

## ESG Disclosures in Private Equity Fund Prospectuses and Fundraising Outcomes

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## **ESG Disclosures in Private Equity Fund Prospectuses and Fundraising Outcomes**

### **Abstract**

We use a large language model to identify Environmental, Social, and Governance (ESG) disclosures in private equity (PE) brochures (Form ADV Part 2) to examine how ESG disclosure is associated with PE advisers' ability to raise capital. We provide three main results. First, we find environmental, but not social or governance, disclosures are negatively associated with the likelihood and amount of fundraising. Second, using disclosure tone, we separately identify disclosures of ESG risk from disclosures of ESG related investment activity. We find environmental risk disclosure is negatively associated with fundraising. In contrast, the effect of environment related investment disclosure is dependent on the political leaning of investors' home state. Similarly, for PE advisers that successfully raise a new fund, we find the likelihood that existing investors participate in the new fund also depends on the political leaning of their home state. Overall, our evidence suggests that (i) environmental disclosures by PE advisers contain decision-useful information, (ii) PE investors are generally averse to disclosed environmental risks, and (iii) PE investors evaluate disclosed environmental investment through a political lens.

## I. Introduction

Nearly 75% of private equity (PE) investors globally claim to consider ESG factors when deploying capital in private funds (Lino, Connolly, Hoverman, McCoy, Schey, and Anders 2022; McCahery, Pudschedl, and Steindl 2022). Motivated by this demand, the Securities and Exchange Commission (SEC) recently proposed multiple regulatory changes that would require PE advisers to enhance their disclosure of ESG related information (e.g., SEC Release No. IA-6034).<sup>1</sup> However, investors have responded to the SEC’s proposal with mixed support (Johnson and Pitt 2022). Attorneys General from 21 different states have argued that private fund advisers should only consider investors’ financial returns, not ESG initiatives, when making investments decisions (Morrisey 2022). Further, in the United States, 38% of PE investors do not have an ESG policy (Lino et al. 2022). Even among investors who claim to consider ESG factors, the extent to which ESG factors affect investment decisions is ambiguous. Overall, how ESG disclosures are used by private equity investors and the potential implications of the SEC’s proposed ESG disclosures remain controversial issues.

In this paper, we examine the association between PE advisers’ ESG disclosure and advisers’ ability to raise capital. Specifically, we use a large language model (FinBERT; Huang et al. 2022) to identify ESG information disclosed by PE advisers and explore three questions. First, do PE advisers’ (i.e., general partners or GPs) disclosures of ESG information affect their ability to raise capital? Second, is the effect different for disclosures of ESG risks versus ESG investments? Finally, do PE investors’ (i.e., limited partners or LPs) political views towards ESG activities impact the response to ESG disclosure?

This topic is of interest to academics, regulators, and investors for multiple reasons. First, PE plays a significant and growing role in the global economy. The PE market exceeded \$4.4 trillion in global assets under management as of 2020, which is expected to continue to grow to over \$9 trillion in the next 5 years

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<sup>1</sup> The SEC proposal would affect all types of investment advisers whose funds consider ESG factors. The proposal intends to promote “consistent, comparable, and reliable information for investors concerning funds’ and advisers’ incorporation of environmental, social, and governance (“ESG”) factors.” Importantly, this proposal directly affects advisers’ brochures, which is the filing we examine, by requiring consistent disclosures of ESG investment strategies, proxy voting, and key metrics that include greenhouse gas emissions.

(Joyce 2020). In addition, the PE market is opaque, relatively lightly regulated, and receives less attention from academics than other capital markets. As a result, understanding factors that influence the flow of capital to PE funds is increasingly important. Second, ESG investing has experienced remarkable growth in recent years with global ESG assets expected to represent more than one-third of total assets by 2025 (Bloomberg 2022). Consequently, regulators and standard setters are progressively concerned about the disclosure of ESG factors, including ESG disclosures made by PE advisers. At the same time, the growing academic literature examining ESG disclosure focuses almost exclusively on publicly traded firms and mutual funds (see Christensen, Hail, and Leuz 2021 for a review), which differ fundamentally from private equity (Borysoff, Mason, and Utke 2023). The private equity setting allows us to examine the impact of ESG disclosures on investors in a lightly regulated, private market.

Ex ante, it is unclear how ESG disclosure affects PE advisers' ability to raise capital. On one hand, ESG information can reduce the asymmetric information between PE advisers and their investors (e.g., Leland and Pyle 1977; Diamond 1984; Phalippou 2009; Metrick and Yasuda 2010, 2011; Crain 2018; Gaver et al. 2023). Further, ESG disclosure may also increase the GPs' ability to attract capital from sophisticated institutional investors (e.g., Hartzmark and Sussman 2019; Andrikogiannopoulou et al. 2022; Cohen, Kadach, and Ormazabal 2023; Gibbons 2023), which are the primary investors in PE. However, because PE investors are sophisticated and often have inside information from PE advisers, the disclosure of ESG information may have little effect on the degree of asymmetric information, especially if the disclosure is primarily 'boilerplate.' In addition, the disclosure of ESG information may inhibit fundraising if PE advisers mainly discuss ESG related risks or if investors are deterred from placing capital with advisers promoting ESG investment opportunities.

To examine our research questions, we gather information provided to investors by PE advisers of buyout and venture capital funds that is disclosed annually to the SEC in Part 2 of Form ADV.<sup>2</sup> Part 2 of Form ADV, which is commonly referred to as a PE adviser's "brochure," is akin to a prospectus for a

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<sup>2</sup> Consistent with prior literature (e.g., Barber and Yasuda 2017; Jiang et al. 2023), we focus our analysis on advisers of buyout and venture capital funds.

mutual fund or public equity. Since the passage of Dodd-Frank, the SEC requires all non-exempt registered PE advisers to provide this document to potential investors before entering into an investment advisory contract and existing investors annually (see SEC Release IA-3060).<sup>3</sup> As a result, we capture time varying disclosures made to all prospective and current PE investors whether or not the PE adviser is able to successfully raise a new fund. Brochures are to be written in narrative format and in ‘plain English’ with the intent to “promote effective communication between [the PE adviser] and [PE fund investors or LPs]” according to Form ADV instructions.<sup>4</sup> Part 2 of Form ADV contains eighteen required items, including specific investment strategies, risks, and compensation arrangements, and is required to be filed with the SEC annually within 120 days of year-end. Importantly, brochures provide additional information over and above the content provided in Part 1 of Form ADV and encompass a more detailed and thorough discussion of the ongoing business activities of a PE adviser.<sup>5</sup> While some recent studies use Part 1 of Form ADV (e.g., Easton, Larocque, Mason, and Utke 2023a, b; Gaver, Mason, and Utke 2023), to our knowledge, we are the first to use Part 2 of Form ADV in an academic study.<sup>6</sup>

We measure the level of ESG disclosure in each brochure, including separate Environmental, Social, and Governance disclosures, for 712 unique advisers managing 16,294 separate funds after restricting the sample to advisers with non-missing variables and matching to Preqin, a reliable source of PE data (e.g., Harris et al. 2014). To measure the ESG information disclosed in each brochure, we implement FinBERT, a large language model that prior literature suggests outperforms other methodologies in classifying financial information (see Huang, Wang, and Yang 2023). A key benefit of FinBERT is that it considers ESG-related topics in the context of a sentence. Consequently, we can also identify the tone of

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<sup>3</sup> Dodd-Frank allows multiple exemptions from certain requirements of Dodd-Frank, including the requirement to file of Part 2 of Form ADV. See Section 3 for additional discussion of the exemptions.

<sup>4</sup> Form ADV, Part 2 detailed instructions can be accessed at: <https://www.sec.gov/about/forms/formadv-part2.pdf>.

<sup>5</sup> For example, the most recently filed SEC Form ADV, Part 1 of Highland Capital Management, a Dallas-based registered investment adviser, makes no mention of a crucial aspect of their firm: the recent filing of Chapter 11 bankruptcy. However, this information was disclosed in ‘Item 2: Material Changes’ of Highland Capital Management’s brochure filed as Part 2 of Form ADV. It is also worth noting that Highland Capital has virtually no website, with no information provided to current or potential investors.

<sup>6</sup> One law review article, Coakley and Allen (2011), generally discusses the regulatory background and adoption of Part 2 of Form ADV along with the various components of this newly required disclosure.

each ESG disclosure (i.e., negative or positive), which is not possible using a traditional bag-of-words approach that ignores context.

We find significant variation in PE advisers' ESG disclosure, with a notable increase in the disclosure of environmental content over time. About 29% of the Form ADV Part 2 filings in our sample contain at least one environmental sentence, which nearly monotonically increases in our sample from a low of 21% in 2012 to a high of 49% in 2021. Next, we examine fundraising outcomes. We do not find reliable evidence that social or governance disclosures impact the likelihood of raising new funds or the amount of capital raised. However, we find a significant negative relation between the discussion of environmental topics and an advisers' fundraising ability. Specifically, a one standard deviation increase in the number of environment-related sentences used in a brochure reduces the likelihood of raising a new fund by 2.9% and reduces the amount of capital raised by 13.78%. These results are robust to considering adviser and fund characteristics including performance. Our results are also robust to including adviser fixed effects and when excluding controls, outliers, and the years impacted by Covid-19.<sup>7</sup> Supplemental results suggest the disclosure of information related to climate change and natural capital are the main driver of the results.<sup>8</sup> Altogether, we find robust evidence suggesting discussion of environmental topics is negatively associated with PE advisers' ability to raise capital.

To test our second research question regarding what specific ESG information investors respond to, we examine the tone of ESG disclosures. Using FinBERT, we identify whether each ESG sentence identified in Part 2 of Form ADV has a negative, positive, or neutral tone. We expect that negative toned ESG sentences more likely relate to ESG risks whereas as positive toned ESG sentences more likely relate to the discussion of the ESG investment activities of the adviser. We find our main inference, that environmental disclosure is negatively associated with fundraising, is primarily attributable to

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<sup>7</sup> Our results are also robust (untabulated) to excluding PE advisers investing in industries, based on Preqin listings, that are directly environmental-related (e.g., clean technology, renewable energy) or in industries typically viewed as environmentally damaging (e.g., oil & gas, mining).

<sup>8</sup> Natural capital refers to natural resources such as plants, animals, air, water, soil, and minerals that provide value to humankind (United Nations 2023).

environmental disclosures with a negative tone. This evidence suggests (1) PE advisers are forthcoming in disclosing environmental risks to some degree, and (2) investors appear averse to environmental risks as evidenced by their response. These results are consistent with survey evidence that 72% of LPs in North America would walk away from a PE investment because of risk mitigation (Lino et al. 2022). In contrast, we find no evidence that positive environmental information is associated with fundraising.

To further understand why investors respond to environmental information disclosed by advisers, we conduct cross-sectional analyses based on investors' home state's support for ESG activities. In doing so, we analyze whether investors respond to environmental information differently depending on the political environment the investor operates in. We expect that investors will continue to respond to disclosed environmental risks regardless of the political environment. However, it is possible that investors in states with anti-ESG sentiment are averse to ESG investment disclosures, whereas investors in pro-ESG states are more likely to place capital with advisers discussing ESG investments. To test these predictions, we identify 21 anti-ESG states based upon these states' joint comment letter filed on August 16, 2022, stating a strong rebuke of the SEC's proposed rule on ESG disclosures for investment advisers (SEC File No. S7-17-22). As an additional test, we also identify states by political party leaning where LPs in more Democrat-leaning states are more likely to favor responsible investing and therefore ESG-related ideals whereas LPs in more Republican-leaning states are less likely to be supportive of ESG.

As predicted, the negative reaction to negatively-toned environmental disclosure does not vary significantly based on LPs' locations. Interestingly, we find a significantly negative response (i.e., lower fundraising) when PE advisers disclose *positive* environmental information to LPs in anti-ESG or more Republican-leaning states. This suggests investors in states opposing ESG initiatives likely respond to the disclosure of environment risks but also seek to avoid PE advisers incorporating environmental factors into their investment decisions. In stark contrast, we find PE advisers are more likely to raise a new fund when disclosing positive environmental information to LPs in pro-ESG or more Democratic states. These results provide interesting evidence consistent with LPs responding to the disclosure of environmental risks but

also, perhaps more importantly, that the effect of environmental investment disclosure on capital formation is conditional on LPs' political views.

We contribute to existing literature along several dimensions. First, our paper adds to the burgeoning literature on ESG disclosure in private equity markets. In a concurrent working paper, Boni, Hendrikse, and Joos (2022) use Prequin's 37 ESG indicators as of a point in time (i.e., September 2022) to examine determinants of ESG disclosure across PE advisers and advisers of private debt funds. The authors find generally low levels of ESG disclosure by these firms. In another concurrent working paper, Abraham, Olbert, and Vasvari (2024) measure ESG information disclosed on PE advisers' websites and find that advisers with higher ESG disclosure achieve better environmental outcomes in their portfolio companies (e.g., reduced emissions and better workplace safety) and raise funds more quickly, consistent with ESG investing being value-adding for investors. In contrast, we find that environment-related information disclosed in mandatory SEC filings leads to a *reduction* in advisers' ability to raise capital, but that this response varies with disclosure tone and LPs political situation.<sup>9</sup> Our paper complements Abraham et al. (2024) by providing nuanced evidence suggesting that the impact of ESG disclosure on fundraising is conditional on the content of the disclosure and investors' political views.<sup>10</sup> Further, the disclosure channel we examine (Form ADV Part 2) is distinct from those in other studies given it is (1) provided directly to all prospective and current investors and (2) regulated by the SEC.

Second, our paper extends the literature on factors affecting PE advisers' ability to raise capital. Early studies find the performance of funds affects subsequent fundraising efforts (e.g., Kaplan and Schoar 2005; Chung et al. 2012; Hochberg et al. 2014). More recent work examines factors beyond prior fund

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<sup>9</sup> To ensure our results are attributable to the ESG-related information disclosed on PE advisers' websites, we obtain website data from the authors of Abraham, Olbert, and Florin (2024). Our results are robust to controlling for the ESG disclosures on PE adviser websites (untabulated). We thank Marcel Olbert for providing the data.

<sup>10</sup> A related paper, Liang, Sun, and Teo (2023), examine hedge funds and find evidence of greenwashing showing hedge funds that endorse the United Nations Principles for Responsible Investment (PRI) attract greater fund flow but underperform. Importantly, hedge funds differ substantially from PE funds along several dimensions with the most notable being hedge funds generally trade public stocks and allow investors to enter and exit funds at will (see Gaver, Mason, and Utke (2023) and Borysoff et al. (2023) for additional discussion). As a result, the PE funds we study are distinctly different from hedge funds with previous results unlikely to generalize to PE funds.



performance. For example, Jiang et al. (2023) finds that advisers' previous misconduct inhibits the ability to raise capital. We extend this literature by examining whether PE advisers' ESG information, a textual and non-financial disclosure, attracts or deters capital investment from LPs.

Finally, our study is related to the literature examining capital flow in mutual funds related to ESG (e.g., Hartzmark and Sussman 2019; Andrikogiannopoulou, Krueger, Mitali, and Papakonstantinou 2022; Amel-Zadeh, Lusterms, and Pieterse-Bloem 2022). This work generally finds that mutual fund investors value sustainability, as measured by favorable fund flows to ESG funds. While seemingly related, PE funds and mutual funds are distinctly different. PE funds face unique agency conflicts due to a high degree of asymmetric information and operate in a lightly regulated environment as compared to mutual funds (see Borysoff et al. 2023 for a discussion). As a result, we add to this stream of literature by identifying the impact that ESG disclosure has on investors in a unique market that is generally opaque and lacks regulatory oversight.

## **II. Institutional Background**

PE funds are financial intermediaries, organized as partnerships, where advisers, or general partners (GPs), raise capital from external investors, or limited partners (LPs), to be deployed through the purchase of controlling stakes in portfolio companies, in the case of buyout funds, or smaller stakes of younger, riskier firms in the case of venture capital funds (e.g., Kaplan and Strömberg 2009; Phalippou 2009). During fundraising, LPs make capital commitments to a PE fund until the fund's target commitments are reached at which point fundraising is concluded and the fund is 'closed'. Once a fund is closed, new or existing LPs are unable to make additional capital commitments and are generally unable to exit their investment. As result, LPs are typically locked-in to their investment for the duration of the fund, which is commonly 10 years with the option of an extension of two to four years. LPs can, however, exit their investment in a PE fund through a secondary market transaction in the event they find a replacement LP and the GP agrees to the exit transaction. It is important to note that such secondary market transactions typically come with a significant discount to the PE fund's asset value (Nadauld et al. 2019; Mason and Utke 2023a, b). In addition, LPs have limited voting rights in PE funds, regardless of ownership percentage (e.g., Gaver et al.

2023; Easton et al. 2023a, b), which presents unique agency issues in PE funds compared to those found in public markets. Borysoff et al. (2023) discuss the unique organizational structure of PE funds and the agency issues that arise.

To partially mitigate agency costs, PE funds commonly use a “2 and 20” compensation structure where GPs receive a fixed portion equal to 2 percent of the capital committed to the fund and an incentive fee component, which is equal to 20 percent of the profits of the fund over and above a set benchmark. The incentive portion of a GP’s compensation is known as ‘carried interest’ and provides an incentive for GPs to perform well and exceed the benchmark (Kaplan and Strömberg 2009). In addition, GPs have incentives to perform well in the current fund to attract LP interest when raising capital for future funds, which increases GPs’ future fees and incentive compensation (e.g., Barber and Yasuda 2017; Brown et al. 2019; Pham et al. 2021). Importantly, a GP’s incentive to raise future funds and increase future fee income is as meaningful as a GP’s existing carried interest incentive (Chung et al. 2012).

Because PE funds are closed funds with a fixed term, GPs must raise new funds to stay in business (Arcot et al. 2015). GPs generally raise new funds every three to six years. Once fundraising efforts begin, GPs continue to fundraise for a period between three months and two years at which point the fund is closed. The necessity of fundraising by a GP to remain in business, coupled with GPs’ compensation incentives related to fundraising discussed above, emphasize the importance GPs place on fundraising activities.

Existing studies have found several factors to influence a GP’s ability to fundraise. Most notable is how the performance of funds managed by a GP significantly affects subsequent fundraising efforts (e.g., Kaplan and Schoar 2005; Chung et al. 2012; Hochberg et al. 2014). More recently, Jiang, Mason, Qian, and Utke (2023) have found the disclosure of negative information, specifically misconduct reported by the GP, to inhibit a GP’s ability to fundraise. We are careful to account for both performance and GP misconduct in our empirical analyses. Extending this work, we examine a new dimension that potentially affects GPs’ fundraising activity: the disclosure of ESG related information.

### III. Hypothesis Development

PE advisers' disclosure of ESG information might improve the likelihood that PE advisers successfully raise funds for at least two reasons. First, similar to other financial intermediaries such as mutual funds, PE funds face agency conflicts due to asymmetric information between GPs (i.e., PE fund advisers) and LPs (i.e., outside investors) (e.g., Leland and Pyle 1977; Diamond 1984; Phalippou 2009; Metrick and Yasuda 2010, 2011; Crain 2018; Gaver et al. 2023). However, PE funds face even higher agency costs than mutual funds due to their unique organizational structure, inherent opacity, and the lightly regulated nature of the PE market (see Borysoff et al. 2023 for a discussion). Prior evidence suggests that PE advisers provide financial information to mitigate agency costs (e.g., Metrick and Yasuda 2011; Johan and Zhang 2016). Recent studies suggest that non-financial disclosures by PE advisers can also impact their new fund formation. For example, Barber, Morse, and Yasuda (2021) suggest venture capital LPs seek particular GPs for nonpecuniary benefits such as meeting their social investing preferences. Jiang et al. (2023) find evidence that governance factors, specifically misconduct by the GP, inhibits their ability to raise funds. Given nearly 75% of private equity (PE) investors globally claim to consider ESG factors when deploying capital in private funds (Lino et al. 2022; McCahery et al. 2022), ESG disclosures should reduce information asymmetry and lead to an increased ability to fundraise.

Second, PE investors are most commonly institutional investors, and prior studies suggest that ESG disclosures impact institutional investors' capital allocation decisions in other settings. Gibbons (2023) finds evidence suggesting institutional investors increase their investment in publicly traded firms making environmental and social disclosures following the passage of mandatory disclosure requirements across 40 different countries. Cohen, Kadach, and Ormazabal (2023) find that institutional investors increase investment in publicly traded firms that disclose climate risks and divest from firms that disclose high carbon emissions. In the context of mutual funds, Hartzmark and Sussman (2019) find mutual fund flow increases for mutual funds viewed as investing more sustainably and socially responsible. Further, Andrikogiannopoulou et al. (2022) find mutual fund flow increases in response to ESG information

disclosed in mutual fund prospectuses. To the extent these results generalize to the private equity setting, ESG disclosure should positively affect PE adviser fundraising.

However, there are at least three reasons why no relation or a negative relation between ESG disclosures and fundraising could exist. First, PE advisers' ESG disclosures may not be informative to investors. The ESG information we examine is disclosed in Form ADV Part 2, which is a mandatory disclosure and is regulated by the SEC. For example, Form ADV Part 2 requires advisers to explain "material risks" to investors. Using publicly traded firms, Cazier et al. (2021) find boilerplate and lengthier risk factor disclosures benefit the firm rather than investors in litigation. Similarly, Form ADV Part 2 disclosures may be motivated to comply with regulation or reduce litigation costs rather than to reduce information asymmetry. To the extent that ESG disclosures do not provide new information or are motivated by regulation or litigation concerns, ESG disclosures are likely to have a negative or no impact on fundraising.

Second, the ESG disclosures we study could convey bad news to investors. As discussed above, Form ADV Part 2 disclosures are mandatory and include information related to material risks. Accordingly, PE advisers may disclose information such as high carbon emissions or environmental business risks to their investment strategy. In this case, ESG disclosures may reduce information asymmetry and simultaneously hinder an adviser's fundraising ability.

Lastly, some investors view ESG activity as value-destroying rather than value-additive. Further, even investors who claim they consider ESG factors could be engaging in greenwashing, the term used to define the practice of claiming to adopt sustainable investment practices for public relations or political reasoning rather than actually considering ESG factors. Because institutional investors have a fiduciary duty to their clients (e.g., individuals invested in a public pension LPs), PE investors may not consider or even be precluded from considering ESG factors when making investment choices.

In sum, there are plausible reasons to expect a positive, negative, or no relation between ESG disclosure and PE advisers' ability to fundraise. Consequently, it is an empirical question, and we state our first hypothesis in the null form as follows:

**H1:** *ESG disclosure has no effect on private equity advisers' fundraising.*

To the extent we find evidence of a positive or negative relation between ESG information and PE fundraising, it remains unclear what specific information investors are responding to and why. We form two additional hypotheses related to the specific tone of GPs' ESG disclosure. Observing a negative relation between GPs' disclosure of ESG information and the likelihood of fundraising in our baseline analysis could be due to two reasons. First, any observed negative relation could be a result of PE advisers discussing ESG related risks or negative ESG related outcomes associated with their investments. In such a case, investors may be more likely to avoid placing capital with these advisers. As a result, we would expect to find negative relation between PE adviser's ability to fundraise and the disclosure of negative ESG information. It is worth noting that investors could favorably view the disclosure of negative ESG information and deem this action by PE advisers as being more transparent or forthcoming regarding the PE fund's activities. In such a case, we may observe a positive relation between negatively toned ESG information and the ability to fundraise. However, we believe this to be an unlikely outcome and state our second hypothesis as follows:

**H2a:** *Negative ESG disclosure lowers private equity advisers' ability to fundraise.*

A second reason that we may observe a negative relation between ESG disclosure and the ability to fundraise in our baseline tests is because investors choose to avoid PE advisers making ESG-related investments. In such a situation, investors are likely responding to an adviser's positive discussion of ESG-related investment opportunities as opposed to negative outcomes or ESG risks. Therefore, we may expect investors to avoid investing with PE advisers making more positively toned ESG disclosures. Alternatively, it is possible that PE investors are more likely to invest with PE advisers discussing their ESG-related investment activities. Barber et al. (2021) suggests investors in buyout funds seek to make 'impact' investments with PE advisers that are investing socially responsible regardless of returns. Similarly, Gibbons (2023) finds investors increase investments in public firms based on their preferences for making environmental and social investments. As a result, it is unclear whether we expect a positive or negative

relation between PE fundraising and positively toned ESG disclosure. Therefore, we state the following hypothesis related to positively toned ESG disclosure in the null form:

**H2b:** *Positive ESG disclosure has no effect on private equity advisers' fundraising.*

### **III. Data and Research Design**

#### **3.1 Data and Variable Construction**

We rely on three sources of data: (1) Form ADV Part 2 for textual measures of ESG disclosure and tone, (2) Preqin for new fund formation data, fund performance, and LP characteristics, and (3) Form ADV Parts 1 for controls related to PE adviser- and fund-characteristics. Part 2 of Form ADV, which is commonly referred to as a PE advisers' 'brochure' and is akin to a prospectus for a mutual fund or public equity, is required to be provided to potential and existing investors, as well as annually filed with the SEC, by all non-exempt registered PE advisers since 2012 following the passage of Dodd-Frank (see SEC Release IA-3060).<sup>11</sup> Brochures are to be written in narrative format and in 'plain English' with the intent to "promote effective communication between you [the GP] and your clients [LPs]" according to Form ADV instructions. Part 2 of Form ADV contains eighteen specific items required to be disclosed, including specific investment strategies, risks, and compensation arrangements, which are to be provided to investors annually within 120 days of year-end.<sup>12</sup>

We gather all Form ADV, Part 2 filings from 2012 to 2022 from the SEC's FOIA data archive.<sup>13</sup> We use FinBERT, as developed by Huang et al. (2022), to identify ESG-related sentences in each Part 2 filing. Specifically, we implement the 9-class ESG FinBERT model in Huang et al. (2022) to classify sentences as either non-ESG or one of eight ESG-topics: including three environmental topics (climate change, natural capital, and pollution & waste), three social topics (human capital, product liability, and

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<sup>11</sup> Dodd-Frank provides for multiple exemptions that investment advisers can qualify for in order to be exempt from certain requirements of Dodd-Frank, which includes the filing of Part 2 of Form ADV. To be exempt, advisers must manage only venture capital funds or have less than \$150 million in assets under management. Therefore, our sample of non-exempt advisers is generally large advisers that manage funds other than venture capital.

<sup>13</sup> Part 2 filings can be downloaded in pdf format. We download each pdf file, convert it to text, clean the text, and then tokenize each sentence for processing with FinBERT.

community relations), and two governance topics (corporate governance and business ethics). In addition, FinBERT reports a confidence value ranging from 0 to 100% for each classified sentence. We require each ESG topic to be classified with at least a 90% confidence.<sup>14</sup> Finally, we map the eight ESG subtopics into either Environmental, Social, or Governance topics, and divide by the total number of sentences in the respective filing to measure the percentage of sentences classified as environmental (*Environment%*), social (*Social%*), and governance (*Governance%*). Huang et al. (2022) find FinBERT significantly outperforms other methods of textual analysis in classifying content into ESG and sentiment categories. However, in supplemental tests, we use an alternative bag-of-words approach using multiple different word dictionaries to identify ESG disclosures.

We next apply the sentiment FinBERT model to classify each sentence as either negative, positive, or neutral, which allows us to answer our second research question regarding what specific ESG information investors respond to. We combine the ESG and sentiment classification for each sentence to identify ESG sentences that are negative in tone (*Env\_Neg%*, *Soc\_Neg%*, and *Gov\_Neg%*) and those that are positive in tone (*Env\_Pos%*, *Soc\_Pos%*, and *Gov\_Pos%*). The ability to measure the tone of ESG disclosures is a significant advantage of using sentence-level classifications rather than a dictionary-based approach when identifying ESG-related information. Appendix B provides example sentences for each ESG-Tone classification. We also account for differences in GPs' Part 2 disclosure choices unrelated to ESG factors. To do so, we include a measure of the number of sentences (*SentCount*) and the overall sentiment (*Tone*) of each Part 2 filing where *Tone* is calculated as the percent of sentences classified as positive minus the percent of sentences classified as negative.

We also require data from Part 1 of Form ADV and Preqin. Part 1 of Form ADV contains annual information for each PE adviser, as well as information related to each private fund managed by the PE adviser (e.g., financial reporting choices, auditor, ownership characteristics) (See Gaver et al. 2023). Preqin is one of the leading providers of PE fund data for both academics and practitioners (e.g., Harris et al. 2014,

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<sup>14</sup> In untabulated results, we both relax and tighten this confidence interval and find generally consistent results.

Kaplan and Lerner 2016). We use several different datasets provided by Preqin. First, we gather fund-level information such as fund size, fund commitments, and vintage. Second, the performance information we use comes from Preqin's Performance Database, which provides final fund performance, fund type, as well as vintage. Finally, we use Preqin's Investors Portfolio Database to identify specific capital commitments by each LP as well as their location.

We compute our primary dependent variables capturing PE advisers' fundraising activity using Preqin. First, we create an indicator variable, *NewFund\_Ind*, which takes the value of 1 if an adviser raises a new fund in the current year based on the date of the first capital call of the fund in Preqin's fund detail dataset. This variable takes the value of zero for any year where the adviser does not raise a new fund. Our second fundraising variable, *NewFund\_Pct*, is the ratio of the total number of new funds formed by an adviser in a given year scaled by the total number of funds managed by the adviser in the previous ten years. Finally, we examine a third variable, *NewFund\_Dollars*, which is the natural logarithm of one plus the total capital raised in a PE adviser's new funds. Importantly, both *NewFund\_Pct* and *NewFund\_Dollars* account for differences in the materiality of new funds raised by an adviser.<sup>15</sup>

Throughout our analyses, we control for numerous adviser and fund-level characteristics that are derived from both Form ADV Part 1 and Preqin information. We account for the average performance of each adviser following Chung et al. (2012), Barber et al. (2021), and Jiang et al. (2023). More specifically, we use Preqin data to compute performance (*Performance*) as the average multiple of all of the GP's past funds that have at least 5 years of history prior to the current year  $t$ . Consistent with previous work (e.g., Jiang et al. 2023), we measure performance using the overall PE market performance when fund-level performance data is missing to minimize our sample loss. We measure market performance as the average multiple for all funds with at least 5 years of history. We also use Preqin to compute the years since the

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<sup>15</sup> In untabulated tests, we also examine the size of new funds formed using a ratio of total capital commitments of new funds scaled by the total commitments of all funds in the last 10 years. Our results are generally consistent with the results presented here.



adviser last raised a new fund (*YrSinceLastFund*) to account for variation in PE advisers' likelihood of fundraising since the last fund was raised.<sup>16</sup>

We also account for several adviser- and fund-level characteristics obtained from Part 1 of Form ADV. We consider adviser size (*LnAUM*) based on the natural logarithm of the total assets under management according to item 5 of Part 1 of Form ADV. We control for financial reporting choices and the strictness of the financial information provided to investors with the variables *Big4* and *GAAP*, which are indicator variables that take the value of 1 if adviser *i*'s fund *j* uses a Big 4 auditor (i.e., Deloitte, Ernst & Young, KPMG, or PwC) or chooses to use GAAP reporting, respectively, and zero otherwise.

Next, we include fund-level ownership characteristics, which capture investor's demand for information and potential monitoring (e.g., Easton et al. 2023a; Gaver et al. 2023). First, we include *LnOwner*, which is the natural log of the number of owners in fund *j*. Next, we include variables *OwnedRelated*, *OwnedNonUS*, and *OwnedFoF*, which measure the percentages of the fund owned by the PE adviser itself or its affiliates, the percentage owned by non-US entities, and the percentage owned by other private funds, known as fund-of-funds, respectively. In addition, because buyout and venture capital funds have different risk profiles with VC funds tending to be riskier, we account for fund type by including *VCFund*, which is an indicator taking the value of 1 if the fund is a VC fund, and zero otherwise. Similarly, we include *FundofFunds*, which is an indicator taking the value of 1 if the fund is a fund of funds (i.e., invests in other private funds) to further account for their different risk profile from other fund types. Further, we include the variable *LnMinInvest*, which is the natural logarithm of the fund's minimum investment amount in millions. A larger minimum investment amount requires more LP investment to participate in the fund.

Finally, we also include the variable *Misconduct*, which is an indicator taking the value of 1 if the GP has disclosed previous misconduct on Question 11 of Part 1 of Form ADV. Jiang, et al. (2023) find

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<sup>16</sup> Following Jiang et al. (2023), we also estimate our models using fixed effects based on the number of years since a PE adviser's last fund raised to account for variation in the likelihood of fundraising over time in addition to calendar year fixed effects (untabulated). We find consistent results as those presented here.

advisers with previous misconduct have a lower likelihood of raising a new fund. Because our research methodology uses an adviser-year unit of observation, each fund-level variable is first constructed at the fund-level. We then compute a weighted average measure for each adviser  $i$  at year  $t$  by weighting the fund-level variables for all funds managed by adviser  $i$  in year  $t$  by fund size. Additional details regarding computation and description for all variables are in Appendix A.

### 3.2 Sample Selection and Descriptives Statistics

Table 1 presents our sample selection process. Consistent with existing literature (e.g., Barber and Yasuda 2017), we restrict our sample to only include advisers of buyout funds or venture capital (VC) funds. Overall, we identify 11,030 adviser-year observations with Form ADV Part 1 filings for advisers who manage buyout or VC funds and are not exempt from filing Part 2. These observations span 1,851 unique advisers and cover 31,303 unique funds. Of these, we are unable to identify Part 2 filings for 1,985 adviser-year observations. We lose an additional 3,966 adviser-years after merging our data with Preqin and restricting our data for non-missing Preqin data and other controls. Our final sample includes 5,079 adviser-years, comprised of 712 unique advisers that manage 16,294 distinct funds.

Table 2 provides descriptive statistics for our sample. The average Part 2 filing in our data has 360 sentences, of which 27.46% are classified as governance, 1.65% are classified as social, and 0.17% are classified as environmental. The high number of governance-related sentences is not surprising given the many required governance-related topics to be discussed by GPs in their brochures to investors. In contrast, social- and environmental-related disclosures appear less frequently. For example, the median firm has no discussion of environmental-related topics. These preliminary findings contrast with the results in the working paper by Abraham, Olbert, and Vasvari (2022), where the authors document very low governance related information being disclosed on PE advisers' websites whereas social and environmental information is discussed more frequently. This suggests PE advisers' brochures, which are required to be disclosed to investors and filed with the SEC, are a distinct and different disclosure channel when compared to company websites (e.g., Skinner 2023). In addition, we find the tone of our sample filings is negative on average, which is likely explained by the nature of the required disclosures (e.g., risk disclosures). ESG-specific

disclosures also tend to be negative in tone as the average and median values of *Env\_Neg%*, *Soc\_Neg%*, and *Gov\_Neg%* exceed the average and median values of *Env\_Pos%*, *Soc\_Pos%*, and *Gov\_Pos%*, respectively. Turning to our primary dependent variables, we find the average of *NewFund\_Ind* is 0.15 suggesting 15% of PE advisers raise new funds each year, on average. The average *NewFund\_Pct* is 0.08, which suggests the average number of new funds raised is 8% of the number of funds the same adviser raised in the prior 10 years. Regarding controls, we find the average PE adviser manages assets of 1.3 billion (or 20.98 logged), 5% of our sample are advisers of venture capital funds, 96% of funds report GAAP financial statements, 67% are audited by Big 4 auditors, and about half of the capital raised is from either related parties (8.38%), foreign investors (24.68%), or fund of funds (17.15%). Lastly, misconduct is disclosed in 4% of the sample.

Figure 1 shows the time trend of ESG reporting activity by topic (environmental, social, and governance). Figure 1A shows the trend in the percentage of brochures with at least one mention by category. Two observations are noteworthy. First, nearly all brochures in our sample contain at least one governance and social mention. This is not surprising given the required content in Form ADV part 2. Second, there is a significant increase in brochures with at least one mention of environmental topics from 21% in 2012 to 49% in 2021. This is consistent with the increase in the discussion of environmental topics on company websites found in Abraham, Olbert, and Vasvari (2022). Figure 1B shows the trend in the average number of sentences by topic for the entire sample. Given the large number of governance-related content, we plot governance percent on the right axis. We find a decrease in governance sentences as a percent of total sentences from 2012 to 2021, but an increase in social and environmental sentences over the same time period. In addition, to shed light on how meaningful these changes are relative to 2012 levels as a baseline, Figure 1C plots changes in the average value of each variable relative to 2012 levels. We find the average number of environmental sentences is about twice as large in 2021 compared to 2012. Overall, the average number of brochure sentences that relate to governance and social issues is high in all years, and the average number of sentences related to environmental issues is smaller but growing over time, especially in the later years of our sample.

### 3.3 Research Design

Our first hypothesis predicts that ESG disclosure has no effect on private equity advisers' likelihood of fundraising. To test this hypothesis, we regress new fund formation on ESG disclosure controlling for various PE adviser- and fund-level factors that might confound results and year fixed effects. Specifically, we estimate the following regressions:

$$NewFund_{i,t} = \alpha_0 + \alpha_1 ESG\%_{i,t} + \sum \alpha Controls + YearFE + \varepsilon_{i,t} \quad (1)$$

Where  $i$  denotes PE adviser and  $t$  denotes year. *NewFund* is either *NewFund\_Ind*, *NewFund\_Pct*, or *NewFund\_Dollars*. *ESG%* is either *Environment%*, *Social%*, or *Governance%*. We estimate results separately for each *ESG%* variable and then again with all three *ESG%* variables in the same model. A positive coefficient on *ESG%*, our explanatory variable of interest, is consistent with a positive relation between the degree of ESG disclosure made by a PE adviser to its investors and the PE advisers' success in raising new funds, and vice versa.

*Controls* is a set of control variables including ADV Part 2 length (*SentCount*), ADV Part 2 sentiment (*Tone*), logged PE adviser size (*LnAUM*), the PE adviser's historical performance (*Performance*), whether the funds are audited by Big-4 firms (*Big4*), whether the funds report GAAP financial statements (*GAAP*), years since the PE adviser last raised a new fund (*YrsSinceLastFund*), whether the funds are funds-of-funds (*FundofFunds*), whether the funds are VC funds (*VCFund*), the logged minimum investment required from LPs to participate (*LnMinInvest*), the logged number of owners in each fund (*LnOwners*), the percentage of the fund investment from related parties (*OwnedRelated*), the percentage of fund investment from foreign LPs (*OwnedNonUS*), the percentage of fund investment owned by fund-of-funds (*OwnedFoF*), and whether the PE adviser reports misconduct in Form ADV Part 1 (*Misconduct*).<sup>17</sup> It is important to note each adviser often manages multiple different funds. In our sample, each adviser manages 22.8 funds (16,294 funds managed by 712 advisers). As a result, to measure fund-level characteristics at

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<sup>17</sup> We estimate results without any controls as a robustness test (tabulated in Table 9).

the PE fund adviser level, we compute the weighted average of each fund-level characteristic at the adviser-year level using fund size as the weight. All variables are defined in section 3.1 and appendix A.

We measure Form ADV Part 2 and dependent variables concurrently in year  $t$  since these brochures are required to be filed by the end of March and must be provided to prospective investors before they commit capital. Said differently, we expect, based on the filing requirements, that each LP who participates in year  $t$  was informed before they made their investment decision by the brochure filed in March of year  $t$ . We measure other control variables at time  $t-1$  because they generally relate to fund-characteristics that mechanically relate to new funds formed in year  $t$ . In addition, we include year fixed effects, winsorize all continuous variables at the 1<sup>st</sup> and 99<sup>th</sup> percentiles annually, and cluster standard errors by PE adviser. We estimate specifications with an indicator dependent variable using the linear probability model.

Our second hypothesis investigates whether the impact of ESG disclosures is conditional on the sentiment of the disclosure to shed light on *why* investors are responding to ESG disclosures. To do so, we separate ESG disclosures that are negative in tone from those that are positive in tone and estimate the following regression model:

$$NewFund_{i,t} = \alpha_0 + \alpha_1 ESG\_Neg\%_{i,t} + \alpha_2 ESG\_Pos\%_{i,t} + \sum \alpha Controls + YearFE + \varepsilon_{i,t} \quad (2)$$

Where  $ESG\_Neg\%$  is either  $Env\_Neg\%$ ,  $Soc\_Neg\%$ , or  $Gov\_Neg\%$ . Similarly,  $ESG\_Pos\%$  is either  $Env\_Pos\%$ ,  $Soc\_Pos\%$ , or  $Gov\_Pos\%$ . Other than partitioning ESG disclosures by sentiment, Equation (2) is estimated in the same way as Equation (1). As discussed in section 3, we predict a negative coefficient on  $ESG\_Neg\%$ , which would be consistent with LPs responding negatively to disclosures of ESG-related business risks. We make no directional prediction for the coefficient on  $ESG\_Pos\%$ . If investors avoid ESG-focused investment strategies, then we would expect a negative coefficient on  $ESG\_Pos\%$ . Conversely, if investors value ESG-focused investment strategies, then we expect a positive coefficient on  $ESG\_Pos\%$ .

## IV. Results

### 4.1 Main Results – ESG Disclosure

Table 3 reports pooled cross-sectional estimates of Equation (1) and our test of our first hypothesis. We examine the binary measure of new fund formation (*NewFund\_Ind*) in the first four columns, the continuous measure of new fund formation (*NewFund\_Pct*) in the next four columns, and the natural logarithm of new funds raised (*NewFunds\_Dollars*) in the last 4 columns. We find a negative and significant coefficient on *Environment%* in column 1 (coefficient = -0.052; t-stat = -6.55), which suggests disclosure of environmental topics in Form ADV Part 2 is associated with a lower likelihood of raising a new fund. In terms of economic magnitude, a 1 standard deviation increase in environmental disclosure (sd = 0.56) is associated with a reduction in the likelihood of raising a new fund of 2.9%. Interestingly, we find no statistically significant coefficients on *Social%* or *Governance%*. The magnitude of the coefficient on *Environment%* is stable in column 4 (coefficient = -0.051; t-stat = -6.27) when estimating the effects of all three ESG categories jointly. Inferences are similar in columns 5 through 8 using the dependent variable *NewFund\_Pct* and again in columns 9 through 12 when analyzing the amount of capital raised using *NewFund\_Dollars*. Specifically, we find a one standard deviation increase in the disclosure of environmental information is associated with a 1.5% reduction in new funds raised as a percent of funds raised in the prior 10 years and a 13.76% reduction in dollars raised (estimated coefficients multiplied by the standard deviation of *Environment%* of 0.56). This reduction in dollars raised is equivalent to \$289,000 (\$22.87 million) at the mean (90<sup>th</sup> percentile) for advisers disclosing environmental information. Further, coefficients on control variables are generally as expected. For example, better performing funds have a higher likelihood of forming new funds. Interestingly, we also find that higher number of sentences disclosed in Form ADV Part 2 increases the likelihood a PE adviser is able to form a new fund. This is consistent with information disclosed in the brochure reducing agency costs from asymmetric information and in turn enabling PE advisers' fundraising efforts. Consistent with Jiang et al. (2023), we also document a lower likelihood of raising new funds for PE advisers that report misconduct.

Overall, the results in Table 3 suggest that environmental disclosures in PE brochures contain information that is relevant to LPs investment decisions, and that disclosing environmental information is associated with a *lower* likelihood of raising new funds. Conversely, we find no evidence that social or governance information is associated with differences in fund raising outcomes. We acknowledge some limitations to our analysis that potentially limits drawing stronger conclusions. First, like most disclosure studies, our tests are unable to determine whether LPs are being directly informed by Form ADV Part 2 disclosures or learning about this information elsewhere. It is possible that the content of the brochures, including environmental risks and strategies, is included in the more private pitchbook used by PE advisers when meeting with LPs in the fundraising process. However, PE advisers' brochures are required to be provided directly to all prospective and existing investors before they commit capital, which provides some mitigation to this concern. Second, we are unable to separate the real effects of environmental activity from the effects of disclosure of the activity. Notwithstanding these limitations, our results at least suggest that PE advisers' environmental disclosures capture relevant and useful information for investors that ultimately affects PE advisers' ability to raise capital.

#### **4.2 Main Results – Conditional on ESG Disclosure Tone**

Our initial results suggest that disclosures related to environmental topics are negatively associated with the likelihood of fundraising. As discussed in section 3, the negative relation could be explained by LPs responding to the disclosure of ESG-related business risks, or it could be a result of LPs' aversion to the discussion of ESG-focused investment strategies. We estimate equation (2) to help distinguish between these explanations and present the results in Table 4. Controls are included in the model but not reported for parsimony.

In column 1, we find a negative and significant coefficient on *Env\_Neg%* (coefficient = -0.121; t-stat = -5.09) but an insignificant coefficient on *Env\_Pos%* (coefficient = -0.037; t-stat = -0.38). This pattern is similar when we include environment, social, and governance in the same model (column 4) and when we use *NewFund\_Pct* (columns 5 through 8) and *NewFund\_Dollars* (columns 9 through 12) as the dependent variable. We do not find consistent relations between social or governance related content and

new fund formation. Overall, this pattern of results is consistent with LPs responding negatively to PE advisers disclosing environmental risk, but not responding (positively or negatively) to LPs disclosing environmental-based investment strategies.

## **V. Additional Analyses**

### **5.1 Results on Political Affiliation**

As discussed in section 3, it is unclear ex ante how investors respond to disclosures of information related to environmental investments (i.e., environmental disclosures with a positive tone). It is possible that some investors are averse to environmental-focused investments while others value these investments. While we find no evidence in our main analyses that PE advisers' discussions of environmental topics with a positive tone have a significant relation to fund raising, we further explore this possibility by partitioning PE advisers based on how their investors perceive ESG-related investment activities. More specifically, we use Preqin data to identify the state that each investor is located in, and then proxy for each investor's sentiment towards ESG activity based on the perception of ESG in their home state.

We use two state-level proxies to identify LP's views towards ESG. First, we identify states that are "anti-ESG". We identify anti-ESG states as the 21 states whose Attorneys General explicitly argue that private fund advisers should only consider investors' financial returns when making investments decisions and not ESG initiatives (Morrisey 2022). We create a dummy variable for each LP equal to 1 if the LP is located in one of these 21 states, and zero otherwise. We measure the extent to which each PE adviser raises funds from LPs in anti-ESG states by taking the average value of this indicator variable for all LPs who a PE adviser raised funds from in the prior 10 years, weighted by committed capital. Accordingly, this variable ranges between 0 and 1 where a value of 0 means no funds were raised from LPs in anti-ESG states in the prior 10 years, and a value of 1 means all funds raised in the prior 10 years were raised from LPs in anti-ESG states. We partition our sample at the median and classify observations above the median value as "anti-ESG" and observations below the median value as "pro-ESG". We predict PE advisers in the anti-ESG subsample to experience a more negative response to the disclosure of positive environmental information than PE advisers in the pro-ESG subsample.



Second, we compute the percent of votes for democratic candidates in each state for the most recent US presidential election each year. Then, we average these values by PE adviser for all LPs who a PE adviser raised funds from in the prior 10 years, weighted by committed capital, based on LP location. Finally, we partition our sample at the median value and classify observations above the median as “high dem” and observations below the median as “low dem”. We predict PE advisers in the low-dem subsample to experience a more negative response to positive environmental disclosure than PE advisers in the high-dem subsample because states with more democratic influence are likely to be more interested in supporting responsible investing due to the party’s beliefs whereas the republican states are more likely to oppose responsible investing.

Table 5 reports pooled cross-sectional estimates of Equation (2) for positive and negative environmental disclosure for each subsample. It is important to note that requiring LP location data from Preqin reduces our sample by slightly more than half from 5,079 observations to 2,351 observations. Table 5, Panel A partitions the sample based on whether LP’s are located in anti-ESG or pro-ESG states whereas Panel B of Table 5 partitions the sample based on whether LP’s are located in high-dem or low-dem states. In each panel of Table 5, *NewFund\_Ind* is the dependent variable in columns 1 and 2, *NewFund\_Pct* in columns 3 and 4, and *NewFund\_Dollars* in columns 5 and 6.

We find a negative and significant coefficient on both *Env\_Neg%* and *Env\_Pos%* in the Anti-ESG subsample in column 1 of Panel A. Turning to the Pro-ESG subsample, we find a negative but insignificant coefficient on *Env\_Neg%* and a positive and significant coefficient on *Env\_Pos%* in column 2 of Panel A. We test the difference between subsamples at the bottom of Panel A and find no significant difference between the coefficients on *Env\_Neg%* but a positive and significant (p-value=0.000) difference between the coefficients on *Env\_Pos%*. Inferences are similar from the results in columns 3 and 4 (5 and 6) of panels A and B when using *NewFund\_Pct* (*NewFund\_Dollars*) as the dependent variable. Most notably, we continue to find the effect of *Env\_Pos%* is conditional on the subsample in a pattern that is consistent with our predictions about LPs views towards ESG investing. However, we don’t find a significantly negative relation between *Env\_Neg%* and *NewFund\_Pct* or *NewFund\_Dollars* in both Panels A and B of Table 5.

Overall, we find evidence consistent with our prediction in each specification suggesting the effect of PE advisers’ discussion of positive ESG information on their likelihood of raising new funds and the amount of new funds raised is dependent upon LPs’ views toward ESG investing. The differences we observe across subsamples help explain our lack of association documented between positive environmental disclosure and PE adviser fundraising in the combined sample. Interestingly, the negative coefficient on *Env\_Pos%* in the anti-ESG sample is inconsistent with the 21 states Attorneys Generals’ position stating PE advisers should ignore ESG-related information (which would predict no effect).

## 5.2 Limited Partner Retention by Type

Our next analysis examines whether LPs’ response to ESG disclosures varies by LP type. Ex ante, we predict that LPs in anti-ESG states and low-dem states will respond most negatively to ESG disclosure with a positive tone, and vice versa, when the LP is most sensitive to political pressure. We expect that public pensions will be most affected by ESG views because public pensions are subject to more political pressure than other types of LPs (e.g., “politicized governance,” Dyck, Manoel, and Morse 2022). To examine this question, we limit the sample to only PE advisers that were able to successfully raise new funds and then test which types of the advisers’ existing LPs were most likely to participate in the new fund (i.e., which LPs were retained).

The sample for the LP retention analysis differs from our primary sample in two important ways. First, we limit the sample to only years when PE advisers successfully raise new funds (i.e., we drop all observations where *NewFund\_Ind* is zero). Second, we construct the sample at the LP-adviser-year unit of observation instead of the adviser-year unit of observation. This is necessary because we want to examine whether the impact of environmental disclosure on LP fund participation varies by LP type. Consequently, this analysis examines how the mix of LPs that invest in new funds is impacted by ESG disclosure. We estimate the following model to test this question:

$$Retain_{k,i,t} = \alpha_0 + \alpha_1 Env\_Neg\%_{i,t} + \alpha_2 Env\_Pos\%_{i,t} + \sum \alpha Controls + YearFE + \varepsilon_{k,i,t} \quad (3)$$

Where  $k$  denotes LP,  $t$  denotes year, and  $i$  denotes adviser. *Controls* is the same list of control variables as previous analyses except we also control for the natural log of LP assets under management ( $LnLP\_AUM$ ). Our sample size for this analysis is 8,411 observations at the LP-adviser-year level. We continue to cluster standard errors at the adviser level and estimate a linear probability model.

Table 6 reports the results of this analysis. We continue to estimate analyses separately based on whether the LP is located in an anti- or pro-ESG state (Panel A) and whether the LP is located in a low-dem or high-dem state (Panel B). Further, we estimate the impact of environmental disclosure on retention for all LP types (columns 1 and 2), for only public pensions (columns 3 and 4), and for all LPs other than public pensions (columns 5 and 6). In Panel A of Table 6, we find that LPs located in anti-ESG states are less likely to participate in new funds for all LP types (column 1), public pensions (column 3), and LPs other than public pensions (column 5). Contrary to expectations, we find  $Env\_Pos\%$  coefficients are similar in magnitude between public pensions in anti-ESG states (column 3) and other types of LPs in anti-ESG states (column 5). We test coefficient differences across subsamples at the bottom of Panels A and find the effect for retention is more negative in the anti-ESG subsample for each LP type with public pensions exhibiting the largest difference. This evidence suggests that ESG disclosure with a positive tone reduces the likelihood that LPs in anti-ESG states will participate in the new fund with the effect being slightly stronger for investors (i.e., public pensions) that face more political pressure. In contrast, we find no relation between LP mix and environmental disclosures with a negative tone. We find a similar pattern of results in Panel B but with weaker statistical significance.

### **5.3 Dictionary Approach**

Throughout our analysis, we rely on FinBERT ESG text classification because prior literature finds FinBERT outperforms other methods (e.g., such as bag-of-words approaches) that ignore the context of words (Huang et al. 2022) and allows us to examine the tone of ESG disclosures. However, given the vast literature that relies on key words or phrase counts to analyze text, and to ensure our results are not attributable only to the specific textual method applied, we next measure environmental disclosure using a dictionary approach where we count key environmental words and phrases included in Form ADV Part 2

without considering the context of those words. Specifically, we use the environmental dictionaries in Henry, Jiang, and Rozario (2021) and Abraham, Olbert, and Vasvari (2024) to compute the percentage of environmental words to total words in each adviser-year Part 2 filing. We label these alternative environmental-disclosure variables as *Abraham\_et\_al.* and *Henry\_et\_al.*

In addition, we also take a third approach and identify individual PE adviser funds with environmental-related investment strategies by searching for key words in each fund's name. We use the dictionary that Dikolli et al. (2022) apply to mutual fund names and apply it analogously to PE funds to create an indicator equal to 1 if a fund's name indicates it has an environmental focus. We label this new indicator *Dikolli\_et\_al.* We note that while the fund name approach has been applied in the context of mutual funds, we expect the approach to be less successful with PE funds because the names of PE funds are commonly nondescript.

Table 7 reports results from the estimation of Equation (1) but replaces our FinBERT measure of environmental disclosure (*Environment%*) with the three alternative measures discussed above (*Abraham\_et\_al.*, *Henry\_et\_al.*, and *Dikolli\_et\_al.*). Similar to our FinBERT-based results, we find a negative and significant relation between the environmental disclosure made in Form ADV Part 2 and new fund formation as well as the amount of capital raised. Both the Abraham et al. (2024) and the Henry et al. (2021) approach for measuring environmental disclosure yield significantly negative coefficients. However, we find no relation between fund names with an environmental focus and the likelihood a PE adviser raises a new fund. The lack of significance with the fund-name approach as in Dikolli et al. (2022) cannot be interpreted but does provide additional motivation for using Form ADV Part 2 filings to capture PE advisers' environmental disclosure. Overall, the analysis reported in Table 7 suggests our results are not sensitive to using FinBERT to classify environmental disclosure.

#### **5.4 ESG Category Analysis**

Next, we disaggregate environment, social, and governance disclosure measures into the eight subtopics provided by the 9-class ESG FinBERT model, which includes three environmental topics (*ClimateChange%*, *NaturalCapital%*, and *Pollution&Waste%*), three social topics (*HumanCapital%*,

*ProductLiability%*, and *CommunityRelations%*), and two governance topics (*CorpGov%* and *BusinessEthics%*). Like our prior analyses, we require each ESG subtopic to be classified with at least a 90% confidence by FinBERT. Table 8 presents estimates using the eight ESG subtopics as independent variables. Regarding environmental subtopics, we find negative and significant associations between our adviser fundraising variables and both *ClimateChange%* and *NaturalCapital%*. Regarding social subtopics, we find a positive and significant coefficient on *ProductLiability%*, and modest evidence of a negative and significant coefficient on *CommunityRelations%*. We find no evidence of relations between governance subtopics and the likelihood of new fund formation. However, we find weak evidence that the discussion of corporate governance is associated with a higher level of capital raised consistent with governance-related information alleviating asymmetric information and easing advisers' fundraising efforts. Altogether, our evidence from these estimations suggest that the negative coefficient on *Environment%* from our main results is primarily attributable to discussions of climate change and natural capital likely consistent with PE advisers discussing business risks associated with these environmental factors.

## 5.5 Robustness Tests

Our main results suggest that PE adviser's disclosure of environmental information has a negative association with the likelihood of raising new funds, and this is primarily attributable to the disclosure of environmental information with a negative tone. We estimate several robustness tests to ensure the results are not overly sensitive to our empirical design choices. First, we remove all control variables and re-estimate the results to better understand how control variables influence our estimates (Whited et al. 2022). Second, we add PE adviser fixed effects to control for time-invariant differences between advisers, namely differences in disclosure practices. Third, we remove outliers to ensure such observations do not drive our results. We define an outlier as those observations with a Cook's distance value greater than  $4/N$  and re-estimate the results. Lastly, we remove the years 2020 and 2021 from our sample and estimate the results to investigate if our inferences are stable in years unaffected by Covid-19.

Table 9 reports the results of each robustness test. Panel A estimates the effect of environmental disclosure unconditional on disclosure tone (*Environment%*), and Panel B separately estimates the effects

of negative (*Env\_Neg%*) and positive (*Env\_Pos%*) environmental disclosure. The results in Panel A suggest that our main results related to *Environment%* are not (i) sensitive to the inclusion of controls, (ii) not explained by time-invariant PE adviser characteristics, (iii) not explained by outliers, and (iv) are not explained by Covid-19. The results in Panel B are similarly robust except the coefficient on *Env\_Neg%*, while still negative, loses statistical significance when controls are excluded. Overall, the robustness tests in Table 9 provide comfort that there is a strong negative association between *Environment%* and *Env\_Neg%*. Importantly, the specification with both year and PE adviser fixed effects helps mitigate many potential endogeneity concerns. Nevertheless, given the limitations of our research design, we cannot rule out all confounders and as such refrain from making stronger causal claims.

## VI. Conclusion

We use a large language model to identify Environment, Social, and Governance (ESG) disclosures in private equity (PE) brochures (Form ADV Part 2) to examine how PE advisers' ESG disclosures are associated with their ability to raise capital. We offer three main results. First, we find environmental, but not social or governance, disclosures are negatively associated with PE advisers' ability to raise capital. More specifically, we find a reduction in the likelihood a PE adviser raises a new fund, fewer new funds raised, and less capital raised for advisers disclosing environmental-related information. Second, using disclosure tone, we separately identify disclosures of ESG risk from disclosures of ESG related investment activity. We find environmental risk disclosure is negatively associated with new fund formation and the amount of capital raised. In contrast, the effect of environmental investment disclosure is positive or negative depending on the political leaning of investors home state. Similarly, for PE advisers that successfully raise a new fund, we find the likelihood that existing investors participate in the new fund also depends on the political leaning of their home state. Overall, our evidence suggests that (i) environmental disclosures by PE advisers contain decision-useful information, (ii) PE investors are generally averse to disclosed environmental risks, and (iii) PE investors evaluate disclosed environmental investment through a political lens.

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## Appendix A: Variable Definitions

Variable	Definition	Source
<i>Environment%</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste with at least 90% confidence.	ADV Part 2
<i>Social%</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to human capital, product liability, or community relations with at least 90% confidence.	ADV Part 2
<i>Governance%</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to corporate governance or business ethics with at least 90% confidence.	ADV Part 2
<i>Env_Neg%</i> <i>(Env_Pos%)</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste, and by the Sentiment FinBERT model as negative (positive).	ADV Part 2
<i>Soc_Neg%</i> <i>(Soc_Pos%)</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to human capital, product liability, or community relations, and by the Sentiment FinBERT model as negative (positive).	ADV Part 2
<i>Gov_Neg%</i> <i>(Gov_Pos%)</i>	The percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to corporate governance or business ethics, and by the Sentiment FinBERT model as negative (positive).	ADV Part 2
<i>NewFund_Ind</i>	An indicator variable equal to 1 if the GP formed at least 1 new fund in year $t$ .	Preqin
<i>NewFund_Pct</i>	The number of new funds raised by a GP in year $t$ divided by the total funds raised by the GP in years $t-10$ to $t-1$ .	Preqin
<i>NewFund_Dollars</i>	The natural logarithm of one plus the total capital raised by a GP in year $t$ .	Preqin
<i>Retain</i>	An indicator variable equal to 1 if an LP from the GP's previous fund also participates in a new fund, and zero otherwise.	Preqin
<i>SentCount</i>	Number of sentences reported in form ADV part 2.	ADV Part 2
<i>Tone</i>	The number of sentences classified by the Sentiment FinBERT model as positive minus the number of sentences classified by the Sentiment FinBERT model as negative in form ADV part 2.	ADV Part 2
<i>LnAUM</i>	The natural logarithm of the total assets under management for adviser $i$ in year $t$ .	ADV

Variable	Definition	Source
<i>Performance</i>	The average final fund performance of all of GP <i>i</i> 's past funds with at least 5 years of history prior to year <i>t</i> . Fund performance (multiple) is defined as (Cumulative Distributions to LPs to date + NAV of unrealized investments)/Cumulative Calls to date.	Preqin
<i>GAAP</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of an indicator variable that equals one if an adviser's PE fund prepares audited financial statements in accordance with U.S. GAAP and equals zero otherwise. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>YrSinceLastFund</i>	Number of years since the GP last raised a new fund.	Preqin
<i>FundofFunds</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of an indicator variable that equals one if the adviser's PE fund is a fund that invests in other PE funds, known as a funds of funds, and equals zero otherwise. The weight used in this calculation is the natural logarithm of each fund's market value. Note that any fund type can be a <i>FundofFunds</i> .	ADV
<i>VCFund</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of an indicator variable that equals one if the adviser's PE fund is a VC fund and equals zero otherwise. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>LnMinInvest</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of the natural logarithm of the fund's minimum required investment to invest in the fund. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>Big4</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of an indicator variable that equals one if the PE fund engages a Big 4 accounting firm and equals zero otherwise. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>LnOwners</i>	The weighted average by adviser <i>i</i> in year <i>t</i> natural logarithm of the raw number of investors in the PE fund. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>OwnedRelated</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of the percentage of the PE fund owned by the investment adviser or a related party. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>OwnedNonUS</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of the percentage of the PE fund owned by non-U.S. investors. The weight used in this calculation is the natural logarithm of each fund's market value.	ADV

Variable	Definition	Source
<i>OwnedFoF</i>	The weighted average by adviser <i>i</i> in year <i>t</i> of the percentage of the PE fund owned by other investment funds (often known as funds of funds). The weight used in this calculation is the natural logarithm of each fund's market value.	ADV
<i>Misconduct</i>	Indicator variable taking the value of 1 if GP <i>i</i> discloses any type of misconduct prior to year <i>t</i> , which is identified by whether GP <i>i</i> answers 'yes' to any question in Item 11 of Form ADV, Part 1A, and zero otherwise.	ADV
<i>ln_LP_Size</i>	The natural logarithm of the total assets under management for an LP.	Preqin

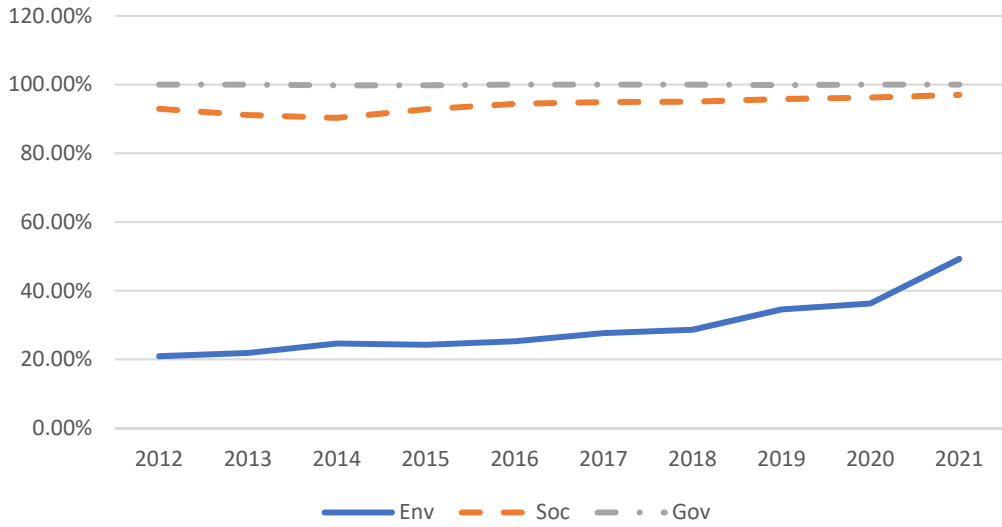
## Appendix B: Example Form ADV Part 2 ESG Disclosures

No.	Sentence	ESG Classification	Tone Classification
1	In the event that climate change causes sea levels to rise, certain portfolio companies might be forced to incur expenses to prevent infrastructure assets from being damaged or rendered unusable by such rising sea levels.	Climate Change	Negative
2	The Firm also provides periodic reporting by email to investors in each fund of matters relating to particular investments that the Firm deems noteworthy.	Climate Change	Neutral
3	In addition, the Inflation Reduction Act of 2022, signed into law by President Biden in August 2022, also provides significant funding and incentives for research and development of low-carbon energy production methods, carbon capture, and other programs directed at addressing climate change, for instance through the imposition of a first-ever methane emissions fee applicable to certain categories of facilities.	Climate Change	Positive
4	Compliance with current and future environmental regulations and permit requirements governing the withdrawal, storage and use of surface water or groundwater necessary for hydraulic fracturing of wells may increase operating costs and cause delays, interruptions or termination of operations, the extent of which cannot be predicted.	Natural Capital	Negative
5	In general, over time, the number of environmental, endangered species and forestry laws, rules and regulations, in many countries, has increased markedly and the enforcement of these laws, rules and regulations has intensified.	Natural Capital	Neutral
6	Target companies include those profiting from outstanding forest management practices, including the manufacture of environmentally certified wood products, and those that have a leading market position in a particular sector.	Natural Capital	Positive
7	As a result, the presence of significant mold or other airborne contaminants at any of FREIP Fund I's properties is likely to require FREIP Fund I to undertake a costly remediation program to contain or remove the mold or other airborne contaminants from the affected property or increase indoor ventilation.	Pollution & Waste	Negative
8	The United States Clean Water Act (the CWA) restricts the discharge of produced waters and other pollutants into waters of the United States and requires permits before any pollutants may be discharged.	Pollution & Waste	Neutral
9	CLP is reimagining the current linear system in which billions of dollars are spent annually to landfill valuable commodities, to create circular supply chains that reduce costs, generate revenue, and protect our environment.	Pollution & Waste	Positive
10	In addition, we expect that the Patient Protection and Affordable Care Act will increase any annual employee health care costs that the Companies or the Companies' Portfolio Companies fund, and significantly increase the cost of compliance and compliance risk related to offering health care benefits.	Human Capital	Negative
11	In addition, certain colleagues receive a year-end incentive that is derived from the accounts they manage.	Human Capital	Neutral
12	Engaged employees are more productive and loyal, which leads to long-lasting and profitable relationships with customers, vendors, and suppliers, resulting in higher quality products and services and satisfied and enthusiastic customers.	Human Capital	Positive
13	To the extent that a portfolio company is subject to cyber-attack or other unauthorized access is gained to a portfolio company's systems, such portfolio company may be subject to substantial losses in the form of stolen, lost or corrupted (i) customer data or payment information; (ii) customer or portfolio company financial information; (iii) portfolio company software, contact lists or other databases; (iv) portfolio company proprietary information or trade secrets; or (v) other items.	Product Liability	Negative
14	Hatteras does not sell or provide non-public personal information for marketing purposes to others.	Product Liability	Neutral
15	Our clients benefit from access to comprehensive security data, time-tested models and flexible reporting capabilities, including data visualization	Product Liability	Positive

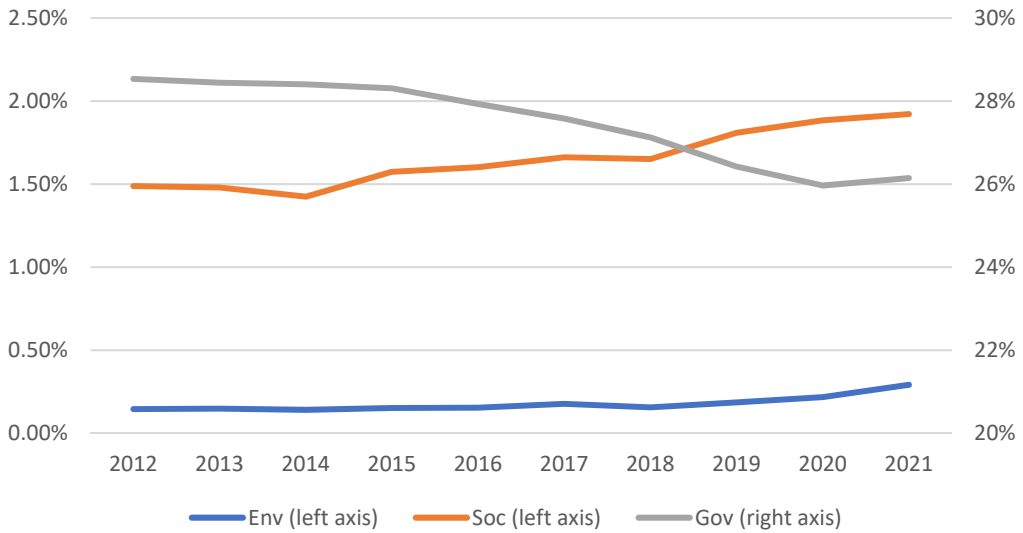
	dashboards powered by business intelligence tools such as Microsoft Power BI or Tableau.		
16	The establishment of a government in the Palestinian Authority in early 2006 by representatives of the Hamas militant group has created additional unrest and uncertainty in the region, and the disruption to normal life in southern Israel led to military operations in Gaza Strip in late 2012 and in mid-2014.	Community Relations	Negative
17	AAM has local teams in Hong Kong, Beijing and Shanghai that conduct investment-related research, monitoring and reporting.	Community Relations	Neutral
18	In addition, Satori considers this area a healthy, diversified, and business-friendly region with favorable population demographics and tax structures.	Community Relations	Positive
19	As a result of the Line 901 incident, several governmental agencies and regulators initiated investigations into the Line 901 incident, various claims have been made against Plains and its directors and a number of lawsuits have been filed against Plains and its directors.	Corporate Governance	Negative
20	The Executive Committee and members of WP Management meet regularly with Ms. Chapman through the weekly conference calls, monthly members' meeting, and investment committee meetings; and through other daily meetings based on need.	Corporate Governance	Neutral
21	Management teams are strongly encouraged to invest their own capital, over and above any equity incentive structures in order to further align interests.	Corporate Governance	Positive
22	The allegations were made by a former employee of the Brazil Affiliate who was terminated for fraud and against whom there is an ongoing lawsuit and criminal investigation.	Business Ethics	Negative
23	A detailed summary of the Code of Ethics is available to limited partners and prospective limited partners during the investment due diligence process.	Business Ethics	Neutral
24	The Apollo Managers strive to adhere to the highest industry standards of conduct based on principles of professionalism, integrity, honesty and trust.	Business Ethics	Positive

# Figure 1: ESG Disclosure Over Time

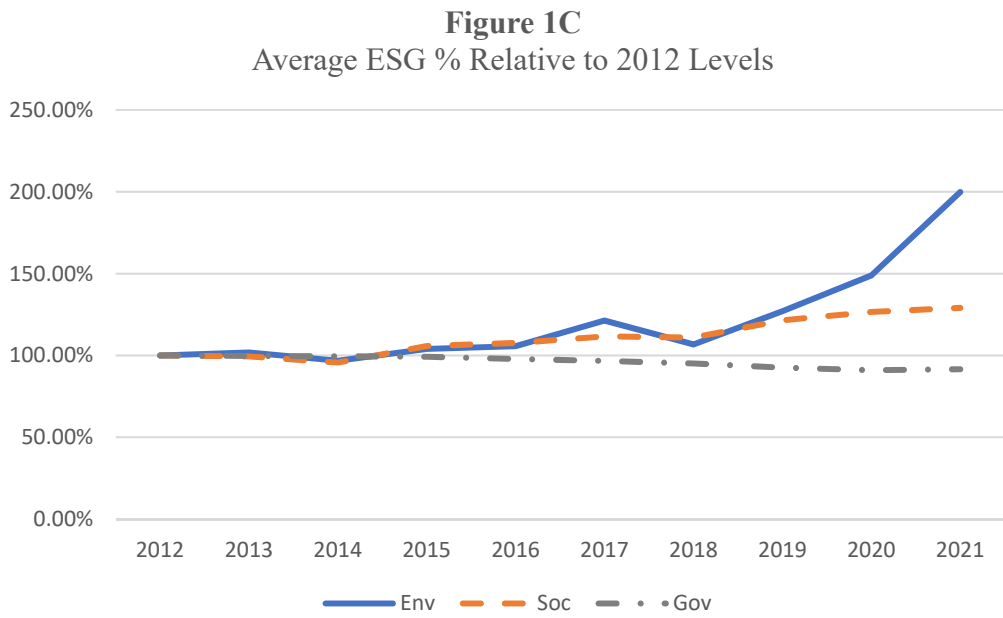
**Figure 1A**  
% of Filings with at least 1 ESG Mention



**Figure 1B**  
Average ESG % Over Time



### Figure 1: ESG Disclosure Over Time (cont'd)





**Table 1**  
*Sample Attrition*

	Adviser-Years	Unique Advisers	Unique Funds
Non-exempt buyout and VC advisers from 2012 - 2021	11,030	1,851	31,303
Less: Missing Form ADV Part 2 Data	(1,985)	(321)	(4,358)
Less: Missing Link to Preqin	(776)	(214)	(1,055)
Less: Missing Preqin Fund Data	(2,928)	(603)	(8,582)
Less: Missing Controls	(262)	(1)	(1,014)
Final Sample	5,079	712	16,294

This table presents our sample attrition.

**Table 2**  
*Descriptive Statistics*

Variable	N	Mean	sd	Min	Median	Max
<b>ESG Variables</b>						
<i>Environment%</i>	5,079	0.17	0.56	0.00	0.00	8.62
<i>Social%</i>	5,079	1.65	1.20	0.00	1.38	6.52
<i>Governance%</i>	5,079	27.46	7.30	0.00	27.00	49.50
<i>Env_Neg%</i>	5,079	0.08	0.22	0.00	0.00	2.41
<i>Env_Pos%</i>	5,079	0.01	0.05	0.00	0.00	1.03
<i>Soc_Neg%</i>	5,079	0.16	0.26	0.00	0.00	1.54
<i>Soc_Pos%</i>	5,079	0.06	0.24	0.00	0.00	4.49
<i>Gov_Neg%</i>	5,079	1.09	0.77	0.00	1.03	3.78
<i>Gov_Pos%</i>	5,079	0.48	0.56	0.00	0.36	3.82
<b>Dependent Variables</b>						
<i>NewFund_Ind</i>	5,079	0.15	0.36	0.00	0.00	1.00
<i>NewFund_Pct</i>	5,079	0.08	0.26	0.00	0.00	4.00
<i>NewFund_Dollars</i>	5,079	0.74	2.13	0.00	0.00	9.19
<b>Control Variables</b>						
<i>SentCount</i>	5,079	360	227	80	295	2,308
<i>Tone</i>	5,079	(10.11)	6.38	(29.59)	(10.12)	6.79
<i>LnAUM<sub>t-1</sub></i>	4,576	20.98	1.53	17.52	20.75	25.59
<i>Performance<sub>t-1</sub></i>	5,079	1.71	0.23	0.38	1.69	2.79
<i>GAAP<sub>t-1</sub></i>	5,079	0.96	0.16	0.00	1.00	1.00
<i>YrSinceLastFund<sub>t-1</sub></i>	5,079	1.73	0.89	1.00	1.83	9.00
<i>FundofFunds<sub>t-1</sub></i>	5,079	0.17	0.35	0.00	0.00	1.00
<i>VCFund<sub>t-1</sub></i>	5,079	0.05	0.23	0.00	0.00	1.00
<i>LnMinInvest<sub>t-1</sub></i>	5,079	12.35	4.68	0.00	13.82	17.34
<i>Big4<sub>t-1</sub></i>	5,079	0.67	0.46	0.00	1.00	1.00
<i>LnOwners<sub>t-1</sub></i>	5,079	3.46	0.92	1.10	3.58	5.52
<i>OwnedRelated<sub>t-1</sub></i>	5,079	8.38	12.31	0.00	3.77	82.62
<i>OwnedNonUS<sub>t-1</sub></i>	5,079	24.68	23.16	0.00	19.43	99.00
<i>OwnedFoF<sub>t-1</sub></i>	5,079	17.15	18.21	0.00	12.67	93.20
<i>Misconduct<sub>t-1</sub></i>	5,079	0.04	0.21	0.00	0.00	1.00

This table presents descriptive statistics of our sample. All continuous variables are winsorized at the 1st and 99th percentiles by year. Appendix A contains variable definitions.

**Table 3**  
ESG Disclosure and New Fund Formation

DV =	<i>NewFund Ind</i>				<i>NewFund Pct</i>				<i>NewFund Dollars</i>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Environment%</i>	-0.052*** (-6.55)			-0.051*** (-6.27)	-0.027*** (-6.80)			-0.027*** (-6.46)	-0.246*** (-5.85)			-0.241*** (-5.64)
<i>Social%</i>		-0.002 (-0.56)		-0.001 (-0.15)		-0.002 (-0.85)		-0.002 (-0.54)		-0.030 (-1.40)		-0.022 (-0.99)
<i>Governance%</i>			0.001 (1.59)	0.001 (1.08)			0.001 (1.07)	0.000 (0.66)			0.008 (1.62)	0.005 (0.99)
<i>SentCount</i>	0.000*** (4.14)	0.000*** (4.10)	0.000*** (4.10)	0.000*** (4.15)	0.000*** (3.23)	0.000*** (3.17)	0.000*** (3.22)	0.000*** (3.22)	0.001*** (3.47)	0.001*** (3.42)	0.001*** (3.42)	0.001*** (3.45)
<i>Tone</i>	0.000 (0.39)	0.001 (1.29)	0.001 (0.59)	-0.000 (-0.03)	0.001* (1.72)	0.002** (2.50)	0.001 (1.58)	0.001 (1.16)	0.003 (0.44)	0.008 (1.37)	0.003 (0.54)	0.001 (0.13)
<i>LnAUM</i>	0.008 (1.50)	0.007 (1.37)	0.008 (1.43)	0.008 (1.55)	0.000 (0.07)	-0.000 (-0.02)	0.000 (0.02)	0.000 (0.09)	0.108*** (3.64)	0.105*** (3.49)	0.107*** (3.58)	0.109*** (3.70)
<i>Performance</i>	0.067** (2.49)	0.067** (2.50)	0.065** (2.40)	0.065** (2.41)	0.027* (1.88)	0.028* (1.90)	0.027* (1.82)	0.026* (1.83)	0.462*** (2.86)	0.466*** (2.87)	0.456*** (2.79)	0.454*** (2.79)
<i>Big4</i>	-0.011 (-0.83)	-0.011 (-0.80)	-0.012 (-0.92)	-0.012 (-0.90)	-0.001 (-0.06)	-0.000 (-0.03)	-0.001 (-0.14)	-0.001 (-0.10)	-0.050 (-0.73)	-0.047 (-0.68)	-0.057 (-0.84)	-0.053 (-0.78)
<i>GAAP</i>	-0.030 (-0.62)	-0.031 (-0.64)	-0.032 (-0.68)	-0.032 (-0.65)	-0.010 (-0.37)	-0.010 (-0.39)	-0.011 (-0.41)	-0.011 (-0.40)	0.149 (1.00)	0.145 (0.99)	0.139 (0.96)	0.139 (0.93)
<i>YrSinceLastFund</i>	-0.022*** (-3.56)	-0.021*** (-3.38)	-0.021*** (-3.41)	-0.022*** (-3.57)	-0.008* (-1.70)	-0.007 (-1.57)	-0.007 (-1.60)	-0.008* (-1.71)	-0.060** (-2.09)	-0.055* (-1.91)	-0.056* (-1.95)	-0.060** (-2.09)
<i>FundofFunds</i>	-0.169*** (-12.51)	-0.162*** (-12.07)	-0.159*** (-11.64)	-0.166*** (-12.08)	-0.099*** (-12.43)	-0.096*** (-12.14)	-0.094*** (-11.17)	-0.098*** (-11.39)	-0.811*** (-11.21)	-0.779*** (-10.87)	-0.763*** (-10.30)	-0.796*** (-10.58)
<i>VCFund</i>	0.028 (0.97)	0.029 (1.01)	0.030 (1.05)	0.028 (0.99)	0.014 (0.46)	0.014 (0.48)	0.015 (0.50)	0.014 (0.46)	-0.013 (-0.12)	-0.011 (-0.09)	-0.003 (-0.02)	-0.015 (-0.13)
<i>LnMinInvest</i>	-0.001 (-0.58)	-0.001 (-0.65)	-0.001 (-0.65)	-0.001 (-0.58)	0.000 (0.45)	0.000 (0.38)	0.000 (0.38)	0.000 (0.45)	-0.000 (-0.06)	-0.001 (-0.12)	-0.001 (-0.12)	-0.000 (-0.06)
<i>LnOwners</i>	0.028*** (3.84)	0.027*** (3.65)	0.027*** (3.68)	0.028*** (3.85)	0.014*** (3.35)	0.014*** (3.18)	0.014*** (3.23)	0.014*** (3.34)	0.192*** (4.93)	0.187*** (4.71)	0.189*** (4.77)	0.191*** (4.90)
<i>OwnedRelated</i>	-0.000 (-0.87)	-0.000 (-0.79)	-0.000 (-0.61)	-0.000 (-0.75)	-0.000 (-0.91)	-0.000 (-0.85)	-0.000 (-0.70)	-0.000 (-0.82)	-0.005*** (-2.58)	-0.005** (-2.47)	-0.004** (-2.19)	-0.005** (-2.43)
<i>OwnedNonUS</i>	0.000 (0.49)	0.000 (0.32)	0.000 (0.38)	0.000 (0.51)	-0.000 (-0.11)	-0.000 (-0.23)	-0.000 (-0.18)	-0.000 (-0.12)	0.002 (1.50)	0.002 (1.30)	0.002 (1.41)	0.002 (1.49)
<i>OwnedFoF</i>	0.001** (2.41)	0.001*** (2.73)	0.001** (2.56)	0.001** (2.29)	0.000* (1.80)	0.001** (2.03)	0.000* (1.95)	0.000* (1.75)	0.005*** (2.93)	0.005*** (3.24)	0.005*** (3.10)	0.004*** (2.85)
<i>Misconduct</i>	-0.030 (-1.04)	-0.031 (-1.05)	-0.031 (-1.04)	-0.029 (-1.01)	-0.028** (-2.01)	-0.028* (-1.94)	-0.028** (-1.97)	-0.027* (-1.95)	-0.127 (-0.64)	-0.124 (-0.62)	-0.128 (-0.64)	-0.116 (-0.58)
Observations	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079
R <sup>2</sup>	0.080	0.074	0.074	0.080	0.041	0.038	0.038	0.041	0.079	0.075	0.076	0.080

This table presents coefficients and (t-statistic) from regressing new fund formation on ESG disclosure and control variables. Observations are at the GP-year level. The dependent variable is *NewFund\_Ind* in columns (1) through (4), *NewFund\_Pct* in columns (5) through (8), and *NewFund\_Dollars* in columns (9) through (12). *NewFund\_Ind* is an indicator variable equal to 1 if the GP formed at least 1 new fund in year *t*. *NewFund\_Pct* is the number of new funds raised by the GP in year *t* divided by the total funds raised by the GP in years *t-10* to *t-1*. *NewFund\_Dollars* is the natural log of one plus the total dollars raised in the new fund. *Environment%* is the percentage of sentences in Form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste with at least 90% confidence. *Social%* is the percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to human capital, product liability, or community relations with at least 90% confidence. *Governance%* is the percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to corporate governance or business ethics with at least 90% confidence. All control variables are measured in year *t-1*, while variables based on Form ADV part 2 are computed based on year *t* filings. All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*) denotes two-tailed significance at the p<0.01 (p<0.05) level.

**Table 4**  
*Tone of ESG Disclosure and New Fund Formation*

DV =	<i>NewFund Ind</i>				<i>NewFund Pct</i>				<i>NewFund Dollars</i>			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Env_Neg%</i>	-0.121*** (-5.09)			-0.122*** (-5.40)	-0.052*** (-3.66)			-0.053*** (-3.80)		-0.498*** (-3.54)		-0.500*** (-3.74)
<i>Env_Pos%</i>	-0.037 (-0.38)			-0.057 (-0.68)	-0.055 (-1.04)			-0.064 (-1.37)		-0.111 (-0.18)		-0.194 (-0.35)
<i>Soc_Neg%</i>		0.041 (1.42)		0.043 (1.52)		0.014 (0.75)		0.015 (0.81)		0.041 (0.33)		0.049 (0.39)
<i>Soc_Pos%</i>		-0.023 (-1.19)		-0.027 (-1.40)		-0.011 (-0.53)		-0.013 (-0.64)		-0.099 (-1.06)		-0.121 (-1.26)
<i>Gov_Neg%</i>			0.016* (1.67)	0.015 (1.60)			0.007 (1.33)	0.007 (1.27)			0.080 (1.55)	0.076 (1.50)
<i>Gov_Pos%</i>			0.010 (0.79)	0.016 (1.20)			0.004 (0.56)	0.007 (0.91)			0.048 (0.76)	0.072 (1.12)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079
R <sup>2</sup>	0.078	0.074	0.075	0.080	0.040	0.038	0.038	0.040	0.077	0.075	0.076	0.079

This table presents coefficients and (t-statistic) from regressing new fund formation on ESG disclosure conditional on tone and control variables. Observations are at the GP-year level. The dependent variable is *NewFund\_Ind* in columns (1) through (4), *NewFund\_Pct* in columns (5) through (8), and *NewFund\_Dollars* in columns (9) through (12). *NewFund\_Ind* is an indicator variable equal to 1 if the GP formed at least 1 new fund in year *t*. *NewFund\_Pct* is the number of new funds raised by the GP in year *t* divided by the total funds raised by the GP in years *t-10* to *t-1*. *NewFund\_Dollars* is the natural log of one plus the total dollars raised in the new fund. *Env\_Neg%* (*Env\_Pos%*) is percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste, and by the Sentiment FinBERT model as negative (positive). *Soc\_Neg%* (*Soc\_Pos%*) is percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to human capital, product liability, or community relations, and by the Sentiment FinBERT model as negative (positive). *Gov\_Neg%* (*Gov\_Pos%*) is percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to corporate governance or business ethics, and by the Sentiment FinBERT model as negative (positive). All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*) denotes two-tailed significance at the p<0.01 (p<0.05) level.

**Table 5**  
Partitions on LP Political Views

**Panel A - Fundraising in Anti-ESG LP States**

DV = Sample Partition =	<i>NewFund_Ind</i>		<i>NewFund_Pct</i>		<i>NewFund_Dollars</i>	
	<i>Anti-ESG</i>	<i>Pro-ESG</i>	<i>Anti-ESG</i>	<i>Pro-ESG</i>	<i>Anti-ESG</i>	<i>Pro-ESG</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Env_Neg%</i>	-0.181*** (-2.99)	-0.050 (-0.68)	-0.064 (-1.47)	0.002 (0.03)	-0.826** (-2.11)	0.063 (0.15)
<i>Env_Pos%</i>	-0.924*** (-3.21)	0.141** (2.10)	-0.584*** (-4.91)	0.057 (1.29)	-6.008*** (-3.75)	1.419*** (3.38)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,178	1,173	1,178	1,173	1,178	1,173
R <sup>2</sup>	0.116	0.064	0.063	0.047	0.112	0.082
Pro-ESG to Anti-ESG Coefficient Diff:						
<i>Env_Neg%</i>	0.131		0.066		0.889	
p-value	0.161		0.317		0.1212	
<i>Env_Pos%</i>	1.065***		0.641***		7.427***	
p-value	0.000		0.000		0.000	

**Panel B - Fundraising in Democrat LP States**

DV = Sample Partition =	<i>NewFund_Ind</i>		<i>NewFund_Pct</i>		<i>NewFund_Dollars</i>	
	<i>Low Dem</i>	<i>High Dem</i>	<i>Low Dem</i>	<i>High Dem</i>	<i>Low Dem</i>	<i>High Dem</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Env_Neg%</i>	-0.146*** (-2.73)	-0.055 (-0.55)	-0.026 (-0.56)	-0.053 (-0.83)	-0.376 (-1.11)	-0.178 (-0.29)
<i>Env_Pos%</i>	-0.560** (-1.98)	0.158** (2.45)	-0.372*** (-2.69)	0.072* (1.66)	-2.017 (-0.96)	1.159** (2.54)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,177	1,174	1,177	1,174	1,177	1,174
R <sup>2</sup>	0.095	0.092	0.065	0.041	0.096	0.099
High-Dem to Low-Dem Coefficient Diff:						
<i>Env_Neg%</i>	0.091		-0.027		0.198	
p-value	0.436		0.731		0.791	
<i>Env_Pos%</i>	0.718**		0.444***		3.176	
p-value	0.012		0.002		0.147	

This table presents coefficients and (t-statistic) from regressing new fund formation on environmental disclosure conditional on tone and control variables, partitioning the sample based on LP political views. Observations are at the GP-year level. The dependent variable is *NewFund\_Ind* in columns (1) and (2), *NewFund\_Pct* in columns (3) and (4), and *NewFund\_Dollars* in columns (5) and (6). *NewFund\_Ind* is an indicator variable equal to 1 if the GP formed at least 1 new fund in year  $t$ . *NewFund\_Pct* is the number of new funds raised by the GP in year  $t$  divided by the total funds raised by the GP in years  $t-10$  to  $t-1$ . *NewFund\_Dollars* is the natural log of one plus the total dollars raised in the new fund. *Env\_Neg%* (*Env\_Pos%*) is percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste, and by the Sentiment FinBERT model as negative (positive). In Panel A, the *Anti-ESG* (*Pro-ESG*) subsample contains GP-years that are above (below) the median value in terms of the percent of committed capital in the prior 10 years from LPs in states that explicitly ban public pensions or other public funds from considering ESG factors (i.e., anti-ESG states). In Panel B, the *High-Dem* (*Low-Dem*) subsample contains GP-years that are above (below) the median value of the democrat voting percent in the most recent US presidential election of LPs who committed capital in the prior 10 years, weighted by committed capital. All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*\*) denotes two-tailed significance at the  $p < 0.01$  ( $p < 0.05$ ) level.

**Table 6**  
New Fund LP Retention by Political View

**Panel A - Retention of LPs in Anti-ESG States**

DV = LP Type =	<i>LP Retain</i>					
	All LPs		Public Pensions		All Other LPs	
Sample Partition =	<i>Anti-ESG</i>	<i>Pro-ESG</i>	<i>Anti-ESG</i>	<i>Pro-ESG</i>	<i>Anti-ESG</i>	<i>Pro-ESG</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Env_Neg%</i>	0.028 (0.25)	0.074 (0.88)	0.064 (0.36)	0.120 (1.00)	0.026 (0.23)	0.002 (0.02)
<i>Env_Pos%</i>	-2.099*** (-3.17)	-0.283 (-0.56)	-2.110*** (-3.87)	0.696 (0.66)	-2.767** (-2.28)	-0.285 (-0.57)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1,806	6,605	919	2,351	887	4,254
R <sup>2</sup>	0.045	0.053	0.056	0.066	0.067	0.050
Pro-ESG to Anti-ESG Coefficient Diff:						
<i>Env_Neg%</i>	0.046		0.056		-0.024	
p-value	0.684		0.716		0.851	
<i>Env_Pos%</i>	1.816*		2.806		2.482	
p-value	0.069		0.005		0.056	

**Panel B - Retention of LPs in Democrat States**

DV = LP Type =	<i>LP Retain</i>					
	All LPs		Public Pensions		All Other LPs	
Sample Partition =	<i>Low Dem</i>	<i>High Dem</i>	<i>Low Dem</i>	<i>High Dem</i>	<i>Low Dem</i>	<i>High Dem</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<i>Env_Neg%</i>	0.050 (0.62)	0.074 (0.85)	0.127 (1.00)	0.139 (1.12)	-0.006 (-0.10)	0.007 (0.07)
<i>Env_Pos%</i>	-0.887*** (-2.98)	-0.175 (-0.32)	-0.958 (-1.61)	0.368 (0.30)	-0.816*** (-4.31)	-0.091 (-0.16)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,586	3,825	1,915	1,355	2,671	2,470
R <sup>2</sup>	0.051	0.056	0.050	0.081	0.054	0.058
High-Dem to Low-Dem Coefficient Diff:						
<i>Env_Neg%</i>	0.024		0.012		0.013	
p-value	0.682		0.903		0.8729	
<i>Env_Pos%</i>	0.712*		1.326		0.725	
p-value	0.077		0.238		0.143	

This table presents coefficients and (t-statistic) from regressing Retain on environmental disclosure conditional on tone and controls. Estimates are made using the linear probability model and observations are at the GP-LP-year level. The dependent variable, *Retain*, is an indicator variable equal to 1 if an LP from the GP's previous fund also participates in a new fund, and zero otherwise. *Env\_Neg%* (*Env\_Pos%*) is percentage of sentences in form ADV part 2 classified by the 9-class ESG FinBERT model as relating to climate change, natural capital, or pollution & waste, and by the Sentiment FinBERT model as negative (positive). We examine all LP types in columns (1) and (2), public pension LPs in columns (3) and (4), and all LP types other than public pensions in columns (5) and (6). In Panel A, the *Anti-ESG* (*Pro-ESG*) subsample is limited to LPs in states that explicitly ban public pensions or other public funds from considering ESG factors (i.e., anti-ESG states). In Panel B, the *High-Dem* (*Low-Dem*) subsample is limited to LPs in states that are above (below) the average democrat voting percent in the most recent US presidential election. All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*) denotes two-tailed significance at the p<0.01 (p<0.05) level.

**Table 7**  
*Bag-of-Words ESG Disclosure Measures*

DV =	<i>NewFund Ind</i>			<i>NewFund Pct</i>			<i>NewFund Dollars</i>		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>Abraham_et_al.</i>	-1.153*** (-4.45)			-0.490*** (-2.98)			-4.257*** (-2.89)		
<i>Henry_et_al.</i>		-0.230*** (-3.72)			-0.126*** (-3.57)			-1.296*** (-3.86)	
<i>Dikolli_et_al.</i>			-0.025 (-0.31)			-0.000 (-0.00)			-0.162 (-0.42)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079
R <sup>2</sup>	0.078	0.077	0.074	0.039	0.040	0.038	0.077	0.079	0.075

This table presents coefficients and (t-statistic) from regressing new fund formation on environmental disclosure and control variables where environmental disclosure is measured using a dictionary approach with three different environmental word/phrase dictionaries. Observations are at the GP-year level. The dependent variable is *NewFund Ind* in columns (1) through (3), *NewFund Pct* in columns (4) through (6), and *NewFund Dollars* in columns (7) through (9). *NewFund Ind* is an indicator variable equal to 1 if the GP formed at least 1 new fund in year  $t$ . *NewFund Pct* is the number of new funds raised by the GP in year  $t$  divided by the total funds raised by the GP in years  $t-10$  to  $t-1$ . *NewFund Dollars* is the natural log of one plus the total dollars raised in the new fund. *Abraham\_et\_al.* is the percentage of words in part 2 of form ADV included in the Environment list word list in Abraham et al. (2022). *Henry\_et\_al.* is the percentage of words in part 2 of form ADV included in the Environment list word list in Henry et al. (2021). *Dikolli\_et\_al.* is equal to the proportion of a GPs funds with a fund-name suggesting an environmental focus using the environmental word list that Dikolli et al. (2022) apply to mutual-fund names, weighted at the GP level by fund size. All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*) denotes two-tailed significance at the  $p < 0.01$  ( $p < 0.05$ ) level.

**Table 8**  
*Specific Categories of ESG Disclosure*

DV =	<i>NewFund_Ind</i>			<i>NewFund_Pct</i>			<i>NewFund_Dollars</i>		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
<i>ClimateChange%</i>	-0.063*** (-7.03)			-0.032*** (-5.84)			-0.268*** (-4.95)		
<i>NaturalCapital%</i>	-0.009*** (-8.52)			-0.006*** (-8.47)			-0.052*** (-7.99)		
<i>Pollution&amp;Waste%</i>	-0.028 (-0.56)			-0.020 (-0.65)			-0.294 (-0.94)		
<i>HumanCapital%</i>		-0.002 (-0.31)			-0.002 (-0.36)			-0.039 (-1.29)	
<i>ProductLiability%</i>		0.009 (0.85)			0.007 (1.09)			-0.009 (-0.16)	
<i>CommunityRelations%</i>		-0.011 (-1.22)			-0.010 (-1.55)			-0.022 (-0.46)	
<i>CorpGov%</i>			0.002 (1.63)			0.001 (1.18)			0.009* (1.91)
<i>BusinessEthics%</i>			0.000 (0.17)			-0.000 (-0.06)			-0.003 (-0.20)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079	5,079
R <sup>2</sup>	0.080	0.074	0.074	0.041	0.038	0.038	0.079	0.075	0.076

This table presents coefficients and (t-statistic) from regressing new fund formation on eight specific ESG categories and control variables. Observations are at the GP-year level. The dependent variable is *NewFund\_Ind* in columns (1) through (3), *NewFund\_Pct* in columns (4) through (6), and *NewFund\_Dollars* in columns (7) through (9). *NewFund\_Ind* is an indicator variable equal to 1 if the GP formed at least 1 new fund in year  $t$ . *NewFund\_Pct* is the number of new funds raised by the GP in year  $t$  divided by the total funds raised by the GP in years  $t-10$  to  $t-1$ . *NewFund\_Dollars* is the natural log of one plus the total dollars raised in the new fund. The eight independent variables presented correspond to the percentage of form ADV part 2 sentences categorized by the 9-class ESG FinBERT model into each category with at least a 90% classification confidence. All regressions include year fixed effects and standard errors clustered by GP. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*\*) denotes two-tailed significance at the  $p < 0.01$  ( $p < 0.05$ ) level.



**Table 9**  
*Additional Robustness Tests*

**Panel A - All Environmental Disclosure**

DV = Robustness =	<i>NewFund Ind</i>				<i>NewFund Pct</i>				<i>NewFund Dollars</i>			
	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>
	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Environment%</i>	-0.030*** (-4.36)	-0.038*** (-2.85)	-0.052*** (-7.62)	-0.042*** (-5.54)	-0.020*** (-4.71)	-0.022*** (-2.64)	-0.016*** (-6.56)	-0.023*** (-5.47)	-0.121*** (-3.09)	-0.045 (-0.71)	-0.051*** (-4.68)	-0.294*** (-5.58)
Controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Observations	5,079	5,028	4,732	4,174	5,079	5,028	4,828	4,174	5,079	5,028	4,666	4,174
R <sup>2</sup>	0.016	0.295	0.107	0.059	0.013	0.229	0.069	0.034	0.018	0.253	0.033	0.076

**Panel B - Environmental Disclosure Conditional on Tone**

DV = Robustness =	<i>NewFund Ind</i>				<i>NewFund Pct</i>				<i>NewFund Dollars</i>			
	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>	<i>No</i>	<i>Firm</i>	<i>Cooks</i>	<i>Excl.</i>
	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>	<i>Controls</i>	<i>FE</i>	<i>Distance</i>	<i>Covid-19</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
<i>Env_Neg%</i>	-0.034 (-1.31)	-0.097*** (-2.96)	-0.112*** (-6.54)	-0.108*** (-4.43)	-0.020 (-1.28)	-0.049* (-1.96)	-0.030*** (-4.14)	-0.047*** (-3.08)	-0.013 (-0.08)	-0.276 (-1.46)	-0.100** (-2.06)	-0.461*** (-3.01)
<i>Env_Pos%</i>	-0.094 (-0.96)	-0.064 (-0.69)	-0.092 (-1.64)	0.020 (0.21)	-0.078 (-1.41)	-0.046 (-0.92)	-0.048** (-2.43)	-0.021 (-0.41)	-0.486 (-0.77)	0.503 (1.13)	-0.301*** (-2.71)	-0.374 (-0.82)
Controls	No	Yes	Yes	Yes	No	Yes	Yes	Yes	No	Yes	Yes	Yes
Observations	5,079	5,028	4,742	4,174	5,079	5,028	4,831	4,174	5,079	5,028	4,683	4,174
R <sup>2</sup>	0.014	0.295	0.108	0.059	0.012	0.229	0.067	0.033	0.017	0.253	0.033	0.080

This table presents several robustness tests of our main results. Panel A regresses *NewFund Ind* (columns 1 through 4), *NewFund Pct* (columns 5 through 8), and *NewFund Dollars* (columns 9 through 12) on *Environment%*. Panel B replaces *Environment%* with *Env\_Neg%* and *Env\_Pos%*. Columns (1), (5), and (9) report results excluding all control variables. Columns (2), (6), and (10) report results including firm fixed effects in addition to year fixed effects, dropping singleton observations. Columns (3), (7), and (11) estimate results excluding values with a Cook's distance greater than 4/N. Columns (4), (8), and (12) estimate results excluding the years 2020 and 2021. All continuous variables are winsorized annually at the 1st and 99th percentiles. Appendix A contains detailed variable definitions. \*\*\* (\*\*) denotes two-tailed significance at the p<0.01 (p<0.05) level.