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WHY TURNOVERS? EXAMINING THE DRIVERS OF CEO
TURNOVER IN FAMILY FIRMS

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Master Thesis

by

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ABSTRACT

I examine the potential drivers for replacement of CEOs in privately held firms in Norway emphasizing on family firms. I studied how different family-related characteristics and change in firm performance are related to CEO turnover. On average, turnover events follow a trend of deteriorating performance. Turnovers are more likely in family firms in two specific circumstances; firstly in the presence of large non-family shareholders and secondly, when the incumbent CEO does not belong to the family. The likeliness of turnover after a period of declining performance increases in non-family firms but decreases in family firms. This positive relationship between prior-performance and turnover in family firms holds even in the presence of outside shareholders or a non-family CEO. My analysis suggests that turnover decisions in family firms are driven differently than in non-family firms.

This thesis is a part of the MSc programme at BI Norwegian Business School. The school takes no responsibility for the methods used, results found, or conclusions drawn.

Table of Contents

1	Introduction and Motivation	1
1.1	Research Questions	2
2	Literature Review and Theory	3
2.1	Firm performance and turnover decisions	3
2.2	Family firms – a possible special case?	5
3	Methodology	8
3.1	Data	8
3.2	Hypotheses	10
4	Data and Summary Statistics	13
5	Analysis and Results	16
5.1	The base model for link between performance change and CEO turnover	16
5.2	A closer look into family firms	18
5.3	Do non-family shareholders have a role?	20
5.4	Are non-family CEOs treated differently than family CEOs?	23
5.5	Test for robustness	27
6	Conclusion	29
7	References	30

1 Introduction and Motivation

Decisions made by senior managers of a firm has a direct impact on how the firm performs, and in turn, the value generated for shareholders and investors. As a result, company stakeholders tend to watch closely on the performance of the firm to assess if the managers are performing effectively. For that reason, in the case of sustained negative performance, one would expect the shareholders to replace the CEO to penalize bad performance. It has widely been documented that CEO turnovers are closely connected to declining firm performance, and continuation of 'good' performance indicates a much lower likeliness of replacing top executives (Jenter & Anderson, 2017).

In the case of most publicly traded firms, the separation between ownership and control of the firm is quite high. This gives rise to the principal-agent conflict. When CEOs are unable to sustain good performance, owners are faced with a decision on whether to keep the CEO or not. If the owners believe that the CEO is responsible for the bad results, they might look to replace the CEO as a means to revive performance. On average, CEO turnover was indeed found to be followed by a significant improvement in firm performance (Huson, Malatesta, & Parrino, 2004). This supports the idea that improved managerial quality can help firms improve their performance post the replacement of the CEO.

However, most of published research is based on large and publicly traded companies mostly based in the US. But, the CEOs role has been found to be much more significant in transforming firm performance in smaller firms due to the lack of complexity (Ling, Simsek, Lubatkin, & Veiga, 2008). For this reason, one would expect a stronger relationship between performance changes and CEO turnover in smaller firms.

Among such privately owned small firms, family-owned firms could be less likely to replace the CEO purely on grounds of performance. Shareholders of family-owned firms have other incentives, such as maintaining their participation in the operations of the business and keeping a family CEO in charge of the firm. Such incentives may imply that the sensitivity towards firm performance when it comes to replacing CEOs may be different in family firms in comparison to non-family firms. Furthermore,

specific incentives may imply that family firms would behave differently from other private firms when evaluating a CEO replacement decision based on performance.

This study aims to identify whether replacement of top management in privately held firms in Norway follows a performance decline. The objective here is to understand to what extent declining firm performance drives CEO turnover and what other factors can come into play in the decision. As private firms are more closely held, and there is often less separation between ownership and control, owners are able to act upon turnover decisions much quicker. For this reason, the relationship between performance and CEO turnover should be quite evident.

However, as family firms may have different incentives in firing or retaining their CEO, firm performance alone might not be a sufficient condition for replacement of the top management in those firms. In family-owned firms where the manager is also a part of the family, there could be two possibilities. Firstly, family participation brings benefits in the form of reduced agency costs and better incentives to take on a longer-term perspective, which might outweigh the costs of short term decline in performance. Secondly, the family could also have incentives to retain control in order to extract private benefits from the firm if there are other shareholders. A combination of these two factors may entail that family firms would not base CEO replacement decisions entirely upon performance.

In this study, I examine the relationship between turnover events and firm performance in privately held firms in Norway to see if CEO turnovers follow a decline in performance. I then take a specific look into how family ownership and a family CEO may alter the sensitivity of CEO turnover to performance.

1.1 Research Questions

Questions:

1. Does CEO turnover follow a decline in firm performance?
2. Is the relationship between performance change and CEO turnover different in family-owned firms?
3. What other factors such as presence of minority shareholders, or the CEO being from the family could be significant in the turnover decision?

2 Literature Review and Theory

The performance of a firm can be modelled as a sum of managerial quality and a random component arising from chance (Kim, 1996). This random component can be seen as a systematic factor, which would be present across all firms in the industry and is not affected by the manager's actions. This could either arise from industry-wide events or mean reversion of accounting series. We would need to control for this factor before evaluating the managerial contribution to firm performance.

2.1 Firm performance and turnover decisions

There are two major theories on why CEOs are replaced following a performance decline: the improved management hypothesis which proposes a strong relationship between manager quality and firm performance, and the scapegoat hypothesis which attributes most of the performance changes to chance and mean reversion.

2.1.1 Turnover events as a consequence of declining performance

The performance of a firm is the indicator of the value created by the firm for its owners. Commonly, in large publicly traded firms, the owners delegate the operations to managers. The selection of managers is made such that the manager can affect firm performance favourably. In this principal-agent relationship, the managers (the agents) are expected to take decisions in the interest of managers to generate value for the owners (the agents). A declining firm performance indicates that the expectations of the principal are not being fulfilled, possibly because of goal incongruence, meaning that the manager is pursuing objectives that are different from those of the owner. Theoretical examples of such goal incongruence could be empire building behaviour or pursuit of private benefits.

These problems can be intensified by information asymmetry, meaning that the owner cannot adequately observe the efforts made by the manager. This means that there is a lack of clarity on whether the lack of performance is due to managerial incapability or from chance. So, it has also been observed that CEOs are more likely to be replaced following bad industry/market performance as well. This shows that boards deciding on whether or not to replace their CEO do not adequately filter out the systemic factors affecting firm performance when evaluating CEO quality (Jenter & Kanaan, 2015).

Previous research has strongly suggested that weak firm performance is a major trigger for decisions on replacing top managers (Huson et al., 2004). Farrell and Whidbee (2003) explored that it is not necessarily always about the performance metrics and that boards also emphasize on deviation from expected performance while evaluating these decisions. Jenter and Anderson (2017) found that anywhere between 38% and 55% of CEO turnover events are performance induced with the exact number varying with the estimation method.

Broadly, we can see that in times of bad performance, the owners are likely to consider replacing the manager in order to appoint someone who can better deliver in line with their objectives (Zajac, 1990).

2.1.2 Improved management hypothesis

The study relies on the improved management hypothesis which supports that forced turnovers or improved quality of managers will lead to improvements in firm performance (Huson et al., 2004). This is reliant on the assumption that managers indeed vary in quality. Therefore, changes in firm performance are not simply because of chance or mean reversion of accounting series. The manager's decisions influence the performance of the firm, and the quality of the manager determines the direction of change in performance. Thus, the decision of shareholders to replace a manager following a period of decline may help revive firm performance.

2.1.3 Scapegoat hypothesis

The scapegoat hypothesis postulates the opposite of the improved management hypothesis. It argues that managerial quality is not variable, and poor performance is caused by chance (Huson et al., 2004). As the manager's effort cannot be directly observed, they are threatened by dismissals in case of poor performance. So, the improvement after a turnover event is not an outcome of improved managerial quality, and the outgoing manager is simply a 'scapegoat'. Performance improvements following the turnover event are visible due to mean reversion of the accounting series.

2.2 *Family firms – a possible special case?*

The principal-agent problem discussed in the previous section may take a special form in the family firm.

One perspective is the skill-based view regarding family control of firms where the family's control and closeness to the firm are seen as strategic resources and a source of competitive advantage. This stems from the belief that the transfer of knowledge and skills within family members can create value for the firm (Cabrera-Suárez, De Saá-Pérez, & García-Almeida, 2001).

Early researchers have identified social and cultural factors in the family's interest in maintaining control of the firm. Such decisions can partially be attributed to families wanting to accumulate power and wealth that can be passed on to future generations (Schulze & Gedajlovic, 2010). Another important element that has been identified is trust. A cultural setting that promotes trust within the family also promotes a certain degree of distrust outside the family. This can be a strong driver in the decision to pass control within the family (Bertrand & Schoar, 2006; Fukuyama, 1995).

Broadly, if the family has both ownership and control of the firm, the principal-agent conflict will be minimized. This happens as goals are more aligned and information asymmetry is eliminated. This implies a reduction of agency costs arising from conflicts between owners and managers. When the agent is a family member, they have incentives in the form of loyalty to the family in addition to the already existing economic benefits to govern well (Bøhren, Stacescu, Almlı, & Søndergaard, 2019; Morck, Shleifer, & Vishny, 1988).

In that case, the family is likely to put a stronger emphasis on the positive aspects of family control. Family control is often linked to a longer-term perspective in decision making, substitution for issues in governance and contractual enforcement and easier transmission of knowledge to other members of the family easing successions (Bertrand & Schoar, 2006). In such a scenario, the family may be willing to overlook a short-term decline in performance for expectations of value creation in the long term. Alternatively, more simply, they might not be willing to remove a close family member from a position of control. This would mean that there could be a difference in how

family firms with an outside CEO weigh firm performance during turnover decisions differently from those family firms with a family CEO.

Another benefit might come from the family's long term approach. As the firm is inherited across generations, the controlling family also commonly see the firm as a legacy that they are responsible for. This prompts them to take a more long term approach when making decisions. This change in approach mitigates the common problem of short-termism among managers which can drive value (Bertrand & Schoar, 2006).

However, in the presence of other shareholders, while the principal-agent conflict is reduced, there might be a conflict between majority and minority shareholders. If the family has sufficient voting rights to exercise control of the firm, but the cash-flow rights are more dispersed, then the controlling block also has incentives to pursue benefits through other means such as tunnelling. Barclay and Holderness (1989) found evidence that larger blocks of shares are associated with a premium, which is interpreted as a measure of the private benefits that the controlling block can extract.

Family firms can thus have a different approach to turnover decisions, either because of a possibility of actual value creation from the benefits of family control, or because of the possibility of certain private benefits at the cost of minority shareholders. On the other side, the family also faces costs in the form of diversification loss, spill over of family conflicts into the business and possible lack of skill in the managers appointed from the family (Bøhren et al., 2019).

Therefore, in more recent studies, an argument has been made that families participate in the firm when the benefits to the family exceed costs. The family stands to gain more value from retaining the CEO, which could be from reduction in agency conflict, perceived value of controlling the business and also from possible benefits to the family at the cost of minority shareholders. If this value gain exceeds the loss caused from poor performance due to managerial quality, the family is unlikely to fire the CEO. This raises a question; whether family control is good or bad for firms?

2.2.1 Family control and firm performance

There is no universal answer to the cost-benefit question when it comes to family control. A study by Morck et al. (1988) found that the correlation between family

control and market to book ratios was positive for young firms, while it was negative for older firms. A more specific study in firms where the control was inherited by a subsequent family member found that firms that choose to appoint a relative of the current CEO, founder or a large shareholder as the successor underperform firms which appoint an unrelated CEO (Pérez-González, 2006). Evidence suggested that this was because of the firm's inability to hire more capable candidates.

Smith and Amoako-Adu (1999) observed that turnover announcements in family firms where the successor was a family member displayed a decline in expected performance. The decline in expectations was commonly attributed to scepticism regarding the managerial abilities of the incoming executive with an emphasis on the person's age. A study in Italian family firms conducted by Cucculelli and Micucci (2008) found that the firm value, in fact, tends to decline when the successor is an heir.

Therefore, the lack of a universal answer on whether a family CEO has an accretive value on firm performance or not leaves the owners of the firm to evaluate this question within their setup. If a family controls the firm, the owners have an incentive to prioritize value creation for the family over value creation for all the shareholders of the firm. While the family might represent all shareholders in some cases, it gives rise to a more complex situation in firms where minority shareholders are present. This creates the question of whether family firms put the same emphasis on performance as non-family firms do. This thesis focuses on this question of emphasis on performance in context of CEO turnover decisions.

3 Methodology

3.1 Data

My sample is comprised of all limited liability firms in Norway operating between the year 2000 and 2015. This is obtained from the database maintained by the Centre for Corporate Governance Research (CCGR) at BI Norwegian Business School. The dataset helps address the knowledge gap regarding smaller privately held firms as Norwegian law requires firms of all size to audit and report their accounts.

The database also contains information regarding family ownership and family participation (for instance, whether the CEO and the chair are members of the controlling family) making it possible to study the connection between turnover decisions and performance.

3.1.1 Determining key variables

Turnover events have been identified based on a change in the anonymized SSN of the CEO. As there is no specific way to identify voluntary or forced turnover events, all turnover events are considered in the sample. If the CEO is identified to be different from year $t-1$ at year t , a turnover is recognized in year t .

The study uses the return on assets (ROA) as the metric for performance. As the firm performance is compared with industry peers and the firm's own performance in the past years, the measure would be the most relevant in contrast to other measures such as return on equity (ROE) which could vary because of the capital structure. The ROA was computed for each time period. In order to control for industry effects, the ROA was adjusted by subtracting the median ROA for companies in the same industry based on their NACE code (Level 2).

I have considered the firm's performance in a window of 3 years prior to the turnover event. As shareholders would not make a decision to remove the CEO for a very short-term decline in firm performance, the three-year window is more reasonable. For a turnover reported at the end of year t , one would expect the shareholders to make an assessment between years $t-2$ and $t-1$. For that reason, the performance change between $t-3$ and $t-1$ would reflect the improvement/decline in performance upon which the turnover decision would be based. Thus, the $\Delta ROA(-3,-1)$ used as the metric for change in performance.

Firm size is used as a control variable as larger firms are more complex in nature compared to smaller firms and this can consequently create a difference in how turnover decisions are made. The firm's sales is used as a proxy for size.

3.1.2 Defining a family firm

There is a large variation in existing literature regarding what a family firm is. There are over 30 different definitions of a family firm in the existing literature (O'Boyle Jr, Pollack, & Rutherford, 2012).

In research pertaining to larger publicly held firms, the criteria seems to be weaker. For instance Gomez-Mejia, Larraza-Kintana, and Makri (2003) define a firm to be family-owned or family-controlled when at least two directors have family relationships and jointly control at least 5% of the voting stock.

The definitions are more stringent and specific when it comes to privately held firms. In a study by Bøhren et al. (2019) on Norwegian family firms, they define family firms as those where the controlling owners are individuals related by blood or marriage or up to the fourth degree of kinship. A controlling ownership is defined here as ownership of more than 50% of voting rights.

For the purpose of this study, I have considered firms with a blocking majority held by a family as family firms. As this study stems from the idea that families would be more hesitant to replace a family CEO, a blocking majority of 34% would be sufficient for the family to resist the decision even if it a proposal is made by non-family shareholders.

In the models used in the study, a firm is defined as a family firm based on the ultimate ownership of the controlling family. A firm is considered a family firm at year t if the controlling family owns 34% or more of the shares at year $t-1$. This again follows the idea that a turnover event at during the reporting year t entails an assessment of the firm's performance between $t-2$ and $t-1$. Based on the performance change, a decision regarding the replacement of the CEO would be made or blocked during the year $t-1$.

3.2 *Hypotheses*

Based on the existing literature and arguments regarding the role of performance in determining CEO turnover, incentives of families in these decisions and the difference between family and non-family firms, I make seven predictions regarding the relationship between turnovers, change in firm performance and family participation in the firm.

A performance decline is a potential indicator that the CEO is making decisions that are causing a value-loss and a better quality manager could help improve the firm performance (Huson et al., 2004). However, for family firms, the performance of the firm is not the only source of value as there are other sources of tangible and intangible benefits for the controlling family. Therefore, I predict a different behaviour among family firms compared to non-family firms.

Hypothesis 1: There is a negative relationship between the probability of CEO turnover and change in performance in the years prior to the turnover (H1)

As the turnover event is expected to be triggered by a performance decline, a negative change in performance between year $t-3$ and $t-1$ should imply a higher probability of the CEO being replaced at year t .

A sharp decrease in performance within a 2-year timespan should be a strong trigger for shareholders to consider removing the CEO. A positive performance, on the other hand, is a signal that the CEO is performing well and a turnover event should be highly unlikely.

Hypothesis 2: The level of turnover is lower for family firms compared to non-family firms (H2)

As it has been argued that family firms have a longer-term horizon, succession decisions are likely to be handled differently. Family firms emphasize knowledge transfer and sharing of skills within the family participants in the firm in order to drive long term value growth (Bertrand & Schoar, 2006). As these are time taking processes, family firms should be more hesitant to removing incumbent managers, as the owning family would want to retain people with firm-specific skills.

Hypothesis 3: The relationship between performance change and CEO turnover is weaker in family firms than in non-family firms (H3)

As previous studies have identified, families place higher importance on survival than firm growth and they would have interests that could be incongruent with regular shareholders. While non-family firms have incentives to maximize the performance of the firm, a decline in performance is a clear trigger for CEO removal. However, for family firms, their incentives could be in maximizing benefits to the family which is not always linked to firm performance.

This would mean that family firms would be less likely to fire their CEO in the case of a performance decline.

Hypothesis 4: The likeliness of turnover in family firms with large non-family shareholders is stronger than in tightly held firms (H4)

Presence of large outside shareholders might create conflict between the shareholders as the family's incentives could differ from the incentives of the non-family shareholders. While families might have an incentive to retain the CEO, the outside shareholders may not agree. As there is evidence that there is a difference in incentives between the two, I expect to see a higher level of turnover in family firms that have large outside shareholders.

Hypothesis 5: The link between performance and CEO turnover in family firms with large non-family shareholders is stronger than in tightly held firms (H5)

Following on H4, in the presence of non-family shareholders, the family's interests to retain the CEO despite consecutive periods of bad performance would become difficult to justify. While the family might evaluate its own benefits, the other shareholders stand to lose from the dip in performance. This might result in a situation where the non-family shareholders try to force the family-shareholders into replacing the CEO.

Thus, a higher non-family shareholding should correlate with a stronger link between performance decline and CEO turnover.

Hypothesis 6: Non-family CEOs in family firms have a higher likeliness of turnover than family CEOs (H6)

The difference in incentives between family and non-family shareholders in a family firm comes from two sources. The first is the long-term perspective that could fundamentally alter the way they make decisions, and the second is the presence of private benefits that the family might be able to extract. Having a family CEO implies stronger control of the firm and retention of control, in itself, is a benefit to the family. It could also entail the possibility of additional benefits. Family CEOs should thus be more likely to be retained than non-family CEOs.

Hypothesis 7: The relationship between performance decline and CEO turnover is weaker in family firms with family CEOs compared to family firms with non-family CEOs (H7)

Following on H6, families are likely to want to maintain their control in the firm. If the incumbent CEO is a family member, they are more likely to overlook a decline in performance compared to a case where the CEO is not a family member. Replacing a non-family CEO does not affect the control the family has. In this case, a new CEO can bring about an improvement in performance, this could be a source of additional benefit to the family. Furthermore, in cases where there is a potential successor from the family, the owners, in fact, could be keen to replace the underperforming non-family incumbent with a family successor to enhance control and potentially improve performance. A family firm with a non-family CEO should thus be more sensitive to performance declines than those with family CEOs with regards to CEO turnover.

In summary, I hypothesize that turnover events follow a decline in performance for all firms, but the sensitivity towards performance decline is lower for family firms when it comes to turnover decisions. The likeliness of turnover is lower in general among family firms and higher in those family firms with outside shareholders. Also, non-family CEOs are more likely to be replaced in contrast to family CEOs. The sensitivity of performance decline in turnover decisions is lower for family firms and specifically family firms with family CEOs and it is stronger for those family firms with outside shareholders or a non-family CEO.

4 Data and Summary Statistics

My sample is comprised of all limited liability firms in Norway operating between the year 2000 and 2015. From the sample, I have excluded publicly listed firms, state-owned enterprises and foreign firms.

Firstly, firms with negative assets and sales were excluded. Firms with sales of less than 1 mNOK were also excluded. In order to filter for consistent reporting, firms with a difference of more than 1mNOK between assets and liabilities were also excluded. As I am studying CEO turnovers, firms with missing values across key variables such as the CEO identification number, family ownership and the CEOs relationship to the family between the first and last year they appear on the sample were also excluded. Finally, I also excluded firms with less than a 4-year lifespan.

After the cleaning, I have 42,191 firm-year observations and 5,655 individual firms. Among them, 4,177 (73.86%) have been classified as family firms during the entire sample period. 88.74% of the firms have been identified as family firms for at least 50% of the duration that they appear in the sample. Looking at the average family ownership during the sample period, only 24.53% of the firms in the sample have minority shareholders owning 50% or more of the shares. The average non-family shareholding across all firms is only 25.26% and the average non-family shareholding for the median firm is 16.09%. Only 6.74% of the firms were never family-owned during the entire sample period. It is clear that the sample is mostly composed of family-owned firms.

There are 1,792 (31.69%) firms with turnover events in the sample and 2,537 turnover events. 1,920 of these turnover events occur in family firms. Only 25.22% of the firms that are family held for the entire sample period have turnover events whereas the number rises to 46.46% in firms that were never family-owned. A closer look (Table 4.1) at the turnover events in family firms reveals that 55.52% of the outgoing CEOs in family firms are members of the family and non-family members replace a majority of them (59.66%). In 5.75% of the turnover events, the firm is family held prior to the turnover and the family ownership drops below 34% by two years after the turnover event.

I observe that family participation in family-owned firms is also quite high. On average, 80.02% of the family-owned firms have a CEO that is a family member, and 78.05% of them have a chair from the family. This indicates a high degree of family participation in firms. This number is even higher for firms fully owned by a single family. In single-family owned firms, on average, 91.10% have a family CEO and 92.28% have a chair from the family.

Table 4.1 summarizes the nature of turnover events. I observe that the most common type of succession is from a family CEO to a non-family CEO. A succession from a non-family CEO to a family CEO is the least common.

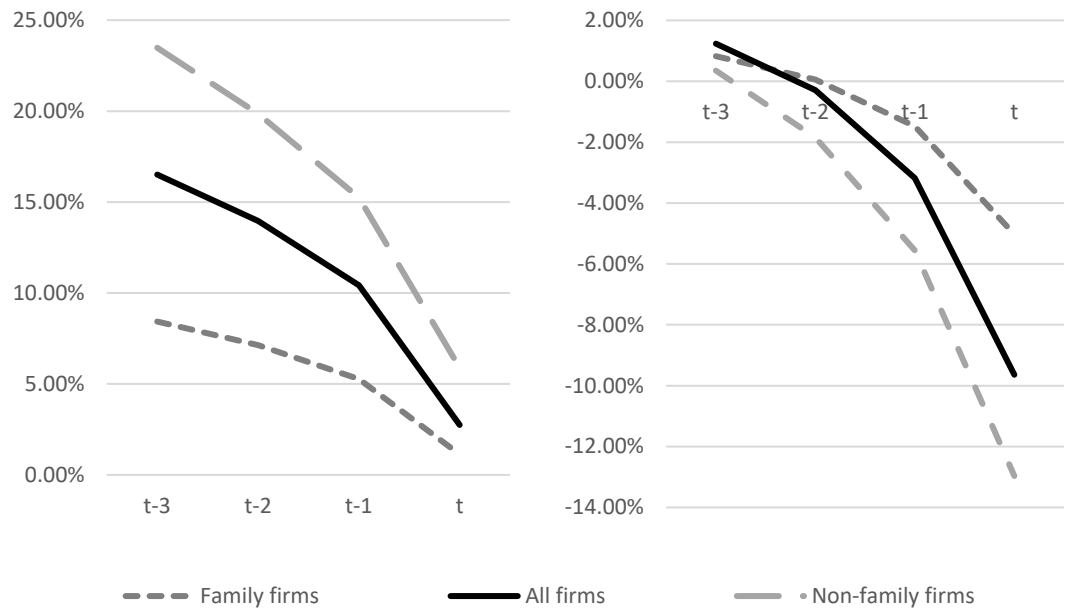
Table 4.1: Turnover patterns in family firms

		Outgoing CEO	
		Family	Non-Family
Successor CEO	Family	430 (22.40 %)	329 (17.14 %)
	Non-Family	636 (33.13 %)	525 (27.34 %)

Looking at the performance of the firms during the sample period, the average ROA was 6.07%. It decreases quite substantially in the period between 2008 and 2010 and gradually picks up. Adjusting for industry effects however, the average change in ROA in consecutive 3-year periods is mostly positive. This indicates that on average, firms are mostly improving in the performance metrics after adjusting for industry-wide effects.

I use the change in industry adjusted ROA between year t-3 and year t-1 as a metric for change in performance. For all the turnover events observed in the sample, the average change is -4.62%. For family firms, there is a change of -5.03% on average in the 3-year duration prior to the turnover while there is a change of -3.33% for non-family firms. Figure 4.1 illustrates the mean ROA before and after industry-adjustment for the sample 3 years prior to the turnover event.

Figure 4.1: Mean ROA (left) and industry adjusted ROA (right) prior to turnover



Looking at Figure 4.1, while family firms seem to perform lower than average in terms of unadjusted ROA, they seem to be better performers if we look at the industry-adjusted ROA.

The figure indicates a decreasing trend in the performance prior to the turnover in both family and non-family firms on average. This trend definitely is an indication that turnover events, on average, follow a period of performance decline. I will continue to explore the specifics of this relationship in the later parts of the thesis.

5 Analysis and Results

The analysis was based on binary logit models with the turnover as the dependent variable and change in firm performance as the independent variable. The sales of the firm in the year was used as a control for firm size.

5.1 The base model for link between performance change and CEO turnover

To test H1, the following regression was run:

$$TURNOVER_{i,t} = \beta_0 + \beta_1 SIZE_{i,t} + \beta_2 \Delta PERFORMANCE_{i,t} + \varepsilon$$

Table 5.1.1: Base model regression results

The dependent variable TURNOVER takes the value 1 if there was a turnover in year t for firm i and 0 otherwise. SIZE is the log of sales in mNOK to serve as a control. $\Delta PERFORMANCE$ is the difference between the industry adjusted ROA in year t-3 and year t-1. The ROA is adjusted by subtracting the median for the industry (based on NACE code at level 2). Panel I contains all the firms and Panel II contains only those firms that are never family-controlled during the entire sample period. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variable	Panel I: All Firms		Panel II: Non-family firms	
	Coefficient	z-statistic	Coefficient	z-statistic
INTERCEPT	-5.039***	-34.580	-3.210***	-7.530
SIZE	0.228***	14.260	0.096**	2.090
$\Delta PERFORMANCE$	0.235**	2.180	-0.320	-0.990
Observations (N)	42,191		2,588	

In Panel I that contains all the firms, I observe a strong positive relationship between performance change and CEO turnover. The coefficient is significant at the 5% level. This is an interesting observation as it implies that a turnover is more likely following a period of improvement in performance. This contrasts the hypothesis that turnovers follow declining performance. This could be because the sample is predominantly composed of family firms. A source of this relationship could come from the family's willingness to retain a badly performing CEO if the private benefits are obtained even if the firm performance is suffering (Anderson & Reeb, 2003).

Running the same model on Panel II that only contained firms that were never family-owned during the sample period, there is some evidence of this possibility. While the significance of the coefficient is low, the coefficient now turns negative. A possible

explanation for this weak relationship could be because of the lack of clarity on the nature of these turnover events. Not all turnovers are forced and decided upon because of performance related concerns. Denis and Denis (1995) found that the industry-adjusted performance change in the 3-year period prior to turnover was not significant in their sample of American firms but was significant at the 1% level in a sub-sample of forced resignations. As I do not have information about whether the turnover events are forced or voluntary, the treatment of all turnovers the same way may be one of the reasons why the relationship is weak.

Furthermore, identification of forced and voluntary turnovers alone may not be a sufficient condition in identifying whether a turnover decision was performance driven. A voluntary retirement may come as a consequence of declining performance, and a forced removal of CEO may occur because of personal or family conflicts even in times of strong performance (Jenter & Kanaan, 2015).

In addition to that, the above model is capturing the cross-sectional variation in performance between the various firms. Firm owners may not just look at the performance relative to industry but also deviations from expectations that they have from the firm (Farrell & Whidbee, 2003). These expectations could be formed based on their own average level of performance. I ran an alternative fixed-effects specification as follows to see how the likeliness of turnover is affected by the firm's performance with regards to its own average. The model was run on a sub-sample that only includes firms that experience at least one turnover event during the sample period. In this model, the average ROA across the past three years (t-3 to t-1) is used as a metric for performance. The model thus evaluates the link between performance and turnover with the firm's own mean performance as the control. The fixed-effects binary logistics model is as follows:

$$TURNOVER_{i,t} = \beta_1 SIZE_{i,t} + \beta_2 MEAN ROA_{i,t} + \varepsilon$$

Table 5.1.2: Fixed-effects model

The dependent variable *TURNOVER* takes the value 1 if there was a turnover in year *t* for firm *i* and 0 otherwise. *SIZE* is the log of sales in mNOK to serve as a control. *MEAN ROA* is the firm's average industry-adjusted ROA for the three years prior to the turnover event. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variable	Coefficient	z-statistic
<i>SIZE</i>	0.089***	3.140
<i>MEAN ROA</i>	-0.969***	-5.420
Observations (N)	14,417	

I observe a significant and negative relationship between the firm's average performance and likeliness of turnover. The negative sign on the coefficient for the average performance indicates that firms are more likely to replace the CEO if the 3 year-average ROA at a given point of time is lower than their own average performance.

Combining the findings from both the models above, it is evident that there is a relationship between declining performance and CEO turnover. However, the contrasting result in the larger sample mostly composed of family firms indicates that there could be other dimensions of family ownership and control which could help form a more complete conclusion. The following sections aim to identify if there is a difference in the drivers of turnover in family firms along with exploring different family-related characteristics of firms that might be linked to turnovers.

5.2 A closer look into family firms

The base model in 3.3.1 was extended including a *FAMILY* variable to test H2 and H3. The variable is defined as outlined in section 3.1.1 using a criteria based on the ultimate ownership of the largest family. The regression is as follows:

$$\begin{aligned}
 TURNOVER_{i,t} = & \beta_0 + \beta_1 SIZE_{i,t} + \beta_2 \Delta PERFORMANCE_{i,t} \\
 & + \beta_3 \Delta PERFORMANCE_{i,t} \times FAMILY_{i,t-1} + \beta_4 FAMILY_{i,t-1} + \varepsilon
 \end{aligned}$$

Table 5.2.1: Extension of base model for family firms

The dependent variable is TURNOVER. Along with the dependent variable, the independent variables SIZE and Δ PERFORMANCE are defined as outlined in Table 5.1.1. FAMILY takes the value 1 if it is identified as a family firm as outlined in section 3.1.1 and 0 otherwise. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variables	Coefficient	z-statistic
INTERCEPT	-4.154***	-26.760
SIZE	0.206***	13.060
Δ PERFORMANCE	-0.302	-1.360
Δ PERFORMANCE \times FAMILY	0.715***	2.820
FAMILY	-0.788***	-13.570
Sum of coefficients linked to performance for family firms		
Δ PERFORMANCE+ Δ PERFORMANCE \times FAMILY	0.413***	3.370

While the Δ PERFORMANCE variable remains weak, the FAMILY variable and the interaction variable between the two are significant at the 1% level.

Here, the coefficient on Δ PERFORMANCE indicates the relationship between the change in performance and the likeliness of CEO turnover in non-family firms. I observe that the coefficient is negative indicating that a decline in prior performance indicates a higher likeliness of turnover. The low significance of the coefficient could again be because of the inclusion of both voluntary and forced turnovers in the study sample.

The relationship between the change in performance and likeliness of turnover in family firms is established by the sum of the coefficients on Δ PERFORMANCE and Δ PERFORMANCE \times FAMILY. As indicated in Table 5.2.1, the coefficient is positive and significant at the 1% level. This implies that a turnover is more likely in family firms after consecutive periods of improved performance. Consequently, it also implies that a turnover is less likely after a period of declining performance in these firms. A study in Italy by Smith and Amoako-Adu (1999) discovered an increase in firm performance relative to the industry just prior to the succession event in family firms. They argue that a turnover decision in family firms is not associated to performance related objectives and they find that specifically, in cases where firms appoint a family successor, firms follow a period of performance increase. This partially explains why the coefficient is positive for the subsample of family firms.

The coefficient on the FAMILY dummy indicates the level of turnover in family firms in comparison to non-family firms. The coefficient is negative and significant. It indicates that the likeliness of CEO turnover at any given period is lower for family firms than non-family firms on average. While the level of turnover in an average sized non-family firm with no change in industry-adjusted performance is identified to be 8.89%, it is 4.04% for a family firm. For non-family firms in the 10th percentile in terms of performance, the probability of turnover climbs to 9.41% whereas it reduces to 3.74% if the firm is family owned. Firms in the 90th percentile will have an increased probability of turnover at 4.44% if family owned, whereas at 8.30% if they are non-family firms.

A possible explanation for this is the varying motivations for turnover decisions in family firms. As families have incentives in prioritizing survival and continuity of the firm rather than maximizing short-term incentives, firms commonly prioritize survival and family growth (Bocatto, Gispert, & Rialp, 2010). This shift in priorities can be attributed to the fact that concentrated family firms have a small number of shareholders, all of whom are more focussed on the long-term over short-term performance metrics and family firms would plan succession based on passing on of knowledge and capabilities (Poza, Hanlon, & Kishida, 2004).

The findings confirm the hypothesis (H2) that a turnover is less likely in family firms in comparison to non-family firms. They also confirm the hypothesis (H3) that turnovers are less likely following a period of performance decline. It, in fact, indicates that turnovers are more likely following a period of improvement in performance in family firms. Regarding non-family firms, the findings are weak, but consistent with the arguments in section 5.1 that a turnover generally follows a period of performance decline.

5.3 Do non-family shareholders have a role?

To test H4 and H5, another dummy was added based on the ultimate shareholding of the family. This was to assess if the level of turnover in family firms is determined by presence of other non-family shareholders. In tightly held family firms, all shareholders have aligned incentives to maximize benefit to the family. However, in the presence of non-family shareholders, performance related metrics become more important as these

shareholders do not have the same incentives as the family shareholders. (Poza et al., 2004).

The regression is as follows:

$$\begin{aligned} \text{TURNOVER}_{i,t} = & \beta_0 + \beta_1 \text{SIZE}_{i,t} + \beta_2 \Delta \text{PERFORMANCE}_{i,t} \\ & + \beta_3 \Delta \text{PERFORMANCE}_{i,t} \times \text{FAMILY}_{i,t-1} \\ & + \beta_4 \Delta \text{PERFORMANCE}_{i,t} \times \text{OUTSIDERS}_{i,t-1} + \beta_5 \text{FAMILY}_{i,t-1} \\ & + \beta_6 \text{OUTSIDERS}_{i,t-1} + \varepsilon \end{aligned}$$

Table 5.3.1: Influence of non-family shareholders

The dependent variable is TURNOVER. Along with the dependent variable, the independent variables SIZE, Δ PERFORMANCE and FAMILY are defined as outlined in Table 5.1.1 and 5.2.1. In Panel I, the variable OUTSIDERS takes the value 1 if the non-family shareholding is higher than the median value of 16.09% at year t-1. For non-family firms, the OUTSIDERS dummy takes the value 0. A new interaction variable between Δ PERFORMANCE and OUTSIDERS is added in addition to the one used in 5.2.1 to see if the presence of non-family shareholders affect the link between performance and CEO turnover in family firms. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variable	Coefficient	z-statistic
INTERCEPT	-3.977***	-25.620
SIZE	0.191***	12.110
Δ PERFORMANCE	-0.310	-1.360
Δ PERFORMANCE \times FAMILY	0.874***	3.080
Δ PERFORMANCE \times OUTSIDERS	-0.335	-1.370
FAMILY	-1.135***	-17.570
OUTSIDERS	0.733***	13.860
Sum of coefficients linked to family firms and family firm performance		
Δ PERFORMANCE + Δ PERFORMANCE \times FAMILY	0.564***	3.320
Δ PERFORMANCE + Δ PERFORMANCE \times FAMILY + Δ PERFORMANCE \times OUTSIDERS	0.229	1.310
FAMILY+OUTSIDERS	-0.408***	-6.94

Here, the coefficient on FAMILY indicates the likeliness of turnover in family firms without outside shareholders owning more than the median outside shareholding (which is 16.09% in this dataset). The sum of the coefficients on OUTSIDERS and FAMILY indicates the likeliness of turnovers in family firms with above median outside shareholding. The sum of these coefficients is negative and significant. It

indicates that family firms with outside shareholders have a lower level of turnover compared to non-family firms. However, comparing this sum to the coefficient on FAMILY, it is clear that the likeliness of turnover in these firms with large outside shareholders is higher than those firms where these outsiders are absent.

Table 5.3.2 summarizes the implied probabilities of CEO turnover for firms based on these characteristics. For an average sized family firm with no performance change, the probability of turnover is estimated at 3.01% in absence of large outside shareholders. It rises to 6.26% in presence of above-median outsider shareholding. This is in line with the argument that outside shareholder participation can bring about a different set of incentives for the firm compared to firms with no outside involvement (Poza et al., 2004).

With the addition of the $\Delta\text{PERFORMANCE} \times \text{OUTSIDERS}$ term in comparison to the model in the previous section, the sum of coefficients on $\Delta\text{PERFORMANCE}$ and $\Delta\text{PERFORMANCE} \times \text{FAMILY}$ now indicates the relationship between change in performance and the likeliness of CEO turnover in family firms without large outside shareholders. The sum of the three coefficients $\Delta\text{PERFORMANCE}$, $\Delta\text{PERFORMANCE} \times \text{FAMILY}$ and $\Delta\text{PERFORMANCE} \times \text{OUTSIDERS}$ indicates this relationship in family firms where large outside shareholders are present.

The sum of coefficients on $\Delta\text{PERFORMANCE}$ and $\Delta\text{PERFORMANCE} \times \text{FAMILY}$ is positive and significant reaffirming that the findings from section 5.2 hold specifically for family firms without the presence of large outside shareholders.

The sum of the three coefficients $\Delta\text{PERFORMANCE}$, $\Delta\text{PERFORMANCE} \times \text{FAMILY}$ and $\Delta\text{PERFORMANCE} \times \text{OUTSIDERS}$ is not significant and is lower than the coefficient for family firms without large outside shareholders. This indicates that in presence of outside shareholders, the positive relationship previously observed between change in performance and CEO turnover is not as strong. In other words, following a period of similar improvement in performance, firms with large outside shareholders are less likely to remove the incumbent CEO. This is further clarified by the implied probabilities obtained from the model, which are presented in Table 5.3.2.

Table 5.3.2: Implied probability of turnover based on outside shareholder presence

The table summarizes the implied probability of turnover based on the model for a firm of mean size based on different levels of change in industry-adjusted performance (10th percentile, no change and 90th percentile) as well as different levels of family ownership.

Family Firm Status	10 th percentile	No performance change	90 th percentile
Non-family firm	9.92%	9.35%	8.72%
Family firm with below-median outsider ownership	2.70%	3.01%	3.42%
Family firm with above-median outsider ownership	5.99%	6.26%	6.59%

This confirms the hypothesis (H4) that in presence of large outside shareholders, the level of turnovers is likely to be higher in family firms. This does not confirm the hypothesis (H5) that the link between change in firm performance and CEO turnover is stronger in the presence of outside shareholders.

5.4 Are non-family CEOs treated differently than family CEOs?

To some extent, the previous sections have established a negative relationship between performance and CEO turnover in non-family firms and a positive relationship in the case of family firms. The previous section has shown that the level of turnover is influenced by the presence of large outside shareholders but does not provide any clear indication for the role of performance in these firms.

In order to identify any differentiating elements within family firms that could influence the relationship between performance and CEO turnover, I intend to explore the varying incentives within family firms further. The relationship of the outgoing CEO to the family has an impact on the benefits the owning family has in the firm.

Having a manager from the family as the agent helps minimize the principal-agent conflict, as the incentives are better aligned. The agent has family obligations which, in intangible ways help counter agency costs (Bøhren et al., 2019). So, whether the CEO is a family member or not could be significant in determining the level of turnover for a family firm as well as the relationship between performance and turnover. In order to test H6 and H7, , two additional dummies and interactions were tested extending on the regression in 3.3.2. As family firms may behave differently based on whether the

CEO was a family member or not, these interactions could identify the sensitivity to performance based on that difference. The regression is as follows:

$$\begin{aligned} \text{TURNOVER}_{i,t} = & \beta_0 + \beta_1 \text{SIZE}_{i,t} + \beta_2 \Delta \text{PERFORMANCE}_{i,t} \\ & + \beta_3 \Delta \text{PERFORMANCE}_{i,t} \times \text{FAMILY CEO}_{i,t-1} \\ & + \beta_4 \Delta \text{PERFORMANCE}_{i,t} \times \text{NON FAMILY CEO}_{i,t-1} \\ & + \beta_5 \text{FAMILY CEO}_{i,t-1} + \beta_6 \text{NON FAMILY CEO}_{i,t-1} + \varepsilon \end{aligned}$$

Table 5.4.1: Influence of CEOs association with controlling family

The dependent variable is TURNOVER. Along with the dependent variable, the independent variables SIZE and Δ PERFORMANCE are defined as mentioned in 5.1.1. FAMILY CEO takes the value 1 if the CEO at year t-1 is a family member and zero otherwise. NON FAMILY CEO takes the value 1 if the CEO at year t-1 is not a family member and zero otherwise. Instead of the interaction Δ PERFORMANCE and FAMILY as used in 5.2.1, interactions Δ PERFORMANCE with FAMILY CEO and NON-FAMILY CEO are tested. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variable	Coefficient	z-statistic
INTERCEPT	-4.827***	-31.800
SIZE	0.196***	12.640
Δ PERFORMANCE	-0.259	-1.270
Δ PERFORMANCE \times FAMILY CEO	0.474*	1.790
Δ PERFORMANCE \times NON-FAMILY CEO	0.902***	3.200
FAMILY CEO	-0.132**	-2.260
NON-FAMILY CEO	0.967***	15.550
Sum of coefficients linked to performance for family firms		
Δ PERFORMANCE+ Δ PERFORMANCE \times FAMILY CEO	0.215	1.280
Δ PERFORMANCE+ Δ PERFORMANCE \times NON-FAMILY CEO	0.643***	3.310

The coefficient on FAMILY CEO measures the level of turnover in family firms with family CEOs and the coefficient on NON-FAMILY CEO measures the level of turnover in family firms with non-family CEOs in contrast to the non-family firms. Both the coefficients are significant at the 5% level, and the coefficient for non-family CEOs is also significant at the 1% level.

The negative coefficient on FAMILY CEO indicates that family CEOs in family firms have a lower likeliness of turnovers. This is in line with the argument that family

owners would be less willing to remove a CEO from the family. This could be because the family gains from having a family CEO either through reduction of agency costs or at the cost of non-family shareholders. Apart from that, this could also be attributed to the lack of effective monitoring as the CEO is also a part of the family that owns the firm. Private firms with CEOs who are owners have been linked with negative governance practices in a sample of Italian firms study (Brunello, Graziano, & Parigi, 2003). The firms in the Italian sample are also dominated by family firms similar to the sample used in this

The positive coefficient on NON-FAMILY CEO indicates that non-family CEOs in family firms have a higher likeliness of turnover compared to non-family firms. The positive coefficient on NON-FAMILY CEO compared to the negative coefficient on FAMILY CEO confirms the hypothesis (H6) that family firms with non-family CEOs are more likely to replace their CEOs than those with family CEOs.

This is an interesting observation that contradicts the implications of a study in Taiwan where turnovers were more likely for family CEOs in family firms compared to non-family CEOs (Tsai, Hung, Kuo, & Kuo, 2006). This indicates a potential difference in governance practices based on cultural differences that could be explored further.

Comparing the results here with the results seen in section 5.2 where family firms had a lower probability of turnover compared to non-family firms, Table 5.4.2 indicates that the probability can in fact vary greatly depending on whether the CEO is from the family or not.

Table 5.4.2: Implied probability of turnover based on whether the CEO is from the family or not

The table summarizes the implied probability of turnover based on the model for a firm of mean size based on different levels of change in industry-adjusted performance (10th percentile, no change and 90th percentile) as well as the nature of the firm.

Family Firm and CEO Status	10 th percentile	No performance change	90 th percentile
Non-family firm	4.39%	4.18%	3.94%
Family firm with family CEO	3.52%	3.66%	3.85%
Family firm with non-family CEO	9.72%	10.99%	12.73%

The sum of the coefficients on Δ PERFORMANCE and Δ PERFORMANCE \times NON-FAMILY CEO which measures the relationship between performance and CEO turnover in family firms with non-family CEOs is positive and significant (at the 1% level). The turnover probability seems to decrease for family firms in cases of bad prior-performance and increase in case of good prior-performance whereas the relationship is the opposite for non-family firms. I observe that family firms in general have a positive relationship between probability of turnover and performance change and this holds for both family CEOs and non-family CEOs. The expectation would be for this effect to be opposite between non-family and family CEOs.

This finding is contrary to the hypothesis (H7) that family firms should be more likely to fire non-family CEOs following a decline in performance. The evidence indicates that non-family CEOs are less likely to be replaced following a period of declining performance. This contradicts findings from Italian and French firms where family-owned firms were much more likely to punish non-family CEOs for performance compared to family CEOs (Rizzotti, Frisenna, & Mazzone, 2017).

While there is no obvious explanation to this positive relationship for non-family CEOs, one source of increased turnover probability could be the cost to the firm of retaining the outside CEO. A study of US family firms have shown that non-family CEOs command a higher incentive-based pay than family CEOs (McConaughy, 2000). A performance based compensation structure entails that consecutive growth in performance may lead the family to observe an increased compensation to the CEO. The owners might believe that the CEO could be replaced while retaining similar performance improvements and save on compensation costs in such a situation. However, this study does not venture into the details of executive compensation and there is room for further investigation on what drives this relationship.

Another reason for this positive relationship could be purely skill driven as suggested by a study on top management turnovers in Danish firms. The owning family could know the CEO well personally and understand their intrinsic value to the firm. That may not be reflected adequately by the performance numbers. This could lead them to handle the performance decline collectively instead of punishing the CEO for this behaviour (Lausten, 2002).

5.5 Test for robustness

As discussed in section 3.1.2, there is very weak consensus among researchers on what a family firm is. I have identified family firms based on the ownership of a blocking majority by the largest family. In another study on family firms based on the same dataset, Bøhren et al. (2019) require the largest family to have a controlling majority of 50% or more in order to be defined as a family firm.

So, in order to test for robustness, the regression in section 5.2 was also tested with a narrower definition of a family firm as used by Bøhren et al. (2019) holding the minimum family ownership at 50%. This is also an approach taken to see whether the link between change in performance and CEO turnover is different in family firms that are more tightly held.

Table 5.5.1: Sensitivity to performance based on different definitions of family firm

The dependent variable is TURNOVER. Along with the dependent variable, the independent variables SIZE, Δ PERFORMANCE and FAMILY are defined as outlined in Table 5.1.1 and 5.2.1. However, the table presents results for two panels where FAMILY is defined based on two different levels of ownership, i.e. 34% and 50%. *, ** and *** denote significance at 10%, 5% and 1% respectively.

Independent Variable	34% ownership		50% ownership	
	Coefficient	z-statistic	Coefficient	z-statistic
INTERCEPT	-4.154***	-26.760	-4.333***	-29.000
SIZE	0.206***	13.060	0.205***	12.930
Δ PERFORMANCE	-0.302	-1.360	-0.043	-0.260
Δ PERFORMANCE \times FAMILY	0.715***	2.820	0.510**	2.360
FAMILY	-0.788***	-13.570	-0.721***	-14.770
Sum of coefficients linked to performance for family firms				
Δ PERFORMANCE+				
Δ PERFORMANCE \times FAMILY	0.413***	3.370	0.467***	3.270

The key difference between studying these relationships based on these two criteria appears to be the coefficient on performance change even though it remains insignificant in both cases.

Apart from that, the major findings in the study seem to hold, i.e. the positive relationship between performance change and turnover probability in family firms compared to the negative relationship found in non-family firms. The summed

coefficients are both significant and positive in either of the identification criterion. The similarity in outcomes in both the cases suggests that the findings are not altered significantly based on how a family firm is defined.

6 Conclusion

This thesis documents that CEO turnover is followed by a decline in performance among privately held Norwegian firms. This is consistent with existing studies on US firms (Denis & Denis, 1995; Huson et al., 2004). However, because of limitations in identifying the nature of the turnover (forced vs. voluntary) the relationship observed is weaker than what has been established in previous studies.

This relationship is found to be different in family-owned firms. The relationship between performance changes and CEO turnover is found to be positive. This implies that turnovers in family firms follow a period of improvement in performance in stark contrast to the non-family firms. In addition to that, the level of turnover is also found to be significantly lower in family-owned firms. These results are in line with the notion that family firms are more likely to place emphasis on firm survival and longevity over maximization of short-term firm performance.

The results support that the presence of non-family shareholders is influential in determining the level of turnover but it does not necessarily affect the link between performance change and likelihood of CEO turnover in family firms. A higher non-family shareholding is associated with a higher probability of turnover. This is consistent with the notion that there is a conflict between family and non-family shareholders and there could be a difference in incentives between the two categories of shareholders while deciding on replacing the CEO.

Non-family CEOs in family-owned firms have a much higher likelihood of being replaced compared to family CEOs as well as CEOs in non-family firms. There is room for further research in identifying the factors that drive this difference.

These results strengthen the argument that there are different incentives at play in family firms driving turnover decisions compared to non-family firms. It highlights the importance of understanding the role of the owning family when studying family firm governance.

This thesis does not venture into post-turnover performance and how that is affected by family participation. Extending this study into post-turnover performance would help establish a more complete picture on the dynamics surrounding turnover events and firm-performance.

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