional tests by decomposing the ESG management index (see Section 6.2). We then proceed to decompose it into three sub-indexes based on whether each indicator is explicitly, partly, or not mentioned in NBIM's Note. Subsequently, we decompose it into fast and slow-to change indicators.

Finally, we draw on some additional databases. We measure country-level minority shareholder protection from the World Bank's (2019) *Doing Business* report. We obtain stock prices and market-related data from Eikon, and the global factors (*RMRF*, *SMB*, *HML* and *UMD)* from Kenneth French's website[19]. To construct monthly returns in US dollars, we employ the *total return index* (which incorporates reinvested dividends) from Eikon.

4.2 Descriptive Statistics

Table 2 details the summary statistics for our main sample. The average company in the sample has a governance score of 52.8 (with a higher score indicating improved governance quality). The standard deviation is 28.7. The average fraction of NBIM's portfolio represented by a firm's market value (which we define as the fund weight) is 0.04%. The average fraction of the firm's market value held by NBIM (which we define as the firm weight) is 0.84%.

Table IA2 in the Internet Appendix presents the changes in NBIM's total equity holdings as well as the percentage of NBIM holdings that we track in our final sample. Table IA3 in the Internet Appendix reports summary statistics for firm characteristics, splitting the sample into those that belonged to NBIM in December 2011, before the Note's release, and those that did not. Finally, Tables IA4 and IA5 in the Internet Appendix report the industry and country composition of our sample when the Note was published.

5. Analytical Framework: A Three-step Decomposition

We adopt a decomposition procedure to analyze the effect of any activism tool that targets a broad population of firms. We apply it to explore the impact of NBIM's Note on the aggregate governance of its portfolio. For this, we define G_t as an aggregate governance index of the NBIM portfolio $G_t = \sum_{i=0}^{I} w_{it} g_{it}$ that measures the overall corporate governance quality of said portfolio according to the preferences NBIM stated in its Note. w_{it} is the investment weight of firm i at time t in the NBIM portfolio and which takes value zero if the firm is not in NBIM's portfolio. The governance score of firm i at

[18] More specifically, to have results on aggregate governance changes that can be interpreted as changes in the "number of indicators" and not as changes in a "ranking index," we also construct a governance index in levels following Eikon's methodology. All information and results are included in Section 6.2.1.

[19] https://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html

Table 2
Summary Statistics

	Mean	Standard Deviation	25%	Median	75%	Obs.
Governance Index	52.849	28.68	28.424	53.880	78.125	17388
NBIM Weight (fund)	0.037	0.10	0.003	0.010	0.028	17388
NBIM Weight (firm)	0.842	1.23	0.008	0.513	0.907	17388
Δgovernance Index$_{(t+1,t)}$	1.117	18.24	−8.351	0.379	10.655	14904
$\lvert\Delta$governance Index$_{(t+1,t)}\rvert$	13.195	12.64	3.632	9.386	18.881	14904

Notes: This table reports mean, standard deviation, 25th-percentile, median, 75th-percentile, and number of observations for each variable by firm. The Governance Index is an index ranked from 0 to 100 and measures a company's commitment to and effectiveness of applying best-practice corporate governance principles. NBIM Weight (fund) is the fraction of NBIM's portfolio represented by the firm's market value. NBIM Weight (firm) is the fraction of the firm's market value held by NBIM. Δgovernance Index$_{(t+1,t)}$ measures the difference between the firm's score in t+1, and *t*. $\lvert\Delta$governance Index$_{(t+1,t)}\rvert$ measures the difference in absolute value between the firm's score in t+1 and *t*.

time *t* is g_{it}. The changes in the overall corporate governance level of NBIM's portfolio (ΔG_t) can thus be expressed as:

$$\Delta G_t = \sum_{i=0}^{I} w_{it} g_{it} - \sum_{i=0}^{I} w_{it-1} g_{it-1} \quad (2)$$

We define $\Delta w_{it} = w_{it} - w_{it-1}$ and $\Delta g_{it} = g_{it} - g_{it-1}$ to obtain:

$$\Delta G_t = \sum_{i=0}^{I} (w_{it-1} + \Delta w_{it})(g_{it-1} + \Delta g_{it}) - \sum_{i=0}^{I} w_{it-1} g_{it-1} \quad (3)$$

By re-arranging terms, we can decompose ΔG_t as follows:

$$\Delta G_t = \sum_{i=0}^{I} (w_{it-1} \Delta g_{it}) + \sum_{i=0}^{I} \Delta w_{it} g_{it-1} + \sum_{i=0}^{I} \Delta w_{it} \Delta g_{it} \quad (4)$$

Each term in Equation (4) has a clear economic interpretation and allows us to develop the hypotheses of our study.

The first term depends on the firms' decision to change their governance practices, potentially to meet NBIM's governance expectations. By estimating this term, we test the main hypothesis of our study which is whether firms react to the Note, in other words, whether the Note is an effective activism tool. Given its universal nature, we also want to test the breadth of this impact, the heterogeneous reaction of firms, and its potential to trigger systemic governance change.

This first term has fixed NBIM weights prior to the release of the Note and allows for the firm governance scores to change. Intuitively, it is similar to a standard intent-to-treat specification in which the firms' treatment depends on fixed, NBIM investment weights predetermined in 2011. Similarly, it can be interpreted as a reduced form of an instrumental variable (IV) regression, in which we instrument NBIM's post-2012 weights with a cross-sectional snapshot of 2011 weights. In the first term, G_{it} changes are driven by changes in the corporate governance score of NBIM's investee companies.

The second term encompasses the reweighting carried out by NBIM after adopting its new governance strategy. It represents the second set of

hypotheses that we would like to test, namely whether NBIM exits (enters) firms with worse (better) governance or decreases (increases) its portfolio holdings of firms with worse (better) governance. Relatedly, we also test whether NBIM is willing to forego financial returns in order to align its portfolio characteristics with its new stated governance preferences. Although these are important questions in themselves, they act as a specification check of the main analysis of our study, namely, whether NBIM effectively changed its investment stance in relationship to the Note.

In the second term, the firms' governance score is fixed prior to the Note's release, and the changes in G_{it} are only driven by NBIM's investment strategy.

Finally, the third term measures firms' changes in corporate governance, including changes in NBIM's weights. Overall, the hypothesis we test is whether NBIM could potentially change its holdings in a firm due to changes in the latter's governance or vice-versa.[20]

6. Empirical Analysis

We structure the remainder of this paper around the three-step decomposition analysis that supports our conceptual framework, with each section dedicated to the econometric counterpart of each individual term in Equation (4). Section 6.1 explores the overall change in the governance scores in NBIM's portfolio after the Note's release. Section 6.2 examines the first term in Equation (4), keeping the NBIM weights constant as of before the Note's publication, while allowing firm governance scores to adjust. This section measures firm responses to the Note's release within an intent-to-treat structure using pre-Note NBIM holdings as proxies of post-Note influence. Section 6.3 concentrates on the changes in NBIM's investment strategy (the second term in Equation 4), taking firm governance scores as predetermined, and investigates the effects that changes in its investment strategy have on the fund's overall governance change. Finally, Section 6.4 explores the third term in Equation (4), indicating how the Note impacted the correlation between changes in governance scores and investment weights.

6.1 Overall Change in NBIM Portfolio's Governance Score

We start by exploring the Note's overall effect (the term ΔG_{it} in Equation (2)) on the governance score of the firms included in NBIM's portfolio and then decompose this effect. This is also a useful descriptive result given that NBIM's stakeholders may be interested in whether their investments are backing firms whose governance is aligned with the Note's objectives.

[20] We explicitly calculate the scores for each of the analytical decomposition's terms in Equation (4) and show the results in Internet Appendix B (see Table IA20).

We estimate the following cross-sectional regression for every year t (2007-2015):

$$Governance_{\mathrm{i}} = \alpha + \sigma NBIM_i + \varepsilon_i, \quad (5)$$

where $Governance_i$ is the governance score of firm i in year t, and $NBIM_i$ is a dummy variable that equals a one (1) if firm i belongs to the NBIM portfolio at time t, and zero (0) otherwise. The coefficient of interest σ calculates the average differential governance between firms included in the NBIM portfolio and firms outside it for every year t.

Figure 1 and Table 3 show our results. Before the Note's publication (pre-2012), we find no significant governance differences across firms inside and outside NBIM's portfolio and no trend regarding this difference. However, after it was issued (post-2012), firms in NBIM's portfolio exhibited significantly higher governance scores relative to firms outside the portfolio. The difference between the periods is statistically significant and economically large, amounting to 4.8 to 7.5 score points in the governance index. In other words, if there were 100 representative companies, the firms included in NBIM's portfolio would, on average, increase their governance rankings by 4.8 to 7.5 positions after the announcement. In addition, we also find similar results when using continuous measures of the NBIM investment weights and carrying out pooled OLS regressions to estimate the Note's overall effect on the governance of the portfolio.[21]

Taken together, this set of results shows that the overall governance characteristics of NBIM's portfolio moved closer to the fund's governance preferences after the 2012 Note. Moreover, these results are consistent with investors not anticipating the Note before 2012, since we observe no pre-trends before 2012 and significant increases after its release. In the next two sections, we analyze which part of the governance changes can be attributed to changes in the governance characteristics of the firms in NBIM's portfolio and which part to changes in the fund's investment strategy.

6.2 Changes in the Governance of NBIM Portfolio Firms

In this section, we analyze the change in governance among NBIM portfolio firms after the release of the 2012 Note. Following the decomposition explained in Section 5, we instrument NBIM's post-2012 weights with the cross-sectional weights in 2011. We therefore measure the firms' response to the Note's release in an intent-to-treat structure that uses NBIM's fixed

[21] See Table IA6 in the Internet Appendix. We include the full sample of firms in this analysis (including those firms outside the NBIM portfolio with a weight of zero). We use both NBIM fund weights and firm weights. The NBIM fund weight is the fraction that a firm represents in NBIM's total holdings. The NBIM firm weight is the fraction of the firm's market value held by NBIM. Results show how the portfolio of firms constructed with fund weights increased its average governance score after the Note's announcement by an average of 9.5 percentile scores. This means that firms that increased their average governance score after the Note's release gained more weight in NBIM's total portfolio. The results are not statistically significant when we focus on firm weights.

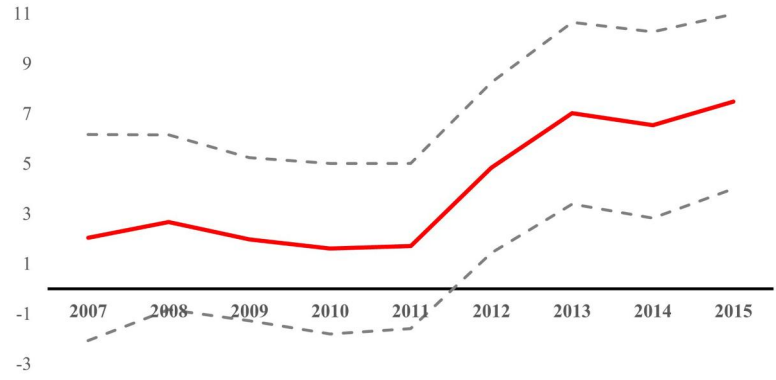

Figure 1
Governance Index Differences among NBIM and Non-NBIM Firms
Notes: This graph plots the estimates from year-by-year cross-sectional regressions and 90% confidence intervals. The dependent variable is the Governance Index. Only one regressor is used, a dummy variable that takes the value of one if the firm belongs to the NBIM portfolio in year *t* and zero otherwise. The estimates plotted are yearly differences in governance between treated firms (firms that belong to NBIM's portfolio) and control firms (firms that do not belong to that portfolio).

Table 3
Governance Differences among NBIM and Non-NBIM Firms

	2007 (1)	2008 (2)	2009 (3)	2010 (4)	2011 (5)	2012 (6)	2013 (7)	2014 (8)	2015 (9)
NBIM	2.048	2.667	1.983	1.606	1.714	4.845***	7.016***	6.548***	7.489***
	(2.102)	(1.782)	(1.663)	(1.740)	(1.681)	(1.739)	(1.851)	(1.899)	(1.780)
Observations	1,422	2,123	2,484	2,484	2,484	2,484	2,484	2,484	2,484
R-squared	0.001	0.001	0.001	0.000	0.000	0.003	0.006	0.005	0.007

Notes: This table presents estimates of yearly cross-sectional OLS regressions of governance index differences among NBIM and non-NBIM firms. The dependent variable is the Governance Index. For each year *t*, one explanatory variable is used (NBIM), a dummy variable that takes the value of one if the firm belongs to the NBIM portfolio in that year and zero otherwise. Standard errors are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

holdings before the release of its Note as proxies for NBIM's influence after its release. By setting the weights in 2011, we prevent changes in NBIM's investment strategy from acting as confounding factors for the changes in governance among NBIM portfolio firms. We use both reduced form regressions and two-stage least square (2SLS) regressions. The reduced form results inform about the direction of the effect of the announcement on the governance changes of firms in NBIM's portfolio; however, only the 2SLS estimates can be quantitatively interpreted as the treatment on the treated firms.

The reduced form regression we use is as follows:

$$\text{Governance}_{izt} = \sigma_1 Post_{(t\geq 2012)} * NBIM_{iz2011} + Post_{(t\geq 2012)} * \delta_z + \alpha_t + \mu_i + \varepsilon_{izt}, \quad (6)$$

Governance_{izt} is the governance score of firm i, in country z, in year t. $Post_{(t\geq 2012)}$ is a dummy variable that takes the value of one (1) after the Note's release (2012-2015), while zero encompasses previous years (2009-2011). Similarly, $NBIM_{iz2011}$ is a dummy variable equal to one if firm i belonged to the NBIM portfolio in 2011, while a zero is used if this is not the case. δ_z, α_t and μ_i represent country, year, and firm dummies, respectively.[22]

In the reduced-form regression, we employ a difference-in-differences estimator that compares the evolution of the governance score of the firms included in NBIM's portfolio in December 2011 (a year before the Note' release), relative to the governance of those not included.[23] In the 2SLS regressions, we explicitly instrument NBIM's holdings the years after the Note's release (2012-2015) with its holdings in December 2011.[24] Results are shown in Table 4. The first two columns show results from the reduced form regressions, while columns 3, 4, and 5 report results for 2SLS regressions. Our findings reveal a significant increase in the governance scores of firms in the NBIM portfolio starting in 2012. On average, the 2SLS regressions indicate that firms included in NBIM's portfolio improved their governance scores by 7 score points yearly after the Note's disclosure relative to firms not included in the portfolio. Moreover, by interacting NBIM_i with year dummies (with 2009 as the omitted category) in the 2SLS specification, we can interpret the lagged effects of the changes in governance. The magnitude of the difference in governance among the two groups increased quite sharply in 2012 but it also increased monotonically with time after the Note's issuance. This post 2012 momentum is consistent with the idea that some corporate governance changes take time to be implemented.[25]

To further explore the timing of implementation, in Table 5 we analyze whether firms took longer to adjust slow-moving governance provisions (those that are seldomly changed or that are more difficult to change). We employ two classification methods for these provisions: one based on their in-sample frequency of changes, and the other on an ex-ante classification

[22] Results are similar if we exclude δ_z from $Post_{(t\geq 2012)}*\delta_z$, or replace it with country-year dummies ($\text{Year}_t * \delta_z$). We opt for an intermediate approach that neutralizes potential country confounding effects, while retaining more degrees of freedom.

[23] Results are similar if we do not include $Post_{(t\geq 2012)}*\delta_z$ or if we include a more saturated model with country-year dummies ($\text{Year}_t * \delta_z$). We opt for an intermediate approach that neutralizes potential country confounding effects, while retaining more degrees of freedom.

[24] See Table IA7 in the Internet Appendix for first-stage regressions showing that the relevance condition of our instrument is satisfied. Note that the first-stage shows that there is enough persistence in NBIM's holdings to make the instrument valid for holdings four years after the Note's release, allowing us to analyze its long-term effects.

[25] In Table IA8 in the Internet Appendix we perform an extended pre-trends analysis starting from 2006. In Table IA9 in the Internet Appendix, we also conduct several placebo tests, defining the placebo pre- and post-periods within the period before the Note (2006-2011) and find no significant results.

Table 4
NBIM's Effect on Firm Governance: Instrumental Variables

	Reduced form		2SLS		
	(1)	(2)	(3)	(4)	(5)
$NBIM_{11}$*Post	4.798***	4.666***	7.437***	7.283***	
	(1.255)	(1.142)	(1.677)	(1.769)	
$NBIM_{11}$*year2010					1.372
					(1.342)
$NBIM_{11}$*year2011					2.149
					(1.379)
$NBIM_{11}$*year2012					6.322***
					(1.927)
$NBIM_{11}$*year2013					7.379***
					(2.460)
$NBIM_{11}$*year2014					9.985***
					(3.117)
$NBIM_{11}$*year2015					14.269***
					(3.474)
Year dummies	Yes	Yes	Yes	Yes	Yes
Firm fixed effects	No	Yes	No	Yes	Yes
Post*Country dummies	Yes	Yes	Yes	Yes	Yes
Observations	17,388	17,388	17,388	17,388	17,388
R-squared	0.021	0.731			

Notes: This table reports instrumental variable estimates of the effect of the Note's release on the governance of NBIM portfolio firms. The dependent variable is the Governance score measured at the firm level. Column 1 reports estimates of a pooled OLS regression. Columns 2 and 3 include firm fixed effects. NBIM ($NBIM_{11}$) is a dummy variable equal to one for firms in NBIM's portfolio (in 2011) and zero otherwise. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. In columns 3 and 4, Post*NBIM is instrumented with Post*$NBIM_{11}$. In column 5, year* is a dummy variable for the years 2010, 2011, 2012, 2013, 2014, and 2015. The reference year is 2009. NBIM*year2012, NBIM*year2013, NBIM*year2014, and NBIM*year2015 are instrumented with $NBIM_{11}$*year2012, $NBIM_{11}$*year2013, $NBIM_{11}$*year2014, and $NBIM_{11}$*year2015. Year dummies and dummies on the interaction of the dummy Post and country dummies are included. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

related to the nature of the provisions.[26] We find that, for slow-changing provisions, the significant effects on improved corporate governance only appeared after 2014. The distinct responses of fast and slow-moving provisions correspond with the Note's timing and their inherent reaction speeds. This alignment strengthens our identification strategy, as it suggests the observed pattern is less likely to be influenced by other confounding factors.

6.2.1 Skin in the Firm Versus Strong Voice. Institutional investor monitoring is likely to depend on both the fraction of the firm held by the institution and the fraction of the institution's portfolio represented by the firm. Fich, Harford, and Tran (2015) show that institutional monitoring is greater when the firm represents a higher fraction in the institution's portfolio. However, expectation documents constitute a unique form of activism in which a single document is released to influence all portfolio firms equally.

[26] Details on the construction of the indexes are provided in Internet Appendix C.

Table 5
The Effect of NBIM on Firm Governance: Slow Changing Provisions

		2SLS	
	(1)	(2)	(3)
$NBIM_{11}$*year2010	0.014	0.363	0.023
	(0.369)	(0.315)	(0.295)
$NBIM_{11}$*year2011	0.589	− 0.033	− 0.132
	(0.382)	(0.339)	(0.318)
$NBIM_{11}$*year2012	0.311	0.525	0.382
	(0.532)	(0.467)	(0.453)
$NBIM_{11}$*year2013	− 0.000	0.436	0.444
	(0.643)	(0.567)	(0.567)
$NBIM_{11}$*year2014	2.296***	1.593**	1.069
	(0.814)	(0.709)	(0.680)
$NBIM_{11}$*year2015	3.638***	3.103***	2.510***
	(1.153)	(1.033)	(0.968)
Year dummies	Yes	Yes	Yes
Firm fixed effects	Yes	Yes	Yes
Post*Country dummies	Yes	Yes	Yes
Observations	17,388	17,388	17,388

Notes: This table reports instrumental variable estimates of the effect of the Note's release on the governance of NBIM portfolio firms. The dependent variable is a governance score in levels (we construct an index as the equally-weighted sum of the provisions contained in the index, and each provision takes a value between 0 and 1). We use 3 indexes in which we exclude fast-changing provisions from the 34 Management Score provisions. We provide further details on these indexes in Appendix C. In column 1 we manually exclude all the provisions related to policies, reporting, and executive compensation. Column 2 and column 3 exclude the highest quartile and the highest tercile of the most volatile provisions in the Governance score measured out of sample (2006-2011). We provide the construction details of the 3 indexes below. NBIM (NBIM11) is a dummy variable equal to one for firms in NBIM's portfolio (in 2011) and zero otherwise. Year201X are year dummies. NBIM*year2012, NBIM*year2013, NBIM*year2014, and NBIM*year2015 are instrumented with NBIM11*year2012, NBIM11*year2013, NBIM11*year2014, and NBIM11*year2015. Firm fixed effects, year dummies, and dummies on the interaction of the dummy Post and country dummies are included. Post is a dummy that takes a value of one for 2012-2015 and a value of zero otherwise. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

In Table 6, we analyze whether the increase in the governance score after the Note's publication depends on the fraction of the firm held by NBIM or the fraction that the firm represented for NBIM. We use the following quantile interaction specification:

$$\text{Governance}_{izt} = \sum_{q=1}^{Q} \sigma_q Post_{(t\geq 2012)} I_q(NBIM_{Weight_{iz2011}}) + Post_{(t\geq 2012)} * \delta_z + \alpha_t + \mu_i + \varepsilon_{izt}, \quad (7)$$

where I_q are dummies assigned to the quartiles of the NBIM weights (zero weight is the omitted category), and $NBIM\_Weight_{i2011}$ represents the fraction of the firm held by NBIM in 2011 (firm weights) or the fraction of NBIM's portfolio (fund weights) represented by the firm in 2011. The coefficients of interest are σ_q and are detailed in columns 4 and 5 in Table 6.

In columns 1, 2, and 3 in Table 6, we use a linear regression model. Instead of using quartiles, with continuous measures of ownership intensity, $NBIM\_Weight_{iz2011}$ is based on firm weights (column 1), fund weights

Table 6
NBIM Effect on Firm Governance – Extensive vs. Intensive Margin

	Firm (1)	Fund (2)	Firm+Fund (3)	Firm (4)	Fund (5)
Post* NBIM_Weight$_{11}$(firm)	1.11***		1.15***		
	(0.41)		(0.42)		
Post* NBIM_Weight$_{11}$(fund)		−0.66	−2.03		
		(2.84)	(2.78)		
Post* I(% quartile1)$_{11}$				2.01	4.22***
				(1.75)	(1.33)
Post* I(% quartile2)$_{11}$				3.40**	3.78***
				(1.45)	(1.30)
Post* I(% quartile3)$_{11}$				4.92***	4.79***
				(1.51)	(1.31)
Post* I(% quartile4)$_{11}$				7.65***	5.81***
				(1.57)	(1.30)
Firm & Year fixed effects	Yes	Yes	Yes	Yes	Yes
Post* Country dummies	Yes	Yes	Yes	Yes	Yes
Observations	17,318	17,388	17,318	17,318	17,388
R-squared	0.731	0.730	0.731	0.732	0.731

Notes: This table reports OLS estimates from panel regressions with firm fixed effects. The dependent variable is the Governance Index. NBIM_Weight$_{11}$(firm) is the fraction of the firm's market value held by NBIM in 2011. NBIM_Weight$_{11}$(fund) is the fraction of NBIM's portfolio represented by the firm's market value in 2011. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. In column 4, I(% quartilèí)$_{11}$ is a dummy variable equal to one for firms in the i^{th} quartile of NBIM_Weight$_{11}$(firm). In column 5, I(% quartilèí)$_{11}$ is a dummy variable equal to one for firms in the i^{th} quartile of NBIM_Weight$_{11}$(fund). In columns 4 and 5, the reference group is formed by all the firms that were not in NBIM's portfolio NBIM in 2011. Firm fixed effects, year dummies, and dummies on the interaction of the dummy Post and country dummies are included. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

(column 2), or both (column 3). The results of linear specification indicate that firms in which NBIM had greater weight increased their governance score more after the Note's publication. However, the quantile specifications in Table 6 reveal a much richer structure.[27] In column 4, we see that firms' reactions were largely driven by the intensive margin. While firms in the bottom quantile (below 0.062%) in terms of NBIM's participation in their shareholder groups did not significantly react to the announcement, the effect grew monotonically to 7.7 rank points among those firms in which NBIM had a substantial weight within its shareholder group.[28] This is consistent with NBIM's influence growing with its share of firm ownership and with a necessary minimum ownership threshold to exert influence on its investee firms. More generally, it indicates that, at the firm level, the Note complements the presence of other forms of stewardship, such as engagement and voting.

The analysis of fund weights in column 5 reveals a different pattern. The reaction of firms seems to have been largely driven by the extensive margin.

[27] The thresholds for the firm weight quartiles are 0.062%, 0.654%, and 0.972%, respectively. The thresholds for the fund weight quartiles are 0.005%, 0.013%, and 0.033%, respectively.

[28] We conduct Wald tests and find that the differences between the coefficient of the highest quartile and the other three lower quartiles are significant for firm weights.

Being part of NBIM's portfolio made a very significant difference (4.2 reduced-form score points), even if the firm represented a small part of NBIM's investments. This indicates that the Note affected firms included in NBIM's portfolio relative to firms outside the portfolio. However, we do not find important differences when comparing the different quartiles, so the Note's impact is uncorrelated to the weight of the firm in NBIM's portfolio. This result coincides with the systemic influence that would be expected from a single expectation document applicable to NBIM's entire portfolio. Moreover, this shows that expectation documents can help fill the gaps left by other forms of stewardship that tend to focus more on larger investments.[29] At the fund level, the Note seems to be a good substitute for other forms of governance as it is particularly useful to incentivize those firms in which the fund has less incentives to devote resources.

Overall, the results of this section suggest that NBIM had a significant and similar influence on firms that exhibited different levels of importance within its portfolio. This is a unique characteristic of the influence exerted through expectation documents. However, the reaction of firms to this homogeneous influence may have been different. In fact, we find that the greater NBIM's shareholder presence, the greater the reaction of firms. This is in line with Appel, Gormley, and Keim (2016) who observed how increasing ownership by passive institutional investors accelerates changes in governance dimensions such as board independence and the removal of takeover defenses. It is also worth emphasizing that the monotonicity of the quantile coefficients in the firm weights lends further support to our hypothesis, specifically, that the effects we captured were driven by NBIM's influence and not by other potential confounding factors.

6.2.2 Heterogeneous Effects. In this section, we explore the heterogeneous firm reactions to the Note, contingent on their characteristics before the latter's publication in 2012. We evaluate the following firm features: total assets, market value, performance (EBITDA over revenues), liquidity, governance score, and the minority investor protection score for the firm's country of incorporation. We use the following specifications:

$$\begin{aligned}\text{Governance}_{izt} = {} & Post_{(t\geq 2012)} * \delta_z + \sum_{q=1}^{Q} \sigma_q Post_{(t\geq 2012)} * I_q(Feature_{iz2011}) \\ & + \sum_{q=1}^{Q} \vartheta_q Post_{(t\geq 2012)} * I_q(Feature_{iz2011}) * NBIM_{iz2011} + \alpha_t \\ & + \mu_i + \varepsilon_{izt,}\end{aligned} \tag{8}$$

[29] Fich, Harford, and Tran (2015), Kempf, Manconi, and Spalt (2017), and Liu et al. (2020) show that investors rationally devote less monitoring time to firms that represent a smaller weight in their portfolio.

Table 7
NBIM Effect on Firm Governance – Heterogeneous Effects

	Assets (1)	MV (2)	Perform. (3)	Liquidity (4)	Govern. (5)	IP (6)
Post*$NBIM_{11}$*Q(% quartile1)$_{11}$	7.37***	6.51**	8.12***	6.34***	2.78	2.56
	(2.72)	(2.56)	(2.69)	(2.08)	(1.99)	(1.91)
Post*$NBIM_{11}$*Q(% quartile2)$_{11}$	6.74***	7.45***	6.67***	7.05***	6.79***	1.70
	(2.15)	(2.22)	(2.27)	(2.43)	(2.16)	(1.77)
Post*$NBIM_{11}$*Q(% quartile3)$_{11}$	4.47**	4.07*	4.19*	4.22*	6.22**	5.23**
	(2.00)	(2.13)	(2.44)	(2.33)	(2.46)	(2.57)
Post*$NBIM_{11}$*Q(% quartile4)$_{11}$	0.58	0.23	3.12	0.09	4.13**	5.37*
	(2.12)	(2.01)	(2.03)	(2.04)	(2.00)	(2.77)
Firm & Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Post*Country dummies	Yes	Yes	Yes	No	Yes	No
Post*Q(% quartileí)	Yes	Yes	Yes	Yes	Yes	Yes
Observations	17,367	17,318	15,890	17,073	17,388	17,381
R-squared	0.73	0.73	0.73	0.73	0.73	0.73

Notes: This table reports OLS estimates from panel regressions with firm fixed effects. The dependent variable is the Governance Index. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. $NBIM_{11}$ is a dummy variable equal to one for firms in NBIM's portfolio in 2011 and zero otherwise. For each feature analyzed, we create quartiles, so that Q(% quartilèí)$_{11}$ is a dummy variable equal to one for firms in the i^{th} quartile of each feature in 2011. In column 1 we classify NBIM portfolio firms according to total assets. In column 2 we classify NBIM portfolio firms according to total market value. In column 3 we classify NBIM portfolio firms according to performance (EBITDA over revenues). In column 4 we classify NBIM portfolio firms according to their governance index. In column 5 we classify NBIM portfolio firms according to their country's score regarding the protection of minority investors (World Bank 2019). In column 6 we classify NBIM portfolio firms according to their liquidity (daily volume traded / daily absolute return). The coefficients reported are those of the interaction of Post*NBIM*Q(% quartilèí)$_{11}$. Firm fixed effects, year dummies, and dummies on the interaction of the dummy Post and country dummies are included. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

where $Governance_{izt}$ is the governance score of firm i in country z in year t. I_q represents dummy variables equal to one (1) for firms in the i^{th} quartile in 2011 of the analyzed feature. All other variables are analogous to those defined in Equation (7). The coefficients of interest are ϑ_q, which indicate the average governance difference after 2011 for each feature and quartile between firms included in NBIM's portfolio in 2011 and firms not included in 2011.

We detail results in Table 7. First, we observe that the increase in governance scores after the Note's release was greater among smaller firms (columns 1 and 2) and not statistically significant for the largest firms in the portfolio (top quartile). This finding suggests that expectation documents can serve as an engagement tool to precisely reach those firms for which a more dedicated stewardship role is less cost-effective. Indeed, Schwartz-Ziv and Wermers (2020) argue that investors have a limited ability to monitor smaller firms and that they focus on bigger firms. Column 3 shows that firms with the worst preexisting financial performance reacted more to NBIM's announcement and that firms in the highest quartile in terms of preexisting financial performance did not significantly change their governance. This may be because poor-performing firms sought to improve their governance to

compensate for poor financial results and to remain attractive to NBIM. We explore this potential trade-off in Section 6.3.2 and provide further insights on these results. These results contribute to the debate on whether active owners should target and engage with profitable or poorly performing firms (Klein and Zur 2009; Becht et al. 2009; Dimson, Karakas, and Li 2015).

In column 4, we show that firms with high stock liquidity did not react to the Note's release, while firms with lower liquidity were much more sensitive. This result is interesting, as less liquid firms may be the ones for which the exit mechanism is less of a credible threat (Edmans and Manso 2011). It also extends McCahery, Sautner, and Starks (2016) finding that active owners pursue high-touch engagement with the most illiquid firms. According to both arguments, our results show that the expectation document had a more intense impact on those firms for which other, more resource-consuming engagements were less likely to be cost-effective.

Interestingly, the logic seems to be completely different if we move from the firms' financial characteristics to their institutional features. In column 5 we show that firms in the two middle quartiles of preexisting governance scores were the ones which reacted the most to the Note's release. The firms in the lowest quartile of past governance scores did not react to the expectation document. It may have been more costly for these firms to improve their governance score, or they may have found themselves too distant from NBIM's newly expected standards. Similarly, firms in the highest quartile of past governance scores reacted less. This reduced effect might have occurred either because there was scant room to improve their governance score or because they already fulfilled NBIM's expected governance standards.

Finally, in column 6 we observe that firms incorporated in countries with weak national investor protection provisions did not improve their governance scores, while the opposite was true for firms incorporated in countries providing stronger investor protection. These findings suggest that active owners' influence on firm policies is contingent on the quality of the national corporate governance mechanisms in which firms are embedded (Doidge, Karolyi, and Schultz 2007).[30] There seems to be a minimum national governance threshold for active owners to be able to influence investees through expectation documents.[31]

6.2.3 Validity of the Empirical Strategy and Robustness Tests. In this section, we provide further evidence that changes in firm governance were

[30] Relatedly, Aggarwal et al. (2011) provide evidence regarding how investors' country-driven preferences match the firm's policies, and Bruno and Claessens (2010) explore how firms' corporate governance and country-level legal investor protection jointly interact and affect firm performance.

[31] Note that we include Country dummies and Post*Country dummies in all the regressions except in this one.

Table 8
NBIM Effect on Firm Governance – Discretionary Investments

	(1)	(2)	(3)	(4)
$NBIM_{11}$*Post	4.666***		4.011***	
	(1.142)		(1.290)	
$FTSE_{11}$*Post		2.836***	1.215	
		(0.980)	(1.101)	
$OnlyNBIM_{11}$*Post				4.008**
				(1.736)
$NBIMFTSE_{11}$*Post				4.993***
				(1.372)
$OnlyFTSE_{11}$*Post				1.562
				(2.545)
$Excluded\text{-}ethics_{11}$*Post				− 2.386
				(3.918)
Firm & Year fixed effects	Yes	Yes	Yes	Yes
Post*Country dummies	Yes	Yes	Yes	Yes
Observations	17,388	17,388	17,388	17,388
R-squared	0.731	0.731	0.731	0.731

Notes: This table reports estimates of the effect of the Note's release on the governance of NBIM portfolio firms. The dependent variable is the Governance Index. $NBIM_{11}$ is a dummy variable equal to one for firms in NBIM's portfolio in 2011 and zero otherwise. $FTSE_{11}$ is a dummy variable equal to one for firms in the FTSE in 2011 and zero otherwise. $OnlyNBIM_{11}$ is a dummy variable equal to one for firms in NBIM's portfolio in 2011 that did not belong to FTSE in 2011. $OnlyFTSE_{11}$ is a dummy variable equal to one for firms in the FTSE in 2011 that did not belong to NBIM in 2011 or that were excluded by NBIM's Council on Ethics in 2011. $NBIMFTSE_{11}$ is a dummy variable equal to one for firms in both NBIM's portfolio in 2011 and in the FTSE in 2011. $Excluded\text{-}ethics_{11}$ is a dummy variable equal to one for firms that were excluded from NBIM holdings by the fund's Council on Ethics by 2011. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. Firm fixed effects, year dummies and dummies on the interaction of the dummy Post and country dummies are included. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate significance at the 1%, 5%, and 10% levels, respectively.

driven by the Note, validating our empirical strategy and ruling out alternative explanations.

First, we compare the average characteristics for NBIM- and non-NBIM firms in 2010 and 2011 (see Table IA3 in the Internet Appendix). Overall, the two groups are comparable, mitigating concerns that omitted variables could be driving our findings.[32]

Second, given that NBIM partially tracks the FTSE Global Cap Index, we show that the results in Table 4 are not driven by global governance trends or shocks like the 2007 financial crisis. In Table 8 we sort firms in 2011 into four categories: those in NBIM's portfolio but outside the FTSE Index (NBIM's discretionary portfolio); firms in the FTSE Index and NBIM's portfolio (non-discretionary, since NBIM follows this benchmark); firms within the FTSE Index but not held by NBIM; and those excluded by NBIM's Council on Ethics. The remaining group includes firms not part of FTSE, NBIM, or the

[32] In Tables IA4 and IA5 in the Internet Appendix we also compare summary statistics by country and industry for NBIM and non-NBIM firms in 2011. We find a similar composition for both groups. Still, to account for heterogeneity at the country level, all our main specifications include Country*Post-event fixed effects.

Council on Ethics' exclusions.[33] We find that NBIM firms significantly improved their governance post-Note. We do not see such increase in FTSE Index firms that were not in NBIM's portfolio. Thus, improvements appear specific to NBIM-held firms, regardless of FTSE inclusion. Overall, Table 8 shows that the overall governance evolution of the FTSE Global Cap index' is not a confounding factor in our findings. We also check that our results are robust to fixing the weights in 2010.[34] This specific robustness check aims to eliminate any potential anticipation effects on the fund or the firms' side during 2011. In Table IA10 in the Internet Appendix we show that results are unchanged when we fix NBIM portfolio weights in 2010 as our treatment.

Third, we replace the index provided by Eikon with a governance index based on levels that does not re-rank firms every year. We find qualitatively similar results to those in Table 8, which can be interpreted directly as changes in the number of governance indicators (see Table IA11). [35]

Fourth, as a robustness check, we manually classify the governance indicators of the Eikon ESG management index according to whether the governance practices are highlighted in the Note. The index' 34 indicators are grouped as follows: 13 indicators are explicitly mentioned; 9 are partially mentioned or related to the Note; and the remaining 12 are not explicitly mentioned. We construct three indexes comprising these different levels, using the same method as in Table 8. The effect is only significant for the index with indicators explicitly mentioned in the Note (see Table IA12) with coefficients that gradually increase as the governance index aligns more closely with the Note. When we apply a specification like the one in Table 8, coefficients on OnlyNBIM_{11} and NBIMFTSE_{11} are significant only for provisions mentioned in the Note. Thus, the more the index mirrors the Note's content, the stronger NBIM firms' reaction compared to non-NBIM firms.

Together, all these results provide strong evidence that our findings are driven by the Note's release and not by aggregate governance changes or other confounding factors.

6.3 Changes in NBIM's Investment Strategy

We now turn to examine whether NBIM rebalanced its portfolio according to its new governance preferences as indicated in its expectation document. Determining whether the release of NBIM's Note was met with an effective change in its own investment policy is important for several reasons. First, it validates our identification strategy by showing that the fund's announcement produced actual changes in its investment preferences. Second, it provides

[33] Sample size for each group is 1,946 observations for OnlyNBIM_{11}, 13,076 observations for NBIMFTSE_{11}, 658 observations for OnlyFTSE_{11}, 161 observations for $\text{Excluded-ethics}_{11}$, and 1,547 observations for the omitted group.

[34] Fixing the weights in 2010 reinforces the exogeneity of the instrument (strengthening the validity of the exclusion restriction) but decreases its relevance.

[35] See the notes in Table IA11 in the Internet Appendix for details on how we construct the index based on levels.

some insight on how the expectation document's content was reinforced by the fund's other governance-related actions. Finally, it analyzes the second element of the quantitative decomposition of the portfolio's overall governance effect (see Equation (4)).

We provide two independent sets of tests. First, we show that the firms' governance level became more relevant after the Note's release in determining the entry and exit of firms in NBIM's portfolio. Second, we show that a trade-off between returns and governance arose after the Note's publication. NBIM was willing to sacrifice financial returns to achieve better governance.

6.3.1 Walk the Talk? Rebalancing NBIM's Portfolio to Align with the Note. We first explore whether NBIM practiced what it preached and rebalanced its portfolio to align its policies with the new Note. We do this by analyzing the entry and exit channels, that is, whether NBIM invested in firms with higher governance scores and exited those with lower governance scores after the announcement. There is a potential issue associated with endogenous changes in firm governance due to the Note's release potentially acting as a confounding factor for the changes in NBIM's investment strategy. To avoid this, we keep the governance index fixed at a point in time before the announcement (2011). Intuitively, we define the firms' inherent governance levels before the release and keep them constant throughout our analysis, as in the second term of the decomposition in Equation (4).

To analyze the entry channel, we estimate the following logistic model:

$$\text{Prob}(\text{y}_{\text{it}} = 1) = \frac{\exp(z_{it})}{1 + \exp(z_{it})}, \tag{9}$$

where y_{it}=$NBIM\_entry_{it}$ is a dummy variable that takes the value of one (1) if firm i enters the NBIM portfolio in year t and a value of zero according to two different control groups. We can compare the governance of firms that entered NBIM's portfolio to the governance of firms not included in the portfolio (*NonNBIM* control group) or to the firms belonging to the NBIM portfolio (NBIM control group). We estimate $z_{it} = \sigma_1 Post_{(t\geq 2012)} * Governance_{i2011} + \sigma_2 Governance_{i2011} + \alpha_t + \varepsilon_{it}$, where $Governance_{i2011}$ is the governance index score of firm i fixed in year 2011 (before the release), and $Post_{(t\geq 2012)}$ is a dummy variable that takes a value of one (1) after the Note's release (2012-2015) and a zero for previous years (2009-2011).

We report the odds ratios of the probit model in Table 9.[36] Each column compares the predetermined governance score of entrants to the score of a different control group (Non-NBIM firms and NBIM firms). We find that the $Post{*}Governance_{2011}$ coefficient is bigger than one (1) in both specifications. That is, the fund gave greater weight to corporate governance when selecting

[36] Table IA13 in the Internet Appendix shows the estimates from logistic regressions and average marginal effects that correspond to the odds ratios shown in Table 9.

Table 9
Governance Differences for Firms Entering NBIM's Portfolio

	FULL SAMPLE		Non-FTSE		FTSE	
	(1)	(2)	(3)	(4)	(5)	(6)
ENTRY	Vs-NonNBIM	Vs-NBIM	Vs-NonNBIM	Vs-NBIM	Vs-NonNBIM	Vs-NBIM
Post * $Governance_{2011}$	1.007**	1.006**	1.010**	1.008**	1.003	1.001
	(0.003)	(0.003)	(0.005)	(0.004)	(0.005)	(0.005)
$Governance_{2011}$	0.995**	0.988***	0.994*	0.987***	0.996	0.989***
	(0.002)	(0.002)	(0.003)	(0.003)	(0.003)	(0.002)
Time & Post* Country dum.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,687	14,307	2,366	13,471	2,110	13,185
Pseudo R-squared	0.0734	0.108	0.154	0.182	0.0309	0.0479

Notes: This table reports odds ratios from logistic regressions. The dependent variable is NBIM_entry, a dummy equal to one for firms that enter the NBIM portfolio in year *t* and do not belong to the NBIM portfolio in year *t-1*. This dummy is equal to zero according to the control group selected. In columns 1, 3, and 5, NBIM_entry is equal to zero for firms that did not belong to the NBIM portfolio the previous and subsequent 2 years. In columns 2, 4, and 6, NBIM_entry is equal to zero for firms that belonged to the NBIM portfolio the previous and subsequent 2 years. The variable $Governance_{2011}$ is the Governance Index fixed in the year 2011. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. Year dummies, and interactions of the dummy Post and country dummies are included but not reported. In columns 1 and 2 we use the full sample of firms. In columns 3 and 4 we exclude the entries that are driven by entries in the FTSE Global Cap. In columns 5 and 6 we only include the entries that are driven by entries in the FTSE Global Cap. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate statistical significance relative to a coefficient of 1 at the 1%, 5%, and 10% levels, respectively.

entrants after the Note's release (columns 1 and 2). This effect is large and statistically significant. Being 10% higher in the governance score ranking increased the chances of firms entering the portfolio by 6%-7%. The $Governance_{2011}$ coefficient is significantly below one (1) in all columns. In addition, the coefficient is lower in column 2 than in column 1, reflecting that, in general, the firms included in NBIM's portfolio had higher scores than those outside.[37]

In columns 3 and 4 in Table 9, we exclude those entries that coincide with a change in the FTSE Global Cap index' composition. The entries induced by the FTSE index' recomposition are mechanical changes driven by the fund's benchmark. By excluding these exogenous changes, we keep only those entries that are more discretionary to the fund. Indeed, when we focus only on the discretionary entries selected by NBIM (non-FTSE), we find stronger results. Being 10% higher in the score ranking increased a firm's chances of entering the portfolio by 8%-10%.[38] In columns 5 and 6 we carry out the

[37] This can also be seen in Table IA14 in the Internet Appendix, where we compare the average governance score before and after the Note's release for firms inside and outside NBIM's portfolio as well as for firms that entered and exited the portfolio. More importantly, when comparing the exits (entries) of NBIM before and after the Note's release, we find that NBIM exited (entered) firms with lower (higher) average governance scores after the release.

[38] Table IA15 in the Internet Appendix reports the yearly number of company entries and exits carried out by NBIM during our sample period. We further classify whether these entries and exits were discretionary or driven by the FTSE Global Cap Index' composition.

Table 10
Governance Differences for Firms Exiting NBIM's Portfolio

	FULL SAMPLE		Non-FTSE		FTSE	
	(1)	(2)	(3)	(4)	(5)	(6)
EXIT	Vs-NonNBIM	Vs-NBIM	Vs-NonNBIM	Vs-NBIM	Vs-NonNBIM	Vs-NBIM
Post * $Governance_{2011}$	0.993	0.993*	0.991**	0.991**	1.014	1.012
	(0.004)	(0.004)	(0.005)	(0.004)	(0.012)	(0.010)
$Governance_{2011}$	1.002	0.996*	1.003	0.996	1.000	0.992
	(0.003)	(0.002)	(0.003)	(0.002)	(0.006)	(0.006)
Time & Post* Country dum.	Yes	Yes	Yes	Yes	Yes	Yes
Observations	2,347	13,491	2,308	13,449	1,697	10,793
Pseudo R-squared	0.149	0.131	0.164	0.142	0.0941	0.0799

Notes: This table reports odds ratios from logistic regressions. The dependent variable is NBIM_exit, a dummy equal to one for firms that belonged to the NBIM portfolio in year t-1 and exited the NBIM portfolio in year t. This dummy is equal to zero according to the control group selected. The control group varies in each column. In columns 1, 3, and 5, NBIM_exit is equal to zero for firms that did not belong to NBIM's portfolio the previous and subsequent 2 years. In columns 2, 4, and 6, NBIM_exit is equal to zero for firms that belonged to NBIM's portfolio the previous and subsequent 2 years. The variable $Governance_{2011}$ is the Governance Index fixed in the year 2011. Post is a dummy variable equal to one for the period 2012-2015 and equal to zero for the period 2009-2011. Year dummies and interactions of the dummy Post, and country dummies are included but not reported. In columns 1 and 2 we use the full sample of firms. In columns 3 and 4 we exclude the exits that were driven by exits from the FTSE Global Cap. In columns 5 and 6 we only include the exits that were driven by exits in the FTSE Global Cap. Standard errors clustered at the firm level are shown in parentheses. ***, **, and * indicate statistical significance relative to a coefficient of 1 at the 1%, 5%, and 10% levels, respectively.

same analysis for those changes in NBIM's portfolio that occurred simultaneously with FTSE's reconstitution. Although NBIM retained some discretion and did not necessarily follow these reconstitutions, in general, the index' reconstitutions entailed rebalancing NBIM's portfolio in cases that were less discretionary and more exogenous to the fund's preferences. Consistently, results for this subsample do not show a significant effect on the Post * $Governance_{2011}$ coefficient. This indicates that the results in columns 1 and 2 were driven by the non-FTSE transitions analyzed in columns 3 and 4.

We undertake a similar analysis to test for exit effects. The results of odds ratios are shown in Table 10.[39] Consistent with our entry analysis, after the Note's release, a better governance score reduced the probability of exiting NBIM. This effect is quantitatively important: ten rank positions in the governance score reduced the probability of exiting by about 7%. Again, when we focus on the fund's more discretionary exits (columns 3 and 4), this probability increased to 9%. Conversely, in columns 5 and 6 we focus on exits driven by NBIM's benchmark and show odds ratios that are statistically indistinguishable from one (1), in fact, exhibiting point estimates in the opposite direction. The effect that the governance level had before the Note's release is inconclusive.

[39] Table IA16 in the Internet Appendix shows the estimates from our logistic regressions and average marginal effects that correspond to the odds ratios shown in Table 10. Table IA17 in the Internet Appendix shows that these results are robust when excluding the year 2011.

Overall, the results in Tables 9 and 10 show that NBIM started to give greater weight to firms' inherent governance (i.e., fixed at 2011 levels) after the Note's release when deciding to include or exclude those firms from its portfolio. This supports the hypothesis that the fund did indeed change its investment strategy after the Note's publication.[40] This effect was driven by the fund's more discretionary decisions and was not present in NBIM's more mechanical decisions driven by reconstitutions of its benchmark, the FTSE Global Cap Index.

6.3.2 Trade-off Between Financial Returns and Governance. Another way to examine NBIM's change in preferences is to explore whether the choices regarding its portfolio reflect a different trade-off between financial returns and governance after the Note's release. That is, the aim is to test whether, after the Note's release, NBIM was willing to forgo some financial returns in exchange for governance characteristics more aligned with the preferences stated in its Note. To explore this, we construct portfolios that track the financial performance of NBIM's investments before and after the Note's release. We decompose NBIM's investment portfolio into non-discretionary investments (firms that also belonged to the FTSE Global Cap Index) and discretionary investments (firms that did not belong to the FTSE Global Cap Index). Focusing on discretionary investments, we can compare the returns between high and low governance portfolios to understand whether NBIM was willing to trade returns in exchange for better corporate governance. The non-discretionary portfolio comprises firms in which NBIM was mechanically forced to invest due its benchmark strategy and acted as a control group that captured the general evolution of the governance-returns trade-off in the economy.

We compute rolling monthly abnormal returns for each firm in NBIM's portfolio in line with Carhart's (1997) four-factor model. For each year t, we decompose NBIM's discretionary and non-discretionary portfolios into five equal-sized portfolios, ranking firms according to their governance index. For all the firms in each of the 10 portfolios, we average the monthly alphas and obtain the equally-weighted monthly alpha of each portfolio. Next, for each portfolio, we average the equally-weighted monthly alphas from periods 2009-2011 (pre-event alphas) and average the equally-weighted monthly alphas from 2012-2015 (post-event alphas).[41]

We report the alphas of the low governance portfolio in row 1 of Panel A in Table 11. The alphas of the high governance portfolios are reported in row 5.

[40] This improvement occurred despite the large increase in the number of NBIM holdings from 2011 to 2012 (see Table IA2 in the Internet Appendix), which would make cherry-picking stocks with high governance scores after the Note's release more difficult.

[41] We also compute market value weighted results. We calculate the average alpha of each portfolio each month and then weight firms' alphas with the market value weight that each firm has in NBIM's portfolio.

Table 11
Governance-Returns Trade-off in NBIM's Portfolio

Panel A: Equally-weighted

	Non-Discretionary		Discretionary	
Governance portfolios	Pre-Event (1)	Post-Event (2)	Pre-Event (3)	Post-Event (4)
1 (Low)	0.299	− 0.024	0.198	0.574
	(0.08)	(0.05)	(0.25)	(0.20)
2	0.125	0.022	0.221	0.387
	(0.09)	(0.05)	(0.23)	(0.23)
3	0.376	0.061	0.460	0.173
	(0.08)	(0.05)	(0.21)	(0.18)
4	0.41	0.00	0.26	− 0.24
	(0.07)	(0.05)	(0.23)	(0.19)
5 (High)	0.230	− 0.060	0.166	− 0.219
	(0.07)	(0.05)	(0.24)	(0.15)
Difference High-Low	− 0.069	− 0.036	− 0.031	− 0.793***

Panel B: Value-weighted

	Non-Discretionary		Discretionary	
Governance portfolios	Pre-Event (1)	Post-Event (2)	Pre-Event (3)	Post-Event (4)
1 (Low)	0.421	0.117	0.328	0.590
	(0.07)	(0.04)	(0.23)	(0.16)
2	0.289	0.029	0.171	− 0.507
	(0.07)	(0.04)	(0.18)	(0.14)
3	0.285	0.001	0.678	0.113
	(0.06)	(0.04)	(0.15)	(0.11)
4	0.342	0.095	0.672	− 0.518
	(0.06)	(0.04)	(0.17)	(0.11)
5 (High)	0.190	− 0.133	0.651	− 0.594
	(0.06)	(0.04)	(0.16)	(0.09)
Difference High-Low	− 0.231	− 0.250	0.323	− 1.184***

Notes: This table reports mean alphas (calculated through Carhart's (1997) four factor model) and standard errors in parentheses. We decompose NBIM's portfolio into non-discretionary firms (those that belong to the FTSE Global Cap Index) and discretionary firms (those that do not belong to the FTSE Global Cap Index). Pre-event is for the period 2009-2011. Post-Event is for the period 2012-2015. Panel A shows equally-weighted results. Panel B shows market value-weighted results. The last row reports differences between alphas in the high and low governance portfolios. ***, **, and * indicate statistical significance of these differences at the 1%, 5%, and 10% levels, respectively.

We report the difference between the highest and lowest governance portfolio alphas in the last row. Before NBIM released its Note (columns 1 and 3), we do not appreciate any significant difference between the alphas in the low governance and high governance portfolio. In column 2 we observe that this is also the case post-publication for non-discretionary investments (non-significant alpha differential of − 0.036%). However, we do observe a trade-off between governance and returns for discretionary investments post-release. There is a differential return between the high and the low governance portfolios of -0.793%. In fact, the alpha of the low-governance portfolio is

positive and statistically significant (0.574%), indicating that NBIM was only willing to include low-governance firms in its discretionary portfolio if their returns were expected to be high. Moreover, the alpha of the high-governance portfolio post announcement is negative (-0.219%). This indicates that NBIM was willing to incorporate 'better' governance firms into its portfolio, even if their expected abnormal returns were low. Results are qualitatively similar for the value-weighted portfolios in Panel B of Table 11. Our findings complement those reported by Barber, Morse, and Yasuda (2021). They show that development organizations and foundations, when acting as investors, are willing to forego expected financial returns in exchange for investing in impact in the dimensions of their mandate.

In conclusion, in Section 6.3 we show that NBIM rebalanced its portfolio according to its new governance expectations. After releasing its Note, NBIM entrants had better inherent governance, while firms exiting NBIM had worse inherent governance. These effects were driven by the discretionary investment changes made by NBIM. Moreover, we provide insights on NBIM's change in preferences across returns and governance after the Note's publication. Jointly, these results validate the identification assumption that NBIM did in fact change its preferences following the Note's 2012 release. In the next section, we analyze if the change in the firms' governance correlates with the change in NBIM's investment weights.

6.4 Correlation between NBIM Investments and Governance Changes

In this section, we explore the third term in Equation (4) and analyze whether the changes in firm governance were linked to NBIM's investment changes. Although establishing causality in this last part of the analysis is challenging, we explore this last term to complete the decomposition of the Note's effects.

We estimate pooled OLS regressions to analyze the correlation between changes in firm governance and investments by NBIM (see Table IA18 in the Internet Appendix). The correlation between the changes in governance and changes in investment weights becomes high and statistically significant only after the Note's release, whereas the two seem uncorrelated before then. Additionally, Granger causality tests reveal that lagged governance changes predict changes in fund weights post-Note. However, the inverse effect lacks statistical significance. These results are shown in Table IA19 in the Internet Appendix.

These findings suggest NBIM increased its investment in firms that improved their governance index post-Note. Thus, NBIM's portfolio restructuring took into account not only firms' current governance levels (section 6.3), but also any changes in these levels. These results are in line with Dimson, Karakas, and Li (2015) who document increased institutional ownership after successful engagements on environmental and social issues. On the other hand, we do not find evidence that lagged changes in fund weights predict changes in firm governance. This implies that firms did not react differently to the Note if

their weight in NBIM's portfolio changed, which is consistent with the uniform activism promoted by a single expectation document.

7. Discussion: Complementarity, Substitutability, and External Validity

The Note's impact was certainly affected by its interaction with the presence of other governance and investment policies. In our study, we find evidence of this based on both complementarity and substitutability traits between the Note and engagement policies and exit strategies.

At the firm level, our results suggest that both NBIM's investment strategy and its engagement policies were complementary to the Note's effects. In Section 6.3. we show evidence that NBIM's investment strategy was aligned with the Note's content. NBIM's rebalancing (see Section 6.3.1) may have been driven by the fund trying to invest according to its new preferences but also by its intention to influence firms. This rebalancing provided incentives for firms to comply with the Note through an explicit or implicit threat of exit strategy. Our results also show that the Note may have been complementary to voice strategies, as it was most impactful in firms for which NBIM represented a large fraction of ownership, making direct interactions and voting more effective. There are possibly other complementarities between the Note and other forms of engagement, although these are harder to measure in our setting.

The Note's universal nature also suggests some degree of substitutability between the Note and other means of action that are confirmed in the analysis. We show in Section 6.2.3 that the Note worked best for smaller and more illiquid firms, which are typically less responsive to voice and exit practices (see Edmans and Manso 2011, and Schwartz-Ziv and Wermers 2020). Moreover, the Note's effectiveness was also relatively constant, regardless of the firm's weight in the fund. This made the Note particularly useful for firms in which NBIM had low investment stakes and, therefore, with weaker incentives to research and engage. Given that the Note precisely reached those firms where voice and exit were more challenging, we could also consider that, at the fund level, it complemented NBIM's existing engagement tools.

A relevant question is whether the Note's effectiveness was driven by a specific mix of tools used by NBIM and its size or whether expectation documents, in general, are effective in a broader context. As we discuss in section 3.3, NBIM shares some similitudes with other universal investors in the use of governance tools. Given the increased prevalence of expectation documents and the similitudes across universal, active investors, our results are relevant to confirm the effectiveness of these expectation documents. However, their effectiveness for investors which are universal though not active (such as pure index funds) or for those that are active but have a narrower investment scope remains an open research question.

8. Conclusions

We explore the effectiveness of expectation documents using the Note released by NBIM in November 2012 as a quasi-natural experiment. This Note served to outline the fund's governance preferences for its investment portfolio. We introduce an analytical decomposition as a roadmap that can be generalized to analyze the effect of any activism tool targeting a broad portfolio of firms. We uncover the following results: (1) the fund's overall governance increased following the Note's release; (2) firms reacted to the fund's new policy by improving their governance score –these results were heterogeneous across firm characteristics and monotonically increasing in NBIM's stake holdings in the firms–; (3) the fund's investment stance changed, focusing more on firms with higher governance scores and indicating its willingness to sacrifice financial returns to achieve better governance; and (4) following the Note's publication, the fund's marginal changes in investment weights became more reactive to recent changes in the firms' governance scores. Quantitatively, most of the overall effect was seen in the investee firms' reactions.

From a research perspective, expectation documents represent a useful source of variation, revealing time-varying preferences regarding measurable dimensions beyond profits. We show that changes in these preferences can be useful to extract information about how firms respond and cater to their investors' preferences.

Our results show that expectation documents can be a compelling governance tool for large universal owners, giving them the opportunity to disseminate their preferences throughout the entire market. In the case of SWFs, expectation documents indicate changes in their publicly visible preferences, which often include elements beyond profit maximization. We also show that expectation documents are particularly useful to reach those firms with fewer incentives to engage (small, illiquid firms with a low representation in the portfolio). Moreover, given their universal nature, expectation documents may also be a channel to enact global changes in governance or ESG stances, especially those that require certain coordination across firms.

Code Availability

The replication code is available in the Harvard Dataverse at: https://doi.org/10.7910/DVN/8GCHCS

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