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Investor Horizons and Employee Satisfaction: A test of the long-term perspective vision of CSR

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## Abstract

This paper analyses the relationship between investor horizons and employee satisfaction. Because employee satisfaction generates substantial value over the long run, it is well suited to provide an empirical test of Bénabou and Tirole (2010)'s long-term perspective vision of CSR. We find that long-term investor ownership is positively associated with employee satisfaction while this is not the case for the other dimensions of CSR. Additional tests show that this association reflects a direct influence of long-term investors (rather than self-selection). Our results suggest that, when CSR is about maximizing intertemporal profits, long-term investors play a critical role in promoting it.

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#### 1. Introduction

Employee satisfaction is a critical management issue. In the modern firm, employees represent key organizational assets and the ability to retain and motivate them is a source of competitive advantage. Existing empirical evidence clearly indicates that employee satisfaction generates substantial firm value (e.g., Edmans 2011, 2012; Faleye and Trahan 2011). Further evidence shows that employee satisfaction also increases labour productivity and fosters innovation (e.g., Flammer 2015; Flammer and Kacperczyk 2015). Employee satisfaction is therefore an important driver of firm value creation, but what determines a firm's ability to provide a satisfying workplace to its employees?

Bénabou and Tirole (2010) develop a *long-term perspective* vision of CSR in which they argue that CSR may be about taking a long-term perspective to maximizing (intertemporal) profits. Investing in creating a satisfying workplace implies immediate costs and only bears fruit over the long run. Edmans (2011) estimates that it takes a long time (i.e., up to five years) for the value of employee satisfaction to be fully incorporated in the stock price. Thus, the value contribution of employee satisfaction is relevant to long-term investors and they should be the ones promoting it. Our paper aims at testing this prediction.

It is essential to highlight that the main objective of our empirical analysis is not to assess the general relation between investor horizons and CSR. While employee satisfaction has an especially strong link, both theoretically and empirically, to firm value, there is no strong evidence that this is the case for other dimensions of CSR or for CSR taken as a whole (Margolis et al. 2007; Oikonomou et al. 2012). Because investing in other dimensions of CSR will not lead to maximize (intertemporal) profits and may even be financially costly (e.g., Di Giuli and Kostovetsky 2014; Jacobs et al. 2010; Brammer et al. 2006), according to the *long-term perspective* vision of CSR, long-term investors should not play an important role in promoting these other dimensions of CSR.

Our results show that long-term investor ownership is strongly associated with both employee treatment and employee satisfaction. This association is robust to the introduction of numerous control variables and to the use of alternative specifications. We use an instrumental analysis to establish causality. The association we document is robust to controlling for the socially-responsible investor ownership. Finally, we show that long-term investor ownership is not associated with any other dimensions of CSR, highlighting the specificity of employee satisfaction and lending further support to the *long-term perspective* vision of CSR.

Our paper expands on earlier research on corporate social responsibility by providing novel empirical support to the *long-term perspective* vision of CSR developed by Bénabou and Tirole (2010). In contrast to prior studies investigating the relationships between institutional investors and CSR (e.g., Nguyen et al. 2017; Chen et al. 2019; Dyck et al. 2019), we argue that long-term investor ownership should have a positive influence on CSR policies when they are mispriced in the short term but create value in the long run and document supportive evidence for employee satisfaction. Second, our paper contributes to the literature on investor horizons and their impact on corporate policies (e.g., Bushee 1998, Gaspar et al. 2005, Chen et al. 2007, Hao 2014, Attig et al. 2013, Harford et al. 2018). Our results suggest that the presence of long-term investors plays a role in inducing firms to invest in employee satisfaction.

The rest of the paper is organized as follows. The next section presents the sample and the data. Section 2 presents the main results and robustness tests. Section 3 concludes.

## 2. Data and sample

### 2.1. Main dependent variables: employee treatment and employee satisfaction

Our main dependent variable is an employee treatment index capturing the existence of employee-friendly initiatives based on KLD ratings. Examples of strengths rated by KLD in the area of employee relations include, among others, union relations, cash profit-sharing, employee involvement, retirement benefits or health and safety. Based on these indicator variables for the different strengths in employee relations, we create a measure of employee treatment corresponding to the sum of the indicator variables (e.g., Bae et al. 2011). Higher values of the employee treatment index therefore indicate more employee friendly initiatives.

In addition to strengths, KLD also contains a list of weaknesses, labelled as "concerns". Accordingly, an alternative approach is to construct a "net" score by subtracting the concerns to the strengths. However, recent research suggests that this approach is methodologically questionable (e.g., Kacperczyk 2009; Mattingly and Berman 2006; Flammer 2015). Our main dependent variable is therefore the number of strengths in the area of employee relations. In robustness tests, we present results based on a "net" score in the area of employee relations as well as the number of concerns. Finally, on top of employee relations, KLD provides ratings pertaining to diversity. The diversity components generally apply to only a subset of the firm's workforce (e.g., women and minorities) and hence may be less accurate to capture employee satisfaction at the firm level. However, in line with recent literature on employee-related CSR (e.g., Flammer and Luo 2017), we use the sum KLD strengths pertaining to both employee relations and diversity as an alternative dependent variable.

In robustness tests, we also use a measure of employee satisfaction based on the list of the "Best Companies to Work For in America". It is annually published in the January issue of Fortune magazine. To construct it, Great Place to Work® conducts the most extensive employee survey in corporate America. Two-thirds of a company's score is based on the results of the Trust Index® Employee Survey, which is sent to approximately 250 randomly selected employees from each company. This survey asks questions related to employees' attitudes about their workplace experience. It spans five main categories: credibility, respect, fairness, pride, and camaraderie. The other third of a company's score is based on responses to the Culture Audit®, which includes detailed questions about pay and benefit programs and a series of open-ended questions about hiring practices, methods of internal communication, training, recognition programs, and diversity efforts. The Best Companies list is a thorough measure of overall job satisfaction that involves surveying several dimensions (Edmans 2011). While the list provides an independent measure of employee satisfaction (e.g., Edmans 2011; Orlitzky 2013), it is relatively small and only publishes the names of the 100 Best Companies.

## 2.2. Main independent variable: long-term investor ownership

Our main independent variable is the fraction of the firm's shares held by long-term investors. To identify long-term investors, we follow recent literature in corporate finance and measure investor horizons based on their portfolio turnover (e.g., Gaspar et al. 2005; Chen et al. 2007; Derrien et al. 2013; Harford et al. 2018). Although investor horizons are not directly observable, the rationale behind this approach is that an investor which changes very frequently the composition of its portfolio is more likely to have a shorter investment horizon. In line with existing literature, we compute measures of investor horizons only for institutional investors covered by the 13F Thomson Files, for which data on stock portfolio composition is available over time. Hereafter, by "investors" we thus mean institutional investors. We start by computing the portfolio turnover of each investor as the fraction of its portfolio sold during the last twelve quarters (Derrien et al. 2013). We then average portfolio turnover over four quarters in order to

smooth the impact of extreme values. Based on this last measure, we classify investors either as having short-term or long-term horizon. Following Derrien et al. (2013), we consider that an investor has a long-term horizon (short-term horizon) if its average portfolio turnover is below (above) 35%. Finally, at the firm level, we aggregate the fraction of shares held by long-term investors. In robustness tests, we use alternative measures of investor horizons. The Appendix provides detailed definitions of our different proxies for investor horizons.

#### 2.3. Control variables

We include several control variables in our analysis. Motivated by prior literature on the determinant of CSR and employee satisfaction (e.g., Bae et al. 2011; Barnea and Rubin 2010; Hong et al. 2012; Cheng et al. 2014; Nguyen et al. 2017), we control for firm size, institutional ownership, financial leverage, profitability, a dividend payer dummy, the book-to-market ratio, and fixed assets.

### 2.4. Sample selection

We obtain stock and index returns from CRSP, accounting data from S&P Compustat, CSR data from KLD, and investor ownership information from 13F Thomson Files. We obtain data on the Best Companies list from Alex Edmans' website and merge it with CRSP and Compustat data using CRSP *permno* identifiers.

The starting point for the formation of our sample comprises all companies present on CRSP, Compustat, and KLD from 2003 to 2015. KLD database covers a subset of publicly traded from 1991. Following numerous recent papers, we use the period 2003-2015 because the sample during this period includes firms in the Russell indexes and thus provides the largest variation across firms (e.g., Bae et al. 2011; Di Giuli and Kostovetsky 2014). We exclude firms that are utilities or financials. We also exclude firms whose headquarters are not located in the United States. To be included in our final sample, we require that a firm-year have a full set of data on employee treatment, long-term investor ownership and our main control variables.

These restrictions result in a final sample of 15,246 firm-year observations corresponding to 1,857 unique firms. Finally, we winsorize all independent variables at the  $1^{\rm st}$  and  $99^{\rm th}$  percentiles.

## 3. Results

#### 3.1. Summary statistics

Table 1 provides descriptive statistics for the main variables of our sample. The average firm has 0.36 strengths in the area of employee relations. About 23% of the sample has a (strictly) positive employee treatment score. These statistics are consistent with previous studies (e.g., Bae et al. 2011; Nguyen et al. 2017). Consistent with the growing importance of institutional investors in U.S. firms' ownership, the average institutional ownership in our sample is about 74%. Long-term investor ownership is also substantial with an average of 17% (23% of total institutional ownership). 2% of the firm-year observations are part of the Best Companies list.

Table 1: Descriptive statistics

Variable	Obs.	Mean	S.D.	0.25	Mdn.	0.75
Employee Treatment	15,246	0.36	0.80	0.00	0.00	0.00
Long-term Ownership	15,246	0.17	0.13	0.03	0.17	0.26
Institutional Ownership	15,246	0.74	0.21	0.62	0.77	0.88
Size	15,246	7.13	1.55	5.98	6.97	8.07

Book-to-market	15,246	0.81	0.46	0.46	0.73	1.06
Leverage	15,246	0.20	0.19	0.01	0.18	0.32
Dividend Dummy	15,246	0.44	0.50	0.00	0.00	1.00
Fixed Asset	15,246	0.28	0.25	0.09	0.20	0.39
Profitability	15,246	0.04	0.12	0.02	0.05	0.09
Employee Treatment Dummy	15,246	0.23	0.42	0.00	0.00	0.00
Adjusted Employee Treatment	15,246	0.06	0.14	0.00	0.00	0.00
Employee Treatment + Diversity	13,276	0.89	1.49	0.00	0.00	1.00
Employee Concerns	15,246	0.38	0.66	0.00	0.00	1.00
Employee Strengths - Concerns	15,246	-0.02	0.98	0.00	0.00	0.00
Best Companies to Work for List	10,351	0.02	0.14	0.00	0.00	0.00
Average Turnover	12,608	0.45	0.08	0.39	0.44	0.51
Long-term Ownership 2	15,246	0.24	0.18	0.05	0.25	0.37
Labour Intensity	15,189	0.01	0.01	0.00	0.00	0.01
Labour Investment Inefficiency	14,396	0.16	0.23	0.04	0.09	0.18
Blockholder Ownership	15,246	0.22	0.14	0.11	0.20	0.31
Return Volatility	14,631	0.12	0.05	0.08	0.10	0.14
Momentum	15,234	0.16	0.46	-0.12	0.11	0.36
Illiquidity	14,212	0.01	0.02	0.00	0.00	0.01
Intangible Investment	9,352	0.30	0.20	0.16	0.25	0.39
Analyst Coverage	14,792	2.04	0.08	1.97	2.01	2.12
Entrenchment Index	6,219	2.40	1.26	1.00	2.00	3.00
S&P500	15,246	0.21	0.41	0.00	0.00	0.00
Avances Trading Porfermence Consitivity	12 270	0.04	0.10	0.02	0.05	0.11
Average Trading Performance Sensitivity	13,370	0.04	0.10	-0.02	0.05	0.11
SRI Ownership 1	15,246	0.08	0.08	0.03	0.06	0.12
SRI Ownership 2	15,246	0.05	0.05	0.01	0.03	0.07
SRI Ownership 3	15,246	0.03	0.09	0.00	0.00	0.00

#### 3.2. Main results

We start our empirical analysis by regressing different measures of employee treatment/satisfaction on long-term investor ownership and control variables. Results are reported in Table 2, Panel A. We find a significant and positive association between long-term investor ownership and employee treatment measured as the number of KLD strengths in the area of employee relations. A one-standard deviation increase in long-term investor ownership is associated with a 0.04 increase in employee treatment, which represents an 11% increase from its mean value. We find similar results when we use alternative measures of employee satisfaction. These findings provide empirical support to the idea that when CSR is about maximizing intertemporal profits, long-term investors play a role in promoting CSR. Our results are robust to alternative specifications (Panel B) such as the inclusion of industry-year fixed effects and state-year fixed effects or controlling for firm fixed effects (Wintoki et al. (2012)). They are also robust to the use of alternative measures of investors horizons (Panel C). In Appendix A.2, we further control for a host of potential time-varying omitted variables.

Table 2: Employee treatment and long-term ownership *Panel A: Alternative measure of employee treatment and long-term ownership* 

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Employee Treatment	Employee Treatment Dummy	Adjusted Employee Treatment	Employee Treatment + Diversity	Employee Concerns	Employee Strengths - Concerns	Best Company to Work for List
I. Long town Ownowskip	0.303***	0.121***	0.042***	0.613***	-0.372***	0.675***	0.438**
L. Long-term Ownership	(0.082)	(0.044)	(0.014)	(0.152)	(0.068)	(0.105)	(0.220)
L. Institutional Ownership	-0.331***	-0.102***	-0.057***	-0.852***	0.006	-0.336***	-0.208
L. Histitutional Ownership	(0.055)	(0.028)	(0.010)	(0.121)	(0.046)	(0.067)	(0.170)
L. Size	0.249***	0.120***	0.045***	0.646***	0.113***	0.136***	0.170)
L. Size	(0.014)	(0.005)	(0.003)	(0.030)	(0.009)	(0.017)	(0.025)
L. Book-to-market	-0.255***	-0.120***	-0.046***	-0.572***	0.032	-0.287***	-0.462***
L. Book to market	(0.027)	(0.013)	(0.005)	(0.052)	(0.022)	(0.036)	(0.088)
L. Leverage	-0.400***	-0.191***	-0.074***	-0.883***	-0.127***	-0.273***	-0.602***
L. Leverage	(0.059)	(0.031)	(0.011)	(0.131)	(0.048)	(0.076)	(0.227)
L. Dividend Dummy	0.006	-0.001	0.002	0.018	0.093***	-0.087***	-0.050
2. Dividena Danning	(0.022)	(0.013)	(0.004)	(0.045)	(0.019)	(0.029)	(0.066)
L. Fixed Asset	-0.022	-0.001	-0.003	-0.296***	0.019	-0.041	0.148
	(0.054)	(0.031)	(0.010)	(0.104)	(0.046)	(0.071)	(0.206)
L. Profitability	-0.167***	-0.084**	-0.031***	-0.511***	-0.414***	0.247***	0.484
•	(0.059)	(0.039)	(0.011)	(0.125)	(0.061)	(0.086)	(0.358)
Observations	15,246	15,246	15,246	13,276	15,246	15,246	404
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm cluster	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Adjusted R-squared	0.256	0.213	0.244	0.394	0.265	0.199	0.340

This panel reports the results from OLS regressions of alternative measures of employee treatment on long-term investor ownership and control variables. In Column 1, we use our main measure of employee treatment, i.e., the sum of the KLD employee strengths. In Column 2, the dependent variable is a dummy standing for whether the firm has a positive value for employee treatment. In Column 3, we adjust the KLD measure of employee treatment for the maximum number of strengths rated by KLD yearly. In Column 4, we use the sum of KLD strengths in the areas of employee relations and diversity. In Column 5, we use the sum of the KLD employee concerns. In Column 6, we use the sum of KLD employee strengths minus the sum of employee concerns. In Column 7, we use the presence in the Best Companies to Work for list. Independent variables are lagged by one year. The regression includes industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

Panel B: Alternative specifications

Employee Treatment	(1) Employee Treatment>0	(2) Industry*Year Fixed Effects	(3) State*Year Fixed Effects	(4) Three-year-spaced observations + Firm Fixed Effects
L. Long-term Ownership	0.347**	0.263***	0.242***	0.287**
	(0.164)	(0.086)	(0.083)	(0.134)
L. Institutional Ownership	-0.439***	-0.311***	-0.313***	-0.114
	(0.115)	(0.055)	(0.054)	(0.147)
L. Size	0.179***	0.241***	0.241***	0.125**
	(0.020)	(0.014)	(0.014)	(0.056)
L. Book-to-market	-0.163***	-0.200***	-0.196***	-0.047
	(0.048)	(0.035)	(0.035)	(0.052)
L. Leverage	-0.258**	-0.326***	-0.287***	0.051
	(0.104)	(0.057)	(0.055)	(0.155)
L. Dividend Dummy	0.083*	-0.001	0.016	0.072

	(0.047)	(0.023)	(0.022)	(0.073)
L. Fixed Asset	-0.072	-0.047	-0.057	-0.083
	(0.085)	(0.047)	(0.046)	(0.127)
L. Profitability	0.069	-0.149***	-0.121**	0.122
	(0.106)	(0.049)	(0.049)	(0.139)
	2.470	15.246	15 224	4.602
Observations	3,479	15,246	15,234	4,602
Year FE	Yes	No	No	Yes
Industry FE	Yes	No	Yes	No
Year*Industry FE	No	Yes	No	No
State*Year FE	No	No	Yes	No
Firm FE	No	No	No	Yes
Firm cluster	Yes	Yes	No	Yes
Adjusted R-squared	0.288	0.267	0.257	0.393

This panel reports the results from several regressions of employee treatment on long-term ownership and control variables. In Column 1, we restrict our sample to firms with a strictly positive score for Employee Treatment. In Column 2, we include industry\*year fixed effects. In Column 3, we include state\*year fixed effects. In Column 4, we use a sample of observations spaced by three years and include firm fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

Panel C: Alternative measures of long-term ownership

Employee Treatment	(1) Average Turnover	(2) Long-term Ownership 2
L. Average Turnover	-0.643***	
Zi iivoinge Turiiovei	(0.157)	
L. Long-term Ownership 2	()	0.159***
r But I was r		(0.061)
L. Institutional Ownership	-0.244***	-0.260***
•	(0.053)	(0.051)
L. Size	0.242***	0.238***
	(0.014)	(0.014)
L. Book-to-market	-0.199***	-0.198***
	(0.036)	(0.034)
L. Leverage	-0.316***	-0.313***
	(0.058)	(0.056)
L. Dividend Dummy	0.004	0.011
	(0.022)	(0.022)
L. Fixed Asset	-0.054	-0.038
	(0.051)	(0.045)
L. Profitability	-0.076	-0.113**
	(0.047)	(0.048)
Observations	12,608	15,246
Year FE	Yes	Yes
Industry FE	Yes	Yes
Firm cluster	Yes	Yes
Adjusted R-squared	0.254	0.252

This panel reports the results from regressions of employee treatment on alternative measures of long-term investor ownership plus control variables. In Column 1, we use the share-weighted average turnover of a firm's institutional investors. In Column 2, we use long-term ownership expressed as a percentage of total institutional ownership. Independent variables are lagged by one year. The regressions include industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

#### 3.3. Endogeneity

The positive association between long-term investor ownership and employee satisfaction we document could be driven by selection, i.e., long-term investors select firms with higher levels of employee satisfaction but do not have a causal effect on employee satisfaction. Consistent with this argument, Starks et al. (2017) show that investors with longer horizons tend to prefer higher-ESG firms.

To address this concern, we study the relation between investor horizons and employee satisfaction in a two-stage least squares (2SLS) regression framework, using a measure of average trading-performance sensitivity as the instrument. The choice of this instrument follows from Cella et al. (2013) and Garel and Petit-Romec (2017). Trading performance sensitivity captures exogenous variations in investor horizons that depend on funding structure rather than stock characteristics (including ESG characteristics). Investors with lower correlation between funding and previous performance expect to have more stable funding and should have the possibility of taking a longer horizon on their investments.

Table 3 presents the results from the instrumental variable analysis. The instrumented average turnover (which is inversely related to investor horizons) is significantly and negatively related to employee satisfaction. Even after accounting for potential self-selection issues, long-term investor ownership is still positively associated with employee satisfaction. The association between long-term investor ownership and employee satisfaction therefore reflects, at least partially, a causal link.

Table 3: Instrumental variable approach using institutional investors' portfolio tradingperformance sensitivity

	(1)	(2)
Employee Treatment	First stage	Second stage
L. Average Trading Performance Sensitivity	0.027*** (0.008)	
L Average Turnover	(0.000)	-8.112** (4.111)
L. Institutional Ownership	0.058***	0.164
L. Size	(0.003) -0.004*** (0.000)	(0.245) 0.232*** (0.020)
L. Book-to-market	-0.011***	-0.352***
L. Leverage	(0.001) 0.022***	(0.050) -0.243**
L. Dividend Dummy	(0.003) -0.019***	(0.101) -0.141*
L. Fixed Asset	(0.001) 0.003	(0.080) -0.026
L. Profitability	(0.003) 0.020*** (0.005)	(0.047) 0.021 (0.102)
Observations Year FE	10,732 Yes	10,732 Yes
Industry FE	Yes	Yes
Firm cluster Adjusted R-squared	Yes 0.633	Yes 0.0662
F-test	11.94	<del>-</del>

This table reports the results from an instrumental variable regression of employee treatment on investors' average portfolio turnover and control variables, where we instrument investors' average portfolio turnover by investors' average trading performance sensitivity. Column 1 reports the first stage of the IV regression including the F-test of the significance of the instrument. Column 2 reports the second stage of the IV regression. All the regressions include industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

#### 3.4. Employee satisfaction: Long-term investors vs. Socially-responsible investors

Socially-responsible investors usually exclude sin stocks (negative screening) and/or overinvest in stocks of socially-responsible firms (positive screening). They are thus likely to have low portfolio turnover (i.e., they are likely to be classified as long-term investors). Differentiating between the effect of socially-responsible investors and long-term investors is key for our purpose. Indeed, Bénabou and Tirole (2010) also develop a *delegated philanthropy* vision of CSR according to which firms engage in CSR initiatives on the behalf of stakeholders. Firms may thus also invest in employee satisfaction (or more broadly in CSR) to cater to the demand of socially-responsible investors for CSR.

To explore this issue, we use three identification strategies of socially-responsible investors. We first classify as socially-responsible investors that do not hold any sin stock in their portfolios (i.e., alcohol, tobacco, and gaming). We follow Hong and Kacperczyk (2009) to identify sin stocks. Our second classification relies on the weighted-average number of KLD strengths of an institutional investor's portfolio and is inspired by the sustainability footprint proposed by Gibson and Krueger (2017). In our third classification, we compare the investor's portfolio weights on each firm to the weights in the MSCI KLD 400 Social Index.

We use these three proxies for socially-responsible investor ownership to examine how investors' horizons, as opposed to their socially responsible nature, influence employee satisfaction. Table 4, Panel A provides the results of regressions of employee treatment on long-term ownership, socially-responsible investor ownership, and control variables. Results suggest that above and beyond the influence of socially-responsible investors, long-term investors play a role in promoting employee satisfaction.

Next, in Table 4, Panel B, we explore how socially responsible investors and long-term investors affect other dimensions of CSR (e.g., community, environment, and product). We find that socially-responsible investor ownership is positively associated with each of these other dimensions of CSR. In contrast, long-term investors are not positively associated with other dimensions of CSR than employee satisfaction. The results from this section indicate that, after accounting for the effect of socially-responsible investors, a positive association between long-term investors and CSR only exists for employee satisfaction. This finding highlights the specificity of employee satisfaction compared to CSR and further support the relevance of the *long-term perspective* vision of CSR.

Table 4: CSR policies, SRI Ownership, and Long-term Investor Ownership

Panel A: Long-term investors vs. socially responsible investors – Employee Treatment

Employee Treatment	(1)	(2)	(3)
L. Long-term Ownership	0.303*** (0.082)	0.163** (0.081)	0.328*** (0.082)
L. SRI Ownership 1	-0.061	(00001)	(00002)
	(0.117)		
L. SRI Ownership 2		2.016***	
		(0.280)	
L. SRI Ownership 3			0.852***
			(0.170)
L. Institutional Ownership	-0.326***	-0.365***	-0.340***
	(0.060)	(0.055)	(0.055)
L. Size	0.249***	0.212***	0.233***
	(0.015)	(0.014)	(0.014)
L. Book-to-market	-0.253***	-0.218***	-0.235***
	(0.028)	(0.026)	(0.027)
L. Leverage	-0.384***	-0.358***	-0.377***
-	(0.061)	(0.057)	(0.059)
L. Dividend Dummy	0.002	-0.013	-0.000
·	(0.022)	(0.021)	(0.022)
L. Fixed Asset	-0.026	-0.028	-0.024
	(0.055)	(0.053)	(0.054)
L. Profitability	-0.176***	-0.139**	-0.164***
•	(0.060)	(0.059)	(0.059)
Observations	15,024	15,246	15,246
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Firm cluster	Yes	Yes	Yes
Adjusted R-squared	0.255	0.267	0.263

This panel reports the results from regressions of employee treatment on long-term investor ownership, different measures of SRI ownership and control variables. In Column 1, we use a measure of SRI investor ownership based on whether investors hold sin stock. In Column 2, we use a measure of SRI investor ownership based on the KLD score of institutional investors' portfolios. In Column 3, we use a measure of SRI investor ownership based the distance between the weights of each firm in the investor's portfolio and the weights in the MSCI KLD 400 Social Index. All the regressions include industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

Panel B: Long-term investors vs. socially responsible investors – Other CSR policies

	(1)	(2)	(3)
KLD Dimensions	Environment	Product	Community
L. Long-term Ownership	0.004	-0.004	-0.014
	(0.072)	(0.035)	(0.040)
L. SRI Ownership 3	1.345***	0.385***	0.602***
	(0.172)	(0.066)	(0.095)
L. Institutional Ownership	-0.373***	-0.106***	-0.171***
	(0.052)	(0.022)	(0.034)
L. Size	0.248***	0.052***	0.122***
	(0.014)	(0.005)	(0.010)
L. Book-to-market	-0.187***	-0.067***	-0.090***
	(0.022)	(0.010)	(0.015)

L. Leverage	-0.178***	-0.045*	-0.119***
	(0.053)	(0.024)	(0.035)
L. Dividend Dummy	0.054***	-0.001	0.021*
	(0.019)	(0.008)	(0.012)
L. Fixed Asset	-0.008	-0.035*	-0.088***
	(0.053)	(0.019)	(0.028)
L. Profitability	-0.035	-0.008	-0.064*
	(0.054)	(0.030)	(0.033)
Observations	15,246	15,246	15,246
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Firm cluster	Yes	Yes	Yes
Adjusted R-squared	0.359	0.116	0.253

This panel reports the results from regressions of different dimensions of CSR on long-term investor ownership, SRI ownership, and control variables. In Column 1, the CSR dimension under scrutiny is environment (sum of KLD strengths in the area of environment). In Column 2, the CSR dimension under scrutiny is product (sum of KLD strengths in the area of product). In Column 3, the CSR dimension under scrutiny is community (sum of KLD strengths in the area of community). All the regressions include industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported. Variable definitions are available in the Appendix.

#### 4. Conclusion

What determines a firm's ability to provide a satisfying workplace to its employees? The main result of this paper is to highlight that the investment horizon of a firm's investors is a strong determinant of the satisfaction of its employees. Our findings provide novel empirical support to the *long-term perspective* vision of CSR developed by Bénabou and Tirole (2010) and more precisely to the idea that when CSR is about maximizing intertemporal profits, long-term investors play a role in promoting CSR.

#### References

Attig, N., S. Cleary, S. El Ghoul, and O. Guedhami (2013). 'Institutional investment horizons and the cost of equity capital', Financial Management, 42, pp. 441-477.

Bae, K.-H., J.-K. Kang, and J. Wang (2011). 'Employee treatment and firm leverage: A test of the stakeholder theory of capital structure', Journal of Financial Economics, 100, pp. 130-153.

Barnea, A., and A. Rubin (2010). 'Corporate social responsibility as a conflict between shareholders', Journal of Business Ethics, 97, pp. 71-86.

Bénabou, R., and J. Tirole (2010). 'Individual and corporate social responsibility', Economica, 77, pp. 1-19.

Brammer, S., C. Brooks, and S. Pavelin (2006). Corporate social performance and stock returns: UK evidence from disaggregate measures. Financial Management, 35, pp. 97-116.

Bushee, B. J. (1998). 'The influence of institutional investors on myopic R&D investment behavior', Accounting Review, 73, pp. 305-333.

Cella, C., A. Ellul, and M. Giannetti (2013). 'Investors' horizons and the amplification of market shocks', Review of Financial Studies, 26, pp. 1607–1648.

Chen, T., H. Dong, and C. Lin (2019). 'Institutional Shareholders and Corporate Social Responsibility: Evidence from Two Quasi-Natural Experiments', Journal of Financial Economics, Forthcoming.

Chen, X., J. Harford, and K. Li (2007). 'Monitoring: Which institutions matter?' Journal of Financial Economics, 86, pp. 279-305.

Cheng, B., I. Ioannou, and G. Serafeim (2014). 'Corporate social responsibility and access to finance', Strategic Management Journal, 35, pp. 1-23.

Derrien, F., A. Kecskés, and D. Thesmar (2013). 'Investor horizons and corporate policies', Journal of Financial and Quantitative Analysis, 48, pp. 1755-1780.

Di Giuli, A., and L. Kostovetsky (2014). 'Are red or blue companies more likely to go green? Politics and corporate social responsibility', Journal of Financial Economics, 111, pp.158-180.

Dyck, I., K. Lins, L. Roth, and H. Wagner (2019). 'Do institutional investors drive corporate social responsibility? International evidence', Journal of Financial Economics, 131, pp. 693-714.

Edmans, A. (2011) 'Does the stock market fully value intangibles? Employee satisfaction and equity prices', Journal of Financial Economics, 101, pp. 621-640.

———. (2012). 'The link between job satisfaction and firm value, with implications for corporate social responsibility', The Academy of Management Perspectives, 26, pp. 1-19.

Faleye, O., and E. A. Trahan (2011). 'Labor-friendly corporate practices: Is what is good for employees good for shareholders?', Journal of Business Ethics, 101, pp. 1-27.

Flammer, C. (2015). 'Does corporate social responsibility lead to superior financial performance? A regression discontinuity approach', Management Science, 61, pp. 2549-2568.

Flammer, C., and A. Kacperczyk (2015). 'The impact of stakeholder orientation on innovation: Evidence from a natural experiment', Management Science, 62, pp. 1982-2001.

Flammer, C., and J. Luo (2017). 'Corporate social responsibility as an employee governance tool: Evidence from a quasi-experiment', Strategic Management Journal, 38, pp. 163-183.

Garel, A., and A. Petit-Romec (2017). 'Bank capital in the crisis: It's not just how much you have but who provides it', Journal of Banking & Finance, 75, pp. 152-166.

Gaspar, J.-M., M. Massa, and P. Matos (2005). 'Shareholder investment horizons and the market for corporate control', Journal of Financial Economics, 76, pp. 135-165.

Gibson, R., and P. Krueger (2017). 'The Sustainability Footprint of Institutional Investors', Working Paper, Swiss Finance Institute.

Hao, Q. (2014). 'Institutional shareholder investment horizons and seasoned equity offerings', Financial Management, 43, pp. 87-111.

Harford, J., A. Kecskes, and S. Mansi (2018). 'Do long-term investors improve corporate decision making?', Journal of Corporate Finance, 50, pp. 424-452.

Hong, H., and M. Kacperczyk (2009). 'The price of sin: The effects of social norms on markets', Journal of Financial Economics, 93, pp. 15-36.

Hong, H., J. D. Kubik, and J. A. Scheinkman (2012). 'Financial constraints on corporate goodness', Working Paper, National Bureau of Economic Research.

Jacobs, B. W., V. R. Singhal, and R. Subramanian (2010). 'An empirical investigation of environmental performance and the market value of the firm', Journal of Operations Management, 28, pp. 430-441.

Kacperczyk, A. (2009). 'With greater power comes greater responsibility? Takeover protection and corporate attention to stakeholders', Strategic Management Journal, 30, pp. 261-285.

Margolis, J. D., H. A. Elfenbein, and J. P. Walsh (2007). 'Does it pay to be good? A meta-analysis and redirection of research on the relationship between corporate social and financial performance'. Ann Arbor, 1001, pp. 48109-41234.

Mattingly, J. E., and S. L. Berman (2006). 'Measurement of corporate social action: Discovering taxonomy in the Kinder Lydenburg Domini ratings data', Business & Society, 45, pp. 20-46.

Nguyen, P.-A., A. Kecskés, and S. Mansi (2017). 'Does corporate social responsibility create shareholder value? The importance of long-term investors', Journal of Banking & Finance.

Oikonomou, I., C. Brooks, and S. Pavelin (2012). 'The impact of corporate social performance on financial risk and utility: A longitudinal analysis', Financial Management, 41, pp. 483-515.

Orlitzky, M. (2013). 'Corporate social responsibility, noise, and stock market volatility', The Academy of Management Perspectives, 27, pp. 238-254.

Starks, L. T., P. Venkat, and Q. Zhu (2017). 'Corporate ESG Profiles and Investor Horizons', Working Paper, McCombs School of Business, University of Texas Austin.

Wintoki, M. B., J. S. Linck, and J. M. Netter (2012). 'Endogeneity and the dynamics of internal corporate governance', Journal of Financial Economics, 105, pp. 581-606.

# **Appendix A.1 Variable Definitions**

Variables	Definition
Employee Treatment	Emp_str_num in KLD.
Long-term Investor Ownership	Portion of long-term institutional investors expressed as a percentage of total shares outstanding, computed following Derrien et al. (2013). We identify as long-term investors, institutional investors with a portfolio turnover lower than 35%.
Institutional Ownership Size	13F institutional ownership. Natural logarithm of total assets (at).
Leverage	Total debt divided by total assets (dltt+dlc)/at
Book-to-market	Book value divided by market value (at/((cshpri*prcc_f)+pstkl+dlc+dltt-txdb).
Profitability	Return on asset (ni/at)
Fixed Asset	Property, plants, and equipment scaled by total assets (ppen/at)
Return Volatility	Volatility of the monthly returns over the last 36 months.
Dividend Dummy	Dummy variable that takes the value 1 if the firm pays a dividend and 0 otherwise.
Employee Treatment Dummy	Dummy variable that takes the value 1 if the sum of KLD employee strengths for a given year is greater than 1 and 0 otherwise.
Adjusted Employee Treatment	Sum of KLD employee strengths divided by the number of employee strengths rated by KLD for the year.
Employee Treatment + Diversity Employee Concerns	Sum of KLD employee and diversity strengths. Sum of KLD employee concerns.
Employee Strengths - Concerns	Sum of KLD employee strengths minus the sum of KLD employee concerns.
Best Companies to Work For	Presence in the Best Companies to Work for List published by the magazine Fortune. We use the data provided on Alex Edmans' website (coverage: 2004-2011).
Long-term Ownership 2	Long-term investor ownership expressed as a percentage of institutional investor ownership. Following Derrien et al. (2013), we identify as long-term investors, institutional investor with a portfolio turnover lower than 35%.
Average Turnover	Share-weighted average portfolio turnover of institutional investors. We compute an institutional investor's portfolio turnover following Derrien et al. (2013). For a given investor, its turnover is the percentage of its stock portfolio he has sold over the last twelve quarters. It is smoothed over four quarters.
Labour Intensity	Number of employees divided by total assets ( <i>emp/at</i> ).
Labour Investment Inefficiency	Abnormal net hiring measured as the absolute value of the difference between actual net hiring and expected net hiring. Net hiring is the percentage change in the number of employees ( <i>emp</i> ). Expected net hiring is the expected percentage in the number of employees ( <i>emp</i> ) based on the Pinnuck and Lillis (2007)'s model.
Blockholder Ownership Momentum Illiquidity Intangible Investment Analyst Coverage	Ownership of institutional investors with holdings greater or equal to five percent of total shares outstanding.  Cumulated monthly returns over the last twelve months.  Amihud (2002)'s measure of illiquidity. We measure illiquidity as the average daily ratio of absolute stock return to dollar volume.  Computed following Peters and Taylor (2017) as $xrd+0.30*xsga$ .  Natural logarithm of the average number of I/B/E/S analysts issuing forecast for one-year-ahead EPS.
Entrenchment Index	Computed following Bebchuk et al. (2008) as a count of the number of

	six antitakeover provisions that a firm has in place (thus a higher value of the entrenchment index means worse corporate governance): Staggered board, Limits to amend bylaws, Limits to amend charter, Supermajority, Golden parachutes, and Poison pill. ( <i>IRRC</i> )
Average Trading Performance Sensitivity	We follow Cella et al. (2013) and capture an investor's trading performance sensitivity using the correlation between each 13F institutional investor's portfolio performance at quarter t-1 (generated solely by the price changes of the stocks held in their portfolios) and the change in assets under management at quarter t computed over a rolling window of 12 quarters before quarter t. We then compute the share-weighted average trading performance sensitivity of institutional investor at the firm level.
SRI Ownership 1	Socially-responsible investor ownership with socially-responsible investors being defined as investors with no sin stock in their portfolio.
SRI Ownership 2	Socially-responsible investor ownership with socially-responsible investors being defined as investors with a portfolio KLD score in the top quartile of the yearly distribution.
SRI Ownership 3	Socially-responsible investor ownership with socially-responsible investors being defined as MCSI KLD 400 Social Index indexers, i.e., investors having an active share with respect to the MSCI KLD 400 Social Index inferior or equal to 0.30.

Appendix A.2 Robustness tests: Potential time-varying omitted variables

Employee Treatment	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
L. Long-term Ownership	0.267***	0.336***	0.252***	0.287***	0.354***	0.274***	0.610***	0.183**
	(0.081)	(0.086)	(0.081)	(0.086)	(0.106)	(0.081)	(0.184)	(0.081)
L. Institutional Ownership	-0.317***	-0.343***	-0.371***	-0.314***	-0.324***	-0.329***	-0.510***	-0.273***
	(0.053)	(0.058)	(0.070)	(0.057)	(0.068)	(0.054)	(0.109)	(0.056)
L. Size	0.238***	0.249***	0.243***	0.253***	0.275***	0.242***	0.308***	0.179***
	(0.014)	(0.015)	(0.015)	(0.015)	(0.019)	(0.014)	(0.020)	(0.016)
L. Book-to-market	-0.197***	-0.266***	-0.205***	-0.219***	-0.152***	-0.238***	-0.249***	-0.179***
	(0.034)	(0.028)	(0.036)	(0.039)	(0.039)	(0.027)	(0.042)	(0.027)
L. Leverage	-0.316***	-0.409***	-0.320***	-0.324***	-0.397***	-0.314***	-0.455***	-0.312***
	(0.056)	(0.061)	(0.056)	(0.060)	(0.084)	(0.057)	(0.122)	(0.059)
L. Dividend Dummy	0.013	0.009	0.010	0.014	0.008	0.012	-0.056	-0.008
	(0.022)	(0.023)	(0.022)	(0.023)	(0.030)	(0.023)	(0.035)	(0.021)
L. Fixed Asset	-0.038	0.001	-0.040	-0.066	0.021	-0.031	-0.020	0.018
	(0.045)	(0.059)	(0.045)	(0.050)	(0.090)	(0.047)	(0.098)	(0.053)
L. Profitability	-0.118**	-0.194***	-0.106**	-0.059	0.006	-0.137***	-0.017	-0.113*
	(0.048)	(0.064)	(0.047)	(0.054)	(0.078)	(0.046)	(0.136)	(0.058)
L. Labour Intensity	-0.912***							
	(0.308)							
L. Labour Investment Inefficiency	, ,	0.010						
		(0.034)						
L. Blockholder Ownership			0.120					
			(0.078)					
Return Volatility				0.296**				
				(0.136)				
Momentum				0.013				
				(0.009)				
Illiquidity				0.514***				
				(0.149)				
L. Intangible Investment					0.349***			
					(0.082)			
L. Analyst Coverage						1.387**		
						(0.554)		
L. Entrenchment Index							-0.007	
							(0.017)	
S&P 500								0.330***
								(0.047)
Observations	15,189	14,396	15,246	13,606	9,352	14,792	6,219	15,246
Year FE	Yes							
Industry FE	Yes							
Firm cluster	Yes							
Adjusted R-squared	0.252	0.260	0.252	0.260	0.281	0.258	0.286	0.268

This table reports the results from regressions of employee treatment on long-term ownership and control variables. In Column 1, we add employee intensity as control variable. Ceteris paribus, a firm with higher labour intensity should devote more resources to provide a satisfying workplace to its employees, we thus expect a negative relation. In Column 2, we control for labour investment inefficiency measured as abnormal net hiring. Ghaly et al. (2015b) provide evidence that long-term investors reduce labour investment inefficiency (as measured by abnormal net hiring). In Column 3, we control for blockholder ownership. Long-term investors are more likely to be blockholders. Firms with greater long-term investor ownership have therefore potentially more concentrated

ownership. Existing literature indicates that concentrated investors may influence managers and have an impact on corporate decisions (e.g., Holderness 2003; Cronqvist and Fahlenbrach 2009; Edmans and Holderness 2017). Following Holderness (2003), we classify as blockholders institutional investors that own at least 5% of a firm's shares and include blockholder ownership as an additional control variable. In Column 4, we control for stock return volatility, momentum, and stock illiquidity. Recent empirical evidence shows that stock characteristics and, in particular, stock liquidity influence CSR (Chang et al. (2018). If long-term investors choose to invest in more illiquid stocks, stock liquidity may constitute an omitted variable. In Column 5, we control for intangible investment computed following Peters and Taylor (2017) as the ratio of R&D plus 30% of Selling, General, and Administrative expenses to total assets. Previous literature indicates that long-term investors push managers to invest for the long-term and in particular that long-term investors encourage innovation (e.g., Aghion et al. 2013). The association between long-term investor ownership and employee satisfaction could therefore reflect a more general association between long-term investors and intangible investment. In Column 6, we control for analyst coverage. On the one hand, previous literature shows that analyst coverage reduces information asymmetry (Brennan and Subrahmanyam 1995; Hong et al. 2000; Das et al. 2006; Yu 2008; Panayides and Ellul 2018), which in turn, increases institutional ownership by lowering the costs associated with information gathering and stock picking (e.g., O'Brien and Bhushan 1990; Chung and Zhang 2011). On the other hand, recent empirical evidence also indicates that financial analysts influence CSR (Dong et al. 2017). Analyst coverage may therefore constitute an omitted variable driving both long-term investor ownership and employee satisfaction. In Column 7, we add entrenchment index. computed following Bebchuk et al. (2008) as a count of the number of six antitakeover provisions that a firm has in place (staggered board, limits to amend bylaws, limits to amend charter, supermajority, golden parachutes, and poison pill). Some have argued that CSR can be a manifestation of agency problems inside the firm (e.g., Tirole 2001; Barnea and Rubin 2010; Cheng et al. 2013). Since employee satisfaction generates substantial firm value, it is unlikely to be a manifestation of agency conflicts (unlike other dimensions of CSR that may be financially costly). Nonetheless, we want to make sure that our results hold when controlling for management entrenchment. In Column 8, we add a dummy variable equal to one if a firm is in the S&P 500 index and zero otherwise. S&P500 firms are overrepresented in the BC list, suggesting that these firms may invest more in employee satisfaction. At the same time, long-term investor ownership may be higher in S&P 500 firms than other firms because institutional investor ownership is (e.g., Aghion et al. 2013). All the regressions include industry and year fixed effects. Standard errors are robust to heteroscedasticity and clustered by firm. Constants are not reported.