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Companies' ethical certification and their attractiveness to institutional investors: An intermediate signaling perspective

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Abstract

Our research investigates how the inclusion of a company on an independent ethics index affects its attractiveness to institutional investors. Using a sample of 864 U.S. firms over the 2010–2018 period, we find that institutional investors significantly increase their holdings in companies in the quarter that they are included on the ethics index and maintain larger holdings in the four quarters following the inclusion on the Ethisphere list relative to pre-inclusion period, with dedicated institutional investors being more swayed to invest than transient investors. This paper adds to the emerging literature on intermediate signaling by showing that a firm's inclusion on an ethics index reduces information asymmetry with institutional investors. Our evidence suggests that public companies should effectively, rather than ceremonially, adopt sound governance structures and invest in socially responsible activities, as these actions can increase their likelihood of being included on ethics indices. By doing so, these firms send credible signals about their ethical compass, granting them access to valuable institutional investments.

KEYWORDS
corporate governance, CSR, ethical list, ethics, institutional investors

1 | INTRODUCTION

Institutional investors' ownership in public equity has surged over the past 5 decades.[1] This increase in institutional holding has sparked scholarly research that explores how companies attract institutional investments (Connelly et al., 2010; McNulty & Nordberg, 2016). Some suggest that institutional investors favor firms that have good governance (Bell et al., 2014) and entities that are socially responsible (Aguilera et al., 2006). For instance, managerial opportunism, a major factor that impedes effective governance, may reduce the amount of capital that investors are willing to put into a company (Chung & Zhang, 2011; Hwang et al., 2022). Likewise, socially responsible initiatives help companies attract more institutional investments (Aguilera et al., 2007; Chung & Zhang, 2011; Dyck et al., 2019).

Others argue that institutional investors' capital allocation decisions are not necessarily a function of a firm's governance structure or its corporate social responsibility profile. Institutional investors may skeptically view a firm's governance practices because governance structures may be ceremonially implemented to satisfy legal codes and benchmarks, resulting in systematic governance failures (Jain & Jamali, 2016). Likewise, institutional investors may not necessarily be attracted to socially responsible companies as these companies may be perceived as engaging in corporate posturing and deception, also called *greenwashing* (Laufer, 2003; Tashman et al., 2019). In fact, recent governance scandals and greenwashing claims have raised institutional investors' skepticism when companies issue self-reported governance and/or social responsibility reports (Jain & Jamali, 2016; Tashman et al., 2019).

In this paper, we shed light on institutional investors' ownership by exploiting a unique setting/event in corporate lifecycle: the moment a corporation is certified as being "ethical" by an independent party, the Ethisphere Institute. Since 2006, and during the month of

March, the Ethisphere Institute publishes its list of the World's Most Ethical Companies list. The methodology includes reviewing codes of ethics, litigation, and regulatory infraction histories; evaluating the investment in innovation and sustainable business practices; looking at activities designed to improve corporate citizenship; and studying nominations from senior executives, industry peers, suppliers, and customers. Hence, companies included on the *Ethisphere Institute* list are leaders of their respective industries when it comes to key ethical criteria such as tone from the top, employee well-being, CSR, and compliance programs.

Drawing on signaling theory (Spence, 1973, 2002) and the intermediate signaling perspective (Vasudeva et al., 2018), we posit that the inclusion of a company on Ethisphere's ethics index sends a credible signal about the quality of its governance structure, its engagement in socially responsible practices, as well as its commitment to ethical business practices. Indeed, good corporate governance structures and social responsibility are integral components of a company's ethical infrastructure, ethical compass, and ensuing actions, granting ethical companies a unique edge in terms of attracting institutional investors.

This paper offers four contributions to extant literature. First, we contribute to the emerging literature on intermediate signaling (Vasudeva et al., 2018) by showing that the inclusion of a company on the World's Most Ethical Companies sends a credible signal to third parties about the company's corporate governance, social responsibility, and commitment to ethical business practices. Since top executives can manipulate a company's self-reported governance indicators and CSR disclosures (e.g., Arena et al., 2015), the inclusion on an independent ethics list seems to provide a stronger and more credible signal about the company's ethical compass, we argue. Second, while most prior research has investigated the effect of social responsibility and good corporate governance structures independently, we probe their joint effect as well as that of ethical commitment to business practices on attracting institutional investors. Third, we heed the growing number of calls to start differentiating between long-term and short-term institutional investors (e.g., Connelly et al., 2010), thereby further shedding light on the profile of institutional investors that are attracted to invest in ethical companies. Studies have reported heterogeneous investment preferences among institutional investors (e.g., Gillan & Starks, 2007; Goyer & Jung, 2011) suggesting that what attracts institutional investors is still open to debate (e.g., Aguilera et al., 2016; Gibson et al., 2004; Grinblatt & Titman, 1989). Fourth, this study offers managerial contributions by showing that public companies need to effectively—rather than ceremonially—adopt sound governance structures, invest in socially responsible activities, and commit to ethical business practices because they can increase their likelihood of being included on ethics indices, therefore allowing them to send positive and credible signals about their ethical compass and granting them access to valuable institutional investments. Effective measures mean that these measures are certified as credible by an independent party and not merely adopted to meet compliance requirements.

The paper is structured as follows: First, we discuss the conceptual background of the study as well as the theoretical framework upon which we build our two hypotheses. Next, we introduce the Ethisphere Institute and the methodology used to score and rank companies included in the list of the World's Most Ethical Companies. Following that, we detail the sample used followed by our method and findings. Finally, we discuss our findings and present our concluding remarks.

1.1 | Literature review: Institutional investments, corporate social responsibility, and corporate governance

According to an OECD study (2011), there has been a huge increase in institutional investors' ownership in public equity since the mid-1960s. Along these lines, Lewellen and Lewellen (2022) note that institutional ownership of publicly traded U.S. firms rose from 32% to 73% of the overall market from 1980 to 2017 and that the 100 largest institutions own more than 50% of all equities. In addition, a recent report by the OECD (2019) showed that institutional money managers control more than 40% of public equity market capitalization worldwide as of year-end 2017.

The rise in institutional investments was paralleled by a rising awareness of corporate social responsibility (CSR) and the need for companies to balance their concern for profits with their concern for the interests of varied stakeholders, society, and the environment (Porter & Kramer, 2011). Since the beginning of the 21st century, the concept of socially responsible investing has become prevalent, attracting a considerable amount of investors' money. Bialkowski and Starks (2016) report that approximately 18% of all assets under management in the United States include socially responsible securities in their portfolios. The Global Sustainable Investment Alliance report of 2016 documents that $22.89 trillion of assets were professionally managed under responsible investment strategies globally, representing 26% of all professionally managed assets. Finally, a recent survey by the Institute for Sustainable Investing at Morgan Stanley demonstrate that 80% of asset owners surveyed in North America, Europe, and Asia/Pacific actively integrated sustainable investing in 2019, up 10 percentage points from Morgan Stanley's last biennial survey in 2017.

There is converging evidence that institutional investors favor firms that dedicate some of their resources to CSR (Aguilera et al., 2006; Cellier et al., 2016). Research also finds reciprocity between institutional investments and social performance. In fact, there is growing evidence of a positive correlation between institutional investors' holdings, notably those having longer investment horizon, and the social performance of the firm (Waddock & Graves, 1997; Zaman et al., 2022). For instance, Dyck et al. (2019) document that firms with higher institutional ownership have better E&S scores especially for institutions based in countries with stronger social and environmental norms (European investors as compared with U.S. institutional investors) and that are signatories

of the Principles of Responsible Investments. Hartzmark and Sussman (2019) find that funds that focus on sustainability benefit from investors' inflows while those that are categorized as low sustainability suffer from outflows. Starks et al. (2017) show that institutions with longer horizons tend to invest more in firms with higher ESG scores and behave more patiently toward high-ESG firms. Similarly, Gibson et al. (2020) found that investors with longer investment horizons are associated with better portfolio-level ESG scores.

The rise of institutional ownership was also accompanied by an increased scrutiny of companies' corporate governance structure and practices. For instance, Chung and Zhang (2011) report a positive and significant relationship between corporate governance and institutional investors' ownership. Specifically, they quantify that an increase in governance quality from the 25th to the 75th percentile results in an increase in institutional ownership by 14%. They argue that institutional investors prefer better-governed corporations for fiduciary responsibilities, monitoring costs, and liquidity reasons. Bushee and Noe (2000) conclude that firms with higher Association for Investment Management and Research disclosure rankings have higher institutional ownership.[2]

Evidence also shows that the relation between better governance and institutional investment is two-directional whereby the rising trends of shareholder activism are driving firms to adopt better governance mechanisms (Chung & Zhang, 2011; Hwang et al., 2022). For example, McCahery et al. (2016) find that institutional investors consider corporate governance a very important factor for their investment decisions, especially those who are eager to take part in shareholder activism. Aggarwal et al. (2011) document a link between international portfolio investment and the adoption of sound corporate governance practices that promote corporate accountability and empower shareholders. Bushee and Noe (2000) find evidence that ownership by governance-sensitive institutions in the United States is associated with future improvements in shareholder rights.

In sum, the positive impact of governance and social responsibility on firm performance is well documented and suggests that the investment decisions and the activism of institutional investors in such companies pay off. Husted and Allen (2007) report a value creation reasoning or rationale behind CSR-related investments. According to Xu et al. (2015), corporations with higher CSR scores have significantly lower cost of equity capital.

At the same time, recent governance scandals and greenwashing claims have raised institutional investors' skepticism when a company issues self-reported responsibility and governance reports (Jain & Jamali, 2016; Laufer, 2003; Tashman et al., 2019). Hence, while increased social responsibility and sound governance practices may indeed attract institutional investments, investors are skeptical about how the firm frames itself along these lines (Jain & Jamali, 2016). In what follows, we argue that when a company is included on an ethics index, by the Ethisphere Institute, the self-reported governance and social responsibility reports gain credibility and legitimacy in the eyes of institutional investors, thereby leading higher institutional shareholdings in those companies.

1.1.1 | Signaling theory and intermediate signaling

Signaling theory has been first conceptualized to explain the behavior of two parties that have access to different information (Spence, 1973, 2002). According to the seminal work of Spence, one party (the sender) aims to communicate information (the signal) to the other party (the receiver) who evaluates and interprets the signal (Connelly et al., 2011; Spence, 1973).

A central premise of signaling theory is the important role that the signal plays in reducing information asymmetry between two parties (Connelly et al., 2011; Ferri & Stiglitz, 2003). Accordingly, senders holding private information decide on which signal they want to send, and receivers decide on how they subjectively interpret the signal. Hence, the value of signaling theory lies in ascribing value to how individuals and organizations get ahold of significant and credible information that can reduce information asymmetry and result in informed decision-making (Spence, 2002).

While much prior work has focused on the sender and the sent signal, less work exists on how the receiver perceives the signal (Connelly et al., 2011; Vasudeva et al., 2018). Indeed, senders *intentionally* communicate information to receivers. As such, senders are more likely to disclose information that provides a positive view of the organization. Because of information asymmetry between senders and receivers (Han et al., 2014), senders are sometimes able to provide false signaling to receivers and, consequently, the signal loses its credibility because receivers begin to perceive the signal with skepticism insofar that they can even ignore the signal (Bird & Smith, 2005). However, the signal can gain more credibility and will have more impact once certified by a third party (Vasudeva et al., 2018).

Although prior research largely focused on companies' self-initiated signals, Vasudeva et al. (2018) introduced the concept of intermediate signaling. Intermediate signaling is defined as "a signaling theory of a third-party intermediary whose actions in relation to the entity of interest serve as an unintended signal of this entity's qualities to observers" (p. 1585). Along these lines, and in the context of this paper, the inclusion of a firm on an ethics index allows the sent signal to gain credibility because it certifies that a company is effectively adopting quality governance structures, implementing socially responsible initiatives, and conducting business ethically. Indeed, since the inclusion on the ethics index was not intentionally initiated by the sender, the signal gains credibility and hence is perceived as reflecting important information about the company's CSR and governance practices. Furthermore, research shows that companies that are included on an ethics index continuously strive to meet quality requirements, as failure to do so would expose a company to the threat of expulsion from the index (Mackenzie et al., 2013).

1.1.2 | Ethical companies and attraction of institutional investors

The inclusion on an ethics index can provide an independent certification that the company is indeed engaging in ethical business practices, through increasing its socially responsible investments, adopting good governance practices, and conducting business ethically. While the relationship between institutional investment, social responsibility, and governance has attracted significant attention, the broader ethical conduct of investee firms is relatively understudied. Nevertheless, the ethical conduct of corporations is gradually growing in importance and is increasingly under scrutiny, at par with other value creating aspects of business conduct.

Several research studies link ethics to corporate governance and social responsibility. Chan and Cheung (2012) argue that the presence of a good corporate governance practice within a corporation does not necessarily mean that the company is ethical. However, holding other variables constant, they find that a corporate management team that has a higher ethical sensitivity will put in place better corporate governance structure and practices. Felo (2001) also highlights the relation between corporate governance and ethical practice within a corporation. The author provides evidence that corporations that offer ethics programs to their personnel decrease the risk of conflicts of interest between ownership and management.

Similarly, Webley and Werner (2008) propose that having well-managed ethics policies, having ethical leadership, and integrating ethics into corporate processes and strategies are essential pre-requisites to maintain good corporate governance. Rodgers et al. (2014) argue that ethical positions can provide supreme security, improved convenience, heightened accountability, better fraud detection, and prevention of fraud, thereby improving CSR performance in discernible ways as well as attracting more ethical investments.

Mehanna and Yazbeck (2009) argue that the effective implementation of policies and procedures for ethical conduct is a critical enabler of value enhancing activities such as innovative products and processes, effective management of the value chain, decentralization, empowering employees, as well as research and development. In turn, these activities foster business innovation, competitive advantages, and economic prosperity. Within the same framework, Hoffman and Rowe (2007) highlight the importance of ethics and ethical officers in a corporation as a means of guarding against governance failure. Hoffman and Rowe (2007) suspect that a fundamental reason for governance failures in corporations is a systemic disconnect of the ethics and compliance function from the board of directors, which undermines the exercise of their responsibilities.

Based on the above, the inclusion of a company on an ethics index can signal that the company is indeed adopting good governance practices and is effectively, and not ceremonially, engaging in socially responsible activities and ethical practices. This independent certification, being unintentional, attracts institutional investments, especially those looking to protect themselves against governance scandals and unethical business practices. Such scandals and practices have exacerbated in recent years, especially with the governance scandals that obliterated humongous investments in public companies (e.g., the cases of Enron and WORLDCOM). Furthermore, recent social irresponsibility scandals have negatively impacted publicly traded firms such as the allegations of sexual harassment that undid the Weinstein Company and the bribery charges against United Airlines.

Hence, we test the following hypothesis:

> **Hypothesis 1.** Institutional investors increase their holdings in companies following their inclusion on an independent ethics index.

1.1.3 | Long-term institutional investors versus short-term institutional investors

Prior research points to remarkable differences among the different types of institutional investors in terms of investment strategy and style. Hutchinson et al. (2015) argue that not all institutional investors have the same drivers to influence companies they invest in. According to Jansson and Biel (2011), investment banks and hedge funds tend to overrate the importance of financial returns and underrate the importance of ethical, environmental, and social features of their investors. On the contrary, municipalities, universities, and labor unions give a broader consideration to fiduciary duty than do investment institutions.

In this regard, researchers make a noticeable distinction between long-term and short-term investors. Ryan and Schneider (2002) argue that variations in institutional investors' ownership preference are largely affected by the nature of products they sell (pension, insurance, etc.) and make an obvious distinction between long-term and short-term investors. Long-term investors, such as pension funds, life assurance funds, unit trusts, investment trusts, and charitable funds, have long-term investment horizons and predictable cash flows (Brammer et al., 2004; Ryan & Schneider, 2002). In contrast, short-term investors, such as mutual funds, have shorter investment horizons and prefer firms that they can more quickly and easily exit (Droms & Walker, 1996; Johnson & Greening, 1999; Zera & Madura, 2001).

The business ethics literature suggests that a corporate culture that focuses on ethics, whether translated into good governance practices or socially responsible investment, is considered a long-term investment (Zaman et al., 2022). Hillman and Keim (2001) claim that better social performance will contribute positively to long-term value creation. Other studies argue that a firm's performance is positively associated with its social performance in the long run. Enhanced social performance improves resource competitiveness (Cochran & Wood, 1984; Hart, 1995; Waddock & Graves, 1997), lowers transaction costs (Ruf et al., 2001), and catalyzes employee excellence and motivation (Moskowitz, 1972; Turban & Greening, 1997) and customer goodwill (McGuire

et al., 1988). Cheng et al. (2014) also report that CSR creates value in the long run by depressing the idiosyncratic restrictions that a corporation tackles in funding operations and strategic projects and allowing it to undertake profitable investments that it would otherwise bypass.

As such, a growing body of evidence seems to suggest that long-term institutional investors are attracted to socially performing firms more so than are short-term investors. According to a CFA Institute report that discusses environmental, social, and governance (ESG) issues in investing, there is a growing realization that ESG issues are relevant to all long-term investors, whether motivated by economic value or moral values. Brammer et al. (2004), Johnson and Greening (1999), and Waddock and Graves (1997) conclude that long-term institutional investments are positively related to corporate social performance (CSP).

Based on the latter argumentation, we hypothesize that:

> **Hypothesis 2.** Following a firm's inclusion on an ethics index, long-term institutional investors increase their holdings in those companies more than do short-term institutional investors.

1.2 | Sample and data

Our initial sample includes all firms on the Ethisphere Institute list of the World's Most Ethical Companies over the period 2010–2018 (1131 firms). Ethisphere is an institute that quantifies corporate ethical standards by attributing an Ethical Quotient (EQ) to firms to recognize those who excel in this field. Ethisphere uses specific methodologies, tools, and standards to evaluate a corporation's ethical standing. Governance, corporate citizenship and responsibility, and ethics are the three major criteria that Ethisphere assesses to rate the ethical conduct of corporations.

1.3 | Ethisphere institute and the list of the World's Most Ethical Companies

The Ethisphere Institute is a leading international think-tank dedicated to the creation, advancement and sharing of best practices in business ethics, corporate social responsibility, anti-corruption, and sustainability with extensive expertise in measuring and defining core ethics standards using data-driven insights. Ethisphere launched the World's Most Ethical Companies recognition program to measure and showcase the superior achievements of organizations that are committed to doing business with ethics and integrity. The program seeks to recognize companies that truly go beyond making statements about doing business ethically and translate words into action. As such, the World's Most Ethical Company honorees not only promote ethical business standards and practices internally, but they also embed "conscious capitalism" into everything they do, every employee they hire, and every partner they bring into their network.

The World's Most Ethical Company assessment is based upon Ethisphere's Ethics Quotient framework. The Ethics Quotient framework has been developed over years of effort to provide a means to assess an organization's performance in an objective, consistent and standardized way. It was determined, vetted, and refined by expert advice and insights gleaned from Ethisphere's network of thought leaders and from the World's Most Ethical Company Methodology Advisory Panel including experts in law, corporate reputation, corporate ethics, governance, and anti-corruption.

The Ethics Quotient Questionnaire includes a 200-point assessment (multiple-choice and free-form questions) of the companies' (i) Ethics and Compliance Program, (ii) Culture of Ethics, (iii) Corporate Citizenship and Responsibility, (iv) Governance, and (v) Leadership and Reputation. Participating firms are expected to provide documents and evidence to support their responses to the questionnaire. Ethisphere's team of analysts qualitatively evaluate aspects of an organization's programs and processes. Ethisphere's team also researches each organization's history of litigation, reputation, and ethical track record to inform the score for the organization's Leadership and Reputation. The team also reviews publicly available information with a bearing on an organization's reputation for acting ethically (e.g., public filings, regulatory activity, media review). Credit for third-party recognitions indicating positive stakeholder perception is granted while off-sets to the credit is given for third-party recognitions with any negative reputational issues faced by a participating firm over the past 5 years. Ethisphere considers the following factors in its evaluation: (i) how long ago the conduct at issue occurred and when it was resolved, (ii) the seriousness of the conduct or issue, (iii) actions taken by the applicant to address the issue, and (iv) how the issue impacts the applicant's reputation. If the issue is severe enough, the Ethisphere team generally exclude an organization from the World's Most Ethical Companies List.

Following that, the self-reported scores are combined with the qualitative assessment of an applicant organization's supplemental documentation and independent research to produce a final EQ score. A company's final (EQ) score is evaluated relative to those of its peers within the context of its structure, size, and operating environment. The final scores are shared with the participating firms to help them improve their programs.

Given the above, we fairly claim the following. First, the Ethics Quotient framework is a rigorous instrument that have been vetted and refined by professional bodies, experts, as well as participating firms. Second, the methodology used for scoring and ranking ensures validating the financial as well as the non-financial metrics provided by the participating firms, incorporating third party data and information, and discussing identified issues and concerns with participating firms' management and leadership. Finally, the Ethics Quotient provides a standardized set of data and metrics that allows comparison of corporate practices and performances across time and regions.

We first eliminate non-U.S. firms to reach a preliminary sample that includes 864 U.S. firms reported on the Ethisphere list over the period 2010–2018 (74.4% of the initial sample). Following that, we eliminate firms that are not publicly traded and firms that do not have financial and stock return data on Compustat and CRSP. In addition, we restrict inclusion on the Ethisphere list to once during a 2-year period.[3] Our final sample includes 468 firms that are spread across the sample period as shown in Table 1.

We obtain institutional shareholdings from Thomson Reuters Ownership Database, which recognizes 13 different types on institutional investors. We use the sum of all 13 types as a representation of total institutional holdings. We also divide institutional investors into long-term investors including banks and trusts, pension funds and insurance companies, and short-term investors such as investment companies, investment advisors, and hedge funds.

We control for various financial and non-financial firm-specific attributes. For instance, we control for firm size since institutional investors tend to invest in larger firms (Edison & Warnock, 2003) and larger firms tend to have more liquid stock that facilitates institutional trade (Cooper et al., 1985). We also control for firm age since older firms are more likely to have a more dispersed ownership structure than younger firms (Eisenberg et al., 1998). We further control for various corporate governance metrics, such as the percentage of insiders on board, percentage of gray directors (outside but related directors) serving on board, percentage of women directors, number of directors serving on board, and the number of board meetings. Additionally, we complement the above governance factors with another measure of the quality of corporate governance structure using a governance composite index. The governance index is an aggregate of indicators each taking the value of 1 in the presence of a good governance practice and 0 otherwise.[4]

Falkenstein (1996) and Gompers et al. (2003), among others, find stock market capitalization to be a major driver of the level of institutional ownership. In addition, Institutional investors are potentially momentum investors. First, there is some evidence and industry knowledge of the "momentum effect" in return patterns, that is, abnormal returns can be obtained by holding stocks that have performed well in recent times (Gompers et al., 2003). Second, many observers have depicted foreign institutions as "hot money" chasing "hot markets," while domestic investors tend to be contrarian (Grinblatt & Keloharju, 2001).

As such, the tested model is as follows:

$$Y = \text{Intercept} + \text{Ethical} + \text{MKVAL} + \text{AGE} - \text{INSPCT} + \text{GRAYPCT} + \text{WOMPCT} + \text{BDSIZE} + \text{BDMEET} + \text{GOVSCORE} + \text{MOM}$$

Where, MKVAL is the Market value of equity; AGE is the Firm age; INSPLSPCT is the percentage of inside directors on board; BDMEET is the Number of board meetings per year; GRAYPCT is the Percentage of gray (Outside-related) directors; WOMPCT is the Percentage of women directors on board; BDSIZE is the size of the board; MOM is Stock return momentum; GOVSCORE is the Governance index measured using aggregate of indicators each taking the value of 1 in the presence of a good governance practice and 0 otherwise. These indicators are: insiders control, institutional majority, board outside majority, board outside meeting, business

TABLE 1 Sample selection.

Year	Total	Number of U.S. firms	% U.S. firms	Number of U.S. firms with financial data/2-year restriction	% of Total (out of 468)
2010	101	86	85.15	68	14.53
2011	107	71	66.36	14	2.99
2012	145	102	70.34	75	16.03
2013	140	102	72.86	18	3.85
2014	145	102	70.34	86	18.38
2015	133	98	73.68	12	2.56
2016	131	99	75.57	87	18.59
2017	124	98	79.03	23	4.91
2018	135	106	78.52	85	18.16
Total	**1161**	**864**	**74.42**	**468**	**100**

Note: Key statistics are provided below regarding the sample of companies on Ethisphere. Ethisphere Institute is a U.S.-based firm whose aim is to define and measure corporate ethical standards and recognize companies that excel in this filed. Every year the company publishes Ethisphere Institute and announces its World's Most Ethical Companies awards (announced once a year, in March). Key statistics are provided below regarding the sample of companies on Ethisphere. For each year, the number of U.S. companies on the Ethisphere list is presented. The percentage of U.S. companies to the total number of firms presented in each year is also reported. After removing companies without financial data (CRSP and or Compustat), we restrict inclusion on Ethisphere list to once during a 2-year period. For example, when a firm like Accenture is included in every year during the 2010–2018 period (9 times in 9 years), we remove odd years and keep even year.

ethics code, fully independent audit committee, fully independent compensation committee, and fully independent nomination committee.

1.4 | Research methods

For analysis purposes, we match every sample firm with a matched firm based on firm size (market value of equity) and industry affiliation (2-digit SIC codes) in the year prior to the inclusion on the Ethisphere list. Following that, and using univariate analysis, we compare mean and median institutional ownership for sample and matched firms over the four quarters preceding the release of the Ethisphere list and the four quarters following the release of the list. Afterward, we compare the change in the shareholdings of long-term versus short-term institutional investors. Finally, and relying on multivariate regression analysis, we test whether the change in institutional holding is a function of the inclusion on the Ethisphere list. The dependent variable is the change in holding while the test variable is a dummy variable equal to 1 for firms included on the Ethisphere list and 0 otherwise.

1.5 | Descriptive statistics

Table 2 presents descriptive statistics for sample firms. Data analysis shows that sample firms have a mean market capitalization of $30 billion, a median of $15 billion, and a maximum of $370 billion. Mean firm age is 66 years with 25% of the firms having an age of 26 years or less and 75% having an age of 102 years or less. Inside directors occupy 21% of board seats, on average, and an exceptional maximum of 92% of board seats. Boards seem to be relatively active meeting 8 times per year, on average, with 75% of boards meeting 9 times or less per year. Gray directors occupy approximately 9% of the board seats, on average, while women directors constitute a mean of 18% of the board members. Boards are relatively large, including an average of 11 directors with a maximum board size of 18 board members. Finally, the composite governance score has a mean of 6.28 with a maximum score of 8.

2 | RESULTS

2.1 | Univariate analysis

2.1.1 | Analysis of total institutional holding

Table 3, Part A shows that institutional investors held a significantly lower percentage of shares in sample firms as compared to the matched firms over the four quarters preceding the release of the Ethisphere list. Institutional holdings in ethical firms range from 69.4% in quarter −4 to 70.28% in quarter −1. Institutional holdings exhibit a significant increase in quarter 0 (release of the Ethisphere list quarter), reaching 72.84% in ethical firms. The increase in institutional holdings seems to be long term, rather than transitory, as institutional holding are significantly higher in quarters 1 through 4, relative to quarter −1.

When it comes to the matched sample, institutional ownership ranges from 73.49% in quarter −4 to 73.59% in quarter −1. We do not observe significant changes in the holdings of the matched sample during the publication of the list quarter. This lack of significant variation provides preliminary evidence that the increase in institutional holdings in sample firms is mainly due to the inclusion of the firms on the Ethisphere list.

To mitigate the fluctuation in holdings among quarters, we compute the average holdings over the four quarters prior to the release of the Ethisphere list and compare it to the average of five quarters starting with the release quarter and the following four quarters. We report these results in Part B of Table 3, and we find that the average holding in sample firms over the pre-release of the Ethisphere list quarters is 69.86% is significantly lower than that of the matched sample, 73.40% ($p < .01$). Yet the mean difference in institutional holding in ethical firms in the following quarters (73.07%) is not significantly different from that of the matched sample (71.79%) suggesting that institutional investors had a more significant increase in their holding at ethical firms compared to the matched firms.

Table 3, Part C presents the change in holdings from pre- to post-list release over several time intervals. Results in this part show an increase in institutional holdings for sample firms relative to the release quarter and relative to the post-release quarters. For instance, the change in the level of institutional holdings in sample firms between quarters −2 and 0 is 2.68%, and 2.58% between quarters −1 and 0, both significant at the 1% level. Similarly, the change in the level of institutional holdings in sample firms is 2.90% between quarters −1 and +3, significant at the 1% level. The evidence clearly indicates that institutional investors increase their holdings in sample firms and maintain higher holdings for at least four quarters following the release of the Ethisphere list (change in holding over the (−1, +4) window is significant at the 1% level). Moreover, looking at the difference between the level of institutional holdings in Ethisphere firms versus their matched counterparts, we find that the increase in holdings in the Ethisphere firms is significantly higher in all the intervals.

The evidence seems to support Hypothesis 1 as institutional investors increase their holdings in Ethisphere Ethical firms more than their matched counterparts. Institutional investors' investment decisions seem to be affected by the ethical practices of investee firms. This evidence is also consistent with prior research that documents a positive relationship between corporate governance and social responsibility of the corporation and the increase in the shareholdings of institutional investors.

It is also worth noting the significantly negative change in the institutional holdings in the matched firms from the pre- to the post-release quarters. This may suggest that once the names of ethical firms are disclosed, institutional owners react by reducing their ownership in matched firms while they increase their holding in sample firms.

TABLE 2 Descriptive statistics.

	N	Mean	SD	Q1	Median	Q3	Max
MKVAL ($M)	461	30,672	45,745	7215	15,878	33,934	370,240
AGE (years)	452	66	45	26	60	102	199
INSPCT (%)	460	21.00	14.00	10.00	19.00	29.00	92.00
BDMTG	453	7.93	3.46	6.00	7.00	9.00	33.00
GRAYPCT (%)	452	9.00	12.00	0.00	6.00	13.00	57.00
WOMPCT (%)	451	18.00	9.00	11.00	17.00	23.00	50.00
BDSIZE	450	11.15	2.26	10.00	11.00	12.00	18.00
MOM (%)	449	1.00	3.00	−1.00	1.00	3.00	12.00
GOVSCORE	449	6.28	2.28	5.00	7.00	8.00	8.00

Note: MKVAL, market value of equity; AGE, firm age; INSPLSPCT, percentage of inside directors on board; BDMEET, number of board meetings per year; GRAYPCT, percentage of gray (outside-related) directors; WOMPCT, percentage of women directors on board; MOM, stock return momentum; GOVSCORE, governance index measured using aggregate of indicators each taking the value of 1 in the presence of a good governance practice and 0 otherwise. These indicators are insiders control, institutional majority, board outside majority, board outside meeting, business ethics code, fully independent audit committee, fully independent compensation committee, and fully independent nomination committee.

2.1.2 | Analysis of the type of institutional holding

In Part A of Table 4, we differentiate between the levels of holdings in Ethisphere firms based on the type of institutional investors. The results show that the largest ownership in sample firms during the Ethisphere list release quarter is held by investments advisors (27.6%), investment companies (21.12%), and banks and trusts (13.4%). Hedge funds, pension funds, and insurance companies hold smaller ownership levels of 3.39%, 3.44%, and 3.14%, respectively. Lower ownership holdings are documented for other types of institutional investors. Investment companies, investment advisors, banks and trusts, hedge funds, pension funds, and insurance companies account for more than 99% of institutional holdings in sample firms.

In Part B of Table 4 we report, by type of institutional owners, the average holdings over the four quarters prior to the release of the Ethisphere list and compare it to the average of 5 quarters starting with the release quarter and the following four quarters. The results show that most institutional investors increase their holdings in the post-release quarters relative to the pre-release period.

2.1.3 | Multivariate regression analysis

Table 5 presents multivariate regression analysis results. Results in Part A (for change in holdings from quarter −1 to quarter 0) show that institutional investors increase their investments in the pre-release quarter in firms that are about to become included on the ethics index. The inclusion of the Ethisphere list' coefficient is positive and significant at the 1% level across all three models.[5]

This can be explained by institutional investors' superior ability to collect and analyze information disclosed in quarterly filings (such as 13f filings reports and end of quarter listings) and in other disclosure venues such as press releases and social media.

Similarly, results in Part B (for change in holding from −1 to +1) show that the inclusion on the Ethisphere list is consistently positive across all three models (significant at 1%),[6] which reaffirms the positive impact of the inclusion on the Ethisphere list on institutional investors' holdings. Part B also shows that the change in holding is also positively related to the governance score confirming prior contentions related to the importance of good governance practices for institutional investors. Finally, the change in institutional holdings also seem to be positively related to momentum, where institutional investors are attracted to companies with higher momentum in stock returns.[7]

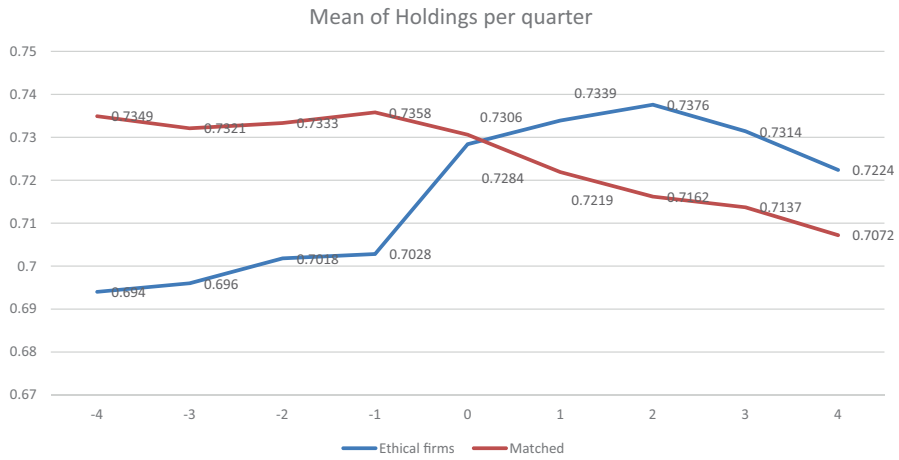
2.1.4 | Discussion and conclusion

We started this paper by asking how the inclusion of a company on an ethical companies' list impacts its attractiveness to both dedicated (long-term) and transient (short-term) institutional investors. Because of the exponential growth in institutional investments in public companies, attracting institutional investors has become a central focus for public company decision-makers and for researchers alike. At the same time, awareness of the importance of governance and social responsibility has reached unprecedented levels in recent years. The relationship between institutional ownership and the governance and social responsibility of corporations that they invest in has also attracted significant research. Some imply that institutional investors are attracted to firms with good governance (Bell et al., 2014; Chung & Zhang, 2011; Hwang et al., 2022) and social responsibility (Aguilera et al., 2006; Chung & Zhang, 2011; Dyck et al., 2019).

Yet, to our knowledge, prior research does not address the impact of an independent party certifying that companies are indeed adopting sound governance practices and are engaging in socially responsible activities. Accordingly, this study provides unique insights over the relationship between an independent certification of corporate ethical initiatives and institutional investing.

TABLE 3 Total institutional holdings in ethical firms and matched firms.

Part A: Levels of holdings



Part B: Change in average levels of holdings

Quarter	Mean pre-holdings	Mean post-holdings	Δ	Δ *p* value	*N*
Ethical firms (mean)	0.6986***	0.7307***	0.0321***	.0000	461
Ethical firms (median)	0.7200	0.7525	0.0325***	.0000	461
Matched (mean)	0.7340	0.7179	−0.0161***	.0073	461
Matched (median)	0.7610	0.7463	−0.0147***	.0021	461
Difference in mean (ethical vs. matched firms)	−0.0354***	0.0128	0.0482		
p value	.0039	.3247			
N	461	463			

Part C: Mean change in holdings

Between quarters	−2 to +0	−2 to +1	−1 to 0	−1 to +1	−1 to +3	−1 to +4
Ethical firms (mean)	0.0268***	0.0324***	0.0258***	0.0317***	0.0290***	0.0202***
Ethical firms (median)	0.0258	0.034	0.0285	0.0359	0.0308	0.0233
Matched (mean)	−0.0024	−0.0111***	−0.0052	−0.0139***	−0.0231***	−0.0288***
Matched (median)	−0.0034	−0.0054	−0.0032	−0.0084	−0.014	−0.021
Diff in changes (ethical vs. matched firms	0.0292***	0.0435***	0.031***	0.0456***	0.0521***	0.049***
p value of the difference in mean changes	.0000	.0000	.0000	.0000	.0000	.0000
N	461	461	461	461	461	461

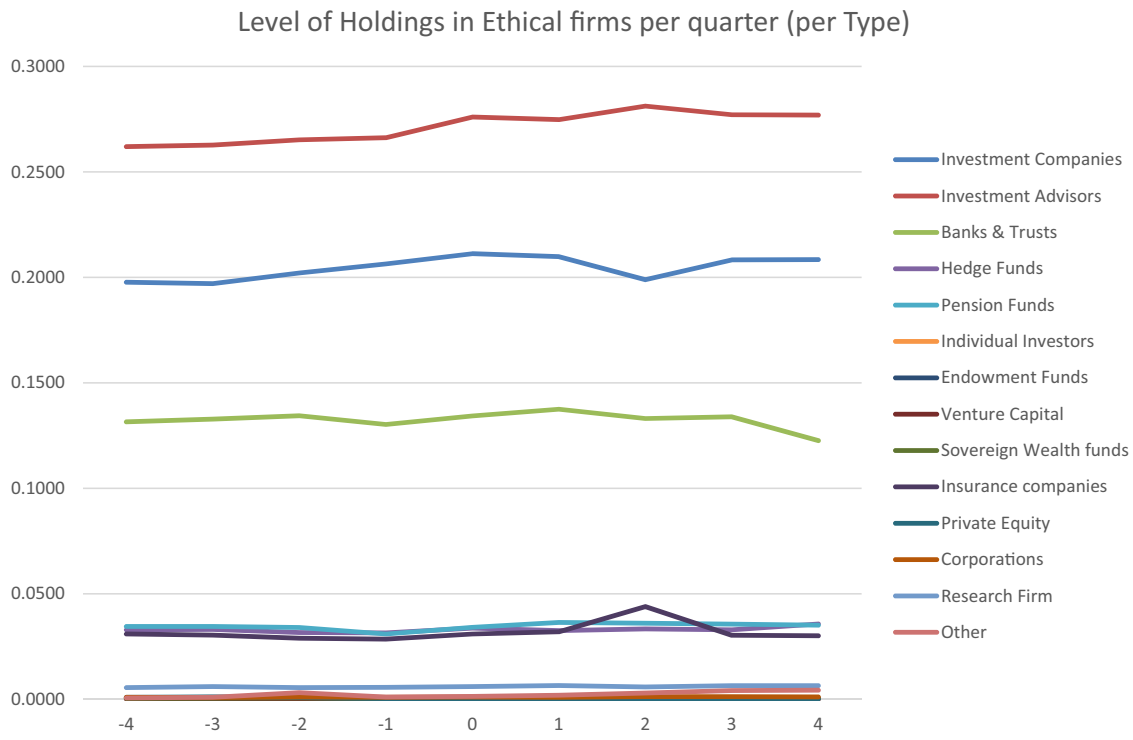
Note: Institutional holdings are obtained from Thomson Reuters Ownership Database, which contains quarterly ownership on institutional ownership of NYSE, Amex, and NASDAQ listed stocks. Details about the database may be found in the main body of the paper. Thomson Reuters Ownership Database classifies each holding institution as one of five "types" according to Standard and Poor's definition of the institution's primary line of business. We decompose holdings into thirteen different groups: Investment Companies; Investment Advisors; Banks and Trusts; Hedge Funds; Pension Funds; Individual Investors; Endowment Funds; Venture Capital; Sovereign Wealth Funds; Insurance Companies; Private Equity; Corporations; and others. For this study, we have used the sum of all Types 1 through 13 to represent *Total institutional holdings*. Holdings data presented in Part A below is for the end of each quarter relative to the first quarter of the year the company is included on the Ethisphere list. Holdings are measured as a percentage of outstanding shares of each firm. Holdings data presented in Part B represent the change of the pre-holdings mean (i.e., average of holdings of the quarters −4, −3, −2, −1) to the post-holdings mean (i.e., average of holdings in quarters 0, +1, +2, +3, +4). *p* values to test the significance of the differences in the changes in holdings between the ethical firms and matched firms in each quarter are reported. Part C presents the change of the holdings over several quarters from pre-release to post-release of the Ethisphere list for the ethical firms and their matched firms. *p* values to test the significance of the differences in the changes in holdings between the ethical firms and matched firms in each period are reported.

***Significance at the 1% level; **significance at the 5% level; *significance at the 10% level.

This study finds that institutional investors increase their level of holdings in firms that get included on the ethics list. The increase in institutional shareholders' ownership in firms included on the Ethisphere list is significantly higher than that in matched counterparts. Higher ownerships relative to the pre-release of the Ethisphere list levels persist for at least four quarters following the

TABLE 4 Average level of institutional holdings in ethical firms by type.

Part A: Level of holdings in ethical firms (per type)



Part B: Average levels of holdings in ethical firms

Quarter	Mean pre-holdings	Mean post-holdings	Δ (mean)	*p* value of Δ (mean)	*N*
Investment companies	0.2008	0.2073	0.0065***	.0001	461
Investment advisors	0.2640	0.2772	0.0132***	.0000	461
Banks & trusts	0.1322	0.1323	0.0001	.8548	461
Hedge funds	0.0322	0.0336	0.0014*	.0635	461
Pension funds	0.0335	0.0354	0.0019***	.0000	461
Individual investors	0.0004	0.0003	−0.0001***	.0031	461
Endowment funds	0.0008	0.0006	−0.0002***	.0000	461
Venture capital	0.0001	0.0000	−0.0001	.4877	461
Sovereign wealth funds	0.0004	0.0004	0.0000***	.0000	461
Insurance companies	0.0297	0.0334	0.0037***	.0000	461
Private equity	0.0008	0.0002	−0.0006***	.0072	461
Corporations	0.0009	0.0011	0.0002***	.0000	461
Pension funds	0.0335	0.0354	0.0019***	.0000	461
Research firms	0.0056	0.0062	0.0006***	.0000	461
Other	0.0014	0.0029	0.0015***	.0000	461

Note: Institutional holdings are obtained from Thomson Reuters Ownership Database, which contains quarterly ownership on institutional ownership of NYSE, Amex, and NASDAQ listed stocks. Details about the database may be found in the main body of the paper. Thomson Reuters Ownership Database classifies each holding institution as one of five "types" according to Standard and Poor's definition of the institution's primary line of business. We decompose holdings into thirteen different groups: Investment Companies; Investment Advisors; Banks and Trusts; Hedge Funds; Pension Funds; Individual Investors; Endowment Funds; Venture Capital; Sovereign Wealth Funds; Insurance Companies; Private Equity; Corporations; and others. For this study, we have used the sum of all Types 1 through 13 to represent *Total institutional holdings*. Holdings data presented in Part A below is for the end of each quarter relative to the first quarter of the year the company is included on the Ethisphere list for each type of the institutional investors. Holdings are measured as a percentage of outstanding shares of each firm. Part B presents the change of the average of holdings of the quarters −4, −3, −2, −1 to the average of holdings in quarters 0, +1, +2, +3, +4 for each type of the institutional investors and the *p* values to test the significance of these changes. The average is calculated by adding the holdings of all the respective quarters and dividing the sum by the number of quarters.

***Significance at the 1% level; **significance at the 5% level; *significance at the 10% level.

TABLE 5 Regression analysis.

Part A: Change in Total holdings from −1 to 0			
	Model 1	**Model 2**	**Model 3**
	ΔH (−1,0)	**ΔH (−1,0)**	**ΔH (−1,0)**
Intercept	−0.0188	−0.039	−0.0356
	(0.175)	(0.036)	(0.054)
Ethical	0.033***	0.0331***	0.0329***
	(0.0000)	(0.0000)	(0.0000)
MKVAL	1.23E−08	9.35E−09	1.97E−08
	(0.824)	(0.865)	(0.72)
AGE	1.39E−05	2.21E−05	3.33E−05
	(0.785)	(0.666)	(0.515)
INSPCT	0.0087	0.0113	0.0136
	(0.567)	(0.456)	(0.368)
GRAYPCT	0.0002	0.0165	0.0183
	(0.991)	(0.399)	(0.347)
WOMPCT	−0.0014	−0.0013	−0.0013
	(0.561)	(0.565)	(0.572)
BDSIZE	0.0008	0.0007	0.0004
	(0.52)	(0.601)	(0.733)
BDMEET	0.0002	0.0002	0.0002
	(0.694)	(0.702)	(0.728)
GOVSCORE		0.0028	0.0027
		(0.102)	(0.114)
MOM			0.1599
			(0.019)
N	902	902	902
Adj. *R*-sq	.086	.09	.1
Part B: Change in total holdings from −1 to +1			
	Model 1	**Model 2**	**Model 3**
	ΔH (−1,1)	**ΔH (−1,1)**	**ΔH (−1,1)**
Intercept	−0.0098	−0.0616	−0.0584
	(0.558)	(0.0060)	(0.009)
Ethical	0.0551***	0.0553***	0.0551***
	(0.0000)	(0.0000)	(0.0000)
MKVAL	2.66E-08	3.41E-08	2.41E-08
	(0.69)	(0.606)	(0.716)
AGE	−8.80E−05	−6.76E−05	−5.62E−05
	(0.155)	(0.274)	(0.36)
INSPCT	−0.0201	−0.0133	−0.0111
	(0.274)	(0.466)	(0.544)
GRAYPCT	−0.0132	0.0285	0.0303
	(0.519)	(0.224)	(0.196)
WOMPCT	−4.71E−05	−1.36E−06	2.94E−05
	(0.987)	(1)	(0.992)

(Continues)

TABLE 5 (Continued)

Part B: Change in total holdings from −1 to +1			
	Model 1	Model 2	Model 3
	ΔH (−1,1)	ΔH (−1,1)	ΔH (−1,1)
BDSIZE	2.28E−05	−0.0004	−0.0006
	(0.988)	(0.81)	(0.698)
BDMEET	4.81E−05	3.15E−05	1.19E−05
	(0.942)	(0.962)	(0.985)
GOVSCORE		0.0072***	0.0071***
		(0.001)	(0.001)
MOM			0.1545**
			(0.059)
N	902	902	902
Adj. *R*-sq	.162	.183	.188

Note: Institutional holdings are obtained from Thomson Reuters Ownership Database, which contains quarterly ownership on institutional ownership of NYSE, Amex, and NASDAQ listed stocks. Details about the database may be found in the main body of the paper. Thomson Reuters Ownership Database classifies each holding institution as one of five "types" according to Standard and Poor's definition of the institution's primary line of business. We decompose holdings into 13 different groups: Investment Companies; Investment Advisors; Banks and Trusts; Hedge Funds; Pension Funds; Individual Investors; Endowment Funds; Venture Capital; Sovereign Wealth Funds; Insurance Companies; Private Equity; Corporations; and others. For this study, we have used the sum of all Types 1 through 13 to represent *Total institutional holdings*. The dependent variable is the change in total Holdings from −1 to 0 in Part A and from −1 to +1 in Part B. The sample includes both ethical and matched firms. The independent variables are a dummy for ethical firms, the firm's common equity, age, percentage of insiders, percentage of related outside directors, women directors, total directors, board meeting, a governance composite, and average stock return. Results are qualitatively identical when using log of market value of equity and when using scaled variables.

***Significance at the 1% level; **significance at the 5% level'; *significance at the 10% level.

release of the list. Furthermore, long-term institutional investors increase their investments in firms included on the Ethisphere list more significantly than do short-term institutional investors, suggesting a difference in sensitivity to ethics by type of institutional investors.

This paper contributes to the emerging body of literature discussing the importance of intermediate signaling (Vasudeva et al., 2018). Senders *intentionally* communicate information to receivers and are more likely to send information that provides a positive view of the organization. Because of information asymmetry between senders and receivers (Han et al., 2014), senders are sometimes able to provide false signaling to receivers and, consequently, the signal may lose its credibility among receivers (Bird & Smith, 2005). As such, the signal can gain more credibility and will have more impact once certified by a third party (Vasudeva et al., 2018).

This paper focuses on this credible signal provided by the inclusion of a firm on Ethisphere by suggesting that a company's inclusion on an ethics index can be regarded as a strong and credible signal that it can build and sustain a competitive advantage over its competitors. The inclusion on an ethics index can increase the trust in companies when they claim to have good governance structures that makes them less prone to corporate wrongdoing and scandals. In addition, the inclusion on the Ethisphere list indicates that the company is increasingly investing in socially responsible activities, which institutional investors—especially those with long-term investment horizon—consider essential for their reputation and for sustained performance (Connelly et al., 2010).

Our results also suggest that decision-makers should consider the inclusion on an ethics index as a strategic goal, especially given its potential to attract long-term institutional owners who typically hold their shares for a long time. These results can also raise awareness about the importance of effectively engaging in governance reforms and in socially responsible initiatives in order to be elected to join an ethics list and later attract institutional investments. In fact, several positive associations between long-term institutional investments and company outcomes have been reported, such as lower pay dispersion in management teams (Connelly et al., 2016), better human resources procedures and outcomes (Mullins et al., 2016), and a higher likelihood for companies to remain competitive over time (Zhang & Gimeno, 2016).

3 | LIMITATIONS

Although this study offers important insights into how being identified as an ethical company is a valuable resource that attracts long-term institutional investors, it is not without limitations. In this study, we assume that the environment and the attitude of investors has not changed from 2010 to 2018. This may not be accurate as we observe more institutional investors pursue a strategy of shareholder activism and more involvement in decision-making within the corporation.

Companies might try to improve their corporate governance structure and ethics standards without efficiently implementing them, thereby distorting the real EQ the firm deserves. We consider this issue to be outside the scope of our research, and we assume that the EQ is a reliable measure of companies' ethical initiatives. Finally, as the aim was to investigate the relationship between inclusion on an ethical firms' list and institutional investments, we limit our study to the existence of a positive relationship between institutional investing and ethical corporate conduct.

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CONFLICT OF INTEREST STATEMENT

No conflicts of interest.

DATA AVAILABILITY STATEMENT

Data is public information and available.

PEER REVIEW

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ENDNOTES

[1] A staggering 368% increase in institutional investors' ownership was recorded in 50 years (OECD Study, 2011).

[2] AIMR, the Association for Investment Management and Research, later renamed CFA Institute being a professional institution charged for educating managers and analysts while sustaining high standards of professional and ethical conduct.

[3] We restrict inclusion on the Ethisphere list to once during a 2-year period. For example, when a firm like Accenture is included in every year during the 2010–2018 period (nine times in 9 years), we remove odd years and keep even year, given that 2010 is the first listing year and it is even. If we have a firm with listing from 2011 to 2016, then we keep odd years starting with 2011.

[4] These indicators are insiders' control, institutional majority, board outside majority, board outside meeting, business ethics code, fully independent audit committee, fully independent compensation committee, and fully independent nomination committee. The composite can therefore take a total maximum value of 8 and reflects number of ownerships, board, and committee performance and practices. The higher the composite value, the better the governance.

[5] Running the regressions by year reveals that the inclusion on the Ethisphere list coefficient is significantly positive in 2008 (highest coefficient), 2012, and 2013. It is insignificant in 2009, 2010, and 2011. This may indicate the heightened interest lately in ethical performance.

[6] The results were robust in multiple tests controlling for other variables, including the sales in year −1, common equity, average volume, average stock returns, percentage holdings by insiders, and percentage holdings by outside-related directors.

[7] Firms were using matched based on year −2 data. The results are qualitatively identical.

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