# Industrial Foundations as Long-Term Owners

**\* WORK IN PROGRESS \***

**\* Please do not quote without permission\***

Christa Børsting[[1]](#footnote-1)

Johan Kuhn[[2]](#footnote-2)

Thomas Poulsen[[3]](#footnote-3)

Steen Thomsen[[4]](#footnote-4)

Center for Corporate Governance

Copenhagen Business School

30 May 2014

**Abstract**

We study Danish industrial foundations as long-term owners of business companies. We document that foundation ownership is more stable compared to other ownership structure. Moreover foundation-owned companies are more conservatively financed, and they have higher survival rates.

**1. Introduction**

Following the financial crisis of 2008, stock markets and business companies are increasingly being criticized for *“shorttermism”* (Phelps 2010, Bair 2011, Roe 2013).

Theoretically, shorttermism can harm companies and society in many ways.

1. Speculative stock market fluctuations (Cremers, Pareek and Sautner 2013) may lead to the takeover and break up of well governed and profitable companies simply because they are cheap or small. Undervalued companies may be acquired by less efficient rivals. Overvalued companies may overinvest in M&A transactions rather than organic growth.

2. The market may fail to appreciate the immaterial value of implicit contracts with employees and customers (Shleifer and Summers 1988).

3. Company managers may feel compelled by market pressures to maximize short term earnings and underinvest, particularly in immaterial assets like competence, culture or reputation (Stein 1988, 1989, Asker et al. 2011, 2013).

4. Short term incentive packages may lead managers to take excessive risk which only become obvious in the long run. For example banks may lend excessively and business companies may leverage their balance sheet or expose the company to greater financial risk in less transparent ways.

5. Companies may replace their managers so frequently that they have little incentive to undertake long run investments because they will not be around when the benefits become evident (Kaplan and Minton 2012).

This impressive range of problems invites solutions both systemic and firm level solutions. For example, Colin Mayer (2013) argues that it is necessary to reinvent the corporation in a way that enables it to make long term commitments.

Several of the issues identified appear to be related to corporate ownership. For example, the problems appear to be more acute in in listed firms. The stocks of private firms are traded less frequently, private firms rely less on stock options and there is evidence that they invest more (Asker at al 2011, 2013). There is also anecdotal evidence that newly listed tech firms like Google, Facebook and Linkedin use ownership structures like dual class shares to neutralize short term stock market pressure. However, such alternative ownership structures are likely to have costs as well as benefits. The owners of unlisted firms may rationally underinvest if they are unable to diversify risk. Family firms are known to suffer from succession problems when ownership and management passes from founders to the second generation. Dual class stock can lead to entrenchment of inefficient management teams and investment behavior that deviate from value maximization because of agency problems.

Moreover, there are many potential advantages to such long term ownership, there are also potential costs. Patience can become procrastination. Companies may overinvest and fail to take into consideration the opportunity costs of capital. Bad managers may not be replaced and it may take too long to adjust unsuccessful strategies. Both myopia and procrastination may be regarded as special cases of unsustainable behavior that suffer from short-termism since it harms value creation in the long run.

In this paper we consider the costs and benefits of an ownership structure which is extremely long-term by design, industrial foundations, which are created to as long term owners of business companies. These entities are fairly common in Northern Europe, and we use a Danish dataset to examine whether they are long-term over a range of characteristics and whether their longtermism appears to benefit the companies that they own. We test the long-termism hypothesis on population data on Danish firms from 2003-2012. Using population data reported to a comprehensive accounting database (Experian), we are able to track (almost) all of the Danish foundation-owned companies, which account for an estimated 5-10 % of the economic activity in Denmark, the bulk of Danish stock market capitalization and the bulk of Danish R&D investments.

We show that foundation-owned companies do in fact show evidence of long-termism in several respects. The foundations hold on to their shares for longer. Foundation-owned companies replace managers and board members less frequently. They have more conservative capital structures with less leverage. They survive longer.

**2. Literature review and theory development**

Industrial foundations are foundations that own companies. They were most often created by wealthy entrepreneurs who donated their shares in a company to a charitable foundation for much the same reasons that Bill Gates and Warrant Buffet donate their wealth to charitable purposes. The main difference is that the Danish foundation hold on their stock in the company and finance their charity by dividends from the company. Moreover, a main purpose of the foundation is typically to act as responsible owner in the company’s best interest. This structure was not uncommon in the US (in fact the Ford foundation was originally intended as an industrial foundation in this style), until US foundation law was changed in 1969.

By design industrial foundations are long term owners. In some cases the foundation charter will formally prohibit the foundations from selling shares in the company or allow it only in an economic crisis. More generally, the foundation’s ability fulfill an obligation to act in the best interest of the company (which is found most charters[[5]](#footnote-5)) will depend on its ability to maintain a controlling share in it. The best interest of the company is difficult to define precisely, but maximizing survival appears to be a reasonable approximation.

Legally, industrial foundations are perpetuities and legally obliged to preserve their capital, which largely consists of stock in the companies that they own. This further underlines their long term nature. Unlike joint stock companies are cooperatives they have no owners or members with a claim on capital or dividends and so they are by design particularly patient owners. Moreover, foundations will typically be risk adverse since their risk is concentrated in a single company. Theoretically, this should make them risk averse and make them prefer lower business volatility and lower financial leverage than other companies.

Finally, the foundation-owned companies are sheltered from stock market fluctuations since the foundation owns a majority of the stock. Typically they are not even listed[[6]](#footnote-6) and even if they are, the foundation has a majority voting share which means that it can block attempts at hostile takeover or other types of shareholder rebellion. The few existing studies of foundation ownership have focused their economic performance which is found to be comparable to that of companies with more conventional ownership structures (Herrmann and Franke 2002, Thomsen 1996, 1999, Thomsen and Rose, 2004) using performance measures such as accounting profitability, growth, stock market value, or stock returns.

While the case for longtermism of foundation ownership appears to be compelling we note that there are also potential counter arguments which could make foundation-owned less short term. For example, theoretically, lack of profit incentives could make foundation-owned companies less efficient and therefore less likely to survive. Moreover, inability or unwillingness to tap into public equity and credit could constrain access to capital which could make foundation-owned companies less longterm than comparable investor-owned companies. Finally, as noted, there is no guarantee that longtermism is “better” for company performance under all circumstances. Hanging on to failing companies, overinvesting, being slow to fire inefficient managers or being adverse to risk-taking in general could all lower company performance which would be less sustainable and therefore less long-term in a true economic sense.

So far no studies have documented whether industrial foundations are in fact long-term owners, so this is what we do in the present paper. We examine how industrial foundations score on various measures (or facets) of longtermism such as stability of ownership, stability of management, low leverage, high investments and high survival rates. Moreover, we also try to assess the consequences of such longtermism for the overall performance of foundation-owned companies.

**3. Data**

The data for this study comes from five different registers. They are all based on mandatory information reported by corporations to the Danish Business Authority. First, we use the Danish Business Authority’s register of industrial foundation to identify the industrial foundations. The purpose of a foundation is not in the register, so in order to remove foundations without business activity outside the foundations and foundations with charitable and government-linked activities (registered at industrial foundations), we clean the list by hand. XX foundation-year observations are deleted in this process, leaving us with YY foundation-years observations for the time period from 2000 to 2011. We then add data from the four other registers with information on firm ownership (who owns the firm and who does the firm own), firm characteristics (e.g. year of incorporation, exit, and industry), firm management (directors and executives), and firm financials (income statement and balance sheet), respectively. These four registers are maintained by the private data provider Experian.

First, we use the ownership data to identify all subsidiaries of the industrial foundations. We can track subsidiaries of subsidiaries but not beyond that, and we can only identify ownership of firms incorporated in Denmark. Some foundations have a holding company in between the foundation and the subsidiary with the business activity. If a subsidiary is a holding company and a subsidiary of this company is also a holding company, it is removed from the data. We use the industrial classification DB07 by Statistics Denmark to identify holding companies. If a subsidiary is a holding company and the business activity is a subsidiary to that company, we drop the holding company but keep its subsidiary (the operating company). In this case, we calculate the foundation’s ownership stake as the product of ownership stakes along the chain.[[7]](#footnote-7) The links between foundations and subsidiaries are made irrespective of ownership stakes, i.e. as long as a foundation owns part of a company the company included as a subsidiary. This procedure is justified as the Business Authority only register foundations with controlling influence as industrial foundations.

Second, having established the links between foundations and operating companies, we add firm characteristics to the latter, and start out by deleting all financial firms, since these firms are regulated by their own (different) law, and their income statements as well as balance sheets are incomparable to those of non-financial firms. At this stage we have ZZ firm-year observations for ZZ2 firms. For these firms, we add the year of entry (incorporation) and the year of exit, if relevant. We are only able to capture those firms that exit the data in the time period from 2000 to 2011. To be precise, we capture those firms that within this period go from having an active status in one year to an inactive status (either bankrupt, under liquidation, dissolved) the following year. This is the sample that we use for the survival analysis in section YY.

We then add information on firm management, i.e. executives and directors. The data captures all entries and exits to and from the executive management board, which typically consists of the CEO only. There is more than one executive in a firm in less than 1.5% of the firm-year observations. Since we are interested in the probability of turnover, we create a dummy variable for each firm and each year that is equal to 1 if an executive left the executive management board during the year (regardless of replacement or not) and 0 otherwise. The same procedure is run on the board-of-directors-data.

Finally, we add financial data. The register contains both consolidated and unconsolidated data. First of all, it is important not to use both types of data in the same analysis, since subsidiaries are treated quite differently. In the unconsolidated numbers (for the parent), the subsidiary appears on the balance sheet as an asset. In the consolidated numbers, the subsidiary’s balance sheet items would be added to the parent’s corresponding balance sheet items one by one (eliminating internal transactions in the process). In terms of capital structure, for example, the difference is that the unconsolidated numbers distorts the ratio between debt and assets, as assets increase while debt is unaffected. In choosing between the two types of data, we choose consolidated data.

Besides mapping some of the firm characteristics in foundation-owned firms, it is also interesting to compare with non-foundation-owned firms. But many foundation-owned firms are unique, not least in terms of their size, making such a comparison less than straight forward. As a first attempt, we compare to all other firms in Experian for which we have consolidated financial data. It is therefore important to bear in mind that these firms are not necessarily equal to the foundation-owned firms in all their (sometimes unobserved) characteristics. As robustness checks, we routinely repeat the analyses on the subset of firms with 100 or more employees. We also compare the foundation-owned firms to propensity score matched firms.

4. Results

**Survival**

Longevity can be one outcome of successful long-termism. In this section, we look into the survival of foundation-owned firms compared to firms with other types of owners. Our data is only subject to right-censoring, i.e. for some firms we only know at least how many years they survived. We estimate the probability of survival up to time *t*, *S(t)*, using the Kaplan-Meier survival function estimator. This leaves us with an estimate of the unconditional probability of survival beyond time *t*. Estimation is carried out by letting each type of ownership (foundation-owned and other) define a stratum, and subsequently we test for equality across strata. For the latter purpose, we use nonparametric Wilcoxon test statistic, which is evaluated in the approximating χ2 distributions.

**Figure 1. Kaplan-Meier survival curves**

In Figure 1, we plot the Kaplan-Meier survival curves for both strata, which depict the estimated survival probability as a function of firm age. The survival probability is always higher for foundation-owned firms, and the result of the Wilcoxon test is that the two curves are significantly different (χ2=16.86). The probability of surviving beyond age 40, for example, is 60% for foundation-owned firms and 10% for other firms. Also, the curvatures suggest that the hazard rates (the probability of exit at time t conditional on survival up to that time) are different. For non-foundation-owned firms, the survival probability drops most steeply in the beginning, suggesting that the hazard rate is highest during the first 40 years. For foundation-owned firms, the drop is less aggressive, and the hazard rate is more constant. This also shows from the quartile estimates of survival times reported in table 1.

**Table 1. Quartile estimates of survival times**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Mean** | **Q25** | **Q50** | **Q75** |
| **Foundation-owned** | 69.61 | 34.00 | 66.00 | 95.00 |
| **Other owners** | 22.52 | 7.00 | 16.00 | 32.00 |

For foundation-owned firms, the interval during which the first 25% is expected to exit is approximately the same as the interval during which the second 25% is expected to fail, which again is approximately the same as the interval during which the third 25% is expected to fail. Contrary to this, the intervals between the first and second and the second and third quartile are much more different for other firms: it takes 7 years for the first 25% of the firms to fail, another 9 years for the next 25%, and then another 16 years for the third 25%.

This difference may be partly attributable to life history of industrial foundations. A standard story is that the foundation is established when a founder donates stock in an existing company to it. In other words, business companies do not start by foundation ownership. The foundation structure may for example arise as a solution to succession problems when the both the founder and the company have reached a mature age. In some cases the foundation is established by bequest in founder’s will. For a typical entrepreneur, this could be some 30 years (+/-) after the company was founded. The survival curve for foundation-owned companies therefore omits those (many) unsuccessful companies that were closed down or acquired before they could become foundation-owned.

Casual examination of the survival curve above gives the impression that foundation-owned companies survive better even after the first 20 years. For example, 25% of the foundation-owned firms exit in the 30 year interval from company age 30 to company age 60, whereas 20% of the non-foundation owned firms do. In relative terms this translates into much higher survival rates even in this period. Among the non-foundation-owned firms 80% of the remaining population at 30 is gone at 60, while only 35% of the foundation-owned population at 30 is gone at 60. However, there is no guarantee that the foundation is established at company age 30, it could be later (at company age 40 or even in the second generation of family ownership, for example if there are no heirs in the third generation. This calls for further analysis of survival patterns.

**Stability of ownership**

As noted by Marc Roe, *“the core short-termist concept is that because securities traders hold their stock for such a short duration, they look for strong corporate results during the period they hold the corporation’s stock, so that they can sell proﬁtably”*. Likewise, following Colin Mayer, one way to think about committed ownership is to consider the stability of equity capital. In this way, a defining characteristic of committed capital is that it is not for sale. One implication of this would be that foundations-owned firms are less active in the market for corporate control, at least as target companies. More generally, commitment in this way would imply that the ownership is more stable, and especially that the odds of a reduction in the ownership stake is smaller.

Our first measure of stability of ownership is the average within-firm standard deviation of ownership over time. We use the ownership stake of the foundation for foundation-owned firms, and the ownership stake of the largest shareholder for other firms. We find that foundations’ ownership stakes are more stable than other large owners in all samples, although the difference is not significantly different from zero for the propensity score matched firms. One alternative measure suggested in the literature is ownership persistency, defined as the mean ownership proportion standardized by its standard deviation (Elyasiani and Jia, 2008). If an owner has a large ownership stake that is stable over timer, persistency is high. We find that foundations’ persistency is significantly higher in all samples.

In this respect, a drawback of measures using the standard deviation is that the standard deviation measures variation per se. What we are actually concerned about in relation to commitment and stability of ownership is negative changes, i.e. reductions in ownership stake. We therefore calculate the unconditional probability that a change in the ownership stake is a negative one. We find that the probability is significantly lower for foundation-owned firms, except for the propensity score matched sample, where the difference is insignificant. Finally, we calculate the unconditional probability of a significant drop in the ownership stake. A significant drop is defined as one from above 50% in one year to below 50% in the following. While the probability is low in any case, it is significantly lower in foundation-owned, except for the propensity score matched sample, where the difference again is insignificant.

**Table 2. Stability of ownership.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Foundation-owned** | **Other firms** | **T-test** |
|  | Average within-firm standard deviation | | |
| All firms | 1.78 | 2.66 | -7.87\*\*\* |
| Firms with 100 or more employees | 1.63 | 2.58 | -8.09\*\*\* |
| Propensity score matched firms | 2.92 | 3.14 | -0.48 |
|  | Persistency | | |
| All firms | 37.78 | 20.19 | 10.35\*\*\* |
| Firms with 100 or more employees | 38.94 | 19.56 | 10.15\*\*\* |
| Propensity score matched firms | 42.08 | 9.16 | 4.38\*\*\* |
|  | Probability of reduction | | |
| All firms | 0.03 | 0.05 | -6.92\*\*\* |
| Firms with 100 or more employees | 0.03 | 0.05 | -4.76\*\*\* |
| Propensity score matched firms | 0.05 | 0.06 | -1.24 |
|  | Probability of significant drop | | |
| All firms | 0.00 | 0.01 | -3.04\*\*\* |
| Firms with 100 or more employees | 0.00 | 0.01 | -2.84\*\*\* |
| Propensity score matched firms | 0.00 | 0.01 | -1.35 |

This leaves us with the general impression that foundation ownership is more stable. However, it would seem important to take other variables into account, including firm age, which might also influence stability.

The propensity score matched results generally come out with the same sign as the population level data, but the results are less pronounced and less significant. This casts some doubt on the general findings, but propensity score matching is also in itself subject to doubts and uncertainties. Casual inspection of the matched companies left the authors with some skepticism concerning its relevance. In particular, give the Danish business environment, it is difficult to find relevant matches within the same industry. Moreover, we set the matching criterion to 5 digits, which increases the validity of the matching, but decreases the number of observations.

One interpretation of this greater ownership may be that foundations are more tenacious (long term) owners, but firm exit is an additional and important source of instability since exiting firms in this sample also leads to a change of ownership. Since we know from the previous analysis that foundation-owned companies live longer, this may be also be a cause of owner stability.

**Capital structure**

Table 3 reports the results from testing these empirical implications on three different data sets: all firms, firms with 100 or more employees, and propensity score matched firms. The depth of committed capital is simply measured as the debt-equity ratio. We find that foundation-owned firms have significantly more equity than other firms in all samples. The ratio is on average 9-15 basis point lower. Since the former firms are larger than the latter, it follows that more capital is committed also in absolute terms.

**Table 3. Commitment of capital.**

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Foundation-owned** | **Other firms** | **T-test** |
| All firms | 0.46 | 0.56 | -4.55\*\*\* |
| Firms with 100 or more employees | 0.46 | 0.55 | -3.45\*\*\* |
| Propensity score matched firms | 0.46 | 0.61 | -6.72\*\*\* |

Thus, the univariate analysis of the debt-equity ratio showed that foundation-owned firms have less debt and more equity (less leveraged) compared to other firms. This analysis does not however take into account that foundation-owned firms may for example be overrepresented in low leveraged industries. This section therefore presents multivariate results on the capital structure. Dutta and Radner (1999) also argue that survival-maximizing firms will be less leveraged.

**Table 4. Capital structure.**

|  |  |  |
| --- | --- | --- |
|  | (1) | (2) |
| Foundation-owned | -0.10\*\*\* | -0.09\*\*\* |
|  | (0.00) | (0.00) |
| Log(sales) | 0.00 | 0.00 |
|  | (0.82) | (0.68) |
| Tangibility | -0.17\*\*\* | -0.15\*\*\* |
|  | (0.00) | (0.00) |
| Non-debt taxshield | -0.18\*\* | -0.21\*\* |
|  | (0.01) | (0.02) |
| Performance (RoA) | -0.20\*\*\* | -0.23\*\*\* |
|  | (0.00) | (0.00) |
| Constant | 0.96\*\*\* | 0.55\*\*\* |
|  | (0.00) | (0.00) |
| Industry effects | Yes | Yes |
| Year effects | Yes | Yes |
|  |  | >100 employees |
| Observations | 9,541 | 6,669 |
| R-squared | 0.15 | 0.17 |

Looking at the main explanatory variable, the dummy variable for foundation ownership, we see that it is very robust – same coefficient and same level of significance across both models. The result is that the ratio of total debt to total assets, on average, is 9%-10%-points lower in foundation-owned firms after having controlled for other relevant firm characteristics.

The impression that we get is that foundation-owned firms are more conservatively financed. This may help explain their higher survival rates and the higher stability of ownership, since foundation-owned firms can withstand larger shocks are less likely to be forced by creditors to issue new equity and change ownership when faced with economic losses.

**5. Conclusions**

Foundation-ownership does in fact appear to be long term over a range of measures. In this paper we have demonstrated, that

* foundation ownership is more stable,
* that foundation-owned companies are more conservatively financed and
* that foundation-owned companies tend to survive longer.

Additional indicators of longtermism are found in related research on industrial foundations:

* executives in foundation-owned firms are replaced less often
* board members in foundation-owned firms are replaced less often
* foundation owned firms have less volatile earnings (lower volatility of ROA).

Thus, there is now little doubt that foundation-ownership is associated with longtermism.

Other aspects of foundation-ownership may be interpreted in this light. For example, recent research (Hansmann and Thomsen 2013, Børsting et al. 2014) finds that foundation-owned companies have lower growth rates, which may perhaps reflect more cautious and gradual expansion and fewer large acquisitions than in other firms

The direction of causality probably runs mainly from foundation-ownership to long-termism. Foundations are created to administer and ownership stake in a given company at a given point in time determined mainly by founder characteristics, tax considerations etc. They rarely buy or sell companies as we have shown and so stock picking of stable companies is less persuasive. Moreover, foundation ownership is scattered across many industries with different risk profiles – e.g. shipping, pharmaceuticals, engineering, newspapers etc. However, founders may be more likely to choose foundation ownership for stable companies in mature industries so we cannot entirely rule out reverse causality.

We imagine that future research in this area could examine further aspect long-termism such as investment, R&D or M&A which we have not touched upon so far. Do foundation-owned companies retain more of their earnings? Do they invest more? Do they do more r&d? Or do they invest in a different (say more continuous way).

Further survival research might examine the survival of foundation-owned companies after the foundation was established and compare to companies of similar age. The same approach could be used to study performance, capital structure and other aspects of foundation research.

A further avenue for future research is to examine the performance implications of longtermism. For example, is longtermism associated with slowness and bad performance or patience and good performance? While we have verified that foundation-owned companies are indeed more long term, we have not yet established whether longtermism is a an advantage or a disadvantage for their performance. Finally, it will be interesting to examine whether is it possible to say more about causality using natural experiments such a policy shocks.

# Literature

Agrawal, Anup and Nasser, Tareque, Blockholders on Boards and CEO Compensation, Turnover and Firm Valuation (August 30, 2012). CELS 2009 4th Annual Conference on Empirical Legal Studies Paper; AFA 2012 Chicago Meetings Paper. Available at SSRN: http://ssrn.com/abstract=1443431 or <http://dx.doi.org/10.2139/ssrn.1443431>.

John Asker, Joan Farre-Mensa & Alexander Ljungqvist, Comparing the Investment Behavior of Public and Private Firms (Nat’l Bureau Econ. Research, Working Paper No. 17394, 2011), <http://ssrn.com/paper=1931164>;

John Asker, Joan Farre-Mensa & Alexander Ljungqvist, Corporate Investment and Stock Market Listing: A Puzzle (Apr. 22, 2013) (unpublished manuscript) (available at [www.ssrn.com/abstract=1603484](http://www.ssrn.com/abstract=1603484)).

Bair, S. 2011. Lessons of the financial crisis: The dangers of short-termism. Remarks to the National Press Club, Washington, D.C. June 24. <http://blogs.law.harvard.edu/corpgov/2011/07/04/lessons-of-the-financial-crisis-the-dangers-of-short-termism/>.

Bereskin, Frederick L. and Hsu, Po-Hsuan, Bringing in Changes: The Effect of New CEOs on Innovation (October 24, 2013). Paris December 2011 Finance Meeting EUROFIDAI - AFFI. Available at SSRN: http://ssrn.com/abstract=1944047 or http://dx.doi.org/10.2139/ssrn.1944047.

Brickley, James A., Empirical Research on CEO Turnover and Firm-Performance: A Discussion. Journal of Accounting & Economics, Vol. 36, Nos. 1-3, pp. 227-233, December 2003. Available at SSRN: <http://ssrn.com/abstract=473881>.

Cremers, Martijn and Pareek, Ankur and Sautner, Zacharias, Stock Duration and Misvaluation (September 19, 2013). Available at SSRN: <http://ssrn.com/abstract=2190437>.

Francois Derrien, Ambrus Keckes & David Thesmar, Investor Horizons and Corporate Policies, Journal of Financial and Quantitative Analysis (forthcoming), [www.ssrn.com/abstract=1491638](http://www.ssrn.com/abstract=1491638)

Hansmann, Henry and Thomsen, Steen Managerial Distance and Virtual Ownership: The Governance of Industrial Foundations (March 2013). Available at SSRN: http://ssrn.com/abstract=2246116.

Hansmann, Henry and Thomsen, Steen. 2011. The Performance of Foundation-Owned Companies. Paper presented to the RICF Conference on “Frontiers in Corporate Finance and Corporate Governance” Development Bank of Japan,18 November 2011, and to the Department of Banking and Finance, University of Chulalongkorn, 21-3-2013, Workshop on Accountability and Responsibility of Corporate Ownership, 9-10 May 2013.

Jenter, Dirk, and Katharina Lewellen, 2010. Performance-induced CEO turnover, Stanford University. Working paper.

Kim, K. (2010). Blockholder monitoring and the efficiency of pay-performance benchmarking. Journal Of Corporate Finance, 16(5), 748-766.80-695.

Mayer, C. (2013). Firm Commitment. Why the corporation is failing us and how to restore trust in it. Oxford University Press. Oxford.

Nguyen, Bang Dang, Ownership Structure and Board Characteristics as Determinants of CEO Turnover in French-Listed Companies (April 16, 2011). Available at SSRN: http://ssrn.com/abstract=1456851 or <http://dx.doi.org/10.2139/ssrn.1456851>.

Yihui Pan, Tracy Yue Wang, Michael S. Weisbach. CEO Investment Cycles. NBER Working Paper No. 19330. Issued in August 2013

Phelps, Edmund S., 2010, Shorttermism is undermining America, New Perspectives Quarterly 27, 17–19.

Roe, Mark J., Corporate Short-Termism - In the Boardroom and in the Courtroom (April 18, 2013). Business Lawyer, August 2013; ECGI - Law Working Paper No. 210; Harvard Public Law Working Paper No. 13-18. Available at SSRN: http://ssrn.com/abstract=2239132 or <http://dx.doi.org/10.2139/ssrn.2239132>.

Sarkar, Arkodipta and Krishnamurthy, Subramanian and Tantri, Prasanna L., CEO Turnover and Earnings Management in Banks: Evidence from India (October 12, 2013). Available at SSRN: http://ssrn.com/abstract=2338392 or <http://dx.doi.org/10.2139/ssrn.2338392>.

Shleifer, Andrei, and Lawrence H Summers. 1988. Breach of Trust in Hostile Takeovers. In Corporate Takeovers: Causes and Consequences., Alan J Auerbach, 33-56. Chicago: University of Chicago Press.

Sponholtz, Carina, Determinants of CEO Turnover in Public and Private Firms in Denmark - CEO and Firm Characteristics (August 28, 2006). Available at SSRN: http://ssrn.com/abstract=927424 or <http://dx.doi.org/10.2139/ssrn.927424>.

Stein, Jeremy, 1988, Takeover threats and managerial myopia, Journal of Political Economy 46, 61‐80.

Stein, Jeremy, 1989, Efficient capital markets, inefficient firms: A model of myopic corporate behavior, Quarterly Journal of Economics 104, 655‐669.

Thomsen, S. (1996). Foundation ownership and economic performance. Corporate Governance: An International Review, 4, 212-221.

Thomsen, S. (1999). Corporate ownership by industrial foundations. European Journal of Law and Economics, 7, 117-136.

Thomsen,S. 2012a. What do We Know about Industrial Foundations. <http://www.tifp.dk/wp-content/uploads/2011/11/What-Do-We-Know-about-Industrial-Foundations.pdf>.

Thomsen, S. 2012b. Industrial Foundations in the Danish Economy. Working Paper. <http://www.tifp.dk/wp-content/uploads/2011/11/Industrial-Foundations-and-Danish-Society1.pdf>.

Weisbach, Michael S., 1995. “CEO turnover and the firm’s investment decisions” Journal of Financial Economics 37, 159-188.

1. Ph. D. student, Center for Corporate Governance, Copenhagen Business School. [↑](#footnote-ref-1)
2. Research fellow, Post Doc, Center for Corporate Governance, CEBR, CCP, EPAC. [↑](#footnote-ref-2)
3. Associate Professor, Ph.D., Center for Corporate Governance. Copenhagen Business School. [↑](#footnote-ref-3)
4. Professor, Center for Corporate Governance, Copenhagen Business School [↑](#footnote-ref-4)
5. In a study of 119 industrial foundation charters we find this “business goal” in 68%. [↑](#footnote-ref-5)
6. Hansmann and Thomsen (2013a) find only 16 listed foundation-owned companies in Denmark albeit that that these companies tend to be some of the largest in the country. [↑](#footnote-ref-6)
7. We could also define a foundation’s ownership stake in terms of control and use the weakest link along the control chain. Since a chain of ownership (with more than one link) only exist in firms owned by foundations through a holding company, this change in definition only applies to the (few) observations where this is the case. Our results are not sensitive to this. [↑](#footnote-ref-7)