



UHASSELT

KNOWLEDGE IN ACTION

Faculteit Bedrijfseconomische Wetenschappen

master in de toegepaste economische
wetenschappen

Masterthesis

The effect of family cohesion on earnings management in private family firms

Delphine Kempeneers

Scriptie ingediend tot het behalen van de graad van master in de toegepaste economische wetenschappen,
afstudeerrichting accountancy en financiering

PROMOTOR :

dr. Maarten CORTEN



UHASSELT

KNOWLEDGE IN ACTION

www.uhasselt.be
Universiteit Hasselt
Campus Hasselt:
Martelarenlaan 42 | 3500 Hasselt
Campus Diepenbeek:
Agoralaan Gebouw D | 3590 Diepenbeek

2018
2019



Faculteit Bedrijfseconomische Wetenschappen

master in de toegepaste economische
wetenschappen

Masterthesis

The effect of family cohesion on earnings management in private family firms

Delphine Kempeneers

Scriptie ingediend tot het behalen van de graad van master in de toegepaste economische wetenschappen,
afstudeerrichting accountancy en financiering

PROMOTOR :

dr. Maarten CORTEN

Preface

This thesis is the final deliverable in order to obtain my master's degree in Applied Economic Sciences – Accountancy and Finance at Hasselt University. With a lot of interest, dedication and perseverance, I was able to successfully complete this challenging study. It has been a very educational and unique experience.

My master's thesis is accomplished with the help of several people, who I would like to thank for. In the first instance my supervisor dr. Maarten Corten, who, with all his knowledge and experience, has always assisted me with some good advice and support. His constructive feedback provided me with new insights, as a result of which my thesis evolved to the final version that I am very proud of.

I would like to thank a few people in my personal environment too. I would like to thank my parents for giving me the opportunity to start this study and for the support during all those years. My friends and fellow students also provided the necessary support and encouragement during this period.

Delphine Kempeneers
Diepenbeek, May 2019

Abstract

Earnings management practices in private family firms have received little attention when compared to public firms. This thesis examines the effect of family cohesion on earnings management in private family firms, by suggesting that the preservation of socioemotional wealth is an incentive for earnings management. Using a sample of Belgian private family firms, I do not find a significant association between family cohesion and earnings management. However, I do find a non-linear association, in which the level of cohesion is positively associated with earnings management in the lower range of cohesion, while turning negative in the higher range. When including the monitoring effectiveness of the board of directors as a moderator, also the direct effect between family cohesion and earnings management became significantly positive. Moreover, the results state that this association becomes weaker when there is a high monitoring effectiveness of the board.

Table of contents

Preface	I
Abstract	III
Table of contents	V
List of figures	VII
List of tables	IX
Chapter I: Introduction	1
Chapter II: Theory and hypotheses	5
2.1 Earnings management	5
2.1.1 Earnings management in public family firms	6
2.1.2 Earnings management in private family firms.....	8
2.2 Family cohesion	9
2.3 The moderating role of the board of directors	11
Chapter III: Data and methodology	13
3.1 Data	13
3.2 Variables.....	13
3.2.1 Dependent variable	13
3.2.2 Explanatory variable	15
3.2.3 Moderating variable	15
3.2.4 Control variables	15
3.3 Models	16
Chapter IV: Results	17
4.1 Descriptive statistics and correlations	17
4.2 Hypotheses tests.....	19
4.3 Additional tests	21
Chapter V: Conclusion	25
5.1 Overview	25
5.2 Theoretical and practical implications.....	26
5.3 Limitations and future research directions	26
Appendices	27
References	29

List of figures

Figure 1: Conceptual model.....12
Figure 2: Quadratic regression model19
Figure 3: Interaction effect control task board of directors21

List of tables

Table 1: Descriptive statistics17
Table 2: Correlation matrix.....18
Table 3: Results OLS regressions20
Table 4: Additional results OLS regressions22

Chapter I: Introduction

While earnings management is a popular subject in the financial accounting field, it has no universally accepted definition. Nevertheless, earnings management can be described as the active manipulation of accounting results to create a modified impression of business performance (Mulford & Comiskey, 2009), within the restrictions of generally accepted accounting principles (GAAP) (Dechow, Sloan, & Sweeney, 1995). Prior research showed different causes for earnings management to occur, such as to influence stock market perceptions, to increase the compensation of the management, to reduce the likelihood of violating lending agreements and to avoid regulatory interventions (Healy & Wahlen, 1999).

Most of the research on earnings management has been conducted regarding public companies, but private family firms also play an important role in the global economy. Despite the fact that they represent the largest fraction of businesses worldwide (Bertrand & Schoar, 2006) and that research indicated that earnings management is more pervasive in private companies than in public companies (Burghstahler, Hail, & Leuz, 2006), the question of why private family firms would engage in earnings management still has to be resolved. The problem concerning earnings management can be clarified using agency theory, but traditional agency theory comprises only a limited level of agency conflicts in (private) family firms (Salvato & Moores, 2010). Concentrated ownership and closer relationships in such firms already lead to better monitoring of the management team and decrease managerial opportunistic behavior, resulting in less incentives to manipulate earnings (Tong, 2007). Therefore, earnings management research in private family firms is scarce.

Though, agency conflicts do occur in private family firms. First, agency problems might exist between controlling and non-controlling shareholders due to seeking private benefits by the founding family, different opinions regarding the firm's goals and other issues (Schulze, Lubatkin, Dino, & Buchholtz, 2001). Second, agency problems can also exist within the family (Corten, Steijvers, & Lybaert, 2017). Despite her contribution, agency theory has not the ability to capture motivations of family owners to exercise discretion in financial reporting, most of which are non-financial in nature (Gomez-Mejia, Cruz, & Imperatore, 2014). Hence, some researchers introduced the socioemotional wealth concept to explain the differences in behavior of family and non-family firms (Gómez-Mejía, Haynes, Núñez-Nickel, Jacobson, & Moyano-Fuentes, 2007). Consistent with Stockmans et al. (2010), I suggest that for private family businesses the primary reference point is the loss of their socioemotional wealth. Families are therefore willing to make decisions both in function of the preservation of socioemotional wealth and in function of the financial performance of the enterprise (Kalm & Gomez-Mejia, 2016). They are also willing to accept an increased risk of poor economic performance to maintain family control (Gómez-Mejía et al., 2007). But when firm performance is poor, private family firms have an incentive to participate in upward earnings management to avoid a decrease in their socioemotional wealth (Stockmans, Lybaert, & Voordeckers, 2010).

It is important to take into account the heterogeneity within the group of family firms when studying such businesses, because they differ in the importance they attach to socioemotional wealth (Gómez-Mejía et al., 2007). Therefore, they are likely to have distinct earnings management behavior. In this

study, the variation within the population of family firms, and how the preservation of socioemotional wealth and resulting earnings management behavior are affected, will be explained using the family cohesion concept. Olson (2000; p. 145) described family cohesion as "... the emotional bonding that family members have towards one another". Björnberg and Nicholson (2007) defined family cohesion as the emotional and intellectual coherence between family members and the possibility of the family to stick together through crises and difficulties. Family cohesion shapes the boundaries of the family system, which is a required condition to remain a unit. Families differ in their degree of cohesion and strength of bonding between family members. The cohesion level determines whether the family has a more individualistic or a more collectivistic orientation (Lansberg & Astrachan, 1994).

As family cohesion is important in family firms, I discuss how the level of family cohesion influences socioemotional wealth preservation and the willingness to engage in earnings management. A low level of family cohesion can be associated with a lower degree of identification with the family firm and with more individualistic behavior. Such families are less interested in the preservation of their socioemotional wealth, resulting in less earnings management. A high level of family cohesion, on the other hand, can be associated with a higher degree of identification with the family firm and with more collectivistic behavior. Such families have a strong need to protect their socioemotional wealth. But highly cohesive families become dysfunctional when the need to preserve socioemotional wealth is so strong that they are willing to engage in earnings management. These extreme or unbalanced levels of family cohesion are seen as problematic for individuals and for relationship development in the long run (Olson, 2000). Balanced family systems tend to be more functional over time (Michael-Tsabari & Lavee, 2012).

In the end, agency problems can be moderated by the appointment of a board of directors, which is a solution to control organisational decision-makers and to reduce agency costs. Such a board always has the power to approve and monitor important decisions and to hire, fire and compensate the top-level decision-makers (Fama & Jensen, 1983). The tasks of the board can be categorised into service and control tasks. The service task refers to the potential of the board to provide advice and counsel to the CEO and other top managers, and to participate actively in the formulation of a strategy by using their experiences, competences and various perspectives. Based on agency theory, the control task refers to its legal obligation to monitor management on behalf of the firm's shareholders and to carry out this duty with sufficient loyalty and care (Forbes & Milliken, 1999). An effective monitoring board could therefore be considered as an instrument to mitigate earnings management in private family firms with both low and high family cohesion.

Using a sample of Belgian private family firms, the results do not point out a significant association between family cohesion and earnings management. However, a non-linear association is found, in which the level of cohesion is positively associated with earnings management in the lower range of cohesion, while turning negative in the higher range. When including the monitoring effectiveness of the board of directors as a moderator, also the direct effect between family cohesion and earnings management became significantly positive. Moreover, the results state that this association becomes weaker when there is a high monitoring effectiveness of the board. These findings contribute to both the family business and earnings management literature. First, earnings management has received

little attention in private family firms. This article provides some new evidence. Second, I answer the call of Stockmans et al. (2010) to devote more attention to the investigation of non-financial decision-making drivers in family firms from the subsystem such as socioemotional wealth. Third, this study also contributes to the family firm heterogeneity debate. I am able to further take into account the heterogeneity of private family firms by introducing the family cohesion concept.

The remainder of this article proceeds as follows. In the next section, a brief overview of the earnings management literature is presented, after which three hypotheses concerning the influence of family cohesion and the effectiveness of the board of directors in private family firms are developed. In the subsequent section, the data and methodology are discussed. Section four describes the empirical results. Finally, the conclusions can be found in section five.

Chapter II: Theory and hypotheses

2.1 Earnings management

While earnings management is a popular subject in the financial accounting field, it has no universally accepted definition. Nevertheless, earnings management can be described as the active manipulation of accounting results to create a modified impression of the performance of an enterprise (Mulford & Comiskey, 2009), within the restrictions of generally accepted accounting principles (GAAP) (Dechow et al., 1995). According to Healy and Wahlen (1999; p. 368), "earnings management occurs when managers use judgment in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers".

Moreover, managers have the possibility to manage earnings in two distinct ways. First, the easiest possibility is through accruals, which is better known as accrual-based earnings management. Since accruals give discretion to make forecasts, estimates and judgements, it provides an opportunity for earnings management (Dechow & Schrand, 2004). As a result, firms use their discretions allowed by the accounting standards of their own country to record transactions or to assess the value of assets and liabilities (Prencipe, Markarian, & Pozza, 2008). A high amount of accruals might indicate lower earnings quality and might be a potential red flag that the top management team is using aggressive accounting practices to overstate earnings (Dechow & Dichev, 2002; Sloan, 1996). Second, firms might manage earnings through changes in business activities (Roychowdhury, 2006), which denotes taking actions with real cash flow consequences (Gomez-Mejia et al., 2014). Examples of such actions are cutting research and development expenditures, the overproduction of goods and boosting sales by offering products at a discount (Dechow & Schrand, 2004). If managers engage in these activities with the objective of beating or meeting an earnings target, then they are involved in real earnings management (Roychowdhury, 2006). Real earnings management is more difficult to be detected by regulators and auditors, and it also has a significant negative effect on the firm's long-term operating performance because it represents non-optimal business decisions (Achleitner, Günther, Kaserer, & Siciliano, 2014). The changing business activities economically do not add business value, but enable managers to reach financial reporting objectives (Roychowdhury, 2006).

An opportunity alone is not enough for the management to undertake earnings management, but an incentive is also needed (Vander Bauwhede & Willekens, 2003). Previous research showed different causes for earnings management to occur, such as to influence stock market perceptions, to increase management's compensation, to reduce the likelihood of violating lending agreements and to avoid regulatory interventions (Healy & Wahlen, 1999). Burgstahler and Eames (2006) indicate that public firms manage their earnings to meet the forecasts of analysts. In particular, they manage earnings upward to avoid reporting earnings lower than analysts' expectations in order to improve the financial image of the firm. Sweeney (1994) finds that firms, who already violated a lending covenant, make income-increasing accounting changes. These changes take usually place after the violation in order to reduce the likelihood of future covenant violations. The earnings management literature has also

explored the effects of industry-specific regulation and anti-trust regulations (Healy & Wahlen, 1999). Managers of enterprises that are subjected to an anti-trust investigation or to other adverse political consequences have the incentive to manage earnings to appear less profitable (Watts & Zimmerman, 1986). Moreover, income smoothing is a manner to dampen fluctuations in reported earnings and to avoid reporting a decrease in income figures when compared to the year before. Companies perform earnings management to increase or decrease earnings and to report smoother results when current profitability is rather low or high (Trueman & Titman, 1988).

Information asymmetry is a precondition for earnings management to occur. The problem concerning information asymmetry in public companies is explained using agency theory (Eisenhardt, 1989). An agency relationship is described as a contract under which the owners of a company (the principals) engage managers (the agents) to fulfill some service on their behalf. This involves delegating some decision-making authority to the agent. Agency theory reckons both parties in the relationship to be utility maximizers, which means that managers will not always act in the best interest of the owners. This gives rise to agency conflicts between the agent and the principal, but the principal can restrain deviations from his interest by establishing suitable incentives for the agent or by setting up a board of directors to monitor the management (Jensen & Meckling, 1976). The bonus plan motivation is an important instrument to avoid opportunistic behavior by the agent and to align the interests of self-interested executives with those of the shareholders. But, when compensation is partially related to profitability results, this plan suggests that certain managers use accounting judgment to maximize their own rewards. CEOs tend to manipulate earnings downward if they are at the upper bound of their bonus contracts to increase the present value of cash payments from those bonus plans (Healy, 1985; Holthausen, Larcker, & Sloan, 1995). It always implicates a cost to assure that the agent will make optimal decisions from the viewpoint of the principal. This are agency costs (Jensen & Meckling, 1976). Earnings management is viewed as such a type of agency cost when managers reveal financial reports that do not present a precise economic picture of the business and shareholders make non-optimal investment decisions as a result. Because it can create and strengthen agency costs, earnings management is related to agency theory (Davidson III, Jiraporn, Young Sang, & Nemeč, 2004).

Despite the benefits, earnings management is not costless and thus represents a gamble for the firm (Gomez-Mejia et al., 2014). Businesses hope to obtain substantial financial benefits at the expense of their stakeholders and risking the possibility of being detected, which may be harmful to the credits of the company. Earnings management can provide short-term financial benefits, but it also includes a risk in the long run due to reputational consequences (Martin, Campbell, & Gomez-Mejia, 2016).

2.1.1 Earnings management in public family firms

The majority of research on earnings management has been conducted regarding public companies, but family firms play also a considerable role in the global economy. In both Europe and the USA, most of the wealth is generated by family-owned businesses (Prencipe, Bar-Yosef, & Dekker, 2014). Because family firms are a unique setting to analyse accounting choices, it is interesting to investigate earlier hypotheses on these businesses too (Salvato & Moores, 2010).

As ownership and management overlap to a significant extent, family firms are less affected by the typical owner-manager agency problems according to traditional agency theory (Salvato & Moores, 2010). Since concentrated ownership leads to better monitoring of the management team and lowers managerial opportunistic behavior, which results in fewer incentives to manipulate earnings (Tong, 2007), financial reporting quality is considered to be better in family businesses (Paiva, Lourenço, & Branco, 2016). According to agency theory, family firms are therefore often assumed to be the ideal form of organisation because of the overlapping relationships and functions (Schulze et al., 2001). However, family owned firms are often characterized by another agency problem. Because of family domination, a new agency conflict might exist between controlling and non-controlling shareholders. The founding family might enjoy substantial control and this control gives the family power to seek private benefits at the expense of other shareholders (Ali, Chen, & Radhakrishnan, 2007). Controlling shareholders obtain such private benefits by expropriating minority shareholders (Gilson & Gordon, 2003), through managerial entrenchment (Shleifer & Vishny, 1997), and by undertaking transactions with related parties (Anderson & Reeb, 2003).

Moreover, agency theory may be too optimistic about family relationships among family members in family firms. The relationships in such firms are often based on emotions and sentiments instead of economically rational behavior as represented by traditional agency theory (Gomez-Mejia, Nunez-Nickel, & Gutierrez, 2001). These emotions can deteriorate the relationships among family members and give rise to intrafamily agency conflicts (Schulze et al., 2001). Potential causes of such conflicts may be sibling rivalry, emotional conflicts between parents or a protection-autonomy clash between parents and offspring (Nicholson, 2008). Despite her contribution, agency theory has not the ability to capture motivations of family owners to exercise discretion in financial reporting, most of which are non-financial in nature (Gomez-Mejia et al., 2014). Therefore, some researchers introduced the socioemotional wealth concept to explain the differences in behavior of family and non-family firms. Socioemotional wealth (further SEW) refers to the non-financial aspects of a company that meet the affective needs of the family owners, derived from its controlling position in that particular enterprise (Gómez-Mejía et al., 2007). Thus, SEW accounts for the emotional aspects of family firms (Berrone, Cruz, & Gomez-Mejia, 2012). Family owners obtain socioemotional wealth from several sources such as identification, the ability to exercise family influence and the perpetuation of the family dynasty (Gómez-Mejía et al., 2007). These owners are keen to avoid losses in their socioemotional wealth endowment. Hence, families are willing to make decisions both in function of socioemotional wealth preservation and in function of the financial performance of the firm. This in contrast to non-family firms, where executives are mainly concerned with financial prospects (Kalm & Gomez-Mejia, 2016).

The SEW preservation model suggests that family owners frame problems in terms of assessing how actions will affect their socioemotional wealth. This model also predicts that family firm owners are loss averse concerning their socioemotional wealth, which means that families are willing to accept a decreased level of economic wealth in order to preserve socioemotional wealth, even if this involves risky decisions. At the same time, they will avoid risky decisions that might increase economic wealth at the expense of socioemotional wealth (Gomez-Mejia et al., 2014). As mentioned above, earnings management is a risky strategy that involves a gamble. Therefore, family owners will evaluate the potential losses of socioemotional wealth associated with earnings management against any potential

benefits (Martin et al., 2016). Because family members consider the firm as a long-term investment (Berrone et al., 2012), they would not engage in any type of earnings management if they think that the family socioemotional wealth might be in danger (Gomez-Mejia et al., 2014). Losing SEW implies lost intimacy, reduced status, and failure to meet the expectations of the family (Gómez-Mejía et al., 2007).

Most of the evidence demonstrates that family-controlled firms have better financial reporting quality and lower earnings management than their non-family counterparts. Ali et al. (2007) showed that reported earnings are of better quality in family firms as compared to non-family firms, because they manipulate discretionary accruals less and are more likely to caution about poor earnings through earnings forecasts. According to Jiraporn & DaDalt (2009), the level of abnormal accruals is a third lower for family-controlled firms, indicating that such companies are less willing to engage in earnings management. However, certain studies also disclose the existence of a negative relationship between family control and financial reporting quality (Ho & Wong, 2001; Prencipe et al., 2008).

2.1.2 *Earnings management in private family firms*

Despite the fact that private family firms represent the largest fraction of firms worldwide (Bertrand & Schoar, 2006) and that research indicated that earnings management is more pervasive in private companies than in public companies (Burghstahler et al., 2006), the question of why private family firms would engage in earnings management is not resolved yet. Certain researchers (Gómez-Mejía et al., 2007; Stockmans et al., 2010) mention the preservation of SEW as an essential goal of private family firms.

Stockmans et al. (2010) discussed the motives for earnings management in private family businesses regarding SEW by looking at the generational stage, the composition of the management team and the CEO position. They *assumed* that the importance of non-financial goals is closely associated with the generation in charge of the firm. As such, SEW is expected to be strongest in the founding-family controlled stage and weaker in later generational stages. They argued that the position and attributes of the CEO are related to earnings management behavior in private family firms too. A founder CEO, for example, has a strong effect on the culture, strategic vision, values and goals of the firm. Founder CEO's tend to focus on family goals at the expense of other goals and are therefore more driven to protect the SEW of the enterprise than external CEO's. The findings showed that private family firms with a strong focus on family objectives will engage in upward earnings management when financial performance becomes poor. They would do this to avoid protective measures taken by non-family shareholders, which could result in a loss of family control. Socioemotional wealth and non-financial objectives are demonstrated to be drivers of decision-making behavior in family firms (Stockmans et al., 2010).

Even though this is a valuable study, the researchers considered the population within a generational stage and within a private family firm with, for example, a founder CEO as homogeneous. They did not account for the variations within the different populations of private family companies and how

such variations could affect socioemotional wealth preservation and resulting earnings management behavior. Recent evidence demonstrated that family firms represent a highly heterogeneous group with different levels of family involvement and emotional attachments (Berrone et al., 2012). Since the importance families attach to non-economic goals depends on the degree of identification family members have with the enterprise (Cabrera-Suárez, Déniz-Déniz, & Martín-Santana, 2014), family cohesion could be an interesting concept to comprise the heterogeneity of groups in order to explain earnings management behavior in private family firms.

2.2 Family cohesion

The family can be regarded as a social system that takes care of its members and develops emotional bonds and a sense of loyalty and responsibility among them (Kepner, 1983). Olson (2000; p. 145) defined the family cohesion concept as "... the emotional bonding that family members have towards one another". Björnberg and Nicholson (2007), on the other hand, described family cohesion as the emotional and intellectual coherence between family members and the ability of the family to stick together through crises and difficulties. Family cohesion shapes the boundaries of the family system, which is a necessary condition to remain a unit. Families differ in their level of cohesion and strength of bonding between family members. The level of cohesion determines whether a family has a more individualistic or a more collectivistic orientation (Lansberg & Astrachan, 1994). Four different levels of family cohesion are distinguished; a *disengaged*, a *separated*, a *connected* or an *enmeshed* family system. These are ranging from a very low to a very high level of cohesion within the family (Olson, 2000).

Connected and cohesive families have a more collectivistic orientation (Lansberg & Astrachan, 1994). The interactions of such a family are featured by mutuality of altruism, which associates each family member's welfare to that of all other family members. This discourages favoritism and gives family members the incentive to exercise self-restraint and to think about the effect of their actions on the firm, thereby mitigating self-interest and limiting the potential for relationship conflicts (Kellermanns & Eddleston, 2004). Highly cohesive families have too much consensus within the family, as well too little independence and autonomy (Olson, 2000). Such a situation may be outrageous when families are too inward looking and lacking sufficient diversity or openness to perspectives from outside the company. The high level of cohesion will be dysfunctional in this way (Björnberg & Nicholson, 2007). A family with extremely high cohesion is called an *enmeshed* system (Olson, 2000). However, also the absence of cohesion may be harmful to the company (Björnberg & Nicholson, 2007). The lower the level of cohesion, the more family members are expected to be individualistic and the higher the likelihood that family members take advantage of another family members' altruism. So, self-interest prevails over the interest of the company (Kellermanns & Eddleston, 2004). Consequently, very low levels of cohesion may lead to destructive intrafamily agency conflicts and may cause fragmentation. This has a negative impact on both the family and the firm (Björnberg & Nicholson, 2007). A family with extremely low cohesion is called a *disengaged* system. These extreme or unbalanced levels of family cohesion are seen as problematic for individuals and for relationship development in the long run (Olson, 2000). Nevertheless, when the culture of the business family supports extreme levels of

cohesion, the unbalanced type may function well as long as all family members are satisfied with it (Michael-Tsabari & Lavee, 2012).

Balanced family systems tend to be more functional over time because of their ability to deal with crises and changing environments (Michael-Tsabari & Lavee, 2012). Family cohesion is considered to be in a state of balance when family members are independent but stay connected to their families, participate in certain decision-making processes, and lend support when needed. The *separated* system has a low to moderate level of cohesion. One is connected to the family, but independence of the individual family member is more important. However, this is not as extreme as the disengaged system. The *connected* system has a moderate to high cohesion level. There is space for non-shared interests or activities, but there will be mainly focused on togetherness. It is more important to spend time together than time alone (Olson, 2000).

Cohesive families perform a high level of coherence between the family and business identities, which contributes to a higher degree of identification with the family firm. Moreover, the importance families attach to non-financial goals depends on the degree of identification family members have with the enterprise. As a result, the family climate and family cohesion are important factors in ensuring SEW (Cabrera-Suárez et al., 2014). A low level of family cohesion can thus be linked with a lower degree of identification with the family firm and with more individualistic behavior, resulting in a lower level of socioemotional wealth preservation. So, it can be expected that families are less willing to engage in earnings management when the level of family cohesion is low. A high level of family cohesion, on the other hand, can be associated with a strong need to preserve socioemotional wealth. But highly cohesive families will become dysfunctional when the need to protect SEW is so strong that they are willing to engage in earnings management. The following hypothesis is formulated:

Hypothesis 1: The level of family cohesion is positively associated with earnings management.

The lower the level of family cohesion, the lower the level of commitment family members show to their family and the lower the level of socioemotional wealth preservation will be. *Disengaged* families function more like a traditional company and not like a family company, resulting in traditional agency conflicts. Thus, it can be expected that families are more willing to engage in earnings management when the level of family cohesion is very low. When the level of cohesion increases to a more balanced level, families are less willing to engage in earnings management because of the conformity between the various family members and the willingness to reach the same goals. However, if family cohesion continues to increase and becomes too strong, families will become dysfunctional when the need to preserve SEW is too high. *Enmeshed* families are more willing to engage in earnings management in order to protect their socioemotional wealth. As private family firms can be viewed as heterogeneous entities (Stockmans et al., 2010), specific family characteristics may influence agency problems as well as the tendency to protect their SEW and resulting earnings management behavior. Therefore, a U-shaped association between the level of family cohesion and earnings management in private family firms can be hypothesized. Based on these arguments, hypothesis 1 is improved by postulating following hypothesis:

Hypothesis 2: The association between family cohesion and earnings management in private family firms is U-shaped. Private family firms with low or high family cohesion are more willing to engage in earnings management than private family firms with family cohesion in-between.

2.3 The moderating role of the board of directors

The importance of the board of directors and its link with earnings management is grounded in the agency view of corporate governance, which mentions that corporate decision-makers may behave opportunistically by pursuing their own interests or spending insufficient effort toward achieving firm objectives (Fama & Jensen, 1983; Jensen & Meckling, 1976). The appointment of a board of directors is a possible solution to control organisational decision-makers and to reduce agency costs. Such a board has the power to approve and to monitor important decisions and to hire, fire and compensate the top-level decision managers (Fama & Jensen, 1983).

The tasks of the board of directors can be categorised into service and control tasks. The service task refers to the potential of the board to provide advice and counsel to the CEO and other top managers, and to participate actively in the formulation of a strategy by bringing in experiences, competences and various perspectives (Forbes & Milliken, 1999). In this way, the board of directors should improve the quality of strategic decision-making by actively evaluating and selecting strategic alternatives developed by top managers and by providing other suggestions (Minichilli, Zattoni, & Zona, 2009).

Based on agency theory, the control task of the board of directors refers to its rigorous obligation to monitor management on behalf of the firm's shareholders and to carry out this duty with sufficient loyalty and care (Forbes & Milliken, 1999). This task comprises different related activities, such as controlling the company's performance, monitoring activities and evaluating the behavior of the CEO (Minichilli et al., 2009). The board has the responsibility to ensure that managers are acting in the best interest of shareholders, instead of pursuing their own interests (Jensen & Meckling, 1976). In the context of family firms, the monitoring role also includes the reduction of agency conflicts among family members, particularly in lowly cohesive families (Voordeckers, Van Gils, & Van den Heuvel, 2007). In highly cohesive families, family members have a strong need to preserve their SEW, even at the expense of other shareholders. The board of directors should prevent those families of possibly engaging in earnings management by effectively performing their control task in order to align the interests of executives with those of shareholders.

It is clear that well-functioning boards can add value to a firm by performing their service and control task. The control task of the board of directors is expected to reduce earnings management in private family firms with both low and high family cohesion, because of the ability to monitor the executives of the company. It is difficult for the board to impede the practice of earnings management by giving advice only. Therefore, the control task can weaken the difference in earnings management between family firms with an extreme level of family cohesion and family firms with a more balanced level of family cohesion. Based on this reasoning, following hypothesis can be formulated:

Hypothesis 3: The control task of the board of directors moderates the association between family cohesion and earnings management in private family firms in such a way that the association gets weaker the better the board fulfills its control task.

Based on previous hypotheses, the conceptual model can be represented in figure 1. H1, H2 and H3 are respectively hypotheses 1, 2 and 3.

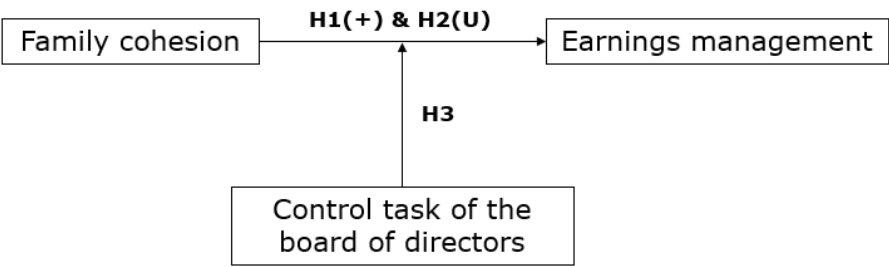


Figure 1: Conceptual model

Chapter III: Data and methodology

3.1 Data

The hypotheses will be tested using data of Belgian private family firms. The empirical data on family firm characteristics were gathered earlier for a research examining the influence of intrafamily agency conflicts in private family firms on audit demand (Corten et al., 2017).

In February 2015, a structured online questionnaire was sent to the selected firms (N = 8.662) and the CEO was asked to complete it. The selected companies were Belgian private firms with an annual average workforce higher than 100 employees or firms who exceeded at least two of the following thresholds: annual average workforce of 50 employees, balance sheet total of €3.650.000 (exclusive VAT) and turnover of €7.300.000 (art. 15 of the Belgian Company Legislation). Moreover, the survey was not sent to companies that were part of the financial services industry. A response from 740 of the selected firms was obtained, which equals a response rate of 8.5%. Unfortunately, this dataset comprises both family and non-family businesses because no entire register of Belgian family firms exists. In order to obtain a datasets of private family firms, only those firms in which a single family group owns more than 50 percent of the shares and/or in which the CEO perceives the business as a family firm are chosen (Dyer, 2003; Westhead & Cowling, 1998). This led to a sample of 390 firms. In this master's thesis, family cohesion will be measured using Olson's (2000) family cohesion scale (see 3.2.2 Explanatory variables). Since this scale is a self-report instrument, only those firms with a family CEO are selected. This resulted in a sample of 231 businesses. After dropping out cases with incomplete and/or inconsistent data regarding the explanatory and control variables, the final dataset contains 90 enterprises to test the hypotheses. Thereafter, the data of the survey are combined with publicly available accounting data from the Bel-First database.

After deleting cases with incomplete and/or inconsistent data concerning the explanatory and control variables, it is important to take into account outliers¹. After detecting and removing three outliers, the ultimate dataset contains 87 private family firms.

3.2 Variables

3.2.1 Dependent variable

The practice of earnings management is measured by the level of discretionary accruals as predicted by the Modified Jones Model (Dechow et al., 1995; Guay, Kothari, & Watts, 1996). The main goal of discretionary accrual models is to separate total accruals into a discretionary and a non-discretionary

¹ An outlier is generally considered to be a data point that is far outside the range for a variable or population (Stock & Watson, 2015).

component (Bernard & Skinner, 1996). A mathematical overview of the discretionary accruals model used in this master's thesis is showed below.

First of all, data from the firm's reported income statements are used to compute accrual measures. The usual starting point for the measurement of discretionary accruals is total accruals. Total accruals are calculated by taking the difference between profit and cash flow from operations (Bergstresser & Philippon, 2006; Dechow et al., 1995). The following equation is used to estimate normal accruals:

$$\frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \beta_1 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t}$$

Description:

- $TA_{i,t}$ = total accruals of firm i at period t
- $A_{i,t-1}$ = total assets of firm i in period $t-1$ (the beginning of the year)
- $\Delta REV_{i,t}$ = revenue of firm i in period t minus earnings in period $t-1$
- $\Delta REC_{i,t}$ = receivables of firm i in period t minus receivables in period $t-1$
- $PPE_{i,t}$ = gross tangible fixed assets of firm i at period t
- $\varepsilon_{i,t}$ = discretionary accruals of firm i in period t

Non-discretionary accruals ($NDA_{i,t}$) can be estimated by deducting the coefficients from the results of the first regression equation on the next equation (Dechow et al., 1995).

$$NDA_{i,t} = \alpha_1 \left(\frac{1}{A_{i,t-1}} \right) + \beta_1 \left(\frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \beta_2 \left(\frac{PPE_{i,t}}{A_{i,t-1}} \right)$$

Non-discretionary accruals are defined as accounting adjustments to the firm's cash flows within the restrictions of accounting standard-setting bodies (e.g. SEC or FASB). Discretionary accruals ($DA_{i,t}$), on the other hand, are modifications to cash flows carefully selected by the manager (Healy, 1985). This last type of accruals creates an opportunity for the manager to engage in earnings management and is therefore of importance for this study. When total accruals and non-discretionary accruals are known, discretionary accruals can be calculated as follows:

$$DA_{i,t} = TA_{i,t} - NDA_{i,t}$$

A high amount of discretionary accruals indicates lower earnings quality and might be a warning that the management team is using aggressive accounting practices to overstate their earnings (Dechow & Dichev, 2002; Sloan, 1996). Consistent with prior research on earnings management, the absolute value of discretionary accruals will be taken since upward and downward earnings management are both negative for the company (Bergstresser & Philippon, 2006; Jiraporn & DaDalt, 2009).

3.2.2 Explanatory variable

As mentioned earlier, family cohesion will be measured using Olson's (2000) family cohesion scale, which is part of the FACES IV package. Despite the self-report nature of this instrument, it is one of the few statistically reliable and valid measures of family behavior disposable (Green, Kolevzon & Vosler, 1985; Olson, 1986; Olson et al., 1988 in Lansberg & Astrachan, 1994). The respondents were asked to give their opinion about 21 items using a 5-point Likert scale, for example "Our family has a good balance of separateness and closeness" and "Family members are supportive of each other during difficult times". All those statements can be found in appendix 1. Hence, these 21 items can be separated into three groups of seven items. Each group corresponds to one of the three levels of cohesion, more specifically *balanced* (the level of cohesion is moderately low/high), *enmeshed* (the level of cohesion is very low) or *disengaged* (the level of cohesion is very high). An overall cohesion score can be calculated as follows: balanced score + enmeshed score – disengaged score (Corten et al., 2017).

3.2.3 Moderating variable

In order to determine the effectiveness of the different tasks of the board of directors, the literature mainly focused on agency theory and board composition like board size, CEO duality, the percentage of outside directors or the financial skills of the board members. This resulted in a strong emphasis on control tasks of the board and in a lack of process-oriented board research. Board behavior, such as encouraging and challenging, turned out to be a better predictor of board effectiveness than those compositional variables (Minichilli et al., 2009). In this research, the effectiveness of the service and control tasks of the board of directors will therefore be directly measured by the scale of Minichilli et al. (2009). The respondents were asked to evaluate 8 items concerning the service task and 7 items concerning the control task of the board on a 5-point Likert scale, including for example "The board contributes on legal issues and taxation" and "The board is kept informed on the financial position of the company". All those items can be found in appendix 2.

3.2.4 Control variables

Some proxies are taken into account to control for other factors that might affect the level of earnings management (or accruals). The first control variable is **leverage**, defined as total debt to total assets. This variable is included to control for the debt covenant hypothesis. This hypothesis states that firms with a high leverage level have incentives to perform upward earnings management in order to avoid the violation of debt covenants (Sweeney, 1994). Moreover, more equity financing and less debt will cause more upward earnings management too. In this way, the management team tries to avoid the empowerment of the board and more monitoring (Stockmans et al., 2010).

Return on assets, defined as annual net income divided by total assets, is included in the model to control for the association between discretionary accruals and financial performance (Dechow et al., 1995; Klein, 2002; Kothari, Leone, & Wasley, 2005).

Additionally, **firm size** and **firm age** are two variables introduced to control for firm visibility, political costs and media attention. The political cost hypothesis states that the larger a firm is, the larger the probability for choosing an accounting method that will lower earnings in order to avoid governmental regulations. These factors are expected to increase the incentive to engage in earnings management (Watts & Zimmerman, 1986). Firm size is defined as the natural logarithm of the book value of total assets of the business (Amertha, Ulupui, & Dwija, 2014; Prencipe et al., 2008). Firm age is measured by taking the natural logarithm of firm age in years (Stockmans et al., 2010).

Finally, the dummy variable **industry** is introduced to control for industry effects. A specific approach concerning accruals can be applied in particular industries. Their business practices might influence specific accruals, which can be a material and a likely object of judgment and discretion (McNichols, 2000). Because of this, the dummy variable equals 1 if the company is part of the manufacturing or construction industry (non-services industry). Otherwise, the dummy variable is equal to 0 (services industry). The data concerning the control variables are gathered from the Bel-First database.

3.3 Models

In order to test the first hypothesis, the variables mentioned above are used in a multiple regression model. This model tests the linear association between family cohesion and earnings management.

$$\text{ABSOLUTE DA} = \beta_0 + \beta_1 \text{COHESION} + \beta_2 \text{LEVERAGE} + \beta_3 \text{ROA} + \beta_4 \text{SIZE} + \beta_5 \text{AGE} + \beta_6 \text{INDUSTRY} + \varepsilon$$

In order to test the second hypothesis, the variables are employed in a U-shaped regression model (Haans, Pieters, & He, 2016).

$$\text{ABSOLUTE DA} = \beta_0 + \beta_1 \text{COHESION} + \beta_2 (\text{COHESION})^2 + \beta_3 \text{LEVERAGE} + \beta_4 \text{ROA} + \beta_5 \text{SIZE} + \beta_6 \text{AGE} + \beta_7 \text{INDUSTRY} + \varepsilon$$

The last regression model is applied to test the moderating role of the effectiveness of the board of directors as developed in hypothesis three. In order to examine the moderating effect of the control task of the board of directors, an interaction term is added to the linear regression model.

$$\text{ABSOLUTE DA} = \beta_0 + \beta_1 \text{COHESION} + \beta_2 \text{MONITORING} + \beta_3 (\text{COHESION} * \text{MONITORING}) + \beta_4 \text{LEVERAGE} + \beta_5 \text{ROA} + \beta_6 \text{SIZE} + \beta_7 \text{AGE} + \beta_8 \text{INDUSTRY} + \varepsilon$$

Chapter IV: Results

4.1 Descriptive statistics and correlations

Table 1 presents descriptive statistics of the variables used in this master's thesis. The average family firm performing earnings management has discretionary accruals that are 7.53% of total assets. The average value of family cohesion is found to be about 25.97, with a minimum of 7.00 and a maximum of 43.00. The theoretical minimum value of this scale is -21.00 and the theoretical maximum value is 63.00 (Corten et al., 2017). The mean value of the monitoring effectiveness of the board amounts 13.15. The minimum is 0.00 and the maximum is 28.00, corresponding to the theoretical minimum and maximum as well (Corten et al., 2017). The mean family firm is 52.83 years old, has a leverage ratio of 60.52% and a return on assets of 5.71%. In addition, 49.40% of the companies in the sample are part of the manufacturing or construction industry and 50.60% are part of the trade or services sector.

Table 1: Descriptive statistics

	<i>Mean</i>	<i>Median</i>	<i>Min.</i>	<i>Max.</i>	<i>s.d.</i>
Absolute DA	0.0753	0.0620	0.0025	0.2531	0.0627
Cohesion	25.97	26.00	7.00	43.00	7.07
Monitoring	13.15	14.00	0.00	28.00	6.57
Leverage	0.6052	0.6349	0.0303	0.9657	0.2148
ROA	0.0571	0.0431	-0.0759	0.2874	0.0674
Firm size (in millions)	9.16	8.96	7.80	11.56	0.7695
Firm age (in years)	52.83	53.00	33.00	75.00	8.21
	<i>Prop.</i>				
Industry					
Non-services	0.4940				
Services	0.5060				

Note. Firm age is measured by taking the logarithm of firm age in years (see 3.2.4 Control variables). The logarithm of firm age is not taken when calculating the descriptive statistics and the correlation matrix.

Table 2 presents the Pearson correlations. The correlation matrix demonstrates that the correlations are rather low and not significant as well. The variable cohesion is not significantly correlated with any other variable. With respect to the control variables, only return on assets and firm size are significantly correlated with absolute discretionary accruals. But one important correlation is the one between the non-services and the services industry. These dummy variables are perfectly correlated with each other ($p \leq .05$). This is a situation in which perfect multicollinearity² arises.

² Perfect multicollinearity arises if one of the regressors is a perfect linear function of the other regressors. A possible source of perfect multicollinearity arises when multiple dummy variables are used as regressors. This is called the dummy variable trap (Stock & Watson, 2015).

Table 2: Correlation matrix

	1.	2.	3.	4.	5.	6.	7.	8.	9.
1. Absolute DA	1								
2. Cohesion	0.085	1							
3. Monitoring	-0.066	0.026	1						
4. Leverage	0.133	-0.017	-0.158	1					
5. ROA	0.230***	0.188	0.041	-0.158	1				
6. Size	-0.277**	0.044	0.033	-0.324**	-0.078	1			
7. Age	-0.115	-0.029	0.020	-0.078	-0.008	-0.047	1		
8. Non-services	0.190	-0.126	-0.026	-0.201	0.099	0.089	0.024	1	
9. Services	-0.190	0.126	0.026	0.201	-0.099	-0.089	-0.024	-1.000**	1

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively (two-tailed).

In order to avoid this kind of problems, one of the two industry variables will be excluded from the multiple regression models. Because each company falls into one and only one category, the dummy variable that signifies the non-services industry is not included in the regression models. In addition, the variance inflation factors (VIF's) of the variables indicate no other problems concerning perfect multicollinearity. All values are below 10, which is the critical VIF-value (the highest value is 1.207).

4.2 Hypotheses tests

Table 3 reports the results of the ordinary least squares regressions. Model 1 shows the results when only control variables are included in the regression model. Return on assets, firm size and industry have a significant effect on earnings management ($p \leq .05$). In order to test hypothesis 1, the variable Cohesion is added in model two. The results show that the coefficient of the variable Cohesion is not found to be significant. This indicates that the first hypothesis is not confirmed by the data. But the linear regression model can be improved by a non-linear regression model as stated before. In order to test a U-shaped relationship, the variable Cohesion² is added in model 3 (Haans et al., 2016). The results of model 3 are very similar to the results of model 2, but the variables Cohesion and Cohesion² have now a direct significant impact on earnings management ($p \leq .10$). The R² is equal to 0.224080 and the adjusted R² equals 0.155328, which is also an improvement when compared to model 1 and model 2.

All of these results point out that the quadratic model is a better estimation for the amount of absolute DA's in comparison to the linear model. But when plotting the non-linear model, it turns out to be an inverted U-shaped relationship and not a U-shaped relationship as hypothesized. This result does not support the hypothesis that private family firms with low or high family cohesion are more willing to engage in earnings management than private family firms with cohesion in-between. So, hypothesis 2 is also rejected by the data.

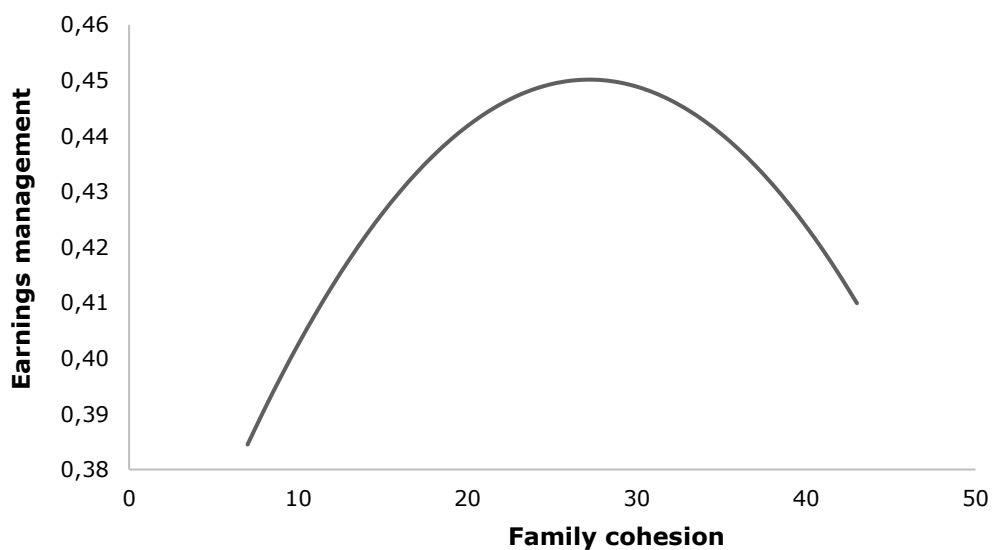


Figure 2: Quadratic regression model

Table 3: Results OLS regressions

	Model 1	Model 2	Model 3	Model 4
Explanatory variables				
Cohesion		0.000783 (0.0000920)	0.008756* (0.004699)	0.004489** (0.002251)
Cohesion ²			-0.000161* (0.000093)	
Monitoring				0.006912 (0.004174)
Cohesion x Monitoring				-0.000270* (0.000150)
Control variables				
Leverage	0.035085 (0.032125)	0.034856 (0.032181)	0.032127 (0.031827)	0.035195 (0.032332)
ROA	0.192483** (0.095653)	0.175202* (0.097946)	0.195371** (0.097450)	0.152179 (0.097997)
Size	-0.020159** (0.008749)	-0.020705** (0.008788)	-0.021754** (0.008701)	-0.021052** (0.008714)
Age	-0.047432 (0.039591)	-0.046765 (0.039667)	-0.046307 (0.039183)	-0.048460 (0.039338)
Industry	-0.027245** (0.012795)	-0.028910** (0.012966)	-0.029826** (0.012818)	-0.027572** (0.012888)
Intercept	0.429146** (0.187992)	0.413152** (0.189250)	0.331104* (0.192864)	0.328806* (0.194810)
R ²	0.187420	0.194704	0.224080	0.228351
Adj. R ²	0.137261	0.134307	0.155328	0.149208
F-statistic	3.736509***	3.223722***	3.259237***	2.885280***

Note. Dependent variable: Absolute DA's

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively (two-tailed).

Finally, model 4 presents the moderating effect of the control task of the board of directors in a linear regression model. The variable Cohesion is found to have a significant positive effect on the level of absolute discretionary accruals ($p \leq .05$). The moderating variable Cohesion x Monitoring on the other hand, has a significant negative coefficient ($p \leq .10$). These results demonstrate that the monitoring effectiveness of the board of directors moderates the association between the level of cohesion and discretionary accruals. Hence, the association between family cohesion and earnings management is weaker when having a higher monitoring effectiveness of the board. This interaction effect is shown graphically in figure 3. Hypothesis 3 is confirmed by the data.

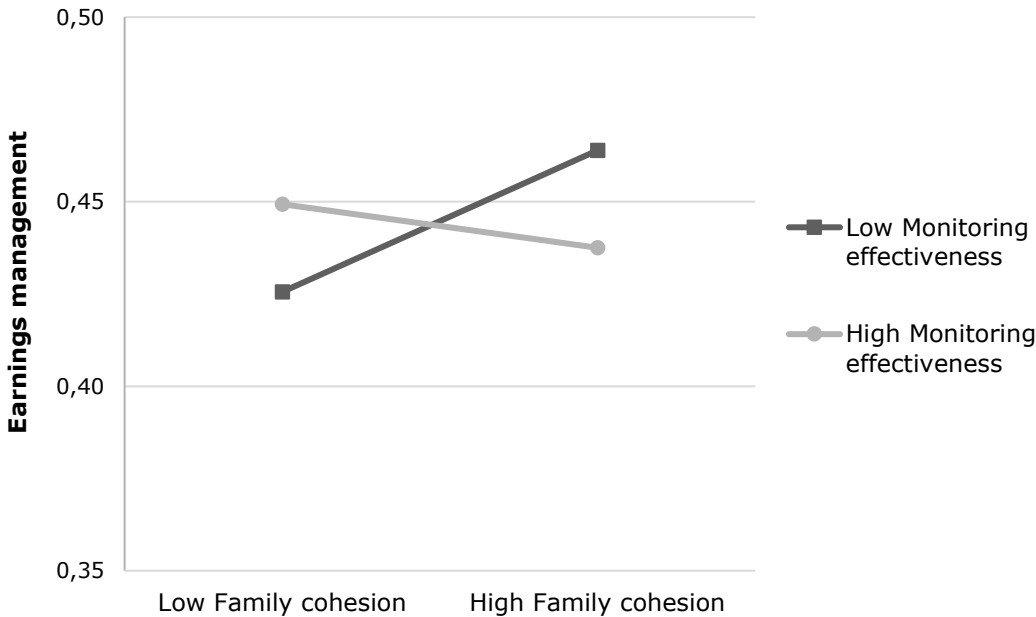


Figure 3: Interaction effect control task board of directors

4.3 Additional tests

Several additional analyses are conducted to test the robustness of the findings. The results of these analyses are showed in table 4.

Since 45 cases are deleted due to missing data regarding the monitoring effectiveness, regression models 1 and 2 are also run without the removal of these cases. This leads to a sample of 132 firms. The coefficient of Cohesion in model 1 is not found to be significant and is thus supporting the results regarding hypothesis 1. The coefficients of the variables Cohesion and Cohesion² in model 2 are not significant as well. These findings do not support the earlier results regarding hypothesis 2. It seems that the composition of the dataset is not able to capture the level of family cohesion and earnings management behavior in this way.

Table 4: Additional results OLS regressions

	Model 1	Model 2	Model 3	Model 4
Explanatory variables				
Cohesion	0.000147 (0.000741)	0.000878 (0.002802)	0.006678 (0.004230)	0.008047** (0.003811)
Cohesion ²		-0.000002 (0.000006)		
Servicing			0.005009 (0.003944)	
Cohesion x Servicing			-0.000199 (0.000139)	
Board of Directors				0.004288* (0.002373)
Cohesion x Board of Directors				-0.000167* (0.000085)
Control variables				
Leverage	-0.004469 (0.028081)	-0.004586 (0.028203)	0.028013 (0.032459)	0.029711 (0.032134)
ROA	0.244662*** (0.080802)	0.245887*** (0.081267)	0.150895 (0.098890)	0.140725 (0.098128)
Size	-0.014741* (0.007975)	-0.014709* (0.008009)	-0.018994** (0.008858)	-0.019587** (0.008698)
Age	-0.022122 (0.036943)	-0.022942 (0.037221)	-0.046020 (0.039539)	-0.047253 (0.039127)
Industry	-0.017262 (0.011680)	-0.017415 (0.011743)	-0.024615* (0.013200)	-0.024583* (0.012968)
Intercept	0.287396* (0.170392)	0.283166 (0.171819)	0.248811 (0.223969)	0.221386 (0.213168)
R ²	0.129488	0.130069	0.220123	0.236300
Adj. R ²	0.082434	0.074709	0.140136	0.157972

Note. Dependent variable: Absolute DA's

*, **, *** indicate significance at the 10%, 5% and 1% levels respectively (two-tailed).

It is interesting to investigate the service task of the board of directors too. So, model 3 is introduced to test the moderating effect of the service task of the board. The coefficients of the variable Cohesion and the interaction term Cohesion x Servicing are not found to be significant. This result is in contrast to the control task of the board of directors. An insignificant result is not surprising since the service task of the board has the potential to provide advice and counsel to the CEO and other top managers, and to participate actively in the formulation of the strategy of the family firm. Therefore, it is difficult to obstruct the practice of earnings management by giving advice only. The monitoring role, on the other hand, does relate to earnings management. This role includes several related activities, such as controlling the company's performance, monitoring activities and evaluating the behavior of the CEO (Minichilli et al., 2009).

Model 4 demonstrates the overall effectiveness of the board. This effectiveness is measured by taking together the monitoring role and the servicing role of the board of directors. Similar to model 4 (table 3), the variable Cohesion has a significant positive direct effect for the level of absolute discretionary accruals ($p \leq .05$) and the moderating variable Cohesion x Board of Directors has a significant negative coefficient ($p \leq .10$). The variable Board of Directors is found to have a significant positive coefficient as well ($p \leq .10$). These results state that the overall effectiveness of the board of directors moderates the association between family cohesion and earnings management. Consequently, the association is weaker when having a higher overall effectiveness of the board.

Chapter V: Conclusion

5.1 Overview

Even though private family firms represent the largest fraction of businesses worldwide (Bertrand & Schoar, 2006), and that research indicated that earnings management is more pervasive in private companies than in public companies (Burghstahler et al., 2006), the question of why private family firms would engage in earnings management still has to be resolved. This study examines whether the level of family cohesion has an effect on earnings management in private family firms. In order to explain earnings management behavior in private family firms, the socioemotional wealth concept (Gómez-Mejía et al., 2007) is extensively used. Consistent with Stockmans et al. (2010), I suggest that for private family firms the preservation of their socioemotional wealth is a key goal. Thereafter, the preservation of socioemotional wealth and resulting earnings management behavior are related to the level of family cohesion.

I hypothesized that the level of family cohesion is positively associated with earnings management. Because lowly cohesive families are not concerned about family objectives, they have no motive to engage in earnings management. Highly cohesive families, on the other hand, do have a strong focus on family objectives and are more willing to engage in earnings management. This first hypothesis was not supported by the data. In hypothesis two, a U-shaped relationship between family cohesion and earnings management is supposed. Based on earlier evidence, it can be expected that families are more willing to engage in earnings management when the level of cohesion is low. The lower the level of family cohesion, the lower the level of commitment family members show to their family and the lower the level of socioemotional wealth preservation will be. These families tend to act more like a traditional company instead of a family company, resulting in traditional agency conflicts. When the level of cohesion increases to a more balanced level, families are less willing to engage in earnings management because of the conformity between the various family members and the willingness to reach the same goals. If family cohesion continues to increase and becomes too strong, there will be a higher need to preserve socioemotional wealth. Unfortunately, highly cohesive families will become dysfunctional when the need to protect their SEW is so strong that they are willing to engage in earnings management. The empirical evidence seemed to support the second hypothesis. But when plotting the non-linear model, it appears to be an inverted U-shaped relationship and not a U-shaped relationship as hypothesized. As a result, the second hypothesis was also rejected by the data.

Moreover, I also hypothesized that the monitoring effectiveness of the board of directors may weaken the association between family cohesion and earnings management. The control task of the board of directors covers several related activities, such as controlling the company's performance, monitoring activities and evaluating the behavior of the CEO (Minichilli et al., 2009). As mentioned above, highly cohesive families have a strong need to preserve their socioemotional wealth, even at the expense of other stakeholders. The board of directors has the competence to prevent those families of possibly engaging in earnings management when effectively performing their control task. Hypothesis three was confirmed by the data.

5.2 Theoretical and practical implications

The findings regarding the association between the level of cohesion and earnings management, and the moderating effect of the board of directors contribute to the existing literature. In the first place, this research contributes to the family firm literature by highlighting a topic, earnings management, that has received little attention in this stream of literature (Salvato & Moores, 2010). Second, I tried to answer the call of Stockmans et al. (2010) to devote more attention to the investigation of non-financial decision-making drivers in family firms from the subsystem such as socioemotional wealth. Third, by applying family cohesion, I was able to take into account the heterogeneity of private family firms (Corten et al., 2017). The classification of private family firms was not based on compositional measures such as the generational or ownership stage of the family, but on the cohesion within the family. This approach tried to comprise the functioning of the family and to use it as a basis for the classification of family firms.

The results also have practical implications. Because earnings management is one aspect of financial reporting quality, it is important to know why private family firms are willing to engage in earnings management. The financial statements are usually the only public source of information in such firms. Therefore, a better notion of the quality of these statements and the drivers behind it, could help all stakeholders in making more precise decisions. The moderating effect of the board of directors is an important finding for practitioners too. More specifically, the results of this survey indicate that highly cohesive family firms may benefit from an effective monitoring board. As a result, the installment of a board of directors can add value to the company by effectively performing their control task.

5.3 Limitations and future research directions

This study also has some limitations that provide additional challenges for future research. First, the sample size used for this thesis is rather small. To ameliorate the results, it might be interesting for future researchers to test the hypotheses introduced in this study using a larger sample size. Second, the dataset contains only Belgian private family firms. According to Olson (2000), the perception of family cohesion is sensitive to ethnic and cultural differences. What might appear to be an *enmeshed* system for one family, may be functional for other ethnic groups. Moreover, prior research has shown that differences in legal systems and in corporate governance might influence earnings management practices (Renders & Vandenberghe, 2008). It is thus necessary to conduct future studies in other countries and institutional settings too. Third, this thesis focused on only one specific type of earnings management, that is, accruals-based earnings management. Because all of this, the generalizability of the results is limited.

Appendices

Appendix 1: Items concerning family cohesion

Balanced Cohesion

1. Family members are involved in each other's lives.
2. Family members feel very close to each other.
3. Family members are supportive of each other during difficult times.
4. Family members consult other family members on important decisions.
5. Family members like to spend some of their free time with each other.
6. Although family members have individual interests, they still participate in family activities.
7. Our family has a good balance of separateness and closeness.

Disengaged

8. We get along better with people outside our family than inside.
9. Family members seem to avoid contact with each other when at home.
10. Family members know very little about the friends of other family members.
11. Family members are on their own when there is a problem to be solved.
12. Our family seldom does things together.
13. Family members seldom depend on each other
14. Family members mainly operate independently.

Enmeshed

15. We spend too much time together.
16. Family members feel pressured to spend most free time together.
17. Family members are too dependent on each other.
18. Family members have little need for friends outside the family.
19. We feel too connected to each other.
20. We resent family members doing things outside the family.
21. Family members feel guilty if they want to spend time away from the family.

Appendix 2: Items concerning the board of directors

Service tasks

- The board contributes on management issues.
- The board contributes on financial issues.
- The board contributes on technical issues.
- The board contributes on market issues.
- The board contributes on legal issues and taxation.
- The board is actively involved in promoting strategic initiatives.
- The board is actively involved in long-term strategic decision-making.
- The board is actively involved in implementing long-term strategic decision-making.

Control tasks

- The board is actively involved in monitoring that all internal behaviours are adequately controlled.
- The board is actively involved in defining behavioural guidelines for divisional and functional managers.
- The board is actively involved in supervising the CEO.
- The board controls that the activities are well organized.
- The board develops plan and budgets.
- The board is kept informed on the financial position of the company.
- The board actively monitors and evaluates strategic decisions.

References

- Achleitner, A.-K., Günther, N., Kaserer, C., & Siciliano, G. (2014). Real Earnings Management and Accrual-based Earnings Management in Family Firms. *European Accounting Review*, 23(3), 431-461. doi:10.1080/09638180.2014.895620
- Ali, A., Chen, T.-Y., & Radhakrishnan, S. (2007). Corporate disclosures by family firms. *Journal of accounting and economics*, 44(1-2), 238-286.
- Amertha, I. S. P., Ulupui, I. G. K. A., & Dwija, I. G. A. M. A. (2014). Analysis of firm size, leverage, corporate governance on earnings management practices (Indonesian evidence). *Journal of Economics, Business & Accountancy Ventura*, 17(2), 259-268.
- Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *The journal of finance*, 58(3), 1301-1328.
- Bergstresser, D., & Philippon, T. (2006). CEO incentives and earnings management. *Journal of financial economics*, 80(3), 511-529.
- Bernard, V. L., & Skinner, D. J. (1996). What motivates managers' choice of discretionary accruals? *Journal of accounting and economics*, 22(1-3), 313-325.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279.
- Bertrand, M., & Schoar, A. (2006). The role of family in family firms. *Journal of economic perspectives*, 20(2), 73-96.
- Björnberg, Å., & Nicholson, N. (2007). The Family Climate Scales—Development of a New Measure for Use in Family Business Research. *Family Business Review*, 20(3), 229-246. doi:10.1111/j.1741-6248.2007.00098.x
- Burghstahler, D. C., Hail, L., & Leuz, C. (2006). The Importance of Reporting Incentives: Earnings Management in European Private and Public Firms. *Accounting Review*, 81(5), 983-1016.
- Cabrera-Suárez, M. K., Déniz-Déniz, M. d. L. C., & Martín-Santana, J. D. (2014). The setting of non-financial goals in the family firm: The influence of family climate and identification. *Journal of Family Business Strategy*, 5(3), 289-299.
- Corten, M., Steijvers, T., & Lybaert, N. (2017). The effect of intrafamily agency conflicts on audit demand in private family firms: The moderating role of the board of directors. *Journal of Family Business Strategy*, 8(1), 13-28.
- Davidson Iii, W. N., Jiraporn, P., Young Sang, K., & Nemec, C. (2004). EARNINGS MANAGEMENT FOLLOWING DUALITY-CREATING SUCCESSIONS: ETHNOSTATISTICS, IMPRESSION MANAGEMENT, AND AGENCY THEORY. *Academy of management Journal*, 47(2), 267-275. doi:10.2307/20159577
- Dechow, P. M., & Dichev, I. D. (2002). The quality of accruals and earnings: The role of accrual estimation errors. *The accounting review*, 77(s-1), 35-59.
- Dechow, P. M., & Schrand, C. M. (2004). *Earnings quality*: Research Foundation of CFA Institute Charlottesville, VA.
- Dechow, P. M., Sloan, R. G., & Sweeney, A. P. (1995). Detecting earnings management. *Accounting review*, 193-225.
- Dyer, G. (2003). The family: The missing variable in organizational research. *Entrepreneurship theory and practice*, 27(4), 401-416.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of management review*, 14(1), 57-74.
- Fama, E. F., & Jensen, M. C. (1983). Separation of ownership and control. *The journal of law and Economics*, 26(2), 301-325.
- Forbes, D. P., & Milliken, F. J. (1999). Cognition and corporate governance: Understanding boards of directors as strategic decision-making groups. *Academy of management review*, 24(3), 489-505.
- Gilson, R. J., & Gordon, J. N. (2003). Controlling controlling shareholders. *U. Pa. L. Rev.*, 152, 785.
- Gomez-Mejia, L., Cruz, C., & Imperatore, C. (2014). Financial Reporting and the Protection of Socioemotional Wealth in Family-Controlled Firms. *European Accounting Review*, 23(3), 387-402. doi:10.1080/09638180.2014.944420
- Gomez-Mejia, L., Nunez-Nickel, M., & Gutierrez, I. (2001). The role of family ties in agency contracts. *Academy of management Journal*, 44(1), 81-95.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative science quarterly*, 52(1), 106-137.
- Guay, W. R., Kothari, S., & Watts, R. L. (1996). A market-based evaluation of discretionary accrual models. *Journal of accounting research*, 34, 83-105.

- Haans, R. F., Pieters, C., & He, Z. L. (2016). Thinking about U: Theorizing and testing U-and inverted U-shaped relationships in strategy research. *Strategic Management Journal*, 37(7), 1177-1195.
- Healy, P. M. (1985). The effect of bonus schemes on accounting decisions. *Journal of accounting and economics*, 7(1-3), 85-107.
- Healy, P. M., & Wahlen, J. M. (1999). A review of the earnings management literature and its implications for standard setting. *Accounting horizons*, 13(4), 365-383.
- Ho, S. S., & Wong, K. S. (2001). A study of the relationship between corporate governance structures and the extent of voluntary disclosure. *Journal of International Accounting, Auditing and Taxation*, 10(2), 139-156.
- Holthausen, R. W., Larcker, D. F., & Sloan, R. G. (1995). Annual bonus schemes and the manipulation of earnings. *Journal of accounting and economics*, 19(1), 29-74.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of financial economics*, 3(4), 305-360.
- Jiraporn, P., & DaDalt, P. J. (2009). Does founding family control affect earnings management? *Applied Economics Letters*, 16(2), 113-119.
- Kalm, M., & Gomez-Mejia, L. R. (2016). Socioemotional wealth preservation in family firms. *Revista de Administração (São Paulo)*, 51(4), 409-411.
- Kellermanns, F. W., & Eddleston, K. A. (2004). Feuding families: When conflict does a family firm good. *Entrepreneurship theory and Practice*, 28(3), 209-228.
- Kepner, E. (1983). The Family and the Firm: A Coevolutionary Perspective. *Organizational Dynamics*, 12(1), 57-70.
- Klein, A. (2002). Audit committee, board of director characteristics, and earnings management. *Journal of accounting and economics*, 33(3), 375-400.
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of accounting and economics*, 39(1), 163-197.
- Lansberg, I., & Astrachan, J. H. (1994). Influence of family relationships on succession planning and training: The importance of mediating factors. *Family Business Review*, 7(1), 39-59.
- Martin, G., Campbell, J. T., & Gomez-Mejia, L. (2016). Family control, socioemotional wealth and earnings management in publicly traded firms. *Journal of Business Ethics*, 133(3), 453-469.
- McNichols, M. F. (2000). Research design issues in earnings management studies. *Journal of accounting and public policy*, 19(4-5), 313-345.
- Michael-Tsabari, N., & Lavee, Y. (2012). Too close and too rigid: Applying the circumplex model of family systems to first-generation family firms. *Journal of Marital and Family Therapy*, 38, 105-116.
- Minichilli, A., Zattoni, A., & Zona, F. (2009). Making boards effective: An empirical examination of board task performance. *British Journal of Management*, 20(1), 55-74.
- Mulford, C. W., & Comiskey, E. E. (2009). *Cash flow reporting by financial companies: a look at the commercial banks*. Retrieved from
- Nicholson, N. (2008). Evolutionary psychology and family business: A new synthesis for theory, research, and practice. *Family Business Review*, 21(1), 103-118.
- Olson, D. H. (2000). Circumplex model of marital and family systems. *Journal of family therapy*, 22(2), 144-167.
- Paiva, I. S., Lourenço, I. C., & Branco, M. C. (2016). Earnings management in family firms: current state of knowledge and opportunities for future research. *Review of Accounting and Finance*, 15(1), 85-100.
- Prencipe, A., Bar-Yosef, S., & Dekker, H. C. (2014). Accounting research in family firms: Theoretical and empirical challenges. *European Accounting Review*, 23(3), 361-385.
- Prencipe, A., Markarian, G., & Pozza, L. (2008). Earnings Management in Family Firms: Evidence From R&D Cost Capitalization in Italy. *Family Business Review*, 21(1), 71-88. doi:10.1111/j.1741-6248.2007.00112.x
- Renders, A., & Vandenbogaerde, S. (2008). Corporate governance and earnings management: Evidence from Europe. *Review of Business and Economics*, 53(3), 263-287.
- Roychowdhury, S. (2006). Earnings management through real activities manipulation. *Journal of accounting and economics*, 42(3), 335-370.
- Salvato, C., & Moores, K. (2010). Research on accounting in family firms: Past accomplishments and future challenges. In: SAGE Publications Sage CA: Los Angeles, CA.
- Schulze, W. S., Lubatkin, M. H., Dino, R. N., & Buchholtz, A. K. (2001). Agency Relationships in Family Firms: Theory and Evidence. *Organization Science*, 12(2), 99-116.
- Shleifer, A., & Vishny, R. W. (1997). A survey of corporate governance. *The journal of finance*, 52(2), 737-783.
- Sloan, R. G. (1996). Do stock prices fully reflect information in accruals and cash flows about future earnings? *Accounting review*, 289-315.

- Stock, J. H., & Watson, M. W. (2015). *Introduction to Econometrics*. Harlow: Pearson.
- Stockmans, A., Lybaert, N., & Voordeckers, W. (2010). Socioemotional wealth and earnings management in private family firms. *Family Business Review*, 23(3), 280-294.
- Sweeney, A. P. (1994). Debt-covenant violations and managers' accounting responses. *Journal of accounting and economics*, 17(3), 281-308.
- Tong, Y. H. (2007). Financial reporting practices of family firms. *Advances in Accounting*, 23, 231-261.
- Trueman, B., & Titman, S. (1988). An explanation for accounting income smoothing. *Journal of accounting research*, 127-139.
- Vander Bauwhede, H., & Willekens, M. (2003). Earnings management in Belgium: a review of the empirical evidence. *Tijdschrift voor economie en management*, 68, 199-218.
- Voordeckers, W., Van Gils, A., & Van den Heuvel, J. (2007). Board Composition in Small and Medium-Sized Family Firms. *Journal of Small Business Management*, 45(1), 137-156. doi:10.1111/j.1540-627X.2007.00204.x
- Watts, R. L., & Zimmerman, J. L. (1986). Positive accounting theory.
- Westhead, P., & Cowling, M. (1998). Family firm research: The need for a methodological rethink. *Entrepreneurship Theory and Practice*, 23(1), 31-56.