FAMILY FIRMS AND CAPITAL STRUCTURE DECISIONS: EMPIRICAL EVIDENCE FROM INDONESIAN LISTED FIRMS

by

Herlina Yoka Roida

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Abstract

The study's aim is to provide new evidence on the role of a family firm's specific characteristics, enshrined in the concept of socio-emotional wealth (SEW), in firms' capital structure decisions with reference to agency and stewardship theories. Family firms in Indonesia rely mostly on banks and short-term debt as a source of funding to meet long-term financing requirements. This situation collectively calls for an investigation into the factors affecting capital structure decision. The study provides new empirical evidence on the determinants of capital structure during the period 2011-2015, covering 160 family firms listed on the Indonesia Stock Exchange.

The general results indicate that SEW dimensions can explain capital structure decisions of family firms in Indonesia. A family's influence on a firm's decisions represents the members' long-term commitment to maintain the sustainability of the company across generations through control and influence. The desire to pass the business to the next generation encourages the families to apply risk reduction strategies to financing decisions by avoiding exposing the business to risk in order to preserve SEW. However, once the control over the firm passes from the founder to the next generation of family members, the desire to maintain the firm within the family has no significant effect on capital structure decisions.

This study contributes to knowledge by examining the determinants of the capital structure specific to family firms in South-East Asia. The financing decisions taken in situations when different generations of the controlling family are in charge as a new approach that distinguishes this study from previous studies. It reveals that financing decisions, apart from being the product of a firm's general characteristics such as age, size, etc., also reflect family goals focused on preserving the firm's SEW, resulting in relatively low long-term debt levels sustained protracted period of time and across generations.

CHAPTER 1

INTRODUCTION

1.1. Background

Family firms are the main force behind economic growth in many developing countries. In Indonesia, more than 95 percent of corporations in the Indonesian private sector are family owned. The number of family firms listed through an initial public offering (IPO) has increased significantly since the Indonesia Financial Services Authority (OJK) was founded in 2011 and started operating in 2012. The OJK drives financial reform in Indonesia through increasing firms' access to capital market and increasing the spectrum of financial option available to them, including access for family firms. For example, as the end of 2018, there were 612 listed companies on the Indonesia Stock Exchange (IDX). This number increases from total of 520 listed companies in 2015. Thus, efforts were made by OJK and IDX to promote access of financial sources.

Financing decisions are essential for family firms' long-term survival, daily operations and growth. They are influenced by many internal and external factors. The managers of family firms have to make capital structure decisions that reflect not only conventional business logic, but also incorporate some specific objectives that follow from the fact that these are enterprises run by families. What follows is that family firms are likely to pursue non-economic goals (Chrisman et al., 2005; Sharma et al.,1997) and strive to maintain the so-called socio-emotional wealth imbedded in their firm to be passed on the next generations of family members (Berrone et al., 2010). Family involvement may require family firms to consider a trade-off between increasing the value of the firm through investment and diluting family control (Molly et al., 2012).

1.2. Previous Studies on Family Firms and Capital Structure

Capital structure is one of the argumentative issues in corporate finance since there is no universal theory of the debt-equity choice, and no reason to expect one (Myers, 2001).

The literature investigating capital structure decision of family firms are still spare. There are several different approaches that have been used in studies of capital structure, but none of them so far seems to have prevailed in practice. The empirical evidence continues to be contradictory regarding their validity. For example, family firms tend to have an excessive risk avoidance (Shleifer and Vishy, 1986) and have such a mechanism to reduce agency costs between the owners and managers (Villalonga and Amit, 2006) that may lead to use less debt due to decrease the risk of bankruptcy and the need for interest payments as a disciplinary management device. However, family firms have a long term commitment (Casson, 1999) and need to control their firms (Harris and Raviv, 1988) that reflect in high level of leverage. Empirically, some researchers focus on the prediction of how debt responds to the cash flow and investment components of the financial deficit (Shyam-Sunder and Myers, 1999; Fama and French, 2002; Frank and Goyal, 2003; de Jong et al., 2011). Other researchers are more concerned with factors affecting debt ratio analysis (Myers and Majluf, 1984; Titman and Wessel, 1988; Anderson and Reeb, 2003; Frank and Goyal, 2009; Ampenberger et al., 2013).

Discourse about capital structure decision in family firms has been greatly influenced by two important theories; namely agency theory and stewardship theory. Rooted in economics with its fixation on rational behaviour, agency theory maintains that managers will pursue own opportunistic self-interested objectives rather than those of the principal. This will create a conflict of interests and make monitoring of the agent by the principal necessary (Jensen and Meckling, 1976). The underlying assumption of agency theory is that 'managers cannot be trusted' (Donaldson, 1990). In family firms this realization may encourage the family to put one of their own at the helm of the company.

In turn, stewardship theory is based on the assumption that there is no inherent problem with a manager's motivation (Donaldson and Davis, 1991). Stewardship theory argues that strategic decisions (such as capital structure decisions) are a device to maximise organisational performance and shareholders' returns, as long as the fundamental coalition between managers and owners is intact. Both agency theory and stewardship theory believe that goal alignment is a winning strategy to reduce a potential conflict of interest between owners and management within a firm. If the goal alignment is strong, monitoring becomes less important.

Previous studies considered that stewardship theory is applicable to analysing family businesses due to facilitation of social satisfaction through involvement of family members (Davis et al., 2010; Pearson and Marler, 2010; Corbetta and Salvato, 2004). Empirical studies on how family involvement can impact financing decisions, tend to focus primary on ownership with minimum attention given to the role of strategic positions such as CEOs or chair/board membership. Some argue that ownership has a negative relationship with leverage (Santos et al., 2014; Schmid, 2013; Mishra and McConoughy, 1999). Others found that ownership concentration has a positive impact on a firm's debt level (Croci et al., 2011; Ellul, 2010; Margaritis and Psillakis, 2010; King and Santor, 2008). However, yet another group of researchers argue that ownership concentration is of no significance in relation to leverage (Ampenberger et al., 2013; Anderson and Reeb, 2003) and there is a non-linear relationship between ownership and debt levels (Setia-Atmaja et al., 2009; Schulz et al., 2003). Thus, these studies have mostly focused on the impact on ownership concentration levels, without distinguishing between the different generations such as founders and descendants in family businesses.

In family firms corporate governance will lead to the degree of an involvement-oriented management system that can change if the situation alters, such as succession-related issues. This is because descendants may not be as committed to the business as the founders and they may be more likely to have different priorities in running family business. For this reason, a number of studies suggest that differences in family involvement at different stages of the life cycle of family firms may shape social-emotional wealth priorities (Le Breton-Miller and Miller, 2013; Gomez-Mejia et al., 2011). In turn, the differences of involvement can influence the degree of family involvement when making a capital structure decision. Family's engagement with the business can change with the dispersion of ownership among generations. Family firm may consider financial goals a priority, when and where they are consistent with non-financial goals or socio-emotional enhancement. Therefore, when making capital structure decisions, family firms may follow the dimensions of socio-emotional wealth (SEW) and are controlled by financial characteristics.

Although the theories are not developed with a specific focus on family firms, it would seem logical to follow the factors claimed to have some influence on corporate finance, since this study concerns about publically listed family firms. Following the previous studies regarding firms' characteristics is therefore necessary in order to make

judgements about connections between the observable studies in family firms and relevant theories. The empirical literature notes several financial characteristics including:

(a) asset tangibility (Titman and Wessels, 1988; Ozkan, A., 2001; Chen, 2004; Laery, 2009); (b) profitability (Rajan and Zingales, 1995; Chen , 2004; Leary, 2009; Ampenberger et al., 2013); (c) firm size (Titman and Wessels, 1988; Rajan and Zingales, 1995, Myers and Majluf, 1984; Fama and French, 2002); (d) growth opportunity (Shyam-Sunder and Myers, 1999; Laery, 2009); (e) non-debt tax shield (Titman and Wessels, 1988); (f) firm's age (Deesomsak et al., 2004; Anderson and Reeb, 2003); (g) earning volatility (Fama and French, 2002) and (h) liquidity (Deesomsak et al., 2004).

A new move in the studies of family firms and capital structure has been to investigate the effect of control considerations on family firm's capital structure decision. Control consideration may be related to a typical combination of concentrated ownership and control that is common in family firms. This approach may take away resources from profitable projects in order to satisfy the owner family's interests. This action can occur when managers have excessive power enabling them to take decisions to satisfy their own interests. Several studies suggest that control motives can shape a firm's capital structure decisions (Israel, 1991; Harris and Raviv, 1988; Stulze, 1988). These views are supported by empirical findings such as those from Croci et al. (2011), Elul (2010) and Mishra & McConaughy (1999) who found that control considerations exert a far greater influence on debt over equity financing. Thus, it is possible that family firms will not put their control at risk and dilute their powers due to their desire to preserve the family's goals.

Other studies have investigated the effect of risk reduction strategy on capital structure decision in family firms (Mishra and McConoughy, 1999; Anderson and Reeb, 2003; Santos et al., 2014). Family firms are assumed to have, and belong to, large and undiversified shareholders. This structure of shareholders leads family firm to be a risk avoider. The shareholders may face a high exposure to a single asset, which is the family firm itself. Therefore, they have an incentive to reduce risk at the firm level. The risk can be financial and/or non-financial, such as family reputation damage and financial distress (Schmid, 2013). Family firms will avoid the risk that potentially can damage their goals to preserve the socio-emotional wealth of such businesses. Moreover, the firm can be seen as a family asset which the members expect to be bequeathed to the next generation. Such

an expectation means the members may be averse to any decisions that can harm their stakes in the business.

1.3. Research Gaps

This thesis aims to examine the determinants of capital structure on family firms in Indonesia. It is motivated by lack of comparative studies on the role of such family firm specific characteristics as *'socio-emotional wealth'* or SEW. SEW could be considered as one of the most typical features that define the family firm and make it different from non-family firms. While there have been studies that examine the determinants of firms' capital structure in developing countries, very little research has been done on the dimensions of SEW and capital structure in the context of family firms. The studies about capital structure in family firms are dominated by traditional agency models and fail to address the domain of behaviour of the decision makers in the agency model. This study addresses a gap in existing literature on the determinants and the relationships between the dimensions of SEW and capital structure in the context of Indonesia listed family firms.

The aspect that makes family firms unique is the connection of such key elements as ownership, management, government and succession. All of these issues influence goals and objectives, strategy, financing structure and dynamics of family firms (Chua et al., 1999). The implications and significance of family involvement, in relation to capital structure decisions, have not been addressed adequately in the literature. This omission is somewhat puzzling as the topic is an important issue to investigate, particularly from the perspective of protecting the interests of shareholders who are not family members.

Agency theory and stewardship theory make different assumption about the goals of family firms. As a result, there is an ongoing debate regarding the predictive ability of each theory in the context of family firms. The relationship between corporate governance and managers' behaviour in family firms may resulting dynamic outcomes of agency and stewardships theories in a way not as separate and opposing lenses for viewing the family firms. A dynamic perspectives that I implemented in this study can benefit theory by explaining why behaviours change relative to capital structure decisions over time. This

perspective helps investigate behaviour patterns based on the non-economic goals (SEW) and would possibly alter predictions made about capital structure decisions in family firms.

Agency and stewardship theories both presume that the principal and managers will become more aligned. However, over time in family forms ownership concentration becomes more dispersed, with friction among family members being more likely when family firms pass from one generation to the next. That conflict is basically the essence of the problem described by agency theory. The necessity to align managers' behaviour and owners' interests becomes important to reduce the conflict between the two roles.

At first, agency problems were not expected in family firms because of their converged ownership and management, resulting monitoring is unnecessary (Chrisman et al., 2004; Fama and Jensen, 1983). However, it is now believed that research in family firms previously overlooked agency problems in family firms such as management or ownership entrenchment (Schulze et al., 2001). Thus, agency problems can exist in family firms. In other words, if managers do not share the same individual motivation and interest as the owners, that dissonance becomes a problem. Control and monitoring become the key elements to govern the company and to ensure that managers act on behalf of shareholders' interests. These previous research endeavors result to bring agency theory into family firms in the context once to be irrelevant to agency theory.

The unique aspects of family firms such as non-economic goals and family involvement has lead the research in family firms to deviate from agency theory and turn to stewardship theory. Stewardship theory assumes that agents act in the best interests of their principals (Donaldson and Davis, 1989, 1991), with a steward's behaviour being empowered to facilitate continued alignment of interests. By working for an organisation, personal satisfaction and needs are met. The structure of the organisation basically facilitates and empowers the manager's ability to act as a steward. Controlling and monitoring can be counterproductive if managers are to be trusted, yet at the same time are being closely supervised. The fact is that in family firms, not all family members become managers or are actively involved in the firm's business. Some family firms hire managers from outside the family, working on behalf of the family towards organisational goals. They have organisational commitment. Thus, this situation pushes the boundaries

of agency theory in family firms that use institutional approaches, rather than personal approaches, as a basis of influence with managers and owners.

Leverage may be interpreted as the possibility of growth in size or in profit, but also the capability of managers to use the availability of information set. Agent behaviour tend to predict performance outcomes based on the agent's risk preference (Mc Guire, 1988; Rees, 1985) or their frames about expectation (Baker et al., 2004). Therefore, it is reasonable that managers decide to use a low level or high level of leverage, depending on how they compare the anticipated outcomes from the available options in terms of loss aversion. In the case of family firms, the motivation of a family manager will be to preserve the non-economic goals especially as financial behaviour theory values maintaining long-term reproduction, growth and the safety of the firm itself (Vasiliou and Daskalakis, 2009).

To connect the family firm and capital structure, the determinants of capital structure will be drawn from the non-economic goals of family firms, which is preserving socioemotional wealth for a long term. Socio-emotional wealth preservation has two implications: i) capital structure might be loaded to maximise the SEW for long term survival, instead of just maximising a business's economic wealth; and ii) capital structure might be an instrument to keep business control due to the priority of protecting the socio-emotional wealth of family firms. These implications could disadvantage the other shareholders, such as those with minority holdings and non-family members (Berrone at al., 2012). Thus, it is reasonable to suggest that pursuing SEW might cause the firm to pay a premium to those investors from outside the family firm (Schulze et al., 2003). The reason for this conclusion is the assumption that the financial objectives of the investors will have less priority than the socio-emotional wealth of the family firm. It can be argued that the family goal to preserve SEW gives sufficient emphasis to the SEW dimension of family firms when it comes to making strategic decisions. Following on from this point, I draw considerably on the aspects of agency and stewardship theories to examine the determinants of capital structure in family firms, rather than putting them in a static perspective. To this extent, what follows is as much a critique of dichotomous agency and stewardship theories as it is an explanation. It is my endeavour to fill any knowledge gaps the context of family firms.

To illustrate this point, I will present the determinants of capital structure by explaining the dimensions of SEW, taken from the existing literature. According to Berrone et al., (2012), there are five major dimensions of SEW: i) family control and influence; ii) family members' identification with the firm; iii) binding social ties by excluding non-family members from key managerial and board positions; iv) family emotional attachment to the firm; and v) renewal of family bonds in the firm through dynastic succession. Capital structure decisions could be a mechanism for family firms to achieve the following strategic objectives, which is preserving SEW (Berrone et al., 2010; Berrone et al., 2012; Naldi et al., 2016). From this point of view, the dimensions will be broken into more operational measurements in order to make the dimensions of SEW sharper in their characterisations, especially in the context of capital structure decisions.

The study uses a total of 322 family firms that were listed on the Indonesia Stock Exchange until the end of 2015. From these family firms, only 160 family firms met the requirement of having issued consecutive financial reports over the 5 years from 2011 to 2015. These data represent a considerable number of the total population, contributing a total of 800 observations for each variable. The quantitative analysis model uses panel data which combines cross sectional and time series information with two model measurements of leverage: a) long-term debt to total assets (LTD) and b) short-term debt to total assets (STD). The quantitative approach relates to the determinants of capital structure as a proxy for three main categories based on SEW dimensions: (i) family control and influence over the firm's operation; (ii) renewal of family bonds through dynastic succession; and (iii) binding social ties by excluding non-family members from key managerial and board positions. The three categories involve a total of six categories which are: (i) family ownership; (ii) the firm founder act as the CEO; (iii) family members are represented on the Board of Directors; (iv) a member of the family is both the CEO and a member of the Board of Directors; (v) a descendant of the family firm founders acts as the CEO, and (vi) Board independence.

Thus, the research answers the following research question:

What are the determinants of capital structure decisions of Indonesian family firms?

1.4. Objectives and Contributions

This thesis analyses the different factors that shape capital structure decisions in Indonesia family firms, how these factors relate to the unique characteristic of socio-emotional wealth and its implications regarding the preservation of a family business sustainability. The thesis explores the following issues:

1. The determinants of capital structure decisions derived from the socio-emotional wealth dimensions which underpin a family firm's decisions.
2. The ways in which capital structure decisions in general relate to the corporate strategies of Indonesia's listed family firms.
3. The implication of this study towards the series of reform policies to regulate public listed companies, including family firms that can implemented to strengthen the Financial Services Authority (OJK)'s functions in Indonesia.

There are two main contributions by this study to the body of literature: theoretical and the methodological. The theoretical contribution is in its attempt to test the validity of hypotheses based on the concept of socio-emotional wealth dimensions of capital structure, applied to the financing decisions of family owned businesses in a developing country. Motivated by the growing attention to financing decisions in family business, this study brings highly relevant research fields of family business and finance critically reviews by study of Michiels and Molly (2017), Motylska-Kuzma (2017) and Payne (2018). In the situation, when the determinants of capital structure are not only derived from economic reasons, it is crucial to test the validity of hypotheses based on the concept of socio-emotional wealth. Thus, the contribution of this study is to verify Berrone et al., (2010) and Gomez-Mejia et al., (2007) who argue that non-economic reasons are often likely to predominate in the financing decisions of family firms as the result of the choice between risk and preserve control (Motylska-Kuzma, 2017).

The study proposes a specific conceptual framework to identify and explore the determinants of capital structure of family firms, by considering a firm's characteristics as corporate finance determinants of capital structure. Capital structure decisions are investigated in a situation when different generations of the controlling family are in charge. This is a new approach that distinguishes this study from previous studies. In addition, by focusing SEW dimensions, the thesis implements an original conceptual framework, in which the concept of socio-emotional wealth differentiates family firms

from non-family firms. In this manner, the framework accommodates a crucial part of family business which is the family itself. This framework is specifically, developed and adapted with reference to Indonesian listed family firms, in order to explain capital structure decisions that they make. However, to maintain the degree of generalisation of this framework, the instruments and variables are made adaptive and applicable to contexts outside Indonesia as well.

The investigation makes a methodological contribution due to the fact that, to my knowledge, this is the first study to have tested SEW dimensions and capital structure decision using quantitative methods. SEW dimensions need to be more operational in measurement to provide sharper and clearer characteristics of SEW, especially in the context of capital structure decisions that involve human relations and interests in decision making.

While research in family firms has covered the strategic importance of debt, most studies in family firms have directly tested the relationship between family involvement through ownership and capital structure decision-making. A quantitative approach is relevant to this research since the variable has proxy measurements. As such, preserving SEW as the aim of family firms will engage with capital structure decision making. Thus this study contributes to the existing capital structure literature on Indonesian listed family firms by providing a greater understanding of the factors that impact capital structure decisions.

With regards to the relationship between SEW and capital structure, this study reveals unique implications for investors, family firms and the policy making. The study shows that as far as SEW is concerned, investments in family firms that have an independent board are sensible, especially as Indonesia has adopted a civil law model which is weak when it comes to offering investors legal protection. Families' socio-emotional motives positively influence investors' perceptions as long as they show strong corporate governance in a family firm. Being listed on the capital market may enhance a firm's legitimacy by relying on professional non-family members on the board. This independence could increase the family's reputation among investors and creditors, due to gaining access to capital facilitated by the family firm's carefully protected successful business record.

Indonesia is one of the emerging capital markets that is developing into a well-regulated and transparent entity and is thus reducing problematic governance and various types of agency problems resulting from ownership pyramids or cross holdings. The capital market now possesses a degree of openness and capital access, which means listed family firms can add value to their businesses. Especially, there is a sense of urgency driving continued efforts to elevate competitiveness through improvements in the quality of corporate governance practices. These improvements are seen as a way to spur financial performance and enhance investor confidence, which in turn could increase access to capital inflow, at least up to the same levels as other companies in the ASEAN region. This optimistic opinion is because since 2015, Indonesia has been a part of the ASEAN Economic Community (AEU) and has a vision to be the big ten of the most powerful economics in 2030. It is imposing higher costs on family firms pursuing SEW preservation, if any of those firms are filling their strategic decision making positions with non-professionals who lack the required competence, authority and reputation needed to manage complexity, including multiple principals' interests and access to funding sources. Moreover, the financial market's policy maker - the Financial Services Authority or OJK - needs to encourage family firms to be more prudent by avoiding expensive involvements that can lead to nepotism or oligarchic behaviour. Such cautious behaviour will help to avoid business failure when it comes to the next generations, which may well lack business-centric capabilities. The adoption of best practices will emerge to safeguard the firm's long-term financial orientation and preserve the socio-emotional wealth of listed family firms.

This thesis highlights that socio-emotional wealth exists in capital structure decisions and their relationships with lenders. This scenario implies that family firms keep a close mutually beneficial relationship with lenders. Nevertheless, the family's reputation should be supported by due diligence and checks by lenders to discourage firms from increasing leverage on the basis of their unhealthy relationships with banks, involving issues such as nepotism and cronyism.

1.5. Limitations of the work

This study is not free of certain limitations. Firstly, information regarding ultimate owners was not available in financial reports published for the Indonesia Stock Exchange (IDX) during the period of researched in this thesis. For this reason, I have not attempted to control my results for a) the profile of block-holding shareholders, b) the use of pyramidal ownership and cross shareholding used to increase voting power in excess of cash-flow rights and c) the role of block-holders who can collude with family shareholders.

Secondly, although there are five major dimensions of SEW, only three were used in this study of strategic decision of family firms. Two dimensions of SEW family members' identification with the firm and emotional attachment to the business have proven to be too difficult to operationalise within a quantitative study. I could not find appropriate proxies to represent these two dimensions in quantitative measurements. Moreover, the dimension of family succession has important implications for the time horizons in the decision-making process. This study uses the firm's founder's descendants acting as CEOs as a proxy for this dimension without distinguishing across second and third generations. However, to measure the impact incrementally on a strict basis across generation is not easy especially if there is still a contribution from the previous generation.

The third limitation relates to the number of observations and the period under investigation. Extending this study with a greater number of observations would have led to more robust results, especially after the requirement from government to publish the ultimate owners in financial report starting in 2018. Lastly, the focus on Indonesian family firms make the findings context specific.

1.6. Overview of the Results

The key findings of the thesis provide evidence on the determinants of the capital structure of Indonesian family firms across two debt measures. These results show that a family firm's capital structure decision-making is substantially driven by non-financial goals designed to preserve SEW.

Firstly, the results indicate that SEW dimensions can explain capital structure decisions of family firms in Indonesia. A family's influence on a firm's decisions represents a long-term commitment of the members of the family to maintain the sustainability of the company across generations through control and influence. The desire to pass the business to the next generation encourages families to apply risk reduction strategies to financing decisions in order to preserve SEW. Secondly, once the control over the firm passes from the founder to the next generation of family members, the desire to maintain the firm within the family has no significant effect on capital structure decisions. As the family's engagement with their business declines as a result of the dispersion of ownership among generations, the demand to keep control and preserve SEW also declines. Thirdly, independent directors play a significant role in protecting outside family shareholders from self-dealing families; in particular, incompetent family members in positions of authority.

Such firm's characteristics, as profitability, the non-debt tax shield, firm age, liquidity and firm growth are significantly associated with the capital structure decision-making of family firms in Indonesia. However, the asset structure and firm size are insignificantly associated with capital structure decisions in family firms. A high concentration of family ownership is attributed to preserving SEW and is characterised by a reputation for keeping a good relationship with creditors. Therefore, intangible assets, e.g. the reputation of the family's good name, might be more relevant as a collateral than a tangible asset. In addition, when size proxies for relative dilution of control, as agency theory posits, the Indonesian family firms would appear likely to have similarities in protecting their SEW, both for small and large businesses.

The study's general results indicate that SEW dimensions informing capital structure can serve to explain capital structure decisions made by family firms in Indonesia. The access to influence a firm's decisions represents the holding of a long-term commitment to maintain the sustainability of the company across generations. Spanning the business to the next generation motivates the families to protect the business from risk exposure, by the desire to preserve SEW.

1.7. Organisation of the Thesis

This thesis is organised into six chapters. Chapters two and three, set up a theoretical frameworks; chapter two establishes a theoretical foundation for family firms' analysis and chapter three does the same for the capital structure in family firms. Both chapters are provide a background for the analyses of the main empirical findings delivered by studies on determinants of capital structure of family firms, as well as of some relevant studies investigating Indonesia specifically. Given that the theoretical framework is developed from agency and stewardship theories as used in the theoretical base of the majority of studies of family firm, the thesis is designed to relax and extend the general conceptual theoretical framework. This conceptual development is achieved by taking into account to expound the dynamic and principles associated with agency and stewardship theories. In addition, the conceptual theoretical framework was developed further, in order to characterise family firms and to address the distinctive factors of determinants of capital structure in specific detail.

Chapter four discusses methodology and provides rational for adopting a quantitative approach. Chapter five outlines the quantitative results and findings, followed by discusses and analyses the results and findings. Lastly, chapter six concludes the thesis by highlighting the key contributions and implications of this work for family firms, policy makers and investors. Limitations of the study and recommendations for future research are identified.

CHAPTER 2
FAMILY FIRMS

2.1. Introduction

Family firms are the main force behind economic growth in the developing countries of South-East Asia. In Indonesia, for example, more than 95 percent of all firms are owned by families and they contribute 25 percent of the national GDP. Many of them are listed companies; in fact, family firms represent 60 percent of all companies listed on the Indonesia Stock Exchange (IDX). The family firms' contribution makes it important to explore how family firms structure their capital. Unlike non-family public companies, family dynamics may influence the firm-level outcomes of strategic decisions as a mechanism of keeping family businesses close to the family. The dominant shareholders, who are from the founding families, are believed to pursue family-centred noneconomic goals that benefit the family (Chua et al., 2015; Chrisman et al., 2012; Chua et al., 1999). Pursuing noneconomic goals is the distinguishing characteristic or feature of family firms that makes them different to other forms of businesses (Gomez-Mejia et al., 2011; Berrone et al., 2012). However, research on family firms mostly employs elements of traditional, non-family firm models as a framework for analysis. For example, primarily they use trade-off theory or pecking order theory as a framework for their analyses (King and Santor, 2008). This approach, in my opinion, fails to consider the importance of preferences and corporate governance found in family firms. In addition, little is known about family firms' involvement in certain forms of financing.

Research into family firms often applies two mainstream theories to explain their unique aspects. These theories are: a) agency theory and b) stewardship theory (Verbeke and Kano, 2012; Madison et al., 2016). Some studies suggest that agency theory offers a rich frame of reference for the unique problems of family firms (Chrisman et al., 2004), but others believe that stewardship theory is an ideal theory for explaining governance in a family business context (Davie et al., 2010). Among these debates, researchers have made significant strides in applying and testing those theories and extending the field of family firm research (such as Schulze et al., 2001; Corbeta and Salvato, 2004; Villalonga and

Amit, 2006). Mostly, these authors have provided insights into seven clusters of family firm-level outcomes; namely: i) performance, ii) strategy, iii) social and economic impact, iv) governance, v) succession, vi) family business roles and vii) family dynamics (Yu et al., 2012). These seven categories have expanded the examinations of family firms' contexts. Yet, there is a lack of research regarding outcomes of family-centred noneconomic goals, both from the agency and stewardship theories' perspectives. Arguments have been made for both theories, but still leave an ambiguity about the governance mechanism that leads to strategic decision making processes in family firms located in Indonesia.

In adopting those theories, my thesis suggests that corporate governance may be dynamic; meaning, it implemented based on the actual behaviour of managers, rather than based only on behaviour assumptions the principal has of managers. Thus, this can advance theories by examining when and why the strategic decisions changed relative to each other, over time, across the owning family's generations. The rationale for the dynamic perspective is the notion that firms make a choice depending on the reference point of each firm's dominant principals (Berrone et al., 2012). Managers will make decisions in order to preserve the accumulated endowment in the firm. In the context of family firms, the emphasis on non-economic goals becomes important; a fact which is rarely understood by those observing from a non-family firm perspective.

The theoretical framework is divided into two sections. This chapter focuses on the first part of the literature review, which examines the characteristics of family firms. I consider agency theory and stewardship theory concurrently, moving away from their current dichotomous treatment, in order to view the agent-principals' preferences and the risk-taking in the decision making of family firms. This perspective may offer a finer-grained application than had previously been available and could possibly alter the predictions made about family firms. Lastly, a perspective informed by an Indonesian context can give an overview of the significant contribution of family firms on Indonesia's economy. The second part of this analysis, as presented in Chapter 3, specifically focuses on the capital structure related decisions in the context of Indonesia's family firms. In this current chapter (Chapter 2), the determinants of capital structure will be derived from non-financial reference points that are used in decision making processes in family firms.

The definition of family firms is diverse, thereby giving a degree of variation across studies and causing the comparison of results to be contested. This definition involves two aspects: a) family ties (blood ties) and b) family involvement in the business (ownership, management and governance positions). According to Villalonga and Amit (2006), a family firm is a firm whose founder or a member of the family by either blood or marriage, is an officer, a director or the owner of at least 5 percent of the firm's equity, individually or as a group. However, La Porta et al. (1999), Faccio and Lang (2002), Anderson and Reeb (2003a), Maury (2006) and Poutziouris et al. (2015) consider a founding family to be one that has a 10 percent fraction of the total ownership. Schmid (2013) on the other hand defines a family firm as one where the family owns at least 20 percent of the voting rights. Thus, although ownership concentration makes some general references to inform the definition of a family firm, the threshold varies from one definition to another.

Westhead et al. (1997) argued that when different definitions of family business are applied, the ownership threshold can differ from 15 percent to 81 percent, according to the definition used. The level of family holdings is considered to represent the degree an owning family can exercise family control, thereby ensuring the family firm's long term future. Control could vary across the ownership concentration and often differs across the generations even within one family business. Controlling shareholders that pursue their interests and objectives are likely to have significant consequences for the firms they invest in. The channel through which control-motivated family holders can defend their corporate control is by leverage. Thus, capital structure becomes such an important firm-related issue in that the family can influence corporate policy decisions to optimise their control over the firm. Leverage can allow the founding family to control more resources, either physical and/or human, without diluting the family's voting rights. Ellul (2009) found that family-controlled ownership increase leverage to maintain or enhance control over the firm's decision making process. However, leverage is not only the mechanism of control; it plays an important role when family firms consider preserving non-economic goals in the future. Ensuring the business stays in the family could motivate them to avoid risk due to a consequence of using more debt to maintain the sustainability of the family and the business as a whole.

As a whole system, a family business can be viewed as a hybrid combination between family and business. Astrachan and Shanker (2003) discuss the point that the integration

of the family and the business is the unique characteristic of family firms. This integration can be in the form of an interaction between family as a unit, family as a business entity, and involvement of family members in the business. The extent of family involvement and influence on the business is distinctive of a family business, where their involvement are connected as a family business system that include key elements as ownership, management, and government. All of these elements influence the firm's goals and objectives, strategies, as well as the family structure and dynamic. However, some critics of those key elements have argued that the ownership, management and governance components of family involvement are weak predictors of a family firm's concerns over succession (Chua et al., 1999). The collapse of 'the Surabaya Post' in 2014 may indicate the same situation, when family involvement fails to include succession as a mechanism for the renewal of family bonding with and to the next generation. Thus, this involvement overlooks the fact that maintaining a family firm's sustainability should involve the element of succession as a dimension of family-centred noneconomic goals.

Outcomes evaluated regarding family-centred noneconomic goals are referred to as socio-emotional wealth (SEW). Gomez-Mejia et al. (2010b), Berrone et al. (2010) and Gomez-Mejia et al. (2011) argue that SEW could be considered as one of the most typical features that define a family firm and make it different from non-family firms. Berrone et al. (2012) offered a description of the dimensions of SEW in order to explain the behaviours in the decision-making process: (1) family control and influence; (2) family members' identification with the firm; (3) binding social ties by excluding non-family members from key managerial and board positions; (4) family emotional attachment to firm; and (5) renewal of family bonds with the firm through dynastic succession. The priority of these dimensions is not a sequence; they can change over time depending on the stage of the life cycle of the family firm and the nature of family involvement (Le Breton-Miller and Miller, 2013). SEW can determine the strategic decisions of family firms that are most likely to preserve the family's socio-emotional wealth and enhance the firm's survival. The noneconomic goals use the endowment effect of a family firm (Chua et al., 2015; Shepherd and Zacharakis, 2000) which includes two aspects: a) the ownership and b) the sunk cost effect. Both of these issues occur when decision makers let their decisions be influenced by costs incurred at the very beginning of the time when the founder set up the business (sunk costs) and the length of time the founder has owned the company (ownership). Thus, my account considers that ownership (endowment) and sunk costs are

the basic control-related considerations of family firms, involving and influencing the strategic decision choices of family firms.

2.2. Family Firm Characteristics

2.2.1. Family Endowment

Socio-emotional wealth represents an imperative point of reference that family firms use to make major strategic choices and policy decisions. These non-financial goals capture the endowment effect of family ownership. Thaler (1980) defines the endowment effect as a pattern in which people often demand much more to give up the object than they would be willing to pay to acquire it. In this context, the object is a family owned business. In particular, the endowment effect could be applied to see how the differences for each stage of family life shape the decision making. Since the founder owns and controls the family business, they would value the business more regarding their ownership in the business. However, the next generation's perception of the value of the business is less likely to be in line with the founder's values. Kets de Vries (1993) found that 70 percent of family businesses fail to survive through the second generation and 90 percent through the third generation. The perception between descendants and founders can be terminally different because of the duration of ownership: the greater the years the more set and inflexible the views.

Issacharoff (1998) confirms that the endowment effect increases with the length of ownership duration. The founder who is handing over control of the family firm is likely to place greater value on the business compared to the next generation. Founders have already invested money, time and effort since the start of the business in order to obtain management control. A founder will not give up or lose control over the family firms that they treat as their 'baby', a new born business, and will therefore try to protect the firm from financial distress that potentially endangers their control over that business.

Thaler (2015) uses the analogy of Homer's Odysseus and the Sirens to express the notion of self-control, but I think that this tale is metaphorically about how a founder leads a company and prevents the firm from being wrecked. The Sirens were a female band feared by sailors because they could not resist the call of the Sirens' song calling them to

their doom. Any sailor who submitted to their calling by trying to steer his ship close to the rocks would end up with himself being shipwrecked. Odysseus had a conflict of interest: on the one hand, he wanted to hear the music, but on the other, he wanted to tell the story and stay alive. He decided on two strategies. Firstly, he asked all the crew to put wax in their ears to avoid the temptation of the Sirens' music, so they did not hear them. Secondly, he instructed his crew to bind him to the mast, which allowed him to enjoy the performance without risking the temptation to steer the ship towards the rocks.

The story illustrates two strategic decisions that are used by founders to maintain the sustainability of family firms through control mechanisms. For the descendants and family members (*the ships' crews*), the strategy is applied to remove the possibility of descendants performing actions that can put the company in danger, by monitoring their actions. As long as the founder is still involved in a business, descendants seem to shut down their own interests by following the founder's rule set as a family system. This strategy is applied to reduce conflict among the family members. For the founder, represented by Odysseus, he chose to limit his interest to prevent self-destruction, which Thaler (2015) defines as a commitment strategy: a strategy of the founder who selects the option of having a sustainable business and then protects it for the long run.

On the other hand, the endowment effect can generate ownership entrenchment. Chrisman et al. (2005) state that ownership entrenchment may have serious consequences for minority shareholders. More concentration of ownership would allow family members to serve their own interests rather than have the firm run properly. For example, rather than run business by professional, family firms create employment for other family members. Morck and Yeung (2003, 2004) found that the entrepreneurial spirit and talent of the founder are not necessarily inherited by subsequent generations of a controlling family. It seems that it is much easier for the succeeding generations to keep control via a *status quo* perspective rather than obtaining competitive advantages through innovation and entrepreneurship. Thus, the ownership entrenchment can facilitate problems such as an inability to make sound decisions due to the lack of a qualified family successor for the business (Nicholson, 2008). Meanwhile, Anderson and Reeb (2003b) argue that entrenched family ownership could be seen in a positive way, which can reduce problems associated with the separation of ownership and management. The ownership entrenchment can be an effective organisational mechanism to reduce agency problems. Despite these debates, it can be argued that ownership entrenchment may be different

across generations, depending on the need of family firms to professionalise their firms. The situation at the founder stage can be different from the descendant stages. Changing from family management of a business to non-family managers may lead to professionalising, but it is not the only way to reduce ownership entrenchment. To an extent, this contentious issue has to do with attitudes and behaviour. The different outcomes of ownership entrenchment and the impact of ownership may vary across the generations and can change over time within one family business.

2.2.2. Sunk Cost Effect

The endowment effect in family firms is related to the sunk cost effect (Shepherd and Zacharakis, 2000). The endowment effect occurs when decision makers allow their decisions to be influenced by costs incurred at an earlier time when they established the family firms, such as the time spent and efforts made at the very beginning. Zeelenberg and Dijk (1997) find evidence that people who have high levels of sunk costs in investment are more likely to choose safer options. The sunk costs that influence the assessment of an option can be either financial (capital), or behavioural (time and effort invested). Investment in those sunk costs is considered as the indicator of the pursuance of both financial and nonfinancial goals. This perception is informed by the availability of a choice between the option that can satisfy the family firm's goal and one that provides probability in which the family's goal may not be met.

Including sunk costs in decision making can be irrational. However, in family firms there appears to be an explanation to this behaviour, which is the family firm's aspiration level. Given the emphasis on loss aversion of the family business, the possibility of losing the business that they have owned and invested in, financially and emotionally, induces managers of a family firm to choose the decision based on preserving the endowments of the family firm.

2.2.3. Family Altruism

Another important characteristic of a family firm is altruism. Altruism can be seen as a moral value that motivates individuals to undertake actions that benefit others without

any expectation of external rewards (Batson, 1990), which is basically what parents do in family firms. This behaviour can be a utility function in which the welfare of an individual is linked positively to others' welfare. Altruism fosters loyalty and commitment to the family and its prosperity (Ward, 1997). However, conversely altruism can also create agency problems within family firms.

If the parent, as founder, is still involved in the company, altruism can create free riding and difficulty in enforcing a contract to alter the conduct of ineffective managers (Chrisman et al., 2004). Parents may be motivated to act unreasonably generously to their children, although that generosity may be counterproductive and cause the children to become spoilt free riders. This negative outcome may be avoided if parents implement a commitment strategy of disciplining their children and teaching them self-control such as in Homer's Sirens illustration above. However, in a situation when the family firm passes to the next generation, shares become widely dispersed and majority shareholders who contribute less and know little or nothing about the business can be disadvantaged by family members who run that business. This situation can happen when a family group of shareholders, who may or may not have a controlling interest, actually runs the business. Inactive shareholders may suspect the family management of taking the benefits and accessing their wealth. Moreover, emotional attachment to the business, identification with the business and altruism may be reduced when family firms pass to the next generation because of conflicts among family members. In the next generation it appears that family members may not be willing to bear more risk, thus strategic decisions may be changed.

The literature has proposed that altruism and executive entrenchment, combined with intentions to maintain family control, can influence agency relationships (Schulze et al., 2003; Chrisman et al., 2005). Agency mitigation may help parents to avoid making decisions that may ultimately harm their own welfare due to the problem of self-control. Agency problems arise when loss of self-control causes parents to violate the terms of agreement that they had made with their children. Thus, it can be argued that altruism depends on parents-children relationships. Altruism can cause descendants who are involved in a family firm to behave as agents or stewards. This relationship structure may result in different opportunistic or trusting behaviours.

2.2.4. Life Cycle Effects in Family Firms

The literature on corporate life cycles indicates that changes which occur in firms follow a pattern which can be characterised by stages of development involving organisational strategies, activities and structural parameters and includes i) the birth phase, ii) the growth phase, iii) the maturity phase, iv) the revival phase and v) the decline phase. (Adizes, 1979; Greiner, 1972; Quinn and Cameron, 1983).

According to Miller and Friesen (1984), in the birth phase firms are typically dominated by owner-managers and the power is highly centralised. Firms in the growth phase have multiple shareholders, are medium sized, somewhat centralised and have rapid growth. At the mature phase, the firm's size is getting larger, the ownership more dispersed, is getting older and experiences slower growth in profits. Firms in a renewal phase have a very large firm size, rapid growth, are competitive and highly dynamic. Lastly, in the decline stage the firm is beginning to stagnate and experience slow growth, risk aversion and the liquidation of subsidiaries. Thus, the different characteristics in every stage of development need the integration of decision making with the strategies and structure of the firms. Faff et al. (2016) that a firm's characteristics, growth opportunities and organisational structure may change gradually and firms behave differently in various life-cycle stages. There are several empirical works that can offer evidence of a further association between strategic decision-making and life cycle.

According to Gersick et al. (1997) family owned firms generally go through three broad phases: i) the controlling owner stage (in Indonesia examples being the Saratoga Group, the MNC Group and the Hamami Group), ii) the sibling partnership (such as the Gadjah Tunggal Group, the Ciputra Group and the Emtek Group) and iii) the cousin consortium (such as the Lippo Group, the Sampoerna Group, the Salim Group and the Sinar Mas Group). To account for these possibilities, the next section will discuss every stage across generations, starting with a) the family founder phase, then b) the descendant stages.

2.2.4.1. Family Founder Stage

At the very beginning of this phase, lack of access to the public markets usually means that financing sources are limited to internally generated funds. In addition, because a family's wealth is mostly tied up in the business, typically financial portfolios are

undiversified. During this phase, the problem of asymmetrical information leads to the difficulty in getting capital from creditors. Although several group of family firms in Indonesia own banks, there is a government regulation to limit loans that allocated to firms in one group company. Thus, family firms are still need to have sufficient asset tangibility as collateral. However, undiversified investment signals to the creditors that family firms are mainly concerned with long term survival and that they prefer to pass the firm to their descendants (Ang, 1991) and a focus on creating SEW. Founders are likely to be especially concerned with maintaining the sustainability of the family business.

At this stage, the founder who acts as a manager tends to avoid damaging the family's reputation and will do his or her upmost to prevent losing everything in case of an inability of capacity to repay debts. Anderson et al. (2003) find that family reputation is more important than just collateral tangible assets to create long lasting economic consequences with external parties such as bondholders or creditors. The long investment horizon creates a good relationship of trust between the company and debt providers (Schmid, 2013). As the duration of ownership increases, the founder places a higher value on the firm, so the level of loss aversion increases. Strategic decisions will be based on, and significantly influenced by, the fear of losing the business. Since family business owners mostly invest their own wealth in the firm, they tend to be more risk averse than non-family firms. Their investment in family business can be driven by the motivation to pass the firm to the next generation. Managers, both founders and hired CEOs avoid any risk to their undiversified personal and family capital. The issue of lower diversification of human capital and reputation of family is a function of their investment for the long run. As a result, a founder-manager will prefer strategic decisions that ensure the survival of the business, rather than any other type of decision. The business protection motives makes control not the only motivation to reduce leverage, as maintaining the sustainability of family business over the long term also plays a role. Therefore, to some extent, I agree with the view that family firms do indeed understand the need to maintain control over the business, but it is also important that they may find it necessary to avoid excessive risk of one single asset, which is the firm, especially in particular institutional environments such as bank-based financial system or market-based system. In bank-based systems such as Indonesia, Germany, Japan and several European countries, banks play a leading role in providing capital. By contrast, in market-based financial systems such as USA and UK, capital market is a centre stage of funding sources. For example,

Schmid (2013) shows the evidence that those family firms in banking-based systems use less debt to optimise their control over the firm and therefore avoid liquidation of the firm. Since Indonesia has adopted a bank-based system, this evidence may support the similarity condition with other countries that adopt the same system, suggesting family firms have incentives to reduce risk at any level.

Family control over strategic decisions can be exercised directly by members of the family running the firm or indirectly by appointing a top management team. Based on Dyer (1988), 80 percent of a family firm's first generation had a paternalistic management culture and style. Two thirds of these firms adopted a professional style. A paternalistic style is characterised by a hierarchical relationship, top management control of power and authority, close supervision and a distrust of outsiders, meanwhile a professional management style involves the inclusion, the predominance of non-family managers in the firm (Sonfield and Lussier, 2008). However, professional management does not always occur when a non-family member is chosen to lead the firm. The founder-manager can be a professional manager, since they have capabilities and skills to manage the firm once it is established; alternatively non-family managers can follow a paternalistic style if they are in a stewardship role for a family firm. Thus, professionalism is about attitudes and behaviour to enhance the performance of a family firm. Founder-managers can be powerful in decision making because they have better access to strategic decisions and should be able to exercise their influence on the firm's decisions more effectively than family firms with founder who does not act as manager. Founder-managers have a greater opportunity to pursue the family's interests (Gomez-Mejia et al., 2003) and may attempt to safeguard the family's interests (Tam and Tan, 2007). Thus, it is common to see family owners involved in multiple roles in order to attempt to achieve the goal of preserving SEW. In this regards, family firms are more likely to perpetuate control, directly or indirectly, to influence the firm's decision making.

Excessive family involvement may lead to over-centralised decision-making and bring about a decline of the family business. Therefore, to reduce an over-emphasis on maintaining binding social ties within the firm, appointing non-family members for board positions is likely to have a positive effect on family firms' performances. According to Berrone et al., 2012, kin ties among members of extended families are likely to threaten social bonds among family members, such as an unwillingness to consider non-family members for board positions or as professional managers. Emotional attachments and

affective kinship bonds are strongest during the founder's stage of the firm's life. On the family's side, kinship bonds are beneficial, but this intensity can affect the SEW component of a firm's performance. Thus, to reduce too much family involvement across the business at this stage, a founder's lack of resources can be enhanced by board members who supply financial, technical or legal support and expertise. Some input could be from family members but some may come from outside through independent board members. Such non-family members can help a company to improve its relationships with organisations outside the family firms, such as suppliers and creditors (banks). In addition, those members may have experience in running business and have knowledge to help young firms (Wilson et al., 2013).

Founders may desire a robust business to pass on to later generations, whereas later generations often wish to benefit from the wealth and status of their family firms (Lubatkin et al., 2005; Le Breton-Miller and Miller, 2013). The firm's survival is a motivation that means family members are willing to serve the family business, in which conflict rarely happens (Le Breton-Miller and Miller, 2013; Chua et al., 1999). Further, Schulze et al. (2003) and Gomez-Mejia et al. (2007) argue that the SEW is strong when the first generation (founder) not only keeps the ownership but also decision management and/or decision control, As a result, with the objective of securing transgenerational control, descendants will be provided with jobs and involved in the family business as the CEO or the chair or both positions, as CEO and chair, for the present and the future. Preserving SEW may culminate during the first generation. As a consequence, founders who have experienced high sunk costs may choose the safe option in order to avoid excessive risks and look for increased involvement in decision making in order to preserve SEW.

2.2.4.2. Founder Descendant Stages

In the post-founder stage, the principal shareholders can be siblings or cousins. A sibling partnership typically has relatively equal proportions of ownership held by members of a single generation. Siblings tend to be more prudent when making investments, in order to preserve their wealth. Wiseman and Gomez-Mejia (1998) indicate that the post-founder phase tends to be more conservative when making investments due to that generation's sense of entitlement. They practice loss aversion to avoid any events that can threaten the value of their wealth inheritance. The business has generally grown in size and advanced

over the years, as its resources such as reputation, expertise and capital have increased from the foundation stage. SEW considers that the emotional attachment remains high in this phase of sibling partnership.

Typically in a sibling partnership each partner has equal power, and is therefore lacking authority and influence over their siblings. Moreover, levels of altruism among siblings reduce, as compared to when the parents were still involved in the company (Stark and Falk, 1998). The children become more concerned about their own wealth. Thus, when ownership is dispersed equally, the siblings will be reluctant to bear risk that might cause loss to their SEW. One implication of loss aversion is that individuals have a strong tendency to preserve the *status quo* because the disadvantage of taking on a new investment that will bear a risk looms larger than the advantage from that potential investment (Kahneman et al., 1991). A *status quo* and stagnation situation (Miller et al., 2008) may occur because no one would like to take more risks due to the priority of maintaining the business. Family remains in control as managers and board members. McConaughy and Phillips (1999) argue that descendant-controlled firms are more professionally run than founder-controlled firms. The former class of company tends to use more professional forms of management but the conflict inside family firms is potentially greater since more branch family members involved in the business.

However, ownership is further fractionalised as it is passed to the third and later generations (e.g., cousin consortium). Businesses at this stage are older, larger and more complex and the strengths of family social bonds, attachments to the business and identification with the business may begin to decline (Le Breton-Miller and Miller, 2013). The declining of attachment is because members from different branches of the family may not have a strong social bond with the family involved and could create a conflict (Schulze et. al., 2003). Some cousins involved as owners but not managers possibly reduce their attachment levels and treat the firms merely as a source of financial support (Miller et al., 2013). The dispersion of ownership during post-founder stage creates two conditions: (1) most non-family shareholders continue to favour consumption through high dividend payments to protect themselves from family members' inclination to expropriate wealth from family shareholders; (2) some of the family members will continue to increase their holding shares due to their concern about preserving benefits from their cash flows rights. Therefore, cousin consortiums' CEOs are willing to pursue the SEW and anticipate the dispersion of ownership as they are more likely to bear the

risk of losing control, as they could enjoy the growth in earnings but not in valuation. Typically, a cousin consortium lacks influence because the members are from different branches of cousins. Coalition among family members by family presence as CEO and chair or the presence of family in a board position could decrease any family tensions and align the interests among family members (Le Breton-Miller and Miller, 2013). Healthy family board members will reduce the potential of conflict. A family board will favour growth, as they are more concerned with the future value of the assets rather than consuming them. However, in the absence of the ability to issue equity, they are more likely to use debt in the capital structure, unless at this stage they want to release their shareholding and change to a new business.

Family social bonds and attachment to the business may decline in this stage. Many family members from different branches sometimes see the business mainly as a means of financial support (Miller et al., 2013) and this perception can increase conflict. When a company has a problem associated with succession or inefficiencies, buyouts of family firms become a reasonable option. Family firms constitute potential targets for incumbent managers interested in acquiring a controlling share of the company through a management buyout (Scholes et al., 2009). As the generations go by, the number of shareholders increases, and the ties to each other and the company could be loosened (Marchisio and Ravasi, 2000). For example 'PT. HM Sampoerna Tbk Indonesia' sold the company through a management buyout to 'Phillip Morris International' after the third generation. The reason for the sale was because the business (cigarettes) was no longer in line with the interests of the third generation (agriculture). Thus, the outcome from a management buyout could be used to fund a new investment or project that is more likely in the favoured by the founder's successors.

Given the potential for conflict, some qualified board members with strong records of business success and experience in serving on other boards might be recruited (Le Berton-Miller and Miller, 2013). Maintaining binding ties within the firm by excluding non-family members from key positions might have a negative effect on family performance. Thus, it is possible to include an independent board member from outside the family membership cohort. The independent board member may be able to help a family firm to enhance the sustainability of the company and resolve conflicts, since the potential for conflict in a cousin consortium may be very high.

Overall, the family firm's stage is becoming important in transferring the business to the next generation. Family firms are concerned with transferring not only the physical assets but also the intangible assets of their firms. Risk reduction motivation may be more dominant in the foundation stage, whereas the descendant stages tend to be more driven by the control motivations to preserve SEW and the sustainability of the business. Family firms' strategic decision choices are driven by family involvement, which is correlated with the family firm's stage of business. However, at some point, family firms that typically are concentrated shareholders face a high risks exposure to single assets which is the business itself. As a consequence, family business governance and behaviour may vary across the generations. Examining the governance and behaviour changes relative to each other over time, there appears to be comprehensive theories to explain the firms' decision making.

2.3. Theory of the Family Firm

2.3.1. Agency Theory and Stewardship Theory: A Static Perspective

2.3.1.1. Agent Behaviour and Agency Governance

Agency problems are not expected in family firms because of their unified ownership and management, resulting in the alignment of interests between owners and managers; a situation with little need of monitoring (Madison et al., 2015; Chrisman et al., 2004; Jensen and Meckling, 1976). However, in large organisations which are listed publicly and which have a dispersed shareholders, there is a separation between managers and owners. As such, owners must necessarily delegate some authority such as financing decision to 'the agent'. In family firms, agency problems appear related to the conflict of having outside fund providers; in particular banks. Family shareholders are concerned about the loss of control associated with external financing (Schmid, 2013). Meanwhile, the decision regarding the firm's mixture of outside debt and equity financing will be delegated to corporate managers. Agency theory is a prominent perspective from which to examine issues related to interests, motivation and compliance that altogether direct the actual behaviour of agents and governs managers to make a decision (Donaldson, 1990).

a. Opportunism in the Family Firms

As originally observed by Harris and Raviv (1991), capital structure decisions can be driven by the desire to reduce conflicts of interest between principals and managers. Principals will enact a governance mechanism to monitor their managers' behaviour. As a system of great complexity, written and unwritten contracts among individuals who are involved in a firm are needed (Fama and Jensen, 1983). The contract is a crucial concept in agency theory that specifies the nature of residual claims. Owners are concerned primarily about diversifying away from specific risks, while managers have their own interests. Owners invest their wealth in companies and design a system in ways that maximise their utility, while managers accept their responsibilities because they expect the possibility of gaining more utility through this opportunity. When the utility of self-serving functions of agents and of principals align, agency problems are less likely; but if they do not, then conflicts will arise. There are two main conflict-related issues.

Firstly, when family firms hire non-family managers, the agency costs occur when there is a difference between inflows of resources and promised payments to managers. Managers under the agency theory will choose opportunistic self-interested behaviour in decision making. As a result, managers may seek to consume excessive benefits at the shareholders' expense, or they may make decisions that reduce their risk rather than aligning their conduct with family shareholders' preferences.

Secondly, if the return on investment funded by debt gives a high yield (the cost of debt is less than the yield), creditors will take the view that shareholders possibly have more gains than creditors. However, if the investment fails, the creditors suffer the losses since shareholders have limited liability for debts. In other words, shareholders are only responsible for a firm's debts up to the value of their shares. The shareholders appear likely to gain from investments in risky projects, even if the value of the investment is decreasing. The loss of value of an investment can be compensated for through the gain from the cost of the debt. For example, taking on a riskier project could provide a greater benefit to shareholders, while taking on more risk means higher chances that the firm will be in default to its creditors. Meanwhile, creditors require some monitoring mechanism to protect their investments. This requirement may reduce the inefficiency of using debt. Monitoring cost will be reflected in the cost of debt, which could be a higher cost of debt or a lower cost of debt; the format will depend on the covenant and the risk that they

should cover. Therefore, agency costs of debt work as a disincentive to the issuance of debt as an instrument of monitoring managerial and opportunistic behaviour. Schmid (2013) finds that if the level of credit monitoring is high, family firms tend to have a low level of leverage. Creditors possibly exert the influence on the firm that they finance due to the discipline of the manager of the family firm and at the same time reduce the internal monitoring mechanism.

Fundamentally, there is nothing inherently wrong with a family member becoming a manager. However, hiring family members as managers can create asymmetric altruism which is not reciprocal, exploitable, and can cause harm to family firms. This scenario can increase agency problems when family firms hire family members to be managers, instead of professional non-family managers, regardless of whether they are qualified or competent for the position to be filled. Schulze et al. (2001) and Schulze et al. (2003) show that there is a tendency toward altruism which can manifest itself as a problem of self-control, thereby creating agency costs due to free rider problems. Moreover, Chua et al. (2009) and Lubatkin et al. (2007) demonstrate that the agency costs of asymmetric altruism are related to the governance mechanism used for monitoring and assessing family managers' behaviour. The costs result from negatively biased parental perceptions of a child's performance, competency and capability.

Family manager capabilities may be debatable when connected with an endowment effect as a consequence of their contributions, such as being a founder or owner of the firm. Founder-managers may thoroughly understand the business since they set it up in the first place. The longer the duration of the founder-manager's involvement in the business, the more skilful they are in managing the business. However, descendant-managers may have limited knowledge about their family's business. Hodgson (1993) states that the limited capability of the human mind to deal with all accessible information creates bounded rationality in managers, which in turn limits the capability of those managers. In making a decision, essentially the act is not about the quantity of information available, but the limited capability of the managers involved. In this situation, placement incompetent and unskilled managers could happen, which is a risk associated with hiring family members without capabilities (Lubatkin et al., 2005). However, family firm owners may have a tendency to refrain from monitoring family members, especially when involving the parent-child relationship. This situation can be a dilemma for parents in which their actions can give beneficiaries incentives to make decisions that may harm their own

welfare. Accordingly, hiring the most competent and skilled managers to run the business is an important act according to agency theory because asymmetric altruism can cause harm to family firms (Blumentritt et al., 2007).

On the other hand, when family firms hire a professional non-family manager, the specific performance criteria may be set-up to ensure that agents will act on behalf of their principals' interests. The agency relationship accommodates the situation under transactional conditions, when the owners can use their knowledge of, and the information about, the agents during the exchange to make sure that the agents will work on behalf of the owners' best interests. It is reasonable to conclude that family firms tend to be embedded in the family business and the family's self-serving interests (Le Breton-Miller, 2009). However, given the problem of asymmetrical information, it may be impossible for principals to specify performance criteria in advance of a manager's appointment and to contract the managers to serve as optimally performing agents.

b. Family Entrenchment

Cleassens et al. (2000) find that in Indonesian listed companies 84 percent of their management personnel comes from the controlling families, which is high when compared to other Asian countries such as South Korea, Taiwan or Singapore. Listed family firms are characterised by a high degree of family ownership in general and are predominantly family controlled. These finding that owner-managers are predominant in Indonesian family firms; a model which is common in family-run publicly traded firms in most countries around the world. However, unlike countries with a high level of creditor monitoring, Indonesia is characterised by low legal enforcement (Aburacra et al., 2017). Thus, the pressures from internal and external governance mechanisms are considerably lower than those exerted in other similar countries.

Family shareholders may commit to preserving their wealth by selecting themselves for a position of management. Owner-managers may act for the controlling family, but not for shareholders in general. In this situation, owner-managers can be more entrenched and less subject to discipline. They have discretion over their firms' capital structure choices. In such instances, owner-managers play an important role in reducing a firm's risk to protect their under-diversified human capital (Fama, 1980). However,

entrenchment can create agency costs in family firms, stemming from both management entrenchment and ownership entrenchment.

In the context of agency theory, entrenchment in family firms is a combination of founder as owner and founder as manager, since the owner-manager position is common in family firms. Morck et al. (1988) and Morck & Young (2003, 2004) show that family entrenchment decreases the firm's value and can create disincentives for the family's entrepreneurial spirit. They argue this because the entrepreneurial spirit and skill of the founder may not be inherited by the next generation of the founder's descendants. Thus, entrenchment is a way for the owner-manager to maintain family control over the business. However, ownership entrenchment is likely to be positively influenced by a concentration of ownership. Ruan et al., (2011) found that entrenchment depends on the level of ownership. This can be a dynamic, non-linear relationship between the agency-related benefits from the use of control mechanisms; those of debt and the concentration of family ownership.

In the case of family management entrenchment, Tosi et al. (1997) argue that the act of monitoring is forced on family managers as a disciplining mechanism. In particular, agents may be of the view that the use of funds are under their domain of management decision-making. However, managers may fail to experience discipline from the full range of corporate governance and control mechanisms. Thus, a way of improving agents' discipline is by asking creditors to provide loans to a family firm. As a consequence, creditors closely control the use of funds; a form of external monitoring. If a manager fails to perform according to the principal's expectations, the non-family manager can and perhaps should be replaced, because if a family manager fails the family firm may lose its reputation.

Overall, the focus on individual motivation would seem to indicate that agency theory prescribes a governance mechanism to curb opportunistic behaviour in decision making. Careful monitoring subsequently reduces agency conflict by alignment or by compensation (Donaldson, 1990). To the degree managers feel their future fortunes are bound to their corporate employers through an expectation of the future, they may perceive their interests to be aligned with the owners. Agency theory, therefore, is critical of governance structures that lack such institutional features as the situation when two roles have the same incumbent; a situation that frequently appears in family firms. In a

family firm's situation, the destructive agent behaviours of opportunism and asymmetric altruism are found with family managers (Madison, et al., 2016). Thus, the governance of family firms to curb detrimental agent behaviour may change, depending on the relationship between principals and managers informed by goal alignment.

2.3.1.2. Steward Behaviour and Stewardship Governance

Unlike agency theory, stewardship theory maintains that there is no inherent or general problem regarding a manager's motivation (Donaldson and Davis, 1991). The synergy of managers and owners will enhance performance effectiveness and produce a superior return to shareholders, rather than create a separation between them. Accordingly, the motivation of the steward is other-serving, because the steward seeks to attain the objectives of the organisation: to protect and maximise shareholders' wealth through the firm's performance (Eddleston and Kellermanns, 2007). Thus, it is generally assumed under this theory that managers: i) have a commitment (Davis et al., 2010); ii) are pro-organisation (Le Breton-Miller and Miller, 2009, 2011; Eddleston and Kellermans, 2007), iii) are reciprocal (Pearson and Marler, 2010; David et al., 1997; Donaldson and David, 1991) and iv) have strategic flexibility (Zahra, 2008). It is also assumed that corporate governance will facilitate family firms' goal and provide managers to authorise and empower their roles (Donaldson and Davis, 1991). In addition, the conflict of interest between agent and owners is potentially low. In other words, using debt as an external control mechanism to alleviate agency conflicts is not necessarily significant relative to firms with agency corporate governance. Family firms tend to have a longer-term commitment to their business, place greater value on non-economic goals (Gomez-Mejia et al., 2007), and are more embedded in the business system (Le Bretton-Miller and Miller, 2009). It seems reasonable to suppose there is a continuous alignment between managers and principals based on these assumptions; opportunism and management entrenchment might be less prevalent in stewardship governance and steward-managers.

Stewardship theory clearly postulates that managers do not always pursue their own benefits but rather act as stewards of the business, suggesting less self-opportunistic orientation. Previous studies considered that stewardship theory is applicable to analysing family businesses, due to a) its identification with the firm, b) its personal connection to the family members and c) facilitation of social satisfaction through involvement of

family members (Davis et al., 2010; Pearson and Marler, 2010; Corbetta and Salvato, 2004). Intrinsic motivation and identification with the family business are thought to facilitate stewardship behaviour. Several previous studies support the idea that a manager's identification with the family business is positively associated with profitability and business survival (Valejo, 2009). In family firms such a scenario contributes to a fostering of trust and commitment among managers (Davis et al., 2010). Both managers and owners may place the same weight on their own and other parties' interests in their efforts to ensure the survivability of the family business.

The survivability of the family business could be of key importance to transferring the practical knowledge of the founder to the next generation or organisation collectively. Thus, the leadership of the founder appears to have a significant role to play in stewardship behaviour. Pearson and Marler (2010) state that the leader can motivate and facilitate reciprocal stewardship behaviour from the employees. The motivation of parents to care for their children and encouragement to consider one another suggests altruistic tendencies can be viewed as other-serving and symmetrical. This can be reciprocal for both owner and manager; family and non-family manager.

Family firms have competitive advantages for those business opportunities in the sense of minimal bureaucratic processes. Related to this advantage, altruism leads to family members sacrificing short term benefits for long term goals, in particular the family firm's survival. Thus, in such a family firm decision making appears to be more flexible as compare to family firms with agency corporate governance (Carney, 2005; Zahra et al., 2008) due to the preservation of socio-emotional wealth of family firms; as such there should be little need to monitor family managers' performances. With this concept, steward behaviour is a reflection of organisational commitment which aligns with the business (Davis et al., 2010). Managers with a high level of commitment may view the organisation as an extension of themselves, which means they will manifest a less self-opportunistic orientation.

As mentioned previously, stewardship theory suggests that there are situational factors that adopt stewardship mechanisms, such as the presence of an involvement-oriented and collectivist work environment (Eddleston and Kellermanns, 2007; Le Breton-Miller and Miller, 2009; Zahra et al., 2008). The involvement-oriented environment may foster the power and status of the family because it provides an opportunity for managers to

participate in decision making that in turn could strengthen their commitment to their employers (Dyer, 1988). Zahra et al., (2008); Madison et al. (2017) and Miller and Le Breton-Miller (2006) argue that family involvement has the potential to create a stewardship governance environment. In this environment information will be exchanged symmetrically and the interactions between owners and managers empower an effective stewardship behaviour. This situation can be a motivation for managers to perform well, since they view the firm's board is there to support rather than monitor (Blumentritt et al., 2007). However, a collectivist work environment can increase free-rider problems resulting from insufficient monitoring, when family members individually assume that individual contributions are less recognised than outcomes from working collectively. The presence of an involvement-oriented and collectivist environment may not eliminate the implementation of monitoring mechanisms because a collectivist structure can compel norms that mitigate any undesirable behaviour of managers. But this mechanism can also reduce entrenchment in family firms and foster trust and engagement between managers and owners. Family managers and non-family managers act voluntarily, based on an intrinsic desire to serve the firm and will therefore naturally align with the owner's interests (Corbetta and Salvato, 2004; Zahra et al., 2008). Thus, governance mechanisms are in place to ensure the steward's behaviour facilitates the continued alignment of interest between manager and owner.

There are two situation in which managers may choose to protect their own self-interests. One is when the continuation of the organisation and employment of managers in the company is threatened by the possibility of a takeover (Donaldson and Davis, 1991). The other is when a family firm undergoes restructuring it moves into a new stage in the life cycle. In this situation, the governance mechanisms that empower an effective stewardship behaviour are prescribed to facilitate the continued alignment of interests, thereby resulting in pro-organisational behaviour, and would possibly change the strategic decisions of family firms.

In elaborating those theories, I suggest that implication of stewardship theory is similar to agency theory; it is merely a rational behaviour of managers. It might be that strategic decision-making is a device to maximise organisational performance and shareholder returns as long as the fundamental coalition between managers and owners is intact. Thus, it seems reasonable to suppose that there is an alternative applicable approach, rather than adopting agency theory and stewardship theory in a static perspective for the long-term

relationship, especially in the application of both theories to family firms. This alternative is there not because the choice to be an agent or a steward is based on rational knowledge, but it is about the best attitude for making strategic decisions.

Both agency and stewardship theories suggest that goal alignment is a strategy to reduce conflict by control mechanisms and the involvement of agents in family firms. If goal alignment is high between owner and manager, a stewardship environment will prevail and monitoring is less important. But, when the goals diverge, the role of the board of directors and independent board directors become most important to reduce agency conflicts (Pieper et al., 2008).

Thus, in my opinion resulting outcomes may be considered to address the rationale for applying agency and stewardship theories in a way not originally theorised but considering the reality that both types of governance: agency and stewardship corporate governance may coexist. The desire to preserve these goals is a key feature of family firms (Berrone et al., 2012; Chrisman and Kellermanns, 2012; Gomez-Mejia et al., 2007). Family-centred noneconomic goals suggest that non-financial reference points are used in decision making. For example, the utility of individual preference points that are derived from the endowment effect may differ between individual family members, such as the founder and descendants. Thus, the pursuit of non-economic goals can generate agency conflicts among family members because of misaligned interests between them. On the other hand, family involvement in running the business is to act in accordance with stewardship assumptions; individual level preferences might be different with firm-level preferences and behaviour.

Rational behaviour is people trying to do what they perceive as best for them (Hey, 1993). The complete list of possible outcomes that might be experienced as a result of decision making can be drawn up by the individual. The individual can rank the outcomes in order of desirability, or a less demanding option is that the individual can identify the best and the worst outcomes. Managers may not be able to gather and process all the information for reaching global maximisation decisions, but they can make a 'rational' decision within a small set of possibilities. Consequently, it is suggested by Simon (1972) that the value of the firm is not based on maximising but '*satisficing'*. The term 'satisficing' means that the preferences and trust conform in a relationship between owner and managers. Thus, the implication for family firms' strategic decision making is not about pursuing

maximisation of shareholder's wealth financially; the most important consideration is the sustainability of the firm in the long-term: a non-economic goals. Non-economic goals are the key to explaining how behaviourally manager make strategic decisions in family firms. Table 2.1 summarises these basic tenets of agency and stewardship theories as applied in family firms.

Table 2.1. Summary of Agency and Stewardship Theories

	Agency Theory	Stewardship Theory
Foundational study	Jensen and Meckling (1976)	Davis et al. (1997)
Assumption	Economic model of man	Humanistic model of man
Governance	Based on the principal-agent relationship. The agency governance mechanisms are there to reduce control and monitoring.	Based on the principal-steward relationship. The governance mechanism is by participation and involvement.
Behaviour	Opportunistic: Individual	Pro-organization: Collective
Firm-level outcomes	Minimising agency costs	Minimising self-opportunistic behaviour
Strategic decision making	Entrenched family ownership	Involvement-oriented, Strategic flexibility

2.3.2. Agency Theory and Stewardship Theory: an Actual Approach

Agency theory and stewardship theory have been used to describe the manager's actual behaviour as a result of the governance structure of the firm in which they are working. Both theories may provide insights into the decision process. However, the literature fails to address the decision-making process (Madison et al., 2016; Michiels and Molly, 2017; Motylska-Kuzma, 2017), especially as related to non-financial reference points that are used in family firms' decision-making processes (Schulze et al., 2015). In addition, the literature's focus fails to move beyond the dichotomous treatment of agency and stewardship theories; for example, the differences between individual reference points that can potentially generate agency conflicts among family members or the individuals' preference levels that might be different from firm-level preferences. Thus, governance

mechanisms may be implemented based on the actual behaviour of manager rather than based only on the behavioural assumptions the principal has of the manager.

In reality managers' behaviour will be based on protecting the family interests, actions which are not always economic; also it is necessary to note that managers' behaviour can change over time. Moreover, unlike stewardship theory that follows the naive assumption that managers or principals do not pursue selfish objectives. In the case of family firms their family members would seem to indicate that they are not self-sacrificial, nor do they ignore financial issues (Berrone et al., 2010). To some extent this view supports the claim made implicitly by Miller and Le Breton Miller (2014) and Schulze and Kellermanns (2015) that 'the pursuit of non-economic goals translates into suboptimal economic achievement'. Economic and non-economic goals do not negate each other, but rather than inversely related. For example the access to capital provided by family reputation (Beatty and Ritter, 1986), but when access to capital is more of a problem (e.g. increasing volatility of earnings), capital may become an issue for family firms. Thus, financial goals are not a trade-off but a priority when they are consistent with the enhancement of non-economic goals.

In addition, it can be possible that the degree to which managers are tied to either the family or the business will shape their priorities in decision making (Le Breton-Miller and Miller, 2009). For example, if managers are more embedded in the family system, an agency environment is more likely to exist because of the hierarchical nature of the family and the family's self-serving interests. It is reasonable to suggest that those managers tend to prefer a control mechanism as a monitoring device. But, if the managers are more embedded in a business system, a stewardship environment is more likely because the family is willing to put the interest of the business first; involvement and avoiding excessive business risks become priorities. In other words the dynamic of when and why governance and behaviours change, relative to each other over time, is a matter of the examination of times within family firms that only become visible over generations.

In some cases, the next generation of family firms may interpret SEW differently. In the case of Indonesia family firms such as *PT. HM Sampoerna Tbk*, established in 1913, in March 2005, 40 percent of the family ownership was sold to Phillip Morris International after its third generation managed this company. The selling price was the highest price in the history of the Indonesia Stock Exchange, which is IDR 10,600 a share, realising as

much as IDR 18.6 trillion or equivalent to US$ 2 billion at that time. This example demonstrates that family intentions for transgenerational control increase; as a result family owners will demand a higher price for the firm to non-family investors. It seems the owners had already calculated the future benefits of control of only a part of their socio-emotional endowment. Therefore, capital structure decisions with increasing equity for non-family shareholders can form one option, but only if family owners are compensated for the loss of SEW, so enabling them to invest in another business based on the preferences of the successors. To this extent, in my opinion, it appears likely that SEW is the goal for family firms, as the origin of the SEW approach is preserving and maintaining sustainability of both the business and the family.

Beyond explicit strategic goals in terms of family control and SEW preservation, how individual-level preference is consistent with firm-level preference depends on: a) the utility derived from an SEW endowment or b) the family which is embedded between the family system and the business system (Goel et al., 2012). Leadership embeddedness is examined from both agency and stewardship perspectives. Le Berton-Miller and Miller (2009) define embeddedness as the relationship between the actor's economic behaviour and the social context in which that behaviour occurs. If the family is more embedded in a family system, the agency environment exists to a greater degree in that family firm. However, if the family is more embedded in the business system as stewardship theory believes (Le Breton-Miller and Miller, 2009), the family will put the interests of preserving SEW as 'the first orders of business. Thus, behaviour can be shaped by how the firm is be governed by family firms.

In summary, I propose that capital structure decisions could be a mechanism for family firms to achieve the following strategic family objectives such as preserving SEW and related strategic behaviour of capital structure, thus preserving SEW (Berrone et al., 2010; Berrone et al., 2012; Naldi et al., 2016). From this point of view, I will break down these dimensions into more operational measurements to provide what Miller and Le-Berton Miller (2014) and Chua et al., (2015) recommend; SEW needs to be sharper in its characterisations, especially in the context of capital structure decisions. In different stages of the family business, behaviour may change regarding the various reference points. For example, if individual reference points that are derived from endowment effects (ownership) differ between individual family members (e.g. founder and descendants), the pursuit of non-economic goals can generate agency conflicts among

owners, family and non-family managers. This dissonance can result in a misalignment of interests among those involved in the firm. On the other hand, if all family members are involved in the business and act in accordance with stewardship assumptions, the individual-level preferences of the manager might be different from the firm-level business preferences. Figure 2.1 presents the framework illustrating the core constructs and relationships offered by the agency and stewardship theories when applied within family firm.

Figure 2.1.
Framework of a Dynamic Perspective of Agency and Stewardship Theories within Family Firms

	Agency Theory	**Stewardship Theory**
Governance	Monitoring and control	Involvement
Behaviour	Opportunistic: individual	Pro-organization: collective
Embeddedness	Family system	Business system
Firm-level outcome **- Economic goals (static way)**	Minimizing agency costs	Minimizing self-opportunistic behaviour
- Non-economic goals (dynamic way)	Socio-emotional Wealth (SEW)	

Tendencies of agent behaviour and agency governance	**Tendencies of steward behaviour and stewardship governance**
1. Family firms tend to monitor and control managers. Success stems from hiring the most competent and skilful managers (Blumentritt et al., 2007).	1. Family firms tend to motivate and facilitate reciprocity to managers (Pearson and Marler, 2010); managers have power in influencing the objectives of family firms. Thus, interpersonal relationships are associated with stewardship, including stability, interaction and shared social networks (Le Breton-Miller et al., 2011)
2. Family firms tend to focus on financial objectives (Westhead and Howorth, 2006), thus control is implemented.	2. Family firms tend to place greater value on noneconomic goals (socio-emotional wealth) due to sustainability (Gomez-Mejia et al., 2007; Le Breton-Miller, 2009).
3. Family firms tend to be embedded in the family system in order to reduce family conflicts (Le Breton-Miller, 2009).	3. Family firms tend to have a long-term commitment to their firms and are embedded in the business system (Le Breton-Miller, 2009)

2.4. The Indonesian Context

2.4.1. Background Facts

Indonesia's economy is one of the world's fastest growing 2017, it grew by 5.2 percent. By comparison, the economic growth of South Korea was about 3.3 percent and Brazil about 2.2 percent. However, this growth is less than China at 9 percent and India with a rate of 7.4 percent. Indonesia's GDP in 2017 was $1.016 trillion, for a population of 262 million. In the ASEAN group, Indonesia is the largest economy by far. It is also one of the most rapidly growing ASEAN countries (World Bank, 2017). The manufacture of food and beverages, business services and infrastructure and the communication sectors play a key role in strengthening Indonesia's economic position (Bank of Indonesia, 2017). Table 2.2 provides a summary of the report of Indonesia's economy sourced from the Indonesian Central Bank (Bank of Indonesia) in 2017.

Table 2.2. Overview of Indonesia

Population (million)	262
Nominal GDP (trillion USD)	1.016
GDP/capita (USD)	3,876
Economic growth (%)	5.07
Investment growth (%)	6.2
Consumption growth (%)	4.9
Manufacturing growth (%)	4.27
Financial Market	
Jakarta Composite Index (IHSG)	6,356
Market capitalization (trillion IDR)	5.808,51
Banking	
Total credit growth (%/year)	8.2
Lending rate (%, average/year)	6.5
Private external debt growth (%)	6.1
Long-term debt (% of total loan)	72.9
Short-term debt (% of total loan)	27.1
Credit growth	
Working capital (%)	10.7
Investment (%)	10.5
Credit interest rate	
Working capital (%)	7
Investment (%)	6.9

Source: Bank Indonesia, Annual Economic Report on Indonesia, 2017

As can be seen from Table 2.2, private external debt grew 6.1 percent in 2017 and was dominated by long-term debt, suggesting increasing investment growth and open jobs for of new employees. More than 95 percent of corporations in the private sector are owned by families, highlighting that corporations are a motor of the economy and therefore they need to strengthen their confidence and ability in finding financial sources to support their endeavours.

According to the Central Bank of Indonesia's 2017 annual report, the sources of funding of Indonesia companies were as follows: i) 46 percent were domestic loans, ii) 21 percent were foreign loans, iii) 19 percent were securities issues and iv) 14 percent from capital and subsidiaries. These data demonstrate that companies in Indonesia mostly rely on banking as a source of funding, although the role of the banking industry in meeting the long-term funds is limited because most of the funds provided by banks are short-term. They still fail to meet the demand for long-term debt. In Indonesia, the volume of bond trading remains low compared with other countries in Asia, such as Malaysia, Thailand, South Korea and China (ADB Quarterly III Report, 2017). Efforts are being made by the Financial Service Authority (OJK) to identify additional sustainable sources of financing by searching for new sources of financing and improving the stimuli that can support firms in Indonesia through capital markets.

Family businesses in Indonesia grew 83 percent, against 65 percent globally, in 2014. In 2015, this increased to 96 percent against 85 percent globally (Price Water Cooper, 2015). The key challenge to growth remains access to and the availability of funding sources. Currently 67 percent of family businesses in Indonesia are in the descendant stages, but such enterprises are still less than 50 years old. The overview of family businesses in Indonesia may be found in Table 2. 3.

Table 2.3. The Profile of Family Business in Indonesia

Company aged between 20 and 50 years - 53 %
Specialised in manufacturing - 50%
Dominated by descendant generations - 68%
Family members as a CEO - 47%
Family members involved in a business (through management and governance) - 52%
Managed by owner-CEO - 87%
Non-family members on the board - 80%

Source: Price Water Cooper Survey, 2014

2.4.2. Family Firms and the Indonesian Stock Exchange

The capital market plays a significant role in Indonesia, it is an important provider of capital resources for family firm. Family firms in Indonesia represent 60 percent of all companies listed on the Indonesia Stock Exchange (IDX). The IDX was established in December 1912 under the name of the Batavia Stock Exchange (Batavia now being known as Jakarta, the capital city of Indonesia). After the Batavia Stock Exchange merged with the Surabaya Stock Exchange in 2007, it became the Indonesian Stock Exchange (IDX) located in Jakarta.

The IDX has 11 constituent stock price indices and 9 sectors. This study will exclude one of 9 sectors, the banking industry, since this industry is highly regulated and has different characteristics from the other sectors. The 11 indices are: i) Jakarta Composite Index (IHSG), ii) Sectoral Index, iii) Liquid 45 (LQ45), iv) Jakarta Islamic Index (JII), v) Kompas100 Index, vi) Bisnis-27 Index, vii) Pefindo25 Index, viii) Sri-Kehati Index, ix) Main Board Index (MBX), x) Development Board Index (DBX), and xi) Individual Index. The eight sectors are agriculture (sector 1), mining (sector 2), basic and chemical (sector 3), miscellaneous (sector 4), consumer goods (sector 5), property and real estate (sector 6), infrastructure, utilities and transportation (sector 7), banking (sector 8) and trade and services (sector 9).

In 2015, there were 520 companies listed in the IDX and all of them are included in the Jakarta Composite Index (IHSG); 322 of them are family firms and 198 are non-family firms. Not all listed firms are included in the LQ45 Index. This index was created to provide the market with an index of 45 most liquid stocks. In addition, this index covers at least 70 percent of the market capitalisation and transactions in the regular market. Interestingly, family firms make up to – 60 percent of most liquid stocks the LQ45 Index (Table 2.4).

Table 2.4. 45 Securities that are listed in LQ45 Index in 2015

No.	Firm Ticker	Name of Firm	Owner
1.	AALI	PT Astra Agro Lestari Tbk	The Astra Group
2.	ASII	PT Astra International Tbk.	The Astra Group
3.	UNTR	PT United Tractors Tbk.	The Astra Group
4.	ICBP	PT Indofood CBP Sukses Makmur Tbk.	The Salim Group
5.	INDF	PT Indofood Sukses Makmur Tbk.	The Salim Group

6.	INTP	PT Indocement Tunggal Prakasa Tbk.	The Salim Group
7.	LSIP	PT London Sumatra Indonesia Tbk.	The Salim Group
8.	LPKR	PT Lippo Karawaci Tbk.	The Lippo Group
9.	LPPF	PT Matahari Departement Store Tbk.	The Lippo Group
10.	MPPA	PT Matahari Putra Prima Tbk.	The Lippo Group
11.	SILO	PT Siloam International Hospital Tbk.	The Lippo Group
12.	BMTR	PT Global Mediacom Tbk.	The MNC Group
13.	MNCN	PT Media Nusantara Citra Tbk.	The MNC Group
14.	SCMA	PT Surya Citra Media Tbk.	The Saratoga Group
15.	TBIG	PT Tower Bersama Infrastructure Tbk.	The Saratoga Group
16.	ADRO	PT Adaro Energy Tbk.	The Triputra Group
17.	AKRA	PT AKR Corporindo Tbk.	Adikoesomo Family
18.	ASRI	PT Alam Sutera Realty Tbk	The Agro Manunggal Group
19.	BBCA	PT Bank Central Asia Tbk.	The Djarum Group
20.	BSDE	PT Bumi Serpong Damai Tbk.	The Sinar Mas Group
21.	CTRA	PT Ciputra Development Tbk.	The Ciputra Group
22.	GGRM	PT Gudang Garam Tbk.	The Gudang Garam Group
23.	KLBF	PT Kalbe Farma Tbk.	Boenjamin Setiawan Family
24.	PWON	PT Pakuwon Jati Tbk.	The Pakuwon Group
25.	SMRA	PT Summarecon Agung Tbk.	The Sumarecon Group
26.	SSMS	PT Sawit Sumbermas Sarana Tbk.	The Citra Borneo Indah (CBI) Group
27.	ADHI	PT Adhi Karya (Persero) Tbk.	State Owned
28.	ANTM	PT Aneka Tambang (Persero) Tbk.	State Owned
29.	BBNI	PT Bank Negara Indonesia (Persero) Tbk.	State Owned
30.	BBRI	PT Bank Rakyat Indonesia (Persero) Tbk.	State Owned
31.	BBTN	PT Bank Tabungan Negara (Persero) Tbk.	State Owned
32.	BMRI	PT Bank Mandiri (Persero) Tbk.	State Owned
33.	JSMR	PT Jasa Marga (Persero) Tbk.	State Owned
34.	PGAS	PT Perusahaan Gas Negara (Persero) Tbk.	State Owned
35.	PTBA	PT Bukit Asam (Persero) Tbk.	State Owned
35.	PTPP	PT PP (Persero) Tbk.	State Owned
36.	SMGR	PT Semen Indonesia (Persero) Tbk.	State Owned
37.	TLKM	PT Telekomunikasi Indonesia (Persero) Tbk.	State Owned
38.	WIKA	PT Wijaya Karya (Persero) Tbk.	State Owned
40.	WSKT	PT Waskita Karya (Persero) Tbk.	State Owned
41.	CPIN	PT Charoen Pokphand Indonesia Tbk.	Foreign Investment
42.	INCO	PT Vale Indonesia Tbk.	Foreign Investment
43.	UNVR	PT Unilever Indonesia Tbk.	Foreign Investment
44.	EXCL	PT XL Axiata Tbk.	Non-Family Firm
45.	ITMG	PT Indo Tambangraya Megah Tbk.	Non-Family Firm

Source: Indonesia Stock Exchange, 2015

There are several prominent families who own firms presented in IDX, such as the Sinar Mas Group (6 listed firms), the Salim Group, the Lippo Group and the Gadjah Tunggal

Group (three groups with 5 listed firms) and the Bakrie Group (4 listed firms). These data show that the concentration of a firm's control is in the hands of a few families may create powerful incentives and abilities to influence the governance policies regarding access to financing. Claessens et al. (2000) found that Indonesia stands out as the country with the largest number of firms controlled by a single family more than four on average. This number may have increased in the almost two decades since their study was published; in 2018 new listed firms in Indonesia reached 50, the highest annual number so far recorded (IDX, 2018).

Through the Indonesia Service Authority (OJK) the Indonesian government has stipulated a regulation concerning maximum legal lending limits for commercial banks, which are as follows:

Table 2.5. Stipulation Concerning Maximum Legal Lending Limits in Indonesia

Criterion	Maximum Legal Lending Limits (% of bank capital)
For parties that are related to the bank. All fund provision portfolios to related parties of the bank	10
For parties that are not related to the bank. All fund provision to one borrower that is not a related party.	20
For parties that are not related to the bank. All fund provision to one group of borrowers that is not a related party.	25

Source: The Indonesia Financial Service Authority, 2017

The capital provided by banks can account for a maximum loan of as much as 10 percent for firms that have a relationship with the bank, or a maximum loan of as much as 20 percent if firms do not have a relationship with the bank. In fact in Indonesia almost 70 percent of banks are owned by family firms (Hadad, 2011). As can be seen from Table 2.6, 20 of the 47 banks registered on the Indonesia Stock Exchange, are owned by several groups of family firms via a holding company. The regulations implemented by the Indonesia government may have a significant effect on capital structure of firms. Thus, funds provided by banks are not heavily allocated to one group family firms.

Table 2.6. List of 20 Listed Banks that Owned by Families

No.	Firm Ticker	Name of Bank	Family/Group of Business
1.	BAEK	PT. Bank Ekonomi, Tbk	Tanojo Susanto Family
2.	BBCA	PT. Bank Central Asia, Tbk	The Djarum Group
3.	BBHI	PT. Bank Harda Internasional, Tbk	Rachmad Hakim Family
4.	BBMD	PT. Bank Mestika, Tbk	Halim Family
5.	BCIC	PT. Bank JTrust Indonesia, Tbk	Tantular Family
6.	BDMN	PT. Bank Danamon, Tbk	Usman Asmadjaja Family
7.	BEKS	PT. Bank Eksekutif Internasional, Tbk	Widjaja Family
8.	BINA	PT. Bank Ina Perdana, Tbk	Surya Family
9.	BMAS	PT. Bank Maspion, Tbk	The Maspion Group
10.	BNBA	PT. Bank Bumi Artha, Tbk	Surya Husada Family
11.	BNII	PT. Bank Maybank Indonesia, Tbk	The Sinar Mas Group
12.	BNLI	PT. Bank Permata, Tbk	Djaja Ramli Family
13.	BSIM	PT. Bank Sinarmas, Tbk	The Sinar Mas Group
14.	BVIC	PT. Bank Victoria International, Tbk	Susana Tanojo Family
15.	DNAR	PT. Bank Dinar Indonesia, Tbk	Limar Family
16.	MAYA	PT. Bank Mayapada Internasional, Tbk	The Mayapada Group
17.	MEGA	PT. Bank Mega, Tbk	The CT Group
18.	NAGA	PT. Bank Mitraniaga, Tbk	Yeo Willy Family
19.	NOBU	PT. Nobu National Bank, Tbk	The Lippo Group
20.	SDRA	PT. Bank Woori Saudara Indonesia 1906, Tbk	The Medco Group

Source: Indonesia Stock Exchange, 2015

2.5. Summary of this Chapter

A family business has a unique character resulting from the interactions between the family as a unit, the family as a business entity and the involvement of family members in the business. The extent of family involvement in, and influence on, the business is the distinctive feature of the family business, where the members are connected as a family business system. In the family system, the interest to control the family business and business activities directly is central to sustain and involve future generations of the family. As a system, enterprising family firms are a synergy of all components sustained across generations to pursue socio-emotional wealth for trans-generational benefit. Family owned firms generally go through three broad phases of dispersion: i) the controlling owner stage, ii) the sibling partnership and iii) the cousin consortium. This thesis suggest a dynamic perspective to advance the agency and stewardship theories regarding strategic decisions such as capital structure can be used to pursue family firm's sustainability. Rather than separate and opposing lenses in a static way for viewing family firms, the behaviour of family firms in strategic decision-making might apply in the full spectrum of those theories in a dynamic. The rationale for the dynamic perspective is the

notion that firms make a choice depending on the reference point of the firm's dominant principals; managers will make decisions in order to preserve the accumulated endowment in the firm. In the context of family firms in Indonesia, the emphasis of non-economic goals becomes important, since family firms make significant contributions to Indonesia's economic growth. As family firms in Indonesia grow in the next few years, the key challenge to growth will be the ease of access and availability of funding sources.

The next chapter (Chapter 3) will explain the capital structure decision-making in family firms and how SEW dimensions can generate the determinants of capital structure. An overview will be presented of how non-economic goals and nonfinancial preference points could impact capital structure decisions in family firms. Two primary determinants of corporate policies will be considered in some detail: a) the influence of SEW dimensions and b) a firm's characteristics, as an interconnection of family firms and capital structure decision-making.

CHAPTER 3
DETERMINANTS OF CAPITAL STRUCTURE IN FAMILY FIRMS: A CONCEPTUAL FRAMEWORK AND HYPHOTHESES BUILDING

3.1. Introduction

With the aim of establishing the theoretical basis of this thesis, this chapter synthesises the literature on family firms grounded in agency and stewardship theories. The dynamic perspectives of both theories that are informed by family-centred noneconomic goals, as a basis for decision-making in family firms, are presented. Since the founder established the family business, he or she would value the business more prior to his/her ownership. However, the situation can be very different once the business passes to the next generation. In the corridor to preserve SEW, capital structure-related decision can be a channel through which control-motivated family firms can defend their businesses via control and involvement. In this chapter, the approaches of determinants of capital structure generally, as well as the role of capital structure in family firms and their consequences, are emphasised. My focus then narrows to the more specific determinants of capital structure in family firms. In doing so, this study establishes a theoretical framework for testing the influence of SEW dimensions on capital structure and controlled by firm characteristics variables in order to yield interconnection between family firms and capital structure decisions.

3.2. The Theory of Capital Structure

3.2.1. Determinants of Capital Structure

Capital structure decisions in the context of family firms will be informed by the two grounded theories of family firms: agency and stewardship. Those two theories offer a prominent perspective to examine issues related to agency problems. The theories highlight the issues of interest, motivation and compliance (Donaldson, 1990) that

together direct the actual behaviour of agents, as well as governing managers to take decisions. Thus, I will start with the forces that determine capital structure: agency, control and asymmetrical information. In a family firm the decisions regarding debt level may a function of those forces to drive such as the need for control, risk preference, and family's goals. The integration of primary determinants of corporate policies: behavioural preferences of managers and a firm's characteristics may yield interconnections for understanding the determinants of family firms' capital structures.

Haris and Raviv (1991) have identified four categories of determinants of capital structure that are based on the forces that determine capital structure. From the four categories I will prioritise three aspects that are relevant to explaining the capital structure decisions in family firms: i) the agency approach, ii) the control approach and iii) the asymmetric information approach. These three factors have identified the potential determinants of capital structure. Following these forces, I will start with the general idea of determinants of capital structure, and will then develop a model whose main focus is on family business.

3.2.1.1. The Agency Approach

This approach focuses on the conflict of interests among various parties with claims to the firm's resources. Agency cost models predict that a firm's equity ownership structure affects the manager-principal agency conflict. This conflict is because the manager may own less than 100 percent of the firm's shares or managers may make decisions that conflict with the best interests of the shareholders (Harris and Raviv, 1988; Jensen and Meckling, 1976). However, the classic agency researchers have only concentrated on the agent side in this agency problem. It should be noted that the problem may also happen from the side of principal who can exploit the agents (Perrow, 1986). From the perspective of a principal, reducing the inefficiency of managers can be done by increasing the fraction of managerial ownership or increasing the fraction of the firm's finance by debt. Since debt commits the firm to pay out cash, it can be supposed that debt will reduce the amount of free cash available to managers to engage in their personal pursuits by honouring interest payment obligation (Jensen, 1986). However, Moh'd et al. (1998) found that the dominant principal is associated with lower debt ratios, suggesting that the presence of a dominant principal might substitute for the disciplinary role of debt

in capital structure. Such principals are supposed to monitor managers intensively without enhancing mechanism to reduce agency problems.

Under the agency approach, managers are assumed to always want to invest all available funds, even if paying out cash is better for investors. This investment related issue can be the source of conflict when principals and creditors do not have information regarding the investment; whether it is a good opportunity or a poor option. Stulz (1991) and Jensen (1986) posit that the abundance of good investment opportunities will create an over-investment problem between managers and principals. Hence, managers may substitute higher quality projects with lower quality project to get favourable terms from creditors. Thus, after loan funding, managers can use the proceeds from risky projects, then passing the unforeseen risk to creditors. In other words, managers make risky decisions to maximise shareholders' value at the expense creditors' interests. This problem highlights the conflict between shareholders and creditors because creditors have a claim on a firm's assets in the situation of bankruptcy. On the other hand, shareholders have control over a manager's decisions affecting a firm's riskiness. Therefore, debt can mitigate the problem by giving creditors the option to force liquidation if cash flows are poor, meanwhile at the same time use debt as a mechanism of shareholders to monitor manager's risky behaviour. Firms with higher liquidation values, such those with high tangibility assets and a non-debt tax shield, will have more debt and will be more likely to default but will have higher market value than firms with lower liquidation values (Harris and Raviv, 1990). Thus, a higher leverage can be expected to be associated with a large firm size, a large debt level relative to expected firm income, and a lower probability of restructuring following default.

However, from the side of managers, the agents as a main component of principal-agents relationship, their performances mostly depend on their abilities, motives and opportunities. Several researchers suggest that classic agency theory only emphasises agency costs and alignment issues as a prescription to minimise agency problems without concern for managers' risk preferences, time dimension and their motives (Wiseman and Gomez-Mejia, 1998; Sanders and Carpenter, 2003; Pepper and Gore, 2012). The ways that managers may work for the best interests of firms, and may act as a steward for the firms, is not included in the factors that can shape the principal-managers relationship. Managers may view that debt is a stable monitoring mechanism by the same shareholders since using debt is preferred by incumbent shareholders. Thus, managers may think that

they have to maintain the continuous alignment with incumbent shareholders and act in the shareholders' best interests.

Combining these results, agency models propose that an optimal capital structure can be obtained by trading off the agency cost of debt, such as asset substitution, bankruptcy cost and underinvestment, against the benefits of debt, such as increased managerial ownership and reduced free cash flows. In particular these models predict that leverage is positively associated with a default probability (Harris and Raviv, 1990), liquidation value (Williamson, 1988; Harris and Raviv, 1990), free cash flows (Jensen, 1986). Leverage also relates to the extent to which the firm is seen as a takeover target by creditors and its managerial reputation (Hirshleifer and Thakor, 1989). However, leverage is expected to be negatively associated with growth opportunities (Jensen and Meckling, 1976; Stulz, 1990), interest coverage and the probability of restructuring following default (Harris and Raviv, 1990). Since default is a threat to the firm's sustainability, managers may limit the benefit from using more debt, with risk avoidance becoming a dominant drive to reduce debt levels.

Admittedly agency model has offered a prediction about the determinants of capital structure, but in my account this approach has limitations due to the time dimension. This issue relates to the limited or unlimited alignment between principal-manager where the future is uncertain. The role of principal is only limited to monitoring managers; meanwhile managers are not always opportunistic and incompetent, and therefore needing to be controlled. Managers may consider risk preferences and an organisation's goal or goals when making capital structure decisions. Therefore, my reason for employing agency model in family firms covers two things. First, although there is a separation between ownership and management in family firms, such firms are assumed to be better at monitoring managers than other types of large shareholders, suggesting that lack of alignment between managers and principals might be less prevalent in family firms. However, this conclusion depends on the relationship between managers-principal, manager's behaviour and corporate governance in family firms. Second, the assumption of conflict being mitigated between principals and managers lead family firms to act towards capital structure decision due to the risk of bankruptcy and financial distress as a result of having under-diversified investment and may face a high exposure of a single asset, which is the family firm itself. However, this approach alone does not cover how the contestability and distribution of power among the several shareholders of a firm are

relevant to this analysis. Hence, the next section will discuss the control approach and its significance to this study. The control approach will connect to the issue of risk reduction motivation that will explain, in the next section, the role of capital structure in family firms.

3.2.1.2. The Control Approach

This approach focuses on the corporate contestability and the distribution of power among the several shareholders of a firm. The control approach links corporate control and capital structure, reflecting the fact that common equity carries voting rights, while debt does not. Bolton and von Thadden (1998) state that from a large shareholder's point of view, new equity financing is not an optimal way to trade-off because their level of control may be diluted. This statement in the context of firms with owner-managers suggests that debt is an instrument to protect a founder-manager's control as long as the firm faces no financial distress and is performing adequately. However, in a case when there are dispersed shareholders, with separation between shareholders and managers, capital structure is relevant to the distribution of voting rights. Thus, control approach will interconnect capital structure and ownership concentration.

From the perspective of corporate governance D'Mello and Miranda (2010) argue that ownership structure and leverage can be seen as the internal control mechanisms to alleviate agency conflicts that exist between different types of stakeholders inside firms. Debt can serve as a disciplining mechanism between managers and dispersed shareholders by imposing fixed obligations on a firm's cash flow by the obligation to meet interest payments. This view supports the claim made by Friend and Lang (1988) that the presence of a group of investors might limit the discretion of management in seeking lower debt ratios. In this context, the mechanism of monitoring is used by a principal to reduce the potential for wealth diversion. However, in closely-held firms such as family firms, debt can facilitate minority shareholders' expropriation (Faccio et al., 2001). However, at the same time debt may serve to mitigate agency problems between controlling and non-family shareholders.

From the perspective of principals, leverage can be an expensive way to maintain autonomy and to determine strategic decisions of their company, since higher indebtedness increases the risks of bankruptcy and financial distress (Mishra and

McConoughy, 1990). As a consequence, if the dominant shareholder has already acquired enough voting power it should not be expected that leverage would be used to achieve control in strategic decision. This conclusion supports the study of Moh'd et al. (1998), cited in the previous section, about the agency approach where the dominant principal is associated with a lower debt ratio. Although control motivation exists, shareholders remain to consider reducing agency problems, as well. In this situation I note the interconnection between two approaches on leverage. However, the control may overlap at certain concentration levels of ownership and may result in increasing leverage. In this situation, increasing debt may be used for the maintenance of coalitions among dispersed shareholders to enforce their interests. Thus, contestability affects the dominant shareholder's power over leverage. If transactions take place in the firm between the principal and managers, suggesting the firm allows managers to make capital structure decisions, control over critical financing sources is a significant managerial power. Even without having ownerships fraction in the firm, managers have discretion to make a debt-equity choice as long as the decision will ensure sufficient efficiency to prevent control challenges.

If a fraction of a company's equity is owned by its managers, who therefore obtain private benefits of control, Stulz (1988) assumes that such managers will not tender their shares. This can indicate there is an entrenched management, suggesting as long as managers remain in control, debt levels will remains low. In such instances, where internal control mechanisms fail to address entrenchment related issues, shareholders may rely on external control mechanisms to redirect management towards optimal behaviour. Therefore, any changes in leverage can be viewed as a response to opportunistic management in the short-run, whereas control considerations may be less significant in the long-run capital structures. This situation makes capital structure decisions dynamic over time. Empirical findings show divergence on control considerations influence financial leverage. This model predicts that leverage is positively correlated with the extent of managerial ownership and a firm's value (Harris and Raviv, 1988; Stulz, 1988); and more concentrated ownership (King and Santor, 2008; Setia-Atmaja et al., 2009; Margaritis and Psikalis, 2010; Ellul, 2010). However, other studies reveal a negative relationship with concentrated ownership (Short et al., 2002; Anderson and Reeb, 2003c; Maury, 2006; Croci et al., 2011; Ampenberger et al., 2013; Schmid, 2013; Santos et al., 2014). In addition, Huang and Song (2006) found that managerial ownership has a negative relationship with leverage in China. Finally, Agrawal and Naser (2011) found

the existence of a dominant shareholder is not related to the level of leverage. The inconsistency of these results seems to demonstrate that control motivation can come under pressure and possible struggle because of the risks of bankruptcy and financial distress. In addition, the agency approach and control approach seem like two sides that trade off each other. The control approach becomes relevant to this study, given that family firm owners view their companies as an asset to transfer to the next generation, thereby establishing a multi generation presence. In addition, they are shareholders with control motives that maintain a long-term presence in the firm's ownership structure, suggesting that control motivation might be more prevalent in family firms than non-family firms (Setia-Atmaja et al., 2009; Ellul, 2010; Croci et al., 2011). This approach will connect to control considerations explained in the next section, regarding the role of capital structure in family firms.

3.2.1.3. The Asymmetric Information Approach

This approach underlies the assumption that managers are assumed to possess private information about the firm's investment opportunities. The choice of the debt – equity structure signals information to outside investors about a firm's status and stability. Managers are assumed to have a better understanding of, and more information about, a firm's potential investments and growth opportunities than outside investors; thus capital structure decisions are proposed to benefits shareholders. Therefore, in my view asymmetric information causes an imbalance of power between managers, shareholders and outside investors. A lack of equal information may lead to economic imbalance that results in strategic decisions. For instance, if investors are less informed than a firm's insiders, then equity may be mispriced by the market. Outsider investors may not be able to discriminate between good and bad projects. As a result of this ignorance, interpreting the firm's decision to issue new equity as a possible sign of bad news will result in new equity being priced accordingly. Investors will demand a high rate of return to invest or the firm will be forced to issue equity at a discount. Underinvestment can be avoided by financing the new project using security that less experienced undervalued by market such as internal funds or riskless debt and then equity, as suggested by Myers (1984) as a pecking order for financing.

However, Narayan (1988) and Heinkel and Zechner (1990) show that overinvestment problems occur as a result of information asymmetry in a new project; potentially attaching a negative value to the project. Thus, the solution to reduce the overinvestment problem is by debt, because debt makes an investment less attractive to investors. Since a new project is associated with issuing debt, then debt issues are good news; investors take higher debt levels as a signal of higher quality projects. Ross (1977) shows profitability, a measure of the firm's quality, and debt-equity ratios have a positive relationship. In contrast, lower quality firms have a greater probability of high bankruptcy costs than do better quality firms. Managers of low quality firms will not decide to use more debt to imitate those higher quality firms. Thus, in this approach profitability, debt level and bankruptcy probability are all positively related. Several studies found that leverage is positively associated: i) with profitability if used as a signal to the market (Ross, 1977; Leland and Pyle, 1977), ii) the firm's value (Ross, 1977), iii) managerial ownership (Leland and Pyle, 1977), and iv) the firm's size (Rajan and Zingales, 1995). However, other researchers found that leverage has a negative relationship with profitability if it refers to a pecking order for financing (Wald, 1999; Syam-Sunder and Myers, 1999; Chen, 2004; Huang and Song, 2006) and free cash flows (Myers and Majluf, 1984). The reason why leverage has a negative relationship with profitability explicitly has been investigated by Myers and Majluf (1984) and Myers (1984) who claim that information costs cause firms to follow the lowest cost of capital, such as retained earnings and debt. However, these claims have been contradicted by Baskin (1989), Allen (1993) and Adedji (1998) who argue that information costs are not the only factors that might drive the use of internal financing first, such as retained earnings. It was found that control considerations may contribute to a reluctance to issue new equities that can negatively impact the balance of power and control.

Thus, I indicate that there is an interconnection between asymmetric information that causes an imbalance power between managers and investors (shareholders and creditors), control considerations and agency issues relating to leverage. Debt has the ability to allow shareholders to gather information useful for monitoring managers (agency argument) and allows larger shareholders to discipline managers and dispersed shareholders (control argument), since managers wants to continue the operations of a firm, even if liquidation is in the interest of creditors. Managers may be reluctant to provide detailed information that could result in the liquidation of their company (asymmetric information argument). As creditors have legal rights, they can force managers to provide detailed information to

support their monitoring activities of the firm's managers. By contrast, higher indebtedness increases the probability of default, suggesting shareholders with enough control rights will prefer lower levels of debt. Therefore, debt is not only about contestability power, a mechanism of controlling and monitoring, but also about the sustainability of a firm or firms in the long run, due to the risk of bankruptcy and financial distress. In adopting these approaches in family firms, however, the owning families are assumed to be better monitors of managers than other types of large shareholders, suggesting that managers and principals are expected to be more closely aligned, as compared to relationships in non-family businesses (Anderson and Reeb, 2003b). On the other hand, family firms may have an incentive and ability to benefit at the expense of dispersed shareholders through entrenchment management (Fama and Jensen, 1983; Shleifer and Vishny, 1997). This possibility provides family firms with greater incentives for both monitoring and entrenchment; thus the control approach may overshadow the agency approach.

Table 3.1 shows each theoretical result; the type of approach from which the results derived and the references that contained the results.

Table 3.1. Summary of the implications of capital structure theories and the empirical evidence of firms' characteristics with leverage.

Determinants	Model	Expected Theoretical Relation	References
Extent to which the firm is a takeover target	Control	Positive	Harris and Raviv (1988)
Increasing dispersion outside ownership	Control	Positive	De Angelo and De Angelo (1985)
Control protection/ Control motivation	Control	Positive	DeAngelo and DeAngelo (1985); Amihud, et al. (1990); Mishra and McConaughy (1999); Ellul (2010); Croci, et al. (2011); Santos, et al. (2014)
The probability of reorganisation following default/ Risk reduction motivation	Agency	Negative	Harris and Raviv (1990); Mishra and McConaughy (1999); Schmid (2015)
	Agency Asymmetric Information	Negative	Friend and Lang (1988); Ross (1977)
Managerial equity ownership	Agency Asymmetric Information	Positive	Harris and Raviv (1988); Stulz (1988)
Free cash flow	Agency Asymmetric Information	Positive Negative	Jensen (1986); Stulz (1990) Myers and Majluf (1984)
Liquidation value (Tangibility/Asset structure)	Agency	Positive	Titman and Wessels (1988); Chen (2004)
(Non-debt tax shield)	Agency	Positive	Titman and Wessels (1988)
Profitability	Asymmetric Information	Positive (signalling) Negative (pecking order)	Rajan and Zingales, 1995; Ampenberger et al.(2013); Chen (2004); Shyam-Sunder and Myers (1999); Myers and Majluf,(1984)
	Agency	Negative	Chang (1987); Chen (2004)

Size	Agency Asymmetric Information	Positive	Titman and Wessels (1988); Rajan and Zingales, 1995; Myers and Majluf,(1984); Fama and French (2002)
Growth Opportunities	Agency	Negative	Jensen and Meckling (1976); stulz (1990); Shyam-Sunder and Myers (1999)
Firms' age Managerial reputation	Agency	Positive	Deesomsak et al. (2004); Anderson and Reeb (2003)
Cost of financial distress/Earning volatility	Agency Asymmetric Information	Positive	Fama and French (2002)
Liquidity	Agency Asymmetric Information	Positive	Deesomsak et al. (2004)

3.2.2. Firms' Characteristics

The empirical literature notes several characteristics that influence financing decisions in a firm, including: a) asset tangibility (Titman and Wessels, 1988; Ozkan, 2001; Chen, 2004; Laery, 2009), b) profitability (Rajan and Zingales, 1995; Chen, 2004; Leary, 2009; Ampenberger et al., 2013), c) firm size (Titman and Wessels, 1988; Rajan and Zingales, 1995; Myers and Majluf, 1984; Fama and French, 2002), d) growth opportunities (Shyam-Sunder and Myers, 1999; Laery, 2009), e) non-debt tax shield (Titman and Wessels, 1988), f) a firm's age (Deesomsak et al., 2004; Anderson and Reeb, 2003), and g) liquidity (Deesomsak et al., 2004). Although the theories are not developed with a specific focus on family firms, it would seem logical to follow the factors claimed to have some influence on corporate finance, since this study concerns about publically listed family firms. Following the literature regarding firms' characteristics is therefore necessary in order to make judgements about connections between the observable studies in family firms and relevant theories. While several of these judgements may seem uncontroversial, there is room for significant disagreement in the case of family firms.

1. Asset Tangibility

Asset tangibility can be seen as a collateral available to creditors. Agency theory suggests that firms with high leverage tend to under invest, thus transferring wealth away from creditors to shareholders. This arrangement will be subject to less information asymmetries between firms and creditors, indicating firms have a greater liquidation value in cases of bankruptcy. Thus, in turn the agency cost of debt between shareholders and creditors will be reduced (Titman and Wessel, 1988; Voutsinas and Werner, 2011). The greater proportion of asset tangibility, the increase liquidation value, and the more creditors willing to provide loans will all act to decrease the probability of mispricing in the event of bankruptcy. The positive relationship between tangibility and leverage has been reported by previous studies (Gaud et al., 2001; Ozkan, 2001; Chen, 2004; Laery, 2009 Ellul, 2010). Asset tangibility is easy to monitor, thus tending to mitigate agency conflict between lenders and borrowers. The expenditure to monitor a firm with large asset tangibility is likely to be reduced when compared to a firm with less asset tangibility.

2. Profitability

Profitability is an indicator that firms are well managed and thus can be expected to be more efficient than less profitable firms. Profitable firms face lower expected costs of financial distress. In addition, the agency costs' perspective predicts that the discipline provided by debt is more valuable for profitable firms, due to free cash flow problems (Jensen, 1986). In addition, creditors will anticipate that a profitable firm has a capability to repay debt. In line with this view, creditors will provide greater levels of debt for a profitable company (Heshmati, 2012). However, almost all empirical studies that have examined firms and businesses found the relationship between profitability and leverage to be negative (Chen, 2004; Aggarwal and Kyaw, 2010; Margaritis and Psillaki, 2010). The reason for this finding is because more profitable firms have a strong enough position to finance their business operations from internally generated funds, passively accumulated profits (Kayhan and Titman, 2007), a company's exhausted debt capacity and the inability to raise more debt (Lemmon and Zender, 2010). In addition, profitable firms prefer not to take on more debt in order to avoid the risk of bankruptcy in the long-term, as well as being reluctant to issue new equity in order to maintain control. Thus, for these reasons, I expect an inverse relationship between profitability and leverage in the long-term.

3. Firm Size

Large firms have been shown to have lower levels of bankruptcy risk and relatively lower bankruptcy costs; thus lower agency costs of debt and monitoring costs. Therefore, large firms have benefits to access to funding sources, thus have more availability amount of debt to a firm (Hooks, 2003). The firm size may indicate the information provided by firms toward disclosure issues. Huang and Song (2006) support the idea that size can be used as a proxy for information asymmetries. The larger the firm, the more information can be accessed by creditors and so the probability that the firm will hide information regarding the possibility of default will be less likely. A high degree of information openness enables large firms to obtain greater leverage than smaller firms (Rajan and Zingales, 1995; Fama and French, 2002; Frank and Goyal, 2003). To a great extent, larger firms face fewer information problems; a situation which might increase the bargaining power to creditors (Degryse et al., 2012). Another possibility is that large firms may have a more diluted ownership, and thus have less control over individual managers (Chen,

2004). Such a relationship suggests that managers may issue debt to reduce the risk of personal loss resulting from bankruptcy (Friend and Lang, 1988). However, if a company's size is used as a proxy for the inverse probability of default, it should be a negative relationship with leverage. Larger firms have a lower probability level of default, suggesting that increasing leverage may actually increase their probability default level.

4. Non-debt tax shield

Non-debt tax shields (NDTS) may be regarded as substitutes for tax benefits of debt financing. As a consequence, debt levels should be inversely related to the level of NDTS (Santos et al., 2014), measured as depreciation to total assets. However, Ozkan (2001) argues that NDTS may be a proxy for things other than the non-debt tax shield. Higher levels of depreciation ratios may indicate that firms have fewer growth options or investment opportunities and thus have relatively more tangible assets (Barclay and Smith, 1995). Firms with more tangible assets indicate greater liquidation values and NDTS. Those firms may have more debt, although they are more likely to default; at the same time they will have higher market values than firms with lower liquidation values (Harris and Raviv, 1990). In Indonesia, tax facilities have been regulated as a stimulus for investment, based on Government Regulation No. 94, 2010, renewed in 2015 with Government Regulation No. 18. According to these regulations, a corporate taxpayer may be entitled to income tax benefits, such as an additional reduction in net income, up to 30 percent of the amount invested in tangible assets, charged at 5 percent per annum over six years. This option can also involve accelerated depreciation and amortization. However, the tax facilities in Indonesia must be met several criteria, such as firms must have high investment value, high labor absorption, and high local content. In addition, the industry sectors that are eligible include food, textiles, chemical and chemical products, forestry and logging, coal and lignite mining, oil, natural gas and geothermal mining. Thus, it may imply a positive relation between the non-debt tax shield and the long-term leverage in the case of family firms that eligible to benefit this tax facilities. Thus, these arrangements could imply a positive relationship between the non-debt tax shield and the long-term leverage in the case of Indonesia firms.

5. Firm's age

Firm's age should play a role in determining its capital structure because older firms may have longer track records and therefore a higher reputational value than newer companies. A firm's reputation can be a good signal that the firm will take action consistent with investors' interests, thus getting more access to the capital market at relatively low cost. Chua et al. (2011) argue that a firm's age can be interpreted as a measurement of default risk. Established firms have a reputation regarding creditworthiness with creditors and should have a higher borrowing capacity because of reducing asymmetric information and lower levels of financial distress. Empirical studies find that capital sources depend on whether a business is developing or maturing (Dollinger, 1995), different financing arrangements having been linked with business life cycles (Berger and Udell, 1998). The interaction between lenders and borrowers over time may enable creditors to alleviate the information asymmetry that can cause financial distress in a firm. However, Filatotchev et al. (2006) and Johnson et al. (2016) suggest that as a firm ages after going public, corporate restrictions and board members influence capital structure choices. As the firm ages, the restrictions and boards are negatively correlated with leverage. This relationship may be related to the risk reduction strategy that can impose costs on diversified shareholders.

6. Liquidity

Illiquid firms face limits in attracting debt because financial distress will be indicated as relatively high. Even though creditors could act as liquidity providers to their important customers in distress (Oliveira et al., 2017), it is only a temporary solution because providing additional debt to lenders can increase the creditors' current liabilities. In addition managers can manipulate liquid assets in favour of shareholders against the interest of creditors, thus increasing the agency cost of debt. Illiquid firms induce financial constraints, and thus increase the monitoring costs for creditors. This scenario suggests a negative relationship between liquidity and leverage.

7. Firm's growth

Firm's growth can be seen as a good prospect from the viewpoint of its creditors. The growing company has, at least potentially, a greater range and number of investment

opportunities. Therefore, such a situation is an opportunity for creditors to offer funds for a firm's investment, because firms with higher growth opportunities are more likely to exhaust internal funds and require more debt than the firms that are not growing (Degryse et al., 2012; Shyam-Sunder and Myers, 1999). Moreover, growth opportunities are likely to have an inverse relationship with the probability of default and lender risk. Thus, firms with higher growth opportunities may be less likely to default than the firms growing more slowly, or not at all. This situation makes creditors more assured that they take on less risk of the firm going bankrupt.

These results are summarised in Table 3.2 that show empirical evidence from G-7 countries (Rajan and Zingales, 1995), Thailand (Wiwanttankantang, 1999), 10 developing countries (Booth et al., 2001), United Kingdom (Ozkan, 2001), Spain (De Miquel and Pindado (2001), USA (Korajezyk and Levy, 2003; Frank and Goyal, 2009), China (Chen, 2004), Asia Pacific Region (Deesomsak et al., 2004), China (Huang and Song, 2006), market based systems (UK and US) and banking based systems (France, Germany and Japan) (Antoniou et al., 2008), Indonesia and Thailand (Bunkanwanicha et al., 2008), 42 countries including Indonesia (De Jong et al., 2008), 40 countries involving both developed and emerging markets, include Indonesia (Kayo and Kimura, 2011), Indonesia (Moosa and Lie, 2012), and European countries (Jooever, 2013).

The next section will explain the role capital structure plays in family firm's strategies, starting from the characteristics of family firms that are most associated with the family controlled shareholder, whose control motivation is prominent. However, risk avoidance may need to be considered, where preserving the SEW and sustainability are both important goals in a family firm. Elaborating the relationship between the components of the organisation's decision-making process will help in understanding the role of capital structure decisions in a firm's strategy.

Table 3.2. Determinants of Leverage.

Characteristics	RJ	WW	BO	O	DMP	W	C	D	HS	A	B	DJ	FG	KK	ML	J
Asset Tangibility	+		+		+		+		+	+	+	+	+	+	+	-
Profitability	-	-	+	+	-	+/-	-	+/-		-	-	-	-	-	-	-
Firm's Size	+	+			+	-	-	-	+	+	+	+	+	+		-
NDTS		-	-	-	-			-	-			+/-				
Firm's Age																
Liquidity				+	-			-				-			-	
Growth Opportunities	-	-	-	-		-	+	-	-	-	+	-	-	-		

The sign of '+' and '–'indicate the direction of significant relationship with leverage. '+' means that characteristic increases leverage, and vice versa for the '-'sign. The studies are Rajan and Zingales (1995) (denoted RJ), Wiwanttankantang (1999) (WW), Booth et al. (2001) (BO), Ozkan, (2001) (O), De Miquel and Pindado (2001) (DMP), Wald (1999) (W), Chen (2004) (C), Deesomsak et al. (2004) (D), Huang and Song (2006) (HS), Antoniou et al. (2008) (A), Bunkanwanicha et al. (2008) (B), De Jong et al. (2008) (DJ), Frank and Goyal (2009) (FG), Kayo and Kimura (2011) (KK), Moosa and Lie (2012) (ML), and Jooever (2013) (J). Comparisons suffer from the fact that these studies used different methodologies, different periods of time, different measures of a firm's characteristics, and different leverage measures.

3.3. The Role of Capital Structure in a Family Firm's Strategy

The interconnections of family business and capital structures can be explained by viewing the situation as motivational based for influencing capital structure decisions. Most pronounced in family firms are the issues of: i) control considerations and ii) risk avoidance.

3.3.1. Debt as a Mechanism to Avoid Control Dilution

Control consideration may be related to a typical combination of concentrated ownership and control that is common in family firms. These combinations allow concentrated shareholders, in this context members of family firms, to benefit from investment projects for private rents. This approach may take away resources from profitable projects in order to satisfy the owner family's interests. This action can occur when managers have excessive power enabling them to take decisions to satisfy their own interests. Several studies suggest that control motives can shape a firm's capital structure decisions (Israel, 1991; Harris and Raviv, 1988; Stulze, 1988). These views are supported by empirical findings such as those from Croci et al. (2011), Elul (2010) and Mishra & McConaughy (1999) who found that control considerations exert a far greater influence on debt over equity financing. It is possible that family firms will not put their control at risk and dilute their powers due to their desire to preserve the family's goals.

The fear of loss of control is likely to have a direct influence on levels of risk taking and the choice of projects in which to invest. Anderson et al. (2003) found that on average families have invested more than 69 percent of their wealth in the firm. This figure indicates that family firms will be concerned to use debt to reduce the risk from under-diversified investments and to maintain control over high risk exposure to one single asset. Moreover, when owners are managers, they may use debt, instead of new equity, to concentrate their voting power, since they are apprehensive that any change in capital structure may dilute their power. They may consider out-of-pocket costs weigh more heavily compared to the opportunity costs of a new capital structure. Once shareholders own and control a firm, they would value the business more than they did prior to that ownership. Mishra and McConaughy (1999) support this notion: 'family firms are more

averse to control risk and therefore avoid debt because increasing debt levels may increase the risk of losing control of their firm'.

Control consideration becomes important in family firms due to their long commitment to the business (Lumpkin and Brigham, 2011), their interest in passing the business on to the next generations (Arregle, 2007), and their wish to maintain the reputation of the family business (Schmid, 2013). However, it can be argued that the intention to be passed to the next generation not only involves the family's reputation, but also ownership and managerial skills as a legacy of the founding / owning family. The long commitment is related to the time and effort that the founder has invested since the firm's beginning. This personal investment issue may well lead to an escalation of commitment to a failing project (Staw, 1976), but failure is disregarded as a sunk cost (Arkes and Blumer, 1985). Thus decisions relating to capital structure are not only about the financial performance that may follow from the new structure, but also about the outcome that an owner-manager anticipates as a consequence of his or her ownership. Owner-managers are very likely to have the feeling of possession, implying that one must take care of and maintain the family firm. However, it is possible that over time the shareholders' feelings of ownership will have increased (Strahilevitz and Loewenstein, 1998), thus leading to a *status quo* bias in capital structure decisions. The disadvantages of leaving the previous capital structure and restructuring with a new capital structure loom large; on the other hand the advantages family firms expect to get are uncertain. Managers could be reluctant to acquire new equity in the capital structure due to an increase in the possession of the firm, preferring to become familiar with the level of debt and investing themselves into family firms through identification of control. Naturally, this situation is in a person's mind, based on the owner-manager principle that a thing which the individual has enjoyed, and used as their own for a long time, will take root and cannot be torn away without shifting behaviour to maintain sustainability.

On the other hand, it is possible that the family agents have their own interests; therefore, to limit the destructive altruism within family firms, managers will be asked to employ mode debt as a control mechanism in order to avoid the free riding problem among family members. However, Kaye and Hamilton (2004) found that descendants are less likely to use more leverage because they are more concerned with wealth preservation than wealth creation. At this point, it can be argued that the level of debt can be in a stagnation

position; descendants seem to be willing to maintain their wealth with certain holding shareholders as long as this portion is enough to confirm their voting rights.

Several studies provide evidence that listed family firms are motivated to use debt as a control consideration (McConaughy and Phillips, 1999; McConoughy et al., 2001). The researchers suggest that large family firms in the US use debt as a control mechanism. Moreover, Ampenberger (2013) and Schmid (2013) found this motive in Germany, while others focused on Western Europe (Maury, 2006), France (Latrous and Trabelsi, 2012), Australia (Setia-Atmaja et al., 2009), and Canada (King and Santor, 2008). Other research initiative took place in 12 European countries (Croci et al., 2011) and 36 countries in the rest of the world (Ellul, 2010). Therefore, it is of interest to note that empirical evidence on this issue of capital structure supports the notion that debt has a role as a control mechanism in family firms, due the maintenance of power over such firms and the importance attached to the long term viability of those firms.

3.3.2. Debt as a Risk Reduction Strategy

Family firms are assumed to have, and belong to, large and undiversified shareholders. This structure of shareholders leads family firm to be a risk avoider. The shareholders may face a high exposure to a single asset, which is the family firm itself. Thus, they have an incentive to reduce risk at the firm level. The risk can be financial and/or non-financial, such as family reputation damage and financial distress (Schmid, 2013). Family firms will avoid the risk that potentially can damage their goals to preserve the socio-emotional wealth of such businesses. To some extent, this attitude makes them prefer less risky financial options that potentially decrease the risk of loss family business to creditors; default on payment can result in fatal consequences for the firm. Moreover, the firm can be seen as a family asset which the members expect to be bequeathed to the next generation. Such an expectation means the members may be averse to any decisions that can harm their stakes in the business.

Consistent with this view, Gugler (2001) proposes that differing capital structure-related decisions are due to the different incentives and motivations which are directly related to the risk. Family firms use debt as a means of reducing undiversified risk, especially in a situation where high levels of credit monitoring exist; as in Indonesia where a banking-based system has been adopted. In these banking-based countries such as Indonesia,

Germany and Japan Schmid (2013) found that if the level of creditor monitoring in an institutional environment is high, family firms tend to avoid debt as a source of external funding. This conclusion suggests that managers will consider reducing the agency costs of debt and potential constraints imposed by creditors. Thus, a risk reduction strategy may be related to the family firm's strong interest in long term survival. This situation causes managers to minimise risk coming from the financial distress of restructuring, a situation which can damage a family's reputation. Mishra and McConaughy (1999) suggest that higher levels of debt increase the likelihood of a firm's bankruptcy, as well as upping the levels of risk control. This conclusion shows that the choice to use debt is more sensitive to conditions associated with risk control. However, risk reduction may have the side effect of reducing potential growth rates by giving up profitable growth opportunities (Schmid, 2013). In this situation, these excessive fears could reduce the attractiveness of family firms for investors, because family firms may be more sensitive to losing the family's wealth than to increasing that wealth through nurturing the growth of their firm.

Despite the two roles of debt as a mechanism to avoid control dilution, and as a device of risk reduction against default, a normative approach of rational choice of managers is based on the utility concept. Managers are presumed to be rational regarding the expectations of all investors, both shareholders and creditors. The expectations of shareholders and creditors are related to the overall outcomes of financing decisions. Under uncertain situations in the future, owner-managers make decisions by maximising the expected utility of wealth. However, the rationality assumptions do not take into consideration that essentially, managers have their own interests. Managers will be more concerned with the outcome of overall capital utility as it is reflected in the weighted average cost of capital. Thus, as long as managers can minimise the agency cost of debt, the prevalence of risk aversion is perhaps the best-known generalisation regarding risky choices (Kahneman and Trevsky, 1979).

Overall, capital structure decisions have an important role as one major channel through which a control-motivated family can defend their firm and risk reduction-motivation in order to preserve the family firm's goals. However, I will argue that the long-term family goals are concerned not only with maximising the wealth of the founding family and minimising the agency cost of debt as economic goals, but also with preserving non-economic goals; the latter being the family firm's long-term survival and sustainability. Achieving these goals will ensure the existence of managers' and owners' interests; both

economical and non-economical. Table 3.3 shows a summary of the literature on the role of capital structure in family firms.

Table 3.3. Literatures about the empirical evidence on the role of capital structure in family firm.

Author (s) & year	Roles/Findings	Countries
Mishra and McConoughy (1999)	Risk reduction strategy of loss of family business. Debt is associated with controlling bankruptcy risk of family firm, thus use lower debt level.	USA
Maury (2006)	Mechanism to avoid control dilution. Debt is used in family firms due to control motivation and reducing conflicts between the family and minority shareholders when shareholder protection is low.	Western Europe
Ampenberger et al. (2013)	Mechanism to avoid control dilution. Debt level is mostly impacted by management involvement.	Germany
Schmid (2013)	Mechanism to avoid control dilution. Debt is used in order to control the firms.	Germany
Santos et al. (2014)	Risk reduction strategy of loss of family business. Debt for family firms is used due to risk of bankruptcy and financial distress as a result of having an under-diversified portfolio.	12 Western Countries
Anderson and Reeb (2003)	Risk reduction strategy of loss of family business Family firms in the Unites States employ less leverage to minimise firm risk.	S&P 500
Margaritis and Psillakis (2010)	Mechanism to avoid control dilution. Debt is used as a control mechanism of family firms.	French
King and Santor (2008)	Mechanism to avoid control dilution Debt is a control-enhancing mechanism in family firms.	Canada
Setia-Atmaja et al. (2009)	Mechanism to avoid control dilution. Debt is used as a control mechanism and as a substitute for independent directors.	Australia
Ellul (2010)	Mechanism to avoid control dilution Debt for family firms is used strategically as a control-enhancing mechanism.	36 countries
Croci et al. (2011)	Mechanism to avoid control dilution The financing policies are influenced by control motives.	12 European countries.

3.4. Capital Structure and Factors Affecting the Choice of Decisions

3.4.1. Capital Structure Decisions under Certain Conditions in the Future

The idea of 'certain conditions in the future' does not mean that conditions in the future will be static and without movement; what I am suggesting is that any movement will be continuous, certain, regular and constant. Thus, under these 'certain conditions' the capital structure is not expected to be changed and no fluctuations in firm's activities are anticipated. All the steps to define and study the capital structure-related decisions are based on traditional assumptions that regard rationality as the most realistic procedure in practical decision making. The most important factor in financial decision making is presumed to be maximising the value of the firms', and therefore the shareholders' wealth. This supposition is based on the assumption that markets are efficient, and that investors and managers are efficient and rational, too (Vasiliou and Daskalakis, 2009). Within this framework, decision making is based on the probability distribution of expected returns, from knowledge of the probability of future income distribution and unlimited alignment in the future. Thus, it is apparent that the rationality assumption presumes that a capital structure decision relates to a condition of certainty and there is no opportunistic behaviour by managers, as the latter are perceived as efficient and rational. As long as the errors of managers are random, then all is well; errors produced by bounded rationality can safely be ignored (Thaler, 2015). For instance, the level outcome of agency and stewardship theories are focused on economic goals; either minimizing the agency costs or minimizing self-opportunistic behaviour of managers. However, the interest/motive potentially inserts a wedge between the failed expectations of shareholders and managers regarding future outcomes. This makes the process of maximising the value of a firm different as compared to the process under certain situation. The treatment of risk and uncertainty potentially shows that managers, as decision makers, have a preference point, limited alignments and specific motives when making decisions.

3.4.2. Capital Structure Decisions under Uncertain Conditions in the Future

Alternatively, relationships between shareholders and managers are absolutely critical in financial decision making. The assumption is that a manager as an agent primarily follows self-interest when managing a firm (Findlay and Williams, 1985). Meanwhile, the main goal of a firm is to maximise the probability of that company's survival. Maintaining long term production, growth and security is the main priority and concern of managers. This argument is supported by the study of Vasiliou and Daskalakis (2009) which found that for managers the first priority in their funding decisions is maximisation of the probability of the long-term survival of the firm. Pursuing this objective will secure their own interests, such as status and security. To achieve their desires through decision making, managers face the challenge of making most, if not all, of their decisions independently of shareholders and creditors. However, it can be difficult to accept that managers are autonomous agents in decision making, who are only driven by their desire to maximise the benefits for shareholders, without any consideration of their own preferences. For example, interest payments are the cost of maintaining managerial financial decisions. By their constant ability to make payments, managers will not be dictated to by creditors regarding the prospect of project investment. In fact, a manager is a semiautonomous agent with a set of preferences based on the expectation of pursuing a firm's growth (size and profit) to avoid financial insecurity as well as optimising that firm's financial security (Gordon, 1992). Maintaining long term viability, a desirable credit level, financial flexibility or a desirable access level to a source of funds may sometimes be a manager's priorities, rather than just the maximisation of shareholders' wealth.

Furthermore, due to uncertain conditions in the future, Kregel (1998) suggests that individuals making decisions in real situations will not be able to specify all possible future outcomes. Managers make decisions using an expectation formation process based on custom, habit, tradition or other constituted practices; rather than those managers merely relying on their acquired knowledge. This perspective appears to be significant in that making decisions, the combination of collective experiences and imagination to arrive at possibility outcomes, is inherently coherent with unpredictable and uncertain conditions. Making decisions in a real world cannot fully specify the relevant possible outcomes and long-term expectations cannot be inferred from given factors. Thus, this view shifts the focus of determinants of capital structure financial decision-making to agent relations. Managers will first consider their past experiences and may presume that

the existing state of affairs will continue indefinitely, unless there are specific reasons to expect a change. In addition, under uncertain conditions, the capital structure could be inconsistent if the manager views the cost of capital as the cost of maintaining managerial decision-making, rather than as an objective to be maximised.

Consequently, a different procedure of decision making and actual behaviour in finance will shape not the definition of a capital structure decision, but rather the determinants of capital structure and the costs associated with making such a decision. The impediments to the process of maximising the firm's value will then not only be associated with the cost of capital but also with what Shefrin (2001) denoted as 'behaviour costs'. These costs are associated with the interests of managers, involving imperfections and emotional influences. Thus, the impediment may well stem from behavioural error in decision making. Most studies in corporate finance presume that managers are optimistic about the value of their firm and so investment opportunities become the reason why they follow the financing structure in a sequential order. However, a manager's duty is also to consider how to balance the cost and benefit of using financial sources. An optimistic manager would never issue new equity when the capital market is efficient and the firm is valued fairly (Baker et al., 2004). However, different with the conventional view, decision making is affected by the confidence of managers, by their optimism or pessimism about the future, and so it explains why managers decide to use low or high levels of debt in capital structuring.

Supposing that the balance of cost conditions under certainty and rationality, including the cost of capital, technology and the control of agency problem, implies that specific information relevant to capital structure decision-making is concentrated in one or just a few agents. Such a situation indicates that shareholders and creditors are not willing to supply funds when managers or 'old' owners have more information about the firm than outside investors (Myers, 1984; Myers and Majluf, 1984). There are two conditions that make such a situation possible. Firstly, if the managers and investors share the same information about everything, except risk (Giammarino and Neave, 1982), the expectation of managers and investors will be homogenous and rational. Thus, risk is allowed to vary only in terms of alternatives of capital structure because risk brings the consequence of variation in the cost of capital. Moreover, a firm's financial characteristics become a stronger determinant of financial-centric decisions than asymmetric information about risk preference. The risk refers to failed expectations and if this

happens there is a discontinuity of policy; capital structure decisions will be based on the parameter of the firm's characteristics or performance. In this situation, raising capital through issuing equity is preferable to issuing debt, because managers will decide to use more debt if the company is riskier than investors think. When investors know this situation, they will not invest. However, by considering the taxes and costs associated with bankruptcy, there is an optimum balance when the cost of capital is minimised. As a result, the integration of financing decisions and investment decisions will culminate in the central objectives of the company, which are to maximise the wealth of shareholders, while at the same time involving only minimal risks.

Secondly, the managers have more information about the value of their particular company's assets and its opportunities than do outside investors, but do not share this information with investors because the information is so favourable to management. Companies will follow a certain hierarchy in financing options in order to pursue the ultimate aim of maximising the wealth of the shareholders. Again, managers are assumed to be optimistic about the value of a firm's assets and investment opportunities. Optimistic managers would never choose equity as a funding source (Baker et al., 2004) if the capital market is efficient and the value of the firm is at its correct fundamental value. Managers will rely on internal sources and debt for funding and turn to equity as their last option.

Thus, the assumption under the certain conditions in the future, and rationality of managers, means that the situation must meet the conditions of a perfect and efficient capital market. This situation does not necessarily mean that capital structure decisions are a product of the manager's knowledge and formed by calculation about the probability distribution of future outcomes. However, managers may behave in decision making by following their own goals; these can be not just maximising the wealth of shareholders but also maximising the probability of the long-term sustainability of the firm (Vasiliou and Daskalakis, 2009). Thus, when managers make capital structure decisions relating to family firms, they will not only consider economic goals but also non-economic goals.

3.5. Determinants of Capital Structure in Family Firms

Previous studies about capital structure in family firms focus on how that structure is affected by ownership concentrated in the hands of the controlling family shareholders

and their choice of funding sources (Santos et al., 2014; Schmid, 2005; Anderson et al., 2003). However, the impact of the founding family's influence on capital structure decision-making has still not been clarified. In family firms, the combination of family holdings, the desire to pass the business to the next generations, and their reputation are the issues taken into account when formulating capital structure decisions designed to preserve the socioemotional wealth of family firms. The role of capital structure is most likely a mechanism to reduce the potential risk of financial distress that could potentially harm the family firm's sustainability. In family firms, the components of behaviour and corporate governance of capital structure are interrelated with family goals; the main ones being: a) preserving socio-emotional wealth through agency, b) control motivation, and c) risk avoidance of business loss.

Mishra and McConaughy (1999) have explored the behaviour of a firm's owner and the consequences of capital structure in family firms. They provide evidence of a key aspect of capital structure related decisions in family firms: losing control over their firms and risk avoidance caused by the increasing costs of financial distress. They find that the founding family controls matters in determining the level of debt financing, not managerial ownership. In the context of the control of family firms, it is common that an owner may act as a manager and the risk attitudes of an owner-manager and descendant-manager could be changed regarding unstable risk preferences in order to take a risk in decision making (Wiseman and Gomez-Mejia, 1998). The preferences of managers may impact capital structure decisions with the rationale that the degree of confidence - seen as degrees of optimism and pessimism about the future - of the founder-manager and descendant-manager might be different. In decision making rational managers are assumed to be optimistic about the value of the firm, as in the value of assets and investment, which are expected to increase in the future. Managers expect that the firms will be more profitable and will increase growth opportunities. Since the market is efficient, where the investors have the same access and information is spread symmetrically, managers would never issue new equity (Baker et al., 2004). Issuing new securities is expensive due to the floatation costs and so increases the agency cost of debt.

In addition, managers are assumed to have a better understanding of, and more information about, the firm's potential investment and growth opportunities than outside investors. As a result capital structure decisions are designed to maximise the value of 'existing' shareholders, who are the founding family. Outside investors, who are assumed

to be rational, will take action based on information from management because they believe in the financial principle that every action conveys information (Myers and Majluf, 1984). The prediction about capital structures is driven not by the trade-off between cost and benefit of debt or equity, but more simply by pursuing the family firm's goals. Motivated by the need to maintain control over the business, the decision emphasises that aggregating new capital is essential in order to keep control of the family firm and reduce the agency cost of debt.

Therefore, I will develop several concepts. Firstly, I consider the three aspects that determine capital structure which are agency problem, control and asymmetric information. Deriving the determinants capital structure from those three aspects is relevant with the case of family firms, especially the force to avoid diluting control (control approach) and a risk reduction strategy (agency approach). Secondly, I consider the endowment effect as a consequence of the second assumption presented above and followed by the concept of noneconomic goals. Thirdly, non-economic goals can distinguish the outcome of capital structure decision under uncertainty conditions in the future which may suit with family firm's goal to preserve SEW. Here, as suggested by Madison et al. (2015), it would be interesting to see if the tenets of socio-emotional wealth, agency and stewardship theory could be viewed as a dynamic approach to establish a new perspective of the family firm. Thus, by not putting in a dichotomous treatment of those theories, this study would fill the gap of how SEW is related to decisions made in family firms.

In applying SEW in family firms, Chua et al (2015) argue that the limitation of SEW is that the concept is mostly focused on the function of accumulating financial wealth, while neglecting changes in socio-emotional endowment through aspirations for profit. However, Martin and Gomez-Mejia (2016) believe that the family firm may consider financial goals a priority, when and where they are consistent with socio-emotional enhancement. When making capital structure decisions, family firms will follow the dimensions of SEW and are controlled by financial characteristics. This paradigm distinguishes family firms from non-family firms. Therefore, capital structure decisions may be a mechanism for family firms to achieve their strategic objectives to preserve SEW (Berrone et al., 2010; Berrone et al., 2012; Naldi et al., 2016).

As a strategic aspect of a company, capital structure may impact the balance of power in family firms. The ability to influence company decisions represents the holding of a long-term commitment to maintain the sustainability of the company across generations, as well as giving different meanings to power and control motivation. Consequently, family firms may wish to maintain control of their wealth; a goal often achieved by the use of debt as a device that allows family firms to retain control of their firms through decision making. The importance of control to families is because families often have long commitments to sustain the business over more than one generation (Schmid, 2013); an obligation which also creates the role of the firm as a provider of 'patient capital' (Lumpkin and Brigham, 2011).

Some researchers, such as Ellul (2010), argue that control is a function of ownership structure. But some say that access to control over critical resources is more important than ownership (Rajan and Zingales, 1997). Founding families may dictate corporate policy either by managing the firm directly or by monitoring the company closely. The rest of the shareholders possibly lack the power to control a company's decision-making. Inviting new investors to be a part of the shareholder cohort may harm the founder's power and authority as a previous shareholder. As a result, the capital structure decision will consider and reflect the outcome that the founder or family member shareholders anticipate as a consequence of their ownership.

Owner-manager behaviour varies depending on the ownership concentration (Santos et al., 2014) and the legal framework and institutional environment of the countries in which the firm operates (Antoniou et al. 2008; Ampenbergers et al., 2011; Schmid, 2013; Santos et al., 2014; Kuznetsov et al., 2014). From the perspective of risk avoidance, the choice is more sensitive to conditions associated with control risk. To raise capital, De Angelo and De Angelo (1985) suggested the insiders' value control and issue non-voting stock without reducing control or increasing control risk. According to Anderson and Reeb (2003), the risk averse behaviour of family firms is evident in financial decisions when firms are involved in less diversified investments. The risk reduction strategies of the firms are pursued through investment diversification into low risk investment (Croci et al., 2011) and lower debt levels. Low levels of debt could decrease the risk of losing SEW, or family capital in the case of bankruptcy (Fama, 1980).

However, from the perspective of control consideration, Villalonga and Amit (2006) and Croci et al. (2011) found that the preference to use more debt is influenced by control motives. This choice is supported by empirical research that indicates higher debt ratios of listed family firms in Australia (Setia-Atmaja et al., 2009), Canada (King and Santor, 2008) and 12 European countries (Croci et al., 2011). Harris and Raviv (1988) as well as Stultz (1988) and d'Mello and Miranda (2010) provide evidence that to retain control of family firms, debt can be used as a device by current owners to maintain control. This same approach can be employed as an internal control mechanism for alleviating agency conflict inside the company. When internal funds are not sufficient, leverage could: a) mitigate the risk of diluting family control (Wu et al., 2007), b) maintain family power through voting mechanisms (Harris and Raviv, 1991; Jensen and Meckling, 1976), c) avoid monitoring by lenders (Mishra and McConoughy, 1999; King and Santor, 2008) and d) mitigate agency problems with minority shareholders and outside family members (Santos et al., 2014; Setia-Atmaja et al., 2009).

The power to control is not always related to those family members holding shares, but is also informed by family members as stakeholders and by the founder of the company. Thus, the strategic financial decision will be influenced by family members. Power to gain access may be more contingent on specific financing than the power provided from ownership. Important access is an alternative way of conferring power. In addition, access is a way to foster strategic decisions such as such as those relating to financial issues. Giving access to one manager will keep and maintain control inside the company. As a result, the owners and managers have a coalition or alignment of interests due to reduced levels of conflict in decision making. In the context of family firms, the intention to maintain family control results in the owner taking a strategic position as a manager, so as to channel resources and capabilities through family involvement. This choice is made in order to ensure the firm's survival and to protect and enhance transgenerational wealth (Chrisman et al., 2003b; Villalongga and Amit, 2006).

When the shareholders are dispersed, families have the power to control managers' decisions. Family members have both incentives and access to influence management appropriately. Management will bear the fiduciary relationship with shareholders but also have a relationship with the family members who, as stakeholders, can affect or be affected by the achievement of the organisation's objectives (Freeman, 1984). The claims of family members may be taken into consideration and subordinated to the claims of

other shareholders. As a result, the power to control is not always related to those family members holding shares, but is also informed by family members as stakeholders and by the founder of the company. Since a family firm's goal is to preserve their SEW, managers will put this goal as a priority. The main reason for doing so is because family firms may bear risks due to the whole investment in the firm potentially being placed as a hazard (Freeman and Evan, 1990). By establishing a system and setting a collective strategy, the family firm will ensure the organisation's survival. Based on the views of Astrachan et al. (2002) and Frank et al. (2002), power reflects the influence of the family on ownership concentration, management and governance. This influence can be a key characteristic that distinguishes family firms: a family member exerts control over strategic decisions (Chua et al., 1999; Schulze et al., 2003). Such control can be direct, such as being a CEO or chairman of the board or indirect by appointing a top management team. Control can be exerted by the founder or by family members or by a dominant family coalition.

However, having a family CEO may not be well received by the market. Ampenberger et al. (2013) found that a founder CEO/chair in a country with a banking-based system will prefer to use less leverage. SEW preservation, manifested by a family CEO/chair placement could send information to the market. Crano (1985) argues that it is more difficult to deal objectively with a family member's performance and qualifications, if acknowledging the institutional requirements of objectivity and transparency. Pursuing SEW will seduce the firm from optimal economic targets to accommodating family interests. As a result, creditor will concern about monitoring family firms for their investments. Thus, a lower level of leverage could protect family firms from the threat of credit monitoring from creditors.

Previous empirical studies on how family involvement can impact financing decisions, mostly just focus on ownership with minimum attention being given to the issue of strategic positions such as CEOs or chair/board membership. Some argue that ownership has a negative relationship with leverage (Santos et al., 2014; Schmid, 2013; Mishra and McConoughy, 1999). In contrast, some found that ownership concentration has a positive impact on a firm's debt level (Croci et al., 2011; Ellul, 2010; Margaritis and Psillakis, 2010; King and Santor, 2008). However, other researchers found that ownership concentration is not significant to leverage (Ampenberger et al., 2013; Anderson and Reeb, 2003) and there is a non-linear relationship between ownership and debt level

(Setia-Atmaja et al., 2009; Schulz et al., 2003). Thus, these studies have mostly focused on the impact on ownership concentration levels, without distinguishing between the different generations such as founders and descendants in family businesses. Table 3.4 summarises empirical findings on family involvement and capital structure decisions.

Table 3.4. The empirical researches on family involvement and capital structure decision

Sample literatures	Variable of family involvement	Findings (The relationship between family involvement and leverage)	Country
Santos et.al.(2014)	Family ownership	Negative	12 Western Countries
Ampenberger et al. (2013)	Family ownership	Not significant	Germany
	Founder CEO	Negative	
Schmid (2013)	Family ownership	Negative	Germany
	Active management role (CEO, Board)	Negative	
Croci et al.(2011)	Founder CEO/Chair	Positive	12 European countries
Ellul (2011)	Family ownership	Positive	38 countries (13 European; 9 Asian; USA and 15 Latin America)
Margaritis and Psillakis (2010)	Family ownership	Positive	French
Setia-Atmaja et al. (2009)	Family ownership	Non-linear relationship	Australia
King and Santor (2008)	Family ownership	Positive	Canada
Villalonga and Amit (2004)	Family ownership	Negative	Fortune 500 companies
Schulze et al. (2003)	Family ownership	Non-linear relationship	USA (private family firms)
Anderson and Reeb (2003)	Family ownership	Not significant	S&P 500 (USA)
	Founder CEO, descendant CEO, hired CEO.	Not significant	
Mishra and McConoughy (1999)	Family ownership	Negative	USA

The researchers argue that a family firm's willingness to give up control and loosen SEW should weigh less heavily as it moves from the founder stage to third generation stage. These issues frequently result in a decline in the motivation to keep control and preserve SEW. Thus, agency governance and agent managers are more effective during these descendant stages. However, some argue that attachment and identification with the business (Zellweger et al., 2012) and dynastic motivation (Casson, 1999; Parker, 2014) suggest that the duration of family control will induce the next generation to keep control, aiming to preserve SEW. As a result, the objective of securing transgenerational control will make the descendants provide jobs and involve members in the family business as CEO and/or chair or duality (CEO and chair) to safeguard both the present and the future. In addition, the new younger family members will prefer to have associate CEOs rather than external directors (Jones et al., 2008) to preserve SEW. In case they need to raise capital from new equity, the family business members motivated by the intention of transgenerational control would consider selling the company at a higher price to compensate for the loss of SEW (Zellweger et al., 2012). It appears likely that at this stage of a firm's life, there is a reduction of commitment and identification with the business, or a reduction of stewardship behaviour among family members.

Following stewardship theory, family involvement across the business, including the management, the board and other levels of activity, is likely either to: a) result in a tendency to hire unskilled family members, rather than professional managers or b) the appointment of family members that leads to overly centralised decision making. Thus, excessive family involvement potentially harms SEW and threatens relational trust. The researchers also propose the loss of SEW as the explanation for this option choice. It is difficult to accept that the independence of family firms is the way to preserve SEW because the reciprocal bond seen within a family business is not exclusively between family members but is likely to be extended to a wider set of constituencies (Miller et al., 2009). Promoting a sense of stability and commitment to the firm (Miller and Le Breton-Miller, 2005) is a part of developing family relationships, including trustworthy partners.

In Indonesia, an independent board for listed companies is mandatory rather than voluntary. It is ruled in the Indonesia Financial Services Authority (OJK) No. 33/POJK.04/2014 article 20, verses 2 and 3, that if the board membership consists of two members, one of them must be an independent. If the board consists of more than two members, 30 percent of those members must be independent. Thus, even though the form

is mandatory, the percentage of the independent board members can indicate and be interpreted as a limitation of the independence of too many kin ties among family members. Such a limitation is likely to endanger strong social bonds and trust with the stakeholders (Miller and Le Breton Miller, 2005). As a consequence, reducing too much emphasis on maintaining binding social ties within the firm to the family firms can avoid family business declined.

Table 3.5 shows the dimensions of SEW and the expected strategic behaviour regarding capital structure decisions. Table 3.6 summarises the empirical findings relating to determinants of leverage in family firms.

Table 3.5. The dimensions of SEW and Expected Strategic Behaviour

Dimensions of SEW		Expected Strategic Behaviour
1.	Family control and influence.	**Actively/Directly:** Strong ownership position (Harijono et al., 2004; Berrone et al., 2012; Santos et al., 2014). Founder actively involved in strategic position (Anderson et al., 2003; Maury, 2006). Being a CEO or chairman of the board or duality (Schulze *et al.*, 2003; Anderson and Reeb, 2004; Gomez-Mejia *et al.*, 2007; Cruz *et al.*, 2010; Miller *et al.*, 2010; Berrone *et al.*, 2010; Chua et al., 2011; Schmid, 2013). Appointing family members to strategic decision maker positions (Chua et al., 1999; Schulze et al., 2003; Chung and Chan, 2012). **Passively/Indirectly:** Appointing of top management team members (Berrone et al., 2012). Assembling a board that supports family decisions (Mustakallio et al., 2002).
2.	Renewal of family bonds through dynastic succession.	Appointing relatives to succeed (Schultz et al., 2001; Cruz et al., 2012). Preservation of the family dynasty (Casson, 1999).
3.	Binding social ties.	Appointing independent board members (Miller and Le Breton Miller, 2005).

Table 3.6. Determinants of Leverage Family Firms

Variables	C	H	SA	S	M	SA	A	AA
Family Ownership	+	+	+	-		+	-	
Founder CEO/Chair	+*						-	
Family Board Rep								
Board Size						-		
Family Management				+				
Descendant CEO					+			
Asset Tangibility	+*/-**		+	+	+	+	+	
Profitability	-	-	-	-	-	-	-	
Firm Size		+	+	+		+	+	
NDTS	-*/+**	-	+					
Firm Age	-		+	-	+		+	
Liquidity								+
Growth Opportunities	+		-	-				
R&D/Sales								
Total Risk						-		+

The sign of '+' and '–'indicate the direction of significant relationship with leverage. '+' means that variables increases leverage, and vice versa for the '-'sign. '*' refers to long-term debt and '**" refers to short-term debt. The studies are Croci et al. (2011) (denoted C), Harijono et al. (2004 (H), Santos et al. (2014) (SA), Schmid (2013) (S), Molly et al. (2011) (M), Setia-Atmaja et al. (2009) (SA), Ampenberger et al. (2013) (A), Anderson and Reeb (2003) AR), Comparisons suffer from the fact that these studies used different methodologies, different period of times and different measures of variables, different leverage measure.

3.6. Consequences of Capital Structure Decisions

Financing involves making strategic decisions for a company, since those decisions determine the company's investment policy. An optimal capital structure decision may serve to maintain the firm's growth (Chua et al., 2011), and the availability of investment opportunities in the future. Decisions regarding a firm's financing will impact the investment project due to the cost of raising capital and making returns to the investors; both debt holders and shareholders. To finance the investment, the company will consider a financial structure which could minimise the cost of capital. The reasons for this consideration include: a) the possibility of financial distress, b) taxes and financial friction and c) information friction that led to the financial cost. As a general rule, more capital is

available for debt investment than equity investment. The cost of raising capital can be broken down into: i) the transaction costs, which are the actual costs of completing the funds, and ii) the required return which is provided to the investors.

Substantially, financing decisions in various companies follow the financial logic driven by economic motives. Within the capital structure, choices are offered between internal and external sources, but capital structure requiring strategic decisions in family firms makes the issue of capital a control mechanism to maintain the interest of owners. This view is closely related to the particular idea of Dreux (1990) that financial objectives could not be achieved without a major recognition of the fundamental issues relating to: i) ownership, ii) appropriate capital levels and iii) the control of the business. So, the use of debt is a device of owners to defend their corporate control. Family firms face a trade-off between raising external finance and losing their control over the firm.

Both the survival and sustainable profitability of companies depend on the capacity to balance economic and social purposes by distributing wealth and value to each group of stakeholders as a part of a company's system (Clarkson, 1995). In other words, a firm's interests are not purely economic, as follows from utilitarian principles, thereby justifying value creation through the decision making process. In family firms autonomy among family members, as well as solidarity between them to pursue a) trans-generations, b) socio-emotional wealth and c) fairness in power allocation become the rules of the game by which to run the company. However, from another perspective, families' experiences of conflicts become a reason for investors' opportunistic behaviour by offering quick and cheap financial fixes in exchange for their shares or other assets.

Family firms tend to avoid damaging the family's reputation in order to prevent the loss of their assets in case of the loss of their capacity to repay. In addition, the non-financial reason for raising new equity through initial public offerings (IPOs) for the family business has been found to be that their reputation and status motives for going public may be a means to increase the prestige of the family (de Lema et al., 2011). Capital structures can improve the external relationships of firms with different capital suppliers and bring about internal changes in investment planning.

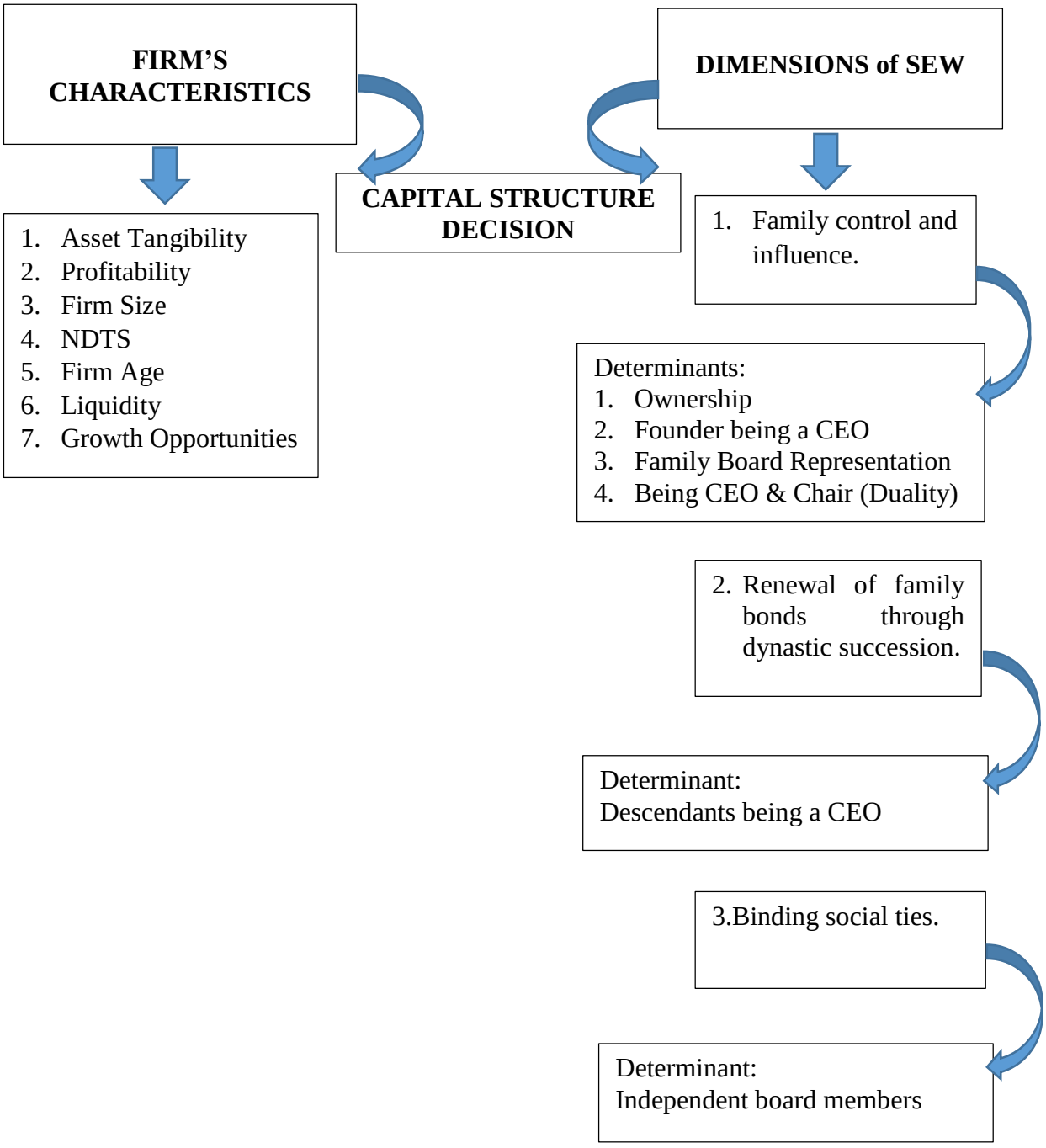
If the shareholders are undiversified, the company could impose a financial decision with less risk, a position argued by Shleifer and Vishny (1986). Family firms prefer to avoid

risks by seeking financial sources that can bear the probability of default. In addition, self-interested managers have an incentive to reduce the level of corporate debt to optimal levels, in order to comply with the shareholders' points of view. The managers tend to be more concerned about total risk in financing by picking the financial logic that minimises the cost of capital or transaction costs. That is, conservative financial policies prefer less debt, as using more debt will increase the probability of a business experiencing financial distress.

However, in a situation involving widespread shareholders, managers are relatively free to pursue their own preferences due to the free rider problem. Family firms reduce the effectiveness of external control mechanisms and expose the firms to the 'self-control' problem (Jensen, 1994) by placing family members as managers. This process is one way to reduce the agency problem or diminish conflict from different interests and motives because conflict can be viewed as a risk that may threaten the sustainability of the company. Anderson and Reeb (2003) propose that family firms could reduce the firm's risk in two ways. First, family firms influence investment decisions by pursuing new projects that are imperfectly correlated with existing projects. Diversification becomes the best way to reduce financial risk, since most family firms put their wealth in the company. Second, family firms may seek capital that can bear the probability of default. The low level of debt could decrease the risk of losing undiversified family members and family capital in case of bankruptcy (Fama, 1980).

To summarise, Figure 3.1 shows the theoretical framework of capital structure decision-making in family firms.

Figure 3.1
Developed Theoretical Framework of Capital Structure Decision in Family Firms



3.7. Research Gaps and Hypotheses Development

Agency theory and stewardship theory maintain that the principal and managers become more aligned over time, but ownership concentration is more dispersed. As a result friction among family members is more likely when family firms pass from one

generation to the next. The philosophical characteristics of agency theory and stewardship theory are derived from different concepts of the model of a person. The weakness of agency theory is the assumption made about individualistic motivation resulting in agent-principal divergence. However, it is believed that in modern corporations, managers and principals seek an individual utility. Each owner has an intention to maximise their investment in the company. Managers are morally, if not legally, contracted to maximise the shareholders' wealth. So, problems are incurred with the owners when their interests are divergent. If managers do not share the same individual motivation and interest as the owners, that dissonance can become a serious problem. To ensure that the interests of the manager or agent and principal are aligned, agency theory prescribes mechanisms, incentives and governance structure (Demsetz and Lehn, 1985; Jensen and Meckling, 1976). Control and monitoring become the key elements to govern the company and to ensure that managers act on behalf of the shareholders' interests. It would seem logical that control and monitoring become important managers in these two roles (controllers and monitors) act on behalf of owners and perform their mandatory duties.

Again, what if the interest does not align or a discontinued alignment of interest occurs? Stewardship theory assumes that agents act in the best interest of their principals (Donalson and Davis, 1989; 1991) and empower their stewards' behaviour to facilitate continued alignment of interest. Thus, the interests of managers are directed by organisational utility, rather than by personal objectives. It appears that managers perform their duties voluntarily by acting as a steward of the firm. Acting as a steward means the manager's attitude is based on self-determination and more intrinsic motivations, such as opportunity and achievement. In this context, collectivism is more dominant than individualism. By working for an organisation, personal satisfaction and needs are met. Pro-organisational motivation of managers could raise personal levels of utility and self-serving behaviour. Although stewardship theory states that the managers are pro-organisation in behaviour, there is a stratum or a sequence in applying stewardship theory: the sequence of interest. Thus, there is no trade-off between individual interest and organisational interest. The structure of the organisation basically facilitates and empowers the manager's ability to act as a steward. Control and monitoring can be counterproductive if managers are to be trusted; therefore, involvement is significant in this context.

The interesting point regarding motivation is how the managers define themselves in term of their membership of their particular organisation. Identification refers to being embedded in the organisation. The fact is that in family firms, not all family members become managers or are actively involved in the firm. Some family firms hire managers from outside the family. Hence, some managers work on behalf of the family and work towards organisational goals. It is fair to conclude they have organisational commitment. Thus, pushing the boundaries of agency theory into family firms that use institutional approaches, rather than personal approaches, as a basis from which both managers and owners can be influence.

An agents' behaviour tends to predict performance outcomes based on the agent's risk preferences (Mc Guire, 1988, Rees, 1985) or their frames about expectation regarding the future (Baker et al., 2004). Therefore, it is reasonable that they decide to use a low level or high level of leverage, depending on how they compare the anticipated outcomes of capital structure decisions from the available options in terms of loss aversion. In the case of family firms, the motivation of a family manager will be to preserve the noneconomic goals which are maintaining long-term reproduction, growth and the safety of the firm itself (Vasiliou and Daskalakis, 2009).

The aspect that makes family firms unique is the connection of such key elements as ownership, management, government and succession. All of these issues influence goals and objectives, strategy, family structure and dynamics (Chua et al., 1999). However, the literature fails to address how decisions relating to the non-economic goals of family firms are made. The different assumption about family firms' goals is essentially the research gap of agency theory/stewardship theory and moving away from those theories static dichotomous treatment to a dynamic approach. Dynamic perspectives can benefit theory by explaining why behaviour changes relative to capital structure decisions over time. This perspective helps investigate behaviour patterns based on the noneconomic goals (SEW) and would possibly alter predictions made about capital structure decisions in family firms. Following this view, there are three dimensions of SEW that I have explained on Chapter 2 based on the descriptions from Berrone et al. (2012) that are related to capital structure.

1. Family control and influence

Agency theory highlights that increasing the common stocks of managers in the firm is a way to get a better alignment of the owner's interests and manager's interests. Using debt financing will reduce total equity financing that, in turn, could reduce the scope of managers' and shareholders' conflicts (Jensen and Meckling, 1976). Studies have assumed that owner-managed firms will have either zero or insignificant agency costs (Jensen & Meckling, 1976; Fama & Jensen, 1983; Ang, Cole, & Lin, 2000). So, under this theory, capital structure decision-making is a device to maximise organisational performance and shareholder returns (Schulze et al., 2001; Eaton et al., 2002; Dyer, 2006; Miller et al., 2007; Sciascia & Mazzola, 2008; Block et al., 2011). Family firms reduce the possibility of losing or diluting control by using a strategy that helps to maintain the family's voting power (Harris and Raviv, 1991; Jensen and Meckling, 1976; Stulz, 1988). Debt will solve the problem of control as long as the firm faces no financial distress. In addition, debt is a strategy of control consideration to maintain power in the firm, especially when ownership is dispersed under descendant stages.

Stewardship theory (Corbeta and Salvato, 2004; Miller and Le Breton-Miller, 2006; Uhlaner, Floren, & Geerlings, 2007) highlights that as long as the fundamental coalition between managers and owners is intact, the value of the firm seems to increase financially. This increase occurs because fundamentally there is no inherent or general problem with the manager's motivation (Donaldson and Davis, 1991). The stewardship theory supports that under one person who has authority over the decision making, such as founder as the CEO/chair, it will not be in their interest to take benefits from their position (Donaldson and Davis, 1991). The dual CEO-chair role in the firm is a strategy to reduce agency problems (Poutziouris et al., 2015). In addition, such a role seeks to protect the interests of the CEO and shareholders and avoid managerial entrenchment. Family firms may avoid debt due to control considerations, since decision making is under a single person, the founder-manager.

In contrast, to preserve and pursue noneconomic goals might require that choice will be based on, and informed by, loss aversion of SEW, such as control over business. Behaviourally, capital structure might be different across generations since the dynamic of family life can influence SEW priorities across generations, due to the pursuit of ensuring the family firm's sustainability. Family firms will be more willing to use debt

when ownership is concentrated in the hands of a controlling owner (Chua et al., 1999; Misra and McConaughy, 1999), such as during the first generation founder phase. Those same families are less willing to use debt when ownership is dispersed, such as in the sibling partnership stage involving the next generation. It appears likely that the relationship between ownership concentration across generations and debt level is non-linear (N shape). Empirically, Setia-Atmaja et al. (2009) found that family ownership and debt take a non-linear shape (inverse U); however, Schulze et al. (2003) found a U-shaped relation in private family firms. Thus, I posit that:

Hypothesis 1. *Concentration of ownership in the hands of family members has a non-linear relationship with leverage over the life period of the family.*

There are two situations regarding family involvement in a family firm. Firstly, founders who are also the CEOs of their family firms tend to be more risk averse as a consequences of these family business owners investing most of their wealth in the firm they have created. Subsequent empirical tests show that if a founder acts as the CEO, family firms have low levels of leverage. This low level is because the founder has a motivation to pass a successful, unthreatened firm to the next generation (Ampenberger et al., 2013; Schmid, 2013). The intention to transfer the business to the next generation makes founder-managers more risk averse, so enabling them to pass their single asset, the family firm, to the next generation. A founder acting as the CEO tends to be more concerned about how the family business, his / her one single asset, can deal with high exposure to the market place and survive. Therefore, founder-managers have an incentive to reduce risk at the firm's level. Additionally, there are non-financial issues such as the family's reputation that can be damaged if financial distress occurs.

Secondly, Ellul (2010) and Croci et al. (2011) found when family members are also board members, they prefer to avoid equity financing because control considerations exert a far greater influence on debt than does equity financing. Family member representation on a board may be more concerned about wealth preservation and the stability of the family's wealth than family firms without family board representation. Those board members could reduce family tensions and align the interests among family members (Le Breton-Miller and Miller, 2013). Moreover, not only do they tend to align the interests, they will vote to use increased amounts of debt instead of losing control of the family firm. If

ownership is dispersed among other shareholders, as long as the family has an influence via board membership, 'whispering' strategic decisions might be still be sufficiently powerful to influence capital structure decisions. This situation seems to demonstrate that the relationship between family board representation and debt level is positive, since it maintains family control to preserve SEW strongly among board members. I thus hypothesise:

Hypothesis 2. *If the firm founder acts as the CEO, the family firm will have low leverage.*

Hypothesis 3. *If family members are represented on the Board of Directors, this increases leverage of the family owned firm.*

A member of the family is both the CEO and a member of the Board of Directors (a duality position) provides a greater influence to pursue the family's interests than if the position was not of a dual nature (Gomez-Mejia, et al., 2003). The holder of a dual position will almost certainly attempt to safeguard the family's interests (Tam and Tan, 2007). The coalition among family members by the founder's presence as CEO and chair could decrease family tension and align interests among family members (Le Breton-Miller and Miller, 2013). However, when they occupy both positions, their power to influence capital structure decisions increases. This power increment allows the dual role holder to choose the options that will not put the firm in a long-term period of risk, involving possibilities of financial distress or being taken over by creditors. The founder CEO/chair will almost certainly view the firm as an asset that will be transferred to future family generations (Arregle et al., 2007). The above points indicate that there is a negative relationship between duality and leverage. I thus posit that:

Hypothesis 4. *In a family owned firm, when a member of the family is both the CEO and a member of the Board of Directors, this results in less leverage.*

2. Renewal of family bonds through dynastic succession

A family firm's stages reflect the time when the family control of the business is transferred from one generation to the next generation. The ownership could be dispersed among successive generations of family members and/or the placement of managerial and

controller positions by the next generation. Both agency theory and stewardship theory highlight that: a) if the continuation of the organisation and employment of managers in the company is threatened by the possibility of takeover (Donaldson and Davis, 1991) or b) a family firm is restructuring to accommodate a life cycle change in the company, managers will react to protect their own self-interest. The motivating prospect behind the managerial reactions is that the organisation may have no benefits for them personally. Thus this is the critical situation, according to both agency and stewardship theories, when any coalitions or alignments are jeopardised for the long run.

Moreover, the strength of efforts dedicated to preserving SEW might become weaker between family and the business as time passes. Chua et al. (1999); Schulze et al. (2003) and Gomez-Mejia et al. (2007) argue that the SEW is strong when the first generation (founder) keeps the ownership and both decision management and/or decision control, but the SEW could fail to survive through to the next generation. The researchers all suggest that the family firm's willingness to give up control and lose SEW should weigh less heavily as it moves from the founder stage to stage three.

As a family's engagement with the business declines with the dispersion of ownership among generations (Gomez-Mejia et al., 2011). As a result of these issues the demand and motivation to keep control and preserve SEW declines. The next generation's perception of the value of the business is unlikely to be in line with that of the founder or the previous generation. The above would seem to indicate that a descendant CEO is willing to use more debt to pursue their objectives, because dispersion of ownership is more likely to bear risk (Schulze et al., 2003). However, if the descendant CEO is more concerned about wealth preservation than wealth creation (Kaye and Hamilton, 2004) the descendant is more likely to use a lower level of leverage to protect the family firm from the threat of a takeover by a supplier of capital. Thus, I posit that:

Hypothesis 5. *If a descendant of the family firm's founders acts as the CEO, this will lead to a lower level of leverage.*

3. Binding social ties

Agency theory highlights that an independent board chair is there to control managerial opportunism. In contrast, stewardship theory stresses that while acting as stewards, the

family may place outside directors on the board to provide expertise, objective advice or commonly act as advocates or independent auditors for the company (Donaldson and Davis, 1991). This scenario is the opposite of implicitly monitoring and controlling activities on behalf of minority shareholder protection. The studies of Setia-Atmaja et al. (2009) and Anderson and Reeb (2004) found that family-controlled firms use either debt or dividends as a substitute for independent directors, due to mitigating families' expropriation of minority shareholders. So, if debt as a mechanism of control is substituted by an independent board, the debt level tends to be low.

By contrast, SEW provides kinship ties with some of the same collective benefits that arise in closed networks, including relational trust (Berrone et al., 2012). Independent board member can help a company to improve its relations with organisations outside the family firms, such as creditor banks. The independent board may be able to help family firms to enhance the sustainability of the company and resolve conflicts, since the potential for conflict in cousin consortiums may be very high (Le Berton-Miller and Miller, 2013). The presence of independent board members could mitigate family altruism in hiring unprofessional expertise that lacks fresh ideas, has limited skills or results in overly centralised decisions. Thus, an independent board might play a role in moderating the family's power and alleviating conflicts among shareholders. Correspondingly, Harford et al. (2008) found that a stronger board that can be indicated by a more independent board, thereby forcing the firm to hold more debt and more short-term debt. There seems to be a positive relation between board independence and leverage, thus I posit that:

Hypothesis 6. *Board independence increases the level of leverage in a family owned firm.*

Table 3.7 provides a list of hypotheses about determinants. It is divided into three parts based on the dimension of SEW that consist of the six hypotheses cited above.

Table 3.7
List of Hypotheses of Determinants Capital Structure of Family Firm

	Justification
Dimension SEW 1: Family control and influence	
Hypothesis 1. *Concentration of ownership in the hands*	Agency theory highlights that leverage and ownership concentration are interrelated through the agency problem, control and risk. Ownership structure and debt can be seen as

of family members has a non-linear relationship with leverage over the life period of the family.	internal control mechanisms aimed at alleviating the agency conflicts that exist between different types of stakeholders inside corporations (D'Mello and Miranda, 2010). Capital structure choice will be based on loss aversion of SEW, such as control over business. Family firms will be more willing to use debt when ownership is concentrated in the hands of a controlling owner (Chua et al., 1999; Misra and McConaughy, 1999) but the dispersion of ownership may result in their use of debt having a non-linear relationship. Family firms are most vulnerable to conflict and least willing to bear added risk (Schulz et al., 2003), when the ownership is split in relatively equal proportion among founder descendants.
Hypothesis 2. *If the firm founder act as the CEO, the family firm will have low leverage.*	A stewardship perspective suggests that the family's attachment to the organisation is highest when the firm is owned and managed by its founding family (Chua et al., 1999; Misra and McConaughy, 1999). Equity holders with a controlling interest should be able to exercise their influence in the firm's decisions more effectively if the founder is a CEO, particularly if the CEO is also the board chair or a board member (Boyd, 1995; Conyon and Peck, 1998). Schultze, et al. (2003). CEOs of family firms tend to be more risk averse as a consequence of family business owners investing most their wealth in their firm. Subsequent empirical tests shows that a negative relationship between a CEO and leverage levels can be explained by i) the motivation to pass the firm to the next generation and ii) higher risk aversion (Ampenberger et al., 2013 and Schmid, 2013).
Hypothesis 3. *If family members are represented on the Board of Directors, this increases leverage of family owned firm.*	Equity holders with a controlling interest should be able to exercise their influence on the firm's decisions more effectively if the founder is a board chair or board member (Boyd, 1995; Conyon and Peck, 1998). Schultze, et al. (2003). Ellul (2010) and Croci et al. (2011) noted that founder chairs prefer to avoid equity financing because control considerations exert a far greater influence on debt over equity financing. Stewardship theory posits that family member representation on a board is more concerned about wealth preservation rather than wealth creation (Kaye and Hamilton, 2004). Family presence as board members could reduce family tensions and align the interests among family members (Le Breton-Miller and Miller, 2013).
Hypothesis 4. *In a family owned firm, when a member of the family is both the CEO and a member of the Board of Directors, this results in less leverage.*	A founder CEO-chair gives greater influence to pursue family's interest (Gomez-Mejia, et al., 2003). Moreover, the duality may attempt to safeguard the family's interests (Tam and Tan, 2007). However, when a CEO is also chair of the board of directors, their power to influence capital structure decision increases, allowing them to choose decisions that protect the firm from a long term period risk, such as financial distress or take over by creditors.

Dimension SEW 2: ***Renewal of family bonds through dynastic succession.***	
Hypothesis 5. *If a descendant of the family firm founders acts as the CEO, this lead to a lower level of leverage.*	The coalition among family members by family presence as CEO could decrease the family tensions and align the interests among family members (Le Breton-Miller and Miller, 2013). They tend to align the interest and be willing to use more debt instead of losing control of the family. Monitoring becomes an effective mechanism of control due to the lack of qualified family successors to run the business (Nicholson, 2008) as agency theory posits.
Dimension SEW 3: ***Binding social ties.***	
Hypothesis 6. *Board independence increases the level of leverage in a family owned firm.*	(Berrone et al., 2012): SEW provides kinship ties with some of the same collective benefits that arise in closed networks, including relational trust. Independent board member can help the company to improve the relations with organisations outside family firms such as suppliers and creditors. Harford et al. (2008) found that a stronger board that can be indicated by a more independent board which will force the firm to hold more debt and more short-term debt. Both agency and stewardship theories are equally applicable for board support on the success of family and non-family CEOs.

3.8. Summary of this Chapter

The SEW could be considered as one of the most unique features of family firms and that make them different from non-family firms. The aspect that makes the family firms unique is the connection of such key elements as ownership, management, government and succession. Preserving SEW is relevant to the long term goals of family firms and their sustainability as a business. As a strategic decision of a company, capital structure decisions may impact the balance of power in family firms. The access to influence company decisions represents the holding of a long-term commitment to maintain the sustainability of the company across generation. Control is not always a function of share ownership for family firms; instead that authority is manifested in access to control over critical resources such as capital needed and family members. Consequently, family firms may wish to gain control of their wealth and choose a capital structure that could be a device and / or a control mechanism. Agency theory and stewardship theory expect that the firm's owners and managers, or majority and minority shareholders, become more

aligned but ownership concentration is more dispersed. As a result, friction among family members is more likely when family firms pass from one generation to the next. Therefore, capital structure decisions based on the objective of the preservation of the SEW have two implications. Firstly, capital structure decisions might lead to preserving the SEW for long-term survival, instead of just maximising the company's economic wealth. Value is related to keeping ownership and business control. Secondly, if protecting the socioemotional wealth of the family becomes a priority for family owners, that orientation could disadvantage other shareholders such as those who are not family members (Berrone at al., 2012). The situations cited above seem to demonstrate that the chosen capital structure model represents a strategic decision to preserve SEW in a dynamic way, rather than being informed by the static perspectives of both agency and stewardship theories. The next chapter will explain how the method to test the determinants of capital structure in family firms is based on the development of the hypotheses presented above.

CHAPTER 4
RESEARCH METHODOLOGY

4.1. Introduction

This chapter describes the methods used to answer the research question and test the hypotheses set in Chapter 3. It contains: a) a discussion of the research philosophy in relation to other philosophy, b) details of the research strategy, c) the source of study design, d) the methodological approach underlying the empirical study and e) an explanation of the research instruments that have been developed and used to achieve the research goals. This chapter is divided into three sub-sections: i) type of data, ii) data collection, and iii) diagnostic tests. In addition, this chapter considers data limitations and methodological issues encountered during the data collection process.

4.2. Philosophical Discussion

Research is a process of intellectual discovery that compares the system thinking of how the real world works with the real world itself. System thinking can mean different things in the context of different research discipline, suggesting that this is more than just a collection of tools and methods, it is also an underlying philosophy. Research in finance is generally accepted as being socially and scientifically oriented as appropriate standards of scientific enquiry are applied to social science rather than natural phenomena. Therefore, researching financial issues is categorised as a social science that studies how people think about, behave towards and make decisions regarding financial issues. Finance need to be understood from a conceptual and intuitive standpoint in order for individuals to analyse and make financial decisions effectively.

How to acquire knowledge involves three substantive issues: the nature of belief, the basis of truth and the problem justification (Ryan et al., 2002). The source of belief that assumes knowledge can be known *a priori* rather than from observation or experience, is called *rationalism*. For example, in finance the idea of perfect capital markets is a rationalist

abstraction. The rationalist argues that the conceptualisation of perfect capital markets can be understood and reflected upon by the exercise of reason alone. By contrast, another epistemological approach called *empiricism*, argues that knowledge is uniquely determined by experience. Empiricists claim that experience can represent a justification of beliefs about what we know (Ryan et al., 2002). Both empiricism and rationalism focus on the source of knowledge and can be classified under the umbrella of *positivism*.

Epistemologically (i.e. what is known to be true or should be), regarding acceptable knowledge in the field of finance, this research follows positivist methodology. Positivists argue that true belief is grounded in what people perceive and it is derived from a value-free independent reality (Bryan and Bell, 2011). In other words, the positivist approach suggests that social reality is independent from human perception. Positivist research only records facts that can be collected and analysed independently and quantitatively (May, 1997). This approach has an advantage for testing hypotheses and identifying causal relationships between variables as predictive tools (Burrell and Morgan, 1979), as well as providing support for quantitative findings. Hence, the ontological consideration that is related to the existence of something has an independent reality apart from a person's perception of it. The preposition that truth has no objective basis could be said to be true, if knowledge is a product of minds. Such a view means there must be justification and verification through observation to prove it. The principle informing the role of orientation for the role of theory in this research is deductive, which is to test the theory. Testing the theory means that predictions can be made on the basis of the previously observed and explained realities and their inter-relationships.

4.2.1. Positivism and Post-Positivism

Positivism is an epistemological position that advocates the application of the methods of natural science to the study of social reality and beyond (Bryman and Bell, 2007). In addition, positivists believe that reality is stable and can be observed without interfering with the phenomenon being studied. The paradigms of modern research in finance are inspired by positivist philosophy. This view is supported by Frankfurter and McGoun (1999) who argue that research in financial economics is dominated by positivism. In principle, the philosophy of positivism will be based on two distinct approaches to

knowledge (Ryan et al., 2002). The first approach is grounded within the context of rational processes, it relates to knowledge about what can be known *a priori* and does not have to be perceived. The second approach is grounded in the object of enquiry. The first one follows the ideas of Socrates and Plato and is known as 'rationalism'. In finance, the concepts of 'ideal' or 'perfect' capital markets follow platonic abstraction. If this is applied, the idea is not realistic since, in the real world, there is no perfect capital market which assumes that managers behave rationally all the times. So there is an absence of flotation costs, there are no taxes, no transaction costs and the situation is under certain conditions, therefore capital structure is irrelevant (Modigliani and Miller, 1958).

In turn, 'empiricism' follows Aristotle's idea that knowledge may be gathered through observation and categorisation. It also challenges the existence of the ideal form. This position is based on the following principles: (i) accepting only phenomena and hence knowledge that can be warranted as knowledge (the principle of phenomenalism); (ii) the hypothesis can be tested based on the theory and allows an explanation to be assessed (the principle of deduction); (iii) the knowledge is a result of collecting of facts based on laws (the principle of induction); (iv) the science must be value free or objective; (v) and there is a difference between scientific statements which is the domain of scientists and normative statements, because the truth cannot be confirmed by the senses.

Accordingly, following empiricism, this research will be concerned with what is discerned to be real or reality subsisting within objects or realism. Realism represents the common-sense view that a thing has a reality which is independent of perception. Likewise, the approach of empirical realists to determine the truth about reality is to take what is claimed and compare it with empirical evidence, so it can be a corresponding theory of truth. However, there is another idea that rather than being correspondent, the reality of experience is a mental representation as well. Knowledge is therefore mentally constructed and the truth does not correspond with reality but is coherent with the individual or with beliefs of others. This position is different from the idealist who concludes that reality is a construction of society and it is not the construction of minds.

By way of comparison post-positivism, or interpretivism, is an epistemology stance that is critical of positivism. If positivists believe that there is independency between the object and subject of research, post-positivists accept that the background, knowledge and values of the researcher can influence what is observed. Thus, interpretivism is predicated

upon the view that a strategy is required to attain the subjective meaning of social science. Post-positivists are profoundly influenced by Weber's conception called *Verstehen* (Bryman and Bell, 2007). The fundamental difference between social science and natural science is that social reality has meaning and therefore human action is meaningful; the task of scientists is to interpret their actions from their point of view. Therefore, the social phenomena and their meanings are continually being accomplished by social actors and social objects are socially constructed.

4.2.2. Philosophical Discussion and Rationale for the Choice of Approach

This thesis follows the methodology of positivist empiricism in order to provide evidence from within the financial disciplines and particularly in the field of corporate finance. The reason for this choice is that empiricism accepts the distinction between theoretical and empirical domains of discovery. The central thesis of positivist empiricism is verification, thus only empirical observation through the process of validation is cognitively meaningful.

Both the research traditions of positivism and post-positivism/interpretivism have their own approaches to detecting the truth of reality. The positivist approach suggests that social reality is independent from human perception. However post-positivism argues that the idea of social reality is a construct and a result of the human's mind and is therefore subjective. Positivists believe that the role of researcher is limited to data collection and interpretation in objective way (May, 1997). This approach is useful for testing hypotheses and identifying causal relationships between variables to predict reality (Burrel and Morgan, 1979). By contrast, post-positivism focuses on the subjectivity of the individuals who are observed as well as those doing the observing (May, 1997) and can be more responsive to any idiosyncrasies of the observed objects. Even though both use data sets, the positivist uses quantitative data analysis and post-positivists focus on qualitative factors such as perceptions and opinions of those participants in the study.

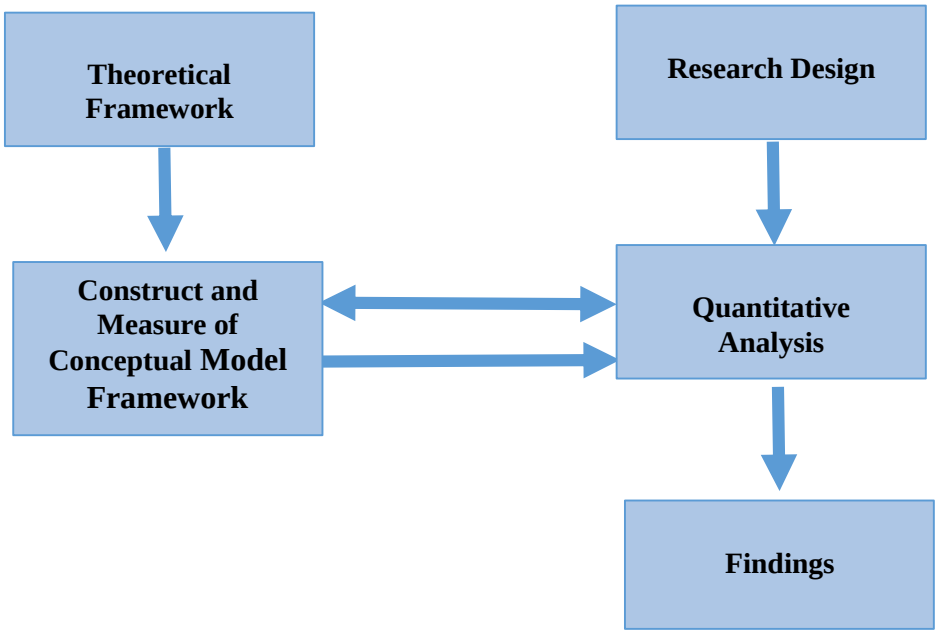
This thesis follows the paradigms of financial economics created by positivists such as Milton Friedman, Robert Lucas and Eugene F. Fama. However, since reality is independent from perception, realist methodology will be applied. Positive realists

maintain that reality exists within the objects of perception and that the construction of behavioural reality and the way to determine the truth is to compare what is claimed with empirical evidence to create a corresponding theory of truth (Ryan et al., 2002). This idea is relevant to the situation of family firms in that a capital structure decision is not value neutral, the family is motivated inside not only based on the peak hierarchical aim of the firm, which is maximising the value of shareholders, but also to preserve SEW. This observation means that the theories individuals construct are coloured by normative views of how the world should be organised (North, 1990). Accordingly, this thesis uses a quantitative research method to support the data analysis process. The determinants of capital structure are derived and quantified from the aim of family firms to preserve socioemotional wealth. To achieve this aim families will: i) keep control of and influence over the firm's operation, ii) renewal of family bonds through dynastic succession, and, iii) binding social ties.

4.3. Research Design

The design of the research presented in this thesis is illustrated in the figure below:

Figure 4.1. Research Design



The research design relates to the plan for conducting the study. With regards to this thesis, the hypotheses are derived from the theoretical framework and literature reviews contained in Chapters 2 and 3. The objectives of this research is to investigate the determinants of capital structure of family firms in Indonesia, with particular focus on preserving SEW could explain family firms' behaviour with regards to their capital structure. The study is using a quantitative approach.

The research model is constructed by comparing and evaluating prior studies in general, and prominent literature about capital structure decisions and family firms in particular, along with relevant information specific to family firms in Indonesia. The research follows the concept of socioemotional wealth by Gomez-Mejia et al. (2010); Berrone et al. (2010) and Gomez-Mejia et al. (2011) – socio-emotional wealth was created as an extension of behavioural agency theory, as formulated by Wiseman and Gomez-Mejia in 1998.

To answer the objectives and all the hypotheses set out in this thesis, this study employs both pooled and panel data analysis, due to the longitudinal nature of the data contained in the present study. Panel data regression methods are used to account for possible unobservable heterogeneity. The poolability test is employed to test whether panel data models (fixed effects and random effects) are necessary. The appropriate model specification will occur after the testing procedures outlined above are carried out. According to Kutzetnov et al. (2008), these estimation techniques (fixed and random effects) allow researchers to control for unobserved individual, firm-specific effects.

4.3.1. Pooled Ordinary Least Square (OLS)

In the pooled model, all observations are put together and the regression coefficients describe the overall influence, with no specific time or individual firm aspect. It is assumed that the error term captures the differences between the individuals (a cross sectional unit) over the time (a time series), thus the pooled model is:

$$Y_{it} = Z_i\alpha + \beta X_{it} + \varepsilon_{it} \quad \ldots\ldots(1)$$

Where:

Y_{it} is the dependent variable where i = firm and t = year.
Z_i is a constant term and a set of individual variables.
α is unknown intercept for each individu.
β is the coefficient for independent variables.
X_{it} represents independent variables.
ε_{it} is an error term.

The ordinary least square (OLS) technique is used to estimate the pooled model. If Z_i is contains only a constant term, then OLS provides consistent and efficient estimates of common α and β. However, this model is usually restrictive and unrealistic since this model omits the individual effects. Moreover, pooling the data in this model implicitly assume that the average values of the variables and the relationships between them are constant over time and across all of the cross-sectional units in the sample (Brooks, 2014). Thus, variables in the OLS model is expected to be biased upward suggesting there are bias of unobservable individual effects in the residual term of OLS and the potential correlation between individual effects and the included regression.

According to Green (2008), if there are individual firm-related and/or time-specific heterogeneities on the dependent variable, this problem can be accommodated by employing one of the panel techniques, fixed effect model or random effect model. Therefore, a panel data technique helps to minimise the problems that arise regarding omitted variable problems, such as time-specific and firm-specific variables. In addition, this approach provides robust parameter estimators, rather than just time-series or cross-sectional data.

4.3.2. Fixed Effect Model (FE)

The fixed effect model allows for the control of unobserved heterogeneity that describes individual's specific effects, which are not captured by observed variables. The fixed effect model assume that individual's specific may impact or bias the predictor, thus it needs to be controlled the bias. This model remove the effect of time-invariant characteristics, thus the effect of the predictors on the variable can be assessed. In fixed effect, if Z_i is unobserved but correlated with X_{it}, then the least square estimator is biased and inconsistent as a consequences of omit variables. This model will be estimated by

using OLS and takes α_i to be a group-specific constant term in the regression model and slope varies across *i*, (Green, 2008) thus the fixed effect model is:

$Y_{it} = \alpha_i + \beta' X_{it} + \varepsilon_{it}$ ……..……..(2)

The fixed effect model explores the relationship between explanatory variables and dependent variable within each firm. Each firm has their individual characteristics that may affect the independent variables. Thus, something within individual can influence biased explanatory variables or dependent variable. This model removes the effect of time variant characteristics from independent variables and evaluate those variables. In addition, those time invariant characteristics are unique to individuals and do not have correlation with other individual characteristics.

4.3.3. Random Effect Model (RE)

In a random effect model, α_i is an unknown intercept for a group specific disturbance, similar to ε_{it}, the unobserved effects are captured by the error term except for each group. The component of μ_i is the random disturbance characterizing the *i*th observation and is constant through time (Green, 2008). Thus, the random effect model is:

$Y_{it} = \alpha + \beta' X_{it} + \mu_i + \varepsilon_{it}$ ……..…….(3)

The random effect model will be estimated by the generalised least square (GLS) technique. The GLS technique takes into account the different correlation structure of the error term in the random effects model (Green, 2008). This model assumes that the individual specification is a random variable that uncorrelated with explanatory variables of the same individual. Moreover, the variance of the individual specific effect is constant. Thus, the parameters (α and the β vector) are estimated consistently but inefficiently by OLS (Brooks, 2014), and the conventional equation of OLS would have to be modified as a result of cross-correlations between error terms for a given a cross-sectional unit at different time.

The purpose of employing three alternative research methods is to find out which model will provide the best specification to estimate the datasets. To decide the best option, firstly, this study uses the Wald F-test for testing fixed effect models against the pooled OLS model under the null hypothesis that the dataset is poolable or the coefficients are

zero. The null hypothesis of OLS is that the dataset is poolable, means individuals have the same slope coefficients. If the null hypothesis is rejected (if $\rho < 0.05$) because the Wald F-test is significant, suggesting that the fit specification to estimate the data sets needs to use a panel effect.

Secondly, this study uses the Breusch and Pagan Lagrange multiplier (LM) test for testing random effects model against pooled OLS, under the null hypothesis that the cross-sectional variance components are zero. It means no significant difference across units (i.e. no panel effect). The significant LM test means the rejection of the null hypothesis (if $\rho < 0.05$), suggesting that the individual firm effect is not consistent and there is a panel effect. Thus, if null rejected, a Hausman test must be performed to compare with random effects estimation.

Lastly, to distinguish between fixed effects and the random effect models, I employ the Hausman test. This test under the null hypothesis investigates whether the coefficients estimated by the random effect estimator are the same as the ones estimated by the fixed effects estimator. Thus, if the null hypothesis is rejected (if $\rho < 0.05$), that outcome will suggest that fixed effects estimators are more appropriate and consistent than random effects model estimations.

4.4. Methodology

4.4.1. Population and Sampling

This study utilises quantitative secondary financial data obtained from The Indonesian Capital Market Institute (TICMI) database for the period from 2011 to 2015 covering 520 Indonesian companies listed on the Indonesia Stock Exchange (IDX): 322 family firms and 198 non-family firms. Based on IDX classifications there are 9 sectors: (1) Agriculture; (2) Mining; (3) Basic and Chemical; (4) Miscellaneous; (5) Consumer Goods; (6) Property and Real Estate; (7) Infrastructure, Utilities and Transportation; (8) Banking; and (9) Trade and Services.

The study targeted all Indonesian family firms that were listed companies available in the market for 5 consecutive years. The data for pooled and panel econometric techniques was collected from the firms' annual reports and from IDX publications. The time horizon

was chosen due to the post-merger period of the Jakarta Stock Exchange and Surabaya Stock Exchange, an entity that then became known as the Indonesian Stock Exchange (IDX) on October 30, 2007. Furthermore, there was a trade-off between sample size and the length of the sample period, where firms had continuous presence in the market for five consecutive years. Hence, the data was chosen in a way that optimised the number of observations and the length of the sample period. Thus, 2011 to 2015 is the period that can optimise the number of observations. The reason for the study period selection was to minimise the missing observations for sample companies; a model was constructed according to the following sample selection criteria:

1. Firms that operate in the banking sector (sector 8) were excluded because of their special characteristics in comparison with the capital structure of non-banking industries. Banks are highly regulated by the Indonesian government. Another reason for exclusion is that banks have a high level of leverage that may tend to bias results and analysis (Rajan and Zingales, 1995).
2. Family firms engaged in merger or acquisition activity during this study period were excluded.
3. Family firms with missing data were excluded.
4. Family firms that have been delisted and then relisted during this study period were excluded.

The application of these criteria confined the sample population to 160 family firms, allowing for a total of 800 observations for each variable, with data continuously available from 2011 to 2015. This number corresponds to almost 50 percent of all family firms listed in the IDX at the end of 2015. Thus, this study sample consists of almost half of the listed family firms in the IDX during the 2011 to 2015 research period.

4.4.2. Data and Collection Procedures

The observations consist of all IDX listed family firms in Indonesia that meet the inclusion criteria set out above, relating to data from the first generation to the third generation. As can be seen from Table 4.1, Panel A, a total of 800 observations, excluding the financial institutions sector and firms with no financial reports, were manually collected for 160 listed family firms. Following prior studies (La Porta et al., 2000; Setia-Atmaja et al., 2009), 47 financial firms (including 20 banks) are excluded because they

are highly regulated and their corporate policies are influenced by government regulations.

Table 4.1.
Panel A. Number of observations

	Number of Companies	Number of Observations (5 years)
Population:		
Family firms	322	1610
Final observation:		
Family firms Founder Stage (1st Generation)	59	295
Family firms Descendant Stage		
2nd Generation	72	360
3rd Generation	29	145
Total sample	160	800

Panel B. Indonesian family firms clustered by industry (2011-2015)

Code	Industry	Number
1.	Agriculture	8
2.	Mining	10
3.	Basic and Chemical	29
4.	Miscellaneous	17
5.	Consumer Goods	15
6.	Property and Real Estate	20
7.	Infrastructure, Utilities, and Transportation	11
9.	Trade and Services	50
Total		160

McConoughy et al. (1998), La Porta et al. (1999), Faccio and Lang (2002), and Anderson and Reeb (2003) define a family firm as any company run by the founder or member of the founding family, or a founding individual who owns a fraction of the company or serves on the board; it should be noted the percentages of these ownership fractions vary. Thus, to operationally define a family firm the 10 percent ownership threshold will be used, which is in line with many other family-firm investigations (La Porta et al., 1999; Maury, 2006; Villalonga and Amit, 2006; Pindado et al., 2008) and is considered high enough for a family to exercise effective control over the business (Poutziouris et al., 2015). In addition, the regulations in Indonesia allow the major shareholder to enhance their control, thereby directly or indirectly controlling the management and the company's policies, in spite of holding less than 25 percent voting shares (under the act number 12/23/PBI/2010 of Bank Central Indonesia).

The data about family ownership, a family CEO's influence, family board representation, positional and role duality and family succession issues were collected manually. For some firms, the process of decision-making is clear since the information denotes the founder, other family members and their descendants. Admittedly, after the founder stage, usually family firms expand the family members with other family names (distant relatives and in-laws). Therefore, I was obliged to trace descendants by manually searching corporate histories from companies' prospectuses and other sources, such as company press releases, capital market news and literature for each firm in the research sample.

4.4.3. Variable Measurements

Financial literature is divided on what is the most appropriate measurement of leverage (Frank and Goyal, 2009). Some authors argue that book value is the most appropriate criterion to be used (Setia-Atmaja et al., 2009) because managers consider book value rather than market value when making their decisions (Myers, 2001). Other researchers argue that market value provides more reliable results (Ampenberger et al., 2013) and still others argue that both should be used (Kayo and Kimura, 2011). Above all, DeAngelo and Roll (2011) state that book value and market value leverage measures are highly correlated. This study follows the pointers from Anderson & Reeb (2003) and Setia-Atmaja et al. (2009) who measured leverage in terms of book value, since mostly the fund sources of family firms in Indonesia are from banking loans. Book value in Indonesia is also used by creditors to determine how much capital to lend to a firm and the amount creditors can expect to receive if the firm goes into liquidation.

The variable of leverage included two measures: long-term debt and short-term debt. Long-term debt is an alternative source of long term funds, in addition to equity, and is much more prominent in developing countries, such as Indonesia, when compared to the financial arrangements evident in developed countries/economies. However, developing countries such as Indonesia's carry a substantially lower amount of long-term debt (Demirguc-Kunt and Maksimovic, 1999; Booth et al., 2001). This is because companies in Indonesia mostly rely on banks as funding sources, at a time when the role of the nation's banking industry in meeting the demand for long-term funds is limited. In addition, fund sourced from debt markets are still inadequate for long-term funds in

Indonesia, compared with other South-East Asia countries such as Malaysia and Thailand.

Rajan and Zingales (1995) suggested that in developing countries firms use trade credit as a means of financing their activities. This finding describes the situation in Indonesia regarding the limitations of the banking industry in providing long-term funds, because most of the funds collected by banks are in the form of short-term debt. On this basis, I included 'accounts payable' as a short-term debt when measuring leverage levels for Indonesia firms. Therefore, in this research, the book values of long-term debt and short-term debt are applied to estimate and identify factors that influence capital structure decisions.

Independent variables related to the concept of SEW dimensions include family control and influence, renewal of family bonds through dynastic succession and bonding social ties. Control variables account for: i) tangibility, ii) profitability, iii) firm size, iv) non-debt tax shield, v) a firm's age, vi) a firm's liquidity vii) growth opportunities, along with binary variables for family influences and involvement. These variables include: a) CEO founder, b) family board representation, c) role duality and d) CEOs' descendants). All the variables used in this study are briefly described below.

a. Family Control and Influence

1. Ownership

Family ownership addresses the impact of different levels of family holdings. To analyse the ownership structure of family firms, this study follows La Porta et al. (1999), Claessens et al. (2000) and Bunkanwanicha et al. (2008). Firstly, I investigate the founding family firm by identifying the ultimate owners who control 10 percent or more equity and who are involved in the top management of the firm. Supplementary data such as capital market news, prospectuses of companies at the time of their initial public offering that cover the history of companies and other resources were used to identify the owners of the firms. I consider a family and its members (such as same family name, family in-laws, etc.) as one unit of analysis. Then, I calculate the percentage of shares held by the family as a group, denoted as *ownership*, in order to address the impact of different levels of family holdings. I consider that the relationship between family holdings and debt might not be uniform over the entire range of family ownership. For

this reason, I assume that such relationships cannot be precisely linear. Therefore, to test whether the family ownership concentration has the same impact when nonlinearities are considered, I modify the regression by including the percentage of family ownership, the percentage of family ownership squared (denoted as $ownership^2$) and the family ownership cubed (denoted as $ownership^3$). This study uses a 10 percent ownership boundary that has been widely used in prior studies of family firms and is considered high enough for an owning family to exercise effective control (La Porta et al., 1999; Maury, 2006; Villalonga and Amit, 2006; Pindado et al., 2008; Santos et al., 2014; Poutziouris et al., 2015).

2. CEO Founder

The combination of undiversified family holdings and the desire to preserve SEW and to pass the company onto subsequent generations suggests that founder CEOs (denoted as *CEO founder*) are more likely to have stronger incentives to reduce risk, particularly if they are wanting to maintain control of the business (Jensen, 1986). Lower debt can reduce risk when aiming to reduce the probability of bankruptcy (Harijono et al., 2004). However, Anderson et al. (2003) found that the cost of debt when the founder is CEO is less than the cost of debt taken on by outside CEOs. This outcome indicates that the founder, as a CEO, is viewed as bringing the unique and added value of their skills to the company. When family firms decrease their members' ownership, family influence via the CEOs can be a powerful influence upon decision making, because they have better access and better mechanisms to provide incentives to invest than ownership. The variable *CEO founder* indicates the operational role of the founder and is a binary variable that equals one if the founder acts as CEO and zero for an outside CEO.

3. Family Board Representation

Equity holders with controlling interest in a business should be able to exercise their influence on the firm's decisions more effectively if the founder or family member is the board chair or a board member (Boyd, 1995; Conyon and Peck, 1998; Villalonga and Amit, 2006; Ampenberger et al., 2013). Ellul (2010) and Croci et al. (2011) noted that a founder chair prefers to avoid equity financing because control considerations exert a far

greater influence on debt than does equity financing. While a descendant chair is more likely to use a lower level of leverage that could protect the family firm from the threat of takeover from capital suppliers (creditors). Such a chairperson is also likely to be more concerned about wealth preservation rather than wealth creation (Kaye and Hamilton, 2004). The variable of *family board representation* is used to oversee and limit managerial opportunism (Anderson and Reeb, 2003); a behaviour which can happen when the CEO is hired from outside the family. To estimate the role of boards in capital structure *family board representation* is a binary variable that equals one when a family member is present on the board of directors and zero otherwise.

4. Duality

The dual position of the founder as the CEO and chair of the Board of Directors gives a greater opportunity to influence the operation of the firm and to pursue family interest than if there is no dual position (Gomez-Mejia et al., 2003). Family firms may attempt to safeguard the sustainability of the business and preservation of socioemotional wealth by placing family members as CEO and chair of the board of directors (Tam and Tan, 2007). However, Miller et al. (2007) argued that dual roles may be beneficial only when the business is at the founder stage. The variable *duality* is measured by a binary variable that equals one when CEO is a Chairman and zero otherwise.

b. Renewal of Family Bonds through Dynastic Succession

The renewal of family bonds through dynastic succession is estimated by using a binary variable to denote the descendants of the founder family firm's involvement in the business as a CEO (denoted as *CEO descendant*); the variable equals one if the founder descendant acts as CEO and zero for an outside CEO. This research uses the succession-based dummy-variable approach as the primary indicator of next generation participation in this testing. Ensuring the business is handed down to the next generation and assets are passed down to descendants, suggesting that succession becomes a continuous process in family firms (Poutziouris, 2001). The research of Kaye and Hamilton (2004) points out that transferring business to the next generation appears to create a negative relationship

with leverage. However, Molly et al. (2010) posit that if the next generations are mostly concerned with SEW, the result could be reversed.

c. Binding Social Ties

Family firms may select an independent board member who can provide professional expertise or has needed expert knowledge. It is expected that they will add to the value of the firm and discipline managers to take their interest benefits (Fama and Jensen, 1983; Hermalin and Weisbach, 1988; Boone et al., 2007). According to Andersen and Reeb (2004), independent directors play a part in protecting outside family shareholders from self-dealing families, such as when an unqualified or incompetent family member is placed as a CEO. In addition, independent boards are associated with the lower cost of debt as compared to other means of funding (Anderson et al., 2002; Bhojraj and Sengupta, 2002) and a healthy board members of family firms. Thus, it would seem logical to conclude that there is a positive relationship between board independence and debt ratios. Studies by Anderson and Reeb (2003) and Setia-Atmaja et al. (2009) measure a board's independence by the number of independent directors divided by the total board size thereby establishing the proportion of outside independent directors compared to directors who are family members (denoted as *board independence*).

d. Control Variables (Firms' Characteristics)

There are numerous factors that could affect capital structure decisions. If a regression model fails to account for these variables, one cause could because the regression does not have the appropriate form for other parameters (omitted variable bias). The bias could produce a spurious relationship between dependent and independent variables and the results would therefore not be reliable (Wooldridge, 2012). To prevent this issue from occurring, firms' characteristics have been chosen as control variables that are known, from the previous literature, to impact a firm's capital structure. To define the control variables, I am informed by the studies of Croci et al. (2011), Ellul (2011), Ampenberger et al. (2011) and Schmid (2013).

1. Asset Structure

The variable *TANG is* measured as the ratio of tangible assets to total assets. The greater the proportion of asset tangibility, the more creditors are willing to provide loans, resulting in an increase in a firm's leverage (Gaud et al., 2001; Ozkan, 2001; Chen, 2004; Laery, 2009 Ellul, 2009). Creditors will see that asset tangibility is easy to monitor and thus tends to mitigate agency conflict between lenders and borrowers. The expenditure to monitor family firms with large asset tangibility seems likely to be reduced, when compared with family firms with less asset tangibility. Thus, such asset tangibility as a collateral can reduce the risk of agency costs associated with debt by the creditors (Titman and Wessel, 1988; Voutsinas and Werner, 2011). Thus, a positive relationship between tangibility of assets and leverage is expected.

2. Profitability

The variable *PROF* is measured by the ratio of earnings before interest, tax, depreciation and amortisation (EBITDA) to total assets. Profitability is an indicator that firms are well managed and thus are more efficient than those that are not. In line with this view, credit suppliers will provide more debt to profitable companies, informed by the perception of a reduced bankruptcy risk (Heshmati, 2012). However, almost all empirical studies that focus on the demand side have found the relationship between profitability and leverage is negative (Aggarwal and Kyaw, 2010; Margaritis and Psillaki, 2010). In addition, profitable firms prefer not to add more debt in order to avoid the bankruptcy risk in the long-term and in order to maintain control are reluctant to issue new power diluting equity. Thus, for these reasons, I expect an inverse relationship between profitability and leverage in the long-term.

3. Firm Size

The variable *SIZE* is measured by the logarithm of total assets. The effect of size toward disclosure is that the larger the firm the more information is provided to creditors. As the information is open to the public, 'it is in the public domain', the probability that firms will hide the information regarding the possibility of default is unlikely; thus large firms can obtain a greater amount of leverage than smaller ones (Rajan and Zingales, 1995; Fama and French, 2002; Frank and Goyal, 2003). In general, larger firms face fewer

information problems than other businesses; a scenario which might increase their bargaining power with creditors (Degryse et al., 2012). Therefore, firm size is expected to have a positive impact on leverage.

4. Non-debt tax shield

The variable *NDTS* is defined as the ratio of depreciation to total assets. This may be regarded as a substitute for the tax benefits available from debt financing. As a consequence, debt levels should be inversely related to the level of any non-debt tax shield (Santos et al., 2014). However, Ozkan (2001) argues that *NDTS* may be a proxy for other things; a higher level of depreciation tends to have fewer growth options of investment opportunity sets, thus have relatively more tangible assets (Barclay and Smith, 1995). Therefore, available evidence may imply a positive relationship between a non-debt tax shield and leverage levels.

5. Firm's age

The variable *AGE* is measured by the number of years since the firm's incorporation. Established family firms have a reputation regarding creditworthiness with creditors and should have a higher borrowing capacity because of reduced asymmetric information and lower financial distress. The interaction between lenders and borrower over time makes creditors able to alleviate the information asymmetry that causes financial distress in a family firm. However, Filatotchev et al., (2006) and Johnson et al., (2016) found that as a firm ages after going public, the corporate restrictions and board members influence the capital structure choices. Thus, a negative relationship between firm's age and leverage is expected.

6. Liquidity

The variable *LIQ* is defined as the ratio of current assets to current liabilities. Illiquid family firms face limits on attracting debt because potential or actual financial distress will be indicated as relatively high. Even though creditors could act as liquidity providers to their important customers in distress (Oliveira et al., 2017), such relief is only temporary because providing additional debt to lenders can increase creditors' current liabilities. Consistent with this reasoning, illiquid family firms induce financial

constraints and increase the monitoring costs demanded by creditors. On the other hand, Ozkan (2001) argues that firms with greater liquid assets may use these assets to finance their investments. Thus, a negative relationship between liquidity and leverage is expected.

7. Firm's Growth

The variable *GROW* is defined as the market value of equity to the book value of equity. Firms with higher growth opportunities are more likely to exhaust internal funds and require more debt than the firms that are not growing. Therefore, this choice can raise the costs of borrowing that lead firms to choose internal funding sources or equity instead of debt. Moreover, growth opportunities are likely have an inverse relationship with the probability of default and lender risk. Firms with growth prospects may be less likely to be default than firms with less growth opportunities. This situation assures creditors they cover less risk of the probability of such a firm's bankruptcy. Therefore, a positive relationship between growth opportunities and leverage is indicated. Table 4.2 provides a summary of the variables used in regression analysis.

Table 4.2. Measurement of Variables

Variables		Measurement
Dependent variables		
1	Long-term debt (LTD)	Ratio of book value of long term debt to total assets.
2	Short-term debt (STD)	Ratio of book value of short term debt to total assets.
Independent variables		
Family Control and Influence		
1.	Family ownership	The percentage of shares held by the family as a group.
2.	Family ownership^2	The square of the variable *Family Ownership*
3.	Family ownership^3	The cube of the variable *Family Ownership*
4.	CEO founder	A binary variable that equals one when the founder of the firm is serving as the CEO, zero otherwise.
5.	Family board representation	A binary variable that equals one when a family members are present on the board of directors, zero otherwise.
6.	Duality	A binary variable which equals one if the CEO is the Chair of the board of directors, zero otherwise.
Renewal of family bonds through dynastic succession		
7.	CEO descendant	A binary variable that equals one when a family member succeeds as CEO, zero otherwise.

Binding Social Ties		
8.	Board independence	The proportion of independent directors on the board.
Control variables (Firm Characteristics)		
9.	Asset structure (TANG)	Ratio of tangible assets (the sum of fixed assets and inventories) to total assets.
10.	Profitability (PROF)	Ratio of earnings before interest, tax, and depreciation to total assets.
11.	Firm size (SIZE)	The natural logarithm of total assets.
12.	Tax shield effect (NDTS)	Non-debt tax shields-ratio of depreciation to total assets.
13.	Firm age (AGE)	The number of years since the firm's incorporation.
14.	Liquidity (LIQ)	Ratio of current assets to current liabilities
15.	Growth opportunities (GROW)	Ratio of market value to book value.

4.4.4. The Model

I employ the following model to investigate the determinants of capital structure of listed family firms on the IDX. In this model, the observed leverage is presented as a function of various firm-specific factors. The primary specification is:

$$\text{Leverage}_{i,t} = \alpha + \beta1(\text{OWN}_{i,t}) + \beta2(\text{OWN}^2_{i,t}) + \beta3(\text{OWN}^3_{i,t}) + \beta4(\text{CEO founder}_{i,t}) + \beta5(\text{Family board representation}_{i,t}) + \beta6(\text{Duality}_{i,t}) + \beta7(\text{CEO decendant}_{i,t}) + \beta8(\text{Board independence}_{i,t}) + \beta9(\text{TANG}_{i,t}) + \beta10(\text{PROF}_{i,t}) + \beta11(\text{SIZE}_{i,t}) + \beta12(\text{NDTS}_{i,t}) + \beta13(\text{AGE}_{i,t}) + \beta14(\text{LIQ}_{i,t}) + \beta\ 15(\text{GROW}_{i,t}) + €_{i,t}$$

Note: the leverage measure of the firm *i* in year *t*, and family involvement variables and firm characteristics for firm *i* in year *t*, signify the explanatory variables and control variables.

This study uses panel data to combine cross-sectional data with time series information. Such an approach utilises general models for panel data that enable the production of empirical estimates of the relationship between leverage (dependent variables) and dimensions of SEW (independent variables). The firm's characteristics are employed in the role of control variables. The hypotheses will be tested using a regression model that explains the firm's capital structure. This method is in line with previous studies

(Anderson and Reeb, 2003; Ampenberger et al., 2013). Thereby, the existing theories presented earlier can be used to draw the hypotheses.

According to Harris and Raviv (1991), different measures of leverage can produce different results that can affect the interpretation of those results. Moreover, the determinants of capital structure are highly sensitive to choice of leverage (Rajan and Zingales, 1995; Both et al., 2001). Therefore, for the analysis two different measures of leverage are employed in this study as dependent variables: i) long-term debt book value to total assets (*LTD*) and ii) short-term debt to total assets (*STD*). The independent variables use numerical parameters that proxy for: (1) Family control and influence: involvement in ownership, being CEO, being Chair/Board members and being both CEO and Chair at the same time: duality); (2) Renewal of family bonds through dynastic succession (descendant succeeds as a CEO); and (3) Binding societal ties (independent board members). These models use binary variables that proxy for founder and descendant as a CEO compared to an outside hire as a CEO. Two different models are used to test the validity of capital structure in family firms. The two models are presented below:

Model 1. (Long-term debt):

$$LTD_{i,t} = \alpha + \beta1(OWN_{i,t}) + \beta2(OWN^2_{i,t}) + \beta3(OWN^3_{i,t}) + \beta4(\text{CEO founder}_{i,t}) + \beta5(\text{Family board representation}_{i,t}) + \beta6(\text{Duality}_{i,t}) + \beta7(\text{CEO decendant}_{i,t}) + \beta8(\text{Board independence}_{i,t}) + \beta9(TANG_{i,t}) + \beta10(PROF_{i,t}) + \beta11(SIZE_{i,t}) + \beta12(NDTS_{i,t}) + \beta13(AGE_{i,t}) + \beta\ 14(GROW_{i,t}) + €_{i,t}$$

Model 2. (Short-term debt):

$$STD_{i,t} = \alpha + \beta1(OWN_{i,t}) + \beta2(OWN^2_{i,t}) + \beta3(OWN^3_{i,t}) + \beta4(\text{CEO founder}_{i,t}) + \beta5(\text{Family board representation}_{i,t}) + \beta6(\text{Duality}_{i,t}) + \beta7(\text{CEO decendant}_{i,t}) + \beta8(\text{Board independence}_{i,t}) + \beta9(TANG_{i,t}) + \beta10(PROF_{i,t}) + \beta11(SIZE_{i,t}) + \beta12(NDTS_{i,t}) + \beta13(AGE_{i,t}) + \beta14(LIQ_{i,t}) + \beta\ 15(GROW_{i,t}) + €_{i,t}$$

Note: α stands for model constant, β_i stands for the coefficiency of independent variables, i stands for the firm number (N = 160), t stands for the number of the number of the years (T = 5) and $€_{i,t}$ stands for the error term.

4.5. Summary of this Chapter

In this chapter, the detail about the philosophy, philosophical rationale and choice of approaches to conduct this study are discussed. There is a clear orientation of principle to link the theoretical terms embedded within financial models with empirical observations. The basis orientation to the role of theory in this research is deductive, a focus chosen to test the agency and stewardship theories. By testing the prediction of these theories can be made on the basis of the previously observed and explained realities and their inter-relationships. This thesis follows a positivist empiricism methodology in order to provide evidence within the financial disciplines and particularly in the field of corporate finance. This perspective is relevant with regards to family firms in that a capital structure decision is not value neutral. The owner family has internal motivation not only based on the peak hierarchical aim of the firm - to maximise value to shareholders - but also to preserve SEW. Thereby, the existing theories presented earlier can be used to test the hypotheses. Owing to the longitudinal nature of the data employed in the present study, the research design employs both the fixed effects model and random effects model. To minimise the potential lack of validity in the conclusions, this study analyses the results obtained quantitatively. The measurement validity, internal validity, and external validity are taken into account, so that the results obtained should be consistent with each other. Lastly, this chapter considers data analysis procedures to verify that the estimation model is correct.

CHAPTER 5
EMPIRICAL FINDINGS ANALYSIS

5.1. Introduction

This chapter presents the findings of the research on the capital structure of family firms, in the context of Indonesian listed companies. An analysis and discussion of the data and the study's methods will be offered in this chapter, as well. The empirical findings are in the form of quantitative regression results, which are presented in two parts. The first part highlights descriptive statistics, and the second part outlines the main quantitative regression results. The quantitative analysis uses long-term debt and short-term debt as dependent variables, together with several independent variables. With the aim of testing the theoretical framework detailed in Chapters 2 and 3, the main focus of the analysis is on the empirical evidences, which will be used to provide a holistic picture of the determinants of capital structure decisions in family firms in Indonesia.

This chapter is subdivided into several sections. Section 5.2 explains data analysis procedures. Section 5.3 explains the descriptive statistics and univariate statistics on the determinants of capital structure. Section 5.4 presents multicollinearity tests. Section 5.5 examines the multivariate testing results on capital structure. Section 5.6 analysis the determinants of capital structure in Indonesian family firms that will answer and discuss hypotheses 1 to 6, and Section 5.7 summarises the overall analysis and discusses the findings relating to how capital structure is decided in family firms, based on the dimensions of socio-emotional wealth: (i) family control and influence, (ii) renewal of family bonds through dynastic succession and (iii) binding social ties.

5.2. Data Analysis Procedures

Data analysis went through different stages before being imported and used in the data analysis programme. Firstly, data collected from financial statements was entered manually in the MS Excel sheet, itemising both dependent and independent variables as

proposed above. During this stage, the data was calculated based on the proxies that are used as parameters. Since the data was ready for the regression, the next step was to move to the data analysis econometric software (STATA).

The next procedure was a multicollinearity test for some sets of explanatory variables. The variables were tested to ensure that there is no multicollinearity among the independent variables that would affect the significance of the regression results. This procedure examines an exact linear relationship in the observation between the means of the response variables and the value of explanatory variables (Van Horne, 2001). The aim of this test is to analyse whether there is a correlation between independent variables. The way to detect the problem of multicollinearity in this study is by using the tolerance values and/or the variance inflation factor (VIF) (Hair et al., 1998). A variable whose mean VIF values are greater than 10 could be considered as a linear combination of other independent variables. Those variables will not include a predictor variable in a model if they have a VIF value of more than 10 or a mean VIF greater than 10. Hence, the main estimation method applied in this analysis uses panel regression.

Moreover, to correct the possibility of heterokedasticity, the pooled model estimated using the procedure of robust standard error named the White-Hubber standard error correction process (Schmid, 2013; Patersen, 2009). These tests ensure that the coefficients of the independent variables are not biased as the result of incorrect standards errors. The reason to apply this test is because if the analysis involves time series data, there is a higher probability that there exists heterokedasticity in the error terms. Heterokedasticity specifies that the variance of the error terms is not constant as the dependent variables change. To correct the heterokedasticity, this study followed a correction technique proposed by White (1980). Furthermore, the regressions are tested for the overall significance of the model by the F test and its probability value (p-value), for individual variables partially using T test and p-values, as well.

T-test was used to test the hypotheses that independent variables: family control and influence, renewal of family bonds through dynastic succession and binding social ties have relationships with leverage. In this test, the null hypothesis assumes there is no relationship between independent variables and leverage of listed family firms in Indonesia. The alternative hypothesis assumes that there is significant relationship between independent variables and leverage of listed family firms in Indonesia Stock

exchange (IDX). The level of significance will be expressed using p-value is more than 0.05 then the null hypothesis is true since this means that there is no statistically significant relationship between independent variables and financial leverage of listed family firms in Indonesia.

Similarity, if the p-value is less than 0.05 percent then the alternative hypothesis is considered true since this means that there is significant relationship between the variables. Coefficient of adjusted determinant determination (adjusted R-squared) was used to provide a measurement of how well the observed result was explained by the model, as proportion of total variation of outcomes explain by the model.

Notwithstanding the identification of the parameters and their influence on literature related to the capital structure of family firms, there is no single model that fits perfectly with such research as this. Nevertheless, most studies have looked for the impact of ownership concentration, family control on debt level or regressed debt levels against the firm's characteristics as determinants of capital structure (Santos et al., 2014; Schmid, 2013; Ampeberger et al., 2013; Croci et al., 2011). A pooled cross section estimation is conducted that involves observations over a five year time period for 160 different Indonesian family firms. The panel estimation approaches that are employed in this study to examine the fixed effects model approach and random effects model. These instruments allow the investigation of dynamics by a time order and reveal unobserved heterogeneity. A fixed effect model controls for the effects of time-invariant variables with time in-variant effects. There are omitted variables that are correlated with the variables in the model under family influence and control; the fixed-effects model may provide a means of controlling any omitted variable bias (Schmid, 2013).

On the contrary, random effects models address the possibility of a spurious relationship between the dependent and independent variables (Setia-Atmaja et al., 2009). The spurious relationship may because the exclusion of unmeasured explanatory variables still affects a firm's behaviour. Therefore, the Hausman test will be conducted to decide the preferred estimation model of this research. Rejection implies that the fixed effects model is more reasonable or preferred than the random effects model. The model used is a panel regression of a firm's leverage against: a) the family's influence and control, b) family succession, c) board independence and d) the firm's characteristics as control variables.

The hypotheses are tested by pooling the data using the primary specification model above.

Another alternative specification test is considering alternative measures of leverage. In the primary analysis, this research uses the ratio of long term debt to total assets as a leverage measure. Croci et al. (2011) and Johnson (2003) used short term debt as a proxy for leverage to examine the role of short term debt maturity in mitigating the debt overhang problem for high growth firms. The researchers found that the short-term debt maturity alleviates the negative impact of growth opportunities on leverage. This outcome follows asset substitution theory that short-term maturity debt alleviates the agency costs of debt (Leland and Toft, 1996; Diamond, 1991; Barnea et al., 1981).

5.3. Descriptive Statistics

The objective of this study is to draw inferences concerning the determinants of the capital structure of listed family firms in Indonesia, while controlling for a number of firm-specific characteristics. Table 5.1 presents the descriptive statistics for the variables used in this research over the whole observation period. Included are the mean, median, standard deviation, maximum and minimum values for the primary variables in the analysis. This study employs two measures of leverage as shown in Table 5.1 *LTD* is defined as the ratio of book value long-term debt to total assets; *STD* is defined as the ratio of book value of short term debt to total assets.

5.3.1. Analysis and Discussion of LTD and STD

For the entire observation, I found that the average book leverage of long-term debt is 0.1553 (median 0.1169), with the standard deviation of 0.1354; the maximum being 0.6306 and the minimum 0.0080. This figure is less than those reported in the extensive literature of family firms around the world. For example Ellul (2011) found the average book value leverage (long-term debt) for a sample of 5,975 firms from 38 countries to be about 0.2456. In Europe, Croci et al. (2011) calculated an average of 0.2614 for long-term debt. Schmid (2013) found the average leverage for a sample of Germany family firms presents the value of 0.22; Australia family firms present an average long-term debt

of 18.86 percent (Harijono et al., 2004) and Andersen and Reeb (2003) found that the average leverage in US family firms is about 18.42 percent. However, Huang and Song (2006) found that in China the average book value leverage of long-term debt is about 8.88 percent, which is almost half the level found in Indonesian family firms. These characteristics suggest the choice of debt level is affected by firm-specific and institutional factors; despite profound differences family firms have their own firm characteristics in financial structure decisions.

The substantially low amount of long-term debt in Indonesia is accompanied by a high level of short-term debt which on average (median), has the value of 0.3162 (0.3026) with the maximum of 0.8524 and the minimum of 0.0033. Bank loans provide short-term financing for working capital; equity might be the main source of finance for capital investment of family firms in Indonesia. On average, long-term debt deviates from the mean by about 0.1354; meanwhile short-term debt deviate from the mean by about 0.1645. Both debt types have low standard deviations, indicating that they tend to be very close to the mean. This data indicates a more homogenous or similar spread of long-term debt and short-term debt in Indonesian family firms. Thus, overall, Indonesia has levels of corporate leverage below 40 percent, indicating that family firms in Indonesia face lower risk of financial distress relative to its counterparts in developed countries.

This research has established that Indonesian family firms are generally less debt oriented, when compared to Asia Pacific countries such as Thailand, Malaysia, Singapore and Australia. This finding confirms the study of Booth et al. (2001) who demonstrated that the debt ratio of firms in developing countries is significantly lower than in developed ones. However, the substantially lower amount of long-term debt is accompanied by a higher level of short-term debt. This situation is consistent with the study by de Jong et al. (2008), who found that the long term debt level of Indonesian firms is on average 14.8 percent. Beck et al. (2002) suggested that the empirical observation of low leverage ratios in developing countries is due to the difficulties companies face in accessing external funds. However, this argument would seem difficult to accept in relation to the situation in Indonesia. There are 47 family firms in the finance sector in this study. Around 20 banking companies are owned by groups of family firms including the Mayapada Group (Mayapada Bank), the CT Corp/Mega Group (Mega Bank), the Sinarmas Group (Sinar Mas Bank, BNII), the Maspion Group (Maspion Bank), the Djarum Group (Bank Central Asia), and the Medco Group (Saudara Bank). 70 percent of the banks in Indonesia are

family owned (Hadad, 2011). Based on the OJK regulation, capital provided by banks to firms, with which they are affiliated by belonging to the same group, can account for a maximum loan of as much as 10 percent from bank capital. This level goes up to the maximum of 20 percent if firms do not have a relationship with the bank. Thus, in the context of accessing external funds, these data do not support the argument put forward by Beck et al. (2002). Even though family firms have support from financial institutions under a group of family business, and the implications for funding sources are profound, external funds offer easier access but their supply is limited by government regulation.

By contrast, the average *short term debt* is 31.62 percent. This results confirms that firms in Indonesia mostly rely on banks as a source of funding (about 46 percent of loans) and most of the funds provided by banks are short-term debt. According to Bank of Indonesia (2017), bank loans deliver short-term financing; 21 percent of funds are from foreign loans and equity provides only 19 percent of the finance for capital investment by family firms in Indonesia. Thus, family firms in Indonesia are largely funded by loans, which form 67 percent of funding sources.

In addition, these findings support the argument of Gomez-Mejia et al. (2010a, 2010b) that debt may be influenced by seeking greater short-term financial return. Family firms in Indonesia use debt mostly for short-term financial reasons. This behaviour confirms the result that the average of short term debt is 31.62 percent, two times higher than long term debt (15.53 percent). Short-term finance has less default risks than long-term finance and allows creditors to monitor and control borrower (family firms) effectively. Funding sources from the debt market are still insubstantial for long-term funds in Indonesia, where the volume of bond trading remains low compared with other Asian countries such as Malaysia, Thailand, South Korea and China in 2017.

5.3.2. Analysis and Discussion of Explanatory Variables

It has been established that the percentage of shares held by the members of the family in Indonesian family firms varies from 0.1017 (minimum) to 0.9607 (maximum), with the average value of about 0.4814 and the median value of about 0.5117 and on average family ownership deviates from the mean by about 0.2131. Although large family controlled firms do not display a significant wedge between ownership and control

compares with Korea, Singapore and Taiwan (Claessens et al., 2000), Indonesia has the largest number of firms controlled by a single family. Thus, the wealth is very concentrated in the hands of several families.

With regards to family influence, an average of 0.3086 of CEO positions are held by founders, 0.3457 by descendants, and the rest (0.3457) by outside CEOs. These ratio suggests that family firms hire a non-family member as a CEO, which is the proportion almost equal with family member CEO (both founder and descendant). However, on average, when either a founder acts as a CEO or a descendant acts as a CEO there are high standard deviations - 0.4622 and 04759, respectively. These figures indicate that the distribution of family members act as a CEO are very polarized for the sampled firms in this study. These figures are normal results in which family firms in Indonesia spread out from the first generation to the third generation. As family firms went public through an initial public offering, family firms need to ensure effective direction by using professional managers, too.

Among family firms, on average 0.6750 of board representatives are family members. This shows that family firms on average have high numbers of family members on the boards of directors, with a standard deviation of 0.4687. Thus, the variability shows a low standard deviation in this observation, suggesting the percentage of family representation on the boards are more concentrated around 67.50 percent. These figures show that in Indonesia the role of family member representation on the board of directors is significant to maintain the stability of a family's wealth. However, the *duality* variable shows a high standard deviation (0.4773) within the mean value is 0.3500. This data indicates the number a duality position in family firms were very polarized in Indonesia. These figures confirm the fact based on the family survey in 2014 that owners are most likely to be a CEO is about 87 percent (Price Water Cooper Family Survey, 2014).

Family firms in Indonesia have a minimum level of independent board members (0.3894) in accordance with government regulation of independent directors, with a minimum value of 0.33 of total board members. This number shows that approximately one in three board members is an independent director. The *board independence* variable shows a low standard deviation in this study that is about 0.1144, suggesting the most of the proportion of independent directors are very close to the average. This shows that most family firms have already responded to the new government rule regarding the minimum proportion

of independent directors. However, this study found that family firms without independent directors still exist, suggesting the government regulations must be more strictly enforced. Table 5.1 presents the descriptive statistics for all variables, both dependent and explanatory.

Table 5.1. Descriptive Statistics for Variable Measures

Variable	*Mean*	*Median*	*SD*	*Min*	*Max*
Dependent Variables					
Long-term Debt (LTD)	0.1553	0.1169	0.1354	0.0080	0.6306
Short-term Debt (STD)	0.3162	0.3026	0.1645	0.0033	0.8524
Independent Variables					
Family Control and Influence					
Family Ownership	0.4814	0.5117	0.2131	0.1017	0.9607
CEO founder	0.3086	0	0.4622	0	1
Family board representation	0.6750	0	0.4687	0	1
Duality	0.3500	0	0.4773	0	1
Renewal of family bonds through dynastic succession					
CEO descendant	0.3457	0	0.4759	0	1
Binding social ties					
Board Independence	0.3894	0.3300	0.1144	0	0.7500
Control Variables					
Firm Characteristics					
Asset structure (TANG)	0.5213	0.5518	0.2234	0.0117	0.9970
Profitability (PROF)	0.0758	0.0680	0.0961	-0.5578	0.6474
Firm Size (SIZE)	13.6535	14.3226	3.9193	4.5951	19.3185
Tax shield effect (NDTS)	0.0336	0.0238	0.0442	0.0001	0.5686
Firm Age (AGE)	30.2575	30	12.7005	2	104
Liquidity (LIQ)	1.8370	1.3984	1.4024	0.0005	9.7169
Growth opportunity (GROW)	1.8418	1.1315	2.0105	0	20.1600

With regards to firms' characteristics; family firms report that the asset structure or *tangibility* on average equals 0.5213 with the standard deviation of 0.2234. It means that more than 52 percent of total assets are tangible assets. The tangibility shows a low deviation with the minimum value of 0.0117 and the maximum value of 0.9970. These results show that *tangibility* tends to be very close to the mean and similar spread among family firms. Thus, these findings indicate that family firms in Indonesia are less diverse in the terms of liquidation value and since asset tangibility as a determinant of the debt capacity of a firm, suggesting that family firms in Indonesia have homogenous borrowing constraint.

At the same time, family firms on average are faced with low *profitability* where the mean value is about 0.0758 and the standard deviation is 0.0961. The *profitability* variable shows a high deviation in this study with the minimum value of -0.5578 and the maximum value of 0.6474. These figures show that different sectors of industries differ profoundly in term of performance. Moreover, these findings indicate that family firm performances are spread out and varies depending on life cycle organization or organization aging, too.

Family firms report that firm size shows on average equals IDR 13.6535 billion with the standard deviation of IDR 3.9193 billion. The maximum size of family firms is about IDR 19.3185 billion and the minimum size is about IDR 4.5951 billion. This indicated a low standard deviation that means most of family firm size are very close to the average. If firm size is a proxy for capital market access, then large and small family firms have similar response to easing credit conditions and access to creditors. Thus, large and small firms provide the same information toward disclosure issues.

Family firms in Indonesia have low *NDTS* on average equals 0.0336, with standard deviation of 0.0442. The *NDTS* variable shows a high deviation with the minimum value of 0.0001 and the maximum value of 0.5686. These figures indicate the level of *NDTS* are spread out, suggesting that not all family firms in Indonesia enjoy the benefits from tax facilities. Some firms miss out because they do not satisfy the several requirements for corporate tax benefits such as the qualitative criteria and eligibility of the industry sectors based on the government regulations (such as food, textiles, chemical and chemical products, forestry and logging, coal and lignite mining, oil, natural gas and geothermal mining).

The average ages of family firms in the sample is approximately 30 years. The oldest firm had the age of 104 years. *Age* shows a low deviation in this study with the standard deviation of 12.7 years. In addition, based on the firms' ages, the findings confirm that family firms in Indonesia have already passed to the descendant generations. With regards to family generations, there are 59 firms under the founder, 72 firms are under the second generation and only 29 firms are under the third generation, suggesting that the ages of family firms in Indonesian are relatively concentrated around 30 years. These figures confirm the fact based on the family survey in 2014 that more than 50 percent company aged between 20 and 50 years (Price Water Cooper Family Survey, 2014).

Liquidity is on average about 1.8370, as expected, higher than 1 but not over liquid. *Liquidity* shows a low deviation in this study with minimum value of 0.0005 and maximum value of 9.7169. This reflects a significant amount of liquidity commonly held by the retail sector (sector 9): about 50 companies or around 0.30 of total companies in this study sample. These figures indicate that most of the family firm liquidity are very close to the average, suggesting that family firms in Indonesia maintain the most similar level of liquidity due to face limits in attracting such short-term debt.

Lastly, *growth opportunities* are on average about 1.8418 with standard deviation of 2.0105. The *growth opportunities* show a high deviation with the minimum value of 0 and maximum value of 20.1600.The high standard deviation indicate that most firm growth are spread out across industries. The high value of growth opportunities comes from the agriculture industry (sector 1), which is dominated by the high growth of palm oil plantations in Indonesia over the last 30 years. Palm oil, with its derivative products, is the most important commodity; since 2014, Indonesia has produced 33.5 million tons of palm oil that raised $18.9 billion in export income.

5.4. Multicollinearity Tests

Because it is possible that the selected explanatory variables may be correlated, I implemented a multicollinearity test. According to Gujarati (2003) the presence of multicollinearity makes the estimation and hypothesis testing about individual coefficients of independent variables in regression impossible. The results of the variance inflation factor (VIF) show that the mean VIF for all variables included in the model is 1.26 and the VIF for all variables ranged between 1.06 - 1.69 and less than 10, which indicates that the model does not suffer from any multicollinearity problem as suggested by Gujarati (2003). Therefore, all explanatory variables can be regressed in panel data set at the same time.

Another method to detect the presence of multicollinearity is by applying a correlation matrix. The presence of collinearity is indicated by a high correlation between two of the independent variables. However, there is no certain standard about what to consider as high correlation. Bryman and Cramer (2001) propose that when correlation exceeds 0.80 multi-collinearity may be suspected. The results of the correlation matrix for all variables

included in the model range between 0.002 - 0.509 and are less than 0.8; indicating that the model does not suffer from any multicollinearity problems.

Table 5.2 presents the correlation matrix and the VIF for all variables. Examination of the correlation matrix indicates that a high level of correlation was not detected between the two independent variables.

Table 5.2. Correlation Coefficients between Variables and VIF Coefficients

Variables	LTD	STD	OWN	CEO founder	Family board rep	Duality	CEO descendant	Board independence	TANG	PROF	SIZE	NDTS	AGE	LIQ	GROW	VIF
LTD	1.000															-
STD	-0.038	1.000														-
OWN	-0.069	0.073	1.000													1.10
CEO founder	-0.057	-0.120	0.050	1.000												1.69
Family board rep	-0.030	0.122	0.1968	0.1136	1.000											1.42
Duality	-0.032	0.002	0.162	0.337	0.509	1.000										1.66
CEO descendant	0.033	0.066	0.018	-0.488	0.174	0.121	1.000									1.56
Board independence	0.114	0.033	0.055	0.049	-0.105	-0.127	-0.097	1.000								1.14
TANG	0.111	0.125	0.041	0.017	0.008	-0.010	-0.083	0.214	1.000							1.19
PROF	-0.118	-0.033	0.150	0.041	-0.030	-0.002	-0.003	0.1216	0.0652	1.000						1.11
SIZE	-0.002	0.028	-0.072	-0.016	-0.102	-0.118	0.034	0.091	-0.014	0.172	1.000					1.11
NDTS	0.103	0.008	-0.053	0.037	0.017	-0.004	-0.102	0.165	0.235	-0.028	-0.161	1.000				1.13
AGE	-0.127	0.117	-0.074	-0.113	-0.051	-0.044	0.138	0.065	-0.009	-0.016	0.092	-0.017	1.000			1.08
LIQ	-0.215	-0.409	0.033	-0.006	-0.040	0.014	0.066	-0.042	-0.293	0.159	-0.014	-0.141	-0.045	1.000		1.14
GROW	0.101	-0.091	-0.061	0.111	0.032	0.021	-0.067	-0.064	-0.053	0.027	0.039	-0.033	-0.169	-0.007	1.000	1.06
Mean																1.26

5.5. Multivariate Testing Results

To decide the best specification to estimate the datasets, in the first step, both model 1- LTD and model 2- STD were run with the OLS model. The results show that the explanatory variables power for both models are significant, according to the F-test. Then, to decide that the data set is poolable, the Wald F-test for testing fixed against pooled OLS model under the null hypothesis was employed. The test found that the Wald-F test rejected for *LTD* and *STD*, since Prob > F (0.00) is less than 0.05, suggesting that the LTD and STD models need to use a panel model.

Moreover, to confirm that panel effects model fits to estimate the LTD and STD model, I employed a Lagrange Multiplier (LM) for testing the random effects model against pooled OLS informed by the null hypothesis that the cross sectional variance components are zero. The result shows that the LM test rejected for *LTD* and *STD*, since Prob > F (0.00) is less than 0.05. The significant LM test means the rejection of the null hypothesis (if $\rho < 0.05$), suggesting that the LTD and STD models need to use a panel model. Thus, if null rejected, a Hausman test must be performed to compare with random effects estimation.

I continued to test by the Hausman specification test, in order to determine which one of the alternative panel analysis methods is more appropriate; fixed effects or random effects models. With regard to this, the test under the null hypothesis that the coefficients estimates by the random effect estimators are the same as the ones estimated by the fixed effects estimator do not exist or the null hypothesis is rejected, suggesting that fixed effects estimators are more appropriate for LTD model. By way of comparison, the Hausman specification test for the STD model shows that the null hypothesis was not rejected where Prob > chi2 (0.0887) is more than 0.05, suggesting the random effects models are more appropriate to estimate the STD model.

Table 5.3 reports the poolability and specification tests for both LTD and STD models.

Table 5.3. Poolability and Specification Tests

Panel A: The Determination of Estimation Model 1 (LTD)		
Wald F-test (OLS vs FE)	*LM test (OLS vs RE)*	*Hausman Test (FE vs RE)*
Prob > F = 0.000 < 0.05 Reject Null, use Panel Model	Prob > chi2 = 0.000 < 0.05 Reject Null, use Panel Model	Prob > chi2 = 0.000 < 0.05 Reject Null, use FE
Model Selection : Fixed-Effects Model		

Panel B: The Determination of Estimation Model 2 (STD)		
Wald F-test (OLS vs FE)	*LM test (OLS vs RE)*	*Hausman Test (FE vs RE)*
Prob > F = 0.000 < 0.05 Reject Null, use Panel Model	Prob > chi2 = 0.000 < 0.05 Reject Null, use Panel Model	Prob > chi2 = 0.0887 > 0.05 Fails to reject Null, use RE
Model Selection: Random-Effects Model		

5.5.1. Estimation Results

This analysis is based on 800 observations of family firms under the first generation to the third generation in Indonesia for the period from 2011 to 2015. Table 5.4 contains the estimated coefficients from regressing leverage (long-term debt and short-term debt) on (i) family control and influence, (ii) renewal of family bonds through dynastic succession and (iii) binding social ties. The models are:

Model 1 (Long-term debt):

$$LTD_{i,t} = \alpha + \beta1(OWN_{i,t}) + \beta2(OWN^2_{i,t}) + \beta3(OWN^3_{i,t}) + \beta4(\text{CEO founder}_{i,t}) + \beta5(\text{Family board representation}_{i,t}) + \beta6(\text{Duality}_{i,t}) + \beta7(\text{CEO decendant}_{i,t}) + \beta8(\text{Board independence}_{i,t}) + \beta9(TANG_{i,t}) + \beta10(PROF_{i,t}) + \beta11(SIZE_{i,t}) + \beta12(NDTS_{i,t}) + \beta13(AGE_{i,t}) + \beta\ 14(GROW_{i,t}) + €_{i,t}$$

Model 2 (Short-term debt):

$$STD_{i,t} = \alpha + \beta1(OWN_{i,t}) + \beta2(OWN^2_{i,t}) + \beta3(OWN^3_{i,t}) + \beta4(\text{CEO founder}_{i,t}) + \beta5(\text{Family board representation}_{i,t}) + \beta6(\text{Duality}_{i,t}) + \beta7(\text{CEO decendant}_{i,t}) + \beta8(\text{Board independence}_{i,t}) + \beta9(TANG_{i,t}) + \beta10(PROF_{i,t}) + \beta11(SIZE_{i,t}) + \beta12(NDTS_{i,t}) + \beta13(AGE_{i,t}) + \beta14(LIQ_{i,t}) + \beta\ 15(GROW_{i,t}) + €_{i,t}$$

As this study uses panel data to investigate the determinants of capital structure in family firms of different size, it is possible that the residuals are not independent, causing the heteroscedasticity problem. This problem refers to the condition where the variability of a variable is unequal across the range of value of the other variables that predicts it. To correct the heteroscedasticity problem, especially for fixed effects estimators of model 1-LTD, I employ a robust standard error regression option (White-Hubber corrected standard error) since there is no serial correlation based on the VIF results above. The robust regression results for model 1-LTD show that the coefficients and standard errors are quite similar, and the t-value and ρ-values are also quite similar to those obtained without using this option.

By way of comparison, model 2 - STD is more appropriate to estimate via the random effects model. The random effects technique can address the possibility of a spurious relationship between dependent and explanatory variables (Setia-Atmaja et al., 2009). This relationship may arise due the exclusion of unmeasured explanatory variables that nevertheless still affect a firm's behaviour in the short-term. For instance, *CEO founder, Family board representation, Duality, and CEO descendant* variables are relatively stable in the short-term and are consistent with the notion that families generally control and influence their firms for short-term periods. In addition, I employ a robust standard error regression option, too, using White-Hubber corrected standard error. The result shows that the coefficient, standard error, the t-value and ρ-values are also quite similar to those obtained without using this option.

The adjusted R-squared indicates that approximately 0.1454 of the variation in long-term debt is explained by variables in the equation. In addition, the F-statistics show that the overall regression is significant at the 0.01 level, as the p-values are less than 0.01. In contrast, the adjusted R-squared indicates that approximately 0.2211 of variation in short-term debt is explained by variables in the equation. This value is higher than the value of the adjusted R-squared of long-term debt. The F-statistics also show a consistent result with long-term debt which is significant at the 0.01 level and the p-values are less than 0.01. Table 5.4 presents the estimation results for model 1- LTD with the fixed effects model and model 2- STD with the random effects model, both using White-Hubber standard error test.

Table 5.4. Panel Regression Results on Leverage for Indonesia Listed Family Firms

Variable	LTD (White-Hubber Standard Error)		STD (White-Hubber Standard Error)	
	Coefficient	t-statistic	Coefficient	t-statistic
OWN	1.4066	(5.27)***	-0.1422	(-0.28)
OWN^2	-2.4238	(-4.07)***	0.7008	(0.66)
OWN^3	1.1385	(2.93)***	-0.6052	(-0.90)
CEO founder	-0.0222	(-1.72)*	-0.0468	(-1.56)
Family board representation	-0.0129	(-1.07)	0.0514	(1.98)**
Duality	0.0055	(0.48)	-0.0122	(-0.40)
CEO descendant	0.0108	(0.97)	-0.0121	(-0.43)
Board independence	0.1984	(4.27)***	0.0583	(0.56)
TANG	0.0295	(1.32)	-0.0220	(-0.59)
PROF	-0.1908	(-4.01)***	0.1012	(2.45)**
SIZE	0.0022	(1.15)	-0.0014	(-0.55)
NDTS	0.2034	(1.70) *	-0.1695	(-1.91)*
AGE	-0.0012	(-2.60)***	0.0016	(2.28)**
LIQ			-0.0303	(-7.44)***
GROW	0.0075	(2.96)***	-0.0036	(-1.26)
Intercept	-0.1340	(-2.54)***	0.3054	(3.15)***
Adjusted R Square	0.1454		0.2211	
Prob > F	0.0000		0.0000	
Inflection points	0.2902 and 0.7096		-	
Number of observation	800		800	

Legend: significant at * p<0.10; ** p<0.05; *** p<0.01. T-statistics are presented in parentheses.

Next, I will analyse and discuss the findings with regards to the hypotheses of this study. In particular, six hypotheses that are related to dimensions of SEW, as well as presenting the analysis of firms' characteristics that control the determinants of capital structure.

5.6. Determinants of Capital Structure in Family Firms

5.6.1. Evidence on the Non-Linear Relationships of Family Ownership and Capital Structure Decision

Hypothesis 1: Concentration of ownership in the hands of family members has a non-linear relationship with leverage over the life period of the family firm.

Table 5.4 presents the estimation of an equation using fixed effects regression for long-term debt with family ownership, using an estimated quadratic and a cubic equation of family ownership to examine the non-linear relationships between leverage and family ownership. It appears likely that the relationships between family holdings and debt are not uniform over the entire range of family ownership. Firms that have a family ownership percentage greater than 0.10 are considered to be family-owned.

Figure 5.1 shows that variables *family ownership*, *family ownership*^{2} and *family ownership*^{3} suggest that the relationship between long-term debt and the level of family holdings is non-linear. This means that the family ownership and debt relationship variables take an N shape for *long-term debt* with the inflection point at around 0.29 (minimum) and 0.7096 (maximum). By contrast, there is a statistically insignificant relationship between *family ownership* and *short-term debt.* Although on average family firms in Indonesia use short-term debt (around 31.62 percent) more than long-term debt (15.53 percent), with short-term financing provided by bank loans, the capital structure decisions are not necessary involved family ownership concentration for the short-term decisions.

With the consideration that usually family firms started with 100 percent of shareholding before IPO, I will present the findings from the right side when family shareholding is in the maximum level. The results show that the debt level decreases slightly until point B when the level of family ownership declines as shareholding reaches level P2 (approximately 0.7096). Then, as the level of family ownership disperses until a certain level (approximately 0.29), the level of *long-term debt* increases up to point A. After that, the debt level decreases again slightly when ownership below 29 percent. In other words, after reaching a maximum level when the family holds around 71 percent, any further

decrease cause the level of debt increase until reaching around 29 percent of the family holding, after which the debt level decrease again.

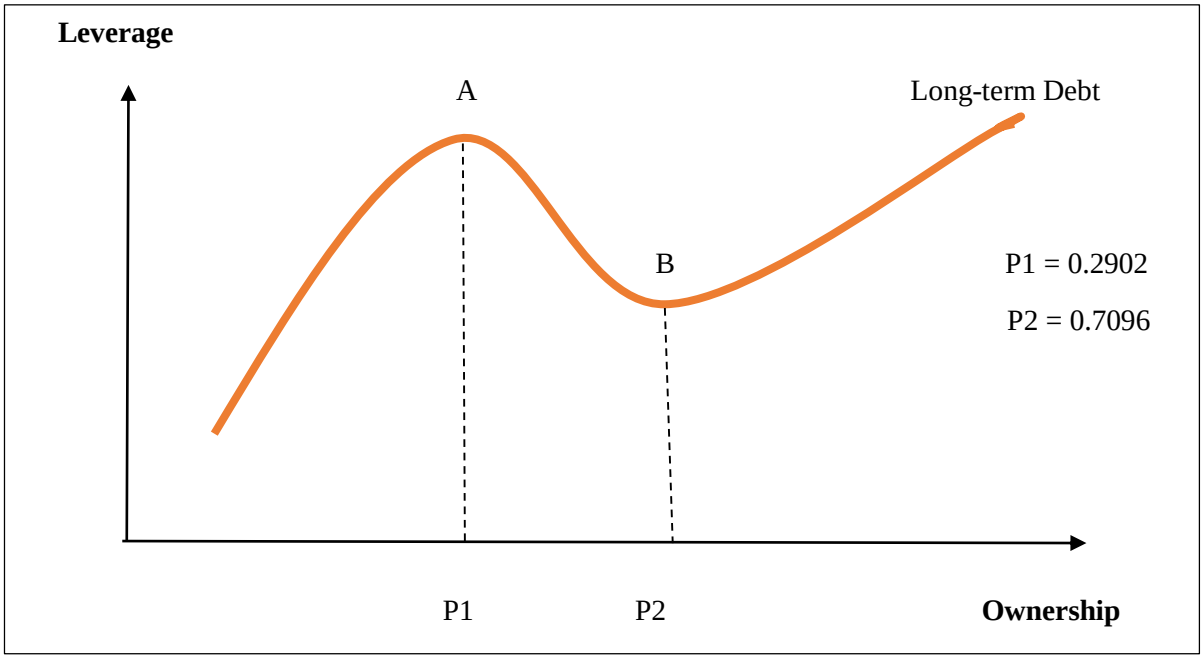


Figure 5.1. Relationship between Capital Structure and Family Ownership

Keeping family control over the firm's operations is one of the dimensions of SEW (Berrone et al., 2012) that could explain the behaviour evident in the capital structure decision making process. Control is a function of ownership proportions, although the relationship between ownership and leverage is not clear cut. Agency theory suggests that in closely held businesses, such as family firms, debt can allow controlling owners to manage capital resources without diluting their voting rights (Jensen and Meckling, 1976; Harris and Raviv, 1991; Faccio et al., 2001). When internal funds are not sufficient, leverage could mitigate the risk of diluting family control (Wu et al., 2007); helping to maintain family power over the business as long as the firm faces no financial distress. Nonetheless, capital structure choices will be based on loss aversion of SEW, especially maintaining control over the business. Family firms will be more willing to use debt when ownership is concentrated in the hands of a controlling owner (Chua et al., 1999; Mishra and McConaughy, 1999), but the dispersion of ownership may result in their use of debt having a non-linear relationship. This suggests that family firms are most vulnerable to conflict, and least willing to bear added risk, when the ownership is split in relatively equal proportions among the founder's descendants.

These figures show that due to a long-term commitment to maintain the sustainability of the company across generations, together with the private benefits of control experienced in Indonesia, families will increase their firms' debt levels to preserve their control. However, at the same time, family firms put substantial wealth at risk. A combination of low risk preferences and the possible struggle for bankruptcy risk, resulting low level of leverage. Thus, the relationships between family ownership and long-term debt appear to be non-linear. It is worth nothing that the estimated quadratic and cube structure turning points on these variables are well within the range of the sample data. The results suggest that family firms maintain a long-term presence in their firm's ownership structure by balancing the motive to control family firms and avoid bankruptcy risk in the long run.

Moreover, the finding is consistent with empirical observations. Ellul (2011), Setia-Atmaja et al. (2009) and Schulze et al. (2003) all found that family ownership and debt form a non-linear relationship, even though these studies have resulted in a different shaped relationship (inverse U shape and U-shaped). Thus, family ownership addresses the impact of different levels of family holdings. The high (more than 71 percent) and low (less than 29 percent) levels of ownership are more risk averse and hence borrow less long-term debt. Whereas, to decide short-term debt levels does not need a function of ownership proportion, because the impact to preserve SEW is not significant in the short run.

Behaviourally, borrowing could be explained by the simple prediction for 'uncertain conditions in the future', so people will be risk seeking for loss and be risk averse for gains (Thaler, 2015). Family firms make choices depending on the reference points of the firm's dominant principals. These principals make decisions in such a way that they preserve the accumulated endowment of their family firms. Thus, the choice at each level of ownership does not give an expected outcome that is equal. In the worst situation, family firms will be back at the level of leverage where they started, which is when the debt level endangered the control, due to the priority of aiming to preserve SEW. Those owners who were highly leveraged lost much more than when the capital structure started. In other words, family firms will be risk seeking for control over business losses from reducing ownership, yet tend to be risk averse for gains from ownership. The relationship between ownership and leverage, at both the low level and high level of ownership, shows that family firms tend to be risk avoider by decreasing their levels of leverage. At this point, the preference to use less debt is influenced by risk reduction motives. The debt

level choice is more sensitive to conditions associated with control risk. According to Anderson and Reeb (2003), the risk averse behaviour of family firms appears in financial decisions, when firms are under less diversified investment. The risk reduction strategy of the firms is pursued through investment diversification with lower debt levels.

Risk reduction strategy is related to family firms' strong interest in their long term survival. This situation makes founder-managers minimise risk from the financial distress of restructuring, which can damage the family's reputation. Family reputation is expected to be passed down to the next generation, too. Therefore, the consideration to use more debt will be counterproductive with the aims of preserving social emotional wealth. Rather than using the reputation of the family name to borrow more, family firms might use reputation as an intangible collateral to sustain accessibility to funding for the long run, as an assurance over critical resources (Rajan and Zingales, 1997). This risk reduction strategy is fungible with their sunk costs (effort and time) at the beginning of the business as a whole asset, both tangible and intangible (reputation and pride) in perpetuity. Setting up the reason to use a low level of debt would seem logical, in that avoiding credit monitoring could also affect capital structure decisions, especially in a specific institutional environment such as Indonesia.

At the level of medium ownership concentration (from 0.29 to 0.7096) for long term debt, increasing the leverage is be explained with the changing of risk preference, which is to be risk taker regarding the possibility of losing control (control motivation) over family business and as a result borrow more long-term debt. Researchers have provided evidence that in order to retain control of family firms debt is used both as a device by the current owners to maintain control and as an internal control mechanism for alleviating agency conflict inside the company (Harris and Raviv, 1988; Stultz, 1988; d'Mello and Miranda, 2010). Thus, when internal funds are not sufficient, leverage could mitigate the risk of diluting family control. They may use debt, instead of new equity, to concentrate their voting power, since they are apprehensive that any change in capital structure may dilute their power. This figure indicates that family firms will be concerned to use debt to reduce the risk from under- diversified investments and to maintain control over high risk exposure to one single asset.

The low level of long-term debt decreases the risk of losing SEW (undiversified personal or family members) and family capital in the case of bankruptcy (Fama, 1980). This

outcome is in line with the findings and consistent with the explanation above, that family firms perceive risk differently for their long-term debt regarding their endeavours to preserve the long term sustainability of the company. However, these results are inconsistent with the findings of some previous studies, which report a linear relationship between ownership and leverage. These findings can be classified as: a) negative (Santos et al., 2014; Schmid, 2013; Mishra and McConoughy, 1999), b) positive (Croci et al., 2011; Ellul, 2011; Margaritis and Psillakis, 2010; King and Santor, 2008) or c) not significant (Ampenberger et al., 2013; Anderson and Reeb, 2003). This apparent inconsistency can be attributed to three factors.

Firstly, capital structure decisions vary depending on the ownership concentration and the outcome for SEW. Ownership concentration represents power over the business. It is possible that over time, the shareholders' feelings of ownership have increased (Strahilevitz and Loewenstein, 1998), thus leading to status quo bias in capital structure decision. This situation is in a person's mind, based on the principle that a thing which individuals enjoy and use as their own for a long time takes root and cannot be torn away without shifting the behaviour and trying to maintain sustainability. When the accumulated legacy of the company is threatened, the family will make decisions to protect and strengthen their aim to preserve SEW which may not be based on economic logic, even if they put the company at risk. Therefore, a family firm's willingness to give up control and lose SEW should weigh less heavily depending on the concentration of ownership and how debt is used as a mechanism of control. In addition, these results are consistent with the findings by researchers who argued that the SEW is strong when the first generation (founder) keeps the ownership because of the sunk costs invested by the founder at the beginning of the company's life (Chua et al., 1999; Schulze et al., 2003; Gomez-Mejia et al., 2007). As long as founders engage in the business, their motivation to obtain management control will increase. This point highlights the importance attached by owners to the aim maintaining the family business. Thus, the family prefers capital structure decisions that will preserve the value of SEW, which is the factor that is closely related to keeping ownership and business control. Keeping family control of the business by involvement in corporate governance, as suggested by stewardship theory, will assist managers to help ensure that the family's principles, policies and practices are upheld within the subsequent generations.

Ownership concentration focuses on the outcome of preserving SEW as a result of the benefits of control. When the motive to maintain the sustainability is larger, control becomes more valuable and the founder might be unlikely to relinquish the business, even after the family's firm has gone public. Meanwhile, the founding families often have a long-term commitment to span the business across more than one generation. Such a commitment suggests that capital structure decisions and family ownership relationships are informed by the possibility of losing control in the future under uncertain conditions. Consequently, foregone gains are less painful than perceived losses of the business they invested in; a performance profile marked by an N-curve shaped relationship between leverage and ownership.

Secondly, those studies that find a linear relationship assume that the preference of risk is always stable as both agency theory and stewardship theory suggest. Both theories typically assume stable risk preferences (Wiseman and Gomez-Mejia, 1998). Behaviourally, the agent in a corporate governance context can have a variety of risk preferences. Since the duration of ownership is increasing, founders place a higher value on an object that they have owned, so loss aversion also increases. As long as people hold the object, the consequence of forgoing gains are less painful than perceived loss. Time and duration become important factors to control the fear of losing. The family's attachment to the organisation is different between founders and their descendants. Chua et al. (1999) and Misra and McConaughy (1999) demonstrate that a family's attachment to the organisation is highest when the firm is owned and managed by the founding family. This strength is because they treat the firm as an asset that will be bequeathed to future family generations. This focus places more emphasis on the impact of ownership as a function of control, with debt level being considered as a proxy for controlling risk aversion in aiming to preserve SEW. Again, research confirms that the firm's founder tends to follow stewardship theory and the descendants tend to follow agency theory in dynamic perspectives.

Thirdly, previous studies have interpreted family control as being represented by the voting rights of family firm members, while this current study uses the levels of family holdings that capture cash flow rights (Santos et al., 2014; Schmid, 2013; Croci et al., 2011; Margaritis and Psillakis, 2010; King and Santor, 2008). This strategy is consistent with the approach by Setia-Atmaja et al. (2009) and Schulze et al. (2003) who found that the relationships between leverage and ownerships are non-linear. Both voting rights

(control) and cash flows right (ownership) could estimate the impact of family firms on capital structure decisions. Debt for certain levels of ownership concentration in the hands of the founders of family firms might be used to limit the excessive exposure to any risks to the sustainability of a family business. For these reasons, I find that the relationship is non-linear. Accordingly, this result offers support for Hypothesis 1, which points to the curvilinear relationship between family ownership and leverage (long-term debt).

5.6.2. Evidence on Family Influences through Management and Governance on Capital Structure Decisions

Hypothesis 2: If the firm founder acts as the CEO, the family firm will have low leverage.

As can be seen, according to the results the founder as CEO seems to prefer to use less long-term debt compared with an 'outside' CEO. *CEO founder* prefers to use less long-term debt as much as 2 percent lower than an outside CEO for *long-term debt*. This result is significant at 0.10 level. However, for *short-term debt*, if the founder acts as the CEO, there is no significant relationship with capital structure decision.

This implication supports the idea that the CEO founder's priority above all others is to transfer the business to the next generation. Such a goal causes founder-managers to be highly risk averse in order to ensure they can pass their single asset, the family firm, to the next generation. Therefore, founder-CEOs have an incentive to reduce risk at the company level, suggesting they will prefer to use significantly less leverage than an outside CEO.

I investigated the situation when the founder of a family firm acts as its CEO. Family members should be able to exercise their influence more effectively if the founder is a CEO (Boyd, 1995; Conyon and Peck, 1998; Schulze et al., 2003). A CEO has a profound influence on corporate policies, such as capital structure decisions. Family influence through the CEOs can be much stronger than through ownership alone. Ellul (2010) and Croci et al. (2011) found that a founder CEO prefers to avoid equity financing because of control considerations. However, this finding supports the argument that behaviourally

decision makers are concerned about the avoidance of loss and prefer to avoid an anticipated loss altogether, rather than engage in less risky options to merely minimise the loss (Thaler and Johnson, 1990).

The results in Table 5.4 show that family firms that have the founder as their CEO have significantly lower levels of *long-term debt* compared to those family firms with non-family member CEOs. However, when leverage is measured as *short-term debt*, a founder CEO or a non-family CEO do not influence debt levels to any statistical significance. With regard to family influence, on average 30.86 percent of family firms in this study are managed by a founder-CEO. This figure is consistent with the hypothesis and in line with the findings of Ampenberger et al. (2013), who noted that founder CEOs exhibit significantly lower debt ratios, compared to non-founder CEOs. Moreover, Mishra and McConaughy (1999) showed that the lower level of debt is driven by the founding family desire to continue their business. This attitude could be explained by the founder CEOs being concerned about two negative impacts of debt in aiming to preserve SEW: i) the increasing cost of financial distress and ii) the probability of losing control over the business. The more debt taken on by family firms to finance their operations, the more they are at risk of experiencing financial distress, including: a) bankruptcy costs, b) higher costs of capital and c) conflicts of interest. Thus, having a CEO founder would seem to indicate being more risk averse over the long-term as a consequence of family business owners investing most of their wealth in the firm.

Agency theory suggests that lowering total equity financing by using more debt can reduce the scope of the agency conflict between managers and shareholders (Jensen and Meckling, 1976). This situation is based on the assumption that managers and equity holders are not members of the same family. There are two possible management-related scenarios in family firms: i) managers are hired from outside the firm or ii) the manager is a family member. 'Manager as agent' in family firms may act for the controlling family, but not for the shareholders in general (Morck and Yeung, 2003). This bias confirms the results for the sample firms in this study, where although around 30 percent of family firms are managed by professional outsider managers, their orientation is towards the interests of the controlling family. Family involvement has a strong impact on the behaviour of managers within the firms. For instance, this study shows that if an outsider is the CEO, the family firms have low leverage levels, as when the founder was the CEO. However, non-family CEOs use a higher level of long-term debt than did the founders.

The situation is different under descendant generations, where neither descendant CEOs nor non-family CEOs significantly affect capital structure decisions. Thus, there is mimic-type behaviour of non-family CEOs towards family member CEOs in making capital structure decisions. This behaviour refers to interpersonal relationships that are associated with stewardship, including stability, interaction with and social sharing with family firms. Thus, under founder stage, family firms tend to be more applying stewardship corporate governance where family firms motivate and reciprocity to non-family CEO. The founder facilitates non-family CEOs to empower themselves as long as their decisions are in line with the interests of the family.

In addition, the conflict of interest between non-manager CEOs and owners is potentially low. Using debt as a control mechanism to alleviate agency conflict is not necessarily significant; whereas that technique is of value when maintaining the sustainability of the firm. Thus, family firms in Indonesia work to secure the long-run wealth or socio-emotional wealth to hand on business to the next generation. Given the emphasis on loss aversion suggests that in the case of family firms, losing the business that they have owned and invested in, both financially and behaviourally since the beginning, will induce founder-managers to choose a low level of debt to preserve the endowments of their family firms. Therefore, in the founder stage, family firms tend to have a longer-term commitment to their business, place greater value on noneconomic goals due to sustainability (Gomez-Mejia et al., 2007), and are more embedded in the business system (Le Bretton-Miller and Miller, 2009). The family is willing to put the interest of the business first, suggesting that steward-type behaviour and stewardship governance are more prominent under founder stage.

An increasing cost of financial distress in some ways could impact a family's reputation, which is tied to the prestige and the economic success of that family' firm. However, creditors may have a different perspective regarding a family's reputation. In some cases creditors could see that CEOs derived from family members lead to greater management entrenchment (Gomez-Mejia et al., 2001). Creditors will anticipate that management entrenchment could impact the performance of the firm. As a consequence, creditors require a higher remuneration from the family firms with a CEO founder than they do for a business with an outside hire as its CEO; therefore, the higher the cost of debt, the less the preference to use debt. Also, having a family CEO may not be well received by the market. This situation leads capital lenders or creditors do more monitoring of family

firms for their investments. As a result, a lower level of leverage could protect family firms from the threat of takeovers from creditors.

The results of this study support the argument that the preference to use less leverage is associated with an entrenched CEO. An entrenched CEO has discretion over their firm's leverage choice. Others suggest that entrenchment motives may cause managers to increase leverage in order to inflate the voting power of their equity stakes and reduce the risk of takeover attempts (Harris and Raviv, 1988; Stulz, 1988). The implication of entrenchment is interpreted as increasing agency costs made by increased ownership. However, CEOs prefer less leverage because of the desire to reduce their firm's risk in order to protect their under-diversified human capital. Thus, they can entrench themselves against pressures from internal and external corporate governance mechanisms, such as control and monitoring. Berger et al. (1997) found that leverage levels are lower when CEOs do not face pressure from either ownership or active monitoring. When founders or owners are also CEOs, it would seem logical that they are not under pressure from monitoring. The capital structure decisions might be considered to be more focused on reducing the risk of financial distress with the use of short maturity debt to preserve their reputations (Gosh et al., 2011). Thus, this study yielded evidence from Indonesian family firms suggesting the implications of entrenchment are not one sided, because CEO founders might have advantages in incentives and monitoring of the firm. Contrary to conventional wisdom, I conclude that capital structure decisions in the hands of family managed-firms frequently consider long-term family business survival and are concerned about SEW.

However, this study contradicts the findings from Anderson et al. (2003) and Anderson and Reeb (2003) that show CEO founders and CEO hires bear an insignificant relationship to the cost of debt. The cost of debt financing results from the creditor's perception about family leadership. The requirement of yield from firms with family CEOs tend to be a consideration when deciding the debt level they wish to take on. Their studies found that CEO founders and CEO hires do not have a significant relationship to, or influence on, the cost of debt. In other words, CEO founders may not be detrimental to creditors as their self-serving behaviour (entrenchment) adopts low-risk strategies that are to the benefit of creditors (Bradley and Chen, 2011). Moreover, inconsistent with these results, Ellul (2011) and Croci et al. (2011) demonstrated that CEO founders favour debt financing, and control considerations exert a far greater influence on debt over equity

financing. They argued that debt level will be culminated during the founder stage and tends to decrease as family attachment to the firm weakens during the transitions to subsequent generations. The preference for debt financing is a non-diluting security factor. Conversely, this study finds that in Indonesia, during the founder stage, debt levels are low and creditors provide short-term debt to family firms. Such an arrangement indicates that capital structure decisions are designed to avoid risk and that creditors have a preference for more risky investments.

Generally, the results showed that family firms avoid a loss of control and decrease the likelihood of financial distress by placing the founder in the CEOs position. In addition, a family CEO pursues SEW because personal attachment and self-identification with the firm are stronger when in the hands of its founder as the CEO (Gomez-Mejia et al., 2007). In addition, Indonesia family firms behave differently with respect to their capital structure decisions in different institutional settings, such as the underdeveloped stock markets in East Asian countries (Oxford Business Group, 2018). Instead, these firms tend to ally themselves with finance coming from the banking-based system, where creditor monitoring is tight. Thus, CEO founders might face reputational concerns that arise from the effect on creditors. A CEO founder's presence allows the firm to develop relationships with creditors that are expected to be built up over successive generations. The firm's survival, together with preserving SEW, are important concerns and therefore also reasons to reduce the probability of the firm experiencing financial distress. Hence, the result supports the hypothesis that a founder CEO has a negative relationship with long-term debt.

Hypothesis 3. If family members are represented on the Board of Directors, this increases leverage of family owned firms.

The results presented in Table 5.4 show that family board representation is associated with significantly higher short-term debt (5.14 percent) compared to those family firms that do not have family representation on the board of directors. This outcome is significant at the 0.10 level. On average, in family firms, seven out of ten members of boards belong to the family. With respect to influence and control, it can be emphasised that the family board representation can reduce asymmetrical information regarding the default likelihood in loan repayments by family firms. In fact banks in Indonesia are the

most frequent providers of short-term debt, thus they perceive family firms' performance according to their ability to repay their loans. These results support the findings by Lorca et al. (2011) and Fields et al. (2011). Moreover, in line with work that demonstrates that short-term debt has a role in mitigating the debt overhang problem, as well as lessening the negative impact of growth opportunities (Croci et al., 2011; Johnson, 2003), family board representations are more concerned about short-term debt due to the need to avoid liquidity risks.

Stewardship theory supports the view that having family board representation is healthy, especially during the founder's generation (Miller et al., 2007). This positioning helps family firms to obtain external funds from creditors who feel secure giving loans to family firms. This argument points to the minimisation of conflicts between members and the uninterrupted management of the firm by the controlling family (Poutziouris et al., 2015). Thus, family board representation is associated with lower liquidity risks, thereby a) giving the firm a higher chance of survival and b) helping to preserve SEW.

One unanticipated finding is that having board level family representation is not associated with a significant lower leverage for long term-debt, when compared to family firms that do not have such representation. This result is consistent, to an extent, with the findings of Schmid (2013) who demonstrated that participation of the members of a founding family in the firm's supervisory board does not significantly influence capital structure decisions. Apparently, family board members consider long-term decisions will less relevant to them than following generations, since the power relationships on family boards change in step with the development of family firms over time. Huse and Zattoni (2008) observed that the dynamics of family firms will change the relationships among family members. Thus, the path dependencies related to power and control of family businesses are not static; a state which challenges the assumption contained within both agency and stewardship theories that they are static, rather than dynamic. These theories are bias in trying to maintain the status quo of long-term relationships in family firms, such as the relationship between long-term debt decisions and the presence of family members on a board. A board in a stewardship culture may be slower to respond in such conditions for fear of jeopardising the SEW of a family firm (Wright and Kellermanns, 2011). Family board representatives are reluctant to alter capital structure and will respond quickly when family control is challenged or at stake. As a result, long-term debt level decisions are not affected by having family board representation in a company.

Admittedly, with regards to behavioural capital structure decision-making under uncertain conditions in the future, having board family representation may not be detrimental regarding long term decisions. Indeed family members may not engage in the family business in the future, for instance because of age reasons, thus limiting their involvement in the business. Moreover, the limitation of their knowledges about the future and lack of power relationships between family members on board and CEOs, suggesting the insignificant impact to the leverage (long-term debt). Therefore, family control through board positions is more pronounced when family firms decide to take on short-term debt rather than long-term debt. Family representative on the board directors are concerned with short-term financing which is mostly funded through bank in Indonesia. The more family firms use short-term debt, the more family board monitors the effectiveness of capital structure decisions. This relationship is interesting to note since the choice of debt maturity depends on the degree of the involvement of the family. Accordingly, the result rejects the hypothesis that family board representation has a positive relationship with leverage if leverage is measured as long-term debt. However, the hypothesis can be accepted if leverage is measured as short-term debt.

Hypothesis 4. In a family owned firm, when a member of the family is both the CEO and a member of the Board of Directors, this duality results in less leverage.

Family firms are highly likely to allow one person to act as the CEO and the chair-person of the board directors. This duality allows one powerful individual to pursue the family's interests with greater efficiency than leadership invested in separate persons (Gomez-Mejia et al., 2003). Moreover, it would seem logical that family firms maintain a close locus of control for external discipline mechanisms. The coalition among family members through the family's presence and representation via the duality of the CEO and the chair could decrease family tensions and align interests among family members (Le Breton-Miller and Miller, 2013). When CEOs chair the board of directors, their power to influence capital structure decisions increases. This increased authority allows them to choose the decisions that do not put the firm in a long-term period of risk, such as experiencing financial distress or takeover threats from creditors. Thus, the hypothesis is that duality and leverage has a negative relation.

The results shown in Table 5.4 demonstrate no significant relationship between duality and leverage, either for *long-term debt* or *short-term debt*. The duality position, in which the CEO is also the chairperson of the board, is evident in around 35 percent of family firms in Indonesia. Family firms view that when a member of the family is both the CEO and a member of the board of directors, the position does not significantly impact capital structure decisions. When the position of manager and controller converge in one person, it is expected that the impact is supposed to be stronger than a founder CEO or founder as a chairman. However, the regression results show no significant impact on leverage for either long-term debt or short-term debt. Accordingly, the result rejects Hypothesis 4 that when a member of the family is both the CEO and a member of the board of directors, this role duality results in less leverage.

5.6.3. Evidence on Capital Structure and Renewal of Family Bonds through Dynastic Succession

Hypothesis 5. If a descendant of the family firm's founders acts as the CEO, this role leads to a lower level of leverage.

Succession is the process during which managerial control of the business is transferred from one generation to the next generation. Family succession, as one of the SEW dimensions, can be marked by a founder's descendant acting as a CEO. As the family business is passed to the next generation, the SEW priorities might change. SEW priorities depend on the dimension of socio-emotional wealth that families desire to preserve. It could be different from the founder stage that might endeavour to ensure the business survives and is passed to the next generations.

When it comes to the next generation, what the founder developed seems to be harvested by the next generations and they enjoy the rewards for family members, including family harmony and using the firm as a family financial resource (Le Breton-Miller and Miller, 2013). If most of the descendants are involved in a family business for a long time, the more they are likely to maintain control under a dominant founder descendant or family members (sibling or cousin) in aiming to preserve SEW. Thus, the hypothesis is that a CEO descendant has a positive relation to leverage.

However, the results shown in Table 5.4 of renewal of family bonds through dynastic succession, where a descendant succeeds as the CEO, indicate no significant impact on capital structure decisions for both *long-term debt* and *short-term debt*. This 'no impact' condition applies even if a CEO is hired from outside at the descendant stage. With regards to family influence, an average of about 34.5 percent of family firms had descendants as CEOs during the research period. Regardless of CEO status, their positions do not impact on the capital structure decisions taken by family firms in Indonesia. Even when family firms hire a professional as a CEO, that position and initiative has no significant influence on capital structure decisions. Seemingly, once family firms enter the post-founder stage, a desire to maintain the firm within the family future generations has insignificant effect on capital structure decision-making.

As the family's engagement with their business declines as a result of the dispersion of ownership among generations, the demand to keep control and preserve SEW also declines. This finding indicates that destructive agent behaviour, stemming from opportunism and asymmetric altruism, will cause the family and independent board members to monitor those agents' activities. A board can connect the younger family members and has the ability to reduce family tensions, preserve the vision of the founder and resolve conflicts. Thus, agency governance and agent managers tend to be more evident under the descendant stages of a family firm's life.

In this context, differences in family involvement at different stages of the life cycle of family firms may shape SEW priorities (Le Breton-Miller and Miller, 2013). In turn, the differences of involvement can influence the degree of family involvement when making a capital structure decision. It is acceptable that a family's status stage reflects the stage during which the family control of the business is transferred from one generation to the next generation. Ownership could be dispersed amongst successive generations of family members and/or the placement of managerial and controller positions with the next generation. Both agency theory and stewardship theory highlight that once the continuation of the organisation and employment of managers in the company is threatened by the possibility of takeover, managers react to protect their own self-interest. In particular they will be motivated by the prospect that the organisation may have no benefits for them personally. Thus, when the coalition or alignment among family members is jeopardised for the long run, this becomes a critical situation.

For instance, the firm ‘PT HM Sampoerna Tbk’ had been in existence almost 90 years in 2005 and was Indonesia’s third-largest cigarette maker by sales when it was taken over by the US tobacco giant, ‘Phillip Morris International Inc.’ for $5.2 billion. This purchase was equal to buying a 40 percent stake in HM Sampoerna, as listed in the IDX. Sampoerna at that time was under a cousin’s consortium with a family CEO, Putera Sampoerna. The descendant generation of Sampoerna gave up control because they did not share the founder’s interest cigarette and tobacco production. The descendant generations had different priorities, with a focus on agribusiness. Thus, the probability of the descendant selling the business increased, although the descendant was on the position as a CEO. This example is an illustration of the statistical result that I obtained regarding the relationship between the change of generations and leverage. Thus, these findings may not necessarily reflect the determinants of capital structure of family firms in Indonesia. These results reject Hypothesis 5.

5.6.4. Evidence on Capital Structure and Binding Social Ties

Hypothesis 6. Board independence increases the level of leverage in a family owned firm

Independent board members can help a company to improve its relations with organisations outside the family firm, such as creditors. The independent board helps family firms to enhance the sustainability of the company and resolve conflicts, since the potential for conflict at the post-founder stage may be very high. Their independent presence could mitigate the family altruism in hiring unprofessional expertise that lacks fresh ideas, has limited skills or making overly centralised decisions. Thus, an independent board plays a role in moderating the family’s power and alleviating conflicts among shareholders. Correspondingly, Harford et al. (2008) found that a stronger board is often a more independent board that will require the firm to hold more debt as a result of the decreasing cost of debt financing. So, there seems to be a positive relationship between board independence and leverage.

The results shown in Table 5.4 show the percentage of independent directors on firms' boards are significant for *long-term debt*, but not for *short-term debt*. The proportion of independent directors increases with increasing long-term debt. This result is significant at 0.01 level. Interestingly, on average, 38.9 percent of firms' directors are independent non-family hires. Board independence is associated with: a) monitoring effectiveness (Corbetta and Salvato, 2004), b) dealing with smaller agency problems that help to mitigate conflicts between shareholder groups relative to general shareholders (Yeh and Woidtke, 2005), c) providing information as an expert or experts (Wilson et al., 2013) and d) as a useful source for a conflict resolution among family members (Ward, 2004). Thus, family firms may select an independent board member to provide professional expertise or has expert.

In addition, in Indonesia, having an independent board has been mandatory, rather than voluntary, for listed companies since 2014, based on the regulation of Indonesia Financial Services Authority (OJK) No. 33/POJK.04/2014 article 20, verses 2 and 3. The regulation states that listed companies must have at least 30 percent of its board members are independent board members. However, the findings indicate that some family firms still have no independent boards, with the maximum 75 percent of board members that are independent as shown in Table 5.1.

This dissonance is because the research coverage is from 2011 – 2015, thus having no independent board members happened before 2014. Family firms may select an independent board member that provides professional expertise or has an expert knowledge. This finding is in line with the research by Setia-Atmaja et al., (2009), who observed that board independence seems to have a positive significant impact on long-term debt. The presence of independent board members appears likely to reduce the excessive family involvement that potentially could harm SEW and threatens relational trust, especially with fund providers. These results are consistent with the study by Anderson and Reeb (2002), who found that independent boards are associated with the lower costs of debt financing. Thus, the preference to use more debt seems likely when there is an independent board member, or from 2014 *members*, on the firm's board of directors.

However, others studies find different results regarding the relationship between board independence and leverage. Anderson and Reeb (2003) failed to find any significant

relationship between board independence and leverage. Others verify that board independence can substitute the effect of debt in reducing free cash flows (Alves et al., 2015). Thus, family firms with a larger fraction of independent board members have a capital structure composed of more equity than long-term debt, but with more long-term debt than short-term debt. This ratio indicates rather tentatively that a capital structure decision is considered as a rank of priority in which monitoring is important for long-term debt decisions.

Regarding preserving SEW, the intensity of family influence across the firm can hamper the family business from being efficient. Excessive family involvement leads to overly centralised decisions. Thus, excessive family involvement potentially harms SEW and threatens relational trust. On the one hand, the independence of family firms is the way to preserve SEW by excluding non-family members from key managerial and board positions. On the other hand, the reciprocal bond seen within a family business is not exclusively between family members but is likely to be extended to a wider set of non-family members. Therefore, independent directors have a significant role to play in protecting outside family shareholders from self-dealing families; in particular, incompetent family members in positions of authority.

These findings confirm the survey of Price Water Cooper (2014), which noted non-family board members made up about 80 percent of Indonesian firms' directors. This figure indicates that the role of independent boards is significant in mitigating problems that potentially arise from the issues of trust and social bonds with the stakeholders. One particularly difficult issue is when the goals of owner-managers or family members and non-family shareholders begin to diverge. With respect to a board's independence it seems that the presence of independent directors is associated with giving a fair impression to the market that family firms mitigate opportunistic behaviour by independent board monitoring. Since the creditors perceive that family firms are not detrimental to their wealth, the lender's yield requirement will decrease. Thus family firms are more likely to enjoy using more debt. Accordingly, the results support the hypothesis that board independence exhibits a positive relation with long-term debt, which provides support for Hypothesis 6.

5.6.5. The Impact of Firm's Characteristics

Hence, to minimise specification error and increase the asymptotic efficiency of the SEW dimension to determine capital structure decisions in family firms, there are several control variables included in context of financial factors that may affect a firm's capital structure decisions. Specifically, in the analysis firms' characteristics have been chosen as control variables that are known from the previous literature. In this study the firms' characteristics are identified as a) the asset structure or tangibility, b) profitability, c) a firm's size, d) non-debt tax shield, e) a firm's age, f) liquidity and g) growth opportunities.

As a developing country, Indonesia is an interesting case study of capital structure, an issue highly relevant to the predominance of family businesses because mostly emerging markets such as Indonesia provide an excellent laboratory to test the governance potential of debt. Specifically, shareholders of emerging market firms often suffer ineffective legal protection and underdeveloped markets for corporate controls (Oxford Business Group, 2018; Harvey et al., 2004; La Porta et al., 1998). As a result, firms financing options prior to loan funds and allocation of credit from fund sources will consider a firm's characteristics as determinants of capital structure as well.

The results presented in Table 5.4 show these with regards to a firm's characteristics; in what follows I discuss those variables which are thought to control the capital structure decisions of family firms.

a. Asset structure

The results in Table 5.4 demonstrate that the asset structure of *TANG* has no significant relationship with leverage for both *long-term debt* and *short-term debt*. Firms with a high ratio of tangible assets to total assets are more likely to use debt to fund the business. The tangibility of the firm's assets is also associated with agency costs of debt. Family firms unable to provide collateral may have more opportunities to expropriate creditor interest by substituting safer projects for riskier projects (Booth et al., 2001). However, the findings show that assets as collateral do not significantly influence capital structure decisions.

TANG is defined as the ratio of tangible assets to total assets. It is collateral that companies may use when they seek to raise credit. Collateral usually increases debt capacity and therefore makes it easier for the firm to raise new debt capital (Almeida and Campello, 2007). In other words, the possibility of that family firms cannot provide collateral. Firms which are unable to provide collateral may have an asset substitution problem which develops because of the wish of the company to substitute safer projects, or high quality assets, for riskier projects or low quality assets. The asset substitution could expropriate creditors' interest and make them suffer credit risks. Thus, collateral plays an important role in terms of offering creditor protection, especially in countries with a weak legal environment (La Porta et al., 1998). Agency theory suggests that creditors see asset tangibility as a monitoring mechanism applicable to borrowers which thus tends to mitigate agency conflict between lenders and borrowers. The expenditure to monitor family firms with large asset tangibility seems likely to reduce compared with family firms with less asset tangibility. In other words, firms with a high ratio of tangible assets to total assets are more likely to prefer debt.

However, the results shown in Table 5.4 indicate that the asset structure of tangibility has no significant relation to leverage, either *long-term debt* or *short-term debt*. Even though *TANG* has an average of 52.13 percent, which is more than half is tangible assets, suggesting that family firms are able to provide collateral for both short-term lenders and long-term lenders, but asset tangibility does not significantly affect decision-making. The insignificant effect of asset tangibility can be explained by the tight family holdings and concentrated ownership and the close relationship of firms with their lenders (Deesomsak et al., 2004); as a result the demand for collateral in order to borrow is less important to many lenders. In addition, this situation could be due to the relatively high level of family ownership in the banking and finance sector. As mentioned above, approximately 70 percent of the banks in Indonesia are owned by families. Thus, family firms in Indonesia limit to use tangible assets as a commitment strategy in order to prevent family firm's self-destruction against financial risk by using more debt.

This result is consistent with Wiwattanakantang (1999) and Deesomsak et al. (2004), who find that in Asian countries such as Thailand, Malaysia, and Singapore, the relationship between leverage and asset tangibility is not significant. This result might be explained by the relatively high concentration of family ownership, that is attributed to preserving SEW and is characterised by a reputation for keeping a good relationship with creditors.

Therefore, an intangible asset such as the reputation of the family's name might be more relevant as collateral, than a physically tangible asset. Regardless of the availability of tangible assets as collateral, family firms might be calculating the interaction between the pleasure of getting funds from creditors and the pain of paying for it. It leads to the tendency of family firms to value assets more, just because they equate collateral as out of pocket costs, representing an 'instant endowment effect' to not giving up any of those assets.

Moreover, keeping a good reputation in front of creditors also becomes a concern of family firms to preserve SEW. Lenders contemplate some features of family firms when it comes to the collateral requested to acquire debt. This behaviour supports Ang (1991) who found that the motivation to pass the business to the next generation makes family businesses a non-diversified investment portfolio with concern for their long-term survival. Thus, family firms tend to avoid damaging the owner family's reputation to prevent the loss of their assets in case of their loss of capacity to repay.

b. Profitability

The results of the impact of profitability show that *PROF* is negatively related to *long-term debt*. However, when leverage is measured as *short-term debt*, as shown in Table 5.4, there is a positive impact of profitability to leverage. The results for *long-term debt* and *short-term debt* are significant at the 0.01 level and 0.05 level, respectively. This finding suggests that family firms with a high profit use a low level of long-term debt. In other words, Indonesian family firms reduce their long-term debt as they become more profitable. This strategy point to the family's desire to avoid financial distress and minimise any risk that can potentially damage their reputation. Maintaining profit as a source of internal funds may deter the family firm from using free cash flows to pay off the interest payment of creditors, thus providing a commitment against the risk of financial distress. Such a strategy is preferred to the family firm getting added value from using more debt, but suffering a loss in utility from using debt which is often extremely expensive. The excessive long-term debt decreases the profitability of family firms and increase financial distress costs. Since family firms generally have long-term orientations to preserve SEW, and the founding family identifies with the business, they strive to maintain their firm's good reputation.

Family firms with a profitable operating performance have a lower probability of experiencing financial distress. There is a tendency to use retained earnings from profit rather than taking on external funds, such as debt. Financial distress can damage a family's reputation as intangible assets whose value is in the long run, thus the more profitable the family firms are, the more they avoid long-term debt. However, family firms in Indonesia are more likely use short-term debt due to the limited capacity of banks to finance long-term debt. In this situation, a profitable firm has a capability to repay short-term debt, suggesting that creditors will be willing to provide more short-term debt for a profitably run family firm.

Profitability is an indicator that firms are better managed and thus expected to be efficient. The more profitable the family firms, the greater the probability that internal resources will be available for investment. Thus, less urgent is the need for external financing (Mishra and McConaughy, 1999). From the side of fund supplies, creditors will expect that profitable family firms have a capability to repay debt. In line with this, they will provide more debt to family firms that have an interest to avoid the potential dilution of family ownership. By way of comparison, almost all empirical studies have found the relationship between profitability and leverage is negative (Ampenberger, 2013; Aggarwal and Kyaw, 2010; Margaritis and Psillaki, 2010; Frank and Goyal, 2009). The negative relationship results from the cost of debt; a company's exhausted debt capacity means no more debt can be raised (Lemmon and Zender, 2010).

However, there may be another reason for the negative relationship, which is to avoid underinvestment problems, where a highly leveraged firm foregoes valuable investment opportunities. For the long term, creditors probably want to capture the returns from the project, thereby leaving insufficient returns for the shareholders. In this situation, family firms may follow a decision rule to not issue more debt. Thus, the firm financed with risky debt might be obliged to pass up the valuable investment opportunity, which could result in high profit, due to the firm's debt overhang problem. Therefore, family firms might set the optimal combination on capital structure to avoid underinvestment and a debt overhang problem. This study confirms previous empirical studies in developing countries which noted that Asian countries, such as Singapore and Thailand, have a negative relationship between leverage and profitability (Booth et al., 2001; Wiwattanakantang, 1999).

By way of comparison, this current study found that there is a positive relationship between *short-term debt* and *profitability*, suggesting that the more profitable the family firms are, the higher their preference to use short-term debt. These figures are normal results for the firms sampled in this study, where most family firms in Indonesia are largely rely on banking, rather the bond market, for their funding. Since the bond market in Indonesia is underdeveloped, banks are the fund source for short-term debt. Moreover, due to the OJK conservative credit policies, Indonesian banks usually offer debt to less risky firms at lower rates of risk premium (10.48 percent pa). Since the most profitable Indonesia family firms may be less likely to experience bankruptcy costs, this situation will increase their ability to reduce costs by increasing short-term debt. In this case profitability is an important determinant in Indonesian banks' decisions to grant short-term loans to family firms in Indonesia. Thus, highly profitable firms indicate that firms are well managed and can be expected to be efficient than low profitable firms. As a result, creditors will anticipate that a profitable firm has a capability to repay their short-term debt and therefore end up providing more short-term debt for those profitable family firms.

c. Firm Size

The impact of *SIZE* on leverage is insignificant, both for *long-term debt* and *short-term debt.* Therefore, the expectation of large family firms carrying more debt is refuted. The findings show that *SIZE* might be used as a proxy for an inverse probability of default. This probability of default is not significantly related to leverage in a country such as Indonesia where the bankruptcy costs are low, since the legal system is incomplete with the relevant finance laws yet to be implemented.

Hooks (2003) finds that *SIZE* affects the amount of debt capital available to a firm. A firm's size is found to be an important determinant of leverage (Santos, 2014; Setia-Atmaja et al., 2009). Moreover, Huang and Song (2006) support the idea that size can be used as a proxy for information asymmetries. The effect of size toward disclosure is that the larger the firm the more information is provided to creditors. As the information is open to the public, the probability that the firm will hide the information regarding the possibility of a default will be less likely. Thus, this perception enables large firms to obtain a greater amount of leverage (Rajan and Zingales, 1995; Fama and French, 2002;

Frank and Goyal, 2003). To a large extent, the bigger firms face fewer information problems and their size might also increase their bargaining power to creditors (Degryse et al., 2012).

The findings shown in Table 5.4 reveal that the expectation of large family firms carrying more debt is refuted. This study found no evidence that large firms provide more information than do smaller ones, thus increasing the availability of capital provided by creditors. This finding indicates that there are no differences between large or small family firms toward disclosure issues, if firm size is seen as a proxy for information asymmetries. Thus, family firms in Indonesia can be presumed to share similarities in transparency and maintaining their reputations, so making them less prone to bankruptcy risks.

This result is in line with Chen (2004), who concluded that in China, the relationship of firm size and leverage is not statistically significant. In this respect family firms in Indonesia are likely to be owned by the founding families, who still own a significant proportion of the companies' shares. The CEO could be the founder, or a family member, or a professional manager selected by the family. Then, if size proxies for relative dilution of control, as agency theory posits, the Indonesian family firms would appear likely to have similarities in protecting their SEW, both for small and large firms.

If large firms are more likely to diversify their financial sources, and firm size may be a proxy for the probability of default, larger firms may be more difficult to liquidate. This situation occurs in firms with large dispersed ownerships, in which the rationale of the argument is very likely to be economic. However, Rajan and Zingales (1995) argue that they do not really understand why size is correlated with leverage. It appears likely that empirical research has not attempted so far to investigate the size effect, since the facts that have been observed appear to be inconsistent. The fixed costs of financing could be a reason to connect firm size and leverage. Nevertheless, the considerations of Indonesian family firms in capital structure are not controlled by firm size, since family firms are typically undiversified financial resources, a status that leads them to be perceived as less likely to default than smaller businesses. Also, as Diamond (1989) suggested, a good family reputation is a ticket to gain access to creditors; the reputation is used to maintain a relationship with lenders in the long run because a family's reputation will also pass to the next generations.

d. Non-Debt Tax Shield

The results shown in Table 5.4 demonstrate a positive and significant relationship between non-debt tax shield (*NDTS*) and leverage, when leverage is measured by *long-term debt* (LTD). The result is significant at the 0.10 level. However, when leverage is measured as *short-term debt* (STD), as shown in Table 5.4, there is a negative relationship between non-debt tax shield and short term-debt. This result is significant at the 0.10 level. These outcomes are not surprising, since the non-debt tax shield (measured as tangible assets depreciation to total assets) has an impact in the long term, rather than in the short term. This result is consistent with the argument of Barclay and Smith (1995), Moh'd et al. (1998) and Santos et al. (2014) who suggested that if firms have more *NDTS*, they will also have higher depreciation ratios. The higher depreciation ratios are more likely to have relatively fewer growth options in firms' investment opportunity sets and relatively more tangible assets. This outcome indicates that family firms with relatively high tangible assets signal their high debt capacity to fund providers. Thus, this finding can be attributed to a large tangibility in their asset structures, more than 50 percent on average, for the long run.

However, *NDTS* is utilised as a substitute for tax benefits for short-term debt, since in Indonesia tax facilities have been regulated as a stimulus for investment, based on government regulations. The tax facilities entitle a corporate tax payer to income tax benefits up to 30 percent of the amount invested in tangible assets and charged at 5 percent per annum. Thus, the higher the tax benefit, the lower the short-term debt.

e. Firm's Age

The firm age, measured by the number years since incorporation, significantly influences leverage in both measurements. However, the relationships are different between *long-term debt*, *short-term debt* and *AGE*. The coefficient estimates for *AGE* is negative and significant at the 0.01 level for *long-term debt*. Established family firms prefer to use a lower level of *long-term debt*. It appears likely that mature family firms prefer a lower level of leverage to avoid financial distress. By contrast, as shown in Table 5.4, when leverage is measured as short-term debt there is a positive and significant impact of the *AGE* on leverage at the 0.05 significance level. Established family firms prefer to use a lower level of long-term debt; mainly because avoiding financial distress is significant

for mature family firms that achieve this goal by using lower levels of leverage. Mature family firms with a good reputation and a long-term satisfactory relationship with creditors, prefer a higher level of short-term debt rather than long-term debt. These results are consistent with Schmid (2013) who found that the relationship between a firm's age and leverage levels is negative.

The firm's age should play a role in capital structure decisions because it may be interpreted as a measurement of default risk (Chua et al., 2011). Also, established family firms or older family firms have longer track records, therefore they have a reputation regarding creditworthiness with creditors. A family firm's reputation is the standard model of the age structure of the capital measure that in turn has a contribution to increase the debt capacity because of reducing the level of asymmetric information. Moreover, empirical studies find that capital sources depend on whether a business is developing or maturing (Dollinger, 1995), with different financing arrangements being linked to business life cycles (Berger and Udell, 1998). The interaction between lenders and borrower over time makes creditors able to alleviate the information asymmetry that causes the financial distress of family firms.

Further, following the assumptions that older family firms have: i) lower information asymmetries between all stakeholders (Santos et al., 2014), ii) more collateral value and cash flows (Croci, et al., 2011) and iii) longer track records (Moosa and Li, 2012) that increases the borrowing capacity, those assumptions fail to support the findings for decision making. In fact these assumptions suggest the possibility of family firms using more debt because they have larger borrowing capacity, but they do not use it. These findings are consistent with the result above, regarding the relationship between firm sizes and leverage levels.

The average family firm has an age of approximately 30 years, with the maximum age of 104 years. These data confirm that 29 of the family firms in this research population have already passed to the third generation, with 72 companies under the second generation. The second generation is the biggest number, the third generation is the smallest and the founder stage is in the middle, with 59 companies. A rationale behind these findings is the fact that as the duration of ownership increases, founders place a higher value on an object that they have owned, so the levels of loss aversion also increase. As long as people hold the object, the consequence of forgoing gains is less painful than perceived loss.

Time and duration become important factors to control the fear of losing. Thus, as family firms mature, they are more prudent in using more long-term debt, since reputation and good track records with creditors are used to preserve SEW and pass it to the next generation.

However, research evidence suggests that if leverage is measured by *short-term debt* (STD), that measurement will be positively related to the leverage ratio (Croci et al., 2011). In fact the average of *short-term debt* is double that of *long-term debt*: 15.53 percent and 31.62 percent, respectively. It therefore appears likely the long track records of family firms are most likely regarding *short-term debt.* Bank loans provide short-term financing for working capital; equity might be the main source of finance for capital investment of family firms in Indonesia. Thus, it would seem logical that the well-established family firms, or older family firms, have longer track records; therefore, they have a good reputation regarding creditworthiness of short-term debt with creditors. This positive perspective makes the direction of the relationships between long-term debt and short-term debt different, depending on the firm's age.

f. Liquidity

As can be seen in Table 5.4 in Chapter 5, *LIQ* is applied for *short-term debt* and not for *long-term debt*. This discrimination is because the ratio is a measure of the ability of the firm to cover its short-term financing commitments. The result demonstrates that *LIQ* is negative and significant at the 0.01 level when related to *short-term debt*. A negative relationship between *short-term debt* and *LIQ* is expected, simply because using more short-term debt means more lack of cash. The more liquid family firms are, the less they wish to finance their firms with debt and may use those assets to provide sources of financing in case of sudden need. This finding supports the studies of Deesomsak et al., (2004) and Moosa and Li (2012) who concluded that firms with greater liquid assets may use those assets to finance their investments. In addition, family firms in Indonesia, especially in the retail sector (sector 9), commonly hold significant liquidity. It would seem logical since the retail sector generally has more working capital than other industries.

Firms tend to use their liquid assets to finance their investment in preference to raising external debt (Deesomsak et al., 2004). Using more debt means more liabilities, which

implies fewer current assets remaining after covering liabilities. Moreover, managers can manipulate liquid assets in favour of shareholders against the interest of bond holders (Prowse, 1990). As a result, such an arrangement might increase the agency cost of debt, thus there is a negative relationship between leverage and liquidity. When family firms face illiquid conditions, they have limits in attracting debt because financial distress will be indicated as relatively high. Even though creditors could act as liquidity providers to their important customers who are in distress (Oliveira et al., 2017), the family firms' long track records and good reputations relief that these are only temporary because providing additional debt to lenders can also increase creditors' current liabilities. Consistent with this reasoning, illiquid family firms induce financial constraints and increase the monitoring costs of the creditors.

Moreover, the negative relationship between short-term debt and liquidity might be due to potential conflicts between shareholders and creditors. As noted earlier, liquidity can be taken as evidence to show the extent to which the assets can be manipulated by shareholders, at the expense of creditors. However, I would not go so far as to say that family firms may use liquidity to manipulate creditors, since family firms are concerned to preserve SEW and maintain their family's good reputation with their creditors. Manipulation by using the liquidity of firms' assets might destroy trust from creditors and increase the agency cost of debt; thus, in the long run it could be a problem for family firms regarding additional leverage. Therefore, the negative effect of the liquidity position of the family firm on its leverage level seems to demonstrate that such firms tend to use their liquid assets to finance their investments, in preference to raising external debt. This conclusion is in-line with the fact that family firms in Indonesia use almost two times more short-term debt (the average is 31.62 percent) compared with long-term debt (the average is 15.53 percent).

g. Growth opportunities

Agency theory predicts that firms with a high market-to-book ratio have higher costs when experiencing financial distress. The relationship between growth opportunities and leverage is therefore negative. The negative impact of *GROW* on leverage might reveal several features of the borrowing behaviour of family firms. This negative impact may give support to the prediction that family firms with relatively high intangible assets cannot support high leverage levels. Moreover, Deesomsak et al. (2004) argued that

negative relations due to the fear of creditors may cause firms to pass up valuable investment opportunities. However, some argue that if firms hold more tangible assets, they tend to borrow more debt, since growth opportunities cannot be collateralised. Therefore, creditors are willing to assign higher valuations to highly leveraged firms, as well as issuing more long-term debt to finance the firm's growth opportunities (Chen, 2004).

However, Table 5.4 implies that *GROW* have a significant impact on capital structure decision-making, but the results will be different depending on the measurement parameters used. When leverage is measured with *long-term debt*, the finding shows that the relationship is positive and significant at the 0.01 level. Therefore, the higher the growth opportunities for the firm, the more likely it is that the firm will exhaust its internal funds and require more *long-term debt*. By way of comparison, when leverage is measured as *short-term debt*, there is an insignificant relationship between a firm's growth and its leverage. Thus, family firms with greater growth rates have higher long-term debt, due to the less probability of default and lender risk. Firms with higher growth opportunities may be less likely to default than the firms growing more slowly.

This finding is consistent with Jung et al. (1996), who showed that if management pursues growth objectives, management and shareholders' interests tend to coincide in those firms with strong investment opportunities. Debt might not limit the agency costs of managerial discretion (Jensen, 1986; Stulz, 1990). In other words, if family firms need additional capital to finance their positive investment opportunities, they may raise more long-term debt. It may be interpreted that family firms will follow the matching principle, which is to finance long term investment with long term debt. Moreover, empirically, previous studies regarding both firm' and country-specific determinants of capital structure in developing countries found that Malaysia and Thai firms (Booth et al., 2001) have a positive relationships between long-term debt and growth opportunities. The highest value of growth opportunities in Indonesia comes from agriculture (sector 1), which is dominated by the high growth of palm oil plantations in Indonesia over the last 30 years. Palm oil and its derivative products form the most important prominent commodity in Indonesia. This product is the most valuable after coal and oil, so the growth opportunities associated with this commodity significantly contribute to the agriculture sector in particular, and Indonesia in general. In addition, these findings indicate that as debt market in Indonesia is still underdeveloped, the expansion of the business will require a

large amount of funds that may not be sufficiently funded by internal operations. Hence growth opportunities have a positive association with long-term debt.

In addition, the results show that the firm's age has a negative relationship with long-term debt but growth opportunities have a positive relationship with long-term debt. Such relationships are significant at the 0.01 level, for both the firm's age and growth opportunities. Therefore, it appears likely that mature family firms need more working capital than younger family firms. Younger family firms normally have founder involvement such as a founder-CEO. Such firms are driven to grow and are characterised by a long-term strategic horizon, thus they need less short-term debt than mature family firms. These findings also confirm that the more growth opportunities are available to firms, the more they tend to finance their investment by long-term financing. The most important aspect of capital structure decisions is the choice between internal and external financing. It might be assumed that financial constraints lead family firms to have to rely more heavily upon internal financing. With regards to financial constraints, I use firm size and market to book value to classify firms as financially constrained (Frank and Goyal, 2009). Here, I maintain financial constraints do not bias the results of my research.

5.7. Additional Robustness Checks

Several additional analysis were conducted to test the robustness of the results. First, I tested all the models with another dependent variable: Total Debt. This test is to examine whether the prior results are sensitive to alternate measurements, I re-estimated the equation using alternate proxy for leverage. The leverage calculated use total debt to total asset (Setia-Atmaja et al., 2009). The fixed effects results are statistically significant and indicate that the dimensions of socio-emotional wealth impact to capital structure decisions. Family ownerships, a founder CEO, family board representation and board independence have relationship with leverage. The results 'are presented in Table 5.5 panel (1).

Second, to examine whether the prior results are sensitive to the fact that family firms can be actively managed or passively managed, for this reason the term of family roles as a CEO, a board members or a duality position, I re-estimated the equation using a binary

variable that equals one for actively managed family firms and zero otherwise. The results are consistent with earlier analyses (panel 2). While, to examine whether this study is sensitive to the fact that proportion of independent directors in family firms may be bias since this study require family members on the board as well as family CEO, thus I follow Setia-Atmaja et al., (2009) to measure of board independence that exclude family members in the denominator. The results are not different from previous analyses (panel 3).

Table 5.5. Estimation Methodology I

Variable	Total Debt (1)		LTD (2)		LTD (3)		LTD (4)	
	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic	Coefficient	t-statistic
OWN	0.7666	(1.81)*	1.3161	(5.01)***	1.2704	(4.82)***	1.4375	(5.45)***
OWN^2	-0.0853	(-0.94)	-2.2530	(-3.88)***	-2.1653	(-3.70)***	-24837	(-4.23)***
OWN^3	0.1032	(0.86)	1.0336	(2.75)***	0.9962	(2.60)***	1.1752	(3.06)***
CEO founder	-0.0636	(-3.30)***			-0.0180	(-1.38)	-0.0191	(-1.50)
Family board representation	0.0320	(1.92)**			-0.0217	(-1.77)*	-0.0274	(-1.06)
Duality					0.0001	(0.01)	0.0050	(0.44)
CEO descendant	0.0105	(0.518)			0.0009	(0.83)	0.0133	(1.20)
FF Active			0.0140	(1.26)				
Board independence	0.2284	(3.29)***	0.1913	(0..46)***			0.1832	(3.79)***
Board Size (Exclude Family)					0.0789	(3.45)***		
TANG	0.0111	(0.36)	0.0287	(1.28)	0.0456	(2.03)**	0.0333	1.50
PROF	-0.1150	(-1.48)	-0.1889	(-3.93)***	-0.1676	(-3.52)***	-0.1853	(-3.89)***
SIZE	0.0027	(1.17)	0.0025	(1.30)	0.0028	(1.46)	0.0025	(1.32)
NDTS	-0.0146	(-0.09)	0.1876	(1.61)*	0.2267	(1.64)*	0.2077	(1.79)*
AGE	-0.0003	(-0.55)	-0.0011	(-2.23)**	-0.0011	(-2.29)**	-0.0012	(-2.58)***
LIQ	-0.0651	(-13.7)***						
GROW	0.0019	(0.50)	0.0068	(2.71)***	0.0063	(2.47)**	0.0074	(2.97)***
Family-Bank Relations							0.0350	(1.97)**
Intercept	0.3190	(4.12)***	0.0750	(1.97)**	-0.0962	(-1.82)*	-0.1445	(-2.78)***
Adjusted R Square	0.274		0.1366		0.1343		0.1518	
Prob > F	0.0000		0.0000		0.0000		0.0000	
Number of observation	800		800		800		800	

Legend: significant at * p<0.10; ** p<0.05; *** p<0.01. T-statistics are presented in parentheses.

In addition, to anticipate family-bank relationships since the fact that in Indonesia almost 70 percent of banks are owned by family firms, I construct a control variable family-bank relations using a binary variable that equals one for family firms that own a bank and zero otherwise. The result indices that family firms that have a relationship with bank in as a holding company tend to use more leverage than family firms that do not have a bank in their holding company (panel 4).

Table 5.6. Estimation Methodology II

Variable	**LTD (1)**		**LTD (2)**	
	Coefficient	t-statistic	Coefficient	t-statistic
OWN	1.3385	(5.02)***	1.3070	(4.83)***
OWN^2	-2.255	(-3.79)***	-2.1828	(-3.59)***
OWN^3	1.0298	(2.65)***	0.974	(2.43)***
CEO founder	-0.021	(2.65)***	-0.0263	(-2.03)**
Family board representation	-0.0169	(-1.42)	-0.0100	(-0.83)
Duality	0.0062	(0.55)	0.0063	(0.55)
CEO descendant	0.0113	(1.03)	0.0067	(0.59)
Board independence	0.2138	(4.66)***	0.2015	(4.47)***
TANG	0.0234	(1.06)	0.0095	(0.40)
PROF	-0.1664	(-3.76)***	-0.1919	(-4.01)***
SIZE	0.0020	(1.08)	0.0027	(1.45)
NDTS	0.2472	(1.98)**	0.2267	(1.81)*
AGE	-0.0011	(-2.43)**	-0.0015	(-2.89)***
GROW	0.0090	(3.70)***	0.0068	(2.65)***
DPR	-0.1208	(-6.42)***		
Industry			0.0357	(3.65)***
Intercept	-0.1237	(-2.31)**	-0.1424	(-2.69)***
Adjusted R- Squared	0.1782		0.1586	
Prob > F	0.002		0.0000	
Number of observation	800		800	

Legend: significant at * p<0.10; ** p<0.05; *** p<0.01. T-statistics are presented in parentheses.

Third, another important aspect is the choice between internal and external financing. Frank and Goyal (2009); Schmid (2013) use the dividend paying status, firm size, and

market-to-book ratio to classify family firms as financially constrained. Firms with high growth opportunities may have lower dividend payout due to their larger investment requirements and a tendency to retain funds to avoid external financing with its attendant costs (Fama and French, 2001; Setia-Atmaja, et.al., 2009). Thus, I employ dividend payments to serve as additional control variable. The results do not change the principal findings (Table 5.6 panel 1). Hence, I maintain that financing constraints do not bias this study's results. In addition, highly capital intensive firms such as the infrastructure, transportation, construction, property and manufacturing industries may be more likely to be candidates for bank loans. On the other hand, trade and service firms are less likely to use external capital because they often lack tangible assets that can be used as collateral (Santos et al., 2014). Thus, the additional industry, which is be classified as highly capital intensive sectors and less capital intensive, is to serve as a control variable. The findings lead to similar results with principal findings that highly capital intensive sectors are tend to use more leverage (Table 5.6 panel 2).

Fourth, this study could potentially suffer from reverse-causality. While it is possible that family ownership leads to higher leverage, the same factors may also induce families to maintain their holdings. To address this potential problem, I use the instrumental variable (IV) procedure to estimate the equation. Following Setia-Atmaja et al., (2009), I create a lagged family ownership variable (lagged by one year) and use it as an instrument for measuring family ownership. The estimation which include this instrumental variable is consistent with previous results presented in Table 5.7 (panel 1), providing similar results with previous results. Lagged ownership has a significant influence on leverage. Moreover, as the last variation, I include lagged leverage as an additional right-hand side variable in the base equation. This allows me to capture the dynamic nature of capital structure decision. Following Schmid (2013), I employ the system-GMM estimator proposed by Blundell and Bond (1998) with lagged values of the right hand side variables as instruments. The results are presented in Table 5.7 (panel 2). As expected, lagged leverage has a positive and significant influence on leverage.

Table 5.7. Estimation Methodology III – Reverse Causality Test

Variable	LTD Instrumental variable (1)		LTD System-GMM (2)	
	Coefficient	t-statistic	Coefficient	t-statistic
OWN			2.1377	(1.65)*
OWN^2			-4.2272	(-1.65)*
OWN^3			2.3676	(1.55)
Lag (OWN) 1 year	-0.0404	(-1.87)*		
CEO founder	-0.0173	(-1.32)		
Family board representation	-0.0089	(-0.74)	0.0399	(0.41)
Duality	0.0052	(0.45)		
CEO descendant	0.0169	(1.52)	0.3161	(123)
Board independence	-0.2284	(3.27)***	0.2138	(4.66)***
Leverage (LTD (1-t))			7.0116	(2.30)**
TANG	0.0111	(1.88)*	0.0202	(0.36)
PROF	-0.1737	(-3.73)***	-0.0821	(-1.11)
SIZE	0.0010	(0.48)	-0.0106	(-1.87)*
NDTS	0.2198	(1.84)*	-0.1324	(-1.01)
AGE	-0.0015	(-3.13)***	0.0053	(1.67)*
LIQ	-0.0651	(-13.69)***		
GROW	0.0068	(2.65)***	-0.008	(-0.01)
Intercept	-0.1227	(3.19)***	-0.3450	(-1.41)
Adjusted R- Squared	0.0818			
Prob > F / Prob > chi2	0.0000		0.002	
Number of observation	800		800	

Legend: significant at * p<0.10; ** p<0.05; *** p<0.01. T-statistics are presented in parentheses.

Table 5.8 summarises the capital structure determinants of Indonesian family firms and Table 5.9 presents the result summary of hypothesis testing.

Table 5.8. Determinants of Family Firms' Capital Structure in Indonesia

Independent Variables	Model 1 – Long-term debt (Relationship)	Model 2 – short-term debt (Relationship)
Family Control and Influence		
Family ownership	Non-linear (N-curve)	Not significant
CEO founder	Negative	Not significant
Family board representation	Not significant	Positive
Duality	Not significant	Not significant
Renewal of Family Bonds through Dynastic Succession		
CEO descendant	Not significant	Not significant
Binding Social Ties		
Board independence	Positive	Not significant
Control Variables		
Firms' Characteristics		
Asset structure (TANG)	Not significant	Not significant
Profitability (PROF)	Negative	Positive
Firm Size (SIZE)	Not significant	Not significant
Tax shield effect (NDTS)	Positive	Negative
Firm Age (AGE)	Negative	Positive
Liquidity (LIQ)	----	Negative
Growth opportunity (GROW)	Positive	Not significant

Table 5.9. Result Summary of Hypothesis Testing

Hypotheses	Result (Long-term Debt)	Result (Short-term Debt)
Dimension SEW 1: Family control and influence		
Hypothesis 1. *Concentration of ownership in the hands of family members has a non-linear relationship with leverage over the life period of the family.*	Accept	Reject
Hypothesis 2. *If the firm founder acts as the CEO, the family firm will have low leverage levels.*	Accept	Reject
Hypothesis 3. *If family members are represented on the Board of Directors, this increases leverage of family owned firms.*	Reject	Accept
Hypothesis 4. *In a family owned firm, when a member of the family is both the CEO and a member of*	Reject	Reject

the Board of Directors, this results in less leverage.		
Dimension SEW 2: ***Renewal of family bonds through dynastic succession.***		
Hypothesis 5. *If a descendant of the family firm's founders acts as the CEO, this leads to a lower level of leverage.*	Reject	Reject
Dimension SEW 3: ***Binding social ties.***		
Hypothesis 6. *Board independence increases the level of leverage in a family owned firm.*	Accept	Reject

5.8. Summary of this Chapter

This chapter presents the findings and results of my research into the issue of capital structure decisions in the context of Indonesian family firms. A model has been developed to explain the determinants of capital structure of such family firms. In addition to the pooled data model, the panel data which are usually estimated using either fixed or random effect techniques were used. The fixed effects specification was found to be the preferred model for LTD and the random effects is the appropriate estimation model for STD.

The estimated model indicates that capital structure decisions made by Indonesian family firms can be explained by the dimensions of the socio-emotional wealth. Those dimensions may constitute a mechanism for family firms to determine their strategic objectives and the related strategic behaviour of capital structure, thus preserving socio-emotional wealth for the long run. Moreover, these findings indicate that the borrowing capacity of Indonesian family firms is mainly affected by avoiding the risks of financial distress, as well as the expected costs of asset substitution problems. This avoidance is most often achieved by using more short-term debt. Accordingly, the relative low level of leverage is due to maintaining the family firm for the long run. Thus to avoid financial distress, family firms may keep the leverage in a low level.

It is generally accepted that traditionally finance literature has had little to say about the dimensions of socio-emotional wealth as the distinctive form of the family as an enterprise affect such firms' capital structure decisions. Previous studies show that family firms differ from non-family firms (Mishra and McConaughy, 1999; Anderson et al., 2003; Setia-Atmaja et al., 2009). Nonetheless, little theoretical and empirical research has been done to support the premise that dimensions of SEW determine the capital structure behaviour of family firms. Thus, to fill the knowledge gap and complete the study of family business and capital structure decisions, this research clarifies the determinants of capital structure of family firms.

Justification of agency theory and stewardship theory is that principals and managers become more aligned, but ownership concentration is more dispersed, and friction among family members is more likely when control of family firms passes from one generation to the next. Thus, the connectivity between them is on the risk attitudes between owners and agents that result in dynamic perspectives. In other words, both might have the same risk preferences, which could change over time.

Moreover, the challenge of agency based models of capital structure through corporate governance is to set up a supervisory and incentive alignment mechanism that alters the risk orientation of agents, to align them with the interests of their principals (Tosi and Gomez-Mejia, 1989; Demsetz and Lehn, 1985; Jensen and Meckling, 1976). This model also restricts the categorisation of agents' risk taking behaviour as either risk aversion or risk neutral. There is a tendency to neglect any changes in the risk preferences of the agents (Wiseman and Gomez-Mejia, 1998). Relaxing the assumption regarding the possibility of changing the risk preferences of agents can improve the explanatory power of the capital decision structure in family firms, in the context of dissimilar risk bearing levels and risk preferences between managers and principals.

Alternatively, a dynamic perspective of both theories highlights that agents' risk preferences do not remain constant or stable in their attitudes to risk (uncertainty); agents do not always demonstrate consistent behaviour. The decision makers are driven by the desire to avoid losses (Wiseman and Gomez-Mejia, 1998); decisions are not based on or shaped by the potential final wealth sum, but are informed by the gains and losses relative to a specific reference point (Chua et al., 2015). As a consequence, the divergent tendencies of interests result not from the individual's motivation or interest that

conventional agency models presume to be a source of agency problem, but from the risk preferences under uncertain conditions.

Under uncertain conditions for the future, managers exercise their authority to make a decision based on their experiences, traditions, habits, customs and other constituted practices of the formation process. This approach is especially true for decisions relating to the outcomes of a series of decisions over time, such as a firm's capital structure. The leverage may be interpreted as the possibility of growth in size or in profit, which is short-term. Also involved is the capability of managers to accumulate the noneconomic outcomes or socio-emotional wealth (SEW) in the long-term, together with the accumulation of stocks of family resources, such as the reputation of the family. Agent behaviour tends to predict performance outcomes based on the agent's risk preferences (McGuire, 1988; Rees, 1985) or their assumptions about expectations in the future (Baker et al., 2004). Therefore, it is reasonable that agents will decide to use the level of leverage depending on how they compare the anticipated outcomes from the available options of capital structures.

However, these static perspectives fail to move beyond the dichotomous treatment of agency and stewardship theories, such as the difference between individual reference points that potentially can generate agency conflicts among family members. Or there are individual level preferences that might well be different with firm-level preferences. Thus, the relationship between governance, behaviour and capital structure decision-making is dynamic, rather than static. Moreover, in family firm decision-making it appears likely that a decision with uncertain outcomes gives the possibility of a mixed gamble, involving both gain and loss outcomes (Gomez-Mejia et al., 2014). In other words, family firms will proceed with capital structure decisions that preserve family SEW when the prospect of SEW gains, such as keeping family control and influence or passing the family business to the next generation, exceeds any prospective SEW losses.

To fill the gap of agency theory/stewardship theory regarding how capital structure is decided in family firms, based on the dimensions of SEW, the implications of hypotheses outlining the relationships between leverage and SEW dimensions are explained below.

1. Family control and influence over the firm's operation

Family control and influence over the firm could be attributed to several roles of involvement, such as: a) through ownership or b) family participation in management and governance. Agency theory suggests that in closely held firms such as family-owned businesses, debt can allow principal owners to control more resources, such as capital, without diluting their voting rights (Jensen and Meckling, 1976; Harris and Raviv, 1991; Faccio et al., 2001). This situation represents a control mechanism and arranges the compensation based on the structure and fairness of the situation with the respect to agents in similar contexts. On the other hand, stewardship theory assumes that agents act in the best interest of their principals (Donalson and Davis, 1989; 1991). The steward places a higher value on cooperation than defection because they consider utility rationally. This conduct appears in line with the spirit of collectivism that is more profound in family firms than the spirit of individualism. Although stewardship theory states that the managers are pro-organisation in behaviour, as I mentioned previously there is a strata or a sequence in applying stewardship theory: the sequence of interest(s) but not risk preferences. This study found that under the 'founder stage', family firms tend to have a longer-term commitment to their business. Greater value is placed on noneconomic goals, due to the issue of sustainability and the family members are more embedded in the business system, since the family is willing to put the interests of the business first, suggesting that steward-type behaviour and stewardship governance are more prominent under founder stage.

This study reveals that the relationship between family holdings and debt level is not uniform over the entire range of family ownership. The non-linear relationship is consistent with the hypothesis that ownership has a non-linear relationship with leverage. Moreover, the finding is consistent with empirical observations. Ellul (2011), Setia-Atmaja et al. (2009) and Schulze et al. (2003) found that family ownership and debt form a non-linear relationship. Thus, family ownership addresses the impact of different levels of family holdings. The risk preferences also change when the level of ownership concentration changes. The risk averse behaviour of family firms is evident in financial decisions when firms are subscribing to less diversified investment strategies. The risk reduction strategy of the firms is pursued through investment diversification with lower debt levels. The low levels of debt could decrease the risk of losing SEW (undiversified personal or family members), as well as family capital in the case of bankruptcy. This

outcome is in line with this study and consistent with the explanation above, that family firms perceive risk differently between short term debt and long term debt, particularly regarding their endeavours to preserve long term sustainability of the company.

Next, the involvement in management by the presence of a founder CEO has a negative relationship with leverage. The family's attachment to the business is highest when the firm is owned and managed by the founding family (Chua et al., 1999; Misra and McConaughy, 1999). A founder CEO is presumed to have a long-term commitment to the company and to be more attached to the firm they founded than a descendant-CEO. CEO founders would seem to be more risk averse as a consequence of those founder-owners investing most of their wealth in the firm. In addition, with the founder as CEO, the firm is considered as a life-time achievement and therefore enjoyment from the firm might be delayed until passed to the next generation. Thus, a CEO founder tends to avoid any risks that can diminish SEW. CEO founders tend to choose the safe option when making a capital structure decision, since the impact of the decision will influence the business in the future under uncertain conditions. Thus, a low level of leverage is considered as a commitment strategy.

The related argument regarding this result is the board of director role will lead to a decrease of information asymmetry, with the consequent reduction of creditors perceiving the likelihood of a default in the repayment of short-term debt; such debt being the preferred option with Indonesia family firms. This finding is in line with some suggestions that short-term debt has a role in mitigating the debt overhang problem and lessening the negative impact of growth opportunities. Family board representation thus might be more concerned about leverage that could avoid financial distress.

Next, the duality that allows the CEO and the chair-person's roles to both be filled by the same person at the same time, does not specify decision making should be to preserve SEW in family firms, even when the family has direct involvement in management and monitoring. The perception of outside investors or creditors on duality may be that of a potential risk of misalignment of interests between family firms and fund suppliers (Poutziouris et al., 2015); such a perception could, I assume, increase the cost of capital. As consequence, a founder-CEO is probably in a position that is strong enough to influence the board's strategic decisions, such as capital structure. In other words, a CEO-

chair duality position could be more costly than a position as a CEO or involvement in a board position.

2. Renewal of family bonds through dynastic succession

There are two major issues of concern regarding perpetuating the family succession: i) future generations tend to be shorter-term oriented than the firm's founder and ii) at the later family stages, identification with the business and emotional attachment both weaken. Firstly, short-term strategies could destroy family business, while long-term strategies tend to characterise founders, who have sacrifice sunk-costs since the very beginning of the business. Secondly, family's life-cycle stage reflects the time during which family control of the business is transferred from one generation to the next generation. Ownership could be dispersed among successive generations of family members and/or superseded by the appointments of managerial and controller positions for the next generation. Thus, the founder's descendants might to be prone to harvest what the founder built, rather than work hard for and in the organization (Schulze et al., 2001). It can be seen from this study that when a descendant is a CEO who is keen on perpetuating the family succession, as well as ensuring that the business is handed down to the next generation, there is no significant relationship between succession and leverage. Thus, it is difficult to accept that this dimension contributes significantly in any way to capital structure decision as one of the determinants of debt-equity choice.

Both agency theory and stewardship theory highlight that once the continuation of the organisation and employment of managers in the company is threatened by the possibility of a takeover (Donaldson and Davis, 1991), or in a case of a family firm restructuring to accommodate a new life cycle of the company, managers will react to protect their own self-interest. The future prospects of the organisation may have no benefits for them personally. Energy devoted to preserving SEW might become weaker when the business is passed to the next generation. Since the family's engagement with the business declines as ownership is dispersed among generations, the demand to keep control and preserve SEW also declines. The next generation's perception of the value of the business is unlikely to be in line with that of the founder or the previous generations. This paradigm is probably why the next generations are less focused on preserving SEW through dynastic succession, than would be the case at the founder stage. Thus, examples of

agency governance and agent managers tend to occur and be most evident under the descendant stages.

3. Binding social ties

This dimension refers to the family members' relationships with non-family members. SEW provides kinship ties with some of the same collective benefits that arise in networks, including relational trust (Coleman, 1990) and building relationships with professionals (Berrone et al., 2012). If the family involvement is too much, it can lead to an asymmetric altruism such as hiring family members who may not be, or should not be, considered for key roles in business. Equally, excessive family focus, prior to 2014, could serve to exclude independent, non-family members from filling board positions. Thus, the reciprocal bonds could be extended to a wide set of members outside of family membership. Sharing a feeling of belonging could promote the sense of stability and commitment to the firm and increase the perception of better corporate governance, suggesting a degree of mitigation in the decline of the family business.

The desire to maintain binding ties among family members, by excluding non-family members from positions such as board membership, might impact on the negative perception of weak corporate governance and the decline of the family business from altruism. However, agency theory highlights that one of the main duties of an independent board chair is to control managerial opportunism. Meanwhile, stewardship theory stresses that while acting as stewards, the family may place outside directors on the board to provide expertise, objective advice or to commonly act as advocates or independent auditors for the well-being of the company (Donaldson and Davis, 1991). Consequently, the relationship exists between the independent board and capital structure because of the counsel and advice independent board members are able to offer. Board independence as a counterbalance to family members' influence will mitigate the problem that potentially arises from this issue. The presence of independent members / experts is associated with sending a fair perception to the market that family firms mitigate opportunistic behaviour of their family members and wish to maintain long-term sustainability of the business. This study supports the idea that independent boards have a positive relationship with long-term debt.

Overall, the results indicate that capital structure decisions will underlie the debt-equity choice on loss aversion relating to socio-emotional wealth. The capital structure decisions might be different since the dynamic of family firms and the preference of risks can influence the determinants of capital structure across generations due to the goal of preserving the long-term sustainability of the family business. In light of the above results, the next chapter will conclude the contributions to knowledge, implications, and limitations of the study decision makers and government of Indonesia as a policy maker and recommendations for the next research.

CHAPTER 6

CONCLUSION

6.1. Introduction

This study has investigated the determinants of capital structure in the context of publically listed Indonesian family firms. It examines these determinants using the dimensions of socio-emotional wealth (SEW). SEW extends agency and stewardship theories through a dynamic approach and suggests that both theories have contributing factors and resulting dynamic outcomes influencing the relationship between governance and behaviour in decision-making. SEW basically stems from the reality of family business that seems to be considered as one of the most characteristic features of family firms, differentiating them from other, non-family firms. Capital structure decisions could be a mechanism used by family firms to achieve certain strategic objectives, thus preserving SEW. This thesis focuses on Indonesian publically listed family firms, due to their significance in contributing to Indonesia's economic development.

The research answers the following research question:

What are the determinants of capital structure decisions of Indonesian family firms?

6.2. Key Findings

The key findings of the thesis provide evidence of the determinants of the capital structure of Indonesian family firms across two debt measures. These results have shown that a family firm's capital structure decision-making is driven by non-financial goals designed to preserve SEW. The three SEW dimensions are: (1) keeping control and influence over the firm's operation and ownership; (2) renewal of family bonds through dynastic succession; and (3) binding social ties by excluding non-family members from key managerial and board positions. The general results indicate that SEW dimensions can explain capital structure decisions of family firms in Indonesia. A family's influence on

a firm's decisions represents the members' long-term commitment to maintain the sustainability of the company across generations. The desire to pass the business to the next generation encourages the families to apply risk reduction strategies by avoiding exposing the business to risk so as to preserve SEW. The combination of loss aversion and control of motivation with the possibility of changing risk preferences in decision-making are found to be more prevalent in this context.

Generally, conventional economic theory, in the form of agency theory or stewardship theory, has sometimes assumed that agents/managers are selected as optimisers through some supposedly Darwinian process of 'survival of the fittest' resulting in a policy of risk avoidance at all times. Both theories describe managers' actual behaviour as the result of the governance structure of the family firms. A manager can be an agent or steward who is deemed to be rational because individuals are presumed to be more efficient than irrational ones, and therefore are expected to have a greater capacity to survive. However, managers also survive because they are trusted by their employers. Managers' risk preferences can change due, at least in part, to future prospects and expectations. Preferences will change based on the projection of gain or loss. A manager will be a risk taker for loss and a risk avoider for gain, indicating that their actions might be more prudent the possibility of both gain and loss outcomes calculation in decision-making.

Agency theory suggests that using more debt levels will reduce total equity financing, which in turn can reduce the scope of conflict between managers and shareholders (Jensen and Meckling, 1976). From a stewardship perspective, capital structure decisions are a product of alignment of interests; thereby debt levels will be flexible depending on the best interests of the organisation (Zahra et al., 2008). Brought into the family firm, opportunistic agent's behaviour possibly occurs with family managers, such as descendant CEOs. Similarly, family research assumes that stewardship behaviour is inherent in family members. However, this research demonstrates that an empowering environment and involvement of non-family-member managers can influence capital structure decisions at the founder stage. Taken together, family and non-family managers exhibit both agent and stewardship behaviours. However, founders tend to behave as a steward and are more embedded in the business system, because a firm's founder will put the interest of their business, which is preserving SEW, as a priority. On the other hand, descendants tend to behave as an agent of the family firm and are more likely to be

embedded in the hierarchical nature of the family system, and also in the family's self-serving interests.

6.2.1. Family Control and Influence

Family control and influence remain significant factors that determine the capital structure decisions of Indonesian family firms. The evidence suggests that there is a non-linear N-curve relationship for long-term debt between ownership and leverage. This relationship suggests that risk preferences can change as the concentration of ownership change. The results can be explained with reference to two factors. First, capital structure decisions vary, depending on the ownership concentration due to the goal of preserving SEW. Second, behaviourally managers in a corporate governance context can have a variety of risk preferences. In this sense, the endowment effect could help explain why the firm's ownership could influence debt levels and also why firms choose to be low debt oriented. Lastly, cash flow rights (ownership) could estimate the impact of family firms on capital structure decisions. This supposition is because in Indonesia, the major shareholder is allowed to enhance their control, in spite of holding less than 25% of the voting shares based on central bank of Indonesia regulation.

When the founder of a family firm acts as its CEO, the founder-CEO prefers to use less debt than a hired CEO. In this sense, loss aversion could explain why founder-CEOs' behaviour. The evidence illustrates the fact that a founder CEO has a long-term commitment strategy to maintain the family business and preserve SEW for the next generation. SEW involves both tangible assets and intangible assets; the latter include reputation and the good family name. Such commitment is driven by the founding family's desire to maintain their business. In other words, the different low levels indicate, to an extent, that there are different risk preferences between founders and outside hire CEOs when considering debt as a control mechanism informing capital structure decisions. When the founders or owners are also CEOs, it would seem logical that they are not under pressure from monitoring. Capital structure decision might be motivated more by desire to reduce the risk of financial distress (Gosh et al., 2011). Moreover, pursuing SEW is stronger and more evident when in the hands of a founder CEO (Gomez-Mejia et al., 2007) because of personal attachment and self-identification with the firm.

Family board representation is associated with significantly higher level of short-term debt, compared to those family firms which do not have a family representation on board. A related argument regarding this result is that membership of the board of director leads to a decrease of information asymmetry, with the consequent reduction of creditors' perceptions of the likelihood of default on loan repayment of short-term debt, the preferred debt option for Indonesia family firms. This finding is in line with some research suggesting that short-term debt has a role to play in mitigating the debt overhang problem and lessening the negative impact of growth opportunities (Croci et al., 2011; Johnson, 2003). Thus, family board representation is associated with liquidity risk, since family firms prefer using short-term debt rather than long-term debt.

Lastly, the duality position of CEO / chairperson does not indicate the involvement of family firms to secure family interests. The perception of outside investors or creditors on duality may be perceived as signifying a potential risk of misalignment of interests between family firms and creditors. As a consequence, a founder CEO is probably in a position that can have a strong enough impact to influence strategic decisions, such as those relating to capital structure. In other words, a duality position could be costlier than a position as a CEO or as a board member.

6.2.2. Renewal of Family Bonds through Dynastic Succession

The finding of this thesis has demonstrated that renewing family bonds through dynastic succession, with the proxy of descendants holding the position of the CEO, is not a significant influence on capital structure decisions. The argument is that the descendant could significantly diminish their effectiveness, because managerial competence and professionalism are processes and not stages-of-change in a firm's management. Transferring tangible assets in the family's succession politics seems to be less of a priority than the transfer of intangible assets to the next generation, such as the family's good reputation. This circumstance allows the prediction that although the firm's leadership is handed down to the next generation, the control motivation might still be under dispersed family members who hold board positions.

6.2.3. Binding Social Ties by excluding Non-Family Members from Key Managerial and Board Positions

Excessive family involvement in the business can lead to overly centralised decisions. This will put too much emphasis on maintaining binding social ties within the firms and is likely to have negative effect upon firm performance. The reciprocal bond seen within family businesses is not exclusively between family members but is likely to be extended to a wider set of constituencies (Miller et al., 2009). Promoting a sense of stability and commitment to the firm is a part of developing family relationships, including trustworthy partners such as other shareholders who are outside family members. Therefore, board independence as a counterbalance to familial influence will mitigate the problem that potentially arises from this issue, especially weakening the problem of goal divergence between owners and managers or family and non-family shareholders. With respect to board independence it seems that independent board position is associated with sending a fair perception to the market that family firms mitigate opportunistic behaviour by the presence of independent board members doing appropriate monitoring. Thus, the presence of board independence is associated with monitoring effectiveness and smaller agency problems between shareholders groups, provide information as an expert and a useful source for a conflict resolution among family members. Their presences indicate increasing the level of leverage in family owned firm in Indonesia.

6.3. Contributions to the Literature

This study provides several important contributions to knowledge. Firstly, agency and stewardship theories follow the assumption of stable risk preferences (Holmstrom, 1979) that contradicts the dynamic perspective decision-making process. Consequently, this assumption limits agency and stewardship theories' contributions to the explanation of how managerial risk taking related to strategic decisions can change over time. Thus, relaxing the assumption of a stable perspective on risk preference provides a more realistic picture how family firms make capital structure decisions. The rationale for this dynamic perspectives may be found in the concept of socio-emotional wealth as a theoretical framework for testing the relationship between capital structures, corporate

governance, and the behaviour of family firms. Secondly, the thesis presents a developed framework that considers the characteristics of Indonesian family firms. This framework could be extended to other family firms with similar characteristics, such as family firms in the same developing countries in one region, such as South East Asia.

Further, the thesis contributes to the literature on the determinants of capital structure by highlighting the role of socio-emotional wealth (SEW) in the context of family business. Capital structure decisions could be a mechanism for family firms to achieve non-economic goals, thus preserving SEW. Moreover, this thesis contributes to the literature on capital structure decisions by indicating that family firms' strategic decisions might be shaped by the need to consider preserving the accumulated endowment in the firm. The points of reference that family-controlled firms use to make a decision are gains or losses in SEW. The implementation of capital structure decisions depends on the degree of involvement of family members in the family firms. A noneconomic reference point for decision making related to preservation of SEW cannot be explained by applying a purely economic logic. Agency and stewardship theories follow the assumption of stable risk preferences that contradict the decision-making behaviour of managers (Kahneman and Tversky, 1979). Thus, the evidence reported in this thesis demonstrates that the determinants of capital structure of Indonesian family firms are notably influenced by the SEW considerations. The results support the idea that debt may be seen as a proxy for risk reduction strategy due to maintaining the sustainability of the business. Nonetheless, a small amount of theoretical and empirical research has been done which supports the premise that dimensions of SEW determine the capital structure behaviour of family firms. Thus, this study clarifies the determinants of capital structure, based on SEW dimensions, to fill the altered predictions made about capital structure decisions in family firms. In addition, it verifies Berrone et al., (2010) and Gomez-Mejia et al., (2007) who argue that non-economic reasons are often likely to predominate in the financing decisions of family firms as the result of the choice between risk and preserve control (Motylska-Kuzma, 2017).

6.4. Limitations of the Study

I acknowledge that there are certain limitations to this study. Unlike other developed countries, information regarding companies' ultimate owners was not available in financial reports published by the Indonesian Stock Exchange during the period of studies (2011 – 2015). The regulation for family firms to declare the ultimate owners was only enacted in 2018, which is outside the research period. More specifically, the non-availability of that vital information is a limitation to investigate the person(s) who ultimately owns or controls family firms. For this reason, I did not attempt to control for the use of pyramidal ownership and cross shareholding to increase voting power in which ownership/control is exercised through a chain of ownership or by means of control other than direct control.

According to Berrone et al. (2012), there are five major dimensions of SEW and these are: (1) Family control and influence; (2) Family identification with the firm; (3) Binding social ties; (4) Family emotional attachment to firm; (5) Renewal of family bonds in the firm through dynastic succession. However, only three of them are used in this study, these being: i) Family control and influence; ii) Renewal of family bonds in the firm through dynastic succession and iii) Binding social ties. It is reasonable to presume these three dimensions could delineate the relationship of preserving SEW with the strategic behaviour of capital structure. The other two dimensions are: iv) Family identification with the firm and v) Family emotional attachment to firm are difficult to include since the approach of this study is quantitative method. The last two dimensions were omitted from this research because of the difficulty of identifying acceptable proxies to represent those dimensions in quantitative measurements.

Moreover, there were limitations to how the dimension of family succession could be investigated in this thesis. This study uses founder descendants acting as CEOs as a proxy for this dimension, without distinguishing across second and third generations. Some authors argue that the dimension of family succession could be studies with the help of a number of proxies. Examples include: a) appointing a relative to succeed (Cruz et al., 2012), b) employing family members from the younger generations (Lubatkin et al., 2001), and c) favouring long term investments at the expense of short term financial objectives (Gomez-Mejia et al., 2007). However, these such proxies are a difficult to

construct and this researcher did not have resources to collect necessary data though surveys.

Another limitation relates to the number of observations and the period of study. There is an inevitable trade-off between the number of observations and the length of period. A longer period would sacrifice the number of observations, since the trend of family firms to be listed on the capital market in Indonesia became more popular only in the last three to four years. However, more research time would have benefited the study by spanning a longer historical period. Extending this study to ensure greater data availability would lead to more robust results, especially after the 2018 requirement from the government to publish the firms' ultimate owners in their financial reports. Moreover, the inclusion of other determinants of capital structure would provide a better view of the determinants of capital structure in family firms.

Lastly, the focus on Indonesian family firms brings one other limitation. This is the fact that the findings become context specific. Extending this study to other countries, especially those in the same geographical regions such as South East Asia or Asia and with the same institutional contexts may result another perspectives. The Indonesian context presents its own typical situation in terms of family background ethnicities and cultures (Chinese, Malay, Indian and Arabic), institutional arrangements, stock market regulations and banking regulations which may influence the relationship between capital structure decisions and how family preserves social emotional wealth in a different way relative to family background. As a consequence, the findings from this study may have relatively little relevance or application to other national contexts.

6.5. Implications and Recommendations for Future Research

6.5.1. Implication for Investors

The findings reveal that, as far as SEW is concerned, investments in family firms that have an independent board are prudent. I would like to suggest rather tentatively that family socio-emotional motives positively influence investors' perceptions, as long as healthy corporate governance in family firms' structure is evident. Healthy corporate governance means sharing the family values with individuals who are not family

members. Such individuals in positions of board independence could serve to encourage more independent directors onto boards. One can argue that as family firms become publicly listed companies, they are subject to scrutiny that limits how family owners can pursue SEW objectives at the expense of public shareholders (Le Breton-Miller and Miller, 2013). Public listing could be seen as a decision to enhance a firm's legitimacy by relying on the presence of professional non-family members on the board. This can increase the business reputation of the family firm among investors and creditors and make access to capital easier. Family reputation is essential to preserve the family's SEW, so these relationships may have both consequences and limitations. The ethos of the fund providers has been undergoing major changes; it is now imperative for fund seeking family firms to demonstrate transparency, fairness and the absence of cronyism or nepotism.

Moreover, beside the reputation of family firms, the suppliers will consider assets and growth opportunities prior to investing in a company (Myers and Majluf, 1984; Smith and Watts, 1992; Hovakimian et al., 2001) as well as default risk (Hugoinner et al., 2015). The fact that growth opportunities have shown significant association with leverage, should be seen as a presentation of market signaling to investors from family firms. Higher growth opportunities present a signal that family firms have good quality long-term investment. For the long-term debt, family firms with high growth opportunities appear likely to finance their positive opportunities by using long-term debt.

6.5.2. Implication for Family Firm Decision Makers

Indonesia is one of the emerging capital markets that are developing a well-regulated and transparent market to reduce governance and agency problems. I can conclude that with the degree of openness and capital access, listed family firms can add value to the business in several ways:

Firstly, the results imply that family firms should consider several of the investor's aspirations for healthy corporate governance which have an independent board as they are viewed to be a more effective mechanism in controlling agency problems. Moreover, the presence of independent board members could mitigate the conflict across generations that arise in the post-founder stage. This situation is already regulated by the Indonesia

Financial Services Authority (OJK) No. 33/POJK.04/2014 article 20, verses 2 and 3. It is now mandatory that a family firm's board is made up of at least 30 percent of independent non-family members.

Secondly, family firms ought to maintain strong corporate governance by hiring the best people for key roles, rather than exercising altruism in hiring family members. Excessive family involvement in business, unwillingness to hire professional CEOs and the continuing appointment of family members will almost certainly lead to overly centralised decisions and an inefficient business. Thus, reducing the degree of family involvement can decrease the cost of capital, since lenders might perceive there is efficiency in management. In fact, placing family members in management positions does not impact significantly on capital structure decisions, such as the CEO/chairperson duality position. The recognition of no relationship between capital structures and duality positions suggests that family firms should pay attention to the possibility of misalignment as an implication of a CEO and board in the hands of one person.

Thirdly, family firms should consider the inherent strategic role and benefits of the founder as CEO in reducing agency costs and having powerful access to strategic decisions, especially both short-term and long-term loans. The close relationships with lenders might facilitate future access to funding. Moreover, founders ought to consider the implications of their role in influencing capital structure decisions, which might not be followed by the post-founder stage. The findings indicated that despite the presence of a founder descendant as the CEO, their position does not impact on the firm's capital structure. This finding indicates the reputation and good relationship with lenders should be transferred, due to preserving SEW for the next generations.

Fourthly, at the stage of descendants, continuing the family legacy and tradition is an important goal for a family business. A successful business transfer to the next generation may not be seen as only an asset transfer, but also of reputation, skill and competence. However, there is no significant evidence to support the idea that descendants influence capital structure decisions. It appears likely a family firm that failed due to conflict within the descendants suffers more reputation damage than a family firm that has failed due to macroeconomic events or natural disasters. An example of the latter is '*PT. Indofood Sukses Makmur, Tbk'*, one of Indonesia's largest food company, whose factory was destroyed by tsunami Aceh in 2004. In other words, the descendants could significantly

maintain the family reputation and increase their effectiveness if they are always consistent in increasing their ability, because management and professionalism are processes and not stages of change in a firm's management (Wright and Kallermanns, 2011). Nonetheless, in many situations when manager-as-agent makes a poor choice, I presume that the person who is misbehaving is often the principal, not the manager. The misbehaviour is in failing to create an environment in which managers can take good risks and make an informed capital structure decision, rather than a constant prediction for the future that could result in inconsistent decision-making. However, the most important thing is the descendant as manager (agent/steward) should be capable of making a decision.

Fifth, for non-family member CEOs, this thesis can give a feedback of evaluation in capital structure decision-making to help avoiding damaging behaviour of family members if the capital structure produce conflicts. Accordingly, non-family member CEOs must be prudent to observe capital structure issues that possible damage the relation within family firms. Moreover, family firms should not need to be concerned that they will lose their family bonds when they hire professional managers. Non-family managers can adopt a clearly set relations, responsibilities and competences in the decision-making processes of family firms. Their roles can contribute to increase the degree of competitiveness of family firms, especially in the more structured and complex business environment in Indonesia.

6.5.3. Implication for Policy Makers

Regulators should be strengthening governance practices of Indonesian issuers and public companies to bring them at least to the same level with the companies in the ASEAN region. This suggestion is made because since 2015, Indonesia has been a part of the ASEAN Economic Community (AEC). There is a sense of urgency and continued efforts to elevate Indonesian competitiveness through improvements in the quality of corporate governance practice as a way to spur financial performance and enhance investor confidence; in turn these positive initiatives could increase access to capital inflow. Here, the environment requires formal rules to prevail for publicly listed companies that will, ensure transparency, for example. Family firms will impose higher costs on pursuing SEW if family firms are filling their strategic decision making positions with non-

professionals. Such individuals lack the competence, attributed authority and reputation that are needed to manage complexity, including multiple principal interests and access to funding resources.

The implication of this study for the Financial Services Authority (OJK) policy makers in Indonesia is evidence of the need to strengthen the regulation No. 11/POJK.04/2017, 14th March 2017, article 2, paragraph 2 regarding ownership reports, as well as every ownership change for publicly listed companies,. The regulation enforces the obligation of direct or indirect owners who hold at least a 5 percent shareholding to report their interest in the company, in order to trace the ultimate beneficial owners, as a part of the ownership chain leading to the real owners. The enactment of the regulation since 2018 as an effort of OJK to protect the interests of public investors, and to be able to regulate public listed companies, including family firms, so they can become pillars of the national economy up to a level of global competitiveness. As entrepreneurial spirit is not necessarily inherited by successive generations of the controlling family (Chrisman et al., 2005), it is much easier to pass on the family business by their wealth through political rent seeking, such as self-interested dealings between the political and business elites, rather than through entrepreneurship.

There are several group of family firms in Indonesia that involved in political relationship as founders of political party such as the founder of Media Group is also the founder of *National Democratic Party*, the founder of MNC Group is also the founder of *Perindo Party*, the founder of Humpuss Group is also the founder of *Berkarya Party* and the founder of Nusantara Group is also the founder of *Gerindra Party*. The impact of business-political relations can indicate unhealthy business environment and reduced economic efficiency at the expense of public interest, indicating a crony capitalism may exist in Indonesia. For this reason, the Financial Services Authority (OJK) should encourage family firms to be more prudent in expensive involvements that can lead to nepotism or oligarchic behaviour. Being prudent and cautious are ways to avoid business failure when it comes to the next generations that sometimes lack capabilities. Family firms need to adopt the best practices of business innovation that can strengthen competitiveness.

6.5.4. Recommendations for Future Research

At a more general level, these results respond to the call for more research into the variation of variables that could be characterised by dimensions of SEW. Nonetheless, many interesting research opportunities remain open. Future research could be directed towards exploring other dimensions of institutional environments: for example, the potential moderating effects of the specific institutional funding systems (banking-based or market-based) adopted, which are relevant to capital structure decisions. One might expect that the level of family involvement required to succeed in highly dynamic capital markets might not be achieved when the family firm is led by a founder descendant CEO. This possibility could be particularly likely if the firm is embedded in the next generation stages, where skill and professionalism are needed to preserve existing family relationships, due to capital access. The life cycle characterisations of family firms do not make clear the shaping of socio-emotional wealth priorities that can influence capital structure decisions. The underlying dimensions of public listings can help illustrate outcomes in different situations, since the ownership structures are widespread through numbers of family members and non-family members. Bearing this situation in mind it would seem logical to question whether SEW will reduce as it passes to the next generations.

Secondly, future research may expect to develop a measure that captures more precisely every single dimension acting as proxies for the preservation of SEW and relating to capital structure decisions. It is possible to explore the debt-equity choices of family firms by including the five dimensions of SEW: (1) Family control and influence; (2) Family identification with the firm; (3) Binding social ties; (4) Family emotional attachment to firm; (5) Renewal of family bonds in the firm through dynastic succession. Why do founders' descendants as CEOs have no significant impact on capital structure decisions? This sense of dynasty probably has implications for the time horizons in the decision making process, since the family's heritage and tradition has become embedded in the next generation (Casson, 1999). Although the long-term view might foster other problems, such as conflict over succession, the roles of CEO descendants may not include sole powerful authority and access to make strategic financial decisions. The power allocation among siblings or cousins should be taken into account in the dimension of

succession. It is reasonable to suggest there is a need to improve the measurement of SEW in Indonesia's family firms. Although this study uses proxies for SEW preservation that are a valid approximation of SEW, future research could extend this study's orientation by developing and using qualitative instruments that can better understand the five dimensions of SEW as mentioned above.

Finally, this study could be replicated in other settings, both in the same region in Asia or South East Asia; or other countries with similar institutional context. The empirical evidence from this study in favour of these hypotheses may not apply generally to other countries where the institutional environments are different with Indonesia. Admittedly, I would like to stress that what matters is the theoretical concept advanced here, in order to understand how family firms make decisions and therefore how to improve them. The issue that future research should be aware of is that family firms are owned and managed by humans who could potentially change their risk preferences, make a decision under uncertain conditions and sometimes be constrained by bounded rationality in decision making. Future studies to explore additional contexts and contingencies will eventually build a more comprehensive model of capital structure decisions based on SEW-preserving strategies. The research presented in this thesis represents a first step in a process towards a focus on family firms' studies that can raise other interesting questions worthy of being explored. This study leaves such an analysis for future researchers.

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Appendices

Appendix 1.
List of Listed Family Firms Used in the Analysis

No.	Code	Name of Company	Family/Group of Business
1.	AALI	PT. Astra Agro Lestari, Tbk	Jardin Family/ The Jardin Group
2.	ABBA	PT. Mahaka Media, Tbk	Thohir Family/ The Mahaka Group
3.	ABMM	PT. ABM Investama, Tbk	The Hamami Group
4.	ACES	PT. Ace Hardware Indonesia, Tbk.	Wibisono Family
5.	ADMG	PT. Polychem Indonesia, Tbk	Sjamsul Nursalim Family/ The Gajah Tunggal Group
6.	ADRO	PT. Adaro Energy, Tbk	Theodore Permadi/ The Triputra Group
7.	AIMS	PT. Akbar Indo Makmur Stimec, Tbk	Suharya Family
8.	AISA	PT. Tiga Pilar Sejahtera Food, Tbk	Mogoginta Family/ The Tiga Pilar Group
9.	AKPI	PT. Argha Karya Prima Industri, Tbk	Henry Pribadi Family/ The Napan Group
10.	AKRA	PT. AKR Corporindo, Tbk	Adikoesomo Family
11.	ALDO	PT. Alkindo Naratama, Tbk	Lily Mulyadi Family & Sutanto The Golden Arista Group
12.	ALMI	PT. Alumindo Light Metal Industry, Tbk	Alim Markus Family/ The Maspion Group
13.	AMRT	PT. Sumber Alfaria Trijaya, Tbk	Djoko Susanto Family
14.	APLI	PT. Asiaplast Industries, Tbk	Agung Pranoto Family
15.	APLN	PT. Agung Podomoro Land, Tbk	Trihatma Haliman Family/ The Agung Podomoro Group
16.	ARGO	PT. Argo Pantes, Tbk	Tulolo Family

17.	ARTI	PT. Arona Bina sejati, Tbk	Maras Family/ The Ratu Prabu Group
18.	ASGR	PT. Astra Graphia, Tbk	Jardine Family/ The Jardine Group
19.	ASII	PT. Astra International, Inc	Jardin Family/ The Jardin Group
20.	ASRI	PT. Alam Sutera Realty, Tbk	The Nin King Family/ The Argo Manunggal Group
21.	BLTA	PT. Berlian Laju Tanker, Tbk	Hadi Surya Family
22.	BMTR	PT. Bimantara Citra, Tbk	Harry Tanoewidjaya Family/ The MNC Group
23.	BNBR	PT. Bakrie and Brothers, Tbk	Bakrie Family/ The Bakrie Group
24.	BRNA	PT. Berlina, Tbk	Tjiptobiantoro Family
25.	BRPT	PT. Barito Pacific, Tbk	Prajogo Pangestu Family/ The Barito Pacific Group
26.	BTEK	PT. Bumi Teknokultura Unggul, Tbk	Tjokrosaputro Family and Sutanto
27.	BTEL	PT. Bakrie Telecom, Tbk	Bakrie Family/ The Bakrie Group
28.	BTON	PT Betonjaya Manunggal, Tbk	Gwie Family
29.	BUDI	PT. Budi Acid Jaya, Tbk	Widarto Family/ Sungai Budi Group
30.	BWPT	PT Eagle High Plantation, Tbk	Widodo Family/ The Rajawali Capital International Group
31.	BYAN	PT. Bayan Resources, Tbk	Dato'Leow Tuck Kwong Family/ The Bayan Group
32.	CEKA	PT. Wilmar Cahaya Indonesia, Tbk	The Wilmar International Group
33.	CLPI	PT. Colorpak Indonesia, Tbk	Pranatajaya Family
34.	CNKO	PT. Eksploitasi Energi Indonesia, Tbk	Andri Cahyadi Family

35.	CSAP	PT. Catur Sentosa Adiprana, Tbk	Totong Family
36.	CTRA	PT. Ciputra Development, Tbk	Ciputra Family/ The Ciputra Group
37.	CTTH	PT. Citatah, Tbk	Johannes Family
38.	DART	PT. Duta Anggada Realty, Tbk	Angkosubroto Family/ Gunung Sewu Group
39.	DILD	PT. Intiland Development, Tbk	Suhargo Gondokusumo Family/ Dharmala Group
40.	DNET	PT. Indoritel Makmur International, Tbk	Salim Family/ The Salim Group
41.	DOID	PT. Delta Dunia Makmur, Tbk	Sugito Walujo Family
42.	DPNS	PT. Duta Pertiwi Nusantara, Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
43.	DSFI	PT. Dharma Samudera Fishing Industris, Tbk ,	Sutjimidjaya Family
44.	DSSA	PT. Dian Swastatika Sentosa Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
45.	DUTI	PT. Duta Pertiwi, Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
46.	EKAD	PT. Ekadharma International, Tbk	Leonardi Family
47.	ELTY	PT. Bakrieland Development, Tbk	Bakrie Family/ The Bakrie Group
48.	EMTK	PT. Elang Mahkota Teknologi, Tbk	Sariaatmadja Family/ The Emtek Group
49.	EPMT	PT. Enseval Putera Megatrading, Tbk	Boenjamin Setiawan Family
50.	FAST	PT. Fast Food Indonesia, Tbk	Galael Family
51.	FASW	PT. Fajar Surya Wisesa, Tbk	Wisesa Family Winarko Sulistyo
52.	FISH	PT. FKS Multi Agro, Tbk	Farhan Rio Gunawan

53.	FORU	PT. Fortune Indonesia, Tbk	Abidin Family
54.	FREN	PT. Smartfren Telecom, Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
55.	GDST	PT. Gunawan Dianjaya Steel, Tbk	Gunawan Family
56.	GGRM	PT. Gudang Garam, Tbk	Wonowidjojo Family/ The Gudang Garam Group
57.	GJTL	PT. Gajah Tunggal, Tbk	Sjamsul Nursalim Family/ The Gajah Tunggal Group
58.	GOLD	PT. Visi Telekomunikasi Infrastruktur, Tbk	Kenny Wirya Family
59.	GPRA	PT. Perdana Gupura Prima, Tbk	Margono Tambayong Family
60.	HDTX	PT. Panasia Indo Resources, Tbk	Hidjaja Family
61.	HOME	PT. Hotel Mandarine Regency, Tbk	Michael Winata
62.	HRUM	PT. Harum Energy, Tbk	Barki Family/ Harum Energy Group
63.	IIKP	PT. Inti Agri Resources, Tbk	Hidayat Family
64.	IKAI	PT. Intikeramik Alamasri Industri, Tbk	Lie Family
65.	IMAS	PT. Indomobil Sukses Internasional, Tbk	Salim Family/ The Salim Group
66.	INAI	PT. Indal Alumunium Industry, Tbk	Alim Markus Family/ The Maspion Group
67.	INCI	PT. Intanwijaya International, Tbk	Tanmizi Family
68.	INDF	PT. Indofood Sukses Makmur, Tbk	Salim Family/ The Salim Group
69.	INDR	PT. Indo-Rama Synthetics, Tbk	Sri Parkash Lohia Family/ The Indorama Group
70.	INDS	PT. Indospring, Tbk	Nurhadi family
71.	INTA	PT Intraco Penta, Tbk	Halim Family
72.	INTP	PT. Indocement Tunggal Prakarsa, Tbk	Salim Family/ The Salim Group

73.	JIHD	PT. Jakarta International Hotel and Development, Tbk	Tomy Winata/Sugianto Kusuma Family/ The Artha Graha Group
74.	JPFA	PT. Japfa Comfeed Indonesia, Tbk	Santoso Handoyo Family
75.	JTPE	PT. Jasuindo Tiga Perkasa, Tbk	Oei Family
76.	KBLI	PT. KMI Wire and Cable, Tbk	Sjamsul Nursalim Family/ The Gajah Tunggal Group
77.	KDSI	PT. Kedaung Setia Industrial, Tbk	Wibisono Family/ The Subur Group
78.	KICI	PT Kedaung Indah Can, Tbk	Wibisono Family/ The Subur Group
79.	KKGI	PT. Resource Alam Indonesia, Tbk	Adijanto Family/ The Rain Group
80.	KLBF	PT. Kalbe Farma, Tbk	Boenjamin Setiawan Family
81.	KONI	PT. Perdana Bangun Pusaka, Tbk	Kolim Family/ The Perdana Group
82.	KPIG	PT. MNC Land, Tbk	Harry Tanoewidjaya Family/ The MNC Group
83.	LAMI	PT. Lami Citra Nusantara, Tbk	Tjandranegara Family/ The Mulia Group
84.	LMAS	PT. Limas Indonesia Makmur, Tbk	Sally Landry Bachtiar
85.	LMPI	PT. Langgeng Makmur Industri, Tbk	Alim Markus Family/ The Maspion Group
86.	LMSH	PT. Lionmesh Prima, Tbk	Riady Family/ The Lippo Group
87.	LPCK	PT. Lippo Cikarang, Tbk	Riady Family/ The Lippo Group
88.	LPKR	PT. Lippo Karawaci, Tbk	Riady Family/ The Lippo Group
89.	LPLI	PT. Star Pacific, Tbk	Riady Family/ The Lippo Group
90.	LTLS	PT. Lautan Luas, Tbk	Masrin Family/ The Lautan Luas Group

91.	MAMI	PT. Mas Murni Indonesia, Tbk	Santoso Family
92.	MAPI	PT. Mitra Adiperkasa, Tbk	Sjamsul Nursalim Family/ The Gajah Tunggal Group
93.	MBTO	PT. Martina Berto, Tbk	Tilaar Family/ The Martina Berto Group
94.	MDLN	PT. Modernland Realty, Tbk	Honoris Family/ The Modern Group
95.	MEDC	PT. Medco Energy Internasional, Tbk	Panigoro Family The Medco Group
96.	META	PT. Nusantara Infrastructure, Tbk	Aksa Family/ Rajawali Group
97.	MIDI	PT. Midi Utama Indonesia, Tbk	Djoko Susanto Family
98.	MIRA	PT. Mitra International Resource, Tbk	Pranoto Family
99.	MITI	PT. Maharani Intifinance, Tbk	The Saratoga Group
100.	MKPI	PT. Metropolitan Kentjana, Tbk	Murdaya Poo Family/ The CCM Group
101.	MLIA	PT. Mulia Industrindo, Tbk	The Mulia Group
102.	MLPL	PT. Multipolar, Tbk	Riady Family/ The Lippo Group
103.	MNCN	PT. Media Nusa Citra, Tbk	Riady Family/ The Lippo Group
104.	MPPA	PT. Matahari Putra Prima, Tbk	Riady Family/ The Lippo Group
105.	MRAT	PT. Mustika Ratu, Tbk	Moeryati Soedibyo Family
106.	MTSM	PT. Metro Supermarket Realty, Tbk	Maruli Family
107.	MYOR	PT. Mayora Indah, Tbk	Atmadja Family/ The Mayora Group
108.	MYRX	PT. Hanson International, Tbk	Benny Tjokrosaputro Family
109.	MYTX	PT Asia Pacific Investama, Tbk	Benny Soetrisno Family
110.	OMRE	PT. Indonesia Prima Property, Tbk	Sjamsul Nursalim Family/ The Gajah Tunggal Group

111.	PANR	PT. Panorama Sentrawisata, Tbk	The Tirtawisata Group
112.	PBRX	PT. Pan Brothers, Tbk	The Pan Brothers Group
113.	PDES	PT. Destinasi Tirta Nusantara, Tbk	The Tirtawisata Group
114.	PICO	PT. Pelangi Indah Canindo, Tbk	Hammond / So Helen
115.	PKPK	PT. Perdana Karya Perkasa, Tbk	Soerjadi Soedarsono Family
116.	PLIN	PT. Plaza Indonesia Realty, Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
117.	POLY	PT. Asia Pacific Fibers, Tbk	Busana Apparel Group Texmaco Group
118.	POOL	PT. Pool Advista Indonesia, Tbk	Bambang Gunawan Tanudjaja Budiman Tanjung
119.	PSDN	PT. Prasidha Aneka Niaga, Tbk	Tandiono Family
120	PUDP	PT. Pudjiadi Prestige, Tbk	The Pudjiadi Group
121.	PWON	PT. Pakuwon Jati, Tbk	Tedja Family/ Pakuwon Group
122.	PYFA	PT. Pyridam Farma, Tbk	Kosasih Family
123.	RALS	PT. Ramayana Lestari Sentosa, Tbk	The Ramayana Group
124.	RBMS	PT. Ristia Bintang Mahkotasejati, Tbk	Wiriahardja Family
125.	RDTX	PT. Roda Vivatex, Tbk	Widjaja Family
126.	RICY	PT. Ricky Putra Globalindo, Tbk	Gunawan Family
127.	RODA	PT. Pikko Land Development, Tbk	Setiawan Family/ The Pikko Group
128.	ROTI	PT. Nippon Indosari Corpindo, Tbk	Salim Family/ The Salim Group
129.	RUIS	PT. Radiant Utama Interinsco, Tbk	Ganis Family
130.	SAFE	PT. Steady Safe, Tbk	Yopie Wijaya/ The Emtek Group
131.	SCCO	PT. Supreme Cable Manufacturing & Commerce, Tbk	Raharjo Family

132.	SCMA	PT. Surya Citra Media, Tbk	Saratoga/Recapital Group
133.	SGRO	PT. Sampoerna Agro, Tbk	Sampoerna Family/ The Sampoerna Strategic Group
134.	SIPD	PT. Sierad Produce, Tbk	Budiardjo Tek Sri Lestari Anwar
135.	SMDR	PT. Samudera Indonesia, Tbk	Poesposoetjipto Family
136.	SMRA	PT. Summarecon Agung, Tbk	Nagaria Family/ The Summarecon Group
137.	SMSM	PT. Selamat Sempurna, Tbk	Hartono Family/ The ADR Group
138.	SRSN	PT. Indo Acidatama, Tbk	Setijo Family/ The Pan Brothers Group
139.	SSTM	PT. Sunson Textile Manufacture, Tbk	Suriadi/Sundjono Mariah
140.	STTP	PT. Siantar Top, Tbk	Shindo Sumidomo
141.	TBIG	PT. Tower Bersama Infrastructure, Tbk	Saratoga Group
142.	TBLA	PT. Tunas Baru Lampung, Tbk	Widarto Oey Family
143.	TKIM	PT. Pabrik Kertas Tjiwi Kimia, Tbk	Eka Tjipta Widjaja Family/ The Sinar Mas Group
144.	TMAS	PT. Pelayaran Tempuran Emas, Tbk	Harto Khusumo Family
145.	TMPI	PT. Sigmagold Inti Perkasa, Tbk	The Artha Graha Group
146.	TOTL	PT. Total Bangun Persada, Tbk	Komadjaja Family
147.	TOWR	PT. Sarana Menara Nusantara, Tbk	Hartono Family/ The Djarum Group
148.	TPIA	PT. Chandra Asri Petrochemical, Tbk	Prajogo Pangestu Family/ The Barito Pacific Group
149.	TRIM	PT. Trimegah Sekuritas Indonesia, Tbk	Avi Y Dwipayana
150.	TRST	PT. Trias Sentosa, Tbk	The Panggung Group
151.	TSPC	PT. Tempo Scan Pacific, Tbk	Muljadi Family

152.	TURI	PT. Tunas Ridean, Tbk	Setiawan Family/ The Tunas Group
153.	ULTJ	PT. Ultrajaya Milk Indty & Trading Co, Tbk	Prawirawidjaja Family
154.	UNIC	PT. Unggul Indah Cahaya, Tbk	Masrin family
156.	UNSP	PT. Bakrie Sumatera Plantations, Tbk	Bakrie Family/ The Bakrie Group
157.	UNTR	PT. United Tractors, Tbk	Jardin Family/ The Jardin Group
158.	VIVA	PT. Visi Media Asia, Tbk	Bakrie Family/ The Bakrie Group
159.	VOKS	PT Voksel Electric, Tbk	Lius Family
160.	YPAS	PT. Yanaprima Hastapersada, Tbk	Alexander Tanzil Family

Appendix 2.
Regression Results for the Dependent Variable *Long-Term Debt*

A. Ordinary Least Square (OLS)

Source	SS	df	MS	Number of obs	=	800
Model	2.12662688	14	.15190192	F(14, 785)	=	9.54
Residual	12.4982539	785	.015921343	Prob > F	=	0.0000
Total	14.6248808	799	.018303981	R-squared	=	0.1454
				Adj R-squared	=	0.1302
				Root MSE	=	.12618

LongTerm	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Own	1.406564	.3137881	4.48	0.000	.7906008	2.022527
Own2	-2.42382	.6803994	-3.56	0.000	-3.759437	-1.088202
Own3	1.138504	.4411871	2.58	0.010	.2724575	2.00455
CEOFounder	-.0221927	.0125947	-1.76	0.078	-.046916	.0025306
FamilySuccesion	.0108317	.0117419	0.92	0.357	-.0122176	.033881
BoardRepresentation	-.0128942	.0114123	-1.13	0.259	-.0352964	.009508
Duality	.0055245	.0121742	0.45	0.650	-.0183733	.0294222
PropBoardInd	.1983628	.0421154	4.71	0.000	.1156906	.2810349
Tangibility	.0295495	.0212026	1.39	0.164	-.012071	.07117
Profitability	-.1907526	.0485874	-3.93	0.000	-.2861292	-.0953761
Size	.0022137	.001616	1.37	0.171	-.0009585	.0053859
NDTS	.2034348	.1070608	1.90	0.058	-.0067245	.413594
FirmAge	-.0012245	.0003657	-3.35	0.001	-.0019423	-.0005067
MBRatio	.0074627	.0022915	3.26	0.001	.0029646	.0119609
_cons	-.1340301	.0528142	-2.54	0.011	-.2377039	-.0303562

B. Fixed Effect Model (FE) with LSDV

Source	SS	df	MS	Number of obs	=	800
Model	2.12662688	14	.15190192	F(14, 785)	=	9.54
Residual	12.4982539	785	.015921343	Prob > F	=	0.0000
Total	14.6248808	799	.018303981	R-squared	=	0.1454
				Adj R-squared	=	0.1302
				Root MSE	=	.12618

LongTerm	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Own	1.406564	.3137881	4.48	0.000	.7906008	2.022527
Own2	-2.42382	.6803994	-3.56	0.000	-3.759437	-1.088202
Own3	1.138504	.4411871	2.58	0.010	.2724575	2.00455
_ICEOFounde_1	-.0221927	.0125947	-1.76	0.078	-.046916	.0025306
_IFamilySuc_1	.0108317	.0117419	0.92	0.357	-.0122176	.033881
_IBoardRepr_1	-.0128942	.0114123	-1.13	0.259	-.0352964	.009508
_IDuality_1	.0055245	.0121742	0.45	0.650	-.0183733	.0294222
PropBoardInd	.1983628	.0421154	4.71	0.000	.1156906	.2810349
Tangibility	.0295495	.0212026	1.39	0.164	-.012071	.07117
Profitability	-.1907526	.0485874	-3.93	0.000	-.2861292	-.0953761
Size	.0022137	.001616	1.37	0.171	-.0009585	.0053859
NDTS	.2034348	.1070608	1.90	0.058	-.0067245	.413594
FirmAge	-.0012245	.0003657	-3.35	0.001	-.0019423	-.0005067
MBRatio	.0074627	.0022915	3.26	0.001	.0029646	.0119609
_cons	-.1340301	.0528142	-2.54	0.010	-.2377039	-.0303562

C. Random Effect Model (RE)

Random-effects GLS regression — Number of obs = 800

Group variable: Firms — Number of groups = 160

R-sq:

within = 0.0058

between = 0.0934

overall = 0.0804

Obs per group:

min = 5

avg = 5.0

max = 5

Wald chi2(14) = 17.46

corr(u_i, X) = 0 (assumed) — Prob > chi2 = 0.2324

LongTerm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
Own	1.156794	.4098687	2.82	0.005	.3534665	1.960122
Own2	-2.169228	.852344	-2.55	0.011	-3.839792	-.4986648
Own3	1.22556	.536536	2.28	0.022	.1739685	2.277151
CEOFounder	-.0164486	.0267117	-0.62	0.538	-.0688026	.0359055
BoardRepresentation	-.0137497	.0240619	-0.57	0.568	-.0609101	.0334106
Duality	.0033267	.0256821	0.13	0.897	-.0470093	.0536627

```
    FamilySuccesion |   .0078795   .0247539     0.32   0.750    -.0406372    .0563962
       PropBoardInd |   .1526079   .0859131     1.78   0.076    -.0157787    .3209945
        Tangibility |    .021377   .0226045     0.95   0.344     -.022927    .0656809
      Profitability |  -.0518283   .0316092    -1.64   0.101    -.1137812    .0101245
               Size |  -.0000483   .0017879    -0.03   0.978    -.0035526     .003456
               NDTS |   .0124143   .0645643     0.19   0.848    -.1141293    .1389579
           FirmAge |   .0000105    .000688     0.02   0.988    -.0013379    .0013589
           MBRatio |    .001384    .002153     0.64   0.520    -.0028358    .0056039
             _cons |  -.0766561   .0774651    -0.99   0.322     -.228485    .0751728
-------------------+------------------------------------------------------------------
           sigma_u |  .11582471
           sigma_e |  .05534493
               rho |   .8141169   (fraction of variance due to u_i)
------------------------------------------------------------------------------
```

D. Heterokedasticity Test using White-Hubber corrected standard error

```
Random-effects GLS regression                   Number of obs     =         800
Group variable: Firms                           Number of groups  =         160
R-sq:                                           Obs per group:
     within  = 0.0058                                         min =           5
     between = 0.0934                                         avg =         5.0
     overall = 0.0804                                         max =           5
                                                Wald chi2(14)     =       18.37
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =      0.1906
                                    (Std. Err. adjusted for 160 clusters in Firms)
------------------------------------------------------------------------------
                   |               Robust
          LongTerm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------------+------------------------------------------------------------------
               Own |   1.156794   .3342206     3.46   0.001     .5017341    1.811855
              Own2 |  -2.169228    .692506    -3.13   0.002    -3.526515   -.8119415
              Own3 |    1.22556   .4771043     2.57   0.010     .2904526    2.160667
        CEOFounder |  -.0164486   .0271165    -0.61   0.544    -.0695959    .0366987
BoardRepresentation |  -.0137497   .0250911    -0.55   0.584    -.0629274    .0354279
           Duality |   .0033267    .023646     0.14   0.888    -.0430186     .049672
    FamilySuccesion |   .0078795   .0232292     0.34   0.734    -.0376488    .0534078
       PropBoardInd |   .1526079   .0997186     1.53   0.126     -.042837    .3480528
        Tangibility |    .021377   .0308876     0.69   0.489    -.0391617    .0819156
      Profitability |  -.0518283   .0477142    -1.09   0.277    -.1453465    .0416898
```

Size	-.0000483	.0023416	-0.02	0.984	-.0046378	.0045412
NDTS	.0124143	.0836551	0.15	0.882	-.1515467	.1763753
FirmAge	.0000105	.0009094	0.01	0.991	-.0017719	.0017929
MBRatio	.001384	.0027927	0.50	0.620	-.0040895	.0068576
_cons	-.0766561	.0835564	-0.92	0.359	-.2404236	.0871115
sigma_u	.11582471					
sigma_e	.05534493					
rho	.8141169	(fraction of variance due to u_i)				

E. Breusch and Pagan Lagrangian Multiplier Test for Random Effects

LongTerm[Firms,t] = Xb + u[Firms] + e[Firms,t]

Estimated results:

	Var	sd = sqrt(Var)
LongTerm	.018304	.1352922
e	.0030631	.0553449
u	.0134154	.1158247

Test: Var(u) = 0

chibar2(01) = 966.56

Prob > chibar2 = 0.0000

F. Hausman Test and Sargan-Hansen Test for Fixed Effects

	---- Coefficients ----			
	(b) fe	(B) re	(b-B) Difference	sqrt(diag(V_b-V_B)) S.E.
Own	.8783598	1.156794	-.2784347	.3147442
Own2	-1.654316	-2.169228	.514912	.5988195
Own3	.9906827	1.22556	-.2348772	.3527392
Tangibility	.0242167	.021377	.0028398	.0116249
Profitabil~y	-.0156691	-.0518283	.0361593	.006531
Size	-.0010735	-.0000483	-.0010252	.00096
NDTS	-.0048636	.0124143	-.0172779	.0049386

```
    FirmAge |     .0049976     .0000105        .0049871        .0012757
    MBRatio |     .0016422      .001384        .0002582        .0009199
------------------------------------------------------------------------------
                           b = consistent under Ho and Ha; obtained from xtreg
            B = inconsistent under Ha, efficient under Ho; obtained from xtreg

    Test:  Ho:  difference in coefficients not systematic

                  chi2(9) = (b-B)'[(V_b-V_B)^(-1)](b-B)
                          =       59.53
                Prob>chi2 =      0.0000.
```

Test of overidentifying restrictions: fixed vs random effects

Cross-section time-series model: xtreg re

Sargan-Hansen statistic 36.132 Chi-sq (9) P-value = 0.0000

Appendix 3.
Regression Results for the Dependent Variable *Short-Term Debt*

A. Ordinary Least Square (OLS)

Source	SS	df	MS	Number of obs	=	800
Model	4.8213775	15	.321425166	F(15, 784)	=	14.99
Residual	16.8072995	784	.021437882	Prob > F	=	0.0000
Total	21.628677	799	.027069683	R-squared	=	0.2229
				Adj R-squared	=	0.2080
				Root MSE	=	.14642

ShortTerm	Coef.	Std. Err.	t	P>|t|	[95% Conf.	Interval]
Own	-.5837765	.3643527	-1.60	0.110	-1.298999	.1314458
Own2	1.476595	.7898318	1.87	0.062	-.0738404	3.027031
Own3	-.9934641	.51204	-1.94	0.053	-1.998596	.0116675
CEOFounder	-.0427764	.0146183	-2.93	0.004	-.0714721	-.0140807
FamilySuccesion	-.0037813	.0136498	-0.28	0.782	-.0305758	.0230131
BoardRepresentation	.0480142	.0132632	3.62	0.000	.0219786	.0740498
Duality	-.010256	.0141286	-0.73	0.468	-.0379903	.0174784
PropBoardInd	.028473	.0488714	0.58	0.560	-.0674612	.1244072
Tangibility	.0091755	.0254417	0.36	0.718	-.0407664	.0591174
Profitability	.0400389	.0569977	0.70	0.483	-.0718473	.151925
Size	.0009473	.0018789	0.50	0.614	-.002741	.0046357
NDTS	-.1756972	.1246271	-1.41	0.159	-.4203395	.0689451
FirmAge	.0010661	.0004251	2.51	0.012	.0002315	.0019006
Liquidity	-.0482956	.0039533	-12.22	0.000	-.0560559	-.0405353
MBRatio	-.0051991	.0026604	-1.95	0.051	-.0104215	.0000233
_cons	.3900412	.0630436	6.19	0.000	.2662869	.5137955

B. Fixed Effect Model (FE)

Fixed-effects (within) regression		Number of obs	= 800
Group variable: Firms		Number of groups	= 160
R-sq:		Obs per group:	
within = 0.0840		min	= 5
between = 0.1076		avg	= 5.0

```
     overall = 0.1033                                        max =         5
                                                  F(10,630)          =      5.77
corr(u_i, Xb)  = -0.0505                          Prob > F           =    0.0000

------------------------------------------------------------------------------
          ShortTerm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
--------------------+---------------------------------------------------------
                Own |   .1615266    .697486     0.23   0.817    -1.208152    1.531205
               Own2 |   .2516524   1.406999     0.18   0.858    -2.511322    3.014627
               Own3 |  -.4265496   .8679565    -0.49   0.623    -2.130987    1.277888
        CEOFounder |          0  (omitted)
    FamilySuccesion |          0  (omitted)
BoardRepresentation |          0  (omitted)
            Duality |          0  (omitted)
       PropBoardInd |          0  (omitted)
        Tangibility |  -.0488092    .034127    -1.43   0.153    -.1158256    .0182072
      Profitability |   .1245257    .043295     2.88   0.004     .0395056    .2095457
               Size |  -.0029868   .0027283    -1.09   0.274    -.0083444    .0023709
               NDTS |  -.1670254   .0871109    -1.92   0.056    -.3380883    .0040375
            FirmAge |   .0032828   .0019459     1.69   0.092    -.0005384     .007104
          Liquidity |  -.0248439   .0041507    -5.99   0.000    -.0329949    -.016693
            MBRatio |  -.0033595   .0031428    -1.07   0.285    -.0095311    .0028121
              _cons |   .2594587    .124761     2.08   0.038      .014461    .5044565
--------------------+---------------------------------------------------------
            sigma_u |  .14170619
            sigma_e |  .07423494
                rho |  .78466162   (fraction of variance due to u_i)
------------------------------------------------------------------------------
F test that all u_i=0: F(159, 630) = 15.86                  Prob > F = 0.0000
```

C. Random Effect Model (RE)

```
Random-effects GLS regression                   Number of obs     =        800
Group variable: Firms                           Number of groups  =        160

R-sq:                                           Obs per group:
     within  = 0.0786                                         min =          5
     between = 0.2211                                         avg =        5.0
     overall = 0.1939                                         max =          5
```

```
                                                Wald chi2(15)     =      94.07
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000

------------------------------------------------------------------------------
          ShortTerm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------------+---------------------------------------------------------
                Own |  -.1422073   .5076436    -0.28   0.779     -1.13717    .8527559
               Own2 |   .7008218    1.06265     0.66   0.510    -1.381934    2.783578
               Own3 |  -.6051616   .6721036    -0.90   0.368    -1.922461    .7121373
         CEOFounder |  -.0468459   .0299425    -1.56   0.118    -.1055321    .0118402
    FamilySuccesion |  -.0118914   .0277872    -0.43   0.669    -.0663533    .0425706
BoardRepresentation |   .0513769   .0270202     1.90   0.057    -.0015818    .1043356
            Duality |  -.0121952   .0288125    -0.42   0.672    -.0686667    .0442763
       PropBoardInd |   .0583229   .0966282     0.60   0.546    -.1310648    .2477106
        Tangibility |  -.0219814   .0288501    -0.76   0.446    -.0785266    .0345637
      Profitability |   .1012336   .0413863     2.45   0.014     .0201179    .1823494
               Size |  -.0014453   .0022638    -0.64   0.523    -.0058823    .0029917
               NDTS |  -.1694661   .0851108    -1.99   0.046    -.3362802   -.0026521
            FirmAge |   .0016319   .0007964     2.05   0.040     .0000709    .0031928
          Liquidity |  -.0302942   .0037595    -8.06   0.000    -.0376626   -.0229258
            MBRatio |  -.0036024   .0027632    -1.30   0.192    -.0090182    .0018134
              _cons |   .3054495    .093339     3.27   0.001     .1225084    .4883906
--------------------+---------------------------------------------------------
            sigma_u |  .13023726
```

D. Heterokedasticity Test using White-Hubber corrected standard error

```
Random-effects GLS regression                   Number of obs     =        800
Group variable: Firms                           Number of groups  =        160

R-sq:                                           Obs per group:
     within  = 0.0786                                         min =          5
     between = 0.2211                                         avg =        5.0
     overall = 0.1939                                         max =          5

                                                Wald chi2(15)     =      88.55
corr(u_i, X)   = 0 (assumed)                    Prob > chi2       =     0.0000

                                    (Std. Err. adjusted for 160 clusters in Firms)
------------------------------------------------------------------------------
```

	Robust				
ShortTerm	Coef.	Std. Err.	z	P>|z|	[95% Conf. Interval]
Own	-.1422073	.5031562	-0.28	0.777	-1.128375 .8439608
Own2	.7008218	.9931927	0.71	0.480	-1.2458 2.647444
Own3	-.6051616	.6067037	-1.00	0.319	-1.794279 .5839558
CEOFounder	-.0468459	.0338235	-1.39	0.166	-.1131388 .0194469
BoardRepresentation	.0513769	.02594	1.98	0.048	.0005354 .1022184
Duality	-.0121952	.0301659	-0.40	0.686	-.0713194 .0469289
FamilySuccesion	-.0118914	.0274534	-0.43	0.665	-.065699 .0419162
PropBoardInd	.0583229	.1045545	0.56	0.577	-.1466002 .2632461
Tangibility	-.0219814	.0370348	-0.59	0.553	-.0945682 .0506053
Profitability	.1012336	.0413863	2.45	0.014	-.0516878 .2541551
Size	-.0014453	.0026304	-0.55	0.583	-.0066008 .0037102
NDTS	-.1694661	.0889339	-1.91	0.057	-.3437735 .0048412
FirmAge	.0016319	.000717	2.28	0.023	.0002266 .0030371
Liquidity	-.0302942	.0040727	-7.44	0.000	-.0382765 -.0223119
MBRatio	-.0036024	.0028639	-1.26	0.208	-.0092156 .0020108
_cons	.3054495	.0970929	3.15	0.002	.115151 .495748
sigma_u	.13023726				
sigma_e	.07423494				
rho	.75477543	(fraction of variance due to u_i)			

E. Breusch and Pagan Lagrangian Multiplier Test for Random Effects

Breusch and Pagan Lagrangian multiplier test for random effects

ShortTerm[Firms,t] = Xb + u[Firms] + e[Firms,t]

Estimated results:

	Var	sd = sqrt(Var)
ShortTerm	.0270697	.1645287
e	.0055108	.0742349
u	.0169617	.1302373

Test: Var(u) = 0

chibar2(01) = 834.38

Prob > chibar2 = 0.0000

F. Hausman Test and Sargan-Hansen Test for Fixed Effects

```
Test of overidentifying restrictions: fixed vs random effects
Cross-section time-series model: xtreg re
Sargan-Hansen statistic 16.401 Chi-sq(10)   P-value = 0.0887
```

Appendix 3.
Additional Robustness Checks

A. Total Debt

```
xi: reg Aggregate Own Own2 Own3 i.CEOFounder i.FamilySuccesion
i.BoardRepresentation i.Duality PropBoardInd Tangibility Profitability Size NDTS
FirmAge Liquidity MBRatio, vce (ro)

i.CEOFounder      _ICEOFounde_0-1     (naturally coded; _ICEOFounde_0 omitted)

i.FamilySucce~n   _IFamilySuc_0-1     (naturally coded; _IFamilySuc_0 omitted)

i.BoardRepres~n   _IBoardRepr_0-1     (naturally coded; _IBoardRepr_0 omitted)

i.Duality         _IDuality_0-1       (naturally coded; _IDuality_0 omitted)


Linear regression                               Number of obs     =        800
                                                F(15, 784)        =      22.52
                                                Prob > F          =     0.0000
                                                R-squared         =     0.2742
                                                Root MSE          =     .17972

------------------------------------------------------------------------------
             |               Robust
   Aggregate |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         Own |   .7666014   .4227342     1.81   0.070    -.0632234    1.596426
        Own2 |   -.853162   .9118302    -0.94   0.350     -2.64308    .9367555
        Own3 |   .1031544   .5833023     0.18   0.860    -1.041865    1.248174
_ICEOFounde_1 |   -.063578   .0192622    -3.30   0.001    -.1013896   -.0257665
_IFamilySuc_1 |   .0105456   .0162899     0.65   0.518    -.0214315    .0425226
_IBoardRepr_1 |   .0319695   .0166376     1.92   0.055    -.0006901     .064629
  _IDuality_1 |  -.0037379   .0162042    -0.23   0.818    -.0355468    .0280709
 PropBoardInd |   .2284008   .0693258     3.29   0.001     .0923146    .3644869
  Tangibility |   .0111136   .0312579     0.36   0.722    -.0502455    .0724726
Profitability |  -.1150434   .0777114    -1.48   0.139    -.2675905    .0375037
         Size |   .0026563   .0022695     1.17   0.242    -.0017987    .0071113
         NDTS |  -.0145575   .1565751    -0.09   0.926    -.3219135    .2927986
      FirmAge |  -.0002724    .000498    -0.55   0.585      -.00125    .0007052
    Liquidity |  -.0651453   .0047594   -13.69   0.000     -.074488   -.0558025
      MBRatio |   .0018939    .003803     0.50   0.619    -.0055713    .0093591
        _cons |     .31904   .0774018     4.12   0.000     .1671007    .4709793
------------------------------------------------------------------------------
```

B. Active/Passive

```
. xi: reg LongTerm Own Own2 Own3 i.AP PropBoardInd Tangibility Profitability Size
NDTS FirmAge MBRatio, vce (ro)

i.AP              _IAP_0-1            (naturally coded; _IAP_0 omitted)


Linear regression                               Number of obs     =        800
                                                F(11, 788)        =      11.10
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1366
                                                Root MSE          =     .12659

------------------------------------------------------------------------------
             |               Robust
    LongTerm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         Own |   1.316089    .262791     5.01   0.000     .8002359    1.831942
        Own2 |  -2.253006   .5809309    -3.88   0.000    -3.393361    -1.11265
        Own3 |   1.033588   .3758199     2.75   0.006     .2958617    1.771315
      _IAP_1 |   .0139654   .0110479     1.26   0.207    -.0077214    .0356523
PropBoardInd |   .1913662   .0462346     4.14   0.000     .1006086    .2821238
Tangibility  |   .0286892   .0224093     1.28   0.201    -.0152997    .0726781
Profitability |  -.1889011   .0480861    -3.93   0.000    -.2832932   -.0945091
        Size |    .002479   .0019039     1.30   0.193    -.0012584    .0062164
        NDTS |   .1875608   .1164362     1.61   0.108    -.0410011    .4161226
     FirmAge |  -.0010858   .0004875    -2.23   0.026    -.0020427   -.0001288
     MBRatio |   .0068371   .0025219     2.71   0.007     .0018867    .0117874
       _cons |  -.1436071    .051271    -2.80   0.005    -.2442509   -.0429633
------------------------------------------------------------------------------
```

C. Board Size (exclude family members)

```
xi: reg LongTerm Own Own2 Own3 i.CEOFounder i.BoardRepresentation i.Duality
i.FamilySuccesion BoardSizenofam Tangibility Profitability Size NDTS FirmAge
MBRatio, vce (ro)

i.CEOFounder      _ICEOFounde_0-1     (naturally coded; _ICEOFounde_0 omitted)

i.BoardRepres~n   _IBoardRepr_0-1     (naturally coded; _IBoardRepr_0 omitted)

i.Duality         _IDuality_0-1       (naturally coded; _IDuality_0 omitted)

i.FamilySucce~n   _IFamilySuc_0-1     (naturally coded; _IFamilySuc_0 omitted)


Linear regression                               Number of obs     =        800
                                                F(14, 785)        =       9.30
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1343
                                                Root MSE          =     .12699

------------------------------------------------------------------------------
             |               Robust
    LongTerm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         Own |    1.270393   .2633095     4.82   0.000     .7535192    1.787267
        Own2 |   -2.165272   .5859865    -3.70   0.000    -3.315558   -1.014986
        Own3 |    .996224   .3833488     2.60   0.010      .243714    1.748734
 _ICEOFounde_1 |   -.0180393   .0130515    -1.38   0.167    -.0436594    .0075807
 _IBoardRepr_1 |   -.0217053   .0122748    -1.77   0.077    -.0458006    .0023899
   _IDuality_1 |    .0001589   .0114562     0.01   0.989    -.0223295    .0226473
 _IFamilySuc_1 |    .0093807     .01125     0.83   0.405    -.0127029    .0314642
BoardSizenofam |    .0789756    .022915     3.45   0.001     .0339937    .1239575
   Tangibility |    .0455877   .0224816     2.03   0.043     .0014566    .0897188
 Profitability |   -.1676414   .0475777    -3.52   0.000    -.2610359   -.0742469
          Size |    .002822   .0019337     1.46   0.145    -.0009739    .0066179
          NDTS |    .2082001   .1270206     1.64   0.102    -.0411402    .4575404
       FirmAge |   -.001081   .0004731    -2.29   0.023    -.0020096   -.0001524
       MBRatio |    .0062634   .0025365     2.47   0.014     .0012843    .0112424
         _cons |   -.0962115   .0528048    -1.82   0.069    -.1998669    .0074439
------------------------------------------------------------------------------
```

D. Family – Bank Relations

```
xi: reg LongTerm Own Own2 Own3 i.CEOFounder i.BoardRepresentation i.Duality
i.FamilySuccesion PropBoardInd Tangibility Profitability Size NDTS FirmAge MBRatio
i.BankFamily , vce (ro)

i.CEOFounder      _ICEOFounde_0-1     (naturally coded; _ICEOFounde_0 omitted)

i.BoardRepres~n   _IBoardRepr_0-1     (naturally coded; _IBoardRepr_0 omitted)

i.Duality         _IDuality_0-1       (naturally coded; _IDuality_0 omitted)

i.FamilySucce~n   _IFamilySuc_0-1     (naturally coded; _IFamilySuc_0 omitted)

i.BankFamily      _IBankFamil_0-1     (naturally coded; _IBankFamil_0 omitted)


Linear regression                               Number of obs     =        800
                                                F(15, 784)        =      10.41
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1518
                                                Root MSE          =     .12579

------------------------------------------------------------------------------
             |               Robust
    LongTerm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         Own |    1.43753    .263801     5.45   0.000     .9196904     1.95537
        Own2 |  -2.483748   .5874545    -4.23   0.000    -3.636918   -1.330578
        Own3 |   1.175166   .3835483     3.06   0.002     .4222632    1.928069
_ICEOFounde_1 |  -.0191391   .0127753    -1.50   0.135     -.044217    .0059387
_IBoardRepr_1 |  -.0127403   .0120123    -1.06   0.289    -.0363204    .0108398
  _IDuality_1 |   .0050408   .0113445     0.44   0.657    -.0172284    .0273099
_IFamilySuc_1 |    .013314   .0110902     1.20   0.230     -.008456     .035084
 PropBoardInd |   .1832114   .0483391     3.79   0.000     .0883219    .2781008
  Tangibility |    .033286   .0221669     1.50   0.134    -.0102276    .0767996
Profitability |  -.1852998   .0476116    -3.89   0.000    -.2787612   -.0918385
         Size |   .0024948    .001884     1.32   0.186    -.0012034     .006193
         NDTS |   .2077412   .1163552     1.79   0.075    -.0206633    .4361457
      FirmAge |  -.0012206   .0004734    -2.58   0.010    -.0021498   -.0002914
      MBRatio |   .0073997    .002491     2.97   0.003     .0025099    .0122895
_IBankFamil_1 |   .0349588   .0177631     1.97   0.049     .0000899    .0698277
        _cons |  -.1449474   .0521135    -2.78   0.006     -.247246   -.0426489
------------------------------------------------------------------------------
```

E. Dividend Payment

```
xi: reg LongTerm Own Own2 Own3 i.CEOFounder i.BoardRepresentation i.Duality
i.FamilySuccesion PropBoardInd Tangibility Profitability Size NDTS FirmAge
MBRatio DPR , vce (ro)
```

```
i.CEOFounder      _ICEOFounde_0-1     (naturally coded; _ICEOFounde_0 omitted)
i.BoardRepres~n   _IBoardRepr_0-1     (naturally coded; _IBoardRepr_0 omitted)
i.Duality         _IDuality_0-1       (naturally coded; _IDuality_0 omitted)
i.FamilySucce~n   _IFamilySuc_0-1     (naturally coded; _IFamilySuc_0 omitted)
```

```
Linear regression                               Number of obs     =        800
                                                F(15, 784)        =      12.68
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1782
                                                Root MSE          =     .12382
```

	Robust				
LongTerm	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]
Own	1.338543	.2668427	5.02	0.000	.8147325 1.862354
Own2	-2.255068	.5948218	-3.79	0.000	-3.4227 -1.087436
Own3	1.029851	.3880081	2.65	0.008	.2681934 1.791509
_ICEOFounde_1	-.0209946	.0126598	-1.66	0.098	-.0458457 .0038565
_IBoardRepr_1	-.0168959	.0119402	-1.42	0.157	-.0403344 .0065426
_IDuality_1	.0062322	.0112978	0.55	0.581	-.0159454 .0284097
_IFamilySuc_1	.0112752	.0109368	1.03	0.303	-.0101936 .0327441
PropBoardInd	.2137914	.0458691	4.66	0.000	.1237506 .3038323
Tangibility	.0234623	.0221884	1.06	0.291	-.0200934 .0670179
Profitability	-.1664521	.0442125	-3.76	0.000	-.253241 -.0796631
Size	.0020651	.0019137	1.08	0.281	-.0016916 .0058217
NDTS	.2471781	.1247025	1.98	0.048	.0023879 .4919684
FirmAge	-.0011078	.0004563	-2.43	0.015	-.0020035 -.000212
MBRatio	.0090446	.0024416	3.70	0.000	.0042517 .0138374
DPR	-.120849	.018829	-6.42	0.000	-.1578102 -.0838879
_cons	-.1237007	.0536106	-2.31	0.021	-.228938 -.0184634

F. Industry Classification

```
xi: reg LongTerm Own Own2 Own3 i.CEOFounder i.BoardRepresentation i.Duality
i.FamilySuccesion PropBoardInd Tangibility Profitability Size NDTS FirmAge
MBRatio i.Industry , vce (ro)

i.CEOFounder      _ICEOFounde_0-1     (naturally coded; _ICEOFounde_0 omitted)

i.BoardRepres~n   _IBoardRepr_0-1     (naturally coded; _IBoardRepr_0 omitted)

i.Duality         _IDuality_0-1       (naturally coded; _IDuality_0 omitted)

i.FamilySucce~n   _IFamilySuc_0-1     (naturally coded; _IFamilySuc_0 omitted)

i.Industry        _IIndustry_0-1      (naturally coded; _IIndustry_0 omitted)


Linear regression                               Number of obs     =        800
                                                F(15, 784)        =      10.29
                                                Prob > F          =     0.0000
                                                R-squared         =     0.1586
                                                Root MSE          =     .12528

------------------------------------------------------------------------------
             |               Robust
    LongTerm |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
         Own |   1.306978   .2705624     4.83   0.000     .7758654     1.83809
        Own2 |  -2.182824   .6087698    -3.59   0.000    -3.377836    -.987812
        Own3 |   .9746005   .4010538     2.43   0.015     .1873341    1.761867
_ICEOFounde_1 |  -.0263439   .0129645    -2.03   0.042    -.0517932   -.0008946
_IBoardRepr_1 |  -.0100296   .0120746    -0.83   0.406    -.0337319    .0136727
  _IDuality_1 |   .0063468     .01149     0.55   0.581    -.0162081    .0289017
_IFamilySuc_1 |   .0066768   .0114099     0.59   0.559    -.0157208    .0290745
 PropBoardInd |   .2015124   .0450872     4.47   0.000     .1130065    .2900183
  Tangibility |   .0095355   .0238675     0.40   0.690    -.0373163    .0563873
Profitability |  -.1919733   .0479016    -4.01   0.000    -.2860038   -.0979427
         Size |   .0027296   .0018853     1.45   0.148    -.0009713    .0064305
         NDTS |   .2266982   .1252435     1.81   0.071    -.0191541    .4725506
      FirmAge |  -.0013627   .0004719    -2.89   0.004     -.002289   -.0004364
      MBRatio |   .0074276   .0024553     3.03   0.003     .0026079    .0122473
 _IIndustry_1 |   .0357157   .0097817     3.65   0.000     .0165143    .0549171
        _cons |  -.1423734    .052885    -2.69   0.007    -.2461865   -.0385604
```

G. Reverse Causality Tests

a. IV – Lagged Ownership

```
ivregress gmm LongTerm CEOFounder BoardRepresentation Duality FamilySuccesion PropBoardInd
Tangibility Profitability Size NDTS FirmAge MBRatio ( Own = LagOwn1 ), wmatrix(robust)


Instrumental variables (GMM) regression          Number of obs   =        800
                                                 Wald chi2(12)   =      65.56
                                                 Prob > chi2     =     0.0000
                                                 R-squared       =     0.0818
GMM weight matrix: Robust                        Root MSE        =     .12956

------------------------------------------------------------------------------
                     |               Robust
           LongTerm |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
--------------------+---------------------------------------------------------------
                 Own |  -.0404146   .0215675    -1.87   0.061    -.0826861     .001857
         CEOFounder |  -.0173051   .0131482    -1.32   0.188     -.043075    .0084649
BoardRepresentation |  -.0089056   .0119994    -0.74   0.458    -.0324239    .0146127
            Duality |   .0051507    .011419     0.45   0.652    -.0172301    .0275316
    FamilySuccesion |   .0168787   .0110709     1.52   0.127    -.0048198    .0385772
       PropBoardInd |   .1494215   .0456694     3.27   0.001     .0599112    .2389319
        Tangibility |   .0436917   .0231921     1.88   0.060    -.0017638    .0891473
      Profitability |  -.1736593   .0466092    -3.73   0.000    -.2650117    -.082307
               Size |   .0009598   .0019939     0.48   0.630    -.0029482    .0048679
               NDTS |   .2198134   .1195739     1.84   0.066    -.0145471    .4541738
            FirmAge |  -.0014957   .0004784    -3.13   0.002    -.0024334   -.0005581
            MBRatio |   .0068277   .0025775     2.65   0.008     .0017759    .0118796
              _cons |   .1226556   .0383989     3.19   0.001     .0473951    .1979161
------------------------------------------------------------------------------
Instrumented:  Own
Instruments:   CEOFounder BoardRepresentation Duality FamilySuccesion PropBoardInd
               Tangibility Profitability Size NDTS FirmAge MBRatio LagOwn1
```

b. GMM – System Model – Lagged Leverage

```
xtdpdsys LongTerm LagLT Own Own2 Own3 CEOFounder BoardRepresentation Duality
FamilySuccesion PropBoardInd Tangibility Profitability Size NDTS FirmAge MBRatio

note: CEOFounder dropped from div() because of collinearity

note: BoardRepresentation dropped from div() because of collinearity

note: Duality dropped from div() because of collinearity

note: FamilySuccesion dropped from div() because of collinearity

note: PropBoardInd dropped from div() because of collinearity
```

System dynamic panel-data estimation — Number of obs = 640

Group variable: Firms — Number of groups = 160

Time variable: Year

Obs per group:

min = 4

avg = 4

max = 4

Number of instruments = 20 — Wald chi2(14) = 34.10

Prob > chi2 = 0.0020

One-step results

LongTerm	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
LongTerm						
L1.	7.011634	3.053248	2.30	0.022	1.027379	12.99589
LagLT	-6.776046	2.890684	-2.34	0.019	-12.44168	-1.11041
Own	2.137681	1.298177	1.65	0.100	-.4066982	4.682061
Own2	-4.227155	2.599373	-1.63	0.104	-9.321833	.867523
Own3	2.367638	1.529587	1.55	0.122	-.6302963	5.365573
CEOFounder	0	(omitted)				
BoardRepresentation	.039885	.0970286	0.41	0.681	-.1502876	.2300575
Duality	0	(omitted)				
FamilySuccesion	.3160711	.2580071	1.23	0.221	-.1896136	.8217558
PropBoardInd	.1112674	.348965	0.32	0.750	-.5726915	.7952263
Tangibility	.0202291	.0561503	0.36	0.719	-.0898234	.1302816
Profitability	-.0821599	.0743159	-1.11	0.269	-.2278164	.0634966
Size	-.0105557	.0056449	-1.87	0.061	-.0216194	.0005081
NDTS	-.1324268	.1306256	-1.01	0.311	-.3884483	.1235946
FirmAge	.0053029	.0031839	1.67	0.096	-.0009373	.0115432
MBRatio	-.00008	.0054214	-0.01	0.988	-.0107057	.0105458
_cons	-.3450091	.2443943	-1.41	0.158	-.8240132	.133995

Instruments for differenced equation

GMM-type: L(2/.).LongTerm

Standard: D.LagLT D.Own D.Own2 D.Own3 D.Tangibility D.Profitability D.Size D.NDTS D.FirmAge D.MBRatio

Instruments for level equation

GMM-type: LD.LongTerm