

# Employee Treatment and Contracting with Bank Lenders: An Instrumental Approach for Stakeholder Management

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**Abstract** Adopting an instrumental approach for stakeholder management, we focus on two primary stakeholder groups (employees and creditors) to investigate the relationship between employee treatment and loan contracts with banks. We find strong evidence that fair employee treatment reduces loan price and limits the use of financial covenants. In addition, we document that relationship bank lenders price both the levels and changes in the quality of employee treatment, whereas first-time bank lenders only care about the levels of fair employee treatment. Taking a contingency perspective, we find that industry competition and firm asset intangibility moderate the relationship between good human resource management and bank loan costs. The cost reduction effect of fair employee treatment is stronger for firms

operating in a more competitive industry and having higher levels of intangible assets.

**Keywords** Employee treatment · Stakeholder management · Instrumental approach · Cost of bank loans · Loan covenants

*Our responsibility as a corporation goes far beyond protecting our customers' assets and helping them succeed financially. We're responsible for promoting the long-term economic prosperity and quality of life for everyone in our communities. If they prosper, so do we. There's never been a thriving bank in a struggling community.*  
—John Stumpf, chairman, president, and CEO, Wells Fargo.

## Introduction

Strategic management involves generating and sustaining an enterprise's competitive advantage and hence increasing value for stakeholders (Freeman 1984). Various strategic management models incorporate stakeholder concepts to explain how modern corporations create value (Harrison et al. 2010). Sound stakeholder relations, however, are rare and difficult to imitate (Bridoux and Stoelhorst 2014; Wolfe and Putler 2002), and thus, they can be a source of competitive advantage that allows firms to outperform their competitors (Barney 1991). As the nexus of interrelated stakeholder relationships, firms should adopt a broad view of the strategic decision process that integrates multiple stakeholder groups, and identify strategies that appeal to important value-chain partners (Freeman et al. 2004, 2007; Harrison et al. 2010). To achieve sustainable and high performance, corporate managers need to implement firm-specific stakeholder management practices that “are tailored to their stakeholders and organizational objectives” (Ruf et al. 2001).

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Notably, treatment of various important stakeholders, such as creditors, employees, suppliers, customers, and environment, involves making socially responsible decisions. Moreover, a firm managing for stakeholders has to allocate resources to satisfy the demands of various stakeholder groups, which, in turn, incurs significant cost (Harrison and Bosse 2013; McWilliams and Siegel 2001; Waddock and Graves 1997). Therefore, firms behaving ethically to show their commitment to corporate citizenship are oftentimes confronted with the question of whether “doing good and doing well” converge (Peterson 2004; Margolis et al. 2009). Parallel to the empirical quest for the existence of above-mentioned convergences, stakeholder theory has emerged and evolved as the dominant paradigm in the literature to explain issues related to corporate social responsibility (Jamali 2008; McWilliams and Siegel 2001). Despite its strong moral foundation (Harrison and Freeman 1999; Freeman et al. 2010), the instrumental version of stakeholder theory posits that managerial concern for and treatment of stakeholder groups have instrumental value in the sense that implementing related strategies and practices enables a firm to create value for its shareholders (Berman et al. 1999; Jones 1995; McWilliams and Siegel 2001). Empirical studies generally confirm that expenditures in corporate citizenship add shareholder value (Berman et al. 1999; Harrison and Freeman 1999) through building and maintaining good stakeholder relationships, and most research along this line focuses on the one-to-one relationship between shareholders and one particular type of non-shareholder stakeholder. It remains unclear whether the beauty of engagement in socially desirable activities is solely in the eye of shareholders.

To answer this call, in this study, we focus on two important groups of non-shareholder stakeholders—employees and creditors—to empirically investigate whether and to what extent fair employee treatment affects efficient contracting with bank lenders. In particular, although there exist many stakeholder groups that a firm and its creditors need to deal with, we choose to focus on employees as one of its most important value-relevant stakeholders for the following two reasons. *First*, employees and the human capital they represent constitute a major source of value creation. By fulfilling employees’ needs, a firm can benefit from the direct and ongoing stakeholder relationship to enhance its productivity and financial performance in the long run. Indeed, empirical studies reveal superior long-run stock performance for a value-weighted portfolio of *Fortune* magazine’s “100 Best Companies to Work for in America” (Edmans 2011). Bird et al. (2007) also find a positive relation among strong employee relations, future stock returns, and market-to-book ratios. Faleye and Trahan (2011) report that announcements of labor-friendly practices are associated with positive stock market reactions and long-run returns.

*Second*, existing literature has been primarily focused on external stakeholders. Fair treatment of employees as an internal stakeholder reflects a firm’s choice of desired ethical standards in general (Valentine and Fleischman 2007). Thus, how a firm treats its employees may influence the perceived corporate social responsibility by other external stakeholders such as consumers and credit suppliers (Becker-Olsen et al. 2006; Edmans 2011; Glavas and Kelly 2014), which, in turn, affect the subsequent transactions between the focal firm and its external stakeholders. As a matter of fact, banks, as an important external stakeholder, increasingly evaluate their borrowers’ corporate citizenship and price it accordingly in loan contracts. According to the 2015 report on “Environmental and Social Risk Management” issued by Wells Fargo Bank, during the due diligence, banks review and evaluate their corporate customers’ exposure to social risks including the quality of their treatment of employees, and incorporate any identified risks into the loan approval process. Adopting an instrumental approach for stakeholder management, we argue that fair employee treatment can serve as an instrument (the means) to facilitate efficient contracting with creditors (Jones 1995) and thus create value for shareholders (the end) in terms of lower loan costs and less restrictive provisions. Such empirical investigation is important to shed further light on the dynamic interactions among various non-shareholder stakeholders as well as the underlying mechanisms through which stakeholder management and corporate citizenship can create firm value.

Following Faleye and Trahan (2011) and Bae et al. (2011), we define fair employee treatment as those labor-friendly practices that involve the allocation of significant firm resources and making favorable arrangements to promote employee welfare. Using a large sample of syndicated loan facilities from 1992 to 2013, we report striking interactions among non-shareholder stakeholders, a perspective not documented in the existing literature. We find statistically and economically significant evidence that fair employee treatment reduces bank loan costs and results in fewer financial covenants. To control for endogeneity issues arising from firms’ decisions to borrow private debt and voluntarily engage in employee-friendly practices, we use a two-step procedure including Heckman correction (Heckman 1979) and propensity score matching (PSM) method (Dehejia and Wahba 2002) to ensure the robustness of our findings. We also report evidence that inside banks (i.e., those having a prior lending relationship with the firm) monitor borrowing firms over time and price into the loan both levels of and changes in employee treatment, whereas outside banks (i.e., those without a prior lending relationship) factor in only the levels of employee treatment. Taking a contingency perspective, we investigate industry competition and firm asset intangibility as two contextual variables, and we find that both variables moderate the relationship between fair

employee treatment and loan price. Specifically, our analysis reveals that the cost-reducing effect of employee-friendly practices is stronger for borrowing firms operating in industries with relatively high competition and having relatively high levels of intangible assets.

## Theory and Hypotheses

### Stakeholder Management: An Instrumental Approach

The modern management approach suggests that corporations should not focus their strategic decisions solely on shareholders. Freeman (1984) posits that managers should incorporate a stakeholder framework into their strategic decisions and allocate resources to fulfill legitimate stakeholders' needs in order to retain their willful participation in the firm's productive activities (Harrison et al. 2010). Fostering and maintaining better relationships with key stakeholders, including financiers, employees, customers, and communities (Clarkson 1995), could thus allow firms to outperform their competitors and create shareholder value (Freeman 1984).

Among various versions of stakeholder theory (Kaler 2003), the instrumental approach receives considerable attention (McWilliams and Siegel 2001; Surroca et al. 2010). Instrumental stakeholder theory views stakeholder management as a means (an instrument) to achieve the goal of creating shareholder wealth (Donaldson and Preston 1995; Jones 1995). It posits that managing for stakeholders is actually part of a company's overall strategy through which executives can communicate, negotiate, and contract with stakeholders (Jones 1995). Good stakeholder management promotes "mutually trusting and cooperative economic relationships" that can reduce informational, agency, and transaction costs and, in turn, facilitate efficient contracting with key stakeholders in subsequent transactions (Jones 1995). Therefore, stakeholder management can help firms avoid decisions that might prompt stakeholders to impede firm objectives, and it can help firms engage key stakeholders that control crucial resources to enhance the implementation of corporate strategies (Berman et al. 1999).

In a corporate setting, a set of interdependent relationships exist among various stakeholder groups, implying that stakeholders including shareholders constantly evaluate firms' treatment of other stakeholders and respond accordingly in transactions with firms (Donaldson and Preston 1995; Jones 1995). A firm will pursue stakeholder relationships that produce desirable outcomes and disengage those that prove unproductive (Donaldson and Preston 1995; Mitchell et al. 1997; Ogden and Watson 1999). While there is a strong moral foundation for firms to treat their stakeholders well to build sound stakeholder relationships,

it is noteworthy that many of the practices are related to involvements in corporate social responsibility (CSR) and they surely incur significant costs. To better gauge the instrumental value in stakeholder management, researchers generally document a positive effect of active stakeholder management on shareholder value (Berman et al. 1999; Bloom et al. 2011; Cheng et al. 2014; Choi and Wang 2009; Edmans 2011, 2013; Filbeck and Preece 2003; Hillman and Keim 2001). Nonetheless, two significant gaps exist in the literature. *First*, it remains unclear through which mechanisms the treatment of a particular type of stakeholder leads to value creation (Harrison et al. 2010). *Second*, existing research predominantly focuses on the dyad of shareholders and a particular group of non-shareholder stakeholders (Choi and Wang 2009; Freeman et al. 2010; Hillman and Keim 2001). These insufficiencies limit the understanding and further advancement of stakeholder theory as well as the implementation of effective stakeholder management strategies. To fill the void in the literature, we focus on two important stakeholder groups—employees and creditors—to investigate whether and to what extent fair employee treatment affects efficient contracting with bank lenders.

### Employee Treatment and Contracting with Bank Lenders

To align employees' interests with those of shareholders, firms adopting stakeholder principles strategically implement a wide array of employee-friendly practices that are socially desirable to motivate employees and enhance their commitment (Lepak and Snell 1999, 2002). However, from a stakeholder perspective, it is not the sole responsibility of a firm's shareholders to evaluate its treatment of employees and related practices.

For example, banks, as delegated monitors (Diamond 1984), play a central role in overcoming informational problems, thereby reducing the cost of external borrowing (Strahan 1999). *Ex ante*, banks must invest in costly information production and due diligence (Focarelli et al. 2008) to assess potential borrowers' creditworthiness and risk profiles. At the inception of a lending relationship, banks must evaluate each borrower's liquidity risk, credit risk, and business risk through intensive and comprehensive due diligence. Banks price a particular borrower's riskiness according to the nature of the firm, its business operations, and its track record. Loan prices vary considerably across firms; in general, riskier firms pay higher interest rates to access bank financing. *Ex post*, banks must devote resources to monitoring borrowers in order to mitigate moral hazard problems, even for borrowers with acceptable credit risk. Lending banks use various non-price contractual features to mitigate loan risks and continue to monitor borrowers throughout the lending relationship (Bharath et al. 2011; Strahan 1999).

### *Employee Treatment and Loan Price*

As a matter of fact, it is common practice for banks to investigate a borrowing firm's human resource practices during due diligence (Datta et al. 1999; Taylor and Sansone 2006). Typically, banks evaluate items such as employee contracts, union activities, benefit plans, and pending disputes. In this paper, we posit that fair employee treatment can affect the cost of bank loans for the following reasons. *First*, good employee relations via labor-friendly practices can reduce the income stream uncertainty of borrowing firms (Preston and O'Bannon 1997). Social exchange theory (Eisenberger et al. 1986; Whitener 2001) suggests that good employee treatment promotes strong organizational commitment to corporate citizenship and a bond of loyalty, which decrease both employee absenteeism (Gellatly 1995) and voluntary turnover rates (Huselid and Becker 2011; Somers 1995). Because reduced labor mobility largely mitigates the potential risk of transferring knowledge to rivals, firms are more willing to make firm-specific investment in employees' human capital (Hatch and Dyer 2004). In addition, loyal and committed employees are likely to treat their firms reciprocally by supporting corporate strategies, and less likely to appropriate economic rents from their employers (Coff 1999). Therefore, firms can proactively engage in good employee relations to improve operational performance (Yee et al. 2008) and stabilize income stream uncertainty (Edmans 2013; Hansen and Wernerfelt 1989).

*Second*, we posit that firms engaging in fair employee treatment have a low cost of financial distress. Firms rely on employees to produce a competitive advantage because unique firm-specific human capital is often difficult to imitate (Palmer and Wiseman 1999; Black and Boal 1994). To attract and contract with talented individuals, employers need to allocate resources to engage in fair employee treatment in a sustainable way, and convey their commitment to honor the implicit contracts. As shown by Maksimovic and Titman (1991), an important firm decision to alleviate stakeholders' concerns and build reputation is to reduce leverage and thus credibly commit the firm to stakeholder-friendly policies and practices. Likewise, firms placing higher value on their reputational capital and committing to fair employee treatment tend to maintain lower leverage (Bae et al. 2011). A large finance literature on capital structure has demonstrated that firms with lower leverage are less likely to experience financial distress, have higher debt capacity, and experience lower cost of debt (Harris and Raviv 1991).

*Third*, we argue that labor-friendly practices can function as a signaling device to convey private information about firm future valuation. Signaling theory applies when significant information asymmetry exists in a decision-making process (Spence 1974). Non-shareholder stakeholders may use other reference points (i.e., signals) to make inferences

given that private information is not directly observable to them. A valid signal needs to satisfy two conditions (Myers 1974): (1) it must be observed in advance and (2) it is costly for the firm that sends the signal. In this sense, fair employee treatment practices can function as a valid signal because it can be observed in advance and incurs significant costs (Harrison and Bosse 2013). More important, implementing employee-friendly practices shows a firm's willingness to expend resources to develop human capital that is essential to firm growth (Jones and Murrell 2001), and signify investment projects with positive net present value (Harris and Raviv 1996; Hirshleifer 1961; Modigliani and Miller 1958). Intuitively, a firm with an unpromising future is unlikely to treat employees well because doing so reduces firm value (Bae et al. 2011). As such, fair employee treatment can convey proprietary information about a firm's future cash flows and valuations (Agle and Caldwell 1999; Jones and Murrell 2001) and influence other stakeholders' (e.g., financiers) perceptions and subsequent transactions with the firm (Jones and Murrell 2001).

In summary, as part of a firm's overall strategy of stakeholder management, fair employee treatment is associated with lower income stream uncertainty and lower likelihood of financial distress and signifies better future valuation. Therefore, borrowing firms that address employees' concerns proactively and favorably are in a better position to negotiate contractual terms with bank lenders. If lenders incorporate the information content of fair employee treatment into their pricing scheme, they will reduce loan costs for borrowing firms. Accordingly, we propose our hypothesis as follows.

**Hypothesis 1:** Fair employee treatment is negatively associated with bank loan costs.

### *Employee Treatment and Loan Price: A Contingency Perspective*

Assessing the instrumental value in fair employee treatment necessitates recognizing the significant costs associated with labor-friendly practices. For a value-maximizing firm, corporate managers intending to allocate resources to employee benefits are often confronted with the question, how much is too much? Does a negative relationship between fair employee treatment and bank loan costs suggest that firms should devote more resources to fulfill employees' demands, such that "more is always better"? (Harrison and Bosse 2013; McWilliams and Siegel 2001). The financial merit of good employee relations in reducing loan pricing is contingent because lenders' interpretation of such information is context dependent (Berman et al. 1999; Goll and Rasheed 2004). Therefore, through a contingency lens, we further examine whether boundary conditions exist to strengthen



or weaken the relationship between fair employee treatment and cost of bank financing. Particularly, we identify two contextual variables, industry competition and asset intangibility, that are likely to moderate the relationship between fair employee treatment and cost of bank loans.

The literatures on strategic management and industrial organization emphasize a firm's industry as a crucial component of its external environment, which presents a contextual background for stakeholders to assess how the configuration of organizational resources is framed, executed, and valued (Datta et al. 2005). Furthermore, as one of the most important defining characteristics of industrial structure, the competitiveness of a particular industry segment largely determines the "fit" between firm practices related to resource deployment and their intended outcomes (Barney 1995). With fierce competition, firms tend to engage in aggressive strategies to earn economic rents, which inevitably increase their risk profiles (Hambrick 1982). The risk-mitigating effect of fair employee treatment is likely to be more pronounced in a highly competitive industry (Harrison and St. John 1998; Post et al. 2002; Preffer 1998). Empirical evidence shows that bank lenders consider the product market competition of borrowing firms and price loans accordingly (Valta 2012). Therefore, we hypothesize that the relationship between fair employee treatment and loan price is contingent on the levels of industry competition of borrowers.

**Hypothesis 2:** The degree of product market competition moderates the relationship between fair employee treatment and bank loan costs. Specifically, the relationship between fair employee treatment and bank loan costs is stronger under conditions of greater industry competition.

In an increasingly knowledge-based economy, the efficient production process requires integrating firm assets with tacit knowledge (Ambrosini and Bowman 2001). Tacit knowledge, an important component of human capital, is embedded in uncodified routines (Liebeskind 1966) and has a high probability of creating strategic value (Lane et al. 1998). Tacit knowledge is extremely important when knowledge-based intangible assets represent a firm's primary source of competitive advantage, because operating intangible assets rely heavily on individual employees' qualifications (Ambrosini and Bowman 2001; Hall 1993; Spender and Grant 1996). Moreover, tacit knowledge demands deliberate firm-specific investments in employees' intellectual talents (Datta et al. 2005; Slaughter et al. 2007) and is likely to be lost when employees leave (Egan et al. 2004). According to resource-based view (Barney 1991), human capital (and the tacit knowledge it possesses) is most valuable and inimitable when it is firm specific, and firms can successfully preserve and protect it (Hatch and Dyer 2004). Engaging in labor-friendly practices increases employee satisfaction

and reduces labor mobility, which is crucial for firms with high levels of intangible assets to sustain their competitive advantage. We thus argue that, as long-term capital providers, bank lenders are likely to use asset intangibility as a context variable to evaluate the instrumental value in fair employee treatment and price loans accordingly (Almeida and Campello 2007).

**Hypothesis 3:** The degree of asset intangibility moderates the relationship between fair employee treatment and bank loan costs. Specifically, the relationship between fair employee treatment and bank loan costs is stronger under conditions of greater asset intangibility.

#### *Employee Treatment and Financial Covenants in Loan Contracts*

In addition to pricing borrowers' riskiness, lenders include various restrictive provisions (i.e., covenants) in debt contracts to mitigate the negative consequences of firm actions resulting from inherent conflicts between debtholders and shareholders. Loan contracts commonly deploy financial covenants, such as maintaining a minimum net worth, a minimum current ratio, a minimum interest coverage, or a maximum leverage ratio (Bradley and Roberts 2015). Covenants have an *ex ante* role on constraining the borrower from taking opportunistic actions, and they also allow lenders to intervene *ex post*, through loan renegotiation or termination, if the borrower violates any prespecified terms (Dichev and Skinner 2002; Drucker and Puri 2009).

The existing literature has documented that, because of their voluntary nature, socially desirable activities such as employee-friendly practices can be a powerful commitment device to show that firms engaging in such activities are less likely to behave altruistically or opportunistically (Godfrey et al. 2009) and build mutual trust between employees and employers (Scheibl and Dex 1998). With stakeholders recognizing such commitment (Mackey et al. 2007), firms can enhance their social conditions and further work toward trust-based relationships with other important stakeholders. In this sense, fair employee treatment may generate moral capital that provides "insurance-like" protection to significantly alleviate stakeholders' concerns in the case of unfavorable events (Godfrey et al. 2009; Mackey et al. 2007; Minor and Morgan 2011). We therefore predict that, because of the reduced need of bank intervention and reduced likelihood of firm opportunistic behavior, firms engaging in fair employee treatment will have fewer financial covenants in their loan contracts.

**Hypothesis 4:** Fair employee treatment is negatively associated with the number of financial covenants in bank loan contracts.

## Methodology

### Data and Sampling Procedure

We collect bank loan data from Loan Pricing Corporation's DealScan database (Strahan 1999) from 1992 to 2013. The DealScan database contains detailed information on individual loan facilities such as loan spreads, maturity, collateral, covenants, loan types, and loan purposes. To retrieve financial information for borrowers, we match the borrowing firms in the DealScan database with the Compustat database using the link table provided by Chava and Roberts (2008). We exclude firms in the financial services (SIC codes 6000–6900) and utilities (SIC codes 4900–4999) industries because such firms are highly regulated. We further match our sample firms with the MSCI ESG KLD STATS (KLD) database to generate our sample. Our sampling procedure yields 10,582 loan facilities issued to 2462 unique firms in 493 4-digit SIC industry segments from 1992 to 2013. KLD dataset has expanded its firm coverage over time (Jo and Harjoto 2011). During 1991–2000, KLD covered the S&P 500 and the Domini Social Index. It added the Russell 1000 Index in 2001, the Large Cap Social Index in 2002, the Russell 2000 Index, and the Broad Market Social Index in 2003. Our own elaboration indicates that our sample covers roughly 40% of firms recorded in KLD database and therefore consists of a representative sample of KLD firms with sufficient variations to identify our regression models.

### Measures

#### *Dependent Measures*

We rely on the DealScan database to construct two dependent measures. We collect information on loan price recorded as all-in spread drawn (AISD), which is the annual spread over the London Interbank Offered Rate (LIBOR). We take the natural logarithm of AISD to normalize the distribution and to ease interpretation of our results (Chava and Roberts 2008). We also retrieve information on various covenants in loan contracts. Loan covenants restrict firm opportunistic behaviors to protect lending banks' claims, and the number of covenants generally increases with the need for monitoring and intervening. Note that the precise nature of individual covenants is complicated. As a result, we are not able to construct one quantitative measure that can reflect all of the details of each covenant. As such, in this study, we focus on financial covenants that impose requirements on the level of 17 different accounting variables (ratios) which include the interest coverage ratio, current ratio, leverage, net worth ratio, and others. For each covenant related to a particular financial ratio that a borrowing firm has to maintain, we create a binary variable (1/0) to capture the presence of that

covenant in the loan contracts. Moreover, given the complex nature of individual covenants, there is no consensus in the literature as to the weights assigned to different covenants. We argue that focusing on one important group of covenants (e.g., financial covenants) that serve the same function can ease our interpretation. Therefore, following the existing literature (Bradley and Roberts 2015; Chava and Roberts 2008; Demiroglu and James 2010), we measure *covenants* as the total number of financial covenants in loan contracts (Drucker and Puri 2009), which implicitly assumes that each covenant is weighted equally and is equally restrictive for borrowing firms.

#### *Main Independent Measure*

In this paper, using KLD database, we measure the quality of a firm's employee treatment according to its rating of employee-friendly practices (Bae et al. 2011). KLD uses multiple information sources to rate firms in seven major qualitative areas: environment, community, corporate governance, diversity, employee relations, human rights, and product quality and safety (Hillman and Keim 2001). We focus on ratings in "employee relations" to evaluate a firm's reputation for treating its current employees fairly. The KLD database has been used in many studies as the proxy for firms' employee treatment. For example, Turban and Greening (1996) find that a firm's employee relations are highly associated with the firm's attractiveness for potential employees. Cronqvist et al. (2007) document that employee treatment practices of parent and spun-off firms tend to be highly correlated. In addition, Landier et al. (2009) report that geographically dispersed firms are less likely to engage in employee-friendly practices.

We give special consideration to five strength categories: (1) strong union relations: a history of notably strong relationships with organized labor in the company; (2) profit sharing: a cash profit sharing program through which a majority of employees have recently received distributions; (3) employee involvement: various channels, such as stock options, profit sharing, stock ownership, financial information distribution, or participation in management decision-making, through which the company strongly encourages employee involvement and/or ownership; (4) strong retirement benefits: a notably strong retirement program in the company; and (5) health and safety: a notably strong health and safety program in the company. A firm gains one point for doing a good deed in each of the strength categories. Following the existing literature (Bae et al. 2011; Deng et al. 2013), we construct an index of employee treatment, *ET\_index\_pos*, by summing up the five categories of strengths. In addition, to incorporate possible concerns about a firm's employee treatment and to ensure the robustness of our estimations, we include an additional variable, *ET\_index\_net*,

by subtracting the total number of concerns in the aforementioned five categories from *ET\_index\_pos* (Goss and Roberts 2011). KLD claims that its ratings reflect the status of a firm's employee relations at the end of a calendar year. To ensure that our information represents a firm's status before a loan origination, we use the indexes in year  $t - 1$  for loans made in year  $t$ . Our sample includes loans made between 1992 and 2013, with employee treatment indexes being constructed between 1991 and 2012.

In addition, to assess whether a firm's decision to treat employees well reflects a general tendency to build good relationships with other stakeholder groups, we examine the correlations between employee treatment indexes with the overall CSR scores based on KLD database and scores for the five sub-categories of CSR activities including environment, diversity, human rights, product quality, and safety. In untabulated results, we find that employee treatment indexes are positively correlated with the overall CSR scores and other dimensions of CSR activities. Therefore, fair employee treatment indeed signals a firm's intension to build good stakeholder relationships and to engage in social issues in general.

#### Control Variables

In addition to our main measures of employee treatment, we include two sets of control variables to capture various firm characteristics and loan features that are important determinants in loan contracts (Bharath et al. 2011; Chava et al. 2013; Degryse and Ongena 2001; Pinkowitz and Williamson 2001). It is plausible that a firm's incentive and ability to offer fair employee treatment is also correlated with other firm characteristics. For example, larger firms, more profitable firms and growth firms may engage more in fair employee treatment. We thereby measure *firm size* as the natural logarithm of the book value of assets. We control for *firm profitability* as the ratio of net income to total sales. We include *sales growth rate* as the percentage change in firm sales from year  $t - 1$  to year  $t$ . It is also plausible that firms with lower likelihood of financial distress may offer better employee treatment. We thus calculate the modified Altman's (1968) *Z-score* to gauge the likelihood of default for our sample firms. We define *cash flow volatility* as the standard deviation of a borrower's quarterly cash flows in the previous 3 years scaled by the average book assets. In addition, we measure *firm leverage* as total debt divided by the book value of total assets.

It is possible that managerial ability both drives a firm's engagement in fair employee treatment and results in loan cost reductions (Custódio et al. 2013). Therefore, following Demerjian et al. (2012), we measure managerial ability according to firm managers' efficiency in generating revenues. Specifically, using a data envelop analysis (DEA)

method, they form an efficient frontier by gauging the use of various resources to generate revenue by the firms within each industry. Firms operating on the efficient frontier are assigned a score of one, and a lower efficient score indicates the further distance from the frontier. They then regress the efficient scores on firm size, market share, free cash flow, firm age, diversification and internationalization, along with industry fixed effects and time fixed effects. As a result, the unexplained portion of the efficient scores according to the regression analysis reflects the managerial ability to efficiently transform firm resources to revenue.

We collect information from DealScan to construct variables capturing various loan characteristics (Bharath et al. 2011). *Loan maturity* is the natural logarithm of debt maturity in months. *Loan size* is the natural logarithm of a loan facility's amount in millions of dollars. *Performance pricing* is a dummy that equals one if a loan facility has performance pricing provisions imposing requirement on borrowers' performance. *Relationship lending* is a dummy variable that equals one when the borrower and the lead bank(s) in a syndicated loan have a prior lending relationship. We also include a set of indicators capturing different loan types and purposes, as well as the presence of S&P 500 long-term debt ratings (Drucker and Puri 2009).

## Results

Table 1 reports summary statistics and correlations of variables used in our regression analysis. We also cautiously check the correlations among variables and calculate the variance inflation factors in the regression analysis to ensure multicollinearity is not a concern. Note that we adopt a one-to-one PSM method to obtain a matched sample and perform the vast majority of our analysis. Therefore, Table 1 is based on the PS-matched sample with 5698 observations.

### Employee Treatment and Loan Pricing

Table 2 presents the regression results relating bank loan costs to employee treatment indexes. To control for the possibility that different industries have strategically different labor-friendly practices, we add industry fixed effects at the two-digit SIC level. We include year fixed effects to control for economy-wide shocks and timely trends. We also control for different loan types and loan purposes with categorical indicators. Because a borrowing firm may initiate multiple deals with different banks, estimates of standard errors by ordinary least square estimator can be biased when the residuals are correlated for the same borrowing firm. Therefore, for all regression models, we use clustered standard errors by firm to account for the residual dependence across loans for the same firm. In column 1 of Table 2, the empirical

**Table 1** Summary statistics

Variable name	<i>N</i>	Mean	SD	1	2	3	4	5	6	7	
1 Loan spreads	5698	173.56	143.31	1.00							
2 Covenants	5698	1.91	2.02	0.46***	1.00						
3 ET_index_pos	5698	1.04	0.24	-0.23***	-0.13***	1.00					
4 ET_index_net	5698	0.42	0.80	-0.15***	-0.06***	0.71***	1.00				
5 Firm size	5698	7.82	1.36	-0.40***	-0.33***	0.21***	0.04***	1.00			
6 Profitability	5698	0.03	0.24	-0.16***	-0.08***	0.06***	0.03***	0.11***	1.00		
7 Leverage	5698	0.29	0.21	0.25***	0.16***	-0.06***	-0.07***	0.11***	-0.18***	1.00	
8 Z-score	5698	1.86	1.56	-0.24***	-0.12***	0.05***	0.02	-0.02	0.23***	-0.37***	
9 Sales growth rate	5698	0.12	0.26	0.01	0.07***	-0.01	0.02	-0.05***	0.04***	-0.02***	
10 Cash flow volatility	5698	0.02	0.03	0.20***	0.08***	-0.03***	-0.03**	-0.17**	-0.21***	0.09***	
11 Managerial ability	5698	0.00	0.13	-0.08***	-0.04***	0.03***	0.04**	-0.03***	0.21***	-0.11***	
12 Logged loan maturity	5698	3.75	0.67	0.26***	0.23***	-0.11***	-0.06***	-0.19***	0.00	0.08***	
13 Logged loan size	5698	5.61	1.25	-0.35***	-0.19***	0.14***	0.05***	0.67***	0.11***	0.07***	
14 Performance pricing	5698	0.52	0.50	-0.07***	0.28***	-0.02*	0.00	-0.08***	0.05***	-0.13***	
15 Relationship lending	5698	0.57	0.50	-0.14***	-0.05***	-0.01	-0.01	0.20***	0.03**	0.06***	
Variable name	<i>N</i>	Mean	SD	8	9	10	11	12	13	14	15
1 Loan spreads	5698	173.56	143.31								
2 Covenants	5698	1.91	2.02								
3 ET_index_pos	5698	1.04	0.24								
4 ET_index_net	5698	0.42	0.80								
5 Firm size	5698	7.82	1.36								
6 Profitability	5698	0.03	0.24								
7 Leverage	5698	0.29	0.21								
8 Z-score	5698	1.86	1.56	1.00							
9 Sales growth rate	5698	0.12	0.26	-0.04***	1.00						
10 Cash flow volatility	5698	0.02	0.03	-0.28***	-0.01	1.00					
11 Managerial ability	5698	0.00	0.13	0.22***	0.17***	-0.07***	1.00				
12 Logged loan maturity	5698	3.75	0.67	-0.04***	0.03**	0.02*	0.00	1.00			
13 Logged loan size	5698	5.61	1.25	0.03**	-0.02	-0.14***	0.02*	-0.03**	1.00		
14 Performance pricing	5698	0.52	0.50	0.08***	0.00	-0.05***	0.06***	0.13***	0.07***	1.00	
15 Relationship lending	5698	0.57	0.50	0.03**	0.01	-0.04***	0.02	-0.02*	0.21***	0.01	1.00

\* Indicates  $p < 0.10$ , two-tailed

\*\* Indicates  $p < 0.05$ , two-tailed

\*\*\* Indicates  $p < 0.01$ , two-tailed

result based on ordinary least square (OLS) estimator reveals that loan price is significantly and negatively correlated with the strengths of fair employee treatment (*ET\_index\_pos*). In column 2 of Table 2, we examine separately the effect of the overall employee treatment index (*ET\_index\_net*) on bank loan costs by incorporating concerns about a firm's employee treatment, and our finding is consistent.

A major concern in our analysis is endogeneity issue arising from two strategic decisions: the firm's decisions of obtaining bank loans and engaging in fair employee treatment. In other words, our sampling and estimating procedure is subject to double self-selection, which may potentially bias our estimation. Following the existing literature (Massa and Žaldokas 2014; Popov and Udell 2012), we

use a two-step procedure to address these endogenous choices made by our sample firms. In the first step, starting with the universe of Compustat non-financial firms, we use the DealScan database and the Thomson Financial SDC Platinum Global New Issues database (SDC) to obtain detailed information about different groups of firms seeking external financing, including bank loans (DealScan), public debts (SDC), and equity issuances (SDC). Heckman (1979) demonstrates that incorporating information from groups of firms using alternative sources of financing allows us to recover the error structure to eliminate bias. We estimate a probit model of the choice of bank loans versus arm's length financing, including public debt or equity financing (Denis and Mihov 2003). Specifically, we



**Table 2** Regression relating loan price to employment treatment indexes

Independent variables	Dependent variable: loan spread (logged)			
	OLS		PSM	
	(1)	(2)	(3)	(4)
<i>Employee treatment (ET) index</i>				
ET_index_pos	- 0.050*** [0.017]		- 0.128*** [0.026]	
ET_index_net		- 0.043*** [0.011]		- 0.051*** [0.012]
<i>Firm characteristics</i>				
Firm size	0.056** [0.024]	0.047* [0.024]	0.077** [0.032]	0.064** [0.032]
Profitability	- 0.003 [0.007]	- 0.003 [0.007]	0.077 [0.050]	0.073 [0.050]
Leverage	1.288*** [0.094]	1.288*** [0.094]	1.372*** [0.115]	1.366*** [0.116]
Z-score	- 0.032*** [0.011]	- 0.032*** [0.011]	- 0.018 [0.011]	- 0.019 [0.012]
Sales growth rate	- 0.008 [0.009]	- 0.007 [0.009]	- 0.019 [0.045]	- 0.017 [0.045]
Cash flow volatility	0.087*** [0.012]	0.087*** [0.011]	0.732* [0.425]	0.676 [0.423]
Managerial ability	- 0.141 [0.091]	- 0.130 [0.091]	- 0.150 [0.106]	- 0.151 [0.106]
<i>Loan characteristics</i>				
Loan maturity	0.068*** [0.014]	0.069*** [0.014]	0.061*** [0.020]	0.061*** [0.020]
Loan size	- 0.102*** [0.010]	- 0.101*** [0.010]	- 0.103*** [0.012]	- 0.101*** [0.012]
Performance pricing	- 0.040** [0.018]	- 0.040** [0.018]	- 0.014 [0.023]	- 0.013 [0.023]
Relationship lending	- 0.021 [0.014]	- 0.021 [0.014]	- 0.026 [0.019]	- 0.022 [0.019]
Inverse Mills ratio			1.844*** [0.241]	1.825*** [0.241]
Constant	2.264*** [0.457]	2.359*** [0.456]	1.953*** [0.643]	2.081*** [0.636]
Loan type fixed effects	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes
Borrower rating fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Clustered standard errors	Firm	Firm	Firm	Firm
Observations	10,582	10,582	5698	5698
Adjusted R-squared	0.670	0.673	0.663	0.660

\* Indicates  $p < 0.10$ , two-tailed\*\* Indicates  $p < 0.05$ , two-tailed\*\*\* Indicates  $p < 0.01$ , two-tailed

model the choice of bank financing as a function of a set of variables that have been identified as important determinants of a firm's financing decisions (Bolton and Freixas 2000; Denis and Mihov 2003; Diamond 1991; Popov and Udell 2012), which includes firm size, profitability,

leverage, Z-score, sales growth rate, cash flow volatility, and credit rating.

We calculate the inverse Mills ratio based on the probit model, which is subsequently entered into all regression models as an additional control variable (Heckman 1979).

The inverse Mills ratio not only allows us to control for selection bias but also signifies the direction of self-selection (Hamilton and Nickerson 2003). Indeed, we document significant coefficients of the inverse Mills ratio ( $p < 0.01$ ) for all models in Table 2, confirming the existence of self-selection of external financing. Moreover, the *positive* signs of estimated coefficients indicate that our sample firms *negatively* self-select (i.e., below-average loan costs) into the strategy of borrowing from banks because of their comparative advantages of obtaining cheaper loans (Hamilton and Nickerson 2003; Li and Prabhala 2007). Alternatively, those firms obtaining arm's length financing would have above-average loan costs had they chosen bank financing.

In the second step, treating a firm's decision of engaging in fair employee treatment as endogenous, we adopt an approach based on the PSM method and report our results in columns 3 and 4 of Table 2. The PSM technique (Dehejia and Wahba 2002) has been widely applied in related research, e.g., Bharath et al. (2011) to pair treatment and non-treatment groups on a set of observable characteristics to remove relevant differences, and it allows for unbiased estimates of the treatment effect (Dehejia and Wahba 2002). We perform a one-to-one match without replacement to construct our matched sample (Leuven and Sianesi 2014). Specifically, starting with all borrowing firms in our sample, we estimate the conditional probability (i.e., propensity score) of having strengths (i.e., better employee treatment) in employee relations, with a probit model on a multidimensional set of observable characteristics. The underlying logic is to ensure that the treatment group and the control group differ only in their practice of engaging in better employee treatment, although these two groups of firms may have similar propensity to do so. To have a parsimonious model with sufficient explanatory power, we carefully select variables included in the first-stage probit model (see Eq. 1). Existing research posits that firms with slack resources are likely to engage in socially desirable activities (Waddock and Graves 1997). Therefore, we control for firm profitability and cash flow volatility. To capture whether a firm can credibly honor its employee benefits, we include firm leverage and Z-score (Bae et al. 2011; Maksimovic and Titman 1991). Moreover, a growth firm is likely to invest in its stakeholder relationships with employees to sustain its competitive advantage. It is also plausible that firms with better managerial ability tend to offer better employee benefits (Demerjian et al. 2012). We thus add measures of sales growth rate and managerial ability in the probit model. In line with the existing literature, we find that growth firms, firms with financial slacks, and firms with better managerial ability are more likely to engage in employee-friendly practices. The first-stage probit model has a log-likelihood of  $-6212.4$  and a McFadden's pseudo  $R$ -squared of 0.08. Following Veall (1996), we compare the prediction accuracy

of our model (0.821) with a blind guess (0.754) by calculating  $\lambda' = (0.821 - 0.754)/(1 - 0.754) = 0.27$ , which reveals a significant 27% improvement over a blind guess (Hoetker 2007). These statistics indicate the appropriateness of the choice of independent variables and the overall fit of the probit model.

$$\begin{aligned} \text{Prob}(Y = 1) = & 2.556^{***} + -0.141^{***} \times \text{Firm size} + 0.029^* \\ & \times \text{Profitability} + 0.069 \times \text{Leverage} + 0.033^{***} \\ & \times \text{Zscore} + 0.161^{***} \times \text{Sales growth rate} \\ & + 0.056 \times \text{Cash flow volatility} + 0.261^{***} \\ & \times \text{Managerial ability} \end{aligned} \quad (1)$$

Our PSM-procedure yields a sample of 5698 observations including both the treatment group and control group. Following Lemmon and Roberts (2010), we perform group mean tests for firm characteristics and loan characteristics of treatment group and control group. In line with our expectation, most variables are not statistically different for two subgroups. Thus, we form a sample with two groups of firms that are identical in almost all aspects, but differs in their employee treatment (i.e., with strengths versus without strengths). We report regression results based on a PS-matched sample in columns 3 and 4 of Table 2, and we find consistent results that fair employee treatment reduces loan price significantly. The economic significance of our findings is quite obvious in that, *ceteris paribus*, a one-point change in employee treatment indexes reduces loan cost by 13% in column 3 (22 basis points) and 5% in column 4 (9 basis points), respectively.

Ideally, the first-stage probit model should incorporate all observable variables to generate the propensity score (Li and Prabhala 2007). We recognize, however, that unobservable variables (hidden bias) may bias the qualitative and quantitative inferences regarding the treatment effects (Bharath et al. 2011; Rosenbaum 2002). Following Bharath et al. (2011), we perform a Rosenbaum bounds sensitivity analysis to econometrically determine whether unobserved factors may alter our causal inferences. We examine the confidence interval of regression coefficients of employee treatment indexes by experimenting with a factor capturing the magnitude of hidden bias. At a given factor, if the hidden bias is sufficiently large such that the confidence interval of the estimated coefficient contains nonnegative values, the negative relationship between fair employee treatment and loan price will be challenged. In our case, a factor of 1.4 will result in a confidence interval of a point estimate containing nonnegative values, which reflects the magnitude of hidden bias. To ease interpretation, we translate the factor to the corresponding change in each variable in the first-stage probit model that is equivalent to the same magnitude of hidden bias. For example, the hidden bias must be sufficiently large (equivalent to a 132% change in firm leverage) to challenge

our results. Using firm size as another example, the magnitude of hidden bias has to be equivalent to 7.6 standard deviations in order to challenge our findings. We thereby conclude it is unlikely that an unobserved factor can lead to the rejection of the causal effect of employee-friendly practices on loan spreads.

Bank lenders invest in costly information production to screen borrowers *ex ante* and expend resources in monitoring those borrowers *ex post* (Bharath et al. 2011). As an important stakeholder, a bank may foster lending relationships with borrowing firms through multiple transactions. It is important and informative to examine how banks dynamically incorporate not only cross-sectional variation but also time series variation of firms' treatment of another stakeholder group into loan contracts. To do this, we distinguish between first-time loans and relationship loans and partition our sample accordingly. We define a first-time loan as one in which a particular borrower has not previously borrowed from the lead lender(s) in a loan syndication as recorded in DealScan database. Accordingly, we define a relationship loan as one in which a particular borrower has previously obtained a loan from the same lender. To capture the dynamic effect of fair employee treatment on bank loan price, we construct an additional variable to capture changes in the employee treatment indexes between previous loan transactions and the current loan origination. For the two subsamples of first-time loans (columns 1–2 of Table 3) and relationship loans (columns 3–4 of Table 3), we run regressions with both the levels and the changes for *ET\_index\_pos* and *ET\_index\_net* along with a set of control variables. For first-time loans, we find that only the levels of the employee treatment indexes show a significantly negative sign, whereas for relationship loans, both the levels of and changes in the employee treatment indexes are significantly and negatively correlated with loan spreads. The results strongly indicate that, as inside lenders and existing stakeholders, relationship banks factor in not only the contemporary labor-friendly practices but also the improvement in employee treatment over time because of their vested interests in the bank–borrower relationship. Outside banks with no existing stakeholder relationship, however, care more about the borrowing firm's current, rather than historical, human resource practices.

Taken as a whole, our findings reported in Tables 2 and 3 lend strong support for Hypothesis 1. Note that in the balance of this paper, all regression analyses are based on a PS-matched sample with inclusion of the inverse Mills ratio to control for possible double self-selection.

### Moderation Analyses: Industry Competition and Asset Intangibility

In Table 4, we perform tests regarding two moderating variables, namely industry competition and asset intangibility. In columns 1 and 2, we focus on industry competition as a contextual variable. We first calculate a sales-based Herfindahl–Hirschman Index (HHI) as the sum of the squared percentage of market share for each firm in a four-digit SIC industry for a particular year. We follow the convention to ease interpretation (Krishnan, Joshi, and Krishnan 2004) and define a dummy variable to capture high industry competition when the HHI is less than 1000 and then interact this dummy with employee treatment indexes. We report significantly positive coefficients on the high industry competition dummy, which indicates a competitive environment increases firm operational risk profiles. More important, the significant and negative coefficients on the interaction terms support our prediction that in a highly competitive environment, strategic investment in good stakeholder relationship with employees becomes more valuable (Datta et al. 2005), and other stakeholders such as banks recognize and factor the instrumental value into subsequent transactions.

In columns 3 and 4 of Table 4, we calculate the ratio of R&D expenditures plus advertisement expenses to firm sales (Surroca et al. 2010), and we define a high asset intangibility dummy that takes the value of one if the ratio is above the median and zero otherwise. We interact this dummy with employee treatment indexes and include the interaction term in the regression analysis. The significantly negative coefficients of the interaction term reveal that better employee treatment is associated with a larger decrease in loan price when a firm is operating with significant intangible assets. For all models in Table 4, the first-order effect of fair employee treatment on loan price remains negative and significant. In summary, the results reported in Table 4 strongly support Hypothesis 2 and 3.

### Employee Treatment and the Adoption of Financial Covenants in Loan Contracts

In Table 5, we report regression results relating the number of financial covenants in bank loan contracts to employee treatment indexes. We employ a Poisson regression to test our hypothesis because the dependent variable is a nonnegative count. We predict that firms engaging in good human resource management will face fewer restrictive provisions in their loan contracts. In line with our prediction, the findings of significantly negative coefficients of employee treatment indexes in columns 1 and 2 support Hypothesis 4.

**Table 3** Employee treatment indexes and loan price: does relationship lending matter?

Independent variables	Dependent variable: loan spread (logged)			
	First-time loan		Relationship loan	
	(1)	(2)	(3)	(4)
<i>Employee treatment (ET) index</i>				
ET_index_pos	- 0.109*** [0.040]		- 0.137*** [0.030]	
ET_index_pos change	- 0.024 [0.052]		- 0.121** [0.049]	
ET_index_net		- 0.033* [0.018]		- 0.067*** [0.015]
ET_index_net change		- 0.022 [0.027]		- 0.039* [0.023]
<i>Firm characteristics</i>				
Firm size	0.060* [0.036]	0.051 [0.037]	0.094** [0.045]	0.078* [0.044]
Profitability	0.113 [0.076]	0.108 [0.077]	0.062 [0.064]	0.059 [0.064]
Leverage	1.212*** [0.134]	1.217*** [0.136]	1.505*** [0.156]	1.484*** [0.157]
Z-score	- 0.008 [0.009]	- 0.008 [0.009]	- 0.048** [0.020]	- 0.050** [0.020]
Sales growth rate	- 0.010 [0.065]	- 0.008 [0.065]	- 0.019 [0.061]	- 0.016 [0.062]
Cash flow volatility	1.365* [0.763]	1.331* [0.767]	0.165 [0.526]	0.096 [0.526]
Managerial ability	- 0.371*** [0.114]	- 0.372*** [0.114]	0.082 [0.135]	0.085 [0.135]
<i>Loan characteristics</i>				
Loan maturity	0.070*** [0.026]	0.072*** [0.026]	0.049* [0.028]	0.049* [0.028]
Loan size	- 0.088*** [0.016]	- 0.088*** [0.016]	- 0.116*** [0.016]	- 0.114*** [0.016]
Performance pricing	- 0.076*** [0.029]	- 0.077*** [0.029]	0.028 [0.028]	0.029 [0.028]
Inverse Mills ratio	1.537*** [0.275]	1.532*** [0.278]	2.162*** [0.352]	2.127*** [0.350]
Constant	1.273* [0.696]	1.339* [0.706]	1.098 [0.923]	1.230 [0.915]
Loan type fixed effects	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes
Borrower rating fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Clustered standard errors	Firm	Firm	Firm	Firm
Observations	2471	2471	3227	3227
Adjusted R-squared	0.627	0.625	0.687	0.687

\* Indicates  $p < 0.10$ , two-tailed\*\* Indicates  $p < 0.05$ , two-tailed\*\*\* Indicates  $p < 0.01$ , two-tailed

## Discussion and Conclusion

As economy-wide competition has heightened during the past few decades, companies have found it very difficult to

maintain their competitive positions and sustain growth. Stakeholder theory thus plays an increasingly important role in the strategy–performance discussion as well as the CSR literature. In the absence of support from various groups of



**Table 4** Moderating effects of industry competition and asset intangibility

Independent variable	Dependent variable: loan spread (logged)			
	(1)	(2)	(3)	(4)
<i>Employee treatment (ET) index</i>				
ET_index_pos	- 0.109*** [0.028]		- 0.076*** [0.025]	
ET_index_net		- 0.044*** [0.014]		- 0.052*** [0.014]
Industry competition (High)	0.101*** [0.027]	0.096*** [0.027]		
ET_index × Industry competition (High)	- 0.098** [0.050]	- 0.057** [0.025]		
Asset intangibility (High)			- 0.005 [0.019]	- 0.015 [0.028]
ET_index × Asset intangibility (High)			- 0.080** [0.033]	- 0.044* [0.026]
<i>Firm characteristics</i>				
Firm size	0.121*** [0.032]	0.110*** [0.031]	0.095*** [0.020]	0.106*** [0.032]
Profitability	0.080 [0.052]	0.075 [0.052]	0.091** [0.041]	0.073 [0.053]
Leverage	1.519*** [0.113]	1.513*** [0.115]	1.476*** [0.069]	1.525*** [0.113]
Z-score	- 0.021* [0.012]	- 0.022* [0.012]	- 0.022*** [0.007]	- 0.017 [0.011]
Sales growth rate	- 0.207*** [0.043]	- 0.202*** [0.043]	- 0.213*** [0.033]	- 0.219*** [0.042]
Cash flow volatility	0.909* [0.542]	0.874 [0.543]	0.643** [0.260]	0.876 [0.534]
Managerial ability	- 0.172 [0.113]	- 0.172 [0.112]	- 0.160** [0.071]	- 0.164 [0.110]
<i>Loan characteristics</i>				
Loan maturity	0.029 [0.021]	0.031 [0.021]	[0.014] - 0.107***	0.031 [0.021]
Loan size	- 0.106*** [0.013]	- 0.105*** [0.013]	[0.009] - 0.050***	- 0.105*** [0.013]
Performance pricing	- 0.042* [0.024]	- 0.041* [0.025]	[0.017] - 0.052***	- 0.039 [0.025]
Relationship lending	- 0.050** [0.020]	- 0.047** [0.020]	[0.017] 2.014***	- 0.046** [0.020]
Inverse Mills ratio	2.139*** [0.235]	2.114*** [0.235]	[0.144] 2.622***	2.106*** [0.238]
Constant	0.673 [0.597]	2.429*** [0.585]	[0.692] [0.014]	2.399*** [0.590]
Loan type fixed effects	Yes	Yes	Yes	Yes
Loan purpose fixed effects	Yes	Yes	Yes	Yes
Borrower rating fixed effects	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes
Clustered standard errors	Firm	Firm	Firm	Firm
Observations	5698	5698	5698	5698
Adjusted R-squared	0.591	0.590	0.601	0.587

\* Indicates  $p < 0.10$ , two-tailed\*\* Indicates  $p < 0.05$ , two-tailed\*\*\* Indicates  $p < 0.01$ , two-tailed

**Table 5** Employee treatment indexes and the use of financial covenants

Independent variables	Dependent variable	
	(1)	(2)
<i>Employee treatment (ET) index</i>		
ET_index_pos	- 0.085** [0.042]	
ET_index_net		- 0.035** [0.017]
<i>Firm characteristics</i>		
Firm size	- 0.062 [0.039]	- 0.061* [0.035]
Profitability	0.033 [0.049]	0.039 [0.057]
Leverage	1.048*** [0.185]	1.105*** [0.176]
Z-score	0.003 [0.008]	0.002 [0.008]
Sales growth rate	0.033 [0.046]	0.038 [0.044]
Cash flow volatility	0.189 [0.408]	0.080 [0.390]
Managerial ability	- 0.286*** [0.101]	- 0.293*** [0.083]
<i>Loan characteristics</i>		
Loan maturity	0.101*** [0.013]	0.078*** [0.010]
Loan size	- 0.031** [0.014]	- 0.039*** [0.015]
Performance pricing	0.608*** [0.010]	0.636*** [0.012]
Relationship lending	0.050* [0.028]	0.045* [0.026]
Inverse Mills ratio	1.109*** [0.371]	1.200*** [0.362]
Constant	- 1.640* [0.870]	- 1.457* [0.883]
Loan type fixed effects	Yes	Yes
Loan purpose fixed effects	Yes	Yes
Borrower rating fixed effects	Yes	Yes
Industry fixed effects	Yes	Yes
Year fixed effects	Yes	Yes
Clustered standard errors	Firm	Firm
Observations	5698	5698
Pseudo R-squared	0.212	0.205

\* Indicates  $p < 0.10$ , two-tailed\*\* Indicates  $p < 0.05$ , two-tailed\*\*\* Indicates  $p < 0.01$ , two-tailed

stakeholders, firms would face serious challenges to survive, excel, and grow. Incorporating the stakeholder framework into strategic management, however, raises important issues around how to allocate resources to engage different stakeholder groups. Without understanding the sources and

mechanisms of shareholder value creation through proactive stakeholder management, it is difficult for managers, as agents for shareholders, to formulate and implement effective strategies that maximize firm value.

Applying an instrumental approach, our study advances the understanding of the economic consequences of stakeholder management and corporate citizenship in three ways: theoretically, empirically, and methodologically. Theoretically, viewing firms as the nexus of a complex web of stakeholder relationships, we posit that stakeholder management is beyond the scope of shareholder–stakeholder relationships. We build on instrumental stakeholder theory, proposing that how companies treat one group of stakeholders (e.g., employees) has instrumental value in efficient contracting with other stakeholder groups (e.g., bank lenders). That is, treating one group of stakeholders in an ethical and socially desirable way may affect how other stakeholder groups perceive the focal firm's strategies, riskiness, and future prospects, and conduct subsequent transactions accordingly. Our theoretical development clearly shows that non-shareholder stakeholders do value corporate citizenship, and thus provides theoretical justifications of the practices of many stakeholder groups (e.g., banks) in favor of CSR-related activities. Therefore, this study not only uncovers the mechanisms of value creation through successful stakeholder management and engagement in corporate citizenship, but also presents a vivid picture of the dynamic interactions among non-shareholder stakeholders.

Empirically, we construct a large comprehensive longitudinal dataset from multiple sources to conduct our analysis. We document strong evidence that fair employee treatment can result in lower loan price and fewer financial covenants for borrowing firms. We thus provide novel evidence and shed further light on the fast-growing literature about the economic consequences of active stakeholder management and corporate citizenship. Our analysis also provides new evidence on the different reactions of existing stakeholders (i.e., relationship banks) and would-be stakeholders (i.e., non-relationship banks) to fair employee treatment. It turns out that relationship banks with access to and vested interests in the stakeholder relationships tend to incorporate both current and historical information on fair employee treatment and price loans accordingly, whereas outside banks care only about *status quo*. To better evaluate the instrumental value in labor-friendly practices and explore possible boundary conditions, our moderation analyses reveal that industry competition and asset intangibility moderate the negative relationship between fair employee treatment and loan price.

From a methodological viewpoint, we cautiously control for endogeneity arising from double-selection of firm strategies. We use the Heckman correction method to address the first self-selection issue: firms endogenously

choosing bank financing over alternatives such as issuing public bonds or equity. We use both the IV approach and PSM method to deal with the second self-selection issue: firms strategically implementing employee-friendly practices. Additionally, we perform Rosenbaum bounds sensitivity analysis to test the possible existence of hidden bias and ensure the robustness of our findings. Our econometric approaches allow us to establish a robust link between fair employee treatment and contracting with bank lenders.

Our research is not without limitations. For example, our study focuses on one important internal stakeholder group (i.e., employees). It is arguable that even without a strong moral foundation or ethical concern, firms may treat their employees well to achieve satisfactory economic outcomes. Nonetheless, the limitations also present fruitful future research opportunities. To generalize the findings in our study to other socially responsible activities, it is of great importance and interest to explore how banks respond to borrowing firms' treatment of other important stakeholder groups, especially those external stakeholders such as environment and other social issue participations.

Although this paper gives a strong implication that firm managers need to assess the overall portfolio of stakeholder relationships and understand the consequences of strategic actions not confined simply to shareholder–stakeholder relationships, we do not explicitly investigate the variation in CSR activities across firms. Similar to many existing studies, we focus on the relationship between one aspect of CSR activities and firm economic performance (i.e., the mean effect). Does a positive mean effect suggest that firms should devote more resources to satisfy all stakeholder demands, so that “more is always better”? (Harrison and Bosse 2013). If not, how much is too much? Given limited and heterogeneous resource configurations, how do firms make decisions on resource allocation and prioritize their focuses on various CSR activities? It is critical for researchers to further investigate the dynamic interactions among firms' treatment of different stakeholder groups. Future research along this line will surely provide informative evidence and practical guidelines to firm managers, shareholders, and other non-shareholder stakeholder groups to manage stakeholders and engage in various social issues.

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#### Compliance with Ethical Standards

**Ethical Approval** This article does not contain any studies with human participants or animals performed by any of the authors.

**Conflict of interest** The authors declare that they have no conflict of interest.

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