Foundation Ownership and Financial Performance: International Evidence

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ABSTRACT

We examine how foundation ownership relates to financial performance using a global sample of listed firms. Foundation-owned firms are controlled by non-profit entities with limited personal profit incentives, long-term horizons and no takeover pressure. Using both accounting-based (*ROA*) and market-based (*Tobin's q*) performance measures, we find that foundation-owned firms perform at least as well as comparable family- and investor-owned peers, challenging conventional agency-theory predictions of inefficiency. They also achieve higher cumulative abnormal returns (*CARs*) around acquisition announcements. Our results are robust to a broad range of sensitivity tests, indicating that purposeful, non-profit ownership can be an economically efficient and viable governance model.

Keywords: Corporate Governance; Corporate Ownership; Performance; Purpose; Agency Theory

JEL Classifications: D64, G30, G32, L31

1. Introduction

Recent debates challenge the sole pursuit of shareholder value maximization and call for corporations to embrace a broader social purpose (Gartenberg & Serafeim, 2023; Gartenberg, Prat & Serafeim, 2019; Edmans, 2020; Henderson & Van den Steen, 2015; Spamann & Fisher, 2022; Mayer, 2020, 2021). In this context, enterprise foundations—non-profit entities that control for-profit companies—offer an alternative to traditional corporate governance models (Forbes, 2022; Financial Times, 2024; Hwang & Lund, 2025; Bennedsen, Fan & Gillan, 2025; Eldar & Ørberg, 2025). Enterprise foundations are legally accountable to their charter purpose, consistent with recent policy recommendations (e.g., British Academy, 2018, 2019).

Prominent companies around the world, such as Patagonia (US), Hershey (US), Rolex (Switzerland), Tata (India), The Guardian (UK), the Wallenberg Group (Sweden), Robert Bosch (Germany), A. P. Møller-Maersk (Denmark), are controlled by non-profit foundations or equivalent legal structures such as irrevocable trusts. While some of these firms are publicly traded, their controlling foundations or trusts help safeguard their independence and uphold the founder's values. However, evidence in the corporate finance literature on their economic performance remains sparse (Thomsen, 1996, 1999; Achleitner et al., 2020). Yet, recent findings by Schröder & Thomsen (2025) reveal that foundation-owned firms have higher non-financial environmental and social performance, prompting the question of whether this commitment to environmental and social goals enhances or compromises financial performance.

In this study, we examine the relation between foundation ownership and financial performance using an international sample of listed firms. We investigate whether foundation ownership benefits or harms financial performance and under what conditions it can add financial value. Foundation ownership attenuates the profit motive because enterprise foundations have no residual claimants, and because key decision makers like foundation board members do not have

profit incentives. Fama and Jensen (1983a) argue that commercial non-profits, like enterprise foundations, are therefore at a disadvantage compared to closely held corporations since they lack profit-sharing incentives, and at a disadvantage compared to open corporations, since they cannot attract outside equity or diversify risk (Fama and Jensen, 1983b). As such, standard agency theory predicts that foundation ownership may lead to inefficiencies—such as muted incentives (Fama & Jensen, 1983a) and capital rationing (Fama & Jensen, 1985)—resulting in economic underperformance. Moreover, governance features of enterprise foundations like self-appointed boards and protection from hostile takeovers may exacerbate these issues (Hansmann & Thomsen, 2021).

Yet the view that foundation ownership is inherently less efficient is not unanimous. Some academics argue that enterprise foundations can confer efficiency advantages through their long-term orientation and firm commitment to stakeholder relationships (Hansmann, 1980; Glaeser & Shleifer, 2001; Thomsen, 2017; Hwang & Lund, 2025). Glaeser and Shleifer (2001) propose that nonprofits may be competitive when stakeholders value safeguards against expropriation, even if such arrangements carry higher agency costs. Furthermore, the long-term orientation and social purpose inherent in foundation ownership may foster trust and stakeholder focus, potentially yielding superior long-run performance (Hansmann, 1980; Mayer, 2020; Hwang & Lund, 2025). This governance model is exemplified by Novo Nordisk's success as Europe's second most valuable firm and a pioneer in weight-loss drugs (The Economist, 2024).

The debate between agency theory and commitment-based governance makes the relation between foundation ownership and firm performance an empirical question. We derive testable predictions from agency theory and evaluate them against competing arguments that emphasize long-term orientation and elevated purpose in enterprise foundations. This paper provides an empirical test of these contrasting perspectives. Contrary to claims of inefficiency, we find that

foundation-owned firms have significantly higher market valuations (*Tobin's q*) and stronger accounting performance (*ROA*) than firms with conventional ownership structures. Causal identification is difficult because foundation ownership is inherently stable with very few changes. However, we exploit the global financial crisis as a quasi-exogenous setting to assess firm behavior under financial stress (Lins et al., 2013, 2017). We also examine acquisition performance—a classic setting for agency costs (Shleifer & Vishny, 1986)—and find that foundation-owned firms deliver better acquisition outcomes.

We conduct several variation tests to pinpoint when and how foundation ownership matters. First, we examine differences across industries and find that foundation-owned firms are associated with stronger performance in sectors with high information asymmetry, such as life science. Second, we compare charitable and family foundations to assess whether foundation purpose affects financial performance, finding that charitable foundations achieve outcomes at least as strong as those with family purposes. Third, we examine differences between private and public foundation-owned firms and observe that private foundation-owned firms exhibit higher investment rates and profitability.

Finally, we conduct multiple sensitivity analyses. We use alternative estimators—firm fixed effects, propensity-score matching, and self-selection models—and test a different definition of foundation ownership (based on foundation-held free-floating shares) and financial performance (*ROE*, EBIT-based *ROA*, and net income-based *ROA*). We also examine whether our findings hold across different legal environments and thresholds of foundation control. Our results remain robust under these alternative specifications.

We do not interpret these results as evidence that foundation ownership is inherently superior. Rather, they suggest it is financially competitive with more conventional ownership forms. A founder's decision to transfer ownership to a foundation is clearly non-random and

depends on idiosyncratic factors such as organizational purpose and corporate culture, which are difficult to measure. While foundation ownership is a choice, when it is chosen it appears, on average, to perform competitively in financial terms.

Our study contributes new evidence to the corporate finance literature on ownership and firm performance by systematically comparing financial outcomes of foundation-owned firms to those of conventional firms. (Anderson & Reeb, 2003; Morck et al., 2000; Claessens et al., 2000; McConnell & Servaes, 1990; Villalonga & Amit, 2006). We also contribute to the debate on the role of business in society (Mayer, 2021; Edmans, 2020; Hart & Zingales, 2022; Henderson & Van den Steen, 2015; Bennedsen, Fan & Gillan, 2025) by showing that ownership by purposeful, non-profit foundations—such as enterprise foundations—is positively associated with financial performance and stakeholder outcomes, including employment protection during a crisis. Building on evidence of superior environmental and social performance in foundation-owned firms (Schröder & Thomsen, 2025), our results suggest that this ownership model can align social responsibility with economic efficiency—even in contexts prone to agency problems. In particular, we find that foundation-owned firms achieve better acquisition outcomes than their non-foundation-owned counterparts, challenging conventional concerns about managerial empire-building in the absence of active markets for corporate control.

We also extend the literature comparing public and private firms (Serafeim & Gartenberg, 2023; Asker et al., 2014; Capron & Shen, 2007; Bernstein, 2015; Fitza & Tihanyi, 2017) by showing that public listing can weaken the long-term investment orientation and profitability of foundation-owned firms. Our results suggest that outside shareholder pressure for short-term earnings may limit the commitment advantages of foundation ownership.

Our results are consistent with ~~provide empirical support for~~ commitment-based ~~governance~~ theories of commercial nonprofits (Glaeser & Shleifer, 2001; Hansmann, 1980),

demonstrating that nonprofit ownership structures can deliver efficiency advantages, particularly in industries characterized by high information asymmetry such as life sciences.

Finally, we extend the literature on foundation ownership (Eldar & Ørberg, 2025; Hwang & Lund, 2025), which has largely focused on Northern Europe (Thomsen, 1996, 1999; Achleitner et al., 2020; Hansmann & Thomsen, 2021)~~,~~ by ~~leveraging~~ a global sample spanning over 40 countries to establish that foundation ownership can function as an effective governance model across diverse institutional contexts beyond Northern Europe.

The paper is structured as follows: Section 2 outlines arguments regarding the impact of foundation ownership on financial performance. Section 3 details our methodology and data. Section 4 presents the results and examines variations across specifications. Section 5 tests the sensitivity of our findings. Finally, section 6 concludes.

2. Theoretical Background and Hypotheses

2.1 Defining Foundation Ownership

La Porta et al. (1999) document that in many countries around the world, corporations are controlled by large shareholders. In continental Europe, a relatively common form is the enterprise foundation—a self-owning non-profit that holds controlling stakes in companies, often established by founders of the company (Thomsen, 2017). A key feature of non-profits is the "non-distribution constraint" (Hansmann, 1980), which eliminates residual claimants,~~ and~~ prevents the distribution of residual income to founders and~~, which~~ completely separates control rights from cash flow rights. By transferring stakes to a foundation, founders can maintain some long-term influence even after their departure, shield firms from hostile takeovers, and reduce costly family conflicts (Bennedsen et al., 2007). The foundation's charter, managed by a self-appointed board, typically mandates that its assets serve a defined social purpose (Sanders &

Thomsen, 2023). For example, the Zeiss Foundation, owner of the Zeiss Group, uses equity proceeds to meet capital needs, share surplus with employees, and support research and community projects. A legal obligation to preserve the endowment generally ensures these foundations preserve capital and secure the firm's longevity.

2.2 Costs of Foundation Ownership

Jensen and Meckling (1976) argue that separation of ownership and control creates agency problems, as managers may prioritize personal interests over shareholder value. Fama and Jensen (1983a, 1983b) highlight governance challenges in commercial non-profits, where directors lack residual claims and thus have weaker incentives to maximize efficiency. While other blockholders can exert discipline through "voice" and "exit" (Edmans, 2009), enterprise foundations rarely exit due to their charters and must therefore curb managerial slack by active ownership—which foundation boards are not strongly incentivized to provide (Stulz, 1988; Morck et al., 1989; Shleifer & Vishny, 1997). Directors' compensation is not linked to financial performance, further weakening efficiency incentives (Fama & Jensen, 1983a). Moreover, as non-profits with social objectives, enterprise foundations could be tempted to sacrifice profit goals for social goals, potentially lowering profitability. According to standard agency theory, foundation-owned companies are therefore expected to operate less efficiently than those whose owners have "skin in the game."

2.3 Benefits of Foundation Ownership

Despite potential agency costs, foundation ownership may also offer efficiency advantages. As perpetual entities, enterprise foundations maintain a long-term presence that supports investments in assets and human capital (Thomsen et al., 2018), exemplified by the Carlsberg Foundation's 146-year control of Carlsberg A/S. This horizon aligns with Thurow's

(1993) call for enduring shareholdings and may reduce managerial myopia, leading to more efficient, NPV-based investment decisions (Stein, 1988; Shleifer & Vishny, 1990; von Thadden, 1995; Bushee, 1998). Foundation ownership can also facilitate implicit, long-term contracts between shareholders and stakeholders, encouraging stakeholder-specific investments as an alternative to costly complete contracts (Williamson, 1979). Although nonprofits face softer profit incentives, some research suggests they can enhance trust in settings where quality is hard to monitor, such as life sciences (Hansmann, 1980; Glaeser & Shleifer, 2001; Easley & O'Hara, 1983). Product market competition may further help contain agency costs, as seen in studies of U.S. commercial nonprofits (Glaeser, 2002).

2.4 Hypotheses

The central question in our study is how foundation ownership relates to firm financial performance. Standard agency theory (Fama & Jensen, 1983a, 1985; Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001) predicts higher agency costs in enterprise foundations due to muted managerial incentives, self-perpetuating boards, and the absence of a market for corporate control. These features are expected to reduce effective monitoring and lower firm performance. For empirical testing, we base our hypotheses on the standard agency-theoretic view—widely held among corporate finance scholars—which predicts poorer outcomes for foundation-owned firms. However, it is an open empirical question whether these agency-related disadvantages are offset by other governance mechanisms, such as commitment to long-term orientation.

Hypothesis 1. Foundation-owned firms are expected to have lower firm value and accounting profitability than comparable non-foundation-owned firms.

Within foundation-owned firms, governance structures differ in how effectively they address agency problems. We distinguish between family foundations and charitable foundations. Family foundations typically distribute profits to family members and thus have stronger monitoring incentives that are aligned with shareholder interests. Charitable foundations invest

profits in philanthropic activities and often have boards with less business experience (Block et al., 2020), reducing monitoring. As a result, standard agency theory would presumably predict lower shareholder value creation in firms owned by charitable foundations.

Hypothesis 2. Firms owned by charitable foundations are expected to have lower firm value and accounting profitability than those owned by private foundations.

We also consider listing status. Publicly listed foundation-owned firms face market discipline from outside investors, while privately held foundation-owned firms lack this external oversight. Without such scrutiny, managers may become entrenched and prioritize stakeholder interests or personal goals over profit maximization.

Hypothesis 3. Publicly listed foundation-owned firms are expected to perform better than privately held foundation-owned firms.

Finally, acquisitions offer a clear test of agency problems (Shleifer & Vishny, 1986). Free cash flow theory (Jensen, 1986) suggests that weak governance in mature firms with stable cash flows enables managers to pursue value-destroying acquisitions to grow firm size and personal power. In foundation-owned firms, the lack of residual claimants may further reduce scrutiny, raising the risk of overpayment and poorer acquisition performance.

Hypothesis 4. Foundation-owned firms are expected to earn lower cumulative abnormal returns (CARs) around acquisition announcements than comparable non-foundation-owned firms.

3. Data, Measurement and Method

3.1 Data

Our main sample comprises a panel of publicly listed foundation-owned firms and matched non-foundation-owned firms. The following describes how we select ~~our sample~~it.[1] We start by collecting all publicly listed firms in which enterprise foundations are controlling owners.

[1] ~~We chose a 20% threshold to ensure that the foundation truly controls the company. Because financial data are more widely available compared to ESG data – which led Schröder and Thomsen (2025) to use a lower, 10% threshold – our approach ensures greater foundation control.~~

[2] In the absence of systematic register information, we manually collect data on ultimate ownership from four sources: (1) annual reports (2) corporate websites (3) Proxy Statements and (4) Bureau van Dijk (BvD) Orbis.[3] During our data collection process, we identified 237 listed firms in which enterprise foundations are controlling shareholders. We exclude enterprise foundations with government-linked activities, consistent with Thomsen et al. (2018), because their business concerns may be secondary. Since financial service companies (SIC codes from 6000 to 6999) and utility companies (SIC codes from 4900 to 4999) are subject to regulatory supervision, which potentially affects firm performance, we also exclude these firms following Anderson and Reeb (2003). We impose a minimum control threshold of 20% of the votes, and the condition that the foundation is the largest owner and exclude foundation-owned companies if they do not satisfy these criteria. This voting threshold is consistent with the one suggested by Villalonga and Amit (2006). Foundation ownership is coded as "1" if a foundation controls the firm and "0" otherwise. For robustness, we also test a continuous measure of foundation ownership, with consistent results. We construct control groups of family-owned and investor-owned companies in the same industry and of comparable firm size. We follow a one-to-one matching approach by industry (two-digit SIC codes) and *size* (total assets) following the suggestion by Gao, Harford, and Li (2013) and Asker et al. (2014). We obtain data on firm financial characteristics from two sources: (1) Bloomberg (2) BvD Orbis. Our data spans from 2001 to 2020. Our final sample comprises 296 publicly listed firms and 4466 firm-year observations.[4] We also analyze a sub-sample of 369 foundation-owned firms (public and private)

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[3]Appendix OA.8 provides a detailed description of the data collection process.
[4]Limited firm characteristic data reduces the number of foundation-owned firms to 97.

to compare performance between publicly and privately held firms, and between charitable and family foundations.

3.2 Measurement

Following prior literature on ownership and financial performance, our performance measures are return on assets (*ROA)* and *Tobin's q* (Anderson & Reeb, 2003; Demsetz & Lehn, 1985; Demsetz & Villalonga, 2001; Villalonga & Amit, 2006). *ROA* is measured in two ways.[5] In one approach, we measure *ROA* as earnings before interest, tax, depreciation, and amortization (*EBITDA*) scaled by the book value of total assets. In a second approach, we measure it by earnings before interest and tax (*EBIT)* divided by the book value of total assets. We measure *Tobin's q* by the sum of the stock market capitalization and the book value of debt as a ratio of total assets. To capture other factors that affect firm performance, we include several control variables. We control for effects related to the firm's size (measured by taking the natural logarithm of total assets). We use *Leverage* to control for effects relating to debt in capital structure consistent with Anderson and Reeb (2003). We further include the fixed assets ratio (*PPE/Sales*) to control for accounting distortions caused by time-based depreciation rates (Cui & Mak, 2002). Bhagat and Bolton (2013) show that growth is an important driver of firm performance. Consequently, we introduce the control variable *Sales growth*.[6] As suggested by Himmelberg et al. (1999), we use a measure of intangible capital (*Intangibility*) controlling for managerial discretion. Furthermore, we include the variable *firm age* to control for effects related to the life cycle of the firm, which we measure by taking the natural logarithm of number of years since the company was incorporated (Anderson & Reeb, 2003). Next to these firm-specific variables, we include year and industry fixed effects for each year and industry (four-digit SIC

[5]In our sensitivity analysis, we redefine *ROA* using *net income* and *EBIT* (rather than *EBITDA)* as the numerator, respectively (see Online Appendix Table OA.11).

[6]We also run the tests excluding the *Sales Growth* variable. The resul~~Result~~ts do not change materially (available on request).

codes) of our sample. Consistent with La Porta et al. (1998), we account for cross-country variation in institutional frameworks by incorporating a *Common Law* indicator variable, which captures the legal tradition under which the firm operates. Additionally, we control for *GDP per capita growth* to account for varying levels of economic development across countries.

3.3 Empirical Specification

We examine the relationship between foundation ownership and financial performance. Our regression specification is:

$$(1)\ FinancialPerformance_{i,t} = \beta_0 + \beta_1 Foundation_i + \boldsymbol{X_{i,t}}\gamma + \delta_{Industry} + \lambda_{Year} + \epsilon_{i,t}$$

$FinancialPerformance_{i,t}$ is measured using return on assets (*ROA)* or *Tobin's q*. The variable $\beta_1 Foundation_i$ is a binary indicator for foundation ownership. The model includes a set of firm-level control variables $\boldsymbol{X_{i,t}}$, along with industry $\delta_{Industry}$ and year λ_{Year} fixed effects to account for sector-specific and temporal variations. Standard errors are clustered at the firm level to correct for heteroskedasticity and within-firm serial correlation.

4. Results

4.1 Descriptive Statistics

Descriptive statistics for our main sample are presented in Table 1 and Appendices OA.1 to OA.4. In Table 1, using *Tobin's q* as a performance measure, we find that foundation-owned firms have significantly higher market valuations than non-foundation-owned firms, 1.63 versus 1.32 for foundation-owned and non-foundation-owned firms, respectively; yielding a 0.31 differential between these groups.[7] Concerning accounting performance, the mean (median) *ROA*

[7]We note that the average *Tobin's q* of our sample (1.46) is similar to the mean value of 1.41 reported by Anderson and Reeb (2003) for their sample of US firms.

of foundation-owned firms is 12.1% (11.7%) compared to 10% (10.3%) for the control group. The average firm age is 56 years, suggesting they are mature businesses~~established~~ rather than new ventures. Foundation-owned firms are significantly older than non-foundation-owned firms, 68 versus 51, suggesting that they are, on average, later in the life cycle of the firm.[8] Table OA.1 provides a correlation matrix for the variables in our sample. The positive relation between foundation ownership and firm performance (*ROA* and *Tobin's q*) is strong with statistical significance at the 1% level. Table OA.3 shows that foundation-owned firms are present in various industries. Notably, they are especially prevalent in the manufacturing sector.

[Insert table 1 about here]

4.2 Baseline Regression Results

Table 2 reports baseline OLS results on the relationship between foundation ownership and firm performance. Across Columns (1) to (4), the *Foundation* variable is positive and statistically significant, whether using *ROA* or *Tobin's q* as the dependent variable. The estimated effect sizes are economically meaningful: for *ROA*, the coefficients of 0.0239 and 0.0275 imply that foundation-owned firms have return on assets approximately 2.4 to 2.8 percentage points higher than comparable non-foundation-owned firms on average; corresponding to roughly 24% to 28% of a standard deviation of *ROA*. For *Tobin's q,* the coefficients of 0.507 and 0.536 indicate that foundation-owned firms have valuations approximately 0.5 points higher on average, representing about 39% to 41% of a standard deviation. These economically and statistically significant differences contradict Hypothesis 1—which reflects agency-theoretic predictions of weaker governance and lower performance (Fama & Jensen, 1983a, 1985)—and instead seems to support commitment-based governance theories suggesting that foundation ownership can be an

[8]As *Tobin's q* is positively correlated with growth prospects, this would negatively bias *Tobin's q* of foundation-owned firms, suggesting our estimates are likely to be conservative given the maturity of these firms. In additional analyses, we augment the size-and-industry matching criteria with firm age (natural logarithm of the number of years since the company's incorporation). Our conclusions remain unchanged.

efficient form of corporate governance (Hansmann, 1980; Glaeser & Shleifer, 2001; Mayer, 2021).

[Insert table 2 about here]

4.3 Endogeneity Concerns and Mitigation

Our analysis faces a potential endogeneity challenge. Founders of firms with stronger prospects are more likely to transfer ownership to a foundation, while those with failing enterprises rarely do so.[9] Thus, the financial success of foundation-owned firms might reflect an initial selection effect rather than a consequence of the ownership model. While the foundation ownership model ~~may be~~is not doubt carefully selected by the founder partly based on the company's financial prospects, better financial performance in~~the argument that better firm performance leads to~~ foundation-~~-~~owner~~ship~~d companies ~~is questiona~~in our sample is unlikely to be attributable to selection effects ~~ble~~ for two reasons. First, enterprise foundations have maintained their stakes for an average of 44 years—a period that would require founders to predict financial performance with extraordinary foresight.[10] In reality, few founders have perfect foresight. Despite the potential information advantages that founders may possess, it is unreasonable to assume that they can accurately foresee the financial prospects of their firm over several decades considering the ever-changing nature of future contingencies. ~~Furthermore~~Secondly, even if significant ~~initial~~ selection effects may result in foundation-owned firms being initially more profitable than other firms during the ownership transfer, we expect ~~this unusual productivity~~that abnormal rates of return will diminish over

[9]For example, Demsetz and Lehn (1985) and Demsetz and Villalonga (2001) note that the market brings forth virtually optimal ownership structures.

[10]This suggests foundations remain controlling owners of their companies even in economically bad times; confirming the causality that foundation ownership leads to better firm performance.

time.[11] Figure 1 shows no sustained decline in performance, suggesting that the initial selection effect does not dissipate.

[Insert Figure 1 about here]

We address the potential endogeneity of foundation ownership and financial performance using different approaches including a Difference-in-Differences (DID) specifications, an event study around acquisition announcements, and fixed effects panel models. Our starting point is the global financial crisis, which serves as a quasi-experimental setting—disrupting firm performance while leaving ownership structures temporarily fixed (Lins et al., 2013, 2017). This setting allows us to observe how investors adjust valuations for firms with different blockholders. We specifically test whether companies with foundation blockholders suffer smaller value declines than those without, based on the idea that foundations provide stability through implicit or explicit guarantees during liquidity shortages. This approach isolates the influence of foundation ownership on a firm's resilience during financial turmoil. To test this, we estimate a difference-in-differences (DID) model using pooled data from before and after the crisis:

$$(2)\ FirmValue_{i,t} = \beta_0 + \beta_1 Foundation_i + \beta_2\left(Post_{i,t} \times Foundation_i\right) + X_{i,t}\gamma + \delta_{Industry} + \lambda_{Year} + \theta_{Country} + \epsilon_{i,t}$$

where $FirmValue_{i,t}$ is our performance measure, $Foundation_i$ is a dummy for foundation-owned firms, $Post_{i,t}$ is a dummy variable set to one in the period after the financial crisis (2009-2010), $\boldsymbol{X_{i,t}}$ is the vector of control variables, followed by year, industry, and country fixed effects and the error term. As before, we cluster standard errors at the firm-level. The coefficient of interest $Post_{i,t} \times Foundation_i$ captures the differential impact of foundation

[11]The "persistence of profitability" literature typically show convergence to the mean within a 5-year period (e.g. Mueller 1990) and over longer periods of time Schumpeterian competition (Schumpeter,1942) can be expected to erode most competitive advantages

blockholders on $FirmValue_{i,t}$ during the crisis. To reduce any impact of industry affiliation and firm size, we match each foundation-owned firm with a control firm and run the analysis on the matched sample. We match without replacement within the caliper δ=0.005. Figure 2 indicates that the parallel trends assumption is not violated.

[Insert Figure 2 about here]

Table 3 shows that the interaction term ($Post_{i,t} \times Foundation_i$) is positive and significant, indicating that foundation-owned firms saw a greater relative increase in *Tobin's q* after the financial crisis. This suggests that foundation-owned firms were less affected by the crisis or coped better with it. Economically, the coefficient estimate of 0.38 in Column (2) represents a 29% increase in *Tobin's q* relative to its standard deviation. Column (3), which includes firm fixed effects, confirms this pattern. The results support the view that foundation ownership is associated with firm resilience during an economic downturn.

[Insert table 3 about here]

Next, we examine implicit contracts. A key advantage of foundation ownership is expected to be the long-term commitment to implicit arrangements with stakeholders, especially employees (Glaeser & Shleifer, 2001; Hansmann, 1980; Mayer, 2021; Thomsen, 2017). Sraer and Thesmar (2007) show that employment in heir-managed French firms responds less to sales shocks, suggesting that similarly long-term owners—such as enterprise foundations—may also be less likely to reduce workforce size during downturns than control firms. This view suggests that foundation ownership not only positively relates to firm performance but also protects employment. Table 4 tests this hypothesis using a difference-in-differences approach with annual panel data from 2007 to 2010. Specifically, we estimate:

$$Employment_{i,t}$$

$$= \beta_0 + \beta_1 Foundation_{i,t} + \beta_2\left(Post_{i,t} \times Foundation_i\right) + X_{i,t}\gamma + \delta_{Industry}$$

$$+ \lambda_{Year} + \theta_{Country} + \epsilon_{i,t}$$

where $Employment_{i,t}$ represents ~~the reduction in~~is the number of employees, $Foundation_i$ is a dummy for foundation-owned firms, $Post_{i,t}$ is a dummy variable set to one in the period after the financial crisis (2009-2010), and all control variables remain the same as specified in equation (2). The parameter of interest $Post_{i,t} \times Foundation_i$ captures the differences in restructuring activities for different controlling ownership types during the crisis. Table 4 shows that foundation-owned firms reduced their employee headcount less than non-foundation-owned firms during the financial crisis. Specifically, the positive coefficient on the *Foundation* × *Post* interaction suggests that foundation-owned firms were more likely to maintain employment levels during the crisis. While the estimates are not highly significant—possibly due to the limited sample size—they align with the view that foundation ownership, as a form of patient capital, provides greater employment stability during an economic downturn by insulating workers from layoffs.

[Insert table 4 about here]

4.4 Agency Costs and Foundation Ownership

According to standard agency theory, agency costs should increase with foundation ownership (Fama & Jensen, 1983a, 1985). To assess the potential relation between foundation ownership and agency costs, we use three frequently appearing indicators in the financial economics literature (e.g., Ang et al., 2000; Ferell et al., 2016): (1) the *sales-to-asset ratio (2) Cash Holdings* and (3) the *dividend payout ratio*. Agency costs are often associated with higher levels of cash holdings and a lower sales-to-asset ratio relative to the control group. Higher dividend payouts are indicative of disciplinary mechanisms that can help mitigate agency costs.

In Table 5, foundation ownership is linked to agency proxies. Column (1) shows that foundation-owned firms have higher sales-to-asset ratios, indicating more efficient asset use and stronger performance driven by higher sales volumes. In Column (2), foundation ownership significantly associated with the dividend payout ratio with an effect about 16% of its standard deviation. Column (3) introduces a *Foundation-Cash Holdings* interaction term, revealing a nonlinear effect: performance gains rise when cash holdings are below roughly 14% but taper off beyond that point.

[Insert table 5 about here]

4.5 Foundation Ownership and Corporate Investment Decisions

Given that these results are inconsistent with the agency view (Fama & Jensen, 1983, 1985), we explore an alternative explanation namely the ownership commitment view of foundation ownership (Hansmann, 1980; Glaeser & Shleifer, 2001). In Table 6, we assess whether the ownership commitment of enterprise foundations manifests in differences in investment decisions. To do so, we construct a measure of investment, the sum of CapEx and R&D expenditures scaled by the beginning-of-year total assets as a proxy for corporate time horizons following Asker et al. (2014). The second measure we use as a proxy for investments is CapEx over beginning-of-year total assets (excluding *R&D*). Table 6, Model (1) shows that foundation-owned firms have a 1.1 percent higher capital expenditure-to-assets ratio, or 14.3% relative to the 7.6% sample mean.

[Insert table 6 about here]

4.6 Foundation Ownership and Information Asymmetry

We next explore whether foundation-owned firms perform better in industries with high information asymmetry, where customers find it more difficult to assess the quality of products and services (Glaeser & Shleifer, 2001; Hansmann, 1980). These challenges are well documented

in health-related and life sciences industries, due to the complexity of medical knowledge, uncertainty of outcomes, and variation in individual health status (Arrow, 1963). To capture this, we construct a *Life-Science* dummy equal to one for firms in the Fama–French 48 industry groups for Healthcare, Medical Equipment, and Pharmaceuticals. While the Fama–French categories include broader healthcare services, our sample is primarily composed of life sciences firms such as Medical Equipment and Pharmaceuticals. Based on Columns (1) and (2) in Table 7, the coefficients on the interaction between *Foundation* and *Life-Science* are positively significant, suggesting that foundation ownership confers a specific advantage in high-information-asymmetry sectors, likely by reducing risks from quality uncertainty and ex-post expropriation. These findings support the quality uncertainty hypothesis (Glaeser & Shleifer, 2001; Hansmann, 1980).

[Insert table 7 about here]

4.7 Publicly Listed vs. Private Foundation-owned Companies

Next, we examine variation in foundation control strength by comparing publicly listed and privately held foundation-owned firms, restricting the test to the foundation-owned sample. This distinction has implications for ownership commitment and potential agency issues. On the one hand, private foundation-owned companies are insulated from pressures from minority investors to which their publicly listed counterparts are exposed, which may enhance ownership commitment as the foundation has a greater ability to exert control over the firm's decisions.[12] On the other hand, the absence of active monitoring by minority investors can lead to reduced external scrutiny, potentially giving rise to greater agency problems like managerial opportunism that could reduce the financial performance of the firm. We examine the agency and commitment

[12]When analyzing the performance of public and private foundation-owned firms (Table 8), we use accounting measures as we do not have data on market values for private firms.

views using a propensity-score matched sample of public and private foundation-owned entities. Table 8 shows that publicly listed and private foundation-owned companies differ systematically in terms of firm performance after matching on size and industry (Fama & French 12 industry groups). In Column (1), the estimated difference in *ROA* between public and private foundation-owned firms is –0.0337 ($p < 0.05$), representing 29% of the standard deviation. This suggests that public foundation-owned firms underperform those not listed on the stock market, possibly because private foundation-owned companies institute more long-term oriented corporate policies in the absence of pressure from outside investors. Additional matching on firm maturity (proxied by age) suggests that life-cycle differences do not explain the performance gap between public and private foundation-owned companies. Column (7) examines net investments, defined as the annual increase in net fixed assets, showing that private foundation-owned firms invest substantially more on average—publicly listed foundation-owned firms invest 57% of a standard deviation less. These findings contradict Hypothesis 3, based on agency theory predictions of better performance for listed firms, and instead suggest that private foundation-owned companies benefit from stronger ownership commitment and a long-term investment orientation—despite being self-owning entities with limited economic incentives.

[Insert table 8 about here]

4.8 Charitable vs. Family Foundations

We examine the role of foundation purpose as a second source of variation, focusing on family versus charitable foundations. Family foundations use dividends for both social and business objectives, including distribution to family members, while charitable foundations prioritize public benefits like scientific, social, or environmental causes, with minimal family involvement. Agency theory predicts that charitable foundations, lacking pecuniary incentives, may monitor less effectively. This expectation is formalized in Hypothesis 2**.** However, our results

in Table 9 show that ownership by charitable foundations are positively and significantly associated with return on sales and profit margin, contradicting the view that they are less effective owners than relatively more profit-focused family foundations.

[Insert table 9 about here]

4.9 Earnings Management under Foundation Ownership

Earnings management can distort true firm performance and may explain the performance differences observed. Foundation ownership is expected to limit earnings overstatement by building stakeholder trust and signaling social responsibility (Kim et al., 2012). However, weaker monitoring incentives in foundation-owned firms may also encourage earnings management through the proliferation of agency issues. To examine this, we estimate accruals using the modified Jones (1991) model following Dechow et al. (1995):

$$\frac{NTA_{j,t}}{A_{j,t-1}} = \alpha_1 \frac{1}{A_{j,t-1}} + \alpha_2 \frac{\Delta REV_{j,t} - \Delta REC_{j,t}}{A_{j,t-1}} + \alpha_3 \frac{PPE_{j,t}}{A_{j,t-1}} + \epsilon_{j,t}$$

where $NTA_{j,t}$ denotes normal accruals for firm *i* in year *t*, and the Δ operator indicates a one-year change in the variable. $A_{j,t-1}$is lagged total assets, $\Delta REV_{j,t} - \Delta REC_{j,t}$ is the change in sales revenue, $PPE_{j,t}$ is gross property, plant, and equipment, all scaled by lagged total assets. Because both positive and negative discretionary accruals reflect earnings management (Klein, 2002), we use the absolute value of modified Jones residuals to capture its magnitude. We estimate discretionary accruals as the residual from the modified Jones (1991) model following Dechow et al. (1995). We estimate discretionary accruals as the residual from the modified Jones (1991) model for each industry-year (two-digit SIC). Columns (1) to (3) of Table 10 suggest that foundation-owned firms engage less in earnings management than non-foundation-owned firms, highlighting governance benefits and a stronger focus on long-term objectives over short-term earnings targets.

[Insert table 10 about here]

4.10 Analysis of Corporate Purpose Statements

We then test whether foundation-owned firms are more likely than others to articulate a corporate purpose—that is, an objective that goes beyond profit maximization, in line with the definition by Henderson and Van den Steen (2015). To identify such statements, we draw on firms' annual reports, corporate websites, and other public sources. As detailed in Online Appendix Table OA.8, we classify statements into three distinct types—*purpose, mission, and vision*. A *purpose* statement explains why the firm exists; a *mission* statement describes what the firm does and for whom; and a *vision* statement outlines what the firm aspires to become. For example, Novo Nordisk states: "Our purpose is to drive change to defeat diabetes and other serious chronic diseases such as obesity…", a statement that defines the company's reason for being and defines a goal beyond profit maximization—hallmarks of a purpose statement. Table 11 reports our findings. Columns (1) and (2) show that foundation-owned firms are significantly more likely to articulate a purpose beyond profit, suggesting that ownership structure may play a role in shaping corporate purpose. Column (3) further indicates that this tendency is stronger among firms owned by charitable foundations than those owned by private foundations.

[Insert table 11 about here]

5. Sensitivity

We performed various additional analyses to test the ~~sensitivity~~ robustness of our findings.

5.1 Sensitivity to Econometric Choices

First, since Himmelberg et al. (1999) show that unobserved heterogeneity across firms can lead to a spurious relation between ownership and firm performance, we also use panel data models with firm fixed effects. To this end, we replace the binary variable *Foundation* with the continuous variable *Foundation held*, which measures the proportion of shares owned by

charitable foundations and allows us to include firm fixed effects in our estimations. Based on the results presented in Table 12, we observe a positive and significant relation between our continuous foundation ownership measure (*Foundation held*) and accounting profitability (*ROA*); suggesting that our results are robust after including firm fixed effects. A one standard deviation increase in foundation ownership is associated with increases in *ROA* ranging from approximately 19% (Column (1)) to 29% (Column (4)) of the standard deviation of *ROA*.[13]

[Insert table 12 about here]

Second, we adopt Heckman's (1979) two-step treatment effects model, as suggested by Villalonga and Amit (2006), to address endogeneity. Because *Foundation* ownership is a binary variable, Heckman's method is superior to an instrumental-variables 2SLS approach. In the first step, we use a probit model to estimate the likelihood of foundation ownership. Then, we incorporate this estimate into the second-stage regression to assess the treatment effect of foundation ownership on financial performance. To identify foundation ownership, we use *Foundation Law* as an instrument in the first stage. This variable captures cross-country variation in regulatory support for enterprise foundations—ranging from favorable tax incentives (e.g., Austria) to more restrictive environments (e.g., the US, Italy). Regulatory friendliness affects the probability of a firm adopting a foundation ownership structure without directly influencing its performance through any other channel.

To estimate the inverse Mills ratio (*Lambda*), we regress foundation ownership on our instrument, *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth*, and industry and year effects (but we exclude year and industry dummies that perfectly predict

[13]Panel regressions, reported in Table OA.14, of *ROA* and *Tobin's q* on *Foundation share* and its squared term—controlling for firm and year fixed effects and firm characteristics—show in both the full sample and the foundation-owned sub-sample (outlined in Section 3.1) that the coefficient on *Foundation share* is negative and on its square is positive ($p < 0.01$). This implies a U-shaped relationship: performance falls as share rises to roughly 20–25 percent, then improves beyond that point. *ROA* seems to peak when foundations hold around 50 percent of the equity rights in a firm, a finding that is consistent with Hansmann and Thomsen (2021).

foundation ownership). We include the inverse Mills ratio from the first-stage regression in the second-stage regression models as an additional independent variable to correct for self-selection of foundation ownership. The outcome regression, reported in Table OA.5, shows that the foundation ownership (treatment) coefficient is statistically significant at the 5% and 10% levels using *Tobin's q* and *ROA*. The *LAMBDA* coefficient is mostly insignificant across models, except for Column (2), suggesting one-stage estimates are unbiased.

Third, we use propensity score matching (PSM) to control for selection on observables (Villalonga & Amit, 2006). We match foundation-owned firms to non-foundation-owned firms using a nearest neighbor algorithm with a caliper of 0.05, based on a probit model that predicts foundation ownership from firm characteristics (e.g., *Ln(total assets), Leverage, Ln(firm age), Intangibility, industry*).[14] Table OA.6 shows that older firms are more likely to be foundation-owned, while Table OA.6 and Figure 2 confirm that the covariates are balanced and the overlap condition holds. Importantly, specifications (2) to (5) in Table OA.7 are consistent with the view that foundation ownership facilitates firm performance. Foundation ownership increases *ROA* by about 28.4% of its standard deviation. Additional matching by country and industry produces consistent results with those in Table 2.

Fourth, we use a generalized least squares (GLS) estimation method consistent with prior literature on ownership and firm performance (e.g., Villalonga & Amit, 2006). The results from the GLS specification reported in Table OA.9 are qualitatively and quantitatively similar to the OLS results presented in Table 2. The *Foundation* coefficient suggests that being a foundation-owned firm is associated with an increase in *ROA* of 25.4% of the standard deviation.

Fifth, we estimate quantile regressions at the 75th, 50th, and 25th percentiles to capture distributional heterogeneity. Unlike OLS, quantile regressions are robust to heteroscedasticity and

[14]Using a 0.005 caliper yields similar results. Our findings remain robust with alternative matching methods, such as entropy balancing weights and coarsened exact matching. Detailed results are available on request.

outliers. Panel A reports estimates for the binary *Foundation* variable, while Panel B reports estimations for the continuous *Foundation held* variable. As shown in Table OA.13, Panel A, the association between foundation ownership and *Tobin's q* decreases from 0.14 at the 75th percentile to 0.065 at the 25th, and from 0.016 to 0.015 for *ROA*. This corresponds to increases of approximately 5% to 11% of a standard deviation for *Tobin's q* and 14% to 16% for *ROA*, with stronger associations in the upper quantiles. In Panel B of Table OA.13, *Foundation held* positively and significantly impacts *Tobin's q* at the 25th, 50th, and 75th percentiles. For *ROA*, the association is significant only at the 75th percentile and is not significant at the median or 25th percentile. Overall, our results are robust to distributional assumptions and outliers.

5.2 Sensitivity to Measurement Choices

To ensure the robustness of our findings to the definition of foundation control, we adopt a stricter criterion, defining foundation control as the foundation being the largest vote-holder with at least 30% of votes (Table OA.10, Panel A) or 50% (Panel B). Even under this stricter definition, our main results remain robust. At the 50% voting rights threshold, foundation ownership increases *ROA* by 0.478 standard deviations and *Tobin's q* by 0.439 standard deviations. Additionally, we test the sensitivity of our results to different measurement choices for financial performance, using return on equity *(ROE), ROA (based on net income), and ROA (based on EBIT).* The results, reported in Table OA.11, consistently support the efficiency of foundation ownership, confirming that our findings are not driven by the specific performance metric used.

5.3 Sensitivity to Sample Selection and Legal Environment

To alleviate concerns that heterogeneity in the distribution of our sample among countries may bias our estimations, we exclude both countries with only foundation-owned firms and countries in which foundation-owned firms are not present. This alternative model specification

does not materially change our results (reported in Table OA.12, Panel A).[15] Taking this analysis further, we split our sample based on country-level indicators that gauge the level of investor protection, such as the anti-director rights index introduced by La Porta et al. (1998) and revised by Spamann (2010). In these splits, we find consistent evidence that foundation control has a differential impact on firm performance, particularly in cases with higher shareholder protection (Table OA.12, Panel B).[16] While we cannot assert that the advantages of foundation ownership outweigh the costs in each of the countries represented in our sample, we can confirm that, on average, minority shareholders around the world stand to gain from foundation control.

5.4 Foundation Age and Selection Effects

Finally, to further examine whether initial selection effects drive our results, we partitioned our sample based on foundation age. We ran separate regressions for two groups: ownership transfers that took place more than 45 years ago (above the sample average) and those that occurred within the last 45 years (below the sample average). Panel A of Table OA.15 includes foundation-owned firms whose transition to foundation ownership occurred over 45 years ago (above the sample average), and Panel B includes those with transfers within the last 45 years (below the sample average). Counter to selection arguments, Table OA.15 shows that older foundations (over 45 years) exhibit significantly stronger financial performance (*Tobin's q* and *ROA*), while *ROA* becomes insignificant in the sample of younger foundations.

5.5 Workforce Outcomes

We further examine the relation between foundation ownership and employment outcomes. Børsting and Thomsen (2017) show that foundation-owned firms in Denmark have better reputations in public image ratings, greater job retention and higher wages. Panel A examines how foundation ownership influences human-capital management, while Panel B

[15]Only the *ROA* coefficient in Column (4) of Table OA.12, Panel A is positive but not significant.
[16]We also used the revised anti-director rights index introduced by Spamann (2008) with similar results.

examines its impact on labor costs. Table OA.16 shows that firms with foundation ownership score significantly higher on the *Human Capital Development Score* than non-foundation-owned firms. In Columns (1) and (2), the *Foundation* coefficients are positive and statistically significant, indicating that, all else equal, foundation-owned firms invest more in employee training, career planning, and other long-term development activities than their peers. Column (3) separates charitable and private foundations: firms owned by charitable foundations devote more resources to human-capital development than those owned by private foundations. Panel B tests Hwang and Lund's (2024) prediction that nonprofit status allows foundation-owned firms to pay lower wages, as employees accept reduced pay knowing non-profits support charitable purposes. Columns (1) to (4) show both total labor costs and the average labor cost per employee are lower in foundation-owned firms. Unlike previous research (Thomsen and Børsting 2017), tThis supports the "wage discount" literature, where employees accept lower pay due to value alignment (Burbano, 2016; Krueger et al., 2024; Colonnelli et al., 2025).

5.6 Sensitivity to Institutional Ownership Patterns

Finally, as an additional sensitivity test, we account for broader institutional ownership structures that may also relate to financial performance, to better isolate the observed association between foundation ownership and firm outcomes. Drawing on Thomson Reuters 13f and S&P Capital IQ data, we control for institutional holdings; the share of floating stock held by private-equity and venture-capital firms; the share held by hedge funds; and the percentage of shares available for public trading. As shown in Table OA.17, foundation ownership remains positively and significantly associated with firm performance, measured by both *ROA* and *Tobin's q*.

5.7 Acquisition Performance

To further mitigate endogeneity concerns, we conduct a standard event study that isolates the market reaction to acquisition announcements, avoiding the noise of annual financial data. This approach focuses on how foundation ownership affects shareholder wealth in acquisitions,

highlighting potential agency costs (Shleifer & Vishny, 1986). We analyze all deal announcements reported in Orbis M&A, a comprehensive database covering corporate mergers and acquisitions (M&A), initial public offerings (IPOs), private equity, and venture capital deals. From this source, we retain only those M&A deals in which one of the foundation-owned and non-foundation-owned companies acts as the acquirer and that meet four screening criteria: (1) the deal must be marked as *Completed*, (2) the reported deal value must be at least *10 Million USD* to ensure economic importance (3) the deal must be classified as an *Acquisition*, and (4) the acquisition must involve a transition from a non-controlling to a controlling stake—specifically, the initial stake must not exceed 49.9%, and the final stake must be at least 50.01%. Abnormal returns are estimated using the market-adjusted model (Brown & Warner, 1985; MacKinlay, 1997), which assumes a firm's expected return equals the market return on the same day. We use the daily return of the Russell 3000 as our market index because it provides a consistent, broad-based benchmark for the firms in our international sample. A narrower country-specific index could absorb some of the effects we seek to identify. We calculate abnormal returns as:

$$AR_{it} = r_{it} - r_{mt}$$

where r_{it} is the realized return of firm *i* on day *t* and r_{mt} is the return on the market index (Russell 3000) on day *t*. To address uncertainty in the timing of market reactions, we calculate acquirer cumulative abnormal returns (CARs) over event windows [−1,1], [−3,3], and [−5,5]. The CAR for any window is defined as:

$$CAR_i(t_1, t_2) = \sum_{t=t_1}^{t_2} AR_{it}$$

These CARs capture market reactions, allowing us to assess whether acquisition performance differs between foundation-owned and non-foundation-owned firms. Univariate results indicate that foundation-owned firms outperform their peers in average cumulative abnormal returns

(CARs). For the [−3,3] window, foundation-owned firms average 1.2% CARs versus 0.93% for non-foundation-owned firms. Over the [−5,5] window, the average CARs are 1.4% and 0.7%, respectively. Table 13 reports regressions of CARs over the [−1,1], [−3,3], and [−5,5] windows comparing foundation-owned and non-foundation-owned firms. The *Foundation* coefficient is significantly positive in all windows, indicating that foundation ownership does not reduce market valuation of acquisitions as standard agency theory would predict. Panel B of Table 13 further reveals that firms owned by charitable foundations generate significantly higher CARs than those owned by private foundations. Overall, these results contradict Hypothesis 4 and instead suggest that foundation-owned firms engage in value-increasing acquisitions. A likely explanation is conservatism in deal-making: stock-financed acquisitions risk diluting control, while cash deals reduce financial flexibility. As a result, acquisitions likely proceed only when expected value clearly exceeds these costs, limiting empire-building motives. In sum, market reactions to acquisition announcements provide additional evidence for the economic viability of the foundation governance model.

6. Conclusion

Around the world—especially in Europe—prominent firms are controlled by foundations. This paper provides new evidence on the relation between foundation control and firm performance. Unlike traditional for-profit companies, foundation-owned firms are controlled by non-profit entities serving as the controlling owners. Our cross-country data indicates that this governance structure is not inherently weak. Foundation-owned firms ~~are related to~~have higher profitability (*ROA*) and market valuation *(Tobin's q*) than their non-foundation-owned counterparts, as well as greater acquisition efficiency—particularly when ownership is held by charitable foundations. These results are economically meaningful and statistically significant. They challenge the standard agency-theory prediction that strong performance requires residual-claimant incentives.

Despite lacking such incentives, foundation-owned firms show strong profitability, valuation, and acquisition outcomes. Instead, these findings are consistent with commitment-based governance theories that emphasize long-term orientation, stakeholder trust, and purpose as substitutes for market discipline. The evidence also suggests that non-profit foundations can credibly maintain implicit contracts with stakeholders—such as employment protection and sustained investment.

We do not interpret these results as evidence of a universal causal effect of foundation ownership on firm performance. Clearly, the decision to transfer ownership to a foundation is not random. However, in the relatively few instance when business owners choose this option after what we must assume to be careful deliberation, it appears not to be associated with subsequent financial underperformance in the foundation owned companies.

Our findings have potential policy implications. They suggest that foundation ownership can be an efficient ~~and viable~~ governance model, supporting its legitimacy as an option for founders and shareholders. Policymakers should recognize these potential benefits and ensure a level playing field for diverse ownership forms.

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Appendix A. Variable Definitions

Variable	Description	Source
CAR	Cumulative abnormal returns measured over the event windows [−1,1], [−3,3], and [−5,5].	Bloomberg
Cash Holdings	Ratio of cash and short-term investments divided by the book value of total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Charitable Purpose	Dichotomous variable set to 1 if the largest ultimate owner is a charitable foundation, and 0 for family foundations.	Hand-collected information from annual reports and websites

Common Law	Dichotomous variable set to 1 if country *c* is a common-law country, and 0 otherwise.	La Porta et al. (1999)
Dividend Ratio	The ratio of dividends to net income, winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Discretionary Accruals	The absolute value of discretionary accruals estimated from the modified Jones (1991) model proposed by Dechow et al. (1995).	Bloomberg
Ln(total assets)	Natural logarithm of the book value of total assets (AT).	Bloomberg
Ln (firm age)	Natural log of number of years since the firm's year of incorporation.	BvD Orbis
Foundation	Dichotomous variable set to 1 if the largest ultimate owner is a foundation or perpetual purpose trust with at least 20% of the firm's votes, 0 otherwise.	BvD Orbis, hand-collected information from annual reports, proxy statements, websites, and Thomsen (2017)
Foundation share	Percentage of shares held by a charitable foundation.	S&P Capital IQ
Foundation Law	Dichotomous variable set to 1 when the regulatory approach towards enterprise foundations is favorable, 0 otherwise.	Sanders and Thomsen (2023)
GDP Growth	The GDP per capita growth rate for country c in year t (in percent).	OECD.Stat
Life Science	1 if Fama–French 48 industry code is Healthcare, Medical Equipment, or Pharmaceuticals; 0 otherwise.	Ken French Data Library
Intangibility	The ratio of intangible to total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Investment w/ R&D	The sum of CapEx and R&D expenditures scaled by the beginning-of-year total assets, winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Investment w/o R&D	CapEx over the beginning-of-year total assets, winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Leverage	Ratio of long-term debt plus debt in current liabilities (DLC) to the book value of total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Ln (Number of Employees)	Log of the number of employees	BvD Orbis
PPE/Sales	Ratio of Property, Plant, and Equipment (PPE) to sales, winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Profit Margin	Net income over total sales, winsorized at the 1st and 99th percentiles of its distribution.	BvD Orbis
Public	Dichotomous variable set to 1 if a firm is publicly listed, and 0 otherwise.	BvD Orbis
ΔREC	Change in accounts receivables for company *j* in year *t*.	Bloomberg
Returns on Assets (ROA) (Using EBITDA)	Ratio of operating income before depreciation and amortization (EBITDA) to the book value of total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg, BvD Orbis
Returns on Assets (ROA) (Using EBIT)	Ratio of operating income before interest and tax (EBIT) to the book value of total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg

Returns on Assets (ROA) (Using Net Income)	Ratio of net income to the book value of total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
ROE	Ratio of net income to the book value of equity, winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Returns on Sales (ROS)	Ratio of operating income before interest and tax (EBIT) to total sales, winsorized at the 1st and 99th percentiles of its distribution.	BvD Orbis
ΔREV	Change in sales revenue for company j in year t.	Bloomberg
Sales Growth	Growth in sales revenue for company i (i.e., the change from t to t – 1), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg
Net Investment	The annual change in net fixed assets—i.e., net property, plant, and equipment—scaled by beginning-of-year nominal total assets.	BvD Orbis
Market return	Daily return of the Russell 3000 index	Yahoo Finance
Tobin's q	(Market capitalization + book value of total debt) divided by total assets (AT), winsorized at the 1st and 99th percentiles of its distribution.	Bloomberg

Table 1. Descriptive Statistics

Table 1 presents summary statistics for the main variables used in the analysis. Foundation-owned firms are matched with non-foundation-owned firms of similar firm size (total assets) and within the same two-digit SIC industry (see Appendix OA.8 for details on the matching procedure). To mitigate the influence of outliers, we winsorize all ratios at the 1st and 99th percentiles. A complete variable list is provided in Appendix A.

Full Sample	*Obs.*	*Mean*	*Median*	*Standard Deviation*	*Min.*	*Max.*
ROA	4466	.107	0.108	.101	-.477	.367
Tobin's q	4466	1.416	0.991	1.318	.242	9.728
Sales growth	4466	.073	0.054	.227	-.578	1.252
PPE/Sales	4466	.431	0.268	.652	.005	4.972

Ln (total assets)	4466	7.247	7.352	1.858	-.87	12.462
Firm age (years)	4466	56.211	44.500	46.046	0	250
Intangibility	4466	.175	0.102	.195	0	.761
Leverage	4466	.224	0.210	.167	0	.765
Foundation-owned Firms						
ROA	1358	.121	0.117	.105	-.477	.367
Tobin's q	1358	1.634	1.069	1.563	.242	9.728
Sales growth	1358	.076	0.056	.21	-.578	1.252
PPE/Sales	1358	.441	0.278	.618	.005	4.972
Ln(total assets)	1358	7.098	7.160	2.027	.727	12.462
Firm age(years)	1358	68.13	58.000	52.334	0	250
Intangibility	1358	.175	0.105	.193	0	.761
Leverage	1358	.215	0.200	.163	0	.765
Non-Foundation-owned Firms						
ROA	3108	.1	0.103	.098	-.477	.367
Tobin's q	3108	1.32	0.953	1.183	.242	9.728
Sales growth	3108	.071	0.053	.233	-.578	1.252
PPE/Sales	3108	.427	0.261	.667	.005	4.972
Ln (total assets)	3108	7.312	7.406	1.776	-.87	11.747
Firm age (years)	3108	51.003	39.000	41.971	0	224
Intangibility	3108	.175	0.100	.197	0	.761
Leverage	3108	.228	0.213	.169	0	.765

Table 2. Accounting and Market Performance: Foundation-Owned vs. Non-Foundation-Owned Firms

Notes. This table provides the OLS regression results of firm performance on foundation ownership (Equation (1)), which investigates differences in performance levels between foundation-owned and non-foundation-owned companies. The dependent variables are *ROA* and *Tobin's q.* All models are estimated as ordinary least squares (OLS) regressions with standard errors clustered at the firm level (in parentheses). The full sample comprises 4466 firm-year observations from 296 public firms (foundation-owned and non-foundation-owned) during 2001-2020. Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth, GDP per capita growth* and *Common Law*. We also include industry (four-digit SIC) and year dummies (fixed effects), which are not reported to preserve space. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are presented in Table Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dep. variable:	*ROA (Using EBITDA)*	*Tobin's q*	*ROA (Using EBITDA)*	*Tobin's q*
Foundation	0.0239*	0.507***	0.0275**	0.536***
	(0.0129)	(0.139)	(0.0113)	(0.138)
Ln(total assets)			0.0181***	-0.0619
			(0.00621)	(0.0485)
Leverage			-0.0435	0.0380
			(0.0274)	(0.323)
PPE/Sales			-0.0257***	-0.155**
			(0.00805)	(0.0679)
Ln(firm age)			0.0101*	-0.0311
			(0.00582)	(0.0522)
Intangibility			-0.0615**	-0.763*
			(0.0295)	(0.439)
Sales growth			0.0317***	0.445***
			(0.0101)	(0.134)
GDP per capita growth			0.00230*	0.0400*
			(0.00135)	(0.0229)
Common Law			0.0220*	0.337**
			(0.0122)	(0.153)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	4,466	4,466	4,197	4,197
R-squared	0.355	0.398	0.465	0.474

Table 3. Difference-in-Differences Estimates of Foundation Ownership During the Financial Crisis

Notes. This table shows the results from regressing *Tobin's q* on the *Foundation x Post* interaction term. Control variables include *Ln (total assets), Leverage, PPE/Sales, Ln (firm age), Intangibility* and *Sales growth*. These are unreported to preserve space. To reduce the effect of firm size and industry membership (FF48), we use propensity score matching, employing the Stata command "Psmatch2," and apply frequency weights (*Fweight*). We match without replacement and use a caliper of 0.005 (Shipman et al., 2017). The model is then estimated on the matched sample, except for model (3), which is run on the unweighted sample due to firm fixed effects. Standard errors, clustered at the firm level, are in parentheses. All ratios are winsorized at the 1% and 99% levels. Variable definitions are provided in Appendix A. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

	(1)	*(2)*	*(3)*
Dep. variable:	*Tobin's q*	*Tobin's q*	*Tobin's q*
Foundation x Post	0.370**	0.382**	0.167*
	(0.161)	(0.159)	(0.0867)
Firm Controls	Yes	Yes	Yes
Year-FE	No	Yes	No
Country-FE	Yes	Yes	No
Industry-FE	Yes	Yes	No
Firm FE	No	No	Yes
Country-Year FE	No	No	Yes
Clustered by	Firm	Firm	Firm
Observations	479	479	880
R-squared	0.497	0.510	0.362

Table 4. Foundation Ownership and Employment Resilience in the Financial Crisis

Notes. This table shows the results from regressing *Ln (Number of Employees) on* the *Foundation x Post* interaction term. We include industry fixed effects, year fixed effects country fixed effects and controls. Control variables include *Ln (total assets), Leverage, PPE/Sales, Ln (firm age), Intangibility and Sales growth*. These are unreported to preserve space. To reduce the effect of firm size and industry membership (FF48), we use propensity score matching, employing the Stata command "Psmatch2," and apply frequency weights (fweight). We match without replacement and use a caliper of 0.005 (Shipman et al., 2017). Then we run the model on the matched sample. Standard errors, clustered at the firm-level, are in parentheses. All ratios are winsorized at the 1% and 99% levels. Variable definitions are provided in Appendix A. ***, **, and * indicate statistical significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable:	*(1)* *Ln (Number of Employees)*	*(2)* *Ln (Number of Employees)*
Foundation x Post	0.681*	0.674*
	(0.386)	(0.389)
Firm Controls	Yes	Yes
Year FE	No	Yes
Country FE	Yes	Yes
Industry FE	Yes	Yes
Clustered by	Firm	Firm
Observations	197	197
R-squared	0.663	0.663

Table 5. Foundation Ownership and Agency Costs

Notes. This table compares agency costs between foundation-owned and non-foundation-owned companies. The agency indicators are (1) the *Sales-to-Total Assets Ratio (2) Cash holdings (*cash plus short-term investments scaled by total assets), *and (3) dividend payout* (dividends/net income*)*. In Model (3), we regress our performance measure on the interaction term (*Foundation* × *Cash Holdings*). Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth, Common Law* and *GDP per capita growth*. We also include the industry (four-digit SIC) and year dummies (fixed effects), which are not reported to preserve space. Firm-clustered standard errors are reported in parentheses. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable:	*(1)* *Sales-to-Total Assets Ratio*	*(2)* *Dividend Ratio*	*(3)* *ROA (Using EBITDA)*
Foundation	0.0769**	8.673**	0.0532***
	(0.0341)	(3.605)	(0.0142)
Cash Holdings			-0.105**
			(0.0525)
Foundation × Cash Holdings			-0.230*
			(0.134)
Ln(total assets)	-0.00489	2.502*	0.0158***
	(0.0131)	(1.432)	(0.00502)
Leverage	-0.278**	-6.247	-0.0670**
	(0.120)	(11.82)	(0.0287)
PPE/Sales	-0.313***	1.285	-0.0310***
	(0.0429)	(4.054)	(0.00829)
Ln(firm age)	0.00264	1.434	0.00593
	(0.0177)	(2.100)	(0.00451)
Intangibility	-0.719***	32.27***	-0.0914***
	(0.113)	(12.21)	(0.0311)
Sales growth	0.0204	-22.40***	0.0306***
	(0.0376)	(6.785)	(0.0112)
GDP per capita growth	-0.00565	-0.388	0.00214
	(0.00474)	(0.710)	(0.00137)
Common Law	0.0544	-11.03**	0.0192
	(0.0456)	(5.333)	(0.0117)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm
Observations	4,197	3,504	3,868
R-squared	0.685	0.189	0.512

Table 6. Foundation Ownership and Corporate Investment

Notes. This table tests the investment levels between foundation-owned companies and non-foundation-owned companies. For variable definitions and a detailed explanation of their construction see Appendix A. Each regression is estimated using ordinary least squares (OLS). Our sample is size and industry-matched (for further details see Appendix OA.8). Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth, GDP per capita growth* and *Common Law*. We also include the industry (four-digit SIC) and year dummies (fixed effects), which are not reported to preserve space. Firm-clustered standard errors are reported in parentheses. Variable definitions are presented in Appendix A. All ratios are winsorized at 1% of each tail to reduce the impact of outliers. ***, **, and * denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)	(4)
Dep. variable:	*Investment w/o R&D*	*Investment w/ R&D*	*Investment w/o R&D*	*Investment w/ R&D*
Foundation	0.0104**	0.0152**	0.00946**	0.0127*
	(0.00488)	(0.00696)	(0.00432)	(0.00708)
Ln(total assets)			0.000188	-0.00170
			(0.00106)	(0.00228)
Leverage			0.0218**	0.0330*
			(0.00846)	(0.0171)
PPE/Sales			0.0135**	0.00641
			(0.00567)	(0.00798)
Ln(firm age)			0.000913	-0.00257
			(0.00194)	(0.00350)
Intangibility			-0.0445***	-0.0534**
			(0.00878)	(0.0210)
Sales growth			0.0382***	0.0658***
			(0.00611)	(0.0109)
GDP per capita growth			0.00117**	-0.000618
			(0.000510)	(0.000938)
Common Law			-0.000474	-0.00672
			(0.00378)	(0.00701)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	4,405	3,712	4,364	3,682
R-squared	0.331	0.500	0.395	0.540

Table 7. Foundation Ownership, Information Asymmetry, and Firm Valuation

Notes. This table reports results for the interaction between Foundation ownership and the *Life-Science* dummy. The *Life-Science* variable equals 1 for firms classified in Fama–French 48 industry groups with high information asymmetry (Healthcare, Medical Equipment, and Pharmaceuticals), and 0 otherwise. The dependent variable is *Tobin's q*. Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth, GDP per capita growth* and *Common Law*. We include year and industry fixed effects defined by the 4-digit SIC code. Firm-clustered standard errors are reported in parentheses. All ratios are winsorized at 1% of each tail to reduce the impact of outliers. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)
Dep. variable:	*Tobin's q*	*Tobin's q*
Foundation	0.345**	0.379***
	(0.137)	(0.123)
Medical-Care Sector	1.163***	1.924***
	(0.439)	(0.641)
Foundation x	1.127**	1.020**
Medical-Care Sector	(0.475)	(0.462)
Ln(total assets)		-0.0666
		(0.0453)
Leverage		-0.0468
		(0.318)
PPE/Sales		-0.150**
		(0.0715)
Ln(firm age)		0.00387
		(0.0545)
Intangibility		-0.598
		(0.401)
Sales growth		0.455***
		(0.139)
GDP per capita growth		0.0457**
		(0.0226)
Common Law		0.397**
		(0.154)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Clustered by	Firm	Firm
Observations	4,466	4,197
R-squared	0.411	0.484

Table 8. Comparison of Public and Private Foundation-Owned Firms' Performance

Notes. In this table, we compare the performance between public and private foundation-owned firms. To alleviate observable differences between private foundation-owned firms and publicly listed ones, we match them on size (logarithm of total assets) and industry (Fama & French 12 industry groups). The dependent variables are *ROA* (Return on Assets), *ROS* (Return on Sales) and *Profit Margin*, respectively. *Public* is a dummy whether the company is listed on the stock exchange. *Ln (total assets)* is the natural logarithm of total assets. *Firm age* is the number of years since the company has been incorporated. Standard errors are clustered at the firm level. Variable definitions are presented in Appendix A. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. ***, **, and * denote significance at the 1%, 5%, and 10% levels respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Dep. variable:	*ROA*	*ROS*	*Profit Margin*	*ROA*	*ROS*	*Profit Margin*	*Net Investments*	*ROA*
Public	-0.0337**	-0.0295	-4.116**	-0.0485***	-0.0636*	-5.878**	-0.0318***	-0.0958***
	(0.0156)	(0.0286)	(2.052)	(0.0182)	(0.0353)	(2.559)	(0.00954)	(0.0238)
Ln(total assets)				0.0137***	0.0312***	1.406***	0.00321***	0.0113***
				(0.00365)	(0.00734)	(0.472)	(0.00119)	(0.00365)
Firm Age				-4.26e-05	-1.48e-05	0.00111	-3.18e-05	2.32e-06
				(0.000120)	(0.000283)	(0.0141)	(0.00954)	(8.51e-05)
Investments								0.000124***
								(1.05e-05)
Public x Investments								0.000123***
								(1.04e-05)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm	Firm	Firm	Firm	Firm
Observations	2,752	2,714	2,612	2,751	2,713	2,611	1,257	2,485
R-squared	0.208	0.154	0.235	0.274	0.237	0.267	0.161	0.198

Table 9. Charitable vs. Family Foundations

Notes. To alleviate observable differences between charitable and family foundations, we match them on size (logarithm of total assets) and industry (Fama & French 12 industry groups). The dependent variables are *ROA (Return on Assets), ROS* (Return on Sales) and *Profit Margin*. *Public* is a dummy whether the foundation has a charitable purpose. *Ln (total assets)* is the natural logarithm of total assets. *Firm age* is the number of years since the company has been incorporated. Standard errors are clustered at the firm level. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels respectively.

	(1)	*(2)*	*(3)*	*(4)*	*(5)*	*(6)*
Dep. variable:	*ROA*	*ROS*	*Profit Margin*	*ROA*	*ROS*	*Profit Margin*
Charitable Purpose	0.0112	0.0638**	3.673**	0.00998	0.0499*	2.929*
	(0.0150)	(0.0288)	(1.804)	(0.0144)	(0.0273)	(1.619)
Ln(total assets)				0.00504*	0.0216***	1.000***
				(0.00265)	(0.00478)	(0.310)
Firm Age				-0.000139	-0.000122	-0.00911
				(9.58e-05)	(0.000178)	(0.00887)
Year FE	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Country FE	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Industry FE	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*	*Yes*
Observations	*5,290*	*5,072*	*4,958*	*5,278*	*5,060*	*4,946*
R-squared	*0.143*	*0.167*	*0.156*	*0.153*	*0.205*	*0.173*

Table 10. Foundation Ownership and Discretionary Accruals

Notes. This table presents the results testing the relation between foundation ownership and earnings management. The dependent variable is the absolute value of discretionary accruals derived from the Modified Jones (1991) Model as suggested by Dechow et al. (1995). The independent variable is foundation ownership (*Foundation)*. Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth*. We include year and industry fixed effects defined by the 4-digit SIC code. Robust standard errors are clustered on the firm-level and are in parentheses. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable:	(1) *Discretionary Accruals*	(2) *Discretionary Accruals*	(3) *Discretionary Accruals*
Foundation	-0.000803*	-0.00161***	-0.00126**
	(0.000410)	(0.000532)	(0.000609)
Ln(total assets)			0.000315*
			(0.000174)
Leverage			0.000240
			(0.000469)
PPE/Sales			-2.28e-05
			(0.000257)
Ln(firm age)			0.000311
			(0.00223)
Intangibility			-5.23e-05
			(0.00184)
Sales growth			0.00542***
			(0.00181)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	No	Yes	Yes
Clustered by	Firm	Firm	Firm
Observations	3,766	3,766	3,586
R-squared	0.082	0.091	0.106

Table 11. Foundation Ownership and Corporate Purpose Statements

Notes. This table analyzes how foundation ownership relates to corporate purpose statements. Table OA.10 provides details on the hand-collection of the corporate purpose measure. Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth*, *GDP per capita growth* and *Common Law*. We include year and industry fixed effects defined by the 4-digit SIC code. Column (2) also includes country fixed effects. Robust standard errors are clustered on the firm-level and are in parentheses. All ratios are winsorized 1% in each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

	(1)	(2)	(3)
Dep. variable:	*Purpose*	*Purpose*	*Purpose*
Foundation	0.724***	3.059***	
	(0.230)	(0.741)	
Charitable Purpose			21.11***
			(0.746)
Ln (Assets)	0.473***	0.597***	3.870***
	(0.0912)	(0.109)	(0.450)
Leverage	-0.412	-2.126***	-9.683***
	(0.669)	(0.810)	(3.018)
PPE/Sales	0.435**	0.440**	-2.096
	(0.176)	(0.219)	(1.817)
Ln(firm age)	0.127	0.146	0.161
	(0.122)	(0.171)	(0.696)
Intangibility	1.030	0.859	-9.785***
	(0.730)	(1.085)	(2.189)
Sales growth	-0.199	-0.173	1.896***
	(0.194)	(0.198)	(0.370)
GDP per capita growth	-0.0307	-0.0235	-0.339**
	(0.0317)	(0.0147)	(0.133)
Common Law	0.655**	2.445	13.25***
	(0.292)	(1.508)	(0.910)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Country FE	No	Yes	No
Observations	2,972	2,279	404

Table 12. Foundation Ownership and Firm Performance: Firm Fixed-Effects Estimates

Notes. This table reports firm-fixed-effects regressions of return on assets (*ROA,* using EBITDA) on the share of equity held by a charitable foundation ("*Foundation held*," from S&P Capital IQ, 2006–2019). All specifications control for *Ln (total assets), Leverage, PPE/Sales, Ln (firm age), Intangibility, and Sales growth,* plus firm and year fixed effects; continuous variables are winsorized at the 1st and 99th percentiles, and standard errors (in parentheses) are clustered by firm. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are presented in Appendix A. ∗, ∗∗, ∗∗∗ indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)
Dep. variable:	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*
Foundation held	0.112**	0.126**	0.101***	0.111**
	(0.0433)	(0.0550)	(0.0387)	(0.0487)
Ln(total assets)			0.00605	0.0230
			(0.00810)	(0.0142)
Leverage			-0.0848***	-0.0625
			(0.0289)	(0.0518)
PPE/Sales			-0.0519***	-0.0431**
			(0.00773)	(0.0185)
Intangibility			-0.134***	-0.250***
			(0.0366)	(0.0600)
Sales growth			0.0111	-0.0127
			(0.0115)	(0.0188)
Firm FE	Yes	Yes	Yes	Yes
Year FE	Yes	Yes	Yes	Yes
Country-Year	No	Yes	No	Yes
Observations	620	620	467	467
R-squared	0.817	0.861	0.767	0.834

Table 13. Effect of Foundation Ownership on Acquirer Cumulative Abnormal Returns (CARs)

This table reports regression results for acquirer cumulative abnormal returns (*CAR*) around acquisition announcements. *CAR* is measured over three event windows: *[−1, 1], [−3, 3], and [−5, 5]. Foundation* is a dummy variable equal to 1 if a foundation is the controlling owner of the firm and 0 otherwise. *Charitable Purpose* is a dummy variable indicating whether the company has a charitable or private foundation as the main shareholder. We also include deal-level control variables. *Cash Payment* is a dummy variable equal to 1 if only cash is used for payment. *Deal value ≥ 100 million USD* is a dummy equal to 1 if the reported deal value exceeds 100 million USD. Market returns are measured using the Russell 3000 daily market return. Standard errors are clustered by firm and deal. Panel A reports results for the full sample, while Panel B restricts the analysis to foundation-owned firms only. ∗, ∗∗, ∗∗∗ denote statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Comparison between Foundation-owned and Other Firms

Dep. variable:	*CAR [-1,1]*	*CAR [-3,3]*	*CAR [-5,5]*
Foundation	0.0490**	0.0453*	0.0481**
	(0.0217)	(0.0231)	(0.0238)
Clustered Standard Errors	Firm & Deal	Firm & Deal	Firm & Deal
Deal Characteristics	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Target Industry FE	Yes	Yes	Yes
Observations	196	196	196
R-squared	0.707	0.739	0.748

Table 13. Effect of Foundation Ownership on Acquirer Cumulative Abnormal Returns (CARs) (cont'ed)

Panel B. Comparison between Charitable and Private Foundations

Dep. variable:	*CAR [-1,1]*	*CAR [-3,3]*	*CAR [-5,5]*
Charitable Purpose	0.0201**	0.0334***	0.0314*
	(0.00733)	(0.00846)	(0.0148)
Clustered Standard Errors	Firm & Deal	Firm & Deal	Firm & Deal
Deal Characteristics	Yes	Yes	Yes
Country FE	Yes	Yes	Yes
Target Industry FE	Yes	Yes	Yes
Observations	54	54	54
R-squared	0.887	0.893	0.843

Figure 1. Profitability

Figure 1 shows the (average) *ROA* of foundation-owned firms (Treated) versus non-foundation-owned firms (Control).

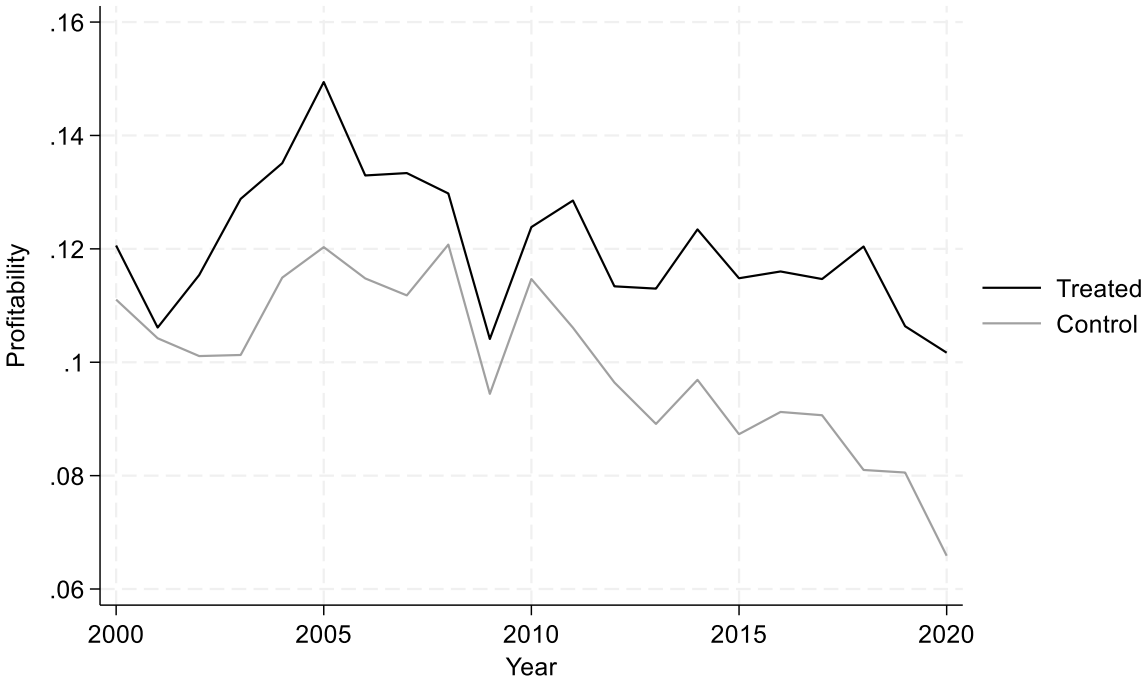
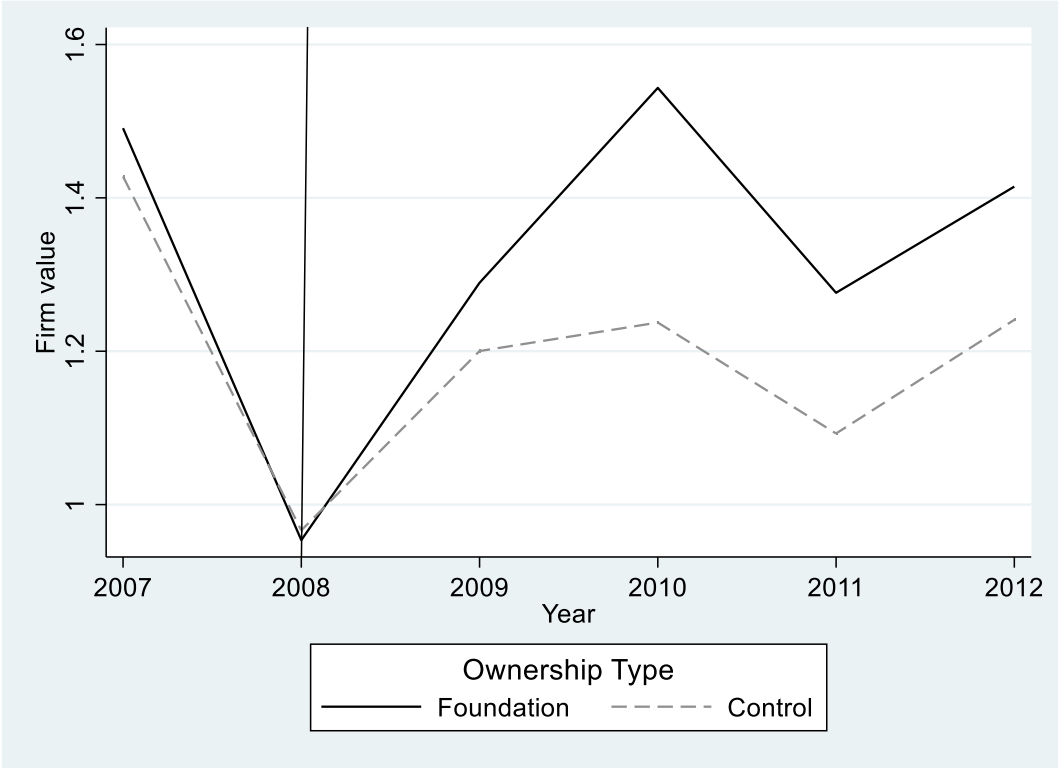


Figure 2. Evidence from the Financial Crisis

Notes. The graph illustrates the relationship between foundation ownership and firm value during the financial crisis. To meet the parallel trends assumption, we match foundation-owned firms to control firms using firm size (ln total assets) and Fama-French 48 industry groups, allowing for replacement and a caliper of 0.005 (Shipman et al., 2017). Propensity scores are estimated with Stata's '*psmatch2'* command, applying frequency weights (fweight).



Foundation Ownership and Financial Performance: International Evidence

Online Appendix

Contents

Table OA.1. Correlations

Notes. This table provides a correlation matrix for some of the key variables of our analysis. For variable definitions and construction see Appendix A. For details on the matching approach see section OA.8. All ratios are winsorized at 1% of each tail to reduce the impact of outliers. The coefficients that are statistically significant at the 5% level or lower are highlighted in bold. The unity of analysis is a firm-year.

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
(1) Foundation	1.000												
(2) ROA	**0.094**	1.000											
	(0.000)												
(3) Tobin's q	**0.110**	**0.212**	1.000										
	(0.000)	(0.000)											
(4) Sales growth	0.009	0.066	0.109	1.000									
	(0.553)	(0.000)	(0.000)										
(5) PPE/Sales	0.010	-0.279	0.001	-0.024	1.000								
	(0.517)	(0.000)	(0.970)	(0.107)									
(6) Ln (total assets)	**-0.053**	**0.192**	**-0.150**	**-0.095**	**-0.075**	1.000							
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)								
(7) Firm age	**0.171**	**0.104**	**-0.099**	**-0.078**	**-0.053**	**0.129**	1.000						
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)							
(8) Intangibility	0.001	-0.001	**0.041**	**0.027**	**-0.214**	**0.231**	**-0.094**	1.000					
	(0.942)	(0.970)	(0.006)	(0.069)	(0.000)	(0.000)	(0.000)						
(9) Leverage	**-0.036**	**-0.063**	**-0.109**	-0.026	**0.186**	**0.289**	-0.001	0.121	1.000				
	(0.018)	(0.000)	(0.000)	(0.077)	(0.000)	(0.000)	(0.948)	(0.000)					
(10) Dividend Ratio	**0.063**	**-0.108**	**-0.033**	**-0.098**	-0.027	**0.083**	**0.071**	**0.052**	0.002	1.000			
	(0.000)	(0.000)	(0.042)	(0.000)	(0.104)	(0.000)	(0.000)	(0.002)	(0.880)				
(11) Cash Holdings	**-0.045**	**-0.147**	**0.233**	**0.031**	**-0.038**	**-0.210**	**-0.099**	**-0.250**	**-0.348**	-0.025	1.000		
	(0.004)	(0.000)	(0.000)	(0.047)	(0.014)	(0.000)	(0.000)	(0.000)	(0.000)	(0.139)			
(12) Investment w/o R&D	**0.116**	**0.240**	**0.097**	**0.209**	**0.238**	**-0.040**	0.004	**-0.242**	**0.099**	**-0.084**	**-0.120**	1.000	
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.007)	(0.791)	(0.000)	(0.000)	(0.000)	(0.000)		
(13) Investment w/ R&D	**0.092**	0.005	**0.380**	**0.232**	**0.255**	**-0.180**	**-0.058**	**-0.138**	**-0.053**	**-0.062**	**0.192**	**0.617**	1.000
	(0.000)	(0.753)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.001)	(0.001)	(0.000)	(0.000)	

Table OA.2. Frequency by Country

Notes. This table reports the country distribution of our sample, including the full sample, foundation-owned firms, and the control group. Foundation-owned firms are categorized as those where a foundation holds at least 20% of the voting rights. For further information about the matching approach used, refer to Table OA.8 in the Online Appendix.

Country	No. of obs.	No. of obs. with foundation ownership	No. of obs. without foundation ownership
Austria	210	173	37
Australia	9	0	9
Bangladesh	9	9	0
Belgium	69	69	0
Brazil	73	29	44
Canada	63	0	63
Switzerland	156	26	130
China	41	0	41
Colombia	20	0	20
Czech Republic	16	0	16
Germany	269	138	131
Denmark	352	329	23
Spain	50	0	50
Finland	58	38	20
France	201	20	181
Great Britain	199	23	176
Greece	15	0	15
Hungary	6	6	0
Ireland	42	0	42
India	266	214	52
Iceland	3	3	0
Italy	73	33	40
Jersey	6	0	6
Japan	672	17	655
Croatia	62	0	62
Kenya	25	0	25
Sri Lanka	19	0	19
Luxembourg	32	32	0
Mexico	14	0	14
Malaysia	25	0	25
Nigeria	12	0	12
Netherlands	58	0	58
Norway	90	20	70
Philippines	18	0	18
Poland	20	0	20
Sweden	294	146	148
Taiwan	37	0	37
United States	868	33	835
Vietnam	14	0	14
Total	4466	1358	3108

Table OA.3. Frequency by Industry

Notes. This table reports the number of observations by industry. Industries are classified according to SIC divisions. The two-digit SIC divisions are the following: agriculture (SIC 00-09); mining (SIC 10-14); construction (SIC 15-19); manufacturing (SIC 20-39); utilities (SIC 40-49); wholesale trade (SIC 50-51); retail trade (SIC 52-59); finance, insurance, and real estate (SIC 60-69, restricted from our sample); services (SIC 70-89); and non-classifiable industries (SIC 99, not represented in our sample).

Industry	Obs.	%	Obs. With foundation ownership	Obs. Without foundation owernship
Agriculture	19	0.4%	0	19
Mining	98	2.2%	33	65
Construction	343	7.7%	110	233
Manufacturing	2,819	63.1%	887	1932
TCEG & S*	329	7.4%	117	212
Wholesale Trade	160	3.6%	24	136
Retail Trade	117	2.6%	35	82
Services	581	13.0%	152	429
All	4,466	100%	1358	3108

Table OA.4. Frequency by Year

Notes. The number of observations by year for the full sample, foundation-owned firms, and non-foundation-owned firms is presented in Table OA.4. Foundation-owned firms are defined as those where a foundation possesses a minimum of 20% of the voting rights. For details on the matching approach see section OA.8.

Year	No. Obs.	Obs. With Foundation Ownership	Obs. Without Foundation Ownership
2001	123	31	92
2002	136	39	97
2003	149	44	105
2004	180	52	128
2005	181	52	129
2006	199	56	143
2007	209	57	152
2008	220	64	156
2009	227	66	161
2010	231	68	163
2011	237	72	165
2012	241	75	166
2013	245	78	167
2014	253	79	174
2015	260	81	179
2016	269	84	185
2017	277	90	187
2018	282	91	191
2019	284	92	192
2020	263	87	176
All	4466	1358	3108

Table OA.5. Heckman Model

Notes. This table examines the impact of foundation ownership on firm performance. The Table reports the regression results of Heckman's treatment regressions. Column (1) provides the first-stage results, and Columns (2) to (5) report second-stage results. The first-stage probit model includes *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth,* and the industry (two-digit SIC) and year dummies (fixed effects) as well as *Foundation_Law*. *Foundation_Law* is a dummy variable that equals one if the regulatory approach towards enterprise foundations is welcoming, and zero otherwise. We exclude those industry and year dummies that completely determine foundation ownership. The second-stage equation includes the self-selection parameter *Lambda* but excludes our instrument. Appendix A reports detailed definitions for the variables used in this study. Robust standard errors clustered by firm and are reported in parentheses. All ratios are winsorized 1% in each tail to mitigate the effect of outliers. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels respectively.

Dep. variable:	*(1)* *Foundation*	*(2)* *ROA (Using EBITDA)*	*(3)* *ROA (Using EBITDA)*	*(4)* *Tobin's q*	*(5)* *Tobin's q*
Foundation		0.190***	0.123***	0.956*	0.819*
		(0.0461)	(0.0326)	(0.490)	(0.473)
Foundation_Law	12.71***				
	(1.135)				
Ln(total assets)	0.138		0.0460***		0.119
	(0.176)		(0.0123)		(0.234)
Leverage	0.646		-0.118***		0.612
	(1.679)		(0.0392)		(0.966)
PPE/Sales	-0.0893		-0.0369*		-0.293***
	(0.275)		(0.0199)		(0.110)
Ln(firm age)	0.0864		0.000275		0.00444
	(0.360)		(0.0106)		(0.169)
Sales growth	-0.340		0.0173		0.788***
	(0.360)		(0.0114)		(0.245)
Common Law	-7.031***	-0.00218	-0.0262	0.888	0.664
	(0.738)	(0.0674)	(0.0417)	(0.749)	(0.744)
Lambda		0.0189**	0.00590	-0.0624	-0.0682
		(0.00809)	(0.00429)	(0.0692)	(0.0776)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm	Firm
Observations	1,185	1,185	1,185	1,185	1,185
R-squared		0.643	0.733	0.566	0.586

Figure 3. PSM Overlap Condition

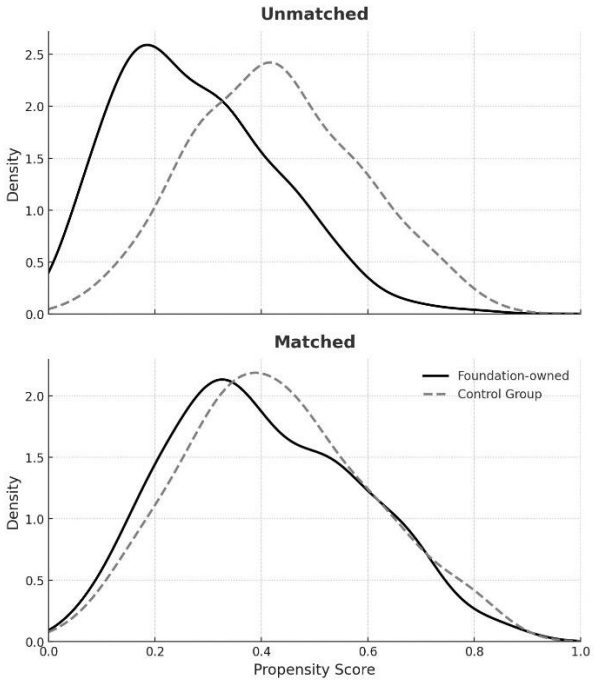


Table OA.6. PSM Covariate Balance

Variable	*Matching*	*Treated (1)*	*Control (2)*	*Diff. (absolute)*	*T-stat*
Ln (total assets)	*Unmatched*	7.02	7.16 (0.1408)**	0.14	-2.42
	Matched	7.03	6.99 (0.029)	0.04	0.56
Leverage	*Unmatched*	0.21	0.23 (0.02)***	0.02	-3.17
	Matched	0.21	0.21 (0.00258)	0.00	0.43
Ln (firm age)	*Unmatched*	3.84	3.51 (0.303)***	0.33	10.49
	Matched	3.83	3.78 (0.052)	0.05	1.62
Intangibility	*Unmatched*	0.18	0.17 (0.02)	0.01	1.7
	Matched	0.18	0.18 (0.0037)	0.00	0.50

Table OA.7. Regressions using a Propensity Score Matched Sample

Notes. This Table reports the results of the propensity score matching (PSM) analysis. In the first stage, in Column (1), we estimate a probit model to predict foundation ownership. In models, specifications (2) to (5) we re-estimate Equation (1) using the propensity-score-matched sample. Control variables are *Ln (total assets), Leverage, Intangibility, Ln (firm age)* and the industry (four-digit SIC) and year dummies (fixed effects), which are not reported to conserve space. All ratios are winsorized 1% in each tail to mitigate the effect of outliers. Variable Definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels respectively.

	Probit	Results using PSM-sample			
	(1)	(2)	(3)	(4)	(5)
Dep. variable:	*Foundation*	*ROA (Using EBITDA)*	*Tobin's q*	*ROA (Using EBITDA)*	*Tobin's q*
Foundation		0.0246*	0.664***	0.0287**	0.663***
		(0.0136)	(0.154)	(0.0118)	(0.154)
Ln(total assets)	-0.0729			0.0203***	-0.0565
	(0.0472)			(0.00646)	(0.0584)
Leverage	-0.280			-0.0234	0.326
	(0.417)			(0.0305)	(0.474)
Ln(firm age)	0.265***			0.0228***	-0.0664
	(0.0810)			(0.00665)	(0.0692)
Intangibility	0.617			-0.0904***	-1.318***
	(0.393)			(0.0324)	(0.503)
Year FE	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm	Firm
Observations	4,846	2,938	2,741	2,938	2,741
R-squared		0.360	0.437	0.452	0.459

Table OA.8. Information about hand-collection

Data collection process:

1. We gathered information on ownership from various sources, including annual reports, corporate websites, proxy statements, and Bureau van Dijk Orbis. We defined a company as foundation-owned if it is owned by a registered foundation or a functionally equivalent entity such as an irrevocable trust. Other terms are stiftungen, fonde, stichtingen, stiftelser, fondations, fondaziones,or fundaciones.

2. We start by collecting ownership information from the BvD Orbis database, which identifies the ultimate owner by looking for the shareholder with the highest ownership stake. We set the global ultimate owner (GUO) type as "Foundation, Research Institute" and exclude firms with other ownership structures. This process identified 237 public foundation-owned companies.

3. We excluded companies owned by foundations with government-linked activities and financial and utility firms. Our ownership data comes from 2020, and we manually checked annual reports for ownership changes. We also exclude companies with less than 20% of the votes and foundation-owned companies from offshore jurisdictions.

4. We manually examined annual reports and other sources to determine if a foundation is the ultimate owner of a company.

5. We collected additional information on ownership stakes and foundation purposes from regulatory filings and websites. We differentiated between charitable and private foundations based on the ultimate beneficiary.

6. We created a control group for foundation-owned companies by matching them with family-owned or investor-owned companies in the same industry and similar size.

7. We defined our foundation variable as a binary indicator equal to one for foundation-owned companies, and zero otherwise.

8. To examine whether foundation ownership is associated with the articulation of a corporate purpose, we manually collected and reviewed purpose, mission, and vision statements from our global sample of firms. Of these, 76 foundation-owned, 47 family-owned, and 67 investor-owned firms articulate a clear “reason for being.” This yielded 190 statements for analysis. We classified each statement as a purpose, mission, or vision, using standard definitions: purpose states why the firm exists, mission what it does, and vision what it aims to become. Each firm was coded with binary indicators for the presence of each type. This allows us to test whether foundation-owned firms are more likely to articulate a broader social purpose.

9. In our analysis, we created a different comparison group using propensity score matching (PSM) by selecting potential matches from the Refinitiv Global Equity Index, which includes almost all investable market capitalization. However, since our access is restricted to the largest 5000 companies based on market capitalization, we choose potential matches from this group of firms. In Table OA.7, we apply PSM without replacement to identify matching companies for each foundation-owned company.

Table OA.9. GLS regressions

Notes. This table provides the empirical results of estimating firm performance Equation (1), which investigates differences in performance levels between foundation-owned and non-foundation-owned companies using an alternative econometric technique (GLS regressions). The dependent variables are *ROA* (return on assets is EBITDA or EBIT divided by total assets) and *Tobin's q*. The control group consists of non-foundation-owned firms (size-and-industry matched sample). Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth.* We include industry (four-digit SIC) and year dummies (fixed effects), which are not reported to conserve space. All ratios are winsorized 1% in each tail to mitigate the effect of outliers. Variable Definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels respectively.

Dep. variable:	*(1)* *ROA (Using EBITDA)*	*(2)* *ROA (Using EBIT)*	*(3)* *Tobin's q*	*(4)* *ROA (Using EBITDA)*	*(5)* *ROA (Using EBIT)*	*(6)* *Tobin's q*
Foundation	0.0185	0.00792**	0.454***	0.0257**	0.00299	0.483***
	(0.0141)	(0.00332)	(0.136)	(0.0130)	(0.00238)	(0.138)
Ln(total assets)				0.0118*	-0.00990***	-0.0826
				(0.00605)	(0.00200)	(0.0750)
Leverage				-0.0523	0.00610	0.397
				(0.0379)	(0.00394)	(0.362)
PPE/Sales				-0.0280***	-0.00302*	-0.316***
				(0.00840)	(0.00162)	(0.0677)
Ln(firm age)				-0.00852	6.27e-05	-0.125*
				(0.00585)	(0.00109)	(0.0676)
Intangibility				-0.106***	0.0115**	-1.884***
				(0.0247)	(0.00546)	(0.376)
Sales growth				0.0407***	-0.00353	0.331***
				(0.00603)	(0.00276)	(0.118)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm	Firm	Firm
Observations	4,466	4,465	4,466	4,424	4,423	4,424
Number of firms	296	296	296	296	296	296

Table OA.10. Alternative Foundation Control Thresholds

This table uses a stricter definition of foundation control. In Panel A, the foundation must be the largest vote holder with at least 30% of votes; in Panel B, it must be the largest vote holder with at least 50% of votes. The control group consists of non-foundation-owned firms (size-and-industry matched sample). All models are estimated as ordinary least squares regressions with standard errors clustered at the firm level (in parentheses). Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth*, and the industry (four-digit SIC) and year dummies (fixed effects), which are not reported to preserve space. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Foundation Control (≥ 30 % Voting Rights)

Dep. variable:	*(1)* *ROA (Using EBITDA)*	*(2)* *Tobin's q*	*(3)* *ROA (Using EBITDA)*	*(4)* *Tobin's q*
Foundation	0.0258	0.652***	0.0330**	0.587***
	(0.0165)	(0.160)	(0.0130)	(0.168)
Ln(total assets)			0.0178**	-0.0477
			(0.00715)	(0.0530)
Leverage			-0.0448	0.0328
			(0.0291)	(0.340)
PPE/Sales			-0.0267***	-0.156**
			(0.00789)	(0.0699)
Ln(firm age)			0.00857	-0.0455
			(0.00696)	(0.0590)
Intangibility			-0.0634**	-0.828*
			(0.0312)	(0.459)
Sales growth			0.0326***	0.444***
			(0.0111)	(0.142)
GDP per capita growth	0.00237	0.0432	0.00275*	0.0406
	(0.00164)	(0.0273)	(0.00149)	(0.0257)
Common Law	0.0145	0.453***	0.0242*	0.415**
	(0.0119)	(0.150)	(0.0141)	(0.170)
Year FE	Yes	Yes	Yes	Yes
Industry FE (4-digit SIC)	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	3,848	3,848	3,809	3,809
R-squared	0.405	0.468	0.477	0.487

Table OA.10. Alternative Foundation Control Thresholds (cont'ed)

Panel B. Foundation Control (≥ 50 % Voting Rights)

Dep. variable:	*(1)* *ROA (Using EBITDA)*	*(2)* *Tobin's q*	*(3)* *ROA (Using EBITDA)*	*(4)* *Tobin's q*
Foundation	0.0456***	0.610***	0.0474***	0.609***
	(0.0145)	(0.208)	(0.0144)	(0.225)
Ln(total assets)			0.0124**	-0.0715
			(0.00610)	(0.0588)
Leverage			-0.0551	-0.0989
			(0.0352)	(0.405)
PPE/Sales			-0.0213***	-0.136*
			(0.00707)	(0.0708)
Ln(firm age)			0.000547	-0.0687
			(0.00496)	(0.0595)
Intangibility			-0.0579*	-0.604
			(0.0327)	(0.492)
Sales growth			0.0374***	0.511***
			(0.0135)	(0.153)
GDP per capita growth	0.000227	0.0258	0.000676	0.0237
	(0.00124)	(0.0236)	(0.00120)	(0.0216)
Common Law	0.00334	0.349**	0.00847	0.248
	(0.0115)	(0.148)	(0.0121)	(0.156)
Year FE	Yes	Yes	Yes	Yes
Industry FE (4-digit SIC)	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	3,480	3,698	3,441	3,441
R-squared	0.468	0.420	0.508	0.484

Table OA.11. Alternative Performance Measures

Notes. This table represents the results of the robustness tests using alternative performance measures, namely *ROE (using Net Income), ROA (Using Net Income)* and *ROA (Using EBIT).* We include year and industry fixed effects defined by the 4-digit SIC code. Control variables include *Ln (total assets), Leverage, PPE/Sales, Ln (firm age), Intangibility, Sales growth, GDP per capita growth* and *Common Law.* All ratios are winsorized 1% in each tail to mitigate the effect of outliers. Standard errors are heteroscedasticity robust and clustered at the firm level. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

Dep. variable:	*(1)* *ROE*	*(2)* *ROA (Using Net Income)*	*(3)* *ROA (Using EBIT)*	*(4)* *ROE*	*(5)* *ROA (Using Net Income)*	*(6)* *ROA (Using EBIT)*
Foundation	0.0322	0.00756**	0.00578**	0.0398*	0.00382*	0.00305*
	(0.0223)	(0.00310)	(0.00262)	(0.0203)	(0.00209)	(0.00181)
Ln(total assets)				0.0384***	-0.00914***	-0.00720***
				(0.0109)	(0.00155)	(0.00140)
Leverage				-0.201**	0.00899*	0.00810**
				(0.0789)	(0.00488)	(0.00401)
PPE/Sales				-0.0499***	-0.00115	-0.00106
				(0.0167)	(0.00194)	(0.00142)
Ln(firm age)				0.0162	-0.00114	-0.00136
				(0.0103)	(0.00118)	(0.00106)
Intangibility				-0.0984	0.00807	0.00610
				(0.0785)	(0.00608)	(0.00522)
Sales growth				0.0690**	-0.00584	-0.00187
				(0.0343)	(0.00451)	(0.00379)
GDP per capita growth				0.00341	0.000484*	0.000291
				(0.00332)	(0.000274)	(0.000218)
Common Law				0.0433*	-0.00362	-0.00318
				(0.0248)	(0.00262)	(0.00227)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm	Firm	Firm
Observations	4,466	4,466	4,465	4,197	4,197	4,196
R-squared	0.120	0.198	0.260	0.175	0.375	0.489

Table OA.12. Sensitivity to Sample Selection and Legal Environment

Notes. This table checks robustness by dropping countries with only or no foundation-owned firms (Panel A) and dropping countries with below-mean anti-director-rights index (La Porta et al. 1998). We include year and industry fixed effects defined by the 4-digit SIC code. Control variables are *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln (firm age), Sales growth, Common Law* and the industry (four-digit SIC) and year dummies (fixed effects). Standard errors are heteroscedasticity robust and clustered at the firm level. All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A. ∗∗∗, ∗∗, and ∗ denote significance at the 1%, 5%, and 10% levels, respectively.

Panel A. Sample Composition

Dep. variable:	*(1)* *Tobin's q*	*(2)* *ROA (Using EBIT)*	*(3)* *Tobin's q*	*(4)* *ROA (Using EBIT)*
Foundation	0.576***	0.00672**	0.624***	0.00289
	(0.165)	(0.00312)	(0.172)	(0.00194)
Ln(total assets)			-0.0342	-0.00855***
			(0.0680)	(0.00161)
Leverage			0.170	0.00993*
			(0.395)	(0.00540)
PPE/Sales			-0.0680	0.000746
			(0.0853)	(0.00134)
Ln(firm age)			-0.0581	-0.00214
			(0.0713)	(0.00133)
Intangibility			-1.318**	0.00619
			(0.562)	(0.00651)
Sales growth			0.354**	0.000838
			(0.161)	(0.00496)
Common Law	0.532**	0.00329	0.447*	-0.000812
	(0.249)	(0.00335)	(0.246)	(0.00323)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	3,247	3,595	2,982	3,222
R-squared	0.373	0.241	0.500	0.484

Table OA.12. Sensitivity to Sample Selection and Legal Environment (cont'ed)

Panel B. High Shareholder-Protection Countries (ADRI ≥ Sample Mean)

	(1)	(2)	(3)	(4)
Dep. variable:	*Tobin's q*	*ROA (Using EBITDA)*	*Tobin's q*	*ROA (Using EBITDA)*
Foundation	0.826***	0.0614***	1.069***	0.0302
	(0.303)	(0.0158)	(0.381)	(0.0210)
Ln(total assets)			-0.177***	0.00796
			(0.0580)	(0.00707)
Leverage			0.0265	-0.0477
			(0.461)	(0.0414)
PPE/Sales			-0.324***	-0.0342***
			(0.0882)	(0.0106)
Ln(firm age)			-0.146**	-0.00286
			(0.0649)	(0.00634)
Intangibility			-1.187***	-0.0384
			(0.439)	(0.0283)
Sales growth			0.361**	0.0302***
			(0.174)	(0.00858)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Clustered by	Firm	Firm	Firm	Firm
Observations	2,696	2,870	2,456	2,555
R-squared	0.497	0.557	0.574	0.599

Table OA.13. Quantile Regressions

Notes. This table presents quantile regression estimates. Panel A shows results for the binary *Foundation* variable, while Panel B shows results for the continuous *Foundation held* variable. Columns (1) to (3) use *Tobin's q* as the dependent variable, while Columns (4) to (6) use the firm's return on assets (*ROA*). We examine the relation between foundation ownership and firm performance at the 25th, median and 75th percentile. Heteroskedasticity-robust standard errors are presented in parentheses. Control variables include *Ln (total assets), Leverage, PPE/Sales, Ln (firm age), Intangibility* and *Sales growth.* All ratios are winsorized at 1% of each tail to mitigate the effect of outliers. Variable definitions are provided in Appendix A.∗, ∗∗, ∗∗∗ indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Binary Foundation variable

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. variable:	*Tobin's q*	*Tobin's q*	*Tobin's q*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*
	Q (75)	*Q (50)*	*Q (25)*	*Q (75)*	*Q (50)*	*Q (25)*
Foundation	0.138***	0.0726***	0.0649***	0.0165***	0.0145***	0.0151***
	(0.0513)	(0.0235)	(0.0149)	(0.00332)	(0.00251)	(0.00254)
Ln(total assets)	-0.101***	-0.0374***	-0.0160***	-0.000662	0.00108	0.00413***
	(0.0137)	(0.00627)	(0.00412)	(0.00107)	(0.000737)	(0.000942)
Leverage	-0.937***	-0.324***	0.157***	-0.0643***	-0.0528***	-0.0269***
	(0.114)	(0.0674)	(0.0410)	(0.0102)	(0.00926)	(0.00956)
PPE/Sales	0.117**	0.0560***	0.0290**	-0.0221***	-0.0177***	-0.0233***
	(0.0513)	(0.0217)	(0.0123)	(0.00220)	(0.00285)	(0.00444)
Ln(firm age)	-0.0699***	-0.0331***	-0.0128*	-0.00136	0.00244**	0.00807***
	(0.0202)	(0.0112)	(0.00696)	(0.00148)	(0.00124)	(0.00123)
Intangibility	0.785***	0.662***	0.552***	-0.00931	0.00554	0.00894
	(0.116)	(0.0597)	(0.0405)	(0.00719)	(0.00691)	(0.00700)
Sales growth	0.919***	0.410***	0.186***	0.0833***	0.0624***	0.0300***
	(0.111)	(0.0864)	(0.0405)	(0.0110)	(0.0122)	(0.00964)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	4,424	4,424	4,424	4,424	4,424	4,424
Pseudo R-squared	0.084	0.066	0.030	0.050	0.073	0.125

Table OA.13. Quantile Regressions (cont'ed)

Panel B. Continuous Foundation variable

	(1)	(2)	(3)	(4)	(5)	(6)
Dep. variable:	*Tobin's q*	*Tobin's q*	*Tobin's q*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*	*ROA (Using EBITDA)*
	Q (75)	*Q (50)*	*Q (25)*	*Q (75)*	*Q (50)*	*Q (25)*
Foundation held	1.201***	0.00656	0.192	0.105***	0.0685***	0.0515***
	(0.401)	(0.200)	(0.117)	(0.0220)	(0.0178)	(0.0158)
Ln(total assets)	-0.0495	-0.0479**	-0.0275**	-0.00166	-0.000907	-0.000790
	(0.0407)	(0.0203)	(0.0118)	(0.00219)	(0.00177)	(0.00157)
Leverage	-1.003**	-0.700***	-0.00895	-0.114***	-0.0548**	-0.00366
	(0.489)	(0.244)	(0.142)	(0.0267)	(0.0215)	(0.0191)
PPE/Sales	0.154	0.242***	0.153***	-0.0245***	-0.0276***	-0.0339***
	(0.140)	(0.0697)	(0.0407)	(0.00772)	(0.00623)	(0.00552)
Ln(firm age)	0.607*	0.723***	0.785***	-0.0166	-0.00799	0.0228*
	(0.358)	(0.179)	(0.104)	(0.0191)	(0.0154)	(0.0136)
Intangibility	1.528***	0.476**	0.208*	0.108***	0.0417**	-0.00361
	(0.382)	(0.190)	(0.111)	(0.0208)	(0.0168)	(0.0149)
Sales growth	0.919***	0.410***	0.186***	0.0833***	0.0624***	0.0300***
	(0.111)	(0.0864)	(0.0405)	(0.0110)	(0.0122)	(0.00964)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	581	581	581	618	618	618
Pseudo R-squared	0.0843	0.0658	0.0609	0.1263	0.0844	0.0866

Table OA.14. Effects of Foundation Shareholding on Firm Performance

Notes. *Foundation share* is the ratio of floating shares owned by a charitable foundation (obtained from S&P Capital IQ). We include its squared term (*Foundation held²)* to capture nonlinearity. We control for firm fixed effects and year fixed effects. The sample spans 2006–2019. Control variables are *Ln (total assets)*, *Leverage*, *PPE/Sales*, *Ln (firm age)*, *Intangibility*, and *Sales growth*. All ratios are winsorized at the 1st and 99th percentiles. Variable definitions are provided in Appendix A. ∗, ∗∗, ∗∗∗ denote statistical significance at the 10%, 5%, and 1% levels, respectively. Panel A reports results for the full sample; Panel B reports results for foundation-owned firms only.

Panel A. All observations

Dep. variable:	*(1) ROA (Using EBITDA)*	*(2) ROA (Using EBIT)*	*(3) Tobin's q*
Foundation held	-0.362***	-0.462***	-5.134***
	(0.122)	(0.126)	(1.649)
Foundation held²	0.806***	0.872***	8.932***
	(0.202)	(0.208)	(2.725)
Firm Size	0.000311	0.00863	-0.236**
	(0.00811)	(0.00837)	(0.113)
Leverage	-0.0843***	-0.110***	0.0422
	(0.0285)	(0.0294)	(0.396)
PPE/Sales	-0.0519***	-0.0561***	0.105
	(0.00762)	(0.00786)	(0.102)
Intangibility	-0.119***	-0.148***	-2.957***
	(0.0362)	(0.0374)	(0.501)
Sales growth	0.00872	0.0138	0.581***
	(0.0113)	(0.0117)	(0.155)
Year FE	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Observations	602	603	565
R-squared	0.821	0.814	0.827

Table OA.14. Effects of Foundation Shareholding on Firm Performance (cont'ed)

Panel B. Restricted to Foundation-Owned Firms

Dep. variable:	*(1)* *ROA (Using EBITDA)*	*(2)* *ROA (Using EBIT)*	*(3)* *Tobin's q*
Foundation held	-0.224	-0.414***	-3.065
	(0.153)	(0.158)	(2.107)
Foundation held²	0.605**	0.785***	5.646*
	(0.241)	(0.248)	(3.309)
Firm Size	-0.00198	0.00873	-0.473***
	(0.0100)	(0.0103)	(0.139)
Leverage	-0.0308	-0.0376	0.572
	(0.0361)	(0.0371)	(0.503)
PPE/Sales	-0.0719***	-0.0823***	0.0928
	(0.00957)	(0.00983)	(0.130)
Intangibility	-0.217***	-0.261***	-3.588***
	(0.0500)	(0.0514)	(0.708)
Sales growth	0.00574	0.00357	0.459**
	(0.0164)	(0.0169)	(0.229)
Year FE	Yes	Yes	Yes
Firm FE	Yes	Yes	Yes
Observations	329	329	311
R-squared	0.854	0.855	0.864

Table OA.15. Foundation Age and Selection Effects

Notes. We divide foundation-owned firms into two groups: those that adopted foundation ownership more than 45 years ago (Panel A) and those with 45 years or less under foundation control (Panel B). We control for *Ln (total assets)*, *Leverage*, *PPE/Sales*, *Intangibility*, *Ln (firm age)*, *Sales growth*, and *Common Law*. Standard errors are heteroskedasticity-robust and clustered at the firm level. Regressions include four-digit SIC and year fixed effects. All ratios are winsorized at the 1 percent tails to limit outliers. Variable definitions appear in Appendix A. ***, **, and * denote significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Panel A. Foundations > 45 years

Dep. variable:	*(1)* *Tobin's q*	*(2)* *ROA (using EBIT)*
Foundation	0.528***	0.00581**
	(0.169)	(0.00288)
Ln(total assets)	-0.105**	-0.00858***
	(0.0424)	(0.00131)
Leverage	0.0231	0.0117***
	(0.336)	(0.00414)
PPE/Sales	-0.259***	-0.00156
	(0.0714)	(0.00157)
Ln(firm age)	-0.0935	-0.00147
	(0.0645)	(0.00108)
Intangibility	-0.849**	0.00797
	(0.419)	(0.00541)
Sales growth	0.443***	-0.000931
	(0.145)	(0.00357)
Common Law	0.442***	-0.00237
	(0.159)	(0.00248)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	3,931	4,180
R-squared	0.450	0.488

Table OA.15. Foundation Age and Selection Effects (cont'ed)

Panel B. Foundations < 45 years

Dep. variable:	*(1)* *Tobin's q*	*(2)* *ROA (using EBIT)*
Foundation	0.496**	-0.000551
	(0.206)	(0.00160)
Ln(total assets)	-0.0880*	-0.00573***
	(0.0519)	(0.00114)
Leverage	-0.255	0.00881***
	(0.349)	(0.00333)
PPE/Sales	-0.0858	-0.00245*
	(0.0640)	(0.00129)
Ln(firm age)	-0.0881*	-0.00131
	(0.0527)	(0.000830)
Intangibility	-0.298	0.00489
	(0.465)	(0.00486)
Sales growth	0.456***	-0.00194
	(0.148)	(0.00404)
Common Law	0.0121	-0.00235
	(0.142)	(0.00229)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Observations	3,579	3,831
R-squared	0.461	0.468

Table OA.16. Workforce Outcomes

Notes. This table explores how foundation ownership affects employment outcomes. Panel A focuses on human capital development, while Panel B focuses on labour costs. We include controls for *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln(firm age), Sales growth,* and *Common Law.* We report heteroskedasticity-robust standard errors clustered at the firm level. Regressions also include four-digit SIC and year fixed effects. All ratios are winsorized at the 1st and 99th percentiles to limit outliers. Variable definitions appear in Appendix A. ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Panel A. Human Capital Development

Dep. variable:	*(1)* *Human Capital Development*	*(2)* *Human Capital Development*	*(3)* *Human Capital Development*
Foundation	0.891**	0.826**	
	(0.376)	(0.338)	
Charitable Purpose			1.690*
			(0.965)
Ln(total assets)		0.361***	0.464***
		(0.107)	(0.167)
Leverage		-1.227*	-0.643
		(0.683)	(1.588)
PPE/Sales		-1.021***	-0.869
		(0.283)	(1.599)
Ln(firm age)		0.229	0.317
		(0.192)	(0.461)
Intangibility		1.060	-0.245
		(0.812)	(1.516)
Sales growth		-0.343	-0.286
		(0.293)	(1.087)
Common Law	-0.627**	-0.503	-1.182
	(0.308)	(0.306)	(0.794)
Year FE	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes
Observations	684	660	188
R-squared	0.555	0.620	0.805

Table OA.16. Workforce Outcomes (cont'ed)

Panel B. Labour Costs

Dep. variable:	*(1)* *Employee costs*	*(2)* *Employee costs*	*(3)* *Employee costs (per Employee)*	*(3)* *Employee costs (per Employee)*
Foundation	-693,076**	-19.63***	-528,299*	-18.74***
	(286,854)	(5.465)	(290,787)	(5.614)
Ln(total assets)			222,280**	1.101
			(106,089)	(1.775)
Leverage			101,788	9.375
			(607,666)	(13.29)
PPE/Sales			-32,858	-1.683
			(137,262)	(2.285)
Ln(firm age)			344,726**	2.915
			(162,393)	(2.464)
Intangibility			-571,131	-4.543
			(564,894)	(12.71)
Sales growth			4,555	0.364
			(13,638)	(0.286)
Gdp growth	-39,739	-0.946	-59,748	-1.075
	(33,715)	(0.661)	(38,772)	(0.675)
Common Law	15,240	7.859	309,172	9.407
	(395,598)	(6.065)	(418,041)	(6.137)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	2,698	2,698	2,672	2,672
R-squared	0.521	0.460	0.561	0.465

Table OA.17. Sensitivity to Institutional Ownership Patterns

Notes. This table controls for additional ownership characteristics in the regressions. Proxies for other types of block ownership include the ratio of floating shares owned by Private Equity and Venture Capital (*PE VC held*) and by hedge funds (*Hedge fund held),* institutional investors (*Investor held*). The *Floating Percent* variable represents the proportion of shares available for public trading on the stock market. The block ownership data is obtained from S&P Capital IQ. We include controls for *Ln (total assets), Leverage, PPE/Sales, Intangibility, Ln(firm age), Sales growth,* and *Common Law.* We report heteroskedasticity-robust standard errors clustered at the firm level. Regressions also include four-digit SIC (industry) and year fixed effects. All ratios are winsorized at the 1st and 99th percentiles to limit outliers. Variable definitions appear in Appendix A. ***, **, and * indicate significance at the 1 percent, 5 percent, and 10 percent levels, respectively.

Dep. variable:	*(1)* *ROA (Using EBITDA)*	*(2)* *ROA (Using EBITDA)*	*(3)* *Tobin's q*	*(4)* *Tobin's q*
Foundation	0.0295*	0.0224**	0.589**	0.675***
	(0.0173)	(0.0105)	(0.262)	(0.240)
Investor held	0.0493**			
	(0.0237)			
Floating Percent		-0.000218		
		(0.000203)		
Hedge fund held			0.00750	
			(0.0102)	
PE VC held				-1.183
				(1.001)
Ln(total assets)	0.0205**	0.0192***	-0.0120	0.0509
	(0.00783)	(0.00701)	(0.0843)	(0.0953)
Leverage	-0.0890**	-0.0738***	-0.246	-0.502
	(0.0415)	(0.0225)	(0.437)	(0.439)
PPE/Sales	-0.0171	-0.0178**	-0.0971	-0.0714
	(0.0140)	(0.00725)	(0.0747)	(0.0848)
Ln(firm age)	0.0137*	0.00681	-0.0573	-0.0628
	(0.00712)	(0.00488)	(0.0795)	(0.0857)
Intangibility	-0.0393	-0.0743**	-1.481**	-1.304*
	(0.0430)	(0.0310)	(0.580)	(0.667)
Sales growth	0.0110	0.0331***	0.389**	0.520***
	(0.0225)	(0.0126)	(0.150)	(0.137)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Observations	1,190	3,037	1,541	1,610
R-squared	0.609	0.486	0.537	0.509