Do Family Firms Invest More Than Nonfamily Firms in Employee-Friendly Policies?

Jun-Koo Kang and Jungmin Kim*

This version: September 2018

Do Family Firms Invest More Than Nonfamily Firms in Employee-Friendly Policies?

Abstract

We examine whether family firms invest more in employee relations than nonfamily firms. Using the variation in state-level changes in inheritance, gift, and estate taxes as an exogenous shock to family control, we find that family firms, particularly those in which a founder serves as CEO or those in which a family member serves as a director on the board, treat their employees better than nonfamily firms. More importantly, family firms focus on investing in employee relations that help alleviate labor-related conflicts and controversies, possibly to avoid a negative family reputation among stakeholders. Family firms' better treatment of their employees is also evident when we use a difference-in-difference test to exploit changes in family firm status due to (sudden) deaths of family members and firms' inclusion in *Fortune*'s "100 Best Companies to Work For" list to identify employee-friendly treatment. We further find that family firms in the early stage of their life cycle invest more in employee relations when they operate in labor-intensive industries in which the benefits from family owners' monitoring of employees are expected to be large. Moreover, we find that while nonfamily firms' investment in employee relations is impeded by several constraints such as short-term investor pressure, managerial myopia, and managerial agency problems, family firms do not suffer from such constraints. These findings help explain why underinvestment in employee relations is prevalent in public firms despite potential long-term benefits from such intangible investment.

1. Introduction

Family firms are the most prevalent organizational form around the world (La Porta, Lopez-De-Silanes, and Shleifer, 1999; Claessens, Djankov, and Lang, 2000). For example, founders and their heirs are the most common types of large, undiversified shareholders in the U.S., as they control approximately one-third of Fortune 500 and S&P 500 industrial firms (Anderson and Reeb, 2003). Previous studies on U.S. family firms have focused on agency problems to examine the benefits and costs of family ownership. These studies show that family firms in the U.S. outperform nonfamily firms largely because of their low shareholder-manager conflicts and active monitoring by controlling owners (Anderson and Reeb, 2003; Fahlenbrach, 2009; Li and Srinivasan, 2011). However, while these studies help explain the advantages of family-controlled from the perspective of low shareholder-manager conflicts, there is little evidence on whether family firms differ from nonfamily firms in terms of their management of other types of stakeholder relations, and whether such relations help family owners continue their businesses and retain control. In this paper, we address these questions by focusing on employee relations, one of the most important stakeholder relations that affect a firm's businesses. Specifically, we compare investment in employee relations between family and nonfamily firms and examine whether unique family firm traits explain any differences in their investment in employee relations.[1]

Contract theory and the theory of the firm view a firm as a nexus of explicit and implicit contracts between shareholders and other stakeholders, whereby stakeholders supply the firm with capital and other resources in exchange for claims on firm value (Alchian and Demsetz, 1972; Jensen and Meckling, 1976; Cornell and Shapiro, 1987). Among various stakeholder relations, employee relations can be particularly important for a firm's success, as employees significantly contribute to production (Agle, Mitchell, and Sonnenfeld, 1999) and as human capital is one of the most important factors that affects firm competitiveness (Pfeffer, 1996).

---

[1] We use the terms "employee treatment," "investment in employee relations," "employee benefits," and "employee-friendly policies" interchangeably throughout this paper.

The importance of employee relations is expected to be greater in family firms than in nonfamily firms since family firms have several comparative advantages in implementing employee-friendly policies over nonfamily firms owing to their unique traits. First, family owners with large equity claims on firm value and a strong interest in the firm as a going concern (due to bequest motives) tend to have a relatively longer-term horizon than shareholders of nonfamily firms (Anderson, Mansi, and Reeb, 2003; Mueller and Philippon, 2011). Family owners' long-term investment horizon and commitment help improve employees' perception of their firm's trustworthiness, which leads to reduced employee turnover and an improved ability of the firm to motivate employees and obtain employee support (March and Simon, 1958; Robinson, 1996; La Porta et al., 1997; Edmans, 2011). Such perceptions increase employee loyalty and motivation, allowing family firms to enjoy greater benefits than nonfamily firms from the same level of investment in employee relations or to incur lower costs in obtaining the same level of benefits from such investment. Consistent with these arguments, Sraer and Thesmar (2007) show that compared with nonfamily firms, family firms in France pay lower average wages but do not exhibit lower labor productivity. These firms also exhibit a lower sensitivity of employment to industry shocks to sales, suggesting that they manage human resources more efficiently than nonfamily firms.[2]

Second, family owner-managers as long-term controlling shareholders encounter lower short-term market pressures and managerial myopia than managers in nonfamily firms. Previous studies show that managers exhibit a high degree of myopia due to several constraints and pressures such as the risk of losing employment (Fudenberg and Tirole, 1995), stock price pressure (Stein, 1988), and need to cater to the short-term demands of transient investors (Bolton, Scheinkman, and Xiong, 2006). In addition, such studies show that myopic managers underinvest in long-term projects.[3] Given that owner-managers in family firms encounter fewer short-term market constraints and pressures than managers in nonfamily firms, they tend

---

[2] The unique business cultures of family firms that treat employees like extended family (PwC Family Business Survey report, 2012; KPMG, 2011) can further improve employees' perception regarding job security and motivate employees to work hard, which helps increase the benefits from investment in employee-friendly policies.

[3] See, for example, Stein (1988), Hirshleifer (1993), Bushee (1998), Graham, Harvey, and Rajgopal (2005), and Edmans (2009) for evidence on the negative effects of managerial myopia on firm value and investment.

to exhibit a lower degree of myopia; thus, they are less likely to underinvest in long-term investment projects, such as investment in employee relations.

Third, family owner-managers are better informed about their firm than managers of nonfamily firms since they frequently serve on the management team or board (e.g., Anderson, Reeb, and Zhao, 2012). For example, we find that at least two family members serve as a director on the board in 42% of our sample family firms. Edmans (2011) finds that a higher level of employee satisfaction leads to better long-term returns but managers tend to underinvest in employee relations because outside investors do not appreciate the intrinsic value of intangible assets. This underinvestment problem is less likely in family firms than in nonfamily firms because the information advantage of family owner-managers allows family firms to invest more in intangible investments, such as investment in employee relations, and to obtain greater benefits from such investments.

Fourth, family firms tend to have lower managerial agency conflicts than nonfamily firms due to active monitoring by controlling owners (Demsetz and Lehn, 1985; Anderson and Reeb, 2003; Fahlenbrach, 2009; Li and Srinivasan, 2011). Several studies find that firm value maximization can incorporate stakeholder value, not merely shareholder value (e.g., Edmans, 2011; Deng, Kang, and Low, 2013) and show that managerial agency problems affect firms' stakeholder relation policies (Ferrell, Liang, and Renneboog, 2016). For example, Ferrell, Liang, and Renneboog (2016) find that well-governed firms that suffer less from agency concerns engage more in corporate social responsibility (CSR) activities, suggesting that managerial agency problems affect firms' stakeholder-relation policies, such as employee-friendly policies. Thus, family firms that tend to have low shareholder-manager conflicts are more likely to invest in employee-friendly policies than nonfamily firms.[4]

---

[4] Previous studies also show that substantial employee benefits do not necessarily increase shareholder wealth (Bertrand and Mullainathan, 2003; Cronqvist et al., 2009; Kim and Ouimet, 2014). For example, Kim and Ouimet (2014) show that employee share ownership plans are often implemented for nonincentive purposes, for instance, by forming a worker-management alliance to fend off hostile takeovers. However, active monitoring by controlling owners and reduced takeover vulnerability in the presence of the concentrated family ownership help prevent managers in family firms from misusing firm resources to act with nonincentive purposes. Thus, family firms are less likely to invest suboptimally in employee-friendly policies than nonfamily firms.

Overall, these arguments suggest that family firms' unique characteristics provide them with comparative advantages in implementing employee-friendly policies and that these advantages allow them to invest more in employee relations than nonfamily firms. The arguments also suggest that family firms' investment in employee relations is particularly pronounced in circumstances in which their unique characteristics (e.g., family owners' long-term horizon and active monitoring) are more evident and in which the benefits from family control are greater (the "comparative advantage hypothesis").

Previous studies suggest that firms evolve over time from family-controlled firms into widely held firms (Berle and Means, 1932). In support of this corporate life cycle view, Helwege, Pirinsky, and Stulz (2007) show that insider ownership of U.S. IPO firms declines over time as these firms become more mature, and Franks et al. (2011) find that family firms in the U.K. evolve into widely held firms as they age. These findings suggest that family ownership is negatively related to firm age; thus, the unique characteristics of family firms that facilitate their investment in employee-friendly policies should be more prevalent in young family firms than mature family firms. Other studies also suggest that family owner-managers care about their firm (family) reputation and thus they are less likely to breach implicit contracts. This reputation concern influences family owner-managers to maintain positive reputation among stakeholders (Anderson, Mansi, and Reeb, 2003) and to avoid hostile labor relations (Mueller and Philippon, 2007; Sraer and Thesmar, 2007; Bassanini et al., 2013; Ellul, Pagano, and Schivardi, 2017). These studies further suggest that family firms invest more in employee relations in the earlier stages of their life cycle and that they devote more resources to avoid potential labor conflicts and controversies that may jeopardize their employee relations when implementing their employee-friendly policies.

To test the predictions of the comparative advantage hypothesis, we employ a large sample of 10,211 firm-year observations in the U.S. for the period 1996-2010. To assess a firm's overall employee-friendly policies, we construct the variable *Employee Treatment Index (ETI)* by using employee relations ratings assigned to firms by KLD Research & Analytics, Inc. (hereafter, KLD). The KLD database provides extensive information on the ratings assigned to firms in relation to their employee treatment standards, and it is the most comprehensive database available for evaluating a firm's strengths and concerns regarding

4

employee relations. The *ETI* is computed as the sum of the ratings for six strength dimensions (*ETI strength*) and four concern dimensions (*ETI concern*) of employee relations.

We first conduct univariate tests to examine whether family firms invest more in employee-friendly policies (i.e., higher *ETI*) than nonfamily firms and whether this difference in investment in employee relations varies across the stage of a firm's life cycles and its industry. We find that the level of the *ETI* for family firms is not significantly different from that of the *ETI* for nonfamily firms. However, dividing the *ETI* into *ETI strength* and *ETI concern*, we find that family firms have a significantly lower level of *ETI concern* than nonfamily firms, suggesting that family firms invest more in employee relations that help avoid labor-related conflicts and controversies. We also find that compared to nonfamily firms, family firms invest more in employee relations when they are in the early stage of their life cycle, during which the unique characteristics of family firms that facilitate investment in employee-friendly policies are more evident. We further find that family firms invest more in employee relations when they operate in industries that are more likely to encounter labor conflicts (i.e., highly labor-intensive industries, industries with a less skillful labor force, low-wage industries, and low-competition industries), and thus, family reputation is at stake. In contrast, nonfamily firms invest more in employee relations when they operate in industries in which labor relations are less confrontational. These findings suggest that family owner-managers care about family reputation and thus have strong incentives to avoid hostile labor relations.

We then examine the difference in employee-friendly policies between family and nonfamily firms using difference-in-difference tests that help mitigate endogeneity concerns in family ownership. For example, a firm's organizational form (i.e., family firm status) and its decision to adopt employee-friendly policies may be simultaneously determined by unobservable omitted firm characteristics. In addition, reverse causality may drive our results: family owners could relinquish their equity stake because of firms' diminishing ability to sustain a high level of investment in employee relations. We use two events to capture an exogenous source of variation in family owners' incentives to retain the business in the family. First, we conduct a difference-in-differences test that exploits variation in the staggered changes in state inheritance, gift, and estate taxes that apply to the residents of the firm's state of location in a given year. Previous

studies show that inheritance taxes significantly impede family ownership growth (Tsoutsoura, 2015), suggesting that a reduction in state inheritance and estate taxes provides family owners with strong incentives to continue their businesses. Thus, we expect the positive effect of family control on investment in employee relations to be more pronounced when family owners' benefits of retaining control increase owing to an exogenous change in laws. Consistent with this expectation, we find that, compared with nonfamily firms, family firms invest more in employee-friendly policies after an exogenous reduction in state inheritance and estate taxes. We also find that this higher value of the *ETI* for family firms is attributed mainly to their efforts to reduce the scores in concern dimensions in the *ETI*. The results are similar when we estimate the *ETI* using the principal component analysis. In Online Appendix A, we discuss the importance of state inheritance, gift, and estate taxes in family businesses and their differences compared to federal estate taxes.

As a second test, we conduct a difference-in-difference test that exploits family firm status changes owing to the (sudden) death of founding family members. Using deaths of founding family members, particularly their sudden deaths, allows us to address the concern that time-invariant characteristics jointly affect family firm status and a firm's ability to implement employee-friendly policies. This test also helps mitigate the reverse causality concern that firm performance influences a firm's ability to treat its employees well—rather than the other way around. We find that investment in employee relations decreases after a transition occurs, indicating that a firm's investment in employee relations is determined by its organizational form. We conduct placebo tests using nonfamily firms experiencing CEO deaths to rule out the alternative explanation that declining investment in employee relations after the change in family firm status followed by the death of founding family members is due to policy uncertainties caused by the death per se. We do not find any significant change in the *ETI* after CEO deaths in nonfamily firms. These results support the comparative advantage hypothesis.

To better understand the cross-sectional variation in the difference in investment in employee-oriented policies between family and nonfamily firms, we examine how these policies change over the different stage of a firm's life cycle and whether such changes are affected by industry characteristics. We expect

family firms operating in labor-intensive industries and industries with noisy environments in which the costs of monitoring employees are higher to invest more in employee relations in the early stage of their life cycle during which unique family firm traits are more likely to be evident. Consistent with these predictions, we find that young family firms operating in labor-intensive industries such as wholesale and retail trade and services industries and those operating in industries that rely more on unskilled workers invest more in employee relations.

Next, to identify factors that drive the difference in investment in employee relations between family and nonfamily firms, we focus on unique family firm characteristics that enable family firms to manage such investment more effectively. We first consider family members' information advantages as one of such characteristics and examine whether their information advantages captured by their board representation[5] affect their investment in employee relations, as information advantages allow family firms to make informed decision on employee-friendly policies. We also examine whether founders' involvement in management affects firms' investment in employee-friendly policies since their active involvement can work as a device for long-term commitment to employee-oriented policies or as a monitoring mechanism that facilitates efficient investment in employee relations. Consistent with the comparative advantage hypothesis, we find that family firms invest more in employee relations when a founding family member serves on the board, when a founder is CEO, or when a founder holds a management position or serves on the board.

As a second factor that drives the difference in employee treatment between family and nonfamily firms, we consider longer-term business horizon of family owners and a lower level of managerial myopia. We use block ownership held by non-dedicated and dedicated institutions (young and old CEO) to capture the investment horizon of shareholders (managerial myopia). Prior literature shows that non-dedicated investors such as transient institutions increase pressure on firms to reduce discretionary expenditures, such as research and development expenditures, to meet short-term earnings expectations (e.g., Bushee, 1998).

---

[5] Anderson, Reeb, and Zhao (2012) show that family owner-managers are better informed about their firms than managers of nonfamily firms, as they frequently serve on the management team or board.

Prior studies also show that CEOs become more myopic as they become old (e.g., Prendergast and Stole, 1996; Serfling, 2014). To the extent that the investment horizon of shareholders (degree of managerial myopia) is relatively shorter (larger) in nonfamily firms than in family firms, we expect nonfamily firms to invest particularly less in employee relations when block ownership by non-dedicated institutions is higher and when CEOs are older. Our results are consistent with these expectations. In contrast, we find no evidence that family firms are affected by the shareholder investment horizon and by managerial myopia that constrain nonfamily firms' investment in employee relations.

Finally, we examine whether lower managerial agency problems, another important family firm trait, can explain the difference in employee friendly policies between family firms and nonfamily firms. In accordance with prior studies (Jensen, 1986; Shleifer and Vishny, 1997), we use firms' free cash flow and product market competition to measure managerial agency problems. We expect managerial agency problems to affect investment in employee relations for nonfamily firms but not for family firms owing to active monitoring by controlling family owners. Consistent with these predictions, we find that only nonfamily firms with a high free cash flow problem and those encountering lower product market competition invest fewer resources in employee relations than other nonfamily firms. Overall, the results from the subgroup analysis suggest that investment in employee relations works differently in family and nonfamily firms largely because of the different characteristics of the organizational form that influence firms' ability and incentive to invest in employee-friendly policies.

In additional tests, to examine whether the effective monitoring role of founding family members is an important channel through which family firms invest more in employee-friendly policies, using a subsample of family firms, we conduct a director-level analysis of director attendance at board meetings and a firm-level analysis of the impact of family member monitoring on the *ETI*. We find that founding family member directors are more likely to attend board meetings than other professional directors and that the level of the *ETI* is higher when a founding family member serves on a monitoring committee. The latter result is particularly evident when family firms operate in labor-intensive industries. Next, to further examine whether family firms treat their employees better than nonfamily firms, we use firms named in

Fortune's "100 Best Companies to Work For" as an alternative measure of employee treatment. Consistent with the results using the *ETI*, we find that family firms are more likely to be included on the Best Companies list than nonfamily firms. We further find that conditional on a firm's inclusion on the Best Companies list, a family firm is less likely to be eliminated from the list than nonfamily firms. Therefore, the greater representation of family firms on the list is unlikely to occur because family firms, especially those that are incapable of maintaining employee-friendly policies, are more likely to participate in the *Fortune*'s annual survey than nonfamily firms.

Our study contributes to the literature at least in two important ways. First, our study links the family firm literature to the literature that shows the prevalence of underinvestment in employee relations (Edmans, 2011). We show that while family firms' unique characteristics, such as family owner-managers' longer-term horizon, lower level of myopia, information advantages, and lower agency conflicts, help reduce underinvestment problems, nonfamily firms' investment in employee-friendly policies is significantly affected by the lack of such characteristics. Second, our study contributes to the literature on stakeholder relations. Prior research shows that family firms are effective in addressing labor relations. Shleifer and Summers (1988) argue that managers' ability to commit implicit contracts is limited when the firm is widely held owing to the high risk of hostile takeover, suggesting that family firms have comparative advantages in sustaining implicit labor contracts. Using the international data, Mueller and Philippon (2011) find that family ownership is prevalent in industries that heavily rely on labor and in countries with adverse labor relations. Bennedsen, Tsoutsoura, and Wolfenzon (2017) also find that employee absences are lower in family firms than in nonfamily firms in Denmark owing to the corporate culture that emphasizes employee loyalty. Consistent with these studies, we find that family firms invest more in employee relations than nonfamily firms when they operate in industries that are more likely to encounter labor conflicts and controversies about employees.

2. Data and Summary Statistics

2.1 Sample selection and measure of employee treatment

To construct our sample, we begin with the universe of firms over the period 1996-2010 in RiskMetrics (formerly IRRC director database), which provides detailed information on all directors of S&P 1500 firms. We first omit firms for which employee relation ratings are not available in the KLD database. Next, we delete firms with missing stock return data in the Center for Research in Security Prices (CRSP) or firms with missing financial data in Compustat. We also exclude firms in regulated industries (SIC codes between 4900 and 4999 and between 6000 and 6999), firms not headquartered in the U.S., and firms in which the number of employees is missing or fewer than 100. Our final sample comprises 10,211 firm-year observations for 1,563 unique firms in the U.S. over the 1996-2010 period.[6]

A number of prior studies measure firms' treatment of employees using KLD employee relations ratings (Cronqvist, Low, and Nilsson, 2009; Landier, Nair, and Wulf, 2009; Verwijmeren and Derwall, 2010; Bae, Kang, and Wang, 2011). KLD assigns ratings (0/1) for each of the following employee relation categories: six strengths (i.e., union relations, employee involvement, cash profit sharing, retirement benefit strengths, health and safety strengths, and other strengths) and five concerns (i.e., union relations, workforce reductions, retirement benefits concerns, health and safety concerns, and other concerns). In this paper, we sum the ratings for the six strengths and four of the five concerns pertaining to employee relations to create the *ETI*. A higher index score indicates greater investment in employee relations.[7]

Panel A of Online Appendix B summarizes how KLD evaluates strengths and concerns in each category of employee relations. Panel B of Online Appendix B presents the correlation coefficient matrix of the *ETI* and its subcomponents. We find that the correlations between the *ETI* and its subcomponents are

---

[6] As Bae, Kang, and Wang (2011) note, coverage of the KLD database before 2003 is largely limited to S&P 500 firms. Since 2003, the KLD database has expanded its coverage to include firms in the Russell 3000. In untabulated tests, we rerun all analyses in the paper using only S&P 1500 firms (covered by the KLD database between 2003 and 2010) and S&P 500 firms (covered by the KLD database over our sample period 1996 to 2010). We find that our results remain qualitatively similar.

[7] Using the *ETI* has both advantages and disadvantages, even though it has been extensively used in prior literature. The summation approach to compute the *ETI* allows us to examine the overall effect of firms' employee-friendly policies. However, because the ratings for the strength dimensions and those for concern dimensions cancel each other out, the *ETI* can take the value of zero if the strength score has the same value as the concern score. We find that among 1,559 unique firms, 547 firms (35%) have an *ETI* score of zero during our sample period. Thus, we conduct additional analyses using the scores computed using strength and concern dimensions separately, as well as the score estimated from the principal component analysis that allows us to create a one-dimensional index from each subcomponent of the *ETI*, in Section 4.2.

relatively high, while those among subcomponents are very low, suggesting that each subcomponent captures a firm's overall investment in employee relations relatively well but captures a different aspect of overall investment.

2.2 Definition of family firms

Following previous studies on family firms (Anderson and Reeb, 2003; Villalonga and Amit, 2006; Li and Srinivasan, 2011), we identify family firms using two criteria: (1) the fractional equity ownership of a founding family and (2) the presence of family members on the management team or the board. We define family firms as those in which founding family members, either individually or as a group, have equity ownership exceeding 5%, or in which at least one founding family member sits on the board or is in top management.[8] We identify family firms by searching sections in firms' proxy statements that contain biographies of their directors, the list of family firms in the November 10, 2003 issue of *Business Week* magazine, the Board Analyst database, and various internet sources, including companies' websites.

2.3 Summary statistics

Table 1 provides summary characteristics for the sample firms. All continuous variables are winsorized at the 1% level in both tails to mitigate the effects of potential outliers. For firm-level characteristics, we find that compared with nonfamily firms, family firms are smaller, younger, and riskier (higher stock return volatility), and they have lower leverage. Family firms also have higher capital expenditure (capital expenditure scaled by total assets), higher stock performance, and lower institutional ownership. While family firms have lower free cash flow, they are less financially constrained (i.e., lower Hadlock-Pierce (*H-P*) index)) and are less likely to default (i.e., higher modified Z-score). We further find that boards of family firms are smaller and less independent than those of nonfamily firms. Regarding industry-level

---

[8] Family firms can be defined by various means. See Villalonga and Amit (2010) for a detailed discussion on various definitions of family firms. In untabulated tests, we redefine family firms as those in which founding family members have equity ownership exceeding 5%, regardless of the presence of family members on the management team or board (Chen et al., 2010). Our inferences do not change when we use this alternative definition of family firms in our analyses.

characteristics, we find that family firms are more prevalent in labor-intensive industries, industries that experience higher voluntary employee turnover, industries that rely on a less skillful workforce, and industries that pay lower wages. Family firms are also more prevalent in industries in which product market competition is less intense (i.e., higher Herfindahl index). In untabulated tests, we find that firms in which the founder (descendent, outsider) serves as CEO represent 32% (23%, 46%) of the family firm sample. In 42% of family firms, at least two family members serve as a director on the board; in 55% of family firms, a founder holds a management position or sits on the board; in 44% of family firms, the founder is inactive but at least one of the descendants or relatives serves on the board, or holds the management position (i.e., descendent-led firms). The appendix provides detailed descriptions of the variables used in Table 1.

Table 2 presents the distribution of the *ETI*, *ETI strength,* and *ETI concern* for family and nonfamily firms during the 1996-2010 period (Panel A), the mean indices for six subcomponents used in constructing the *ETI* (Panel B), the mean *ETI* for family and nonfamily firms classified according to various stages of the corporate life cycle (measured by firm age) (Panel C), and the mean *ETI* for family and nonfamily firms classified according to industry (Panel D). In Panel A, we find that the differences in the mean and median *ETI* between family and nonfamily firms are not significant. However, when we divide the *ETI* into *ETI strength* and *ETI concern*, which are measured using strength and concern dimensions of investment in employee relations, respectively, we find that family firms' average *ETI strength* score is significantly lower than that of nonfamily firms, while family firms' average *ETI concern* score is significantly lower than that of nonfamily firms at the 1% level. It should be noted that firms are required to allocate more resources not only to receive higher *ETI* strength scores but also to lower *ETI* concern scores.[9] Thus, family firms' employee-friendly policies focus on avoiding labor conflicts and controversies about employee relations. The significant differences in *ETI* strength and concern scores between family and nonfamily firms partly help explain why we find no significant difference in the *ETI* between the two groups of firms.

---

[9] For example, KLD describes factors that affect health and safety concern scores as follows: "a history of involvement in workplace safety-related legal cases, widespread or egregious fines for unsafe workplace practices, resistance to improved practices, and criticism by NGOs and / or other third-party observers."

In Panel B, we find that compared to nonfamily firms, family firms have lower scores in five strength categories (i.e., *Employee involvement*, *Union relations*, *Health and safety*, *Retirement benefits*, and *Cash profit sharing*) and a higher score in one strength category (i.e., *Others*). In contrast, family firms have lower concern scores than nonfamily firms in all four concern categories (i.e., *Union relations*, *Health and safety*, *Retirement benefits*, and *Others*). All these differences in subcomponent scores between family and nonfamily firms are significant at the 5% level or better. Thus, lower strength and concern scores for family firms than for nonfamily firms are not limited to only overall strength and concern dimensions of the *ETI* but are evident for all the subcomponents of the *ETI* except for *Others*, for which family firms treat their employees better than nonfamily firms in a strength dimension.

In Panel C, we find that family firms in the early stage of their life cycle (i.e., the lowest and the 2nd lowest age quintile groups) exhibit higher mean *ETI* scores than nonfamily firms in the corresponding stage, while nonfamily firms in the mature stage of their life cycle (i.e., the highest 3rd and 4th age quintile groups) have higher mean *ETI* scores than family firms in the corresponding stage. To the extent that the unique characteristics of family firms are more prevalent in the early stage of their life cycle, these results support the comparative advantage hypothesis.

In Panel D, we find that family firms operating in wholesale and retail trade and service industries have higher *ETI* than nonfamily firms. In contrast, nonfamily firms have higher *ETI* in manufacturing, and agriculture, forestry and fishing industries than family firms.[10]

3. *ETI* by Industry Characteristics and Family Control

To better understand the striking differences in *ETI strength* and *ETI concern* between family and nonfamily firms and the differences in the *ETI* across industries, in Panel A of Table 3, we examine how industries are different in terms of labor intensity and labor conflicts. We use various industry

---

[10] There are 21 (613) firm-year observations in the agriculture, forestry, and fishing (mining and construction) industry, accounting for 0.2% (6.0%) of the total sample. Given a small number of observations in the agriculture, forestry, and fishing (mining and construction) industry, we redo univariate tests in Panels A, B, and C of Table 2 and Table 4 after excluding firms operating in these two industries and find that our results do not change.

characteristics, including labor intensity (measured as (1,000 × number of employees) / sales), voluntary employee turnover (measured as of 2001), the percentage of skilled employees, industry median wage, and product market competition (i.e., Herfindal index) to measure labor intensity and labor conflicts. We find that wholesale and retail trade and services industries in which family firms excel in providing better employee treatments are characterized by the highest labor intensity and voluntary employee turnover rate. In contrast, the labor intensity and voluntary employee turnover rate are relatively low in the manufacturing industry, where nonfamily firms provide more employee benefits. Wholesale and retail trade industries also tend to rely less on a skillful labor force, pay the lowest wage, and encounter low product market competition, while the services industry recruits more skilled employees, pays higher wages, and experiences higher product market competition. These results imply that family firms provide employees with more benefits when they operate in labor-intensive industries and industries with noisy environments in which benefits from family owners' active monitoring of employees are expected to be large.[11]

As a more explicit test, we next investigate whether family firms' employee-oriented policies are indeed more pronounced in industries with higher labor conflicts and noisier environments where the founding family's monitoring and unique characteristics help alleviate such concerns. We classify our sample firms into two groups according to industry characteristics used in Panel A of Table 3, except for voluntary turnover.[12] We define firms operating in a certain industry in the top 25th percentile of the sample as "High group" firms and the remaining firms as "Low group" firms. The industry characteristics are

---

[11] Most empirical studies that examine the relation between wages and monitoring costs show that high wages and monitoring costs are substitutes in inducing efforts by employees (Groshen and Kruerger, 1990; Krueger, 1991; Rebitzer, 1995) although some papers support an alternative view that employees in general dislike external monitoring, and thus, they receive a pay premium when they are subject to intensive monitoring (Aoki, 1984; Groshen and Krueger, 1990). For example, exploiting the institutional features of the labor market in the fast food industry, Krueger (1991) shows that high wages are used to discourage shirking at company-owned outlets in which monitoring is more difficult than in franchisee-owned outlets. Additionally, other studies using unique features of the contract employment relationship in the petrochemical industry (Rebitzer, 1995) and data on monitoring (supervision) requirement for nurses in the hospital industry (Groshen and Krueger, 1990) find that a high level of monitoring is associated with a lower level of wages. Overall, these findings support the argument that less skilled and low-wage employees in general require more monitoring by the founding family member, who has better access to firm-specific information than outside investors.

[12] We do not use voluntary turnover since information on it is available only for one year.

measured a year before the *ETI* is measured. The results are similar when we measure industry characteristics five years before the *ETI* is measured.

Panel B of Table 3 presents the results. Columns (1) and (4), which present the mean *ETI* for the full samples of "High group" and "Low group" firms, respectively, show a striking contrast between the two subgroups. We find that the mean *ETI* is negative (positive) for industries in which labor intensity is higher (lower), the proportion of a skilled labor force is lower (higher), the industry median wage is lower (higher), and product market competition is lower (higher). The differences in the mean *ETI* between these two subgroups are all significant. Thus, firms operating in industries that are more likely to encounter conflicts with the labor in general (i.e., higher labor-intensive industries, industries with a less skilled labor force, lower-wage industries and less-competitive industries) tend to have negative mean *ETI*.

We next divide "High group" ("Low group") firms into family and nonfamily firms and examine the difference in the *ETI* between these two groups of firms. The results are reported in columns (2) and (3) (columns (5) and (6)), respectively. We find that family firms operating in industries that are more likely to encounter labor relations-related conflicts have significantly higher *ETI* (i.e., less negative *ETI* value) than nonfamily firms operating in the same industries. Given that firms are required to invest more in employee relations to reduce their concern scores used in computing the *ETI* (i.e., *ETI* = strength scores – concern scores), these results support the implicit contract theory that family owner-managers are less likely to breach implicit contracts and thus actively invest to avoid potential conflicts with employees that may undermine their firm (family) reputation. For nonfamily firms, the results are the opposite of those for family firms: nonfamily firms invest more in employee-friendly policies than family firms when they operate in industries in which labor relations are less confrontational (i.e., lower labor intensity industries, industries with a more skilled labor force, higher-wage industries and more-competitive industries). The difference in the mean *ETI* between family and nonfamily firms operating in these industries is significant, except for the industry median wage.

In sum, our analyses provide evidence that family firms invest more in employee relations than nonfamily firms, especially when they operate in industries in which labor conflicts are more likely to occur and, thus, family reputation is at stake.

4. Do Family Firms Invest More Than Nonfamily firms in Employee-Friendly Policies?

In our examination of the difference in employee-friendly policies between family and nonfamily firms, it is important to address potential endogeneity biases discussed in the introduction section. To mitigate these concerns, we perform the following two tests: 1) a difference-in-difference test exploiting variation in state-level changes in inheritance, gift, and estate taxes that apply to the residents of the firm's state of location in a given year and 2) a difference-in-difference test exploiting family firm status changes due to (sudden) deaths of founding family members.

4.1 Changes in employee treatment around state-level changes in inheritance and estate taxes

As a first test to address potential omitted variable biases, we use exogenous variation in the staggered state-level changes in inheritance, gift, and estate taxes.[13] Specifically, we construct the variable *Index of Inheritance Taxes* by summing four indicator variables, each of which takes the value of one if the state-level tax (estate tax, inheritance tax, generation skipping tax, or gift tax) is applicable in a given year, and zero otherwise. We then define *Decrease in Index of Inheritance Taxes,* an indicator that takes the value of one if *Index of Inheritance Taxes* in a given year is lower than that a year ago, and zero otherwise and interact it with *Family firm (indicator).* We use this interaction term as a key independent variable of interest in a difference-in-difference test. Previous studies show that inheritance taxes significantly impede family ownership growth (Tsoutsoura, 2015), suggesting that a reduction in state inheritance and estate taxes provides family owners with strong incentives to continue their businesses. Thus, to the extent that an exogenous reduction in state taxes makes family owners' marginal benefits of staying in the company exceed the costs of relinquishing family control, using the change in state taxes that affects the incentive of

---

[13] See Massa and Zaldokas (2017) for a detailed discussion about the state-level implementation of tax changes.

individuals to build up family wealth allows us to compare the employee-friendly policies of family and nonfamily firms. This argument suggests the positive effect of family control on investment in employee relations to be more pronounced after a significant reduction in state inheritance and estate taxes, as such a reduction makes firms more likely to remain under family control. As family owners' incentives to retain their business increase, family firms would utilize their improved ability to allocate more resources to employee-friendly policies in order to reap economic gains in the long run.[14]

Table 4 reports results of ordinary least squares (OLS) regressions in which the dependent variable is the *ETI*.[15] We control for log (assets), log (firm age), R&D / sales, leverage, ROA, stock performance, capital expenditure / assets, return volatility, institutional ownership, board size, board independence, free cash flow, modified Z-score, and *H-P* index. We also include state fixed effects to control for differences in state characteristics, such as differences in state laws and state economy, industry-year fixed effects to control for unobserved heterogeneity across industries over time, and firm fixed effects to control for unobservable time-invariant firm characteristics. In column (1), we find that the coefficient on *Decrease in Index of Inheritance Taxes (indicator)* is insignificant, indicating that state-level changes in inheritance, gift, and estate taxes have no discernable effect on a firm's investment in employee-friendly policies.

---

[14] One may argue that family members are less likely to be constrained in transferring control within the family after estate tax cuts and that their incentives to make incremental efforts to maintain durable employee relations could therefore be reduced. However, our comparative advantage hypothesis suggests that family members invest more in employee relations after a significant reduction in inheritance taxes, since family owners' increased incentives to retain family control are more likely to reinforce the unique characteristics of family firms. These intensified family firm characteristics provide family members with competitive advantages in reaping long-term economic gains from investing in employee-friendly policies. Consistent with this view, Tsoutsoura (2015) shows that decreased estate taxes provide family owners with strong incentives to continue their businesses rather than sell their firms and that family firms increase their investment after the reduction in estate taxes. Using international data, Ellul, Pagano, and Panunzi (2010) further find that strict inheritance laws reduce the investment of family firms but not nonfamily firms. Although these studies do not distinguish types of investment that family firms undertake when estate taxes are reduced, long-term investment in employee relations could be a type of investments to which family owner-managers would want to commit more capital in order to increase their firms' long-term competitiveness.

[15] In untabulated tests, we examine whether *Decrease in Index of Inheritance Taxes* impacts family ownership by estimating probit regressions in which the dependent variable is an indicator that takes the value of one for family firms, and zero for nonfamily firms, and a key independent variable of interest is *Decrease in Index of Inheritance Taxes*. We use the same control variables as those in Table 4 and include year and industry fixed effects. We find that the coefficient on *Decrease in Index of Inheritance Taxes* is positive and significant at the 5% level, suggesting that firms are more likely to remain family firms when the state-level taxes are reduced. The result does not change when we replace year and industry fixed effects with year-industry fixed effects.

In column (2), we add an interaction term between *Decrease in Index of Inheritance Taxes (indicator)* and *Family firm (indicator)* and find that its coefficient is positive and significant at the 5% level, suggesting that family firms invest more in employee-friendly policies than nonfamily firms after an exogenous reduction in state inheritance and estate taxes that makes the marginal benefits of maintaining their businesses exceed the costs of relinquishing family control. The coefficient of 0.109 indicates that, on average, the *ETI* for family firms increases from –0.027 (the *ETI* for a firm in the 25th-30th percentile of our sample) to 0.082 (the *ETI* for a firm in the 75th-80th percentile of our sample) when the state-level tax is reduced. Given that a firm in the 75th percentile of our sample has the *ETI* of zero, this number appears to be economically large and significant.

In columns (3) and (4), we divide the *ETI* into *ETI strength* and *ETI concern* and reestimate the regression in column (2) using these two scores as the dependent variables. We find that the coefficient on the interaction term between *Decrease in Index of Inheritance Taxes* and *Family firm* is negative and significant when *ETI concern* is used as the dependent variable (column (4)), but it is insignificant when *ETI strength* is used as the dependent variable (column (3)). These findings suggest that family firms focus on investment in concern dimensions of employee relations to mitigate potential conflicts with employees that may deteriorate the stakeholder relationship and thus jeopardize their reputation.

In columns (5) and (6), to examine whether a time trend exists in patterns of investment in employee relations, we divide the sample into two subperiods: the period from 1997 to 2002 and the period from 2003 to 2010. We then re-estimate the regression in column (2) separately for these two subgroups. We find that the coefficient on the interaction term between *Decrease in Index of Inheritance Taxes (indicator)* and *Family firm (indicator)* is positive and significant at the 10% level in both subperiods, suggesting that our results are not driven by a potential time trend in the *ETI*.

We conduct additional tests to examine whether our results in column (2) of Table 4 are more pronounced for certain types of family firms and report the results in Online Appendix C. We first classify family firms according to whether the founding family members serve as the directors on the board, or whether they are involved in the management team. We use *Family board presence (indicator)*, which takes

the value of one if two or more family members serve as directors on the board, and zero otherwise, to identify family members' board presence. To the extent that family members sitting on the board have better access to firm-specific private information that is necessary for making informed investment decisions in employee relations (e.g., Anderson, Reeb, and Zhao, 2012), we expect the result to be more pronounced when family representation on the board is significant. Consistent with this prediction, we find that the coefficient on the interaction term between *Decrease in Index of Inheritance Taxes (indicator)* and *Family board presence (indicator)* is positive and significant at the 5% level.[16] We next use indicators for family firms where a founder, a descendant, and a nonfamily member serve as CEO (*Founder CEO firm*, *Descendent CEO firm*, and *Outsider CEO firm*), respectively, to capture family members' involvement in management. Previous studies show that the impact of succession taxes on firm investment is strongest for family firms that experience a succession (Ellul, Pagano, and Panunzi, 2010; Tsoutsoura, 2015), which suggests that the positive impact of reduced inheritance taxes on investment in employee relations should be more pronounced for family firms that are expected to experience a succession such as when founders are involved in management to a certain extent. In support of this view, we find that our main result is evident only when a founder serves as CEO. When we use *Founder-led firm* (family firms in which a founder holds a management position or serves on the board) and *Descendent-led firm* (family firms in which a founder is inactive (i.e., holds neither directorship nor management titles) and at least one descendent holds a management position or serves on the board) to measure the extent to which a founding family member is involved in the management or the board, we find that the effect of family control on the *ETI* is particularly pronounced for founder-led firms, suggesting that an active role of founders in management or on the board can work as a commitment device in long-term employee-friendly policies.[17]

---

[16] The significance of the coefficient on the interaction term between *Decrease in Index of Inheritance Taxes (indicator)* and *Family board presence (indicator)* may be driven by family members' large equity stake rather than by family firms' unique traits that allow family members to have more private information about their firms. To examine this issue, we regress the *ETI* on the sum of equity ownership held by independent directors, control variables used in Table 4 for a subsample of nonfamily firms, and firm and year fixed effects. We find that director equity ownership has an insignificant impact on the *ETI*.

[17] Some studies consider family firms controlled by descendants genuine family firms (e.g., Mehrotra and Morck, 2013) and distinguish them from entrepreneurial firms in which family control is unlikely to pass to descendants (e.g.,

In untabulated tests, to examine whether there exists any pretrend in the *ETI*, we perform a difference-in-differences test using firm-year observations three years before and four years after the year in which the *Index of Inheritance Taxes* is reduced compared to that a year ago (i.e., $Year_t$). We omit $Year_{t-3}$ from the regression. Our key independent variables of interest are the interaction terms between each year indicator (i.e., $Year_{t-2}$, $Year_{t-1}$, ..., and $Year_{t+4}$) and *Family firm*. We find that none of the coefficients on the interaction terms is significant in the pre-period, while the coefficients on the interaction term involving $Year_t$ and $Year_{t+2}$ are positive and significant. These findings suggest that there exists no pretrend before a decrease in the *Index of Inheritance Taxes*.

4.2. Decomposing *ETI* into subindices and computing *ETI* using principal component analyses

We decompose the *ETI* into five subindices to examine which type of investment in employee relations drives the difference in employee treatment between family and nonfamily firms. This subindex analysis allows us to examine whether family firms focus more on investments in certain types of employee relations such as investments in *Union relations* and *Retirement benefits* that require longer-term managerial commitment and effort than on investments in other types of employee relations. Panel A of Table 5 presents results of OLS regressions in which each of five subindices measuring investment in a certain type of employee relations is used as a dependent variable. Each subindex is computed by summing the strength and concern ratings on the corresponding subcomponent. We find some weak evidence that the positive impact of family ownership on the *ETI* shown in Table 4 is mainly driven by investment in

---

Microsoft (Berkshire Hathaway), where the founder Bill Gates (Warren Buffet) explicitly disinherits their children). To better reflect the fact that family succession is more likely to occur at founder firms that are more likely to experience a succession in the future, in untabulated tests, we use a more strict definition of *Founder CEO firms* (*Founder-led firms*) by requiring these firms to have at least one descendent who serves as a director or an executive officer, which suggests that the descendent is more likely to succeed family control, and reestimate the regressions. We restrict the founder's descendants who serve as directors or executive officers to her sons, daughters, grandchildren, sons-in-laws, and daughters-in-laws. We find that our results do not change. To partly address the concern that founder firms are just entrepreneurial technology firms in which family member succession is not intended (Mehrotra and Morck, 2013), we also reestimate the regressions in Table 4 after excluding technology firms, which account for 20.61% of our sample observations. We follow Roughran and Ritter (2004) to define technology firms. Excluding technology firms removes firms such as Apple Computer, Dell Computer, Gateway, Microsoft, and Oracle Corp. from the analysis (Fahlenbrach, 2009). We find that the results remain similar, except for the regression in which the interaction term between *Decrease in Index of Inheritance Taxes* and *Family board presence* is used.

retirement benefits. Since investment in *Retirement benefits* tends to require longer-term managerial commitment and thus is more effective for building durable employee relations by providing long-term security for employees, the result is consistent with the view that family firms' longer-term horizon is one of the important family firm traits that allows them to invest more in employee relations than nonfamily firms**.** Moreover, as shown in Panel B of Online Appendix B, the correlation of *Retirement benefits* with the *ETI* (0.567) is higher than those between other subcomponents and the *ETI*, suggesting that *Retirement benefits* captures a firm's overall investment in employee relations better than other subcomponents.

However, using the index for each subcomponent of the *ETI* in the analysis lowers the power of the tests due to its small variation, which could explain why the results are weak when this index is used as the dependent variable. Therefore, to alleviate this concern, we conduct the principal component analysis (PCA) (e.g., Linck, Netter, and Yang (2008), Custodio, Ferreira, and Matos (2013)) that allows us to incorporate the information contained in each subcomponent of the *ETI* into a one-dimensional index. Since an index calculated by using scores obtained from the PCA analysis can capture the commonality of individual subcomponents, it could capture a firm's employee-friendly policy in a more informative way. We use only factors with an eigenvalue higher than one in the analysis.

Panel B of Table 5 reports the results. In column (1), the dependent variable is *ETI$_{PCA}$*, an index calculated by using scores obtained from the PCA analysis for six strength indicators and four concern indicators. We find that the coefficient on the interaction between *Decrease in Index of Inheritance Taxes* and *Family firm* is positive and significant at the 5% level. This finding corroborates our main results that family firms on average provide more employee benefits than nonfamily firms. In column (2) (column (3)), we use as the dependent variable *ETI$_{PCA\ strengths}$* (*ETI$_{PCA\ concerns}$*), which is calculated by using scores obtained from the PCA analysis for six strength (four concern) indicators.[18] We find that the coefficient on the interaction term is insignificant when *ETI$_{PCA\ strengths}$* is used as the dependent variable, while the corresponding coefficient is negative and significant at the 5% level when *ETI$_{PCA\ concerns}$* is used as the

---

[18] The eigenvalues for *ETI $_{PCA}$*, *ETI $_{PCA\ strengths}$*, and *ETI $_{PCA\ concerns}$* are 1.27, 1.43, and 1.29, respectively.

dependent variable. Thus, family firms actively seek to invest more in employee-friendly policies to improve scores in concern dimensions and thereby avoid controversies over employee relations.

4.3 Changes in employee treatment around changes in family firm status due to the death of founding family members

As a second identification test, we identify the events in which the change of organization form is attributed to deaths (sudden deaths) of founding family members and use them to examine the effect of family control on investment in employee relations. This empirical setting using deaths of founding family members, particularly their sudden deaths, allows us to further address the concern that time-invariant characteristics jointly affect family firm status and a firm's ability to implement employee-friendly policies. This setting also helps mitigate the reverse causality concern that firm performance influences its ability to treat its employees well, rather than the opposite, and thus allows us to address concerns that family owners relinquish their holdings because of their firms' diminishing ability to maintain a high level of investment in employee relations. We define the transition year as the last year in which all founding family members resign or retire from a firm and no longer own equity in the firm. We consider only firms that experience a complete change in control and ownership, which means after the transition, family members own no equity, do not serve on the board and are not on the management team. We restrict the samples to family firms in which the transition occurs within 12 months after deceased dates. This restriction results in 31 death cases. We then require firms to have information on the *ETI* for at least one year prior to the year in which a founding family member died, which further reduces the sample size to 26, of which 16 cases are sudden deaths of founding family members.[19]

---

[19] We follow the definition of sudden death used in Nguyen and Nielsen (2010) who provide detailed definitions of sudden deaths based on the medical literature. To limit attention to deaths that were sudden and not expected by the stock market, they exclude deaths attributed to cancer, complications from illness, past strokes, and surgery. Suicides are also excluded from the sample, as these events may be related to a firm's business conditions, which may already affect the firm's stock price.

Next, we match each family firm that experiences a founding family member's death with a nonfamily firm in a year prior to the death date. We calculate a propensity score by employing a probit model that uses as matching criteria the *ETI*, the natural log of total assets, the natural log of firm age, and two-digit SIC code dummies. Our final sample comprises 26 unique family firms (316 firm-year observations) that become nonfamily firms owing to the death of a founding family member and their 26 matched unique nonfamily firms (360 firm-year observations). We then estimate panel data regressions in which the dependent variable is the *ETI* and the key independent variable of interest is *Family firm status change (indicator) × Post (indicator)*. *Family firm status change (indicator)* takes the value of one for family firms that experience a status change because of the death of a founding family member, and zero for matched nonfamily firms, whereas *Post (indicator)* takes the value of one for a firm in the post-transition period, and zero otherwise. All control variables are measured as of the fiscal year immediately prior to the founding family member's deceased date. We also include firm fixed effects in all regressions to mitigate the concern that time-invariant unobservable firm characteristics jointly affect family firm status and a firm's ability to implement employee-friendly policies.

The results are reported in Table 6. In the first two regressions, we use a pooled sample of family firms that experience deaths of founding family members and their matched nonfamily firms. In column (1), we control for year fixed effects, and in column (2), we replace year fixed effects with industry-year fixed effects to further control for omitted variable biases. We find that the coefficient on the interaction term between *Family firm status change (indicator)* and *Post (indicator)* is negative and significant in both regressions, indicating that family firms invest less in employee relations after they become nonfamily firms. In the last two regressions, we divide deaths into sudden deaths and other deaths and replace *Family firm status change (indicator)* with *Family firm status change due to sudden deaths (indicator)* and *Family firm status change due to other deaths (indicator)*. To the extent that sudden deaths are largely unexpected by the market, focusing on these events separately can further mitigates endogeneity concerns inherent in our study. Column (4) shows that our results are mainly driven by the cases in which the transition is attributed to sudden deaths of founding family members. Specifically, the coefficient estimate on the interaction term

23

between *Family firm status change due to sudden deaths (indicator)* and *Post (indicator)* is −0.712, suggesting that after a transition to nonfamily firms, a firm's *ETI* decreases by 0.712. This result accounts for an economically significant 71.7% of the standard deviation of the *ETI*.[20]

An important concern about the analysis in Table 6 is that some unobservable characteristics may jointly affect a family firm's decision to stay at the firm after the death of a founding family member and its decision to invest in employee relations. Although we cannot completely rule out this endogeneity bias, we conduct two additional analyses to mitigate the concern and report the results in Online Appendix D. First, we conduct a placebo test using a subsample of nonfamily firms in which CEOs suddenly die. To perform a placebo test, we identify 23 unique nonfamily firms that experience the death of a CEO in a given year and then match them with nonfamily control firms that do not experience the death of a CEO. We match each nonfamily firm that experiences the death of a CEO with a nonfamily control firm in a year prior to the death date by using the same propensity-score matching approach used in Table 6. Panel A of Online Appendix D reports the results. We find that the coefficient on the interaction term between indicators for nonfamily firms that experience the (sudden) death of a CEO and *Post (indicator)* is insignificant, suggesting that our findings in Table 6 are not simply attributable to increased uncertainty caused by (sudden) deaths per se.

---

[20] To address potential concerns that a small number of sample firms drive our results, we examine actual changes in the *ETI* in treatment and control firms. Our treatment family firms used in Table 6 comprise 10 sudden deaths (38.46%) and 16 other types of deaths (61.54%). To examine the changes in the *ETI*, we first compute the average (median) *ETI* for pre- and post-period for each firm and then compute the change by subtracting the pre-period average (median) *ETI* from the post-period average (median) *ETI*. Each firm is classified into one of three groups: firms with a positive change, firms with no change, and firms with a negative change. We do not find any systematic evidence that decreases in the *ETI* are driven by only a few firms: among 26 sample firms, only 10 treatment firms (16 control firms) increase the *ETI* in the post-death period using the average changes and only six treatment firms (13 control firms) increase the *ETI* in the post-death period using the median changes. For 10 sudden death cases, three treatment firms (seven control firms) increase the average *ETI* and two treatment firms (seven control firms) increase the median *ETI*. To examine whether our results are driven by the changes in any specific subcomponent of the *ETI*, we replace the dependent variable the *ETI* with the score for each subcomponent and reestimate the regressions in Table 6. We do not find any consistent significant results, suggesting that the *ETI* changes following deaths of founding family members and family firm status change are not driven by a change in any particular component of the *ETI*.

Second, we identify 25 cases in which the family firm continues its business after the death of a founder (*Continued family firms*).[21] We match each of these family firms with a family (nonfamily) control firm that does not experience the death of a founder (CEO) in the year prior to the death date by using the same propensity-score matching approach used in Table 6. We then examine whether the *ETI* of *Continued family firms* does not change in the post-death period. Panel B of Online Appendix D reports the results. Consistent with our expectation, we find that the coefficient on the interaction term between *Continued family firms* and *Post (indicator)* is insignificant in all regressions using family firms and nonfamily firms as the control firms. Thus, investment in employee-friendly policies does not change significantly in family firms that maintain their status in the subsequent period after the death of the founder. These results contrast with those in Table 6 using family firms that experience deaths of founding family members and the subsequent transition to nonfamily firms. Overall, the results support the comparative advantage hypothesis that family firms exploit the comparative advantages of their ownership structure in making large investments in employee relations.

5. Factors Driving the Difference in Employee-Friendly Policies between Family and Nonfamily firms

Our comparative advantage hypothesis suggests that family firms' investment in employee relations is particularly pronounced in circumstances in which their unique characteristics are more evident. The hypothesis also suggests that family firms have greater advantages than nonfamily firms in establishing durable employee relations because of their unique characteristics, such as family owners' longer-term business horizon and their lower level of managerial myopia. To test this view, we focus on firms' life cycle, industry characteristics, and unique family firm traits as the factors that drive the cross-sectional variation in the difference in employee-friendly policies between family and nonfamily firms.

---

[21] The mean (median) age of 25 deceased founders is 81.4 (81). We find that the most frequent cause of the death is cancer (9), followed by complications from diseases (5) and natural causes (3). For the remaining eight cases, information about the cause of death is unknown or unavailable. Thus, none of 25 cases falls into the definition of a "sudden death."

5.1 Impact of firms' life cycle and industry characteristics on employee treatment

We first examine how family firms' investment in employee relations varies across their life cycle and industry characteristics. We expect family firms' incentives to invest in employee relations to be greater in the early stage of their life cycle since the unique characteristics of family firms are more likely to be preserved during this early stage. We also expect family firms to invest more in employee relations when they operate in labor-intensive industries since benefits arising from family owners' monitoring of employees are expected to be greater in such industries. The results are reported in Table 7. We use two indicators as our key independent variables of interest: *Young firm with high labor intensity* (an indicator that takes the value of one if a firm's age falls in the bottom quintile of the sample and its labor intensity is in the top 25th percentile of the sample, and zero otherwise) and *Old firm with low labor intensity* (an indicator that takes the value of one if a firm's age falls in the top quintile of the sample and its labor intensity is in the bottom 25th percentile of the sample, and zero otherwise). We also control for year and firm fixed effects in the regressions. We find that in regressions using a pooled sample of family and nonfamily firms and a subsample of family firms, the coefficients on *Young firm with high labor intensity* are positive and significant, while those on *Old firm with low labor intensity* are insignificant. The test of the difference in coefficients between these two indicators is significant in column (2) that uses a subsample of family firms (*p*-value = 0.022), suggesting that employee-friendly policies are more pronounced among young family firms operating in labor-intensive. In contrast, for a subsample of nonfamily firms, the coefficient on *Old firm with low labor intensity* is positive and significant (column (3)).

In untabulated tests, we reestimate the regressions by replacing high (low) labor intensity measured at the firm level with other industry-level characteristics used in Panel B of Table 3 to measure the extent of the noisiness of firms' business environments (i.e., the percentage of skilled employment, the industry median wage, and the Herfindhal index). We find the coefficient on *Young firm with low skilled employment* is positive and significant at the 1% level, while that on *Old firm with high skilled employment* is insignificant in both a pooled sample and a subsample of family firms. The test of the difference in coefficients is significant (*p*-value = 0.034) for a subsample of family firms. However, for a subsample of

26

nonfamily firms, we find that none of coefficients is significant. For the other two industry-level variables (i.e., industry median wage and Herfindahl index), we find that the magnitude of the coefficient on *Young firm with low wage* (*Young firm with low product market competition*) is larger than that of the coefficient on *Old firm with high wage* (*Old firm with high product market competition*) in a subsample of family firms but their difference is not significant, probably due to the lack of variations within firms when industry-level variables are used. Overall, these findings support the comparative advantage hypothesis.

5.2 Impact of shareholder' (managers') investment horizon and myopia on employee treatment

Other factors that may drive the difference in employee-friendly policies between family and nonfamily firms are the difference in shareholder investment horizon and managerial myopia between them. We capture shareholder investment horizon[22] and managerial myopia by using block ownership held by non-dedicated/dedicated institutions and CEO age, respectively. Prior literature on investor horizon shows that non-dedicated (dedicated) investors increase (decrease) pressure on firms to reduce discretionary expenditures such as research and development expenditures, in order to meet short-term earnings expectations (e.g., Bushee, 1998). Prior studies also show that CEOs behave more myopically as they become old (e.g., Prendergast and Stole, 1996; Serfling, 2014). Therefore, we expect managers in nonfamily firms with higher block ownership held by non-dedicated institutions and those in which CEOs are older and thus encounter greater short-term market pressures to exhibit a higher level of managerial myopia and to therefore invest less in employee relations.

Panel A of Table 8 reports the results. In columns (1)-(3) of Panel A, we estimate regressions in which the dependent variable is the *ETI* and the key independent variables of interest are two indicators that

---

[22] Firm age and the long-term business horizon could capture some common aspect of family firm characteristics. For example, it is possible that family firms focus more on long-term investments in the early stage of their life cycle due to their owners' interest in the firm's long-term survival. To test this possibility, in untabulated tests, we reestimate the regressions in Table 8 after including *Young firm* and its interaction with the variables measuring shareholders' investment horizon/managerial myopia and managerial agency problems: *High non-dedicated ownership*, *Old CEO*, and *High free cash flow and low Tobin's q*. We find that none of the coefficients on the interaction terms are significant. Thus, it appears that the effects of family firms' unique traits (i.e., long-term horizon property of family owners measured by shareholders' investment horizon and managerial myopia) on their employee-friendly policies are not different between the early stage of the life cycle and the late state of the life cycle.

capture the difference in short-term market pressures: an indicator that measures the highest level of short-term market pressures (i.e., non-dedicated investors' ownership is in the top 25th percentile of the sample) and an indicator that measures the lowest level of short-term market pressures (i.e., dedicated investors' ownership is in the top 25th percentile of the sample). We then examine whether the differences in coefficients on these two indicators are significant for a subsample of family (nonfamily firms). In column (1) of Panel A, which uses a pooled sample of family and nonfamily firms, we find that the coefficient on *High dedicated ownership* is positive and insignificant, while that on *High non-dedicated ownership* is negative and significant at the 5% level. The test of the difference in coefficients between these two indicators is significant (*p*-value = 0.058), suggesting that the large presence of non-dedicated investors has a negative impact on investment in employee relations. When we estimate the regression separately for family firms (column (2)) and nonfamily firms (column (3)), we find that the results for nonfamily firms echo those for the full sample, while the coefficient on *High non-dedicated ownership* loses its significance in the regression using family firms. The difference between the coefficient on *High non-dedicated ownership* and that on *High dedicated ownership* is insignificant in the regression using family firms. Thus, managers in nonfamily firms invest less in employee-friendly policies when they encounter more short-term investor pressure. In contrast, there is no such investment behavior for family firms in which long-term controlling family owners exert a strong influence.

In columns (4)-(6) of Panel A, we use two indicators that capture the difference in managerial myopia: an indicator for old CEOs (i.e., CEO age is in the top 25th percentile of the sample) and an indicator for young CEOs (CEO age is in the bottom 25th percentile of the sample). In column (4), we find that firms run by old CEOs, who tend to be more myopic, have significantly lower *ETI* than those run by young CEOs. This negative effect of managerial myopia on investment in employee relations is evident only among a subsample of nonfamily firms (column (6)). For family firms, the coefficients on the indicators for old and young CEOs and their difference are not significant (column (5)), possibly because of active monitoring by controlling family owners who have a long-term horizon.

5.3 Impact of managerial agency problems on employee treatment

Finally, we examine managerial agency problems as a factor that affects firms' employee-friendly policies. Ferrell, Liang, and Renneboog (2016) find that well-governed firms in which managers are properly incentivized are more likely to engage in CSR activities, suggesting that managerial agency problems affect firms' employee-friendly policies. We measure managerial agency problems by using two variables: free cash flow problem and product market competition (measured as Herfindahl index). We expect firms to encounter greater managerial agency problems when their free cash flow is abundant but when growth opportunities are absent (Jensen, 1986)). To the extent that product market competition serves as an external governance mechanism that prevents managers from taking actions that increase their private benefits, firms are likely to have greater managerial agency problems when product market competition is lower. The results are reported in Panel B of Table 8. In columns (1)-(3), we use an indicator for high free cash flow and low Tobin's q (an indicator that takes the value of one if a firm's free cash flow is above the sample median and its Tobin's q is below the sample median, and zero otherwise) and an indicator for low free cash flow and high Tobin's q (an indicator that takes the value of one if a firm's free cash flow is below the sample median and its Tobin's q is above the sample median, and zero otherwise). Consistent with Ferrell, Liang, and Renneboog (2016), we find that the coefficient on *High free cash flow* and *low Tobin's q* (*Low free cash flow* and *high Tobin's q*) is significantly negative (insignificant) in the regression using a pooled sample of family and nonfamily firms (column (1)) and that using a subsample of nonfamily firms (column (3)). The difference between the coefficient on the variable that captures a higher level of managerial agency problems (i.e., *High free cash flow* and *low Tobin's q*) and that on the variable that captures a lower level of managerial agency problems (*Low free cash flow* and *high Tobin's q*) is significant in both regressions. However, for family firms, none of the coefficients on the indicators is significant. The difference in their coefficient is also insignificant (column (2)). Thus, family firms' ability to invest in employee relations is not constrained by managerial agency problems. In columns (4)-(6), we use an indicator for firms in the top (bottom) 25th percentile of the sample industry Herfindahl index as the measure of low (high) product market competition (i.e., a higher (lower) level of managerial agency

problems) and find the results that are similar to those in columns (1)-(3): nonfamily firms encountering lower product market competition invest less in employee-friendly policies. However, this finding does not apply to family firms.

Overall, the results from the subgroup analysis suggest that employee-friendly policies work differently in family and nonfamily firms as firms' ability to invest in employee-friendly policies is influenced by the characteristics of their organizational form.

6. Additional Tests

In this section, we perform several additional tests to provide further evidence on the comparative advantage hypothesis.

6.1 Impact of founding family member monitoring on employee treatment

The results in Table 3 suggest that family firms invest more in employee relations when they operate in labor-intensive industries in which monitoring is relatively difficult and, thus, founding family members' monitoring role is more valuable. To further examine whether founding family members' effective monitoring is an important channel through which family firms invest more in employee relations, as a first test, we examine whether family member directors perform better monitoring than professional directors by comparing their board meeting attendance records. We focus on attendance records because they are the only observable input measure of director performance, which allows us to investigate whether family member directors behave differently than professional directors. Moreover, attendance behavior is important from a governance point of view because attending a board meeting is one of the most important ways for directors to access the firm-specific information necessary to carry out their monitoring duties and exert influence on corporate decisions, such as investment in employee relations. This measure has been widely used in prior literature as an input measure of board diligence and monitoring effort (Adams and

Ferreira, 2008; Cai, Garner, and Walkling, 2009; Li and Srinivasan, 2011).[23] We conduct the director-firm level analysis using family firms. We exclude employee directors from the analysis.

Panel A of Online Appendix E shows the results from linear probability model regressions in which the dependent variable is an indicator that takes the value of one if the director has attended fewer than 75% of meetings during the fiscal year, and zero otherwise. Our key independent variable of interest is *Family member director*, which takes the value of one if the director is a founder or a member of the founding family by either blood or marriage, and zero otherwise. In column (1), we find that the coefficient on *Family member director* is negative and significant at the 5% level after controlling for a set of firm- and director-level characteristics that may affect directors' attendance behavior, suggesting that family member directors have a better attendance record than professional directors. In column (2), we control for two additional variables, meeting fees that directors receive when they attend the meetings and the number of board meetings held in a fiscal year and find that the results do not change.[24] In columns (3) and (4), we exclude founder directors from the analysis following Li and Srinivasan (2011). Li and Srinivasan (2011) argue that founders, who have nonpecuniary ties to the firm, can be more committed to attending board meetings. We find that the results remain unchanged. These results provide supporting evidence that, compared to professional directors, family member directors provide better efforts to gain firm-specific information that is necessary to provide effective monitoring for employee-friendly policies.

We next examine whether family members' monitoring affects family firms' investment in employee relations. Panel B of Online Appendix E reports the results. We use only family firms in the analysis. In column (1), the key independent variable of interest is *At least one founding family member serves on board*, which is an indicator that takes the value of one if a family firm has at least one founding family member who serves on the board, and zero otherwise. Consistent with the result in column (1) of Online Appendix

---

[23] To the best of our knowledge, no study has directly examined whether founding family member directors perform a better monitoring role than professional directors. Prior literature on family firms suggests that directorship is a potential channel through which family members obtain firm-specific private information (e.g., Anderson, Reeb, and Zhao, 2012), which helps them perform an effective monitoring role.

[24] The data on these two variables are available in ExecuComp up to 2005.

C, in which we use the full sample of family and nonfamily firms, we find that the coefficient on *At least one founding family member serves on board* is positive and significant at the 5% level, suggesting that family firms in which a founding family member provides a more active monitoring role via directorship invest more in employee relations than other family firms. In column (2), we add an indicator that takes the value of one if a founder serves on the board but not as a CEO, and zero otherwise (*Non-CEO founder director*). Li and Srinivasan (2011) show that founder-director firms have higher pay-for-performance sensitivity and higher CEO turnover-performance sensitivity than nonfounder firms, suggesting that founder-directors are better monitors. We find that the coefficient on *Non-CEO founder director* is positive and insignificant, while the coefficient on *At least one founding family member serves on board* remains positive and significant, indicating that the positive association between a family member's board membership and the *ETI* is driven by the monitoring role provided by a founding family member than by the presence of the founder per se. In column (3), we separate *At least one founding family member serves on board* into two indicators: *At least one founding family member serves on monitoring committee* (an indicator that takes the value of one if at least one founding family member serves on a monitoring committee, such as the audit, nominating/governance, and compensation committees (Faleye, Hoitash, and Hoitash, 2011), and zero otherwise), and *No founding family member serves on monitoring committee* (an indicator that takes the value of one if a founding family member serves on the board but not as a member of a monitoring committee, and zero otherwise). If the level of investment in employee relations is associated with the founding family members' monitoring role via their directorship, we would expect this positive association to be more pronounced when founding family members play a more active role by serving on a monitoring committee. Consistent with this view, we find that the magnitude of the coefficient on *At least one founding family member serves on monitoring committee* is greater than that of the coefficient on *No founding family member serves on monitoring committee*. However, the difference in their coefficients is not significant.

Finally, to examine whether the positive relation between the founding family member's monitoring role and the *ETI* is more pronounced among family firms with higher labor intensity, we add to the

regressions a measure of a firm's high labor intensity and its interaction with three indicators used in columns (1), (2), and (3). Specifically, we capture a firm's high labor intensity using an indicator that takes the value of one if a firm's labor intensity (the ratio of (1,000 × number of employees) to total sales) is in the top 25th percentile of the sample of family firms, and zero otherwise (*High labor intensity*). The results are reported in columns (4)-(6). We find that the coefficient on interaction terms between *High labor intensity* and *At least one founding family member serves on board* (*At least one founding family member serves on monitoring committee*) is positive and significant at the 5% (10%) level in columns (4) and (5) (column (6)). These results suggest that family firms invest more in employee relations when they operate in labor-intensive industries in which they could benefit more from the founding family member's active monitoring role.

6.2 Alternative measure of employee-friendly policies: Likelihood of inclusion on *Fortune*'s Best Companies list

To test the robustness of our main results using the *ETI*, we use a firm's inclusion on the Best Companies list as an alternative measure of employee-friendly policies (Bae, Kang, and Wang, 2011; Edmans, 2011; Faleye and Trahan, 2011). We obtain data on the Best Companies list for the period between 1998, when *Fortune* first published this list, and 2010. We then combine the Best Companies list for year *t* with our sample from RiskMetrics for year *t*–1. Our final Best Companies sample includes 463 firm-year observations after we exclude private firms, nonprofit organizations, and cooperatives. To the extent that a firm's inclusion on the Best Companies list reflects a firm's ability to implement employee-friendly policies, the comparative advantage hypothesis predicts that family firms are more likely to be included on the list than nonfamily firms. To test this prediction, we estimate probit regressions in which the dependent variable is an indicator that takes the value of one if a firm is included on the Best Companies list, and zero otherwise. In addition to controlling for various firm characteristics used in previous regressions, we include industry-year fixed effects to address the concerns that the probability of a firm's inclusion in list is affected by unobserved heterogeneity across industries over time. The results are reported in Online Appendix F. We

find that the coefficient on *Family firm* is positive and significant, suggesting that family firms are more likely to be named on the Best Companies list than nonfamily firms. These results confirm our results using the *ETI* in Tables 4. [25]

7. Summary and Conclusion

In this paper, we extend the literature on family ownership by examining whether family firms treat their employees better than nonfamily firms. We argue that family firms invest more in employee relations than nonfamily firms since their unique traits provide family firms with comparative advantages in honoring implicit labor contracts and committing to long-term employee relations (the "comparative advantage hypothesis"). We further argue that family firms' investment in employee relations is concentrated in investment that reduces labor conflicts and controversies about employees. Since family owner-managers care about their firm (family) reputation, family firms are less likely to breach implicit contracts, and thus, they are more likely to prioritize their investment in employee relations to mitigate potential conflicts with employees that would undermine their stakeholder relationship.

Consistent with the comparative advantage hypothesis, we find that family firms invest more in employee relations (*ETI*) than nonfamily firms after an exogenous reduction in state inheritance and estate taxes. The result is particularly pronounced when family members serve as a director on the board, when founders serve as CEOs, and when founders are involved in other management positions or board functioning, suggesting that family firms treat their employees better when their owners have information

---

[25] To be included on the Best Companies list, firms are required to participate in *Fortune*'s annual survey conducted for a random sample of their employees. It is possible that owner-managers of family firms have stronger incentives to participate in the survey because of their greater concern for reputation than managers of nonfamily firms. To address this selection bias issue, we examine the likelihood of a firm being eliminated from the Best Companies list conditional on its inclusion on the list. If the Best Companies list includes more family firms simply because a large number of family firms, especially those that are incapable of maintaining employee-friendly policies, participate in the survey in the first place, we should observe a higher probability of a family firm being eliminated from the list. To examine this issue, in untabulated tests, using firms that are included on the Best Companies list, we estimate a logit regression in which the dependent variable is an indicator that takes the value of one if a firm is included on the list in a given year but excluded in a subsequent year, and zero otherwise. We find that family firms are less likely to be eliminated from the list than nonfamily firms. Thus, the results in Online Appendix F are unlikely to be driven by sample selection bias.

advantage and longer-term horizon. Decomposing the *ETI* into *ETI concern* and *ETI strength*, we find that family firms' *ETI concern* scores are lower than those of nonfamily firms, suggesting that family firms focus more on investment to avoid controversies about employee relations. Family firms' better treatment of their employees is also evident when we use a difference-in-difference test that exploits changes in family firm status due to (sudden) deaths of family members and firms' inclusion in *Fortune*'s "100 Best Companies to Work For" list to identify employee-friendly treatment.

We also find that family firms in the early stage of their life cycle invest more in employee relations when they operate in industries in which they can obtain large benefits from family owners' extensive monitoring of employees: industries characterized by higher labor intensity and a higher proportion of unskillful employees. The results suggest that family firms excel in providing better employee treatment when their unique traits are more likely to have a significant impact. In addition, we find that nonfamily firms reduce employee benefits when the shareholder investment horizon is shorter, when managers are subject to more short-term market pressure, or when managerial agency conflicts are greater. In contrast, we find that family firms are not affected by these factors that constrain nonfamily firms' investment in employee-friendly policies.

In summary, our results show that family owner-managers pay more attention to employee-friendly policies that help avoid labor-related disputes or controversies in employee relations, possibly due to their reputation concerns. The results also show that family firms' investment in employee relations is not impeded by constraints such as short-term investor pressure, managerial myopia, and managerial agency problems, which helps elucidate why underinvestment in employee relations is widespread among public firms (particularly nonfamily firms).

References

Adams, Renée, and Daniel Ferreira, 2008, Do directors perform for pay?, *Journal of Accounting and Economics* 46, 154-171

Agle, Bradley R., Ronald Mitchell, and Jeffrey Sonnenfeld, 1999, Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values, *Academy of Management Journal* 42, 507-525.

Alchian, Armen, and Harold Demsetz, 1972, Production, information costs, and economic organization, *American Economic Review* 62, 777-795.

Altman, Edward I., 1968, Financial ratios, discriminant analysis and the prediction of corporate bankruptcy, *Journal of Finance* 23, 589-609.

Anderson, Ronald, and David Reeb, 2003, Founding-family ownership and firm performance: Evidence from the S&P 500, *Journal of Finance* 58, 1301-1328.

Anderson, Ronald, David Reeb, and Wanli Zhao, 2012, Family-controlled firms and informed trading: Evidence from short sales. *Journal of Finance* 67, 351-386.

Anderson, Ronald, Sattar Mansi, and David Reeb, 2003, Founding family ownership and the agency cost of debt, *Journal of Financial Economics* 68, 263-285.

Astrachan, Joseph H., and Roger Tutterow, 1996, The effect of estate taxes on family business: Survey results, *Family Business Review* 9, 303-314.

Bae, Kee-Hong, Jun-Koo Kang, and Jin Wang, 2011, Employee treatment and firm leverage: A test of the stakeholder theory of capital structure, *Journal of Financial Economics* 100, 130-153.

Bakija, Jon, and Joel Slemrod, 2004, Do the rich flee from high state taxes? Evidence from federal estate tax returns, Working paper, *NBER*.

Bassanini, Andrea, Thomas Breda, Eve Caroli, and Antoine Rebérioux, 2013, Working in family firms: Paid less but more secure? Evidence from French matched employer-employee data, *Industrial & Labor Relations Review* 66, 433-466.

Bennedsen, Morten, Margarita Tsoutsoura, and Daniel Wolfenzon, 2017, Drivers of efforts: Evidence from employee absenteeism, Working paper.

Berle, Adolf A., and Gardiner Means, 1932. *The modern corporation and private property* (Macmillan, New York).

Bertrand, Marianne, and Sendhil Mullainathan, 2003, Enjoying the quiet life? Corporate governance and managerial preferences, *Journal of Political Economy* 111, 1043-1075.

Bolton, Patrick, Jos Scheinkman, and Wei Xiong, 2006, Executive compensation and short-termist behaviour in speculative markets, *Review of Economic Studies* 73, 577-610.

Bushee, Brian, 1998, The influence of institutional investors on myopic R&D investment behavior, *Accounting Review* 73, 305-333.

Cagetti, Marco, and Mariacristina De Nardi, 2009, Estate taxation, entrepreneurship, and wealth, *American Economic Review* 99, 85-111.

Cai, Jie, Jacqueline Garner, and Ralph Walkling, 2009, Electing directors, *Journal of Finance* 64, 2389-2421.

Chen, Shuping, Xia Chen, Qiang Cheng, and Terry Shevlin, 2010, Are family firms more tax aggressive than non-family firms?, *Journal of Financial Economics* 95, 41-61.

Claessens, Stijin, Simeon Djankov, and Larry Lang, 2000, The seperation of ownership and control in East Asian corporations, *Journal of Financial Economics* 58, 81-112.

Cornell, Bradford, and Alan Shapiro, 1987, Corporate stakeholders and corporate finance, *Financial Management* 16, 5-14.

Cronqvist, Henrik, Angie Low, and Mattias Nilsson, 2009, Persistence in firm policies, firm origin, and corporate culture: Evidence from corporate spin-offs, Ohio State University, Working paper.

Custódio, Cláudia, Miguel Ferreira, and Pedro Matos, 2013, Generalists versus specialists: Lifetime work experience and chief executive officer pay, *Journal of Financial Economics* 108, 471-492.

DeAngelo, Harry, Linda DeAngelo, and René M. Stulz, 2010, Seasoned equity offerings, market timing, and the corporate lifecycle, *Journal of Financial Economics* 95, 275-295.

Demsetz, Harold, and Kenneth Lehn, 1985, The structure of corporate ownership: Causes and consequences, *Journal of Political Economy* 93, 1155-1177.

Edmans, Alex, 2009, Blockholder trading, market efficiency, and managerial myopia, *Journal of Finance* 64, 2481-2513.

Edmans, Alex, 2011, Does the stock market fully value intangibles? Employee satisfaction and equity prices, *Journal of Financial Economics* 101, 621-640.

Ellul, Andrew, Marco Pagano, and Fabiano Schivardi, 2018, Employment and wage insurance within firms: Worldwide evidence, *Review of Financial Studies* 31, 1298-1340.

Ellul, Andrew, Marco Pagano, and Fausto Panunzi, 2010, Inheritance law and investment in family firms, *American Economic Review* 100, 2414-50.

Fahlenbrach, Rüdiger, 2009, Founder-CEOs, investment decisions, and stock market performance, *Journal of Financial and Quantitative Analysis* 44, 439-466.

Faleye, Olubunmi, and Emery Trahan, 2011, Labor-friendly corporate practices: Is what is good for employees good for shareholders?, *Journal of Business Ethics* 101, 1-27.

Faleye, Olubunmi, Rani Hoitash, and Udi Hoitash, 2011, The costs of intense board monitoring, *Journal of Financial Economics* 101, 160-181.

Ferrell, Allen, Hao Liang, and Luc Renneboog, 2016, Socially responsible firms, *Journal of Financial Economics* 122, 585-606.

Franks, Julian, Colin Mayer, Paolo Volpin, and Hannes F. Wagner, 2011, The life cycle of family ownership: International evidence, *Review of Financial Studies* 25, 1675-1712.

Fudenberg, Drew, and Jean Tirole, 1995, A theory of income and dividend smoothing based on incumbency rents, *Journal of Political Economy* 103, 75-93.

Graham, John R., Campbell R. Harvey, and Shiva Rajgopal, 2005, The economic implications of corporate financial reporting, *Journal of Accounting and Economics* 40, 3-73.

Groshen, Erica L., and Alan B. Krueger, 1990, The structure of supervision and pay in hospitals, *Industrial and Labor Relations Review* 43, 134S-146S.

Helwege, Jean, Christo Pirinsky, and Rene M. Stulz, 2007, Why do firms become widely held? An analysis of the dynamics of corporate ownership, *Journal of Finance* 62, 995-1028.

Hirshleifer, David, 1993, Managerial reputation and corporate investment decisions, *Financial Management* 22, 145-160.

Holtz-Eakin, Douglas, John W. R. Phillips, and Harvey S. Rosen, 2001, Estate taxes, life insurance, and small business, *Review of Economics and Statistics* 83, 52-63.

Jensen, Michael C., 1986, Agency costs of free cash flow, corporate finance, and takeovers, *American Economic Review* 76, 323-329.

Jensen, Michael, and William Meckling, 1976, Theory of the firm: Managerial behavior, agency costs and ownership structure, *Journal of Financial Economics* 3, 305-360.

Kim, E. Han, and Paige Ouimet, 2014, Broad-based employee stock ownership: Motives and outcomes, *Journal of Finance* 69, 1273-319.

Krueger, Alan B., 1991, Ownership, agency, and wages: An examination of franchising in the fast food industry, *Quarterly Journal of Economics* 106, 75-101.

La Porta, Rafael, Florencio Lopez-De-Silanes, and Andrei Shleifer, 1999, Corporate ownership around the world, *Journal of Finance* 54, 471-517.

La Porta, Rafael, Florencio Lopez-de-Silanes, Andrei Shleifer, and Robert Vishny, 1997, Trust in large organizations, *American Economic Review* 87, 333-338.

Landier, Augustin, Vinay Nair, and Julie Wulf, 2009, Trade-offs in staying close: Corporate decision making and geographic dispersion, *Review of Financial Studies* 22, 1119-1148.

Li, Feng, and Suraj Srinivasan, 2011, Corporate governance when founders are directors, *Journal of Financial Economics* 102, 454-469.

Linck, James S., Jeffry M. Netter, and Tina Yang, 2008, The determinants of board structure, *Journal of Financial Economics* 87, 308-328.

Loughran, Tim, and Jay Ritter, 2004, Why has IPO underpricing changed over time?, *Financial Management* 33, 5-37.

March, James, and Herbert Simon, 1958, Organizations. New York, NY: John Wiley & Sons.

Massa, Massimo, and Alminas Zaldokas, 2017, Bankrupt family firms, Working paper.

Mehrotra, Vikas, and Randall Morck, 2013, Chapter 9 - Entrepreneurship and the family firm, in George M. Constantinides, Milton Harris, and Rene M. Stulz, eds.: *Handbook of the Economics of Finance* (Elsevier).

Mueller, Holger, and Thomas Philippon, 2011, Family firms and labor relations, *American Economic Journal: Macroeconomics* 3, 218-245.

Nguyen, Bang Dang, and Kasper Meisner Nielsen, 2010, The value of independent directors: Evidence from sudden deaths, *Journal of Financial Economics* 98, 550-567.

Pfeffer, Jeffrey, 1996. Competitive advantage through people: Unleashing the power of the workforce, Cambridge, MA. Harvard Business School Press.

Prendergast, Canice, and Lars Stole, 1996, Impetuous youngsters and jaded old-timers: Acquiring a reputation for learning, *Journal of Political Economy* 104, 1105-1134

Rebitzer, James B., 1995, Is there a trade-off between supervision and wages? An empirical test of efficiency wage theory, *Journal of Economic Behavior & Organization* 28, 107-129.

Robinson, Sandra, 1996, Trust and breach of the psychological contract, *Administrative Science Quarterly* 41, 574–599.

Serfling, Matthew A, 2014, CEO age and the riskiness of corporate policies, *Journal of Corporate Finance* 25, 251-273.

Shleifer, Andrei, and Lawrence Summers, 1988, Breach of trust in hostile takeovers, in Auerbach. A. (ed) Corporate Takeovers: Causes and Consequences, Chicago. University of Chicago Press.

Shleifer, Andrei, and Robert W. Vishny, 1997, A survey of corporate governance, *Journal of Finance* 52, 737-783.

Sraer, David, and David Thesmar, 2007, Performance and behavior of family firms: Evidence from the French stock market, *Journal of the European Economic Association* 5, 709-751.

Stein, Jeremy C., 1988, Takeover threats and managerial myopia, *Journal of Political Economy* 96, 61-80.

Tsoutsoura, Margarita, 2015, The effect of succession taxes on family firm investment: Evidence from a natural experiment, *Journal of Finance* 70, 649-688.

Verwijmeren, Patrick, and Jeroen Derwall, 2010, Employee well-being, firm leverage, and bankruptcy risk, *Journal of Banking and Finance* 34, 956-964.

Villalonga, Belen, and Raphael Amit, 2006, How do family ownership, control and management affect firm value?, *Journal of Financial Economics* 80, 385-417.

Villalonga, Belén, and Raphael Amit, 2010, Family control of firms and industries, *Financial Management* 39, 863-904.

Appendix
Variable Definition

This appendix provides detailed descriptions of all the variables used in the tables.

Variables	Description	Source
Firm characteristics		
Board size	Number of directors on the board	RiskMetrics
Capital expenditure / assets	Capital expenditure / total assets	Compustat
Free cash flow	(Operating income before depreciation – interest expenses – income taxes – capital expenditures) / book value of total assets	Compustat
Hadlock-Pierce (*H-P*) index	$-0.737 \times$ size $+ 0.043 \times$ size$^2 + 0.04 \times$ Firm age. Size is the log of inflation adjusted (to year 2004) book assets, and firm age is the number of yeas the firm has been on Compustat with a non-missing stock price	Compustat
Institutional ownership	Number of shares held by institutional shareholders that own more than 5% of a firm's equity / total shares outstanding	Thompson13F
Leverage	(Long-term debt + debt in current liabilities) / total assets	Compustat
Log (assets): $billions	Natural log of total assets	Compustat
Log (firm age)	Natural log of firm age. Firm age is the number of years since the founding of the firm or the oldest of its predecessor companies	Various sources
Proportion of independent directors on the board	Ratio of the number of nonfamily independent directors to the total number of directors on the board	RiskMetrics
R&D / sales	Max (0, R&D expenditures) / total sales	Compustat
Return volatility	Standard deviation of a firm's daily stock returns during a fiscal year	CRSP
ROA	Operating income before depreciation / book value of total assets	Compustat
Stock performance	Buy-and-hold stock returns net of buy-and-hold CRSP value-weighted market returns	CRSP
Industry characteristics		
Herfindahl index	Sum of squared market shares of all Compustat firms in the industry (two-digit SIC codes) with no missing value of sales	Compustat
Industry median wage	Median annual wage at the industry level	Bureau of Labor Statistics
Labor intensity	(1000 $\times$ number of employees) / sales	Compustat
Skilled employment	Percentage of industry employment that falls into the following occupational categories: management, architecture and engineering, computer and mathematical; life, physical, and social science (Villalonga and Amit, 2010)	Bureau of Labor Statistics
Voluntary employee turnover	Industry-level (two-digit SIC codes) voluntary employee turnover rate for 2001	U.S. Department of Labor

Table 1
Summary Statistics

The table presents summary characteristics (mean) for the sample firms. The sample comprises 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. We omit firms for which employee relations ratings are not available in the KLD database. Next, we delete firms with missing stock return data in the CRSP or missing financial data in Compustat. We also exclude firms in regulated industries (SIC codes between 4900 and 4999 and between 6000 and 6999), firms not headquarterd in the U.S., and firms in which the number of employees is missing or fewer than 100. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. ***, **, and * indicate that the mean difference between columns (1) and (2) is significant at the 1%, 5%, and 10% levels, respectively.

Variable	Family firms (1)	Nonfamily firms (2)	Test of difference (1) - (2)
Firm Characteristics			
Total assets ($ billions)	5.260	7.640	-2.380***
Firm age	47.268	56.190	-8.922***
Leverage	0.188	0.219	-0.031***
R&D / sales	0.042	0.040	0.002
ROA	0.157	0.155	0.002
Stock performance	0.073	0.059	0.014*
Capital expenditure / assets	0.059	0.054	0.005***
Return volatility	0.110	0.105	0.005***
Institutional ownership	0.174	0.189	-0.015***
Board size	9.363	9.519	-0.156***
Proportion of independent directors on the board	0.652	0.768	-0.116***
Free cash flow	0.050	0.056	-0.006***
Modified Z-score	2.265	2.057	0.208***
Hadlock-Pierce (*H-P*) index	-2.130	-2.039	-0.091***
Industry Characteristics			
Labor-intensive industry (indicator)	0.325	0.248	0.077***
Industry-level voluntary employee turnover (as of year 2001)	1.521	1.280	0.241***
Percentage of skilled employment	21.102	22.325	-1.223***
Industry median wage	36,595.046	38,323.070	-1,728.02***
Herfindahl index	0.066	0.063	0.003**

Table 2
Distribution of Employee Treatment Index (*ETI*)

The table presents the distributions of the *Employee Treatment Index* (*ETI*) and its subindices by family control (Panel A), mean indices for six subcomponents of the *ETI* by family control (Panel B), the mean *ETI* by firms' life cycle and family control (Panel C), the mean *ETI* by industry (two-digit SIC code) and family control (Panel D). The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. *ETI strength* (*ETI concern*) is computed by summing six strength (four concern) indicators for the employee relations dimension. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The numbers in square brackets are the counts per cell. ***, **, and * indicate that the mean and median differences between rows (columns) (1) and (2) are significant at the 1%, 5%, and 10% levels, respectively.

Panel A. Breakdown of the *ETI* into indices for the strength and concern dimensions by family control

	ETI			*ETI* strength			*ETI* concern		
Family control	Mean	Median	Standard deviation	Mean	Median	Standard deviation	Mean	Median	Standard deviation
Full sample [10,211]	-0.016	0.000	0.993	0.436	0.000	0.748	0.453	0.000	0.684
Family firms [4,340]: (1)	-0.027	0.000	0.943	0.374	0.000	0.692	0.401	0.000	0.644
Nonfamily firms [5,871]: (2)	-0.008	0.000	1.028	0.481	0.000	0.784	0.491	0.000	0.709
Test of difference: (1) - (2)	0.019	0.000	-	-0.107***	0.000	-	-0.089***	0.000	-

Panel B. Breakdown of the *ETI* (mean) into indices for six subcomponents by family control

		Full sample	Family firms (1)	Nonfamily firms (2)	Test of difference (1) - (2)
Subcomponent of the *ETI*					
Employee involvement	Strengths	0.137	0.133	0.140	-0.007
Union relations	Strengths	0.022	0.014	0.028	-0.014***
	Concerns	0.038	0.033	0.041	-0.008**
Health and safety	Strengths	0.075	0.038	0.103	-0.065***
	Concerns	0.117	0.094	0.133	-0.039***
Retirement benefits	Strength	0.063	0.047	0.075	-0.028***
	Concerns	0.229	0.218	0.237	-0.019**
Cash profit sharing	Strengths	0.105	0.091	0.115	-0.024***
Others	Strengths	0.061	0.068	0.056	0.012**
	Concerns	0.074	0.061	0.084	-0.022***

Panel C. Mean *ETI* by a firm's life cycle (firm age) and family control

	Firm age quintiles				
Family control	5 (old)	4	3	2	1 (young)
Family firms: (1)	0.120	-0.319	-0.122	0.111	0.031
	[719]	[718]	[930]	[1,037]	[936]
Nonfamily firms: (2)	0.061	-0.069	0.038	0.017	-0.089
	[1,346]	[1,275]	[1,098]	[1,004]	[1,148]
Test of difference: (1) - (2)	0.059	-0.250***	-0.160***	0.094**	0.120***

Panel D. Mean *ETI* by industry and family control

	Family firms (1)	Nonfamily firms (2)	Test of difference (1) - (2)
Industry			
Agriculture, forestry & fishing (01-09)	-0.500	0.182	-0.682**
	[10]	[11]	
Mining & construction (10-17)	-0.083	-0.057	-0.026
	[217]	[396]	
Manufacturing (20-39)	0.032	0.145	-0.113***
	[2,383]	[3,487]	
Transportation & communications (40-48)	0.000	-0.135	0.135
	[249]	[316]	
Wholesale & retail trade (50-59)	-0.259	-0.547	0.288***
	[774]	[828]	
Services (70-89)	0.045	-0.043	0.088**
	[707]	[833]	

Table 3
Labor Characteristics by Industry and Employee Treatment Index (*ETI*)
by Industry Characteristics and Family Control

Panel A of this table presents labor intensity and noisy environment characteristics by industry. Panel B presents the mean *Employee Treatment Index (ETI)* by industry characteristics and family control. The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. "High group" firms are the firms in the top 25th percentile of the sample operating in the industry, and "Low group" firms are the remaining firms. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. The numbers in square brackets are the counts per cell. ***, **, and * indicate that the mean differences between family and nonfamily firms are significant at the 1%, 5%, and 10% levels, respectively.

Panel A. Labor intensity and noisy environment characteristics by industry

Industry	Labor intensity	Voluntary turnover	Skilled employment	Industry median wage	Herfindahl Index
Agriculture, forestry & fishing (01-09)	4.540	N/A	17.552	26,149	0.288
Mining & construction (10-17)	2.368	0.859	17.961	41,647	0.077
Manufacturing (20-39)	4.382	0.940	23.361	38,171	0.050
Transportation & communications (40-48)	4.540	1.253	10.284	40,899	0.082
Wholesale & retail trade (50-59)	8.240	2.885	6.718	23,956	0.103
Services (70-89)	7.683	1.850	35.229	46,647	0.059
Industry average	5.374	1.397	21.798	37,577	0.064

Panel B. *ETI* by industry characteristics and family control

	High group			Low group			Test of difference		
	Full	Family firms	Nonfamily firms	Full	Family firms	Nonfamily firms			
Industry characteristic	(1)	(2)	(3)	(4)	(5)	(6)	(1) - (4)	(2) - (3)	(5) - (6)
Labor intensity	-0.214	-0.161	-0.262	0.049	0.024	0.065	-0.263***	0.101***	-0.041*
	[2,561]	[1,215]	[1,346]	[7,650]	[3,125]	[4,525]			
Skilled employment	0.054	0.030	0.070	-0.390	-0.340	-0.441	0.444***	-0.040*	0.101**
	[6,139]	[2,491]	[3,648]	[2,054]	[1,030]	[1,024]			
Industry median wage	0.045	0.026	0.058	-0.298	-0.246	-0.352	0.343***	-0.032	0.106***
	[6,821]	[2,769]	[4,052]	[2,266]	[1,150]	[1,116]			
Industry Herfindahl index	-0.270	-0.231	-0.299	0.067	0.042	0.085	-0.337***	0.068*	-0.043*
	[2,588]	[1,111]	[1,447]	[7,653]	[3,229]	[4,424]			

Table 4

Table 4
Family Control and Employee Treatment: Difference-in-Differences Tests
Using Changes in State-level Inheritance and Estate Taxes

The table presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)* in columns (1), (2), (5), and (6), *ETI strength* in column (3), and *ETI concern* in column (4). The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. In column (5) ((6)), we use a sample of the first subperiod (1995-2002) (second subperiod (2003-2010)). The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. *ETI strength* (*ETI concern*) is computed by summing six strength (four concern) indicators for the employee relations dimension. *Decrease in Index of Inheritance Taxes* is an indicator that takes the value of one if the index of inheritance taxes in a given year is lower than that a year ago, and zero otherwise. *Index of Inheritance Taxes* is constructed by summing the values of four indicator variables that take the value of one if the state-level estate tax, inheritance tax, generation skipping tax, or gift tax are applicable in a given year, and zero otherwise, respectively (Massa and Zaldokas, 2017). *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering within firms. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	Full sample				Sample of the first subperiod	Sample of the second subperiod
	ETI		*ETI strength*	*ETI concern*	*ETI*	
	(1)	(2)	(3)	(4)	(5)	(6)
Decrease in Index of Inheritance Taxes (indicator): a	-0.020	-0.072*	-0.040*	0.036	0.034	-0.054*
	(0.488)	(0.077)	(0.090)	(0.255)	(0.487)	(0.089)
Family firm (indicator): b	-0.116	-0.127	-0.095	0.016	-0.080	-0.169*
	(0.231)	(0.192)	(0.172)	(0.780)	(0.686)	(0.063)
a × b		0.109**	0.015	-0.091***	0.138*	0.072*
		(0.025)	(0.644)	(0.009)	(0.074)	(0.086)
Log (assets)	-0.005	-0.006	0.018	0.035	-0.047	-0.065
	(0.945)	(0.936)	(0.724)	(0.368)	(0.533)	(0.400)
Log (firm age)	0.213	0.215	0.162	-0.028	-0.011	0.064
	(0.218)	(0.215)	(0.224)	(0.875)	(0.971)	(0.794)
R&D / sales	0.389	0.402	-0.199	-0.604***	-0.459	-0.215
	(0.224)	(0.211)	(0.508)	(0.006)	(0.592)	(0.600)
Leverage	0.140	0.136	0.062	-0.066	-0.020	0.093
	(0.276)	(0.289)	(0.507)	(0.614)	(0.940)	(0.587)
ROA	-0.160	-0.168	-0.357	-0.168	-0.777*	0.452
	(0.711)	(0.699)	(0.154)	(0.699)	(0.072)	(0.398)
Stock performance	-0.045*	-0.045*	-0.039***	0.005	-0.074**	-0.018
	(0.091)	(0.088)	(0.006)	(0.771)	(0.048)	(0.371)
Capital expenditure / assets	0.490	0.500	0.224	-0.255	-0.345	0.186
	(0.489)	(0.486)	(0.647)	(0.717)	(0.721)	(0.691)
Return volatility	-0.155	-0.165	0.019	0.231	0.294	-0.012
	(0.415)	(0.381)	(0.887)	(0.176)	(0.441)	(0.951)
Institutional ownership	-0.166	-0.166	-0.217**	-0.061	-0.193	-0.022
	(0.164)	(0.162)	(0.013)	(0.472)	(0.394)	(0.799)
Board size	0.022**	0.022**	0.010	-0.011*	0.010	-0.000
	(0.046)	(0.044)	(0.188)	(0.089)	(0.468)	(0.977)
Proportion of independent directors on the board	-0.068	-0.070	-0.075	0.000	0.116	-0.151
	(0.702)	(0.694)	(0.550)	(0.999)	(0.530)	(0.458)
Free cash flow	0.797	0.810	0.621***	-0.179	0.966	-0.308
	(0.117)	(0.112)	(0.004)	(0.710)	(0.129)	(0.463)
Modified Z-score	-0.010	-0.010	0.003	0.014**	0.002	0.022**
	(0.220)	(0.186)	(0.713)	(0.045)	(0.938)	(0.015)
H-P index	-0.164	-0.170	-0.098	0.004	-0.173	-0.525
	(0.557)	(0.543)	(0.516)	(0.988)	(0.674)	(0.105)
Firm fixed effects	Y	Y	Y	Y	Y	Y
Industry-year fixed effects	Y	Y	Y	Y	Y	Y
State fixed effects	Y	Y	Y	Y	Y	Y
Number of observations	10,211	10,211	10,211	10,211	3,403	6,808
Adj. R^2	0.630	0.630	0.692	0.598	0.720	0.685

Table 5
Family Control and Employee Treatment: Difference-in-Differences Tests Using Subcomponents of Employee Treatment Index (*ETI*) and Principal Component Analysis

The table presents estimates of OLS regressions by subcomponents of the *Employee Treatment Index (ETI)*. The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. In Panel A, the dependent variable is the index computed by summing the strength and concern ratings on each subcomponent of the *ETI*. In Panel B, the dependent variable is *ETI$_{PCA}$* (an index calculated using scores obtained from the principal component analysis for six strength indicators and four concern indicators) in column (1), *ETI$_{PCA\ strengths}$* (an index calculated using scores obtained from the principal component analysis for six strength indicators) in column (2), and *ETI$_{PCA\ concerns}$* (an index calculated using scores obtained from the principal component analysis for four concern indicators) in column (3). *Decrease in Index of Inheritance Taxes* is an indicator that takes the value of one if the index of inheritance taxes in a given year is lower than that a year ago, and zero otherwise. *Index of Inheritance Taxes* is constructed by summing the values of four indicator variables that take the value of one if the state-level estate tax, inheritance tax, generation skipping tax, or gift tax are applicable in a given year, and zero otherwise, respectively (Massa and Zaldokas, 2017). *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. Online Appendix B provides detailed descriptions of how KLD evaluates strengths and concerns in each subcomponent of employee relations. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering within firms. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. OLS regressions of the index for each subcomponent of the *ETI* on family control

Independent variable	Union relations (1)	Employee involvement (2)	Retirement benefits (3)	Cash profit sharing (4)	Health and safety (5)
Decrease in Index of Inheritance Taxes (indicator): a	-0.002	0.012	-0.026	-0.015	-0.017
	(0.793)	(0.410)	(0.243)	(0.175)	(0.263)
Family firm (indicator): b	-0.047**	-0.002	0.033	-0.064*	-0.025
	(0.020)	(0.943)	(0.596)	(0.053)	(0.523)
a × b	0.009	0.019	0.039*	-0.003	0.028
	(0.444)	(0.252)	(0.098)	(0.817)	(0.170)
Control variables (same as those in Table 4)	Y	Y	Y	Y	Y
Firm fixed effects	Y	Y	Y	Y	Y
Industry-year fixed effects	Y	Y	Y	Y	Y
State fixed effects	Y	Y	Y	Y	Y
Number of observations	10,211	10,211	10,211	10,211	10,211
Adj. R^2	0.543	0.660	0.484	0.635	0.373

Panel B. Principal component analysis

Independent variable	ETI$_{PCA}$ (1)	ETI$_{PCA\ strengths}$ (2)	ETI$_{PCA\ concerns}$ (3)
Decrease in Index of Inheritance Taxes (indicator): a	-0.090**	-0.054	0.040
	(0.038)	(0.264)	(0.345)
Family firm (indicator): b	-0.113	-0.040	0.063
	(0.153)	(0.590)	(0.406)
a × b	0.110**	0.029	-0.104**
	(0.043)	(0.470)	(0.046)
Control variables (same as those in Table 4)	Y	Y	Y
Firm fixed effects	Y	Y	Y
Industry-year fixed effects	Y	Y	Y
State fixed effects	Y	Y	Y
Number of observations	10,211	10,211	10,211
Adj. R^2	0.608	0.685	0.624

Table 6
Changes in Employee Treatment around Changes in Family Firm Status Due to Deaths of Founding Family Members: Difference-in-differences Test

The table presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)*. The sample consists of 26 unique family firms that become nonfamily firms because of the death of a founding family member and their 26 matched unique nonfamily firms. We match each family firm that experiences a founding family member's death with a nonfamily firm in a year prior to the death date by using a propensity-score matching approach. We use as matching criteria the *ETI*, the natural log of total assets, the natural log of firm age, and two-digit SIC code dummies. To ensure that firms experience a complete change in control and ownership, we include only cases in which after the transition, family members own no equity and do not serve as an executive officer or a director within 12 months after the death of a founding family member. *Family firm status change (indicator)* takes the value of one for family firms that experience a status change because of the death of a founding family member, and zero for matched nonfamily firms. *Post (indicator)* takes the value of one for firm-year observations in the post-transition period, and zero otherwise. *Family firm status change due to sudden deaths (indicator)* takes the value of one for family firms that experience a status change because of the sudden death of a founding family member, and zero otherwise. Sudden deaths are defined in accordance with Neuyen and Nielsen (2010). *Family firm status change due to other deaths (indicator)* takes the value of one for family firms that experience a status change because of the death of a founding family member that is not sudden, and zero otherwise. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering within firms. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	ETI			
	(1)	(2)	(3)	(4)
Family firm status change (indicator) × Post (indicator)	-0.552***	-0.402*		
	(0.001)	(0.088)		
Family firm status change due to sudden deaths (indicator) × Post (indicator)			-0.420**	-0.712***
			(0.029)	(0.006)
Family firm status change due to other deaths (indicator) × Post (indicator)			-0.644***	-0.015
			(0.003)	(0.974)
Control variables (same as those in Table 4)	Y	Y	Y	Y
Firm fixed effects	Y	Y	Y	Y
Year fixed effects	Y	N	Y	N
Year-industry fixed effects	N	Y	N	Y
Number of observations	453	453	453	453
Adj. R^2	0.108	0.359	0.108	0.368

Table 7
Impact of Firms' Life Cycle and Industry Characteristics on Employee Treatment

The table presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)*. The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. *Young (old) firm with high (low) labor intensity* is an indicator that takes the value of one if a firm's age falls in the bottom (top) quintile of the sample and its labor intensity is in the top (bottom) 25th percentile of the sample, and zero otherwise. We require industries to have at least four firms. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering within firms. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Independent variable	Full sample (1)	Family firms (2)	Nonfamily firms (3)
Young firm with high labor intensity (indicator): a	0.161**	0.243**	0.103
	(0.021)	(0.012)	(0.306)
Old firm with low labor intensity (indicator): b	0.171	-0.154	0.310**
	(0.166)	(0.284)	(0.049)
Log (assets)	-0.040	0.026	-0.084
	(0.454)	(0.735)	(0.232)
R&D / sales	0.745	1.079*	0.195
	(0.106)	(0.081)	(0.740)
Leverage	0.166	-0.107	0.317
	(0.271)	(0.596)	(0.150)
ROA	-0.080	-0.670	0.253
	(0.822)	(0.194)	(0.592)
Stock performance	-0.040**	-0.002	-0.055**
	(0.033)	(0.952)	(0.026)
Capital expenditure / assets	0.360	0.862	-0.271
	(0.496)	(0.296)	(0.698)
Return volatility	-0.662***	-0.366	-0.652*
	(0.007)	(0.231)	(0.058)
Institutional ownership	-0.166	-0.020	-0.328**
	(0.143)	(0.906)	(0.028)
Board size	0.025**	0.038**	0.010
	(0.016)	(0.024)	(0.409)
Proportion of independent directors on the board	-0.066	-0.186	0.023
	(0.596)	(0.286)	(0.891)
Free cash flow	0.827**	1.308**	0.368
	(0.026)	(0.021)	(0.426)
Modified Z-score	-0.016	-0.047***	0.043
	(0.392)	(0.003)	(0.190)
H-P index	0.052	0.306	-0.224
	(0.861)	(0.497)	(0.552)
P-value for the test of the difference in coefficients between a and b	(0.944)	(0.022)**	(0.269)
Firm fixed effects	Y	Y	Y
Year fixed effects	Y	Y	Y
Number of observations	9,598	4,081	5,517
Adj. R^2	0.082	0.089	0.093

Table 8
Impact of Shareholders' (Managers') Investment Horizon/Myopia and Managerial Agency Problems
on Employee Treatment

The table presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)*. The sample consists of 10,211 firm-year observations covered in RiskMetrics during the 1996 to 2010 period. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. In Panel A, *High dedicated (non-dedicated) ownership* takes the value of one if a firm's ownership by dedicated (non-dedicated) investors is in the top 25th percentile of the sample, and zero otherwise. Dedicated (non-dedicated) ownership is computed as the ratio of the number of shares held by dedicated (transient and quasi-indexer) institutional shareholders that own more than 5% of a firm's equity to the total number of shares outstanding (Bushee, 1998). *Old (Young) CEO* is an indicator that takes the value of one if the CEO age is in the top (bottom) 25th percentile of the sample, and zero otherwise. In Panel B, *High (Low) free cash flow and low (high) Tobin's q* is an indicator that takes the value of one if a firm's free cash flow is above (below) the sample median and its Tobin's *q* is below (above) the sample median, and zero otherwise. *High (Low) product market competition* takes the value of one for firms in the bottom (top) 25th percentile of the sample industry's Herfindahl index (at the two-digit SIC code level), and zero otherwise. Control variables are the same as those in Table 4, except for institutional ownership in columns (1)-(3) of Panel A and free cash flow in columns (1)-(3) in Panel B. All regressions include year and firm fixed effects. *Family firms* are defined as those in which founding family members, either individually or as a group, have equity ownership exceeding 5% in the firm, or in which at least one founding family member sits on the board or is in top management. The appendix provides detailed descriptions of the variables. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering within firms. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Pane A. Impact of shareholders' (managers') investment horizon and myopia on employee treatment

Independent variable	Full sample (1)	Family firms (2)	Nonfamily firms (3)	Full sample (4)	Family firms (5)	Nonfamily firms (6)
High dedicated ownership (indicator): a	0.014	0.062	-0.025			
	(0.607)	(0.105)	(0.486)			
High non-dedicated ownership (indicator): b	-0.055**	0.013	-0.102***			
	(0.034)	(0.719)	(0.004)			
Young CEO (indicator): c				-0.026	-0.008	-0.054
				(0.411)	(0.882)	(0.170)
Old CEO (indicator): d				-0.101***	-0.064	-0.141***
				(0.003)	(0.242)	(0.001)
P-value for the test of the difference in coefficients between a and b (c and d)	(0.058)*	(0.299)	(0.031)**	(0.057)*	(0.371)	(0.087)*
Number of observations	10,211	4,340	5,871	10,211	4,340	5,871
Adj. R^2	0.080	0.100	0.086	0.082	0.100	0.091

Panel B. Impact of managerial agency problems on employee treatment

Independent variable	Full sample (1)	Family firms (2)	Nonfamily firms (3)	Full sample (4)	Family firms (5)	Nonfamily firms (6)
High free cash flow & low Tobin's *q* (indicator): a	-0.068**	-0.011	-0.084**			
	(0.014)	(0.782)	(0.027)			
Low free cash flow & high Tobin's *q* (indicator): b	-0.017	-0.025	0.000			
	(0.559)	(0.528)	(0.995)			
High product market competition (indicator): c				0.052	0.009	0.066
				(0.208)	(0.865)	(0.221)
Low product market competition (indicator): d				-0.086	-0.044	-0.142*
				(0.103)	(0.555)	(0.051)
P-value for the test of the difference in coefficients between a and b (c and d)	(0.194)	(0.806)	(0.097)*	(0.049)**	(0.564)	(0.027)**
Number of observations	10,211	4,340	5,871	10,211	4,340	5,871
Adj. R^2	0.080	0.097	0.088	0.081	0.099	0.089