



## City Research Online

### City, University of London Institutional Repository

---

**Citation:** Danielle, L. and Bilinski, P. ORCID: 0000-0002-0499-6429 (2021). Does corporate social responsibility affect the institutional ownership of firms in the hospitality and tourism industry?. *Tourism Economics*,

This is the accepted version of the paper.

This version of the publication may differ from the final published version.

---

**Permanent repository link:** <https://openaccess.city.ac.uk/id/eprint/27262/>

**Link to published version:**

**Copyright:** City Research Online aims to make research outputs of City, University of London available to a wider audience. Copyright and Moral Rights remain with the author(s) and/or copyright holders. URLs from City Research Online may be freely distributed and linked to.

**Reuse:** Copies of full items can be used for personal research or study, educational, or not-for-profit purposes without prior permission or charge. Provided that the authors, title and full bibliographic details are credited, a hyperlink and/or URL is given for the original metadata page and the content is not changed in any way.

---

---

---

City Research Online:

<http://openaccess.city.ac.uk/>

[publications@city.ac.uk](mailto:publications@city.ac.uk)

---

# Does corporate social responsibility affect the institutional ownership of firms in the hospitality and tourism industry?

Danielle Lyssimachou<sup>1</sup>, Pawel Bilinski<sup>1</sup>

<sup>1</sup>*Bayes Business School, City, University of London, Northampton Square London EC1V 0HB, United Kingdom*

Email: [pawel.bilinski.1@city.ac.uk](mailto:pawel.bilinski.1@city.ac.uk)

## Abstract

As hospitality and tourism (H&T) businesses mature, they often seek institutional equity financing to support their growth. Capital intensive H&T firms, such as cruise operators, casinos and large restaurant and hotel chains, continuously rely on institutional capital to fund their operations. This study examines which corporate social responsibility dimensions affect H&T firms' ability to attract institutional equity capital providers. We document that firms with better social and governance performance have higher institutional ownership, particularly by investors focused on long-term growth and value creation, such as dedicated institutional investors, domestic investors and blockholders. Community and environmental performance do not increase institutional holdings.

**Keywords:** CSR, ESG, Social, Environmental, Governance, Capital, Institutional ownership

## 1. Introduction

Corporate social responsibility (CSR) is a “concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (European Commission, 2001, p. 3). This study examines whether CSR affects hospitality and tourism (H&T) firms’ ability to attract and maintain the desired level of institutional capital to support and grow their operations and which CSR dimensions play key roles in driving this relation. These questions are important for three reasons. First, as H&T businesses mature and expand, their ability to attract external equity is essential to support growth as the owners’ resources are limited. Thus, H&T owners and managers need to know whether their CSR activities will influence their ability to attract and maintain the required levels of external equity capital. Institutional equity funding is important as (1) H&T businesses often struggle to secure bank lending or face steep borrowing costs and (2) the capital requirements to expand and grow H&T businesses typically exceed the resources of the founders.<sup>1</sup>

Second, several H&T sectors, such as casinos, cruise operators and restaurant and hotel chains, are capital intensive and require substantial ongoing investments in infrastructure and services. Therefore, these businesses need to (1) frequently seek external equity capital and (2) maintain high levels of institutional funding. For example, the capital spending of Royal Caribbean Cruises was \$3.6 billion in 2018, two times the reported income of \$1.8 billion. The media routinely mention new stock issuances by companies such as Burger King Holdings, Bloomin’ Brands, Cinemark Holdings, Hilton Worldwide Holdings, Host Hotels & Resorts,

---

<sup>1</sup> Cyclical and high cashflow volatility in the H&T industry reduce the availability of bank lending and increase lending costs. Motta (2017) highlights that “due to information asymmetries, access to capital is a major obstacle for [service and hospitality] SMEs to expand their activities”.

MGM Resorts International, Starbucks and Wynn Resorts, which these firms use to finance their operations (Feng and Tseng, 2019).<sup>2</sup> Thus, the ability to continually attract institutional investors is essential for the survival and growth of large, capital intensive H&T businesses. High capital requirements mean that H&T firms are particularly sensitive to reductions in an already high level of institutional holdings and capital outflows can severely impair operations, potentially leading to bankruptcies.<sup>3</sup> High funding requirements in the H&T industry were laid bare during the coronavirus pandemic (COVID-19), as businesses had to continue covering high overheads (e.g. rent and maintenance of restaurants, hotels and cruise ships) when they were not earning any revenue to cover those costs. Thus, whether CSR can promote more institutional funding, particularly from long-term investors willing to support businesses over long periods of time, is an important question for managers in the H&T industry.

Third, we focus on institutional investors as they are the main equity capital providers in the market. For example, the 2017 Pensions and Investments report highlights that “[I]nstitutions own about 78% of the market value of the U.S. broad-market Russell 3000 index, and 80% of the large-cap S&P [Standard and Poor’s] 500 index”. Thus, when searching for external equity financing, H&T businesses typically seek financing from institutional investors. Understanding the CSR preferences of the latter can affect H&T firms’ ability to attract these investors. Further, an increasing proportion of investment funds considers CSR to be a criterion for their investments. Stevens (2019) estimates that investment funds explicitly accounting for firms’ CSR performance grew to \$30 trillion in 2018 and could reach \$50 trillion over the next two

---

<sup>2</sup> The Thomson Reuters Eikon database shows that between 2000 and 2018, Caesars Entertainment and Caesars Acquisitions, an operator of casinos and resorts, issued new stock 33 times, Amergent Hospitality Group, a restaurant operator, issued equity 39 times and Hilton Group 39 times.

<sup>3</sup> The bankruptcy of the major U.K. travel group, Thomas Cook, was ultimately due to its inability to secure emergency institutional funding to continue operations (<https://www.businessinsider.com/thomas-cook-bankrupt-airline-stranded-rescue-2019-9?r=US&IR=T>).

decades. Thus, as investors increasingly prioritise CSR among the factors influencing their capital allocation decisions, it is important for H&T firms' managers to understand which CSR dimensions matter.

To explain why institutional investors would consider firms' CSR performance in their investment decisions, we build on two literature streams. First, we build on the agency theory and propose that CSR aligns managers' and shareholders' interests, which in turn reduces the likelihood of managers misappropriating corporate funds (Kim, Rhou, Uysal and Kwon, 2017). CSR commits firms to corporate behaviour that respects employees, the environment and the community in which they operate (Dare, 2016). Although there is no agreed-on set of rules or actions that a firm should take to be considered as meeting its CSR, investors and CSR rating agencies agree that a firm's attitude towards its employees, environment, customers, community and corporate governance capture the key CSR dimensions.<sup>4</sup> A firm violating CSR norms, for example by repressing trade unions or damaging the environment, sends a signal that it is either unable or unwilling to meet its commitments. Investors can interpret this as a sign of poor managerial dedication to meet the goals of the firm's stakeholders, including its shareholders (Flammer, 2012). We expect that institutional investors will be unwilling to commit funds to companies with a poor track record of meeting their CSR promises.

Second, we build on the corporate reputation theory and studies documenting the important role that CSR plays in building and maintaining corporate image (Fombrun, 2005; Walsh and Beatty, 2007; McWilliams and Siegel, 2011; Famiyeh et al., 2016; Nazir and Islam, 2020; Kim, Milliman and Lucas, 2021; Koseoglu, Uyar, Kilic, Kuzey and Karaman, 2021; Ou, Wong and

---

<sup>4</sup> The key CSR scoring institutions, such as the Sustainability Accounting Standards Board, the Global Reporting Initiative and the Task Force on Climate-related Financial Disclosures, all consider these four dimensions when assessing firms' CSR performance.

Huang, 2021).<sup>5</sup> RepTrak Company (2020) survey evidence suggests that CSR-related factors account for up to 41% of corporate reputation. Violating CSR commitments can lead to a reputational loss that can negatively affect a firm's ability to attract external capital.

This study examines which CSR dimensions affect H&T firms' ability to attract institutional equity capital providers. To date, the H&T literature has not addressed this research question, leaving a gap in the literature. Further, non-H&T literature provides mixed evidence on the association between a firm's CSR performance and institutional ownership.<sup>6</sup> To answer the research question, we collect information on institutional holdings in H&T companies listed in the United States (U.S.) over the period 2010–2018. We focus on the H&T industry because of its prominence in the broader service industry in terms of employment and its significant contribution to gross domestic product (GDP): The World Travel and Tourism Council suggest a contribution of \$8.8 trillion to the global economy in 2018, representing 10.4% of the world's total GDP, with 319 million people employed in the H&T industry worldwide.<sup>7</sup> We purposefully use a recent sample period as CSR's capital market impact can change over time and we want our result to be timely.<sup>8</sup>

---

<sup>5</sup> Several studies have examined the adoption and impact of CSR in the H&T industry. The general conclusion from these studies is that CSR affects customer loyalty, legitimacy in the local community, employee attitudes and company performance. Coles, Fenclova and Dinan (2013), Font and Lynes (2018), Iyer and Jarvis (2019) and Moyeen, Kamal and Yousuf (2019) provide excellent reviews of CSR in the H&T industry.

<sup>6</sup> Teoh and Shiu (1990) find no evidence that institutional investors consider CSR when choosing firms to invest in from a sample of all firms listed on the U.S. exchanges. Coffey and Fryxell (1991) report that institutional investors have lower holdings in more socially conscious firms in South Africa. Graves and Waddock (1994) document no association between the percentage of institutional ownership and CSR for a large cross-section of listed firms. Fernando et al. (2010) find that both green firms and toxic firms have lower institutional holdings than neutral firms. Chava (2014) documents a negative relation between institutional ownership and firms' environmental concerns. Gillan et al. (2012) find that institutions hold fewer shares in firms that improve their social and environmental scores. In contrast, Dhaliwal et al. (2011) report higher ownership by dedicated institutions in firms with better CSR performance.

<sup>7</sup> See <https://hospitalityinsights.ehl.edu/hospitality-industry>.

<sup>8</sup> For example, Bloomberg highlights that the prominence of CSR in the media is associated with the increase in CSR exchange traded funds' assets from \$3.1 billion in 2016 to \$47.3 billion in 2020: <https://www.bloomberg.com/news/articles/2020-10-25/record-flows-pour-into-esg-funds-as-their-wokeness-is-debated>.

To capture CSR activity, we follow previous research, including Byrd, Bosley and Dronberger (2009), McGehee, Wattanakamolchai, Perdue and Calvert (2009), Inoue and Lee (2011), and Feng and Tseng (2019), and identify four key CSR dimensions. The social dimension captures a firm's relation with its employees, respect for the diversity of the corporate workforce and for human rights and citizenship within its local community. Environmental performance captures a firm's support for the environment. Corporate governance performance measures the quality of a firm's corporate governance mechanisms, such as its board structure, board independence and business ethics. Finally, product and service performance examines how firms respond to customer needs by providing quality, safe and innovative products and services.

Our main findings are as follows. We document that firms with better social and governance performance have higher institutional ownership. Community and environmental concerns do not increase institutional holdings. These results are consistent with those of Fernando, Sharfman and Uysal (2010), which show that the worst environmental performers have higher portfolio returns, which can motivate institutional investors to hold these stocks. Our conclusions are unchanged when we subject our results to robustness tests that include alternative estimation methods, controlling for unobservable firm characteristics, such as the performance of the managerial team, addressing endogeneity and reverse causality concerns.

We recognise that not all types of institutional investors may be desirable for H&T businesses. In particular, transient institutional investors hold stock to maximise short-term returns from stock trades, often at the expense of firms' long-term value creation (Bushee, 2001). Such investors may not be desirable for H&T businesses focused on sustainable and long-term value creation. We document that better social and governance performance can attract dedicated investors that focus on long-term value creation, domestic investors, which are less likely to



withdraw capital during market shocks, and blockholders, which tend to engage with managers to create long-term value (Edmans, 2014). Thus, the social and governance dimensions of CSR help attract investors more attuned to sustainable value creation in the H&T industry.

The rest of the paper is organised as follows. Section 2 discusses the relevant literature and develops the research hypotheses. We present the data and research methods in Section 3. Section 4 reports the empirical results and the discussion and conclusions follow in Section 5.

## **2. Literature review and hypothesis development**

### *2.1. CSR in the H&T industry*

Dowling and Pfeffer's (1975) organisation legitimacy theory highlights that CSR legitimises a firm in the eyes of customers, employees and local communities as the firm commits to respect and adhere to commonly accepted social values. Gray et al. (2010, p. 28) highlight that "organisations can only continue to exist if the society in which they are based perceives the organisation to be operating to a value system that is commensurate with the society's own value system". Deegan (2009) stresses that companies need to continuously assure stakeholders that they are functioning within the legal and social bonds and norms. Deegan and Samkin (2009) emphasise that companies do not operate in isolation but through establishing "social contracts" with various stakeholders, such as employees, communities, regulators and shareholders. CSR helps to legitimise the social contract between a firm and the societies with which it interacts.

The need for legitimacy can explain the link between CSR activities in the H&T industry and employee engagement (Gürlek and Tuna, 2019), business reputation (Fu, Ye and Law, 2014) and customer loyalty (Vassilikopoulou, Siomkos and Mylonakis, 2005). The emerging hospitality economics literature has also explored the link between CSR and financial performance (Lee and

Park, 2009; Kang, Lee and Huh, 2010, 2015; Theodoulidis, Diaz, Crotto and Rancati, 2017; Ringham and Miles, 2018) and firm value (Lee, Singal and Kang, 2013). Feng, Wang and Huang (2014) report that tourism firms in Western countries with active CSR programmes have a lower cost of equity. Watts and Holme (1999) highlight that CSR reflects a business's commitment to contribute to economic development through improving the quality of life of its workforce, local community and greater society. H&T firms devote significant resources to CSR activities. This reflects the increased attention to the sustainability of the H&T business model, which has been criticised for significant externalities, such as negative effects on employees and on the environments and communities in which the businesses operate. To illustrate, Cohen, Higham, Peeters and Gossling (2014) highlight that by 2050, tourism will likely generate 40% of global carbon emissions. However, the literature has not yet examined how an H&T firm's CSR activities affect its ability to attract institutional funding, which is the focus of this study.

## *2.2. Institutional investors and firms' CSR activities*

Institutional investors, such as insurance companies, pension and mutual funds, held between 78% and 80% of the total market value of stocks listed in the U.S. in 2017, compared to 34% in 1980 (The 2017 Pensions and Investments Report). Previous research documents a positive association between institutional ownership and firm value (Duggal and Millar, 1999; Woidtke, 2002). Institutional investors promote value creation by improving firms' corporate governance, which includes changing executive compensation, removing underperforming managers and promoting performance through proxy proposals (Smith, 1996; Strickland, Wiles and Zenner, 1996; Wahal, 1996; Carleton, Neslon and Weisbach, 1998). Dedicated institutional investors also allow managers to focus on long-term projects and value creation by promoting spending on

innovation and investments (Jensen and Meckling, 1976; Aghion, Blundell, Griffith, Howitt and Prantl, 2009). In contrast to institutional investors, retail investors have limited capital and invest for short-term profit maximisation (Odean, 1999; Barber and Odean, 2000, 2008; Barber, Lee, Liu and Odean, 2009).

We expect that firms' CSR activities will affect institutional investors' choice of firms in which to invest. Institutional investors use a variety of signals to assess a firm's investment risk and gauge the commitment of a firm's managerial team to creating value. When deciding on their investments, institutional investors conduct detailed analyses of firms' financial performance, follow analyst recommendations and participate in conference calls with managers (Davis and Steil, 2004). CSR sends a valuable signal concerning (1) the firm's commitment to ethical and conscientious behaviour, and thus its ability and commitment to meet various stakeholders' demands and expectations of the firm; and (2) the firm's ability to mitigate "legitimisation risk" (Lindblom, 1994). Consistent with the signalling effect, Aggarwal, Hu and Yang (2015) document that institutional investors reduce holdings in companies subjected to regulatory interventions related to accounting misstatements, which they interpret as a managerial lack of commitment to truthful disclosure. Legitimisation risk reflects the negative consequences of unexpected events, such as financial or environmental scandals. Firms' CSR activities can build reputational capital that helps mitigate the negative consequences of such events. Consistent with this, Lins, Servaes and Tamayo (2017, 1785) report that "firms with high social capital, as measured by corporate social responsibility intensity, had stock returns that were four to seven percentage points higher than firms with low social capital during the 2008–2009 financial crisis". The authors state that the "evidence suggests that the trust between a firm and both its stakeholders and investors, built through investments in social capital, pays off when

the overall level of trust in corporations and markets suffers a negative shock”. Thus, we expect that institutional investors will consider a firm’s CSR performance when deciding whether to invest in it and will hold more shares in companies with better CSR performance. Therefore, our first hypothesis is:

*Hypothesis 1: Better CSR performance is positively associated with institutional ownership.*

The literature recognises that different agendas and holding periods promote different types of institutional behaviour (Del Guercio, 1996; Woidtke, 2002). Transient investors have short investment horizons and favour short-term stock price gains over long-term value creation. Research shows that these investors often pressure managers to abandon long-term projects and investment in research and development (R&D) to maximise firms’ short-term income (Bushee, 1998, 2001; Edmans, 2007; Cherkes, Sagi and Stanton, 2009). Bushee (2001) documents that firms with a higher proportion of short-term institutional investors are associated with lower long-term value.

In contrast, dedicated institutional investors—investors that have long investment horizons and turn their portfolios over less frequently—are willing to learn about firms and are more likely to promote long-term sustainable value creation (Chen, Harford and Li, 2007). CSR legitimises a firm within its operating environment, promoting long-term value creation (Lee, Singal and Kang, 2013). Long-term value creation aligns with the investment horizon of dedicated investors. Therefore, we expect that dedicated investors will increase their holdings in firms with better CSR performance. Accordingly, our second hypothesis is:

*Hypothesis 2: Better CSR performance is associated with higher holdings by dedicated investors.*

Blockholders hold economically large positions in firms, thus their wealth is more sensitive to the stock price performance of individual firms in their portfolios compared to highly diversified

investors holding relatively small stakes in individual firms in their portfolios (Shleifer and Vishny, 1997; Gorton and Schmid 2000). Aoki (1984) highlights that because blockholders invest significant capital into individual firms, they perform more in-depth scrutiny and analysis of the firm. We expect that blockholders will consider a firm's CSR performance as an indicator of potential risk, e.g., the likelihood of a future regulatory action if a firm violates labour or environment regulation (Starks, 2009), and a signal of a firm's commitment to long-term value creation (Kim, Kim, Kim, and Park, 2019). Highly diversified institutional investors have less incentive to spend resources on costly firm analysis and monitoring as even a large negative stock price shock to an individual firm will have a small effect on their overall portfolio performance. Consistently, Clark and Hebb (2005) highlight that investors with higher portfolio sensitivity to an individual stock's price volatility consider the firm's reputation, such as in terms of corporate governance quality and employee protection, when selecting firms to invest in. Lins, Servaes, and Tamayo (2017) report that firms with high CSR scores performed better than firms with low CSR scores during the 2008–2009 financial crisis as measured by the stock price performance. To safeguard their investments, blockholders often establish private communication channels with managers, actively monitor managerial performance and pressure managers to improve firm performance (Shleifer and Vishny, 1997). Blockholders are also more interested in long-term value creation as they tend to hold stock for longer. In line with this, Claessens, Djankov, Fan and Lang (2002) report a positive relation between firm value and concentrated ownership by the largest shareholders. Based on the above discussion, we expect that blockholders will increase their holdings in companies with better CSR performance, which leads to our third hypothesis:

*Hypothesis 3: Better CSR performance is associated with higher ownership by blockholders.*

### 3. Data and research methods

The data on H&T companies listed in the U.S. between 2010 and 2018 were collected from the Compustat database. We start in 2010 to prevent the 2007–2009 financial crisis from affecting our analysis. Ending in 2018 ensures a gap between the end of the sample period and the COVID-19 pandemic.<sup>9</sup> We use Thomson Reuters Institutional Holdings 13F data to calculate quarterly institutional holdings. Institutional investment managers who exercise investment discretion over \$100 million or more in Section 13(f) securities are required to report their quarterly holdings on Form 13F to the Securities and Exchange Commission within 45 days of each quarter’s end. Compustat Quarterly is the source of the quarterly financial data required to calculate the control variables. The sample is 2,064 firm-quarter-years with non-missing information.

Following Uyar, Karamahmutoglu, Köseoglu and Karaman (2020), we classify H&T firms into four sectors based on the North American Industry Classification System (NAICS) codes: travel, hotels and recreation, casinos and restaurants. Appendix A details the industry codes that we used to classify firms into the four sectors. Table 1 reports the number of observations in the four sectors calculated at an annual frequency. We have a total of 990 firm-years in the restaurant sector, 114 firm-years in the casino sector, 544 in hotels and recreation and 416 in the travel sector.

[Table 1 around here]

#### 3.1. Measures of CSR

Following Clarkson (1995), Inoue and Lee (2011) and Feng and Tseng (2019), we use the

---

<sup>9</sup> Companies reported financial results and CSR performance for the fiscal year 2019 starting from March 2020. If we included 2019 in the sample period, this would add noise to the analysis of the relation between CSR and institutional ownership.

Kinder, Lydenberg, Domini (KLD) data, which reflect corporate attention to key issues of interest to stakeholders to capture firms' CSR performance. The data are collected by MSCI, an investment research company which evaluates U.S. firms that are part of the S&P 500 and Russell 3000 indexes in terms of their social, environmental, governance and product performance. MSCI collects CSR information from various sources, including the media, non-governmental organisations, governments, public documents and annual reports. Inoue and Lee (2011, p. 795) highlight that the "KLD database is considered the most comprehensive multidimensional CSR measures available to the public".

There are several benefits of using KLD. First, the scores are company-specific and are based on a company's interactions with its stakeholders. This allows us to directly measure a firm's performance in relation to its primary stakeholders as defined by Clarkson (1995).<sup>10</sup> Second, by looking at each dimension independently, we avoid using a firm's aggregate CSR score. This allows us to understand *which* dimensions institutional investors care about. For example, Berman, Wicks, Kotha and Jones (1999) document that among the KLD dimensions, only employee relations show a positive association with a firm's profitability. Third, the KLD dimensions have been firmly established in the tourism literature. Several studies have used the data, including those of Byrd, Bosley and Dronberger (2009), McGehee, Wattanakamolchai, Perdue and Calvert (2009), Inoue and Lee (2011) and Feng and Tseng (2019), which builds confidence in the validity of the measures.

The KLD database identifies four key CSR dimensions. The **social** dimension captures four groups. The **employee relations** score is based on a company's performance in ensuring

---

<sup>10</sup> Clarkson (1995, p. 106) identifies primary stakeholders as individuals, groups and institutions "without whose continuing participation the corporation cannot survive as a going concern", such as shareholders, employees, customers and public stakeholders, such as the community and the natural environment.

employees' health and safety, providing retirement benefits and maintaining favourable union relations. The **diversity** score measures how a firm integrates diversity into its management and operations, for example through the appointment of women and minority executives. The **human rights** variables score a firm on the initiatives that benefit human rights, including indigenous peoples' relations, labour and human rights policies. The **community** score is based on whether a company supports communities through education, charity and volunteer programmes.

The second CSR dimension is **environmental** performance, which is concerned with a firm's support for the environment. This includes the use of clean energy and the provision of environmentally friendly products and services. The third dimension is **corporate governance**, which measures the quality of a firm's corporate governance mechanisms, such as its board structure, board independence and business ethics. The fourth dimension is **product and service** performance, which scores whether a firm responds to customer needs by providing quality, safe and innovative products and services.

We follow previous studies (e.g. Turban and Greening, 1996) in measuring firms' CSR scores in the four areas—social, environmental, corporate governance and product and service—by subtracting the total number of concerns from the total number of strengths. This generates a net score for each area. Appendix B lists definitions of the strengths and concerns in each dimension. A firm can receive a score ranging from 0 (no strength) to 2 (strong strength) in a strength area and a score ranging from 0 (no concern) to 2 (strong concern) for concerns. We then use the composite scores in the analysis.<sup>11</sup> In robustness tests, we show that our results are the same when we create ratios of  $(1 + \text{strengths}) / (1 + \text{strengths} + \text{concerns})$ . KLD scores are measured

---

<sup>11</sup> We create the net scores ourselves as the KLD database discontinued reporting total scores for strengths and concerns in 2013. However, in robustness tests, we also use the KLD total scores to create the net measures for the period 2010–2013 and find similar results.



annually over the sample period.

Table 2 presents the relative rankings for the KLD measures across the four sectors. Specifically, we calculate the mean KLD for each sector in the sample and then rank the sectors on each CSR dimension from best to worst performance. The travel sector has the highest relative ranking for employee, diversity, community and environment performance. This result is consistent with the heavy criticism the sector received for its employee and environmental impact, which resulted in substantial CSR investment in these areas (Gössling, 2002). The casino sector tends to have the worst scores across most dimensions.

[Table 2 around here]

### 3.2. Measures of institutional ownership

We measure institutional ownership, *Institutional Ownership*, as the sum of the holdings of all institutions in a firm's stock divided by the stock's total market capitalisation at the end of each calendar quarter. To sharpen the analysis, we also disaggregate institutional ownership into shareholding by domestic investors, *Domestic IO*, which is the sum of the holdings of all institutions domiciled in the U.S. divided by the firm's market capitalisation.<sup>12</sup> Because institutional investors differ in their investment strategies and holding periods, we also separate holdings by investment style, using the classification from Bushee (2001). Specifically, *Dedicated IO* sums up the percentage of holdings by dedicated institutions, which provide stable ownership and take large shares in individual firms, and holdings by quasi-indexers, which trade infrequently and own small stakes, similar to an index strategy. Bushee (2001) documents that holdings by quasi and dedicated investors are associated with higher firm performance. Finally, we calculate holdings by blockholders, defined as investors who hold at least 5% of a company's

---

<sup>12</sup> We use the abbreviation *IO* to denote institutional ownership.

stock. We then measure the percentage of holdings by the top five blockholders, *Top 5 IO*. We measure institutional holdings for firm  $i$  at the end of each fiscal quarter  $q$  for year  $t$ .

The regression model we use has the form:

$$\begin{aligned}
 & \textit{Measure of institutional ownership}_{i,q+1,t} \\
 &= \theta_0 + \theta_1 \textit{Net Employee}_{i,q,t} + \theta_2 \textit{Net Diversity}_{i,q,t} \\
 &+ \theta_3 \textit{Net Human Rights}_{i,q,t} + \theta_4 \textit{Net Community}_{i,q,t} \quad (1) \\
 &+ \theta_5 \textit{Net Environment}_{i,q,t} + \theta_6 \textit{Net CG}_{i,q,t} \\
 &+ \theta_7 \textit{Net Product and Service}_{i,q,t} + \textit{Controls} + u_{i,q,t},
 \end{aligned}$$

where the dependent variable is either *Institutional Ownership*, *Dedicated IO* or *Top 5 IO*.

The controls include variables that previous studies associate with institutional ownership, such as firm size, measured as a firm's market capitalisation, *MV*, as institutional investors tend to invest in larger firms (Edison and Warnock, 2003) and larger firms tend to have more liquid stock that facilitates institutional trade (Cooper, Growth and Avera, 1985). We control for firm profitability, measured by return on assets, *ROA*, as institutional investors may be attracted to more profitable firms (Gompers, Ishi and Metrick, 2001) and low profitability is associated with higher stock risk (Hou, Xue and Zhang, 2015). We include the price-to-sales ratio, *P/S*, the book-to-market ratio, *B/M*, and the R&D spending scaled by sales, *R&D*, to capture a firm's risk and growth opportunities as institutional investors prefer growth firms (Black, Jang and Kim, 2006). Several studies show that firms with high B/M ratios and low investment rates are associated with higher risk (Fama and French, 1992; Bolton, Chen and Wang, 2011). We capture firms' visibility using their advertising spending scaled by sales, *Advertising*, as institutional investors may be attracted to firms that are more visible in the market (Lang, Lins and Miller, 2003). Finally, we control for firms' financial leverage, *Leverage*, as debt financing can act as a

substitute for equity financing (Jensen and Murphy, 1990). Control variables are measured at the end of the fiscal quarter prior to the quarter where we measure institutional holdings to reduce the likelihood of reverse causality. We estimate the model using OLS with standard errors adjusted for serial correlation and heteroskedasticity.

Table 3 reports descriptive statistics for the variables used in the study and correlations between the CSR dimensions. Panel A documents the results for the dependent variables. The average institutional ownership is around 81.2%, which suggests that institutional investors are the most important shareholders in H&T listed firms. Dedicated investors hold around 71.3% of equity, and domestic investors hold 75.5% of stock. The ownership of top five blockholders is around 32.9%. These results suggest that institutional investors focused on long-term value creation are the main shareholders in the H&T industry. Appendix D reports institutional ownership for each sector and we find comparable levels. This result suggests that institutional ownership is likely important for each H&T sector. Panel B documents the KLD measures and the results are consistent with earlier studies (e.g. Inoue and Lee, 2011). Panel C reports the descriptive statistics for the control variables, which are comparable with earlier studies (e.g. Lee and Park, 2009; Kang, Lee and Huh, 2010, 2015; Lee, Singal and Kang, 2013; Theodoulidis, Diaz, Crotto and Rancati, 2017; Ringham and Miles, 2018). Panel D shows the correlations between the KLD measures. Most correlations are significant and the magnitudes are below 0.8, which is typically considered an indicator of a potential multicollinearity problem (Franke, 2010). Some of the correlations between measures are weak or negative because each CSR dimension captures a different area of corporate activity. For example, an emphasis on product quality and safety does not guarantee that a firm will spend resources on the professional development of employees or employee profit sharing. This justifies the need to look at

individual dimensions rather than one CSR index for a firm.

[Table 3 around here]

#### **4. Regression results**

Table 4 reports the regression results for equation (1), where the dependent variable is the percentage of institutional ownership in a stock. The first columns present the results for the OLS model. The ‘fixed effects’ columns report the results for equation (1) with firm-fixed effects.<sup>13</sup> This model helps better control for unobserved firm effects, such as the quality of the managerial team, but at the cost of lower power to detect statistically significant relations if the variables, such as CSR scores, are “sticky”.

We first focus on the OLS regression results in Table 4. None of the values for the variance inflation factors in column ‘VIF’ is higher than 10, a rule of thumb for potential multicollinearity. This result suggests that all CSR dimensions capture slightly different aspects of CSR, a conclusion similar to the Table 3 evidence of the correlations between the CSR dimensions. We find that companies with higher Net Employee and Net Diversity scores tend to have higher institutional ownership. Further, the Net Corporate Governance and Net Product and Service dimensions also have a positive effect on institutional holdings. Jointly, the results suggest that (1) how firms build relations with their employees and respect the diversity of their workforce; (2) the quality of internal corporate governance mechanisms which ensure that managers act in the interest of shareholders; and (3) the quality of firms’ products are the dimensions that institutional investors care about. The Net Human and Net Community dimensions have a negative effect on institutional ownership. It is plausible that investors perceive that local and federal governments are responsible for supporting the local community,

---

<sup>13</sup> The Hausman test rejects the null hypothesis that the random effects model is preferred.

rather than private enterprises through corporate donations. Further, direct corporate involvement in social issues can expose a company to potential customer and legal backlash. For example, the Starbucks CEO's challenge of policies promoted by former U.S. president Trump resulted in backlash from Trump supporters; #boycottStarbucks became a top trending hashtag on Twitter.<sup>14</sup>

[Table 4 around here]

To gauge the relative economic magnitude of the effects of each CSR dimension, we report standardised coefficients where all variables are standardised to a mean of zero and a unit standard deviation. These coefficients show how institutional ownership would change for the same magnitude of change in each independent variable.<sup>15</sup> The 'STD estimate' column shows that Net Diversity has the largest economic effect on institutional ownership: A one standard deviation increase in Net Diversity would increase institutional ownership by 22.3% standard deviations, four times greater than the effect of Net Product and Service. The model's adjusted  $R^2$  suggests that the variables jointly explain 16.7% of the quarterly variation in institutional ownership. In untabulated results, we find that estimating equation (1) without the CSR measures produces an adjusted  $R^2$  of 10.9%, which suggests that the CSR measures can improve the model's explanatory power by 53%.

The last columns of Table 4 report the results for regressions with firm-fixed effects. We find that the Net Employee, Net Diversity and Net Corporate Governance variables are positively associated with institutional holdings. Interestingly, controlling for firm-fixed effects shows that Net Human Rights has a positive effect on institutional holdings. The adjusted  $R^2$  in the model

---

<sup>14</sup> See <https://www.forbes.com/sites/econostats/2017/03/15/unilever-and-the-failure-of-corporate-social-responsibility/>.

<sup>15</sup> We use standardised coefficients because the usual unit-change interpretation of coefficients from an OLS regression ignores that a one-unit change for a variable can be associated with different economic magnitudes of changes. For example, Net Human Rights ranges between 0 and 1; thus, a one-unit increase in the Net Human Rights variable means a 100% increase in this score. In contrast, a one-unit increase in the Net Employee score is only a 20% change as its range lies between -1 and 3.

increases to 87.62%, which suggests that a substantial proportion of the variation in institutional holdings is firm-specific.

Based on the results in Table 4, we conclude that a firm's performance for the social dimension of CSR together with its corporate governance performance are positively associated with institutional holdings in the firm, a result consistent with Hypothesis 1.

#### *4.1. Further tests*

Hypotheses 2 and 3 predict that CSR will positively affect a firm's ability to attract more dedicated investors and blockholders. To test these predictions, Table 5 reports regression results where we use as the dependent variable the percentage of ownership by dedicated institutional investors, *Dedicated IO*, domestic institutional investors, *Domestic IO*, and top five institutional investors, *Top 5 IO*. The conclusions from these tests mirror our main results: Firms with better social and governance performance have higher dedicated institutional investor, domestic institutional investor and blockholding ownership. Further, we find that better performance for product and service quality can attract more domestic investors and more blockholders. Net Human Rights and Net Community performance show a negative association with the three institutional ownership measures, which suggests that company performance in these dimensions does not positively affect these investors' investment decisions.

[Table 5 around here]

#### *4.2. Robustness tests*

In sensitivity tests, we perform three analyses to build confidence in our conclusions. First, we recalculate each KLD score as a ratio of  $(1 + \text{strengths}) / (1 + \text{strengths} + \text{concerns})$ . We perform this test because of concerns that netting strengths and weaknesses may not capture the

variability in CSR across firms. For example, a firm with three strengths and three concerns has the same score as a firm with a score of zero for both strengths and concerns. However, the two firms would have scores of 0.57 vs. 1, respectively, in the recalculated measure. The smaller value captures a larger variation in CSR dimensions, which reflects higher uncertainty about a firm's future CSR scores. The 'IO (recalculated KLD)' column in Table 6 reports results when we use the CSR ratios. We find similar conclusions to our main results. Further, in untabulated results, we also calculate the ratios as  $(1 + \text{strengths}) / (1 + \text{concerns})$  and reach the same conclusions. Thus, our results are not sensitive to the way that we calculate the measures of firms' CSR performance.

[Table 6 around here]

Because previous studies frequently use total strengths and total concerns as reported by KLD to capture CSR dimensions (e.g. Inoue and Lee, 2011), in the 'IO (org KLD measures)' column, we report equation (1) results with these original measures that were discontinued in 2013. Using the original measures produces results similar to our main conclusions. Thus, our conclusions are not driven by the way that we define the CSR measures.

#### *4.3. Endogeneity and reverse causality*

We recognise that firms decide whether to implement CSR measures; thus, our conclusions may reflect these endogenous decisions. We believe that our tests that use lead-lag relations in equation (1) jointly with firm-fixed effects significantly reduce the likelihood of endogeneity affecting our conclusions. This is also reflected in the Hausman test, which suggests no evidence of endogeneity. However, for extra robustness, we also use instrumental variables analysis to ensure that our conclusions are robust. As the instrument, we use the average CSR performance

of a company's industry, captured by the NAICS code, excluding the focal firm. Industry CSR activities should not affect institutional ownership in a focal firm; however, we would expect industry CSR activities to correlate with a firm's CSR decisions. Thus, the instrument meets both the exclusion and relevance criteria. The 'instrumental variables' column in Table 6 reports regression results for the 2SLS model and the conclusions are similar to our main results.

To address the reverse causality issue, Appendix E reports the results from regressing each CSR dimension on (1) past institutional ownership and (2) the six CSR dimensions measured in the previous year. We control for past CSR scores because of significant persistence in the measures. This means that the regressions are effectively capturing the incremental effect of past institutional ownership on past CSR performance. We do not find that past institutional ownership affects a firm's current CSR score, controlling for the firm's past CSR performance. These results reduce the likelihood of reverse causality, although we acknowledge that we cannot rule out this alternative explanation.

Our research design measures institutional ownership one quarter after we observe firm CSR scores to reduce the likelihood of the results being driven by reverse causality. To further reduce the likelihood that institutional ownership drives changes in CSR, we run a Granger-type lead-lag test where we include lagged institutional holdings among the explanatory variables. Our conclusions from this test are identical to our main findings (result untabulated).

Finally, we conduct a Google search for any indications of shareholder activism focused on the sample firms' CSR activities. We do not find news or other sources suggesting proposals or pressure from shareholders to change firms' CSR activities. We acknowledge that such pressures may be applied through private channels; however, we believe that investments funds would make such attempts public to showcase their proactive approach to firms' CSR activities. The



fact that we find no evidence of such actions suggests that those private channels are unlikely to drive our results.

## **5. Discussion and conclusions**

Ensuring that businesses have sufficient capital to support their existing operations, including enough to make ongoing investments in infrastructure, expand their operations and develop staff and new services for customers, is essential for the sound development of the H&T industry. The World Travel and Tourism Council estimates that the capital spending of the global travel and tourism industry amounted to \$948 billion in 2019, supporting 330 million jobs (1 in 10 jobs around world). This study examines the relation between H&T firms' CSR activities and institutional ownership, an important source of equity capital for these firms. We document that businesses with better social and governance performance have higher institutional ownership, particularly by dedicated institutional investors, domestic investors and blockholders, which are more focused on long-term value creation. To ensure the robustness of our conclusions, we subject the results to several sensitivity tests that include alternative estimation methods, controlling for unobservable firm characteristics and endogeneity. Our use of recent data ending in 2018 also helps build confidence that the results are timely and of relevance to H&T businesses.

Interestingly, we find that community and environmental concerns do not increase institutional holdings. These results may capture appealing investment returns offered by some companies with poor track records of community and environment performance. Fabozzi, Ma and Oliphant (2008, p. 82) document that “sin stocks”—companies associated with activities that are perceived negatively in light of social norms (e.g. alcohol, tobacco, gambling and weapons

manufacturers)—“produced an annual return of 19% over the study period, unambiguously outperforming common benchmarks in terms of both magnitude and frequency”. Gray (2015) states that environmental regulations impose costs on manufacturing plants, resulting in lower productivity. Pham, Ramiah and Moosa (2020, p. 3280) **highlight the possibility** that the “adoption of costly environmental policies and practices by a firm may be perceived [by investors] to be an unnecessary burden that will have a negative effect on the firm’s financial indicators. According to this view, environmental regulation exerts a negative effect on the bottom line of the regulated firms, and hence the return on assets or shareholders’ equity, at least because regulation triggers extensive compliance costs.” Veith, Werner and Zimmermann (2009) find that European electricity manufacturers pass on costs arising from the increasing prices of emission allowances to consumers. Ramiah, Martin and Moosa (2013) report that the returns of heavy Australian polluters were unaffected by environmental regulation as these firms passed on the costs to consumers, while the returns of low polluters, such as beverage firms, were affected by rising costs. Although our results suggest that firms’ community and environment related actions do not have a positive effect on institutional ownership, we recommend that managers take a holistic view and consider how poor performance in these dimensions reduces a firm’s legitimacy in the eyes of customers, employees and regulators.

This paper has several theoretical and practical implications. First, we contribute to the growing CSR literature on the service industry (Vassilikopoulou, Siomkos and Mylonakis, 2005; Lee and Park, 2009; Kang, Lee and Huh, 2010; Lee, Singal and Kang, 2013; Feng, Wang and Huang, 2014; Fu, Ye and Law, 2014, 2015; Theodoulidis, Diaz, Crotto and Rancati, 2017; Ringham and Miles, 2018; Gürlek and Tuna, 2019) by identifying a positive relation between H&T firms’ CSR activities and ownership by institutional investors, particularly by investors

more interested in promoting companies' long-term growth. The study enhances our understanding of how CSR affects an important group of external stakeholders—institutional investors—which complements previous research that examined the relation between CSR and another external stakeholder group: customers (Li, Fu and Huang, 2015; Boccia, Malgeri Manzo and Covino, 2019).

Second, our findings provide empirical support for the multidimensional conceptualisation of CSR, where various dimensions play different roles for diverse audiences (Carroll, 1999). Our study identifies which dimensions influence institutional ownership and quantifies their respective importance. Further, our focus on the H&T industry responds to the call in Rhou and Singal's (2020) research. These authors argue that hospitality research needs to explore the importance of CSR at the industry level to better understand the industry-specific relevance of CSR.

Third, the study results are of direct relevance to H&T industry business owners seeking institutional capital; the results can guide their decisions on which CSR dimensions to promote. Critics of CSR highlight the substantial costs of implementing and managing CSR. A report from the Institute of Economic Affairs highlights that “far from being harmless, its [CSR] adoption threatens prosperity in poor countries as well as rich. It is likely to reduce competition and economic freedom and to undermine the market economy” (Henderson, 2001). We show that external equity capital providers consider CSR in their investment decisions. Better performance in the social and governance dimensions makes H&T companies more attractive to long-term institutional investors. The fact that not all CSR dimensions are relevant to institutional investors indicates that owners and managers of H&T businesses should carefully decide which policies to adopt.

Fourth, we add to the broader literature on the links between CSR and institutional ownership. Previous research documents mixed evidence on the association between CSR performance and institutional holdings (Teoh and Shiu, 1990; Coffey and Fryxell, 1991; Graves and Waddock, 1994; Fernando et al., 2010; Chava, 2014; Gillan et al., 2012; Dhaliwal et al., 2011).

Finally, our evidence is also important for policymakers as large H&T businesses are frequently key employers in economically deprived areas. Therefore, their ability to access financing to maintain and grow their existing operations is important in policy setting.<sup>16</sup> For example, David Henderson, the former Head of Economics and Statistics at the Organisation for Economic Co-operation and Development, claims that the “corporate social responsibility movement will increase business costs, reduce welfare and undermine the market economy” and that “[t]he greatest potential for harm arises from government attempts to regulate the world as a whole in the name of CSR”.<sup>17</sup> Our results suggest that despite regulators’ concerns that CSR may increase business costs, there are important externalities to policies promoting CSR, such as the ability to attract institutional funding. Capital flows into H&T firms in the private sector can reduce the need for government loans and funding, which can then be deployed in other areas, such as to reduce poverty, a concern for developing countries. Regulators could promote CSR activities focused on improving employee relations, diversity among workforce and the quality of corporate governance. This could include policies that promote stronger trade unions, employee health and safety and professional employee development. Governments could also promote campaigns raising awareness of the benefits of CSR activities, including by establishing recognition awards that increase the visibility of the best performing firms. Finally, governments

---

<sup>16</sup> The World Travel and Tourism Council’s 2019 global economic impact report highlights that the travel industry employed one in 10 people in the world and contributed 10.3% to global GDP: <https://wtcc.org/Research/Economic-Impact>.

<sup>17</sup> See <https://iea.org.uk/in-the-media/press-release/corporate-social-responsibility-raises-costs-undermines-market>.

could provide funds to support the development of CSR programmes.

We identify three main limitations of this study. First, our research focuses on the H&T industry, which limits the generalisability of the conclusions beyond that sector. Second, we cannot rule out that our evidence is sample-period specific, which limits the generalisability of the study's results to a more recent period. Finally, previous research documents a positive association between institutional holdings and firms' CSR performance (e.g. Smith, 1996; Duggal and Millar, 1999; Woidtke, 2002). Although we do our best to address reverse causality, it is possible that (1) our results capture this alternative explanation or (2) there is a simultaneous relation between CSR and institutional holdings (i.e. institutional investors buy shares in companies with higher CSR performance, which in turn prompts these firms to improve their CSR scores).

Future research could examine the relation between CSR dimensions and institutional holdings at the industry level. The relative effects on the environment, communities, employees and other stakeholders differ between H&T industries (e.g. an airline has a greater environmental impact than a museum). Further, institutional investors may attach different CSR priorities to various industries (e.g. they may consider environmental impact to be more important for a transportation company and community impact as more relevant for a casino). Focusing on individual industries could uncover potential heterogeneity that is lost at the aggregate level. Future research could also examine whether our conclusions apply to other periods, including periods of market turbulence such as during the COVID-19 pandemic. We also recommend that future studies examine the channels through which CSR could attract institutional investors. For example, the structure of the corporate team responsible for implementing a CSR strategy can facilitate efficient communication with institutional investors, increasing the likelihood of these

investors investing in the company.

## References

- Aoki, M. (1984). *The cooperative game theory of the firm*. Clarendon: Oxford.
- Aghion, P., R. Blundell, R. Griffith, P. Howitt, and S. Prantl (2009). The effects of entry on incumbent innovation and productivity. *The Review of Economics and Statistics*, 91, 20–32.
- Barber, B., Lee, Y., Liu, Y., Odean, T. 2009. Just how much do individual investors lose by trading? *Review of Financial Studies*, 22, 609-632
- Barber, B., Odean, T. (2000). Common stock investment performance of individual investors. *Journal of Finance*, 55, 773-806
- Barber, B., Odean, T. (2008). All that glitters: the effects of attention and news on the buying behavior of individual and institutional investors. *Review of Financial Studies*, 21, 785-818
- Berman, S. L., Wicks, A. C., Kotha, S., & Jones, T. M. (1999). Does Stakeholder Orientation Matter? the Relationship Between Stakeholder Management Models and Firm Financial Performance. *Academy of Management Journal*, 42(5), 488–506
- Black, Bernard, Hasung Jang, and Woonchan Kim. 2006. Predicting Firms' Corporate Governance Choices: Evidence from Korea. *Journal of Corporate Finance* 12, 660-691.
- Bolton, P., H. Chen & N. Wang (2011). A Unified Theory of Tobin's q, Corporate Investment, Financing, and Risk Management. *Journal of Finance* 66, 1545-1578.
- Bushee, B. (1998). The influence of institutional investors on myopic R&D investment behavior. *Accounting Review*, 73, 305-333
- Bushee, B. (2001). Do institutional investors prefer near-term earnings over long-run value? *Contemporary Accounting Research*, 18, 207-246
- Byrd, E. T., Bosley, H. E., & Dronberger, M. G. (2009). Comparisons of stakeholder perceptions of tourism impacts in rural eastern North Carolina. *Tourism Management*, 30(5), 693–703
- Carroll, A. (1999). Corporate social responsibility: Evolution of a definitional construct. *Business & Society*, 38, 268-295.
- Carleton, W., Neslon, J., Weisbach, M. (1998). The influence of institutions on corporate governance through private negotiations: evidence from TIAA-CREF. *Journal of Finance*, 53, 1335-1362
- Chava, S. (2014). Environmental externalities and cost of capital. *Management Science*, 60, 2111-2380.
- Chen, X., Harford, J., Li, K. (2007). Monitoring: Which institutions matter? *Journal of Financial Economics*, 86, 279-305
- Cherkes, M., Sagi, J.S., Stanton, R., (2009) A Liquidity-Based theory of closed-end funds. *Review of Financial Studies*, 22, 257-297
- Claessens, S., Djankov, S., Fan, J. P. H., & Lang, L. H. P. (2002). Disentangling the incentive and entrenchment effects of large shareholdings. *The Journal of Finance*, 57, 2741-2771.
- Clark, G., and Hebb, T. 2005. Why should they care? The role of institutional investors in the market for corporate global responsibility. *Environment and Planning A*, 37, 2015–2031.
- Clarkson, M. (1995), A Stakeholder Framework for Analyzing and Evaluating Corporate Social Performance. *The Academy of Management Review* 20, 92-117
- Coffey, B., Fryxell, G., (1990) Institutional ownership of stock and dimensions of corporate social performance: An empirical examination. *Journal of Business Ethics* 10, 437–444.
- Cohen, D. A., & Zarowin, P. (2010). Accrual-based and real earnings management activities around seasoned equity offerings. *Journal of Accounting and Economics*, 50(1), 2–19.
- Coles, T., Fenclova, E., Dinan, C. (2011) Responsibilities, recession and the tourism sector: perspectives on CSR among low-fares airlines during the economic downturn in the UK. *Current Issues in Tourism*, 14(6), 519-536
- Cooper, K., J. Growth & W. Avera (1985) Liquidity, exchange listing, and common stock performance. *Journal of Economics and Business*, 37, 19-33
- Davis, E., Steil, B. 2004. *Institutional investors*. Cambridge, MA: MIT Press.

- Dare, J. (2016). Will the Truth Set Us Free? An Exploration of CSR Motive and Commitment. *Business and Society Review*, 121, 85-122.
- Del Guercio, D. (1996). The distorting effect of the prudent-man law on institutional equity investment. *Journal of Financial Economics*, 40 (1996), pp. 31-62
- Dhaliwal, D., Li, O., Zhang, A., & Yang, Y. (2011). Voluntary nonfinancial disclosure and the cost of equity capital: The initiations of corporate social responsibility reporting. *The Accounting Review*, 86, 59–100.
- Dowling, J. and Pfeffer, J. (1975) Organizational Legitimacy: Social Values and Organizational Behavior. *Pacific Sociological Review*, 18, 122-136
- Duggal, R., Millar, J. (1999). Institutional ownership and firm performance. The case of bidder returns. *Journal of Corporate Finance*, 5, 103-117
- Edison, H., Warnock, F., (2003). A simple measure of the intensity of capital controls. *Journal of Empirical Finance*, 10, 81-103
- Edmans, A., 2007. Blockholders, market efficiency, and managerial myopia. SSRN Working Paper.
- Edmans, A., 2014. Blockholders and Corporate Governance. *Annual Review of Financial Economics* 6, 23-50.
- Eisingerich, A., Rubera, G., Seifert, M., Bhardwaj, G. (2010). Doing Good and Doing Better despite Negative Information?: The Role of Corporate Social Responsibility in Consumer Resistance to Negative Information. *Journal of Service Research* 14, 60-75.
- European Commission (2001). Promoting a European Framework for Corporate Social Responsibility, COM (2001) 366.
- Fabozzi, F., Ma, K., Oliphant, B. (2008) Sin stock returns. *The Journal of Portfolio Management* 35, 82-94.
- Feng, Z., Tseng, Y., 2019. Corporate social responsibility in the tourism industry: evidence from seasoned equity offerings. *Current Issues in Tourism*, 22, 91-106.
- Feng, Z. Y., Wang, M. L., & Huang, H. W. (2014). Research note: Corporate social responsibility and equity financing in the global tourism industry. *Tourism Economics*, 20, 869–883.
- Fernando, C., Sharfman, M., & Uysal, V. (2010). Does greenness matter? The effect of corporate environmental performance on ownership structure, analyst coverage, and firm value. Working Paper.
- Flammer, C., (2012). Corporate Social Responsibility and Shareholder Reaction: The Environmental Awareness of Investors. *Academy of Management Journal*, 56, 758-781.
- Font, Xavier and Lynes, Jennifer (2018) Corporate social responsibility in tourism and hospitality *Journal of Sustainable Tourism*, 26, 1027-1042.
- Franke GR. Multicollinearity. In *Wiley International Encyclopedia of Marketing* (eds J. Sheth and N. Malhotra); 2010
- Friend, S., F. Jaramillo, J. Johnson (2020). Ethical Climate at the Frontline: A Meta-Analytic Evaluation. *Journal of Service Research* 23, 116-138.
- Fu, H., Ye, B. H., and Law, R. (2014). You do well and I do well? The behavioral consequences of corporate social responsibility. *International Journal of Hospitality Management*, 40, 62-70.
- Gillan, S., Hartzell, J., Koch, A., & Starks, L. (2012). Firms' environmental, social and governance (ESG) choices, performance and managerial motivation. Working Paper.
- Gompers, P., J. Ishii, and A. Metrick. 2003. Corporate Governance and Equity Prices. *Quarterly Journal of Economics* 118:107-55.
- Gorton, G., and Schmid, F. 2000. Universal banking and the performance of German banks. *Journal of Financial Economics*, 58, 29–80.
- Gössling, S. (2002). Global environmental consequences of tourism. *Global Environmental Change*, 12(4), 283–302
- Graves, S., Waddock, S. 1994. Institutional Owners and Corporate Social Performance. *The Academy of Management Journal*, 37, 1034-1046



- Gray, W., (2015) Environmental regulations and business decisions, *IZA World of Labor*, 187.
- Gürlek, M., & Tuna, M. (2019). Corporate social responsibility and work engagement: Evidence from the hotel industry. *Tourism Management Perspectives*, 31, 195-208
- Henderson, D. (2001) Misguided virtue. The Institute of Economic Affairs. Available at <https://www.iea.org.uk/sites/default/files/publications/files/upldbook126pdf.pdf>
- Hou, K., Xue, Ch., & Zhang, L. (2015). Digesting Anomalies: An Investment Approach. *The Review of Financial Studies*, 28, 650–705
- Inoue, Y., & Lee, S. (2011). Effects of different dimensions of corporate social responsibility on corporate financial performance in tourism-related industries. *Tourism Management* 32, 790-804.
- Ignite Economics 2018. The economic contribution of the UK hospitality industry. <https://www.ukhospitality.org.uk/page/EconomicContributionoftheUKHospitalityIndustry2018>
- Iyer, G., Jarvis, L. (2019). CSR adoption in the multinational hospitality context A review of representative research and avenues for future research. *International Journal of Contemporary Hospitality Management* 31 (6) 2376-2393
- Jensen, M., Murphy, K. (1990). Performance pay and top-management incentives. *Journal of Political Economy*, 98, 225-264.
- Kang, K.H., Lee, S., & Huh, C. (2010). Impacts of positive and negative corporate social responsibility activities on company performance in the hospitality industry. *International Journal of Hospitality Management*, 29, 72–82.
- Kim, H., Kim, T., Kim, Y., and Park, K. (2019). Do long-term institutional investors promote corporate social responsibility activities? *Journal of Banking and Finance*, 101, 256–269
- Kim, H., Rhou, Y., Uysal, M., Kwon, N. (2017). An examination of the links between corporate social responsibility (CSR) and its internal consequences. *International Journal of Hospitality Management*, 61, 26-34.
- Kim, S., Milliman, J., Lucas, A. (2021). Effects of CSR on affective organizational commitment via organizational justice and organization-based self-esteem. *International Journal of Hospitality Management*, forthcoming.
- Koseoglu, M., Uyar, A., Kilic, M., Kuzey, C., and Karaman, A. (2021). Exploring the connections among CSR performance, reporting, and external assurance: Evidence from the hospitality and tourism industry. *International Journal of Hospitality Management*, forthcoming.
- Lang, M., Lins, K., Miller, D. 2003. ADRs, Analysts, and Accuracy: Does Cross Listing in the United States Improve a Firm's Information Environment and Increase Market Value? *Journal of Accounting Research* 41 (2), 317-345
- Lee, S., & Park, S.Y. (2009). Do socially responsible activities help hotels and casinos achieve their financial goals? *International Journal of Hospitality Management*, 28, 105–112.
- Lee, S., Singal, M., & Kang, K. H. (2013). The corporate social responsibility–financial performance link in the U.S. Restaurant industry: Do economic conditions matter? *International Journal of Hospitality Management*, 32, 2–10.
- Lins, K., Servaes, H., and Tamayo, A. 2017. Social capital, trust, and firm performance: The value of corporate social responsibility during the financial crisis. *The Journal of Finance* 72 (4), 1785–1824.
- López-Andreu M, Papadopolous O, Jamaliam M 2019. How has the UK hotels sector been affected by the fissuring of the worker–employer relationship in the last 10 years? Working paper, Newcastle University.
- McGehee, N., Wattanakamolchai, S., Perdue, R., and Calvert, E. (2009) Corporate Social Responsibility Within the U.S. Lodging Industry: An Exploratory Study. *Journal of Hospitality and Tourism Research* 33, 417-437
- Matos, C., Henrique, J., Rossi, C. (2007). Service Recovery Paradox: A Meta-Analysis. *Journal of Service Research* 10, 60-77.

- Motta, V. 2017. Are SMEs in the hospitality industry less likely to experience credit constraint than other industries in the service sector? Evidence from Latin America. *Tourism Economics* 23, 1398-1418
- Moyeen, A., Kamal, S., Yousuf, M. (2019) A Content Analysis of CSR Research in Hotel Industry, 2006–2017. In: Crowther D., Seifi S., Wond T. (eds) Responsibility and Governance. Approaches to Global Sustainability, Markets, and Governance. Springer, Singapore.
- Nazir, O., Islam, J. (2020). Effect of CSR activities on meaningfulness, compassion, and employee engagement: A sense-making theoretical approach. *International Journal of Hospitality Management*, forthcoming.
- Odean, T., 1999. Do investors trade too much? *American Economic Review*, 89, 1279-1298
- Pensions and Investments Report, 2017.  
<https://www.pionline.com/article/20170425/INTERACTIVE/170429926/80-of-equity-market-cap-held-by-institutions>
- Pham, H, Ramiah, V., Moosa, I. (2020). The effects of environmental regulation on the stock market: the French experience. *Accounting and finance* 60, 3279-3304.
- Ou, J., Wong, I., Huang, G. (2021). The coevolutionary process of restaurant CSR in the time of mega disruption. *International Journal of Hospitality Management*, forthcoming.
- Ramiah, V., B. Martin, and I. Moosa, 2013, How does the stock market react to the announcement of green policies? *Journal of Banking and Finance* 37, 1747–1758
- Reena Aggarwal, May Hu and Jingjing Yang 2015. Fraud, Market Reaction, and the Role of Institutional Investors in Chinese Listed Firms. *The Journal of Portfolio Management*, Special China Issue 2015, 41 (5) 92-109
- Ringham, K., Miles, S. (2018). The boundary of corporate social responsibility reporting: the case of the airline industry. *Journal of Sustainable Tourism* 26, 1043-1062.
- Sajtos, L., Brodie, R., Whittome, J. (2010). Impact of Service Failure: The Protective Layer of Customer Relationships. *Journal of Service Research* 13, 216-229.
- Shleifer, A., Vishny, R. (1997). The Limits of Arbitrage. *The Journal of Finance*, 52, 35-55.
- Smith, M., (1996). Shareholder activism by institutional investors: evidence from CALPERS. *Journal of Finance*, 51, 227-252.
- Starks, L. 2009. EFA keynote speech: corporate governance and corporate social responsibility: What do investors care about? What should investors care about?. *Financial Review*, 44, 461–468.
- Strickland, S., Wiles, K., Zenner, M. (1996). A requiem for the USA: is small shareholder monitoring effective? *Journal of Financial Economics*, 40, 319-338
- Stevens, P. (2018). Your complete guide to investing with a conscience, a \$30 trillion market just getting started. CNBC News. Available at <https://www.cnbc.com/2019/12/14/your-complete-guide-to-socially-responsible-investing.html>
- Teoh, H., Shiu, G. (1990) Attitudes towards corporate social responsibility and perceived importance of social responsibility information characteristics in a decision context. *Journal of Business Ethics* 9, 71–77
- Theodoulidis, B., Diaz, D., Crotto, F., Rancati, E. (2017). Exploring corporate social responsibility and financial performance through stakeholder theory in the tourism industries. *Tourism Management*, 62, 173-188.
- Turban, D., Greening, D., (1996) Corporate Social Performance and Organizational Attractiveness to Prospective Employees. *The Academy of Management Journal* 40, 658-672
- Uyar, A., Karamahmutoglu, M., Köseoglu, M., Karaman, A., (2020). The link among board characteristics, corporate social responsibility performance, and financial performance: Evidence from the hospitality and tourism industry. *Tourism Management Perspectives* 35, 100714.

- Vassilikopoulou, A., Siomkos, G., Mylonakis, J. (2005). Clustering consumers according to their attitudes on corporate social responsibility. *International Journal of Business Governance and Ethics* 1, 317-328
- Wahal, S. (1996). Pension fund activism and firm performance. *Journal of Financial and Quantitative Analysis*, 31, 1-23
- Watts, P. and Holme, R. 1999. Corporate Social Responsibility: Meeting Changing Expectations. World Business Council for Sustainable Development: Geneva.
- Woidtke, T. (2002). Agents watching agents? Evidence from pension fund ownership and firm value. *Journal of Financial Economics*, 63, 99-131

## Appendix A. NAICS codes for each of the four H&T sectors

NAICS code	Description
<b>1. Travel</b>	
481111	Scheduled Passenger Air Transportation
481211	Nonscheduled Chartered Passenger Air Transportation
481212	Nonscheduled Chartered Freight Air Transportation
481219	Other Nonscheduled Air Transportation
483112	Deep Sea Passenger Transportation
483114	Coastal and Great Lakes Passenger Transportation
483212	Inland Water Passenger Transportation
485999	All Other Transit and Ground Passenger Transportation
487110	Scenic and Sightseeing Transportation, Land
487210	Scenic and Sightseeing Transportation, Water
487990	Scenic and Sightseeing Transportation, Other
488119	Other Airport Operations
488999	All Other Support Activities for Transportation
561510	Travel Agencies
561520	Tour Operators
561599	All Other Travel Arrangement and Reservation Services
<b>2. Hotels and recreation</b>	
561591	Convention and Visitors Bureaus
561990	All Other Support Services
711190	Other Performing Arts Companies
711212	Racetracks
711219	Other Spectator Sports (Racing stables, horse)
711310	Promoters of Performing Arts, Sports, and Similar Events with Facilities
711320	Promoters of Performing Arts, Sports, and Similar Events without Facilities
712110	Museum
712130	Zoos and Botanical Gardens
713110	Amusement and Theme Parks
713120	Amusement Arcades
713910	Golf Courses and Country Clubs
713920	Skiing Facilities
713930	Marinas
713940	Fitness and Recreational Sports Centers
713950	Bowling Centers
713990	All Other Amusement and Recreation Industries
721110	Hotels (except Casino Hotels) and Motels
721120	Casino Hotels
721191	Bed-and-Breakfast Inns
721199	All Other Traveler Accommodation
721211	RV (Recreational Vehicle) Parks and Campgrounds
721214	Recreational and Vacation Camps (except Campgrounds)
<b>3. Casinos</b>	
713210	Casinos (except Casino Hotels)
713290	Other Gambling Industries

*Continued on next page*

#### **4. Restaurants**

722310	Food Service Contractors
722320	Caterers
722330	Mobile Food Services
722511	Full-Service Restaurants
722513	Limited-Service Restaurants
722514	Cafeterias, Grill Buffets, and Buffets
722515	Snack and Nonalcoholic Beverage Bars

---

The table shows NAICS code for companies classified broadly into four groups: Travel, Hotels and recreation, Casinos and Restaurants.

## Appendix B. Definitions of CSR measures

Strengths	Concerns
<i>Panel A. Net employee: sum of strengths-sum of concerns</i>	
Union Relations	Union Relations
Cash Profit Sharing	Employee Health & Safety
Employee Involvement	Supply Chain
Employee Health and Safety	Child Labor
Supply Chain Labor Standards	Labor-Management Relations
Compensation & Benefits	
Employee Relations	
Professional Development	
Human Capital Management	
Labor Management (EMP-STR-M)	
<i>Panel B. Net Diversity: sum of strengths-sum of concerns</i>	
Board of Directors – Gender	Workforce Diversity
Women and Minority Contracting	Board of Directors – Gender
Employment of Underrepresented Groups	Board of Directors - Minorities
Other Strengths	
<i>Panel C. Net Human Rights: sum of strengths-sum of concerns</i>	
Humanity	
Indigenous Peoples Relations Strength	Support for Controversial Regimes
Human Rights Policies & Initiatives	Freedom of Expression & Censorship
	Human Rights Violations
	Other Concerns
<i>Panel D. Net community: sum of strengths-sum of concerns</i>	
Innovative Giving	Community Impact
Community Engagement	
<i>Panel E. Net Environment: sum of strengths-sum of concerns</i>	
Environmental Opportunities	Regulatory Compliance
Waste Management	Toxic Spills & Releases
Packaging Materials & Waste	Climate Change
Climate Change	Impact of Products & Services
Environmental Management Systems	Biodiversity & Land Use
Water Stress	Operational Waste
Biodiversity & Land Use	Supply Chain Management
Raw Material Sourcing	Water Management
Other Strengths	Other Concerns
<i>Panel F. Net CG: sum of strengths-sum of concerns</i>	
Corruption & Political Instability	Governance Structures
Financial System Instability	Controversial Investments
	Business Ethics
<i>Panel G. Net Product and service: sum of strengths-sum of concerns</i>	
Quality	Product Quality & Safety
Social Opportunities	Marketing & Advertising
Access to Finance	Anticompetitive Practices
	Customer Relations
	Other Concerns

The table reports how we calculate the six CSR measures Net Employee, Net Diversity, Net Human Rights, Net Community, Net Environment, Net CG and Net Product and service.

## Appendix C. Definitions of the dependent and control variables used in the study

Abbreviation	Definition
<i>Panel A. The dependent variables</i>	
Institutional ownership	Percentage institutional ownership measured as the sum of the holdings of all institutions in a firm's stock divided by the stock's total market capitalization at the end of each calendar quarter.
Dedicated IO	Dedicated institutional ownership (IO) defined as percentage holdings by dedicated investors measured as the sum of percentage holdings by dedicated institutions, which provide stable ownership and take large positions in individual firms, and holdings by quasi-indexers, which trade infrequently. The measure is calculated at the end of each fiscal quarter.
Domestic IO	Domestic institutional ownership (IO) defined as percentage holdings by domestic institutional investors measured as the sum of the holdings of all institutions domiciled in the United States divided by the firm's market capitalization. The measure is calculated at the end of each fiscal quarter.
Top 5 IO	Percentage holdings by top five blockholders. Blockholders are defined as investors who hold at least 5% of company's stock. The measure is calculated at the end of each fiscal quarter.
<i>Panel B. The control variables</i>	
MV	Stock's market capitalization measured at the end of the fiscal quarter prior to the quarter where we measure institution holdings.
B/M	The book-to-market ratio measured as the ratio of book value of equity scaled by the firm's market capitalization.
ROA	Return on assets, measured as net income scaled by total assets.
P/S	Price to sales ratio measured as the market capitalization to total revenue.
R&D	Research and development expense scaled by total sales.
Advertising	Advertising expenses scaled by total sales.
Leverage	Financial leverage measured as the ratio of total debt scaled by total assets.

The table reports definitions of the dependent and control variables used in the study.

## Appendix D. Average institutional ownership by H&T sector

	Restaurants	Casinos	Hotels and recreation	Travel
Institutional ownership	0.843	0.634	0.745	0.877
Dedicated IO	0.724	0.637	0.700	0.724
Domestic IO	0.784	0.609	0.684	0.821
Top 5 IO	0.340	0.264	0.312	0.342

The table reports institutional ownership for each H&T industry.



## Appendix E. Regressing the CSR scores on past institutional ownership and past CSR dimensions

	Net Employee	Net Diversity	Net Human Rights	Net Community	Net Environment	Net CG	Net Product and service
	Est	Est	Est	Est	Est	Est	Est
Intercept	0.126	-0.291 ***	0.058 ***	0.026	0.177 ***	0.079 *	0.017
Past IO	0.199	0.124	-0.017	-0.016	-0.064	0.071	0.023
Past Net Employee	0.358 ***	0.007	-0.001	0.000	0.030	-0.004	-0.099 ***
Past Net Diversity	0.072 *	0.472 ***	0.019 ***	0.015	0.027	0.059 ***	0.001
Past Net Human Rights	0.555 **	0.413 ***	0.343 ***	0.024	0.310 ***	0.020	0.067
Past Net Community	0.643 ***	0.100	0.041 *	0.567 ***	0.352 ***	0.029	0.264 ***
Past Net Environment	0.150 ***	0.049 **	0.010 *	0.042 ***	0.573 ***	0.043 ***	0.015
Past Net CG	-0.194 **	-0.118 ***	0.006	-0.048 ***	-0.011	0.516 ***	-0.157 **
Past Net Product and service	-0.011	-0.007	0.005	-0.044 ***	-0.085 ***	-0.105 ***	0.255 ***
Controls included	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	1294	1294	1294	1294	1294	1294	1294
Model p-value	0.000	0.000	0.000	0.000	0.000	0.000	0
Adjusted R2	28.51%	30.51%	1.49%	31.75%	53.77%	38.43%	23.34%

The table reports results from regressing the CSR dimensions on institutional ownership and CSR dimensions, measured in the previous year. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level, and \*\*\* denotes significance at the 1% level.

	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
Restaurants	76	101	113	126	118	130	129	108	89	990
Casinos	11	16	15	12	12	12	13	11	12	114
Hotels and recreation	49	67	64	56	57	58	58	69	66	544
Travel	31	45	45	48	51	52	49	47	48	416
Total	167	229	237	242	238	252	249	235	215	2064

The table reports the annual distribution of the firms in the four H&T sectors: Restaurants, Casinos, Hotels and recreation and Travel, over the period 2010-2018.

**Table 2**

The relative rankings of industries on each CSR dimension

CSR dimension	Category	Best	2	3	Worst
Net Employee		Travel	Hotels and recreation	Restaurants	Casinos
Net Diversity	Social	Travel	Restaurants	Hotels and recreation	Casinos
Net Human Rights		Hotels and recreation	Travel	Restaurants	Casinos
Net Community		Travel	Hotels and recreation	Restaurants	Casinos
Net Environment	Environment	Travel	Hotels and recreation	Restaurants	Casinos
Net CG	Corporate governance	Casinos	Restaurants	Hotels and recreation	Travel
Net Product and service	Product and service quality	Restaurants	Hotels and recreation	Travel	Casinos

The table reports the relative rankings from Best to Worst performance across the CSR dimensions for the four H&T sectors.

<b>Table 3</b>				
Descriptive statistics for regression variables				
	Mean	Std Dev	Minimum	Maximum
<i>Panel A. The dependent variables</i>				
Institutional ownership	0.812	0.184	0.268	1.000
Dedicated IO	0.713	0.111	0.424	0.941
Domestic IO	0.755	0.185	0.000	0.996
Top 5 IO	0.329	0.114	0.090	0.843
<i>Panel B. The CSR measures</i>				
Net Employee	0.234	0.786	-1.000	3.000
Net Diversity	-0.056	0.671	-1.000	2.000
Net Human Rights	0.023	0.151	0.000	1.000
Net Community	0.061	0.239	0.000	1.000
Net Environment	0.256	0.676	-1.000	3.000
Net CG	-0.041	0.274	-1.000	1.000
Net Product and service	-0.109	0.521	-2.000	1.000
<i>Panel C. The control variables</i>				
MV	7431.6	15259.5	100.5	91126.0
B/M	0.492	0.516	0.006	2.883
ROA	0.159	0.081	-0.008	0.365
P/S	1.690	1.733	0.158	12.868
R&D	0.076	0.398	0.000	2.733
Advertising	0.022	0.034	0.000	0.231
Leverage	0.625	0.210	0.183	1.029

(Continued on next page)

Table 3, continued

<i>Panel D. Pearson correlations between the CSR measures</i>						
	Net Employee	Net Diversity	Net Human Rights	Net Community	Net Environment	Net CG
Net Diversity	0.073***					
Net Human Rights	0.032	0.243***				
Net Community	0.103***	0.354***	0.379***			
Net Environment	0.092***	0.339***	0.241***	0.427***		
Net CG	-0.084***	-0.007	0.093***	0.090***	0.093***	
Net Product and service	-0.048**	-0.015	0.137***	0.221***	-0.123***	-0.004

Panel A reports descriptive statistics for the dependent variables, Panel B for the CSR measures and Panel C for controls. Panel D reports Pearson correlations between the CSR measures. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level, and \*\*\* denotes significance at the 1% level.

**Table 4**

Regression results: the relation between CSR and institutional ownership

Measure	Estimate	IO			Fixed effects	
		Estimate	STD estimate	VIF	Estimate	
Intercept	0.764 ***			0.000		
Net Employee	0.025 ***	10.8%	1.083	0.007 **		
Net Diversity	0.061 ***	22.3%	1.291	0.017 ***		
Net Human Rights	-0.088 ***	-7.2%	1.231	0.062 ***		
Net Community	-0.060 ***	-7.7%	1.631	0.009		
Net Environment	0.005	1.8%	1.635	0.003		
Net CG	0.080 ***	11.9%	1.154	0.032 ***		
Net Product and service	0.017 **	4.8%	1.230	-0.007		
In MV	0.009 **	8%	2.441	0.053 ***		
B/M	-0.053 ***	-15%	1.723	-0.029 ***		
ROA	0.035	2%	1.590	-0.131 **		
P/S	0.007 ***	7%	1.532	-0.009 ***		
Leverage	0.031	4%	1.373	-0.093 ***		
R&D	-5.734	-1%	1.156	14.290		
Advertising	-0.444 ***	-8%	1.090	0.690 **		
Controls included	Yes			Yes		
N	2064			2064		
Model p-value	0.000			0.000		
Adjusted R2	16.70%			87.62%		

The table reports regression results for equation (1). Column STD estimates shows coefficients for variables standardized to a mean of zero and unit standard deviation. VIF is the variance inflation factors. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level, and \*\*\* denotes significance at the 1% level.

**Table 5**

Dedicated ownership, domestic institutional investors and blockholdings

	Dedicated IO		Domestic IO		Top 5 IO	
	Estimate		Estimate		Estimate	
Intercept	0.684	***	0.716	***	0.331	***
Net Employee	0.012	***	0.020	***	0.007	***
Net Diversity	0.052	***	0.054	***	0.019	***
Net Human Rights	-0.059	**	-0.063	**	-0.044	***
Net Community	-0.059	***	-0.061	***	-0.054	***
Net Environment	0.008		-0.008		0.003	
Net CG	0.091	***	0.072	***	0.030	***
Net Product and service	0.011		0.019	**	0.025	***
Controls included	Yes		Yes		Yes	
N	2064		2064		2064	
Model p-value	0.000		0.000		0.000	
Adjusted R2	29.27%		16.31%		20.25%	

The table reports regression results where we use as the dependent variable the percentage ownership by dedicated institutional investors, *Dedicated IO*, percentage ownership by domestic institutional investors, *Domestic IO*, and ownership by top 5 institutional investors, *Top 5 IO*. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level, and \*\*\* denotes significance at the 1% level.

**Table 6**

Sensitivity tests for the relation between CSR and institutional ownership

	IO (recalculated KLD)		IO (org KLD measures)		Instrumental variables	
	Estimate		Estimate		Estimate	
Intercept	0.627	***	0.702	***	0.766	***
Net Employee	0.028	***	0.018	***	0.030	***
Net Diversity	0.040	***	0.037	***	0.069	***
Net Human Rights	-0.037		-0.175	***	-0.110	***
Net Community	-0.045	***	0.000		-0.076	***
Net Environment	0.002		0.000		0.004	
Net CG	0.108	***	0.066	***	0.094	***
Net Product and service	0.022	*	0.003		0.024	***
Controls included	Yes		Yes		Yes	
N	2064		1138		2064	
Model p-value	0.000		0.000		0.000	
Adjusted R2	13.85%		27.05%			

The table reports regression results for sensitivity tests. Column 'IO (recalculated KLD)' reports results when we recalculate each CSR measure as ratios of  $(1 + \text{strengths}) / (1 + \text{strengths} + \text{concerns})$ . Column 'IO (org KLD measures)' reports equation (1) results with the original KLD measures that were discounting in 2013. Column 'Instrumental variables' reports results from 2SLS regressions. \* denotes significance at the 10% level, \*\* denotes significance at the 5% level, and \*\*\* denotes significance at the 1% level.