Online Appendix

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

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This online Appendix contains the detailed discussion on state inheritance, gift, and estate taxes (Appendix A), definitions of the *Employee Treatment Index* (*ETI*) subcomponents and Pearson correlation coefficients among the *ETI* and its subcomponents (Appendix B), and additional robustness tests of our main results (Appendices C-G).

Appendix A
State Inheritance, Gift, and Estate Taxes

This appendix discusses the importance of state inheritance, gift, and estate taxes in family businesses and their differences compared to federal estate taxes.

Several studies suggest that inheritance and estate taxes bring significant economic consequences to family firms. For example, using a 2002 policy change in Greece that reduced the tax on intrafamily transfers of businesses (i.e., succession tax), Tsoutsoura (2015) finds that succession taxes lead to a more than 40% decline in investment around family successions, slow sales growth, and depletion of cash reserves. Cagetti and De Nardi (2009) also show that estate taxes distort the investment decisions of family business, especially the decisions of large firms. Although effective tax rates can be reduced significantly through various estate tax avoidance schemes and extra deductions, firms could still face a great level of uncertainty about the effective progressivity of the estate tax and its exemption level (Cagetti and De Nardi, 2009). Other studies further show that estate taxes have disincentive effects by preventing the owners of family businesses from passing their enterprises to heirs due to direct and

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indirect costs associated with estate planning and other compliance costs (Holtz-Eakin, Phillips, and Rosen, 2001). A survey of family business owners (Astrachan and Tutterow, 1996) shows that 61% of the respondents believe that estate taxes threaten the survival of their business, and one-third of the respondents sell all or part of their business to pay estate taxes. The case of Sanderson Farms Inc., the third largest poultry producer in the U.S., illustrates the financial burdens imposed on founding family members by inheritance and estate taxes. In its 2004 proxy statement, the company reports that the family estate pledged all the shares of common stock owned by the estate to secure its obligations under its credit agreement with two banks and used the proceeds of its borrowing of $13 million to pay estate taxes.[1]

State-level inheritance and estate taxes have significant impacts on the wealth of individuals at the top of the federal-level tax brackets. For example, an increasing number of estates became subject to state taxes in 2001 (i.e., Economic Growth Tax Relief Reconciliation Act of 2001 (EGTRRA)) when Congress changed the law to phase out the special credit that in effect allowed states to tax estates without actually costing the estate any money.[2] Moreover, inheritance taxes are levied only at the state-level since the federal government does not impose any inheritance tax on individuals. According to the Tax Foundation special report (2017), state inheritance and estate taxes raised $5.1 billion in fiscal year 2016, accounting for 0.6% of state tax revenues, while the federal estate tax collection in the same year was estimated to be about $21.4 billion, representing 0.7% of federal tax revenues. Thus, the importance of state estate and inheritance taxes in state government revenues appears to be comparable to that of federal estate taxes in federal government revenues. Supporting the fact that state estate and inheritance taxes are a significant part of taxpayers' liabilities, Bakija and Slemrod (2004) show that even some rich individuals flee states that impose relatively heavy state estate and inheritance taxes. They further note that state estate and inheritance taxes have a significant impact on the wealth of individuals, encouraging them to engage in aggressive tax avoidance strategies. In particular, with the elimination of the credit for state inheritance and estate taxes and the federal unified credit that exempts a large number of estates, state-level estate and inheritance taxes account for a substantial portion of the total liability of the residents of states that impose such taxes during our sample period.

State-level taxes are closely linked to the federal taxes. A certain amount of state estate and gift taxes are credited dollar for dollar against the federal tax liability owed. This, what is called 'pick-up'

[1] It is possible that family firms could lobby for tax law changes in favor of the founding family members. However, considering a long public debate over estate and inheritance taxes before any changes in these rates in the U.S. and a large number of their changes in many different states, it is difficult to identify the timing of family firms' engagement in lobbying activities and whether their lobbying activities play a significant and direct role in changing the tax rates in each state.

[2] "No need for states to fear estate taxes," *Washington Post* (July 3, 2005)

tax, or 'soak-up' tax, allows the state to collect some of the federal estate tax revenue without adding to the total tax burden on the estate. However, there are still large cross-sectional and time-series variation in the state-level inheritance and estate tax codes, which have significant wealth impact on individuals on top of federal taxes.[3] For example, cross-sectional variation in taxation across states increases substantially, especially after the federal tax reform in 2001.[4] The EGTRRA includes a four-year phase out of the credit for state inheritance and estate taxes among its provisions, providing a significant increased estate tax exclusion and decreasing top tax rates by 2010. The elimination of the tax credit has prompted various responses from states. Some states have eliminated their estate and inheritance taxes,[5] while others decouple from the federal estate tax to maintain their pick-up tax revenues. For example, Rhode Island and Wisconsin initiated changes by setting the state's estate tax equivalent to the amount of the federal credit as of a specific date, and as a result, the state-level tax liability net of the federal tax credit would increase. Although 30 states repealed all four different types of state taxes especially in 2005 in line with the federal tax reform in 2001, other states still impose different types of state-level taxes, thus creating large variation across states in the timing of the changes during our sample period of 1996-2010.

Given the complexity of the taxation system in the U.S., which has various types of relevant taxes, top marginal tax rates, and applicable exempted values across states and over time, in our analysis, we focus on staggered changes in four different types of taxes that are imposed on the residents of the state in which a firm is headquartered in a given year rather than using effective tax rates. Specifically, in estimating the regressions, we measure the state-level tax law changes every year by considering changes in the *Index of Inheritance Taxes*, a summation of four indicator variables that takes the value of one if the state-level estate tax, inheritance tax, generation skipping tax, or gift tax exists in a state in a given year, and zero otherwise. Since these four different types of taxes are determined as an integrated set of state taxes, it is difficult to separately assess the effect of each tax on a firm's investment in employee relations. Although the differences exist in each type of taxes, they are construed together, making it difficult to measure its respective contribution. For example, the estate tax is imposed on the decedent's entire estates prior to the transfers regardless of how they are disbursed, whereas the inheritance tax

[3] For example, in 2000, two states (i.e., Connecticut and Tennessee) imposed all four different types of state taxes (i.e., estate tax, inheritance tax, generation skipping tax, and gift tax), Wisconsin imposed no state tax, and other states imposed either one, two, or three different types of state taxes.

[4] The Tax Foundation special report (2017) provides a summary of history of state inheritance and estate taxes and features of each state tax codes.

[5] Competition to keep state estate taxes low has become intense among the states mainly due to the concerns that affluent and wealthy taxpayers move out of state to avoid estate taxes ("Why More States Are Killing Estate Taxes," *Wall Street Journal* (June 16, 2017)).

applies to individuals receiving properties from a decedent's estate.[6] Both the generation skipping tax and gift tax exist to limit avoidance of the estate and inheritance taxes by lifetime giving before death.[7] Since it is extremely difficult to compute the average effective rates for each owners at different states, using the *Index of Inheritance Taxes* allows us to measure the permissiveness of state taxes, and thus to capture family owner-managers' incentives to maintain their businesses across states at different periods.

[6] Estate and inheritance taxes are imposed on the transfer of wealth that occurs at death and they are determined by the decedent's state of residence. While inheritance tax rates may differ depending on the type of beneficiary, an estate tax is imposed on the net estate of the deceased. Intangible property is taxed by the state in which the decedent was primarily domiciled, and tangible property is taxed by the state in which it is physically located. State tax laws and tax forms verify that the location of the heirs is irrelevant to state inheritance taxation (see Bakija and Slemrod, 2004) who provide detailed information on how the tax base of state inheritance and estate taxes is determined). The information on the state incorporation of a firm is also irrelevant for taxation purposes. If the decedent owns property in multiple states, the effective estate and inheritance tax rates could be a weighted average of the rates for multiple states. We cannot take this particular complication into account in our analyses due to the lack of information available. We only know the state in which the firm is headquartered and do not know which state the taxpayer claims as the primary domicile. We assume that the significant portion of the estate subject to estate tax is located in the state in which the firm is headquartered, and the taxpayer is domiciled primarily in the state of the firm's headquarters.

[7] The generation skipping tax is incurred when grandparents directly transfer money or property to their grandchildren without first leaving it to their parents. The gift tax is imposed on the transfer of ownership of property.

Appendix B
Definitions of the *ETI* subcomponents and Their Correlations

Panel A of this appendix provides the details about how KLD evaluates strengths and concerns in each category of employee relations. *Retirement benefits* and *Cash profit sharing* are subcomponents of *Employee involvement* (Source: *Getting started with KLD STATS and KLD's rating definitions*, 2006, KLD Research & Analytics, Inc.). Panel B presents the Pearson correlation coefficient matrix of the *ETI* and its subcomponents. 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. ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Definitions of the *ETI* subcomponents

KLD rating	Category	Definition
Strengths	Union relations	Whether the company has taken exceptional steps to treat its unionized workforce fairly
	Employee involvement	Whether the company strongly encourages worker involvement or ownership through stock option plans that it makes available to a majority of its employees
	Cash profit-sharing	Whether the company has a cash profit-sharing program through which it has recently made distributions to a majority of its employees
	Retirement benefits strength	Whether the company has a notably strong retirement benefits program
	Health and safety strength	Whether the company has a strong health and safety program
	Other strength	Whether the company has strong employee relations initiatives not covered by other KLD ratings
Concerns	Union relations	Whether the company has a history of notably poor union relations
	Retirement benefits concern	Whether the company has either a substantially underfunded defined benefit pension plan, or an inadequate retirement benefits program
	Health and safety concern	Whether the company has either paid substantial fines or civil penalties for willful violations of employee health and safety standards, or has been otherwise involved in major health and safety controversies
	Other concern	Whether the company is involved in an employee relations controversy that is not covered by other KLD ratings

Panel B. Pearson correlation coefficients among the *ETI* and its subcomponents

	ETI	Union relations	Employee Involvement	Retirement benefits	Cash profit sharing	Health & safety	Others
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ETI	1						
Union relations	0.346***	1					
Employee involvement	0.505***	0.034***	1				
Retirement benefits	0.567***	0.054***	0.058***	1			
Cash profit sharing	0.463***	0.027**	0.203***	0.058***	1		
Health & safety	0.421***	0.058***	0.057***	0.012	0.046***	1	
Others	0.514***	0.111***	0.120***	0.071***	0.101***	0.081***	1

Following previous studies (Verwijmeren and Derwall, 2010; Bae, Kang, and Wang, 2011), we exclude *workforce reductions* in constructing *ETI*, as the indicator for *workforce reductions* is negatively

correlated with other concern categories, whereas all the correlations among the indicators for the other concern categories are positive. Furthermore, the indicator for *workforce reductions* is significantly positively correlated with the overall strength score, suggesting that *workforce reductions* does not serve as a suitable measure for poor employee treatment. Several studies use only strengths to measure employee relations (Cronqvist, Low, and Nilsson, 2009; Landier, Nair, and Wulf, 2009; Bae, Kang, and Wang, 2011), possibly because of the potential problems related to *workforce reductions*. Our main results do not change when we include workforce reductions in the analysis, or when we use only strengths ratings to measure a firm's employee treatment.

We contacted MSCI Inc. to enquire about two potential issues regarding an assessment on *Union relations*. First, we questioned how the presence of a union affects its assessment of a firm's *Union relations*. According to MSCI, a firm's strength score is assessed based on the firm's union density. Therefore, the firm is required to have a labor union to receive a strength score for *Union relations*. However, MSCI's assessment of a firm's concern score for *Union relations* is based on the firm's union organizing efforts, as well as criticisms from nongovernmental organizations and third-party observers. To measure the severity of controversy related to a firm's union relation practices, the first important aspect considered by MSCI is a firm's attempt to deter organized strikes initiated by non-unionized employees or its attempt to prevent non-unionized employees from unionizing. In both cases, the firm does not necessarily have labor unions. The second important aspect in assessing labor relations includes anti-union activities (e.g., efforts to prevent strikes, lock-outs, the use of replacement workers) and controversies regarding contract negotiations and alleged breaches of union contracts. Therefore, the nonexistence of a labor union is not a necessary condition for the firm to receive a concern score for *Union relations*. Second, we questioned how much of the *ETI* is driven by domestic employees versus international employees. According to MSCI, its assessment of a firm's *Union relations* is not affected by whether its employees are located in domestic markets or global markets. We thank Ruiming Mu of ESG Client Service of MSCI Inc. for a discussion on the issue related to *Union relations*. In an untabulated test, we create the *ETI* excluding *Union relations* and re-estimate regressions in columns (1) and (2) of Table 4. We find that the results do not change although the magnitudes of the coefficients are slightly reduced.

Appendix C
Family Firm Characteristics and Employee Treatment: Difference-in-Differences Tests Using Changes in State-level Inheritance and Estate Taxes

The appendix 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. *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 board presence* is an indicator that takes the value of one for a family firm in which two or more family members serve as directors on the board, and zero otherwise. *Founder (descendent) CEO firm* is an indicator that takes the value of one for a family firm in which the founder (descendants of the founding family) serves as CEO, and zero otherwise. *Outsider CEO firm* is an indicator that takes the value of one for a family firm in which professional managers serve as CEO, and zero otherwise. *Founder-led firm* is an indicator that takes the value of one for a family firm in which a founder holds a management position or serves on the board, and zero otherwise. *Descendent-led firm* is an indicator that takes the value of one for a family firm in which the founder is inactive (i.e., do not serve on the board or are not in management team), but at least one of the descendants or relatives serves on the board, or holds the management position, 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 of the paper provides detailed descriptions of other 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.

	ETI					
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
Decrease in Index of Inheritance Taxes (indicator): a	-0.040	-0.043	-0.039	-0.026	-0.055	-0.037
	(0.198)	(0.172)	(0.227)	(0.417)	(0.108)	(0.273)
Family board presence (indicator): b	-0.075					
	(0.442)					
Founder CEO firm (indicator): c		-0.197***				
		(0.008)				
Descendent CEO firm (indicator): d			-0.059			
			(0.471)			
Outsider CEO firm (indicator): e				0.062		
				(0.272)		
Founder-led firm (indicator): f					-0.296***	
					(0.000)	
Descendent-led firm (indicator): g						0.227***
						(0.004)
a × b	0.119**					
	(0.019)					
a × c		0.133***				
		(0.001)				
a × d			0.115			
			(0.212)			
a × e				-0.012		
				(0.819)		
a × f					0.092**	
					(0.034)	
a × g						0.057
						(0.312)
Control variables (same as those in Table 4)	Y	Y	Y	Y	Y	Y
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	10,211	10,211
Adj. R^2	0.630	0.630	0.626	0.626	0.628	0.627

Appendix D
Placebo Tests

The appendix presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)*. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. In Panel A, the sample consists of 23 unique nonfamily firms that experience the death of the CEO in a given year and their 23 matched nonfamily firms that do not experience the death of the CEO. We match each nonfamily firm that experiences the death of the CEO with a nonfamily control firm in a year prior to the death date by using a propensity-score matching approach. We use as matching variables the *ETI*, the natural logarithm of total assets, the natural logarithm of firm age, and two-digit SIC code dummies. *Nonfamily firms that experience death of CEO (indicator)* takes the value of one for nonfamily firms that experience the death of the CEO, and zero for matched nonfamily firms. *Post (indicator)* takes the value of one for firm-year observations in the post-death period, and zero otherwise. *Nonfamily firms that experience sudden death of CEO (indicator)* takes the value of one for nonfamily firms that experience the sudden death of the CEO, and zero otherwise. *Nonfamily firms that experience other death of CEO (indicator)* takes the value of one for nonfamily firms that experience the non-sudden death of the CEO, and zero otherwise. In Panel B, the sample consists of 25 unique family firms in which they continue as family firms after the death of the founder (*Continued family firms*) and their 25 matched unique family firms (nonfamily firms) that do not experience the death of the founder (CEO) in columns (1) and (2) (columns (3) and (4)), respectively. We match each firm in *Continued family firms* with a family firm (nonfamily firm) that does not experience the death of the founder (CEO) in the year prior to the death date by using a propensity-score matching approach. *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 of the paper provides detailed descriptions of other 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.

Panel A. Using nonfamily firms that experience the death of the CEO and their control firms

	ETI			
Independent variable	(1)	(2)	(3)	(4)
Nonfamily firms that experience death of CEO (indicator) × Post (indicator)	-0.232	0.540		
	(0.285)	(0.307)		
Nonfamily firms that experience sudden death of CEO (indicator) × Post (indicator)			-0.250	1.100
			(0.388)	(0.255)
Nonfamily firms that experience other death of CEO (indicator) × Post (indicator)			-0.189	-0.110
			(0.401)	(0.831)
Control variables (same as those in Table 4 of the paper)	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	540	540	540	540
Adj. R^2	0.556	0.716	0.555	0.718

Panel B. Using family firms that continue family firm status after deaths of founders and their control firms

	ETI			
	Using family control firms		Using nonfamily control firms	
Independent variable	(1)	(2)	(3)	(4)
Continued family firms (indicator) × Post (indicator)	0.183	-0.122	-0.116	0.125
	(0.331)	(0.894)	(0.517)	(0.835)
Control variables (same as those in Table 4 of the paper)	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	580	580	540	540
Adj. R^2	0.526	0.696	0.538	0.849

Appendix E
Impact of Founding Family Members' Monitoring on Employee Treatment: Using a Subsample of Family Firms

Panel A of this appendix presents estimates of linear probability model regressions in which the dependent variable takes the value of one if the director has attended less than 75% of meetings during the fiscal year, and zero otherwise (*Attendance problem*). The sample consists of 28,495 nonemployee director-family firm year observations covered in RiskMetrics during the 1997 to 2010 period. Panel B presents estimates of OLS regressions in which the dependent variable is the *Employee Treatment Index (ETI)*. The sample consists of 4,366 family firm-year observations covered in RiskMetrics during the 1997-2010 period. The *ETI* is computed by summing six strength and four concern indicators for employee relations from the KLD SOCRATES database. *Family member director* is an indicator that 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. *Number of directorships* is the number of director positions that a nonemployee director takes in other firms covered in RiskMetrics. *Female director* is an indicator that takes the value of one if a nonemployee director is female, and zero otherwise. *Director tenure* is the number of years since a nonemployee director has served on the board. *At least one founding family member serves on board* is an indicator that takes the value of one for a family firm in which at least one founding family member serves on the board, and zero otherwise. *Non-CEO founder director* is an indicator that takes the value of one for a family firm in which a founder serves on the board but does not hold the CEO title, and zero otherwise. *At least one founding family member serves on monitoring committee* is an indicator that takes the value of one for a family firm in which at least one founding family member serves on a monitoring committee (the audit, nominating/governance, and compensation committees), and zero otherwise. *No founding family member serves on monitoring committee* is an indicator that takes the value of one for a family firm in which no founding family member serves on a monitoring committee, and zero otherwise. *High labor intensity* is an indicator that takes the value of one if a firm's labor intensity value is in the top 25th percentile of the sample, 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 of the paper provides detailed descriptions of other variables. The *p*-values in parentheses are based on standard errors adjusted for heteroskedasticity and allow clustering at the directorship (firm) level in Panel A (B). ***, **, and * denote statistical significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Director board meeting attendance: Director-level analysis

	Attendance problem (indicator)			
	All nonemployee Directors		Nonemployee directors excluding founder directors	
Independent variable	(1)	(2)	(3)	(4)
Family member director (indicator)	-0.007**	-0.008**	-0.010***	-0.013***
	(0.047)	(0.031)	(0.008)	(0.002)
Number of directorships	0.000	0.001	0.000	0.001
	(0.571)	(0.346)	(0.565)	(0.353)
Female director (indicator)	-0.004	-0.006*	-0.004	-0.006*
	(0.132)	(0.084)	(0.126)	(0.080)
Director age	-0.000*	-0.000	-0.000**	-0.000
	(0.066)	(0.294)	(0.037)	(0.172)
Director tenure	-0.001	-0.001	-0.001	-0.001
	(0.593)	(0.620)	(0.609)	(0.641)
Log (assets)	-0.002	-0.001	-0.002	-0.002
	(0.514)	(0.788)	(0.443)	(0.703)
Tobin's *q*	-0.002*	-0.001*	-0.002**	-0.002**
	(0.069)	(0.098)	(0.037)	(0.040)
ROA	-0.014	0.006	-0.010	0.012
	(0.407)	(0.832)	(0.589)	(0.681)
Stock return volatility	0.027	0.018	0.025	0.015
	(0.281)	(0.587)	(0.322)	(0.665)
Board size	0.002**	0.001	0.002**	0.001
	(0.012)	(0.326)	(0.013)	(0.315)
Proportion of independent directors on the board	-0.008	-0.010	-0.009	-0.011
	(0.380)	(0.412)	(0.357)	(0.369)
Number of board meetings		0.000		0.000
		(0.563)		(0.590)
Meeting fee		-0.002		-0.002
		(0.365)		(0.271)

Year fixed effects	Y	Y	Y	Y
Firm fixed effects	Y	Y	Y	Y
Number of observations	28,495	20,389	27,776	19,851
Adj. R^2	0.019	0.021	0.020	0.021

Panel B. Effects of founding family members' monitoring on the *ETI*: Firm-level analysis

	ETI					
Independent variable	(1)	(2)	(3)	(4)	(5)	(6)
At least one founding family member serves on board (indicator): a	0.183** (0.023)	0.179** (0.034)		0.125 (0.152)	0.119 (0.197)	
Non-CEO founder director (indicator): b		0.012 (0.840)			0.020 (0.769)	
At least one founding family member serves on monitoring committee (indicator): c			0.222** (0.027)			0.164 (0.131)
No founding family member serves on monitoring committee (indicator): d			0.188** (0.025)			0.149 (0.106)
High labor intensity (indicator): e				-0.257* (0.088)	-0.260* (0.083)	-0.175 (0.276)
a × e				0.351** (0.016)	0.363** (0.014)	
b × e					-0.036 (0.714)	
c × e						0.324* (0.085)
d × e						0.254 (0.112)
Control variables (same as those in Table 4 of the paper)	Y	Y	Y	Y	Y	Y
Year fixed effects	Y	Y	Y	Y	Y	Y
Firm fixed effects	Y	Y	Y	Y	Y	Y
Number of observations	4,336	4,336	4,028	4,336	4,336	4,028
Adj. R^2	0.102	0.102	0.108	0.103	0.103	0.110

Appendix F
Firms' Inclusion on Fortune's "100 Best Companies to Work For" List

The appendix presents estimates of probit regressions in which the dependent variable takes the value of one if a firm is included on *Fortune*'s "100 Best Companies to Work For" list, and zero otherwise (*Best Companies*). The list is compiled from two primary sources: 1) employee responses to survey questions, which represents two-thirds of the score, and 2) the evaluation of a firm by the Great Place to Work Institute, which represents the remaining one-third of the score. Each year, firms apply to participate in the employee survey to be considered for the list. See Edmans (2011) for a detailed discussion about how the list is constructed. 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. *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 of the paper provides detailed descriptions of other 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.

	Best Companies (indicator)	
Independent variable	(1)	(2)
Family firm (indicator)	0.444***	0.411***
	(0.000)	(0.001)
Log (assets)	0.420***	0.415***
	(0.000)	(0.000)
Log (firm age)	-0.066	0.092
	(0.446)	(0.304)
R&D / sales	1.855***	2.622***
	(0.000)	(0.000)
Leverage	-1.264**	-1.018*
	(0.015)	(0.051)
ROA	4.543***	2.049
	(0.000)	(0.116)
Stock Performance		-0.047
		(0.416)
Capital expenditure / assets		2.619
		(0.142)
Return volatility		-11.279**
		(0.029)
Institutional ownership		-0.004
		(0.238)
Board size		0.025
		(0.280)
Proportion of independent directors on the board		0.217
		(0.532)
Free cash flow		1.190
		(0.411)
Modified Z-score		0.205***
		(0.004)
H-P index		-0.707***
		(0.000)
Industry-year fixed effects	Y	Y
Number of observations	9,435	9,231
Pseudo R^2	0.263	0.299

Appendix G
Survivorship bias

Thus far, we assume that the probability of firms' financial distress is similar between family and nonfamily firms. However, our findings on family firms' tendency to invest more in employee relations may capture survivorship bias if the probability of financial distress is lower in family firms than in nonfamily firms. For example, nonfamily firms are more likely to be delisted from stock exchanges than family firms if they do not have sufficient financial resources owing to poor performance. To address this concern, we first identify firms that are delisted from stock exchanges because of poor performance (CRSP delisting codes 500 and 520-584) before the end of our sample period. We then run probit models that estimate the probability of a firm's delisting as a function of family firm status and the other control variables used in our earlier analyses. Each firm is included once in the estimation, and the covariates are measured in the first year in which a firm appears in the sample. In untabulated tests, we find that the coefficient on *Family firm* is negative and insignificant. This result is inconsistent with the view that the difference in survival likelihood between family and nonfamily firms may drive our main findings.