

Is What's Best for Employees Best for Shareholders?*

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Abstract

We study the effect of labor-friendly corporate practices and find that labor-friendly firms are received positively in the market and outperform comparable firms on productivity, profitability, and value creation. Human capital dependent firms are more likely to be labor-friendly and the benefits of improved performance accrue mostly to such firms. Our analysis of excess executive compensation and forced turnover suggests that top management derives no pecuniary benefits from labor-friendly practices. We therefore interpret our results as consistent with rational choice, noting that the benefits of devoting significant resources to employee welfare appear to outweigh the costs, especially when the need for firm-specific human capital is greater.

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1. Introduction

By virtue of their proximity to the firm as corporate insiders, employees are special stakeholders with significant opportunity to further or hinder shareholder interest. Thus, one of the enduring issues in the corporate finance and labor economics literatures is how to align employee interest with shareholder value maximization. Traditionally, labor equity ownership is considered as one of the primary means of achieving this convergence. Proponents including Vanek (1965), Drucker (1978), and Aoki (1984) argue that equity ownership helps align employees' interests with those of shareholders by empowering employees and lengthening workers' time horizons. Nevertheless, the empirical evidence on employee ownership is largely inconclusive.

In this paper, we focus on labor-friendly practices as a potential means of fostering shareholder value maximization. We define labor-friendly programs as those that treat employees as special stakeholders by devoting significant resources (financial and otherwise) to enhancing their welfare and helping them balance their home and work lives. The basic argument in favor of these programs is their potential to stimulate workforce loyalty and foster lower absenteeism, reduced turnover, better productivity, and, ultimately, improved profitability and higher market valuation. Relying on social exchange theory, Eisenberger et al. (1986) and Whitener (2001) show that employees' perception of their organization's commitment to them as demonstrated by positive beneficial actions strongly influences the level of their commitment to the firm and its goals. Somers (1995) and Gellatly (1995) show that absenteeism and voluntary turnover significantly decline with employee commitment while Zwick (2004) and Fauver and

Fuerst (2006) report German evidence indicating positive relation between employee involvement and firm performance.

Despite these potential benefits, labor-friendly programs are not without their possible dark sides. Agency theory suggests that management may pursue labor-friendly programs to further its self interest, for example, by using these programs as a quid pro quo, in which labor turns a blind eye to managerial excesses and supports the incumbent in takeovers and other corporate control contests in return for above-market wages and cozy benefits. Hellwig (2000) argues of a “natural alliance” between managers and workers against takeovers and proxy contests while Pagano and Volpin (2005) present a formal model in which workers team up with management to resist hostile takeovers in order to protect their high wages. Labor-friendly programs also may encourage CEO-specific employee loyalty, thereby enhancing managerial job security by making it more difficult to terminate the CEO.

We study these issues using data from two distinct sources, each with offsetting strengths and limitations. Our primary sample consists of firms chosen by *Fortune* magazine as the “Best 100 Companies to Work for in America” (Best Companies) between 1998 and 2004. Our second sample consists of firms in the KLD Research & Analytics’ SOCRATES database. This database covers about 650 firms, consisting of all members of the S&P 500 index and those non-S&P 500 firms belonging to the Domini 400 Social index created by KLD. Each firm is rated on several screens designed to capture its relation with numerous stakeholder groups, including the community, environment, and employees. We use scores on employee related screens to create an index of labor-friendliness.

We begin with standard event study analysis of the stock price reaction to the annual announcements of the *Fortune* list. We find a statistically significant average announcement period return of 1.63%, suggesting that the market views investments in labor-friendly programs as beneficial. Next, we examine several dimensions of operating performance, including productivity, profitability, and firm value. Consistent with the event study results, we find that the Best Companies significantly outperform comparable firms on all measures. These results are robust to several controls for self-selection, including performance matching and econometric corrections for endogeneity.

We obtain similar results using the KLD sample. Specifically, we find a positive relation between our aggregate measure of labor-friendliness and employee productivity, total factor productivity, and firm value. Further analysis shows that the performance measures are affected differently by the individual dimensions of labor-friendliness. Firm value is significantly positively related with the strength of employee involvement and retirement benefits while employee productivity is positively associated with the strength of safety records, retirement benefits, and cash profit sharing plans. In contrast, profitability is significantly related with the existence of cash profit sharing plans (negatively) and the strength of retirement benefits (positively).

We then consider the question of whether firms rationally engage in labor-friendly activities by focusing on how the need for firm-specific human capital affects the likelihood and benefits of labor-friendliness. In a rational choice regime, we expect firms whose success depends more on the quality of human capital to be more likely to adopt labor-friendly policies both to attract and retain high quality employees and encourage them to invest in firm-specific human capital. Consistent with this, we find a positive

relation between the likelihood of labor-friendliness and R&D intensity, which we employ as a proxy for human capital dependence. We also find that the performance benefits of labor-friendliness accrue largely to R&D-intensive firms.

Finally, we examine possible managerial self-interest motives for adopting labor-friendly policies by analyzing excess executive compensation and forced CEO turnover. Using several measures of compensation, we find no significant differences in excess compensation between CEOs of labor-friendly firms and those at comparable firms. Likewise, forced CEO turnover rates are similar for both categories of firms.

We interpret our results as consistent with rational choice and note that the benefits of devoting significant resources to employee welfare appear to outweigh the costs, and that this is more so when the need for firm-specific human capital is greater. In this sense, we also complement and extend the literature on the valuation effects of a significant consideration of non-shareholder constituencies. Fisman, Heal, and Nair (2005) analyze community stakeholders and find that socially responsible behavior is more positively related to profitability in consumer-oriented and competitive industries. Dowell, Hart, and Yeung (2000) show that firms adopting a stringent environmental standard have significantly higher valuation than firms adopting less stringent standards. Our results suggest similar effects for the devotion of sizeable resources to employee welfare while identifying the context within which such practices appear most valuable.

The remainder of the paper is organized as follows. In the next section, we provide a brief review of related studies and position our work within the literature. Section 3 discusses our data sources, while Section 4 presents our empirical analysis. We conclude with a brief summary in Section 5.

2. Background and related studies

A basic tenet of American capitalism is that corporations are supposed to be run in their shareholders' best interest, with management choosing policy variables to maximize firm value. It is also widely recognized that management's ability to achieve this goal depends on several stakeholders, including customers, employees, regulators, and the community at large. Jensen (2001) argues that a firm cannot maximize value if it ignores the interest of its stakeholders and that value maximization requires management to direct an extra dollar toward stakeholders when doing so generates present value benefits in excess of the costs.

Much prior work has considered if devoting significant corporate resources to satisfying various stakeholders affect firm performance. Griffin and Mahon (1997) provide a comprehensive review. More recently, Fisman, Heal, and Nair (2005) report differential performance effects for community-focused corporate social responsibility, depending on industry characteristics. They find that the impact of socially responsible behavior on firm value and profitability increases in the level of industry competition. Statman (2000) and Geczy Levin, and Stambaugh (2003) evaluate the performance of mutual funds that invest in socially responsible firms. They find that these funds generally perform no worse than comparable funds.

By virtue of their position, employees are perhaps the most important value-relevant stakeholders, since they are the ones who must execute the firm's strategies for creating value. A crucial issue then is how to secure the loyalty of employees and align their interest with shareholder value maximization. Employee ownership is often suggested for this purpose. Vanek (1965), Drucker (1978), and Aoki (1984) argue that

equity ownership leads to a convergence of labor and shareholder interests, empowers employees, and lengthens workers' time horizons. They propose that these effects lead to better overall corporate performance. Similarly, Garvey and Swan (1994) contend that equity ownership may motivate enhanced efficiency given costly and imperfect contracting in labor markets.

Nevertheless, the empirical evidence is largely contradictory. Bloom (1986), U.S. General Accounting Office (1987), Rosen (1990), Gordon and Pound (1990), Faria, Trahan, and Rogers (1993), and Lougee (1999) all conclude that employee ownership has no significant impact on corporate performance. More recently, Faleye, Mehrotra, and Morck (2006) show that significant labor-controlled equity blocks are associated with large deviations from value maximization. There are several potential explanations for these results. Equity ownership increases employee exposure to firm-specific risk and may therefore encourage a costly restriction on the firm's investment opportunity set when the firm avoids high risk but potentially profitable investments. There is also the obvious free-rider problem, and the possibility that ordinary employees fail to see the connection between their day-to-day job responsibilities and overall firm value.

For these reasons, we focus on labor-friendly programs as a possible tool for fostering a convergence of labor and shareholder interests. At the theoretical level, there are several reasons to expect this convergence. First, a worker-friendly environment may create a strong bond of loyalty to the firm. Social exchange theory and the norm of reciprocity (Blau, 1964; Eisenberger et al., 1986) suggest that employees interpret their organization's actions and practices as a reflection of its commitment to them, which they then reciprocate in their loyalty and commitment to the firm. Bridges and Harrison (2003)

show that employee-focused perceptions (as measured by monetary and non-monetary benefits as well as services devoted to employees) are positively associated with employee commitment to the organization. Whitener (2001) shows that employee perception of organizational support is positively related to their commitment to the firm.

Gellatly (1995, p. 470) argues that committed employees would exhibit lower absenteeism rates because they are motivated “to engage, become involved, and identify with their work.” He then shows an inverse relation between employee commitment and absence frequency and total days absent. Similarly, Somers (1995) reports a negative association between employee commitment and voluntary turnover. Since absenteeism and turnover are costly, lower rates can facilitate improved firm performance, thus suggesting a positive impact for employee-friendly programs.

Furthermore, a demonstrated commitment to employee welfare may help the firm to attract and retain better employees as well as encourage them to invest in firm-specific human capital. These practices also can help to create positive community goodwill toward the company, which may in turn help to improve the firm’s competitiveness and its financial performance.

Despite these potential benefits, there are reasons for labor-friendly practices to be detrimental to shareholder interest. Agency theory suggests that management may use labor-friendly practices to further its own objectives at the expense of shareholders. In particular, these policies may create an entrenched, management friendly workforce that supports the incumbent in takeovers and other corporate control situations and ignores managerial excesses. Pagano and Volpin (2005) discuss a model in which management transforms workers into a shark repellent through generous long-term labor contracts and

employees team up with management to resist hostile takeovers for the purpose of protecting their high wages. Furthermore, labor-friendly management also may extract excessive compensation from the company since employees may be less inclined to protest excessive executive compensation and perk consumption when management is generous to ordinary employees.¹ These programs also may cultivate CEO-specific employee loyalty, thereby enhancing managerial job security by making it harder to terminate the CEO. Our objective is to test these competing effects with a view to understanding how and under what circumstances shareholders benefit from labor-friendly programs.

3. Sample and data

3.1. The Fortune sample

Each January since 1998, *Fortune* magazine publishes its list of the “100 Best Companies to Work for in America.” These firms are selected based on employee responses on an anonymous survey that evaluates trust in management, pride in work and/or company, and camaraderie, as well as company responses to the 29-page Hewitt People Practices Inventory and additional corporate materials, including employee benefits booklets, company newsletters, and videos. Between 1998 and 2004, 234 unique companies appeared on this list. Of these, 134 are public firms with data available in the Compustat and Center for Research in Security Prices (CRSP) databases.

¹ Speaking of the recently implemented compensation disclosure rules, Mark Reilly, a partner at Chicago-based Compensation Consulting Consortium, says that many firms are cutting back on executive perks to reduce the likelihood of employee protests, confirming that management cares about worker opinion on executive compensation. The discussion is, he says, “How will our employees and shareowners perceive these perquisites? It just sort of provides ammunition to employee groups and unions to attack your pay policy.” *The Wall Street Journal*, January 13, 2007, page A6.

These companies devote significant financial and non-financial resources to creating a worker-friendly environment and helping employees balance their home and work lives. Of the 58 publicly traded companies on the 2000 list, 31 offer on-site university courses and 53 reimburse tuition, with MBNA topping the list at up to \$15,600 a year. Among firms on the 2002 list, AFLAC has two on-site childcare centers serving 540 children, while Genentech provides on-campus bicycles, a rental library of audio books, an on-site hair salon, free espresso, and weekly social gatherings. Stratus Technologies offers on-site mammograms and skin-cancer testing as well as a concierge service that makes employee dinner reservations. At Synovus Financial, supervisors meet with their subordinates at least three times a year to discuss their career development. In addition, management appears to succeed in fostering employee trust. At SRA International, 96% of employees say management trusts them to do a good job, while 97% of Edward Jones employees say management is honest.²

The *Fortune* sample has two major strengths. Its principal strength is that it consists of firms that are clearly labor-friendly, as evidenced by the plethora of benefits and programs they provide their employees. Thus, it gives us significant power to examine the effect of labor-friendliness. Second, the annual publication of *Fortune*'s list provides an identifiable event date, which allows us to study investors' reaction to labor-friendly programs as a complement to our operating performance tests.

Yet, the sample suffers from some limitations. It consists of firms identified as labor-friendly, without a complement of labor-neutral or labor-unfriendly firms. Ideally, we would prefer a ranking of a pre-specified universe of firms on several dimensions of labor-friendliness. Second, *Fortune* does not provide consistent details on the specific

² These examples were taken from the various annual *Fortune* issues announcing the 100 Best Companies.

programs in place at each firm, thus making it impossible to identify the effects of specific labor-friendly programs. The sample also suffers from the possibility that other considerations besides labor-friendliness may inform *Fortune*'s decision to include specific firms in the list. Our second sample addresses these limitations.

3.2. KLD Research & Analytics sample

KLD Research & Analytics provides proprietary social research and indexes for institutional investors. Its SOCRATES database consists of ratings of the social records of a subset of publicly traded U.S. firms beginning in 1991. In 1998, the database covered 658 firms, including all S&P 500 firms and those non-S&P 500 firms in KLD's Domini 400 Social Index. Each firm is rated on screens labeled "strengths" and "concerns." The ratings are indicated by a "1" or "0" for each strength or concern, depending on whether the firm meets the criteria for each screen.

The database includes ratings on nine labor-related screens, five strengths and four concerns. These screens are defined by KLD as follows:

Strengths

1. Family Benefits: "1" if the company has outstanding employee benefits or other programs addressing work/family concerns, e.g., childcare, elder care, or flextime.
2. Employee Involvement: "1" if the company strongly encourages worker involvement and/or ownership through stock options available to a majority of its employees, gain sharing, stock ownership, sharing of financial information, or participation in management decision-making.
3. Cash Profit Sharing: "1" if the firm has a cash profit-sharing program through which it has recently made distributions to a majority of its workforce.

4. Strong Retirement Benefits: “1” if the company has a notably strong retirement benefits program.
5. Other Strength (Safety): “1” if the firm has a good employee safety record or demonstrates other noteworthy commitments to its employees’ well being.

Concerns

1. Safety: “1” if the company recently has either paid substantial fines or civil penalties for willful violations of employee health and safety standards, or has been otherwise involved in major health and safety controversies.
2. Workforce Reductions: “1” if the company has reduced its workforce by 15% in the most recent year or by 25% during the past two years, or it has announced plans for such reductions.
3. Pension/Benefits Concern: “1” if the company has either a substantially underfunded defined benefit pension plan, or an inadequate retirement benefits program.
4. Other Concern: “1” if the company has a notable employee problem not addressed by KLD’s specific rating categories.

We construct an index of labor-friendliness by summing over the indicator variables for strengths and concerns and then subtracting total concerns from total strengths for each firm. Thus, the index’s theoretical maximum and minimum values are 5 and -4, respectively, although the sample maximum is 4 while the minimum is -2. Mean and median values are 0.5 and 0.0, with a standard deviation of 0.95.

The KLD sample serves as an independent check on the results obtained with the *Fortune* sample while also allowing us to examine the differential effects of individual dimensions of labor-friendliness beyond the aggregated results feasible with the *Fortune*

list. However, it does not permit us to examine investors' reaction, since there are no verifiable announcement dates for the ratings.

4. Empirical analysis

Our empirical tests are divided into two broad groups. First, we examine the stock price reaction to announcements of the *Fortune* list. In an efficient market, we expect positive announcement returns if investors believe that labor-friendly practices are beneficial to shareholders. The second group of tests focuses on operating performance. For these tests, we select a size- and industry-match for each firm on the *Fortune* list.³ We require match firms not to appear on the list during any of the seven years of our study. Starting out with firms in the same four-digit SIC group, we select the one with total assets closest to each Best Company (within ± 30 percent of the Best Company's assets) during the first year it appears on the list. If we cannot find an appropriate match within the four-digit SIC code, we choose a match from the three-digit or two-digit industry. We are unable to match 20 companies within the two-digit SIC group. We match them with control firms from the single-digit group.⁴ Each firm is included (along with its match) from the year it first appears on the list to the end of our window of empirical analysis in 2004. We then repeat our operating performance tests using the full panel of firms in the KLD sample over the same 1998-2004 period.

4.1. Event study analysis

Since *Fortune* issues hit news stands two weeks prior to their publication dates, we define the event date as two weeks prior to the publication date of the issue containing

³ We require a minimum of two years of post-inclusion data for these tests. Thus, we exclude firms on the 2004 list from this part of our analysis. This reduces the Best Companies sample to 125 unique firms.

⁴ Our results remain the same if we exclude these firms from the sample.

the Best Companies list and employ standard event study methodology to calculate abnormal returns surrounding the announcement. We estimate the market model for each firm over a period of 255 days (-301,-46) preceding the event date and then use estimated parameters to calculate abnormal returns for various event windows. Results are summarized in Table 1. As the table shows, average cumulative abnormal return (CAR) is positive and statistically significant in each of the four windows examined. It ranges from 0.36% for the [-1, 0] window to 1.63% for the [-5, +1] window.

We acknowledge a potential problem with the above results arising from the common event window shared by all firms for each year since all list firms in a particular year are announced on the same day. We address this by forming event portfolios consisting of all events announced on the same date. Since there are seven different announcements (one for each year over 1998-2004), we form a total of seven event portfolios. We then rerun our event study using these portfolios. Results are similar to those in Table 1 and are therefore omitted. We also recognize that treating each observation for repeat list members as independent may bias our results by overstating the significance of the test statistics. Therefore, we rerun our analysis using only data for the year in which each firm was first named to the list. Once again, our results are not affected by this adjustment. Specifically, we obtain CARs ranging from 0.88% for the [-1, +1] window to 1.91% for the [-5, 0] window, with p -values of 0.05 or lower.

These results suggest that investors view labor-friendly working environments positively, essentially attributing higher benefits to labor-friendly practices than the costs of providing such programs. In the following sections, we examine the precise manner in

which shareholders benefit from these programs by analyzing their impact on productivity, profitability, and firm value.

4.2. *Operating performance*

We focus on four measures of operating performance and firm value: employee productivity, total factor productivity, return on assets, and Tobin's q . We measure employee productivity using the natural logarithm of net sales per employee and estimate total factor productivity as in Faleye, Mehrotra, and Morck (2006). We define return on assets as the ratio of operating income to total assets. Our measure of firm value, Tobin's q , is calculated as the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets.

Table 2 presents results of univariate comparisons of the labor-friendly firms with the control group on each variable. Average and median employee productivity for labor-friendly firms are 5.634 and 5.604, corresponding to sales per employee of \$279,800 and \$271,500, respectively. In contrast, mean and median labor productivity for the control group are 5.460 and 5.402, which imply sales per employee of \$235,100 and \$221,800, respectively. The differences are statistically significant at the 1% level in each case. Thus, relative to similar companies, employees at labor-friendly firms generate approximately 20% more in sales revenue. Table 2 shows similar results for total factor productivity: mean and median excess factor productivity of 23.5% and 19.0% for labor-friendly firms, compared to 9.6% and -0.3% for the control group.

These results imply that labor-friendly programs are associated with improved productivity. However, they do not necessarily imply that such programs are beneficial to shareholders since the firm may be spending more than it gets from better productivity.

Therefore, we compare profitability and firm value for the labor-friendly and control firms. As Table 2 shows, mean and median return on assets are 11.1% and 9.9% for labor-friendly firms, compared to 7.5% and 7.2% for the control group. Similarly, average and median Tobin's q for the labor-friendly firms are 2.41 and 1.73, compared to 1.58 and 1.13 for the control group. The differences are statistically significant at the 1% level.

These results suggest that a labor-friendly environment enhances employee productivity, which helps to increase operating profitability and shareholder value. However, firm value and operating performance are affected by other factors besides labor-friendliness. For example, prior research has shown that several corporate governance variables are correlated with firm performance. These include board size (Yermack, 1996), board composition (Rosenstein and Wyatt, 1990), board election method (Bebchuk and Cohen, 2005; Faleye, 2006), leadership structure (Rechner and Dalton, 1991), and managerial ownership (Morck, Shleifer, and Vishny, 1988). The availability or lack of investment opportunities may also affect firm performance and value. Thus, to isolate the effect of a labor-friendly environment, we control for these variables within a multiple regression framework.

We obtain corporate governance data from the Investor Responsibility Research Center (IRRC) board structure database and measure investment opportunity set using the ratio of capital expenditures to total assets as in Yermack (1996) and Faleye (2006). Furthermore, we control for leverage because debt may enhance or hinder a firm's performance, for example, by changing its operating environment through constraints imposed by debt covenants. Using data from Compustat, we measure leverage as the ratio

of long-term debt to total assets. Our regressions also include year dummies, two-digit primary SIC code dummies to control for time-invariant industry differences, and the natural logarithm of total assets to control for differences in firm size.

4.2.1. Productivity

Table 3 presents results of regressions for our measures of productivity. The first regression in each panel employs a Fama-MacBeth framework, while the second is a pooled time series cross-sectional regression with industry and year dummies and robust standard errors. The third utilizes variables averaged over 1998-2004. Thus, although data for all years are employed, there is only one observation per firm in this model.

The dependent variable in Panel A is the natural logarithm of sales per employee, while the explanatory variables include the indicator variable for labor-friendly firms and the control variables described in Section 4.2. In each case, the indicator variable is positive and significant at the 1% level. The Fama-MacBeth regression indicates that, on average, employees at labor-friendly firms generate approximately 20% more sales than employees at comparable firms. Relative to average sales per employee of \$358,000 for the full sample, this implies an economically significant \$68,000 improvement in annual sales per employee. Results in the other two specifications are comparable, in terms of both magnitude and statistical significance.

We obtain similar results for total factor productivity. Each regression in Panel B of Table 3 reveals significantly better total factor productivity in the labor-friendly firms. Specifically, the coefficient in the Fama-MacBeth regression suggests that, relative to similar firms, actual output at labor-friendly firms is approximately 20 percentage points higher than what we would expect based on factor inputs. These results are consistent

with Beatty (1995) who finds enhanced post-ESOP productivity at firms where the ESOP does not replace an existing pension plan but lower productivity where it does. This suggests that productivity increases when workers perceive an increased managerial devotion to employee welfare, which is similar to our findings.

4.2.2. Operating profitability

Regression results for return on assets (ROA) are displayed in Table 4. We estimate three regressions similar to those for labor productivity. As Table 4 shows, the labor-friendliness variable is positive and statistically significant at the 1% level in each regression. Its coefficients suggest that labor-friendliness is associated with three- to four-percentage points increase in ROA. Note that average and median ROA for the sample are 9.33% and 8.40%, respectively. Thus, after controlling for other variables that potentially affect operating profitability, labor-friendly firms achieve a 40% increase in profitability relative to comparable firms in the same industry.

4.2.3. Shareholder value

Table 5 presents regression results for our measure of shareholder value. It shows that the labor-friendliness indicator variable is positive and statistically significant at the 1% level in each regression. Its coefficient in the Fama-MacBeth regression suggests that an employee-friendly work environment is associated with an increase of 86.8 percentage points in Tobin's q. Since average Tobin's q for the sample is 2.01, this translates into an economically significant 43.2% increase in shareholder value relative to similar firms operating in the same industry.

4.2.4. Possible selection bias

A major concern with our operating performance results is the issue of the direction of causality, that is, do labor-friendly firms perform better because they engage in employee-friendly practices or do they engage in such behavior because they are superior performers with available resources? This problem is further exacerbated by the possibility that *Fortune* selects firms for its list not only because they are labor-friendly but also because they are good performers.

We address this issue in several ways. First, we estimate additional regressions controlling for performance over the five years immediately preceding each firm's inclusion on the *Fortune* list. Table 6 displays results of regressions in which we measure prior performance using five-year average ROA. As the table shows, our results are robust to this control. In particular, the labor-friendliness variable remains positive and statistically significant at the 1% level, although the coefficients are smaller in magnitude. We obtain similar results when we use five-year average pre-inclusion Tobin's q as our measure of prior performance. Our results also remain unchanged when we include lagged annual performance measures (ROA and Tobin's q) as control variables. These additional results are not presented to conserve space.

As a more extensive robustness check, we create a new group of control firms, matched to the labor-friendly firms on the basis of size, industry, and operating performance as measured by average ROA during the five years immediately preceding inclusion on the list. We require each of these control firms to have its 5-year average ROA within $\pm 30\%$ of the corresponding labor-friendly firm's 5-year average ROA and be in the same four-, three-, or two-digit SIC industry group. Average and median historical

ROA for these control firms are 13.7% and 12.3%, respectively, compared to 13.9% and 12.3% for the labor-friendly firms. The differences are not statistically significant. We then estimate regressions similar to those in Tables 3-5 using these new control firms. The results, which are summarized in Table 7, show that the labor-friendliness variable remains positive and significant in all regressions.

Furthermore, we create another control group matched to the labor-friendly firms on the basis of size, industry, and historical performance as measured by 5-year average pre-selection Tobin's q. Mean and median historical q for this control group are 2.9 and 2.1, respectively, compared to 3.0 and 2.1 for the labor-friendly firms; again, the differences are not statistically significant. Yet, when we employ these control firms in our regressions, we continue to find a positive and statistically significant effect for labor-friendliness on productivity, operating profitability, and firm value.

Finally, we employ three-stage least squares to estimate a system of simultaneous equations in which labor-friendliness and our performance variables are jointly determined. We use five-year average pre-inclusion Tobin's q, research and development expenditure, CEO age, and CEO equity ownership in first stage regressions predicting labor-friendliness. We then use predicted values in (unreported) second-stage regressions relating our performance measures to labor-friendliness and other control variables. We obtain results similar to those in Tables 3-5, that is, labor-friendliness is significantly positively related to our performance measures.

Overall, while it is impossible to completely rule out selection bias, we believe these results do not support such an interpretation. Rather, they suggest that the superior performance achieved by the labor-friendly firms is not a simple artifact of their past

performance. It appears that a devotion of significant resources to employee welfare facilitates higher productivity, improved performance, and superior market valuation.

4.2.5. Regressions using the KLD sample

We estimate regressions relating our performance measures to scores on the index of labor-friendliness and the control variables in Tables 3-5. These regressions are pooled time series cross sectional regressions with year and industry indicator variables and robust standard errors and are estimated over 1998-2004 to ensure comparability with results obtained using the *Fortune* sample. Results are presented in Table 8.

The first column of the table contains results for employee productivity. It shows that the index of labor-friendliness is positive and statistically significant at less than the 1% level. Similarly, columns 2-4 of the table indicate that the index is positively related with total factor productivity (p -value = 0.047), profitability (p -value = 0.382), and firm value (p -value = 0.032). In all, these results corroborate those from the *Fortune* sample, further suggesting that shareholders benefit when firms foster an employee-friendly working environment.

Both the *Fortune* and KLD sample results suggest that labor-friendliness in the aggregate is associated with improved performance. A related question is whether and which individual labor-friendly activities have any discernible effect on performance. To explore this question, we rerun the regressions in Table 8 using ratings on the five strength components of the index of labor-friendliness in place of the index value.

The first column of Table 9 shows that each dimension of labor-friendliness is positively related with employee productivity. The coefficients are significant for the existence of cash profit sharing plans (p -value = 0.007), safety records (p -value = 0.029),

and the strength of retirement benefits (p -value = 0.073). In contrast, the second column indicates that none of the individual variables is significantly related with total factor productivity. As reported in Table 8, the index itself is significantly related with total factor productivity. Thus, factor productivity appears to depend on the combination of all labor-friendly programs rather than on specific programs or practices. The third column of Table 9 shows that profitability is significantly related with the existence of cash profit sharing plans (negatively) and the strength of retirement benefits (positively) while the fourth column indicates that firm value is positively related with the extent of employee involvement and the strength of retirement benefits.

These results suggest that employees respond to both the financial and non-financial aspects of the working environment. Similar to broad based stock option compensation as shown by Oyer and Schaefer (2005), strong retirement benefits may facilitate employee retention and investment in firm-specific human capital, resulting in improved productivity and profitability. On the other hand, the significance of safety records and employee involvement in the productivity and firm value regressions illustrates the influence of non-financial factors in aligning labor with shareholder interests. Furthermore, the overall pattern of statistical significance of the individual index components suggests that it is not sufficient to focus on a single aspect of the employee experience; rather, it appears that a well-balanced approach is necessary to secure the benefits of being labor-friendly.

4.2.6. Labor-friendliness and the need for firm-specific human capital

In this section, we turn to the question of whether firms rationally engage in labor-friendly practices. As argued by Jensen (2001), firms will devote significant

resources to employee welfare if doing so enhances their ability to maximize value. Labor-friendly programs may help to attract and retain well qualified employees and encourage them to invest in firm-specific human capital. This suggests a positive relation between labor-friendliness and the extent to which a firm depends on highly skilled employees who must invest in firm-specific human capital. It also suggests that such firms derive the most benefit from engaging in labor-friendly practices.

We measure the need for employee investment in firm-specific human capital using the ratio of research and development expenditures to total assets. The intuition is that R&D-intensive firms depend on highly skilled employees because of the technical expertise required to reap the firm-specific, potentially enormous but quite uncertain payoffs associated with R&D expenditures. We classify firms as R&D-intensive if their R&D investment is greater than the median R&D investment of 1.32% of total assets.

Consistent with rational choice, we find that R&D-intensive firms are significantly more likely to appear on the *Fortune* list. Specifically, 56% of the Best Companies are R&D-intensive, compared to only 41% of control firms. Similarly, 59% of R&D-intensive firms in the combined *Fortune* sample are labor-friendly, compared to 44% of non R&D-intensive firms. These differences are statistically significant at the 1% level.⁵ We also estimate regressions predicting labor-friendliness as a function of R&D intensity and other firm-specific characteristics including firm size, profitability, availability of investment opportunities, and leverage. As Table 10 shows, R&D intensity is positive and statistically significant in each regression. None of the other variables (with the exception of profitability) is statistically significant. Results remain the same

⁵ We obtain similar results for the KLD sample, with a positive and statistically significant correlation (p -value = 0.002) between R&D intensity and scores on the index of labor-friendliness.

when we control for various dimensions of corporate governance, with none of the corporate governance variables being statistically significant.

We then test the effect of the need for firm-specific human capital on the relation between performance and labor-friendliness by estimating regressions that include an additional term interacting the labor-friendliness and R&D intensity dummy variables. If R&D-intensive firms benefit more from creating a worker-friendly environment, then the interaction term should be positive and statistically significant.

As Table 11 shows, the interaction term is positive and significant at the 1% level in the regression for Tobin's q . In contrast, the baseline labor-friendliness variable itself is only marginally significant. Similarly, the interaction term is positive and significant at the 1% level in the regression for return on assets but the main effect, while also positive, is not statistically distinguishable from zero. Only in the productivity regressions is the interaction term not significant, although it remains positive in both regressions. Overall, these results suggest that R&D-intensive firms, whose success depends more on the ability to attract and retain high quality human capital, tend to benefit more from labor-friendly practices. This is analogous to Fisman, Heal, and Nair (2005) who find that community-oriented socially responsible behavior mainly benefits firms in competitive product markets where success crucially depends on a favorable public image.

4.3. Possible managerial self-interest motives

Management may pursue labor-friendly practices to protect its self-interest. In this section, we examine this possibility by analyzing the impact of labor-friendly practices on excess managerial compensation and forced executive turnover.

4.3.1. *Excess managerial compensation*

We define three measures of compensation: salary, cash compensation, and total compensation. Cash compensation is the sum of salary and bonus, while total compensation includes salary, bonus, the value of stock options and restricted stock granted during the year, long-term incentive payouts, and other miscellaneous annual compensation amounts. These measures are based on data from Standard and Poor's Execucomp database.

Similar to Berger, Ofek, and Yermack (1997), we calculate excess CEO compensation using residuals from the following regression that predicts normal compensation as a function of firm size, market performance, operating performance, and CEO tenure. Each regression includes industry and year dummies and is estimated over all firms in the Execucomp panel. The subscripts i and t refer to individual firms and years, respectively.

$$\begin{aligned} CEO\ Compensation_{i,t} = & \alpha + \beta_1 Sales_{i,t} + \beta_2 Market\ Return_{i,t-1} + \beta_3 Return\ on\ Assets_{i,t-1} + \\ & \beta_4 Years\ as\ CEO_{i,t} + \gamma' Industry\ Dummies_i + \phi' Year\ Dummies_t + \varepsilon_{i,t} \quad [1] \end{aligned}$$

We then compare excess CEO compensation for the labor-friendly firms with that for the control group. Panel A of Table 12 presents univariate data for both groups. As the table shows, mean and median excess salary for CEOs of labor-friendly firms are \$56,880 and \$74,300, respectively, compared to \$123,550 and \$99,150 for CEOs at control firms. The differences are both statistically significant at the 1% level, thus indicating that labor-friendly CEOs receive lower amounts in excess salary compared to their peers. Similarly, excess cash compensation is significantly lower for labor-friendly CEOs: mean and median of \$141,120 and -\$42,650, compared to \$476,950 and \$119,930

for control firms. However, labor-friendly CEOs enjoy a higher level of excess total compensation than CEOs at comparable firms. On average, they receive \$3.57 million (median of \$6,030) in excess total compensation, compared to \$1.51 million (median of \$818,000) for CEOs at control firms. While the differences are statistically significant at the 10% level, we think it is more probable that they reflect the superior market performance of the Best Companies, since total compensation includes the value of stock option and restricted stock grants, both of which depend significantly on the firm's market performance.

We recognize that other factors may affect excess CEO compensation. In particular, it is plausible that the CEO's ability to secure excessive compensation depends on the strength of the firm's monitoring mechanisms. Core, Holthausen, and Larcker (1999) show that the level of CEO compensation is significantly related to board of director characteristics and ownership structure. Therefore, we estimate regressions controlling for variables related to the firm's corporate governance structure, including board size, board composition, CEO duality, the number of external boards on which the CEO serves, CEO equity ownership, and CEO age. Each regression also controls for firm size, leverage, and performance (as measured by Tobin's q) as well as industry and year dummies. Results are presented in Panel B of Table 12.

As the first column shows, the labor-friendliness variable is negative but statistically insignificant in the regression for excess salary. The second and third columns show similar results for cash compensation and total compensation. Thus, after controlling for the strength of internal monitoring and other firm- and CEO-specific characteristics, the evidence suggests that labor-friendly CEOs do not enjoy excessive

compensation. If anything, it appears that these CEOs extract lower rent than their peers at comparable firms.

4.3.2. *Forced executive turnover*

We use proxy statements in conjunction with newspaper and newswire reports in Dow Jones & Reuters' *Factiva* to identify terminated CEOs and the reasons for their replacement. We follow the CEOs of each Best Company and its matching control firm from January of the year the Best Company first appears on the *Fortune* list until the earlier of December 2004 or his/her termination date. This produces 143 turnovers, of which 15 are due to acquisitions, one is due to death, and three are due to health problems. We exclude these 19 cases and then read media reports and press releases around each of the remaining replacements to classify them as voluntary or involuntary.

We define forced turnovers as those reported as due to dismissals or firings by the board, disagreements with the board, need for new leadership, and similar circumstances suggesting that the turnover is involuntary. When media reports are not specific about the nature of the departure, we follow Huson, Parrino, and Starks (2001) and classify the turnover as forced if the CEO is under 60 and leaves within one month of the turnover announcement for no job or one of lower status. This yields a forced turnover sample of 26 chief executives. The remaining 98 turnovers are classified as voluntary, giving a 21% forced turnover rate, which is similar to the 23.4% reported by Huson, Parrino, and Starks (2001) for the 1989-1994 period and the 23% reported by Faleye (2006) for the 1995-2002 period.

Of the 26 forced turnovers, 12 occurred at labor-friendly firms, while 14 occurred at control firms. This translates into forced turnover rates of 20% for labor-friendly firms

and 22% for control firms. The difference is not statistically significant at conventional levels, with a p -value of 0.73. Thus, it does not appear that labor-friendly practices confer any significant job protection benefit on the CEO.

We understand that other factors have been shown to affect the likelihood of forced executive turnover. However, we do not believe that meaningful regression analysis can be performed with a forced turnover sample of only 26 firms. Moreover, given the nearly even split in the forced turnover sample between labor-friendly and control firms, it is unlikely that multiple regression analysis will provide significant value-added in this instance. Thus, we limit our analysis to the univariate comparison of relative frequencies.

Our excess compensation and forced turnover results suggest that top management derives no significant pecuniary benefits from engaging in labor-friendly activities, either in the form of job protection or excessive managerial rent extraction. This complements our earlier findings and lends additional support to the hypothesis that these practices are rationally adopted to enhance shareholder wealth, rather than as a means of satisfying managerial self-interest motives.

5. Conclusions

We focus on firms selected by *Fortune* magazine as the 100 Best Companies to Work for in America between 1998 and 2004 to understand how a labor-friendly corporate environment affects shareholder outcomes. We find significantly positive announcement returns, suggesting that the market values corporate concern for workers. We also find that companies selected for the list subsequently outperform comparable

firms in terms of productivity, profitability, and value creation. Thus, it appears that the positive announcement returns capitalize subsequently higher operating profitability as well as superior productivity. We obtain similar results using an independent sample based on the SOCRATES database supplied by KLD Research & Analytics.

Our results also suggest that firms rationally engage in labor-friendly practices. We find that R&D-intensive firms are more likely to be labor-friendly and that the benefits of showing concern accrue mostly to these firms. We do not find that top management derives significant personal benefits from labor-friendly practices. Rather, we find that these CEOs do not extract excessive compensation from their firms and that they are just as likely to be forced out as their peers at similar firms. We interpret our results as consistent with a genuine concern for employees translating into higher productivity and profitability, which in turn facilitate value creation. It appears that the benefits of creating an employee-friendly environment significantly outweigh the costs and that what is good for employees is good for shareholders.

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Table 1: Market response to announcement of the Best Companies list

This table reports average cumulative abnormal returns (CAR) for announcements of firms on *Fortune's* "100 Best Companies to Work for in America" over 1998-2004. The announcement date is two weeks prior to the publication date of the issue containing the Best Companies list. Levels of significance based on standardized z-statistics are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

Window	CAR	% Positive	Sample
[-1, 0]	0.36% ^{**}	53%	395
[-1, +1]	0.38% [*]	52%	395
[-5, 0]	1.61% ^{***}	58%	395
[-5, +1]	1.63% ^{***}	57%	395

Table 2: Univariate comparisons

Best Companies are firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003. The *Control Group* consists of a size- and industry-matched group of firms that did not appear on the list throughout the entire period. *Tobin's q* is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *Return on Assets* is the ratio of operating income to total assets. *Employee Productivity* is the natural logarithm of net sales per employee. *Total Factor Productivity* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. Statistical significance at the 1% level is indicated by ***.

Variable	Best Companies		Control Group		Test Statistics	
	Mean	Median	Mean	Median	Mean	Median
Tobin's q	2.407	1.731	1.582	1.134	7.28***	7.82***
Return on assets	0.111	0.099	0.075	0.072	5.94***	5.66***
Employee productivity	5.634	5.604	5.460	5.402	3.99***	5.55***
Total factor productivity	0.235	0.190	0.096	-0.003	4.96***	6.83***

Table 3: Labor-friendliness and productivity

Model 1 employs a Fama-MacBeth framework, while Model 2 is a pooled time series cross-sectional regression with industry and year dummy variables and robust standard errors. Model 3 utilizes variables averaged over 1998-2004. *Employee Productivity* is the natural logarithm of net sales per employee. *Total Factor Productivity* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. *P*-values are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	<i>A: Employee Productivity</i>			<i>B: Total Factor Productivity</i>		
	<i>1</i>	<i>2</i>	<i>3</i>	<i>1</i>	<i>2</i>	<i>3</i>
Best companies	0.2042 ^{***} (0.000)	0.2075 ^{***} (0.000)	0.2704 ^{***} (0.000)	0.1968 ^{***} (0.000)	0.1963 ^{***} (0.000)	0.2475 ^{***} (0.000)
Firm size	0.1146 ^{***} (0.000)	0.1126 ^{***} (0.000)	0.0834 ^{***} (0.009)	0.0282 ^{***} (0.009)	0.0301 ^{***} (0.013)	0.0144 (0.627)
Leverage	-0.2427 ^{**} (0.048)	-0.2108 (0.218)	0.0194 (0.952)	-0.452 ^{***} (0.001)	-0.419 ^{***} (0.013)	-0.3559 (0.240)
Capex	-1.4293 ^{**} (0.055)	-1.441 ^{***} (0.007)	-5.029 ^{***} (0.006)	-3.342 ^{***} (0.000)	-3.281 ^{***} (0.000)	-7.263 ^{***} (0.000)
Classified board	-0.0139 (0.396)	-0.015 (0.660)	-0.0132 (0.863)	-0.0455 ^{**} (0.041)	-0.0411 (0.212)	-0.0231 (0.745)
Board size	-0.023 ^{***} (0.001)	-0.025 ^{***} (0.001)	-0.0223 (0.217)	-0.028 ^{***} (0.001)	-0.031 ^{***} (0.000)	-0.0338 ^{**} (0.050)
Board independence	-0.1463 (0.127)	-0.1662 (0.123)	-0.0699 (0.765)	-0.1266 [*] (0.109)	-0.1463 (0.155)	-0.2082 (0.346)
CEO ownership	0.0066 ^{**} (0.047)	0.0049 ^{**} (0.027)	0.0051 (0.322)	0.0066 ^{**} (0.036)	0.0057 ^{***} (0.014)	0.0043 (0.365)
CEO duality	-0.0406 (0.225)	-0.0383 (0.335)	-0.0639 (0.445)	-0.0093 (0.795)	-0.0125 (0.749)	0.0040 (0.959)
R-square	---	0.6870	0.7139	---	0.4001	0.4394
Sample size	184	1048	182	182	1032	180

Table 4: Labor-friendliness and operating profitability

Model 1 employs a Fama-MacBeth framework, while Model 2 is a pooled time series cross-sectional regression with industry and year dummy variables and robust standard errors. Model 3 utilizes variables averaged over 1998-2004. The dependent variable is *Return on Assets*, which is the ratio of operating income to total assets. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2004, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. *P*-values are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	1	2	3
Best companies	0.0354*** (0.000)	0.0345*** (0.000)	0.0434*** (0.002)
Firm size	-0.0036* (0.110)	-0.0053 (0.159)	-0.0045 (0.463)
Leverage	-0.0219 (0.644)	0.0069 (0.902)	0.1838* (0.060)
Capex	0.4902** (0.052)	0.4273* (0.060)	0.8533** (0.016)
Classified board	-0.0118** (0.034)	-0.0118* (0.108)	-0.0202 (0.170)
Board size	0.0035* (0.110)	0.0044*** (0.005)	0.0037 (0.291)
Board independence	0.0062 (0.830)	-0.0095 (0.678)	-0.0104 (0.816)
CEO ownership	-0.0008 (0.498)	-0.0008 (0.553)	-0.0008 (0.431)
CEO duality	0.0224** (0.026)	0.0221** (0.016)	0.0264* (0.102)
R-square	---	0.2719	0.3482
Sample size	185	1050	182

Table 5: Labor-friendliness and firm value

Model 1 employs a Fama-MacBeth framework, while Model 2 is a pooled time series cross-sectional regression with industry and year dummy variables and robust standard errors. Model 3 utilizes variables averaged over 1998-2004. The dependent variable is Tobin's q, calculated as is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. *P*-values are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	1	2	3
Best companies	0.8678*** (0.000)	0.8100*** (0.000)	0.8468*** (0.001)
Firm size	0.0254 (0.703)	0.0025 (0.971)	-0.0142 (0.896)
Leverage	-3.0363*** (0.006)	-2.5606*** (0.000)	-1.1976 (0.285)
Capex	5.8385* (0.096)	6.0622** (0.041)	11.552* (0.065)
Classified board	-0.2351*** (0.010)	-0.2401* (0.077)	-0.2790 (0.287)
Board size	-0.0577 (0.187)	-0.0409 (0.163)	-0.0247 (0.690)
Board independence	-0.0760 (0.757)	-0.1338 (0.714)	-0.2556 (0.750)
CEO ownership	0.0420 (0.151)	0.0354** (0.035)	0.0349** (0.048)
CEO duality	-0.0556 (0.604)	-0.0863 (0.610)	-0.0103 (0.971)
R-square	---	0.3905	0.4293
Sample size	185	1052	182

Table 6: Controlling for prior performance

Tobin's q is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *ROA* is operating income divided by total assets. *SLE* is the natural logarithm of net sales per employee. *TFP* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is long-term debt divided by total assets. *Capex* is capital expenditures divided by total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the CEO. *CEO Duality* equals one if the CEO also serves as board chairman, zero otherwise. For *Best Companies*, *Prior Performance* is average ROA over five years preceding inclusion on the *Fortune* list. For control firms, *Prior Performance* is average ROA over five years before the corresponding Best Company was included on the list. Each regression includes industry and year dummies. *P*-values based on robust standard errors are reported in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	<i>SLE</i>	<i>TFP</i>	<i>ROA</i>	<i>Tobin's Q</i>
Best companies	0.1858*** (0.000)	0.1927*** (0.000)	0.0193*** (0.004)	0.6608*** (0.000)
Firm size	0.1061*** (0.000)	0.0344*** (0.005)	-0.0058** (0.051)	0.0140 (0.838)
Leverage	-0.2551 (0.136)	-0.4546*** (0.009)	0.0182 (0.693)	-2.3507*** (0.000)
Capex	-1.5256*** (0.004)	-3.2372*** (0.000)	0.2344 (0.274)	4.0632 (0.150)
Classified board	-0.0171 (0.618)	-0.0458 (0.173)	-0.0012 (0.865)	-0.1194 (0.409)
Board size	-0.0167** (0.020)	-0.0248*** (0.000)	0.0027** (0.039)	-0.0684** (0.016)
Board independence	-0.1736* (0.108)	-0.1918* (0.061)	-0.0087 (0.675)	-0.1659 (0.640)
CEO ownership	0.0059*** (0.009)	0.0060*** (0.011)	-0.0002 (0.858)	0.0414** (0.011)
CEO duality	-0.0506 (0.201)	-0.0226 (0.564)	0.0247*** (0.003)	-0.0598 (0.711)
Prior performance	0.2913 (0.200)	-0.0891 (0.722)	0.4750*** (0.000)	5.5360*** (0.001)
R-square	0.6911	0.4173	0.4147	0.4343
Sample size	1032	1020	1035	1036

Table 7: Regressions using performance-matched control firms

Tobin's q is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *ROA* is the ratio of operating income to total assets. *SLE* is the natural logarithm of net sales per employee. *TFP* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. We select control firms in these regressions based on industry, average total assets, and average return on assets during the five years preceding the Best Company's inclusion on the *Fortune* list. Each regression includes industry and year dummies. *P*-values based on robust standard errors are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	SLE	TFP	ROA	Tobin's Q
Best companies	0.1481*** (0.000)	0.1255*** (0.000)	0.0161** (0.051)	0.7772*** (0.000)
Firm size	0.8230*** (0.000)	0.0317** (0.021)	-0.0092** (0.030)	0.1107 (0.146)
Leverage	0.1385 (0.280)	-0.0523 (0.756)	0.1183** (0.056)	-0.8208 (0.379)
Capex	1.8114*** (0.000)	-2.8755*** (0.000)	0.2812 (0.116)	4.0356** (0.056)
Classified board	0.0340 (0.369)	-0.0344 (0.333)	-0.0007 (0.932)	-0.1303 (0.310)
Board size	0.0422*** (0.000)	-0.0245*** (0.003)	0.0071*** (0.000)	-0.0265 (0.435)
Board independence	0.0783 (0.483)	-0.1905* (0.092)	-0.0262 (0.296)	-0.7211* (0.068)
CEO ownership	0.0078** (0.031)	0.0071** (0.038)	-0.0011 (0.513)	0.0334*** (0.018)
CEO duality	0.0707* (0.065)	-0.0356 (0.346)	0.0252*** (0.014)	-0.0050 (0.978)
R-square	0.925	0.353	0.347	0.393
Sample size	966	947	966	966

Table 8: Regressions using the KLD sample

Tobin's q is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *ROA* is the ratio of operating income to total assets. *SLE* is the natural logarithm of net sales per employee. *TFP* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *Labor-friendliness index* is based on ratings assigned by KLD Research & Analytics. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. Each regression includes industry and year dummies. *P*-values based on robust standard errors are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	SLE	TFP	ROA	Tobin's Q
Labor-friendliness index	0.0638*** (0.001)	0.0358** (0.025)	0.0022 (0.409)	0.1161** (0.026)
Firm size	0.1087*** (0.000)	0.0291* (0.073)	-0.0052* (0.062)	0.1643*** (0.003)
Leverage	-0.2920** (0.040)	-0.4768*** (0.000)	0.0926*** (0.000)	-2.8357*** (0.000)
Capex	-0.0847 (0.855)	-1.1477*** (0.002)	0.2857*** (0.000)	5.6602*** (0.000)
Classified board	-0.0211 (0.618)	0.0086 (0.806)	0.0041 (0.472)	0.0408 (0.709)
Board size	-0.0106 (0.189)	-0.0176*** (0.012)	0.0030*** (0.010)	-0.0401* (0.094)
Board independence	-0.2821** (0.030)	-0.1549 (0.160)	-0.0159 (0.253)	-1.0088*** (0.004)
CEO ownership	-0.0081 (0.207)	-0.0055 (0.244)	-0.0002 (0.504)	0.0014 (0.844)
CEO duality	-0.0038 (0.913)	-0.0110 (0.714)	-0.0004 (0.937)	-0.2845*** (0.006)
R-square	0.682	0.194	0.293	0.324
Sample size	2,796	2,748	2,829	2,829

Table 9: Individual labor-friendly programs and firm performance

SLE is the natural logarithm of net sales per employee. *TFP* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *ROA* is the ratio of operating income to total assets. *Tobin's q* is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *Family benefits* equals one if the company has outstanding employee benefits or other programs addressing work/family concerns, e.g., childcare, elder care, or flextime, zero otherwise. *Profit sharing* equals one if the company has a cash profit-sharing program through which it has recently made distributions to a majority of its workforce. *Employee involvement* equals one if the company strongly encourages worker involvement and/or ownership through stock options available to a majority of its employees, gain sharing, stock ownership, sharing of financial information, or participation in management decision-making. *Retirement benefits* equals one if the company has a notably strong retirement benefits program. *Safety* equals one if the company has a good employee safety record or demonstrates other noteworthy commitments to its employees' well being. These ratings are assigned by KLD Research & Analytics. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* equals one when the CEO also serves as board chairman, zero otherwise. Each regression includes industry and year dummies. *P*-values based on robust standard errors are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

Table 9 continued: Individual labor-friendly programs and firm performance

	SLE	TFP	ROA	Tobin's Q
Family benefits	0.0080 (0.888)	-0.0339 (0.511)	0.0021 (0.772)	0.0446 (0.785)
Profit sharing	0.1094*** (0.007)	0.0599 (0.125)	-0.0120* (0.105)	-0.0486 (0.719)
Employee involvement	0.0225 (0.626)	0.0118 (0.776)	0.0002 (0.976)	0.3512** (0.033)
Retirement benefits	0.1479* (0.073)	0.0515 (0.432)	0.0269*** (0.004)	0.4126** (0.016)
Safety	0.1456** (0.029)	0.0597 (0.218)	-0.0016 (0.854)	-0.2427 (0.153)
Firm size	0.1049*** (0.000)	0.0302* (0.078)	-0.0058** (0.047)	0.1508*** (0.009)
Leverage	-0.2946** (0.031)	-0.4796*** (0.000)	-0.0979*** (0.000)	-2.8524*** (0.000)
Capex	-0.1114 (0.810)	-1.1215*** (0.003)	0.2952*** (0.000)	5.8012*** (0.000)
Classified board	-0.0194 (0.647)	0.0101 (0.777)	0.0027 (0.627)	0.0317 (0.769)
Board size	-0.0093 (0.243)	-0.0164** (0.020)	0.0029*** (0.011)	-0.0405* (0.088)
Board independence	-0.2962** (0.027)	-0.1486 (0.192)	-0.0152 (0.285)	-1.0278*** (0.003)
CEO ownership	-0.0081 (0.208)	-0.0054 (0.248)	-0.0002 (0.488)	0.0025 (0.725)
CEO duality	-0.0058 (0.865)	-0.0117 (0.692)	-0.0022 (0.666)	-0.3213*** (0.002)
Adjusted R-square	0.676	0.172	0.281	0.314
Sample size	2,796	2,748	2,829	2,829

Table 10: Logistic regressions predicting labor-friendliness

The dependent variable in these regressions is an indicator variable which equals one for firms on the *Fortune* Best Companies list, zero for control firms. *R&D* is the ratio of research and development expenditures to total assets. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Employee productivity* is the natural logarithm of sales per employee. For firms on the *Fortune* list, all variables are averaged over the five years preceding their inclusion on the list. For control firms, all variables are averaged over the five years before the corresponding Best Company was included on the list. Each regression includes industry dummies. *P*-values are reported in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

	1	2	3
R&D	7.7543*** (0.003)	7.7739*** (0.002)	7.1294** (0.011)
Return on assets	----	4.8273*** (0.002)	4.2911*** (0.008)
Firm size	----	----	0.0732 (0.425)
Capex	----	----	2.8390 (0.386)
Leverage	----	----	-0.0949 (0.940)
Employee productivity	----	----	0.2073 (0.373)
Intercept	-0.2692 (0.207)	-0.8205*** (0.003)	-2.5669* (0.063)
R-square	0.047	0.084	0.088
Sample size	244	244	224

Table 11: Labor-friendliness, human capital intensity, and performance

Tobin's q is the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *ROA* is the ratio of operating income to total assets. *SLE* is the natural logarithm of net sales per employee. *TFP* is the residual of annual industry-specific Cobb-Douglas production functions estimated for each 2-digit SIC industry group. *Best Companies* equals one for firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2004, zero otherwise. *R&D* equals one for firms with research and development expenditures (as a percentage of total assets) higher than the sample median, zero otherwise. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Capex* is the ratio of capital expenditures to total assets. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *CEO Duality* is a dummy variable, which equals one when the CEO also serves as board chairman, zero otherwise. Robust *p*-values are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

Table 11 continued: Labor-friendliness, human capital intensity, and performance

	<i>Tobin's Q</i>	<i>ROA</i>	<i>SLE</i>	<i>TFP</i>
Best companies	0.2356* (0.090)	0.0041 (0.704)	0.1248** (0.025)	0.1428*** (0.005)
R&D intensive	0.6930*** (0.001)	-0.0104 (0.423)	0.0978** (0.026)	0.0968** (0.020)
Best companies × R&D	0.7740*** (0.001)	0.0483*** (0.001)	0.0985 (0.132)	0.0541 (0.380)
Firm size	-0.0109 (0.871)	-0.0058* (0.083)	0.1036*** (0.000)	0.0233** (0.033)
Leverage	-2.1325*** (0.001)	0.0078 (0.868)	-0.1575 (0.290)	-0.3812*** (0.008)
Capex	4.7228** (0.044)	0.4307** (0.025)	-1.2653*** (0.005)	-2.9720*** (0.000)
Classified board	-0.2305* (0.067)	-0.0114* (0.083)	-0.0297 (0.345)	-0.0544* (0.076)
Board size	-0.0425 (0.126)	0.0043*** (0.002)	-0.0214*** (0.001)	-0.0267*** (0.000)
Board independence	-0.4454 (0.159)	-0.0130 (0.555)	-0.1863** (0.048)	-0.1639* (0.063)
CEO ownership	0.0278* (0.062)	-0.0009 (0.445)	0.0027 (0.166)	0.0037* (0.058)
CEO duality	0.0478 (0.743)	0.0230*** (0.003)	-0.0241 (0.488)	-0.0031 (0.925)
R-square	0.350	0.242	0.667	0.361
Sample size	1052	1050	1048	1032

Table 12: Labor-friendliness and excess executive compensation

Excess compensation variables are residuals from first-stage regressions predicting executive compensation as a function of economic determinants. These regressions were estimated over all Execucomp firms. *Cash Compensation* is the sum of salary and bonus. *Total Compensation* includes salary, bonus, the value of stock options and restricted stock granted during the year, long-term incentive payouts, and other miscellaneous annual compensation amounts. *Best Companies* are firms listed on *Fortune* magazine's 100 Best Companies to Work for in America between 1998 and 2003. The *Control Group* consists of a size- and industry-matched group of firms that did not appear on the list throughout the entire period. *Board Size* is the number of directors. *Board Independence* is the fraction of independent directors. *Classified Board* equals one when directors are elected to staggered terms, zero otherwise. *CEO Duality* is a dummy variable, which equals one when the CEO also serves as board chairman, zero otherwise. *CEO External Directorships* is the number of outside board on which the CEO serves. *CEO Ownership* is the fraction of shares owned by the chief executive officer. *Firm Size* is the natural logarithm of total assets. *Leverage* is the ratio of long-term debt to total assets. *Firm Performance* is Tobin's q, calculated as the market value of common equity plus the book values of preferred equity and long-term debt divided by the book value of assets. *P-values* based on robust standard errors are provided in parentheses under parameter estimates. Levels of significance are indicated by ***, **, and * for 1%, 5%, and 10%, respectively.

Table 12 continued: Labor-friendliness and excess executive compensation*A: Univariate comparisons*

Variable	Best Companies		Control Group		Test Statistics	
	Mean	Median	Mean	Median	Mean	Median
Excess salary	56.88	74.30	123.55	99.15	-2.66 ^{***}	-2.76 ^{***}
Excess cash compensation	141.12	-42.65	476.95	119.93	-1.83 [*]	-2.18 ^{**}
Excess total compensation	3568.57	6.03	1507.34	-818.05	1.79 [*]	1.64 [*]

B: Regression results

	Salary	Cash Compensation	Total Compensation
Best companies	-13.418 (0.686)	-327.047 (0.187)	-755.891 (0.674)
Board size	-9.922 (0.306)	-136.138 ^{***} (0.002)	-940.533 ^{***} (0.002)
Board independence	187.954 [*] (0.065)	-644.526 (0.449)	-610.365 (0.895)
Classified board	69.717 ^{***} (0.013)	-24.589 (0.892)	173.472 (0.903)
CEO duality	142.110 ^{***} (0.000)	275.782 (0.346)	-2091.288 (0.242)
CEO external directorships	33.330 ^{***} (0.011)	205.151 (0.128)	1380.631 ^{**} (0.047)
CEO ownership	-3.443 (0.262)	-14.892 (0.331)	28.388 (0.898)
CEO age	3.469 ^{**} (0.054)	-110.652 (0.425)	-18.689 (0.795)
Firm size	19.375 (0.170)	252.494 ^{***} (0.002)	2618.576 ^{***} (0.003)
Leverage	185.811 [*] (0.084)	-17.981 (0.981)	-3999.498 (0.419)
Firm performance	-14.616 ^{**} (0.015)	-16.644 (0.639)	1766.603 ^{**} (0.045)
R-square	0.3183	0.2163	0.2731
Sample size	644	644	644