

Three Essays on Family Businesses

by

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ABSTRACT

In this dissertation, I look at three strategic processes within one of the most prevalent business forms in the world – family firms. In chapter 2, I look at the acquisition process, particularly focusing on deal structure. My findings, supported by data from S&P 500 firms during the period 2003-2014, show that when family firms engage in equity-based transactions, their valuation of the target is affected negatively due to the additional risk of losing. I also find that international acquisitions are more attractive to family firms due to benefits of risk diversification and loose-coupling, thereby increasing deal valuation. Moreover, family firms are willing to pay more to acquire targets operating under better public governance as they perceive lower reputational risk in associating with them. Post-hoc analyses reveal descendant board chairs show a stronger preference for targets with better public governance and ones that are located cross-border. In chapter 3, I look at board processes, focusing on how decisions made by the board of directors in family firms are more likely to be colored by groupthink. Using a sample of firms from the S&P 500, I find that institutional investors, discouraged by groupthink in family firms, invest less in them. However, appropriate corporate governance in the form of greater board diversity, lower director tenure, busier boards, more financial disclosure and bigger shareholder voice can help in alleviating these concerns. I also explore the heterogeneity in family firms that have different generations of family members on board and find that groupthink is likely to be higher in them, but the presence of independent directors can be an alleviating factor. In chapter 4, I look at the long-term decision-making process in family firms. My findings, based on an international sample of listed firms from 2007-2018, show that while family firms may have more long-term oriented values which make them less sensitive to time delays, contextual factors such as economic and non-economic performance hazard and whether the decision-making is controlled by founder or descendant, will influence the expectancy and value of future utilities, thereby moderating the positive impact of long-term oriented values on long-term decision-making.

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TABLE OF CONTENTS

ABSTRACT.....	ii
ACKNOWLEDGEMENT.....	iii
CHAPTER 1: GENERAL INTRODUCTION.....	1
CHAPTER 2: ESSAY 1.....	3
2.1 Introduction.....	4
2.2. Theory and Hypotheses.....	6
2.2.1 Family Firm Acquisitions and Deal Valuation.....	6
2.2.2 The Role of Payment Mode.....	10
2.2.3 The Role of Public Governance.....	12
2.2.4 The Role of Cross-border Acquisitions.....	13
2.3 Methodology.....	15
2.3.1 Sample	15
2.3.2 Variables	16
2.3.3 Empirical Analyses & Results.....	18
2.4 Robustness Check and Post-hoc Analysis.....	23
2.5 Discussion.....	30
2.6 Conclusion and Future Research Directions.....	32
CHAPTER 3: ESSAY 2.....	37
3.1 Introduction.....	38
3.2 Theory and Hypotheses.....	39
3.2.1 Groupthink in the board of family firms.....	39
3.2.2 Controlling groupthink.....	44
3.3 Methodology.....	47
3.3.1 Sample and data collection.....	47
3.3.2 Variables	47
3.3.3 Model.....	51
3.4 Results.....	52
3.5 Post-hoc Analysis.....	64
3.6 Conclusion and future research directions.....	69
CHAPTER 4: ESSAY 3.....	70

4.1 Introduction.....	71
4.2 Theory and Hypotheses.....	73
4.2.1 Temporal Motivation Theory.....	73
4.2.2 Time Sensitivity.....	74
4.2.3 Expectancy.....	76
4.2.4 Value.....	78
4.3 Methodology.....	78
4.3.1 Sample and data.....	78
4.3.2 Variables.....	79
4.3.3 Model.....	82
4.4 Results.....	83
4.5 Robustness Checks.....	94
4.6 Discussion.....	98
4.7 Conclusion and Future Research Directions.....	99
CHAPTER 5: GENERAL CONCLUSION.....	102
BIBILOGRAPHY.....	104

LIST OF TABLES

Table 2.1	Descriptive Statistics and Correlations.....	19
Table 2.2	Descriptive Statistics of Subsamples.....	21
Table 2.3	Main Results.....	22
Table 2.4	Moderating Effects of Public Governance Dimensions & Results from Robustness Tests.....	25
Table 2.5	Results from ANOVA Analysis with Regard to Transaction Value....	28
Table 2.6	Family Board Chair and Transaction Value of Acquisition & Founder Board Chair Vs. Descendant Board Chair.....	29
Table 3.1	Variable Definitions.....	50
Table 3.2	Descriptive Statistics.....	53
Table 3.3	Descriptive statistics by subsample of family and non-family firms..	54
Table 3.4	Pairwise correlations.....	55
Table 3.5	Main Results.....	57
Table 3.6	Results using alternative definitions of family firms.....	61
Table 3.7	Results of post-hoc analyses.....	66
Table 3.8	Derivation of regression sample.....	68
Table 4.1	Variable definitions.....	84
Table 4.2	Descriptive Statistics.....	86
Table 4.3	Descriptive statistics by subsample of family and non-family firms..	86
Table 4.4	Country-wise sample of family and non-family firms.....	87
Table 4.5	Pairwise Correlations.....	88
Table 4.6	Main Results.....	89
Table 4.7a	Robustness tests.....	95
Table 4.7b	Robustness Tests.....	97

LIST OF FIGURES

Figure 4.1	Long term decisions, internal performance hazard and family.....	93
Figure 4.2	Long term decisions, reputation risk and family.....	93

CHAPTER 1

GENERAL INTRODUCTION

Family firms are considered to be distinct from other firms due to the significant impact of family on governance, management and entrepreneurship within these businesses. Gomez-Mejia et al. (2007) introduce the overarching concept of socioemotional wealth possession as differentiating a family firm from a non-family one. Also termed as ‘affective endowment’, it collectively comprises of three non-economic factors that distinguish a family firm. The first of these is the emotions vested by the family members/owners in the firm – this intimacy results in emotional satisfaction when the family business owners are able to control their firms (Schulze, Lubatkin, Dino, & Buchholtz, 2001), much like a parent deriving satisfaction out of the upbringing and success of a child. The second component refers to the satisfaction gained from the strong diffusion of family values on to the firm such that the organizational culture becomes synonymous to the family beliefs and values (Dyer, 2003; Aronoff, 2004). The third non-economic factor refers to the family business owners’ altruistic behavior whereby the owners derive a sense of satisfaction out of taking care of the family employees regardless of the professional competence level of those employees (Miller, Le Breton-Miller, Lester, & Cannella, 2007). A more recent study describes five dimensions (abbreviated FIBER) of socioemotional wealth as being: family control and influence, identification of family members with the firm, binding social ties, emotional attachment to the firm and renewal of family bonds through dynastic succession (Berrone, Cruz, & Gomez-Mejia, 2012). These unique characteristics not only differentiate family from non-family firms, but also give rise to heterogeneity among themselves.

Family firms are prevalent around the world (Astrachan & Shanker, 2003; Boellis et al., 2016); while there are many small and medium sized family firms (Cruz & Justo, 2017; Corbetta and Montemerlo, 1999; Voordeckers et al., 2007), they also comprise one-third of the S&P 500 (Anderson & Reeb, 2003b) and span across a wide variety of industries. Therefore, in this dissertation, I focus on further exploring the intricate, but significant, differences that family governance has on a business.

In chapter 2, I study the deal valuations of family firms by looking at 515 completed acquisitions of S&P 500 companies over the period 2003-2016 and consider how these valuations are

influenced by the payment mode, quality of public governance and whether the acquisition is cross-border; in post hoc analyses, I dig deeper into the implications of the family's occupation of the board chair position. In chapter 3, I go further deeper into board processes and governance of family firms by first arguing how the board of directors of a family firm is likely to suffer from groupthink and then looking at ways of controlling it. I use the amount of institutional investment that family firms are able to attract to illustrate my arguments; results of empirical analyses on S&P 500 family firms from 2003-2014 show that family firms get lower amount of institutional investment, but I further explore several corporate governance variables and argue that greater board diversity, board busyness, disclosures, shareholder voice and lower director tenure will reduce groupthinking tendencies on family boards. In chapter 4, I study long-term decision-making in family firms using Temporal Motivation Theory (Steel & Konig, 2006) and look at how family firms not only differ from non-family firms in terms of sensitivity to time delays, but also how the expectancy and value of their utilities influence their long-term decisions. More specifically, I use an international sample of firms over the period 2007-2018 to first see whether family firms are, *ceteris paribus*, less sensitive to time delays and therefore more likely to make long-term decisions and then whether economic and non-economic performance hazard moderates this likelihood; additionally, I explore how the calculus of founders and descendant decision-makers may differ.

CHAPTER 2: ESSAY 1¹

Do family firms have higher or lower deal valuations? A contextual analysis

Abstract

How does the socioemotional wealth (SEW) of a family firm affect its deal valuation in acquisition? Using a sample of 515 completed transactions of S&P 500 firms over the period 2003-2016, we examine a number of contexts and find that SEW creates differential valuations of targets by family firms vis-à-vis non-family firms. Particularly from an internationalization perspective, acquisitions may be an ideal option for family firms because foreign acquisitions may be loosely coupled from the core firm. Post-hoc analyses on the heterogeneity in family governance reveal that founder and descendant board chairs may have different perceptions of SEW.

Keywords: family firms, acquisitions, deal valuation, internationalization, socioemotional wealth, loose coupling.

¹ This essay has been published in Entrepreneurship Theory & Practice with co-authors.

2.1 Introduction

Socioemotional wealth (SEW), which collectively epitomizes the non-economic utilities - control, diffusion of family values and altruism -- that family principals derive out of their business (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011) causes lower tendency among family firms to acquire or to be acquired (Caprio, Croci, & Del Giudice, 2011; Miller, Breton-Miller, & Lester, 2010; Tang, 2008); looking at the post-IPO investment strategies of family firms, Jain and Shao (2014) also find that family firms tend to invest less on acquisitions. However, when it becomes a matter of survival, they do acquire other firms within (Gomez-Mejia, Patel & Zellweger, 2018) or outside their core industry sectors (Gomez-Mejia et al., 2018; Miller et al., 2010). Nonetheless, acquisitions by family businesses are positively viewed by the stock market (André, Ben-Amar, & Saadi, 2014; Feito-Ruiz & Menéndez-Requejo, 2009; Tang, 2008), even though such valuations can be influenced by the legal and institutional environment surrounding the M&A deals (Feito-Ruiz & Menéndez-Requejo, 2009). While investigating the negative effects of concentrated ownership structures, such as ‘tunneling’ (Johnson, La Porta, de Silanes, & Shleifer, 2000), on acquisition decisions, Ben-Amar and André (2006) find that positive abnormal returns are greater for family than for their non-family counterparts.

While there has been much focus on tendency, industry relatedness and market reactions, scholars have devoted relatively little attention to valuation of acquisition deals that family firms do make. This is surprising given that the soundness of the valuation of target plays a rather important role in maximizing the acquirer’s value. In this paper, we study the structure of deals made by family firms. More specifically, we ask if family and non-family firms differ in their valuations of targets and how different contexts, namely payment choice, public governance and cross-border (vs domestic) location of target, affect these valuations.

Our core arguments are based on the socioemotional wealth perspective. Given that the decision to acquire is a ‘mixed gamble’ between financial and socioemotional wealth and a positive decision reflects sacrifice of the latter (Gomez-Mejia et al., 2018), we explore how family firms value the deal in an attempt to recoup SEW. We test our hypotheses on 515 acquisitions of S&P 500 companies during the period 2003-2016. We find that when family firms pay by equity (majority), they incorporate the additional risk of dilution of ownership and control by increasing the discount rate of future returns, such that they have a lower valuation in comparison to non-family firms.

They value similarly downwards when the target operates under poor quality of public governance as the marginal cost related to loss of reputation is higher for family firms as the identity of the family is closely linked with the organizational identity of the family firm (Zellweger et al., 2012). We also find that family firms value foreign targets more than non-family firms due, in part, to greater marginal benefit of geographic risk diversification, but more so because cross-border acquisitions can be loosely coupled (Weick, 1976) from the core firm. Further post-hoc analyses on the family firm sub-sample reveal heterogeneous perception of SEW by founder and descendant board chairs.

Our study addresses an emergent and growing field of enquiry about the emotional and behavioral responses to acquisition issues (Sharma et al., 2019; Cartwright & Schoenberg, 2006) and more fully examines the role of ownership structure on acquisition behavior and performance (Haleblian et al., 2009). More specifically, we make three main contributions to theory. First, we build on and extend recent studies by Gomez-Mejia et al. (2018) and Leitterstorf and Wachter (2016) in the area of family firm acquisitions. Gomez-Mejia et al. (2018) present evidence that family firms prioritize financial well-being over control retention when their performance is below aspiration levels and hence make acquisitions. Our study extends this by going beyond the decision to acquire; instead, we focus on the process of acquisition by looking at the deal structure. Leitterstorf and Wachter (2016) also focus on a part of the acquisition process by analyzing the takeover premiums offered by German family firms and finding that these are usually lower than those of non-family firms. We extend this study by focusing on the total deal valuations for completed acquisitions. While analysis of premiums can indicate differential valuation by family and non-family firms, use of the total deal valuation provides a fuller picture as it takes into account the insider perspective of the firm rather than the market; looking at completed acquisitions, rather than merely offers, also allows us to be more confident about the valuations of targets by family and non-family firms.

Second, we contribute to the intersecting literature on family and international business by showing how international acquisitions can lower both financial and socioemotional risks for family firms by introducing the idea that the parent family firm may be ‘loosely coupled’ (Weick, 1976) from foreign acquisitions. By doing so, we address calls for research on acquisitions as an alternative means of internationalization of family firms (Arregle et al., 2017). Furthermore, we extend the recent study by Arregle et al. (2019) studying the heterogeneity within family firms on

their decisions to internationalize: while they concentrate on the relevance of family structures, we look at heterogeneity in governance, more specifically how the differences in SEW between founder and descendant board chairs impact internationalization by acquisitions. Third, our main and post-hoc findings extend the literature studying the heterogeneity of family firms (Stanley et al., 2017; Stanley et al., 2019) and the nature of SEW. We find that SEW is a relative rather than an absolute stock of wealth as it can be calculated in different ways by different members of the family.

Our findings on the acquisition behavior of family businesses have practical implications not only for managers of family, non-family and target firms, but also established entrepreneurs who may be considering acquisition as either an opportunity for expansion or exit (Miller, Steier & Le Breton-Miller, 2016). In this study, we differ from and add to Chirico et al. (2019) who focus on the willingness of family firms to use mergers as an exit strategy (thereby becoming potential targets). While their study provides valuable direction on family firms in an ‘exit’ and ‘target’ context, our study helps practitioners by adding insights on family firms in an ‘acquirer’ context and more specifically, how they value targets. Thus, our findings have special relevance for entrepreneurs who negotiate takeover terms with a family business in order to expand or exit from their ventures. Last but not the least, our hand-collected data on heterogeneity in family governance provides finer-grained insights on subtle differences among family firms. The remainder of this paper is organized as the following. The next section establishes the theoretical framework for this study and proposes hypotheses. Sample, variables, and empirical models are described afterwards, followed by discussion of empirical results. The last section concludes and addresses future research directions.

2.2. Theory and Hypotheses

2.2.1 Family Firm Acquisitions and Deal Valuation

The motivations behind mergers and acquisitions have been widely studied and can be both value-creating and value-destroying. Such antecedents include efficiency, market power, resource redeployment, managerial self-interest (e.g. compensation and hubris), environmental factors (e.g. uncertainty and resource dependence) and firm characteristics (e.g. acquisition experience and strategy) (for a review of these, please refer to Halebian et al., 2009). Due to these reasons, mergers continue to be a popular, albeit paradoxical, source of corporate development, with

approximately 49,000 acquisitions completed globally in 2018 with a total value circa USD 3.8 trillion².

Family firms, however, might not accord to this popularity. First, the concentrated ownership structure of family-owned firms places the family in a position of vantage to control the strategic direction of the firm by minimizing agency (family principal-agent) costs either through direct family placements in management or by having significant control over them, which in turn reduces managerial hubris (Gupta et al., 1997; Hayward & Hambrick, 1997; Roll, 1986) and empire-building tendencies (Berkovitch & Narayanan, 1993; Roll, 1986). Therefore, managerial expropriation which is a major, albeit value destroying, reason of acquisition activity, is lower in the case of family firms (Miller et al., 2010; Villalonga & Amit, 2006).

Second, according to the behavioral agency model (Wiseman & Gomez-Mejia, 1998), the socioemotional wealth of family firms and the resultant tendency to retain control within the family imply that family firms will have a greater appetite for performance hazard risk while simultaneously being loss-averse in terms of SEW preservation (Gómez-Mejía et al., 2007). Mergers and acquisitions activity has been seen to dilute shareholder concentrations (Franks, Mayer, & Rossi, 2009) and in line with that family firms are likely to perceive a higher risk of losing control due to the post-acquisition involvement of a new firm at a governance (if there is an equity swap), as well as management level; as such, they would be willing to undertake the hazard of below-target performance or even failure since it results in preservation of socioemotional wealth. Moreover, acquisitions have high performance variations, with 44-50% of M&A activities failing (Kitching, 1974; Rostand, 1994), so family firms who are already in a tenuous position due to bearing high performance hazard (at a firm level) would tend to be risk-averse in terms of venturing risk when considering acquisitions as an investment project.

Thus, due to lower (type 1) agency costs and family principal's focus on maintaining socioemotional wealth by ensuring retention of firm control, family firms may be expected to differ from non-family firms by having a lower tendency to engage in acquisitions. This is in line with studies that find an inverse relationship between family ownership and the volume/value of acquisitions (Miller et al., 2010), lower propensity of firms with concentrated ownership structures (both family and non-family) to engage in post-IPO investments in acquisition (Jain & Shao,

² <https://imaa-institute.org/mergers-and-acquisitions-statistics>

2014), lower propensity of family firms to acquire (Gomez-Mejia et al. 2018; Tang, 2008) and to launch takeover bids as well as make acquisitions (Caprio et al., 2011).

However, it is not like family firms never acquire. The decision is a mixed gamble for the family because it is presented with a gain and loss situation simultaneously – gain in financial wealth and loss in socioemotional wealth. Martin et al. (2013) describe CEO stock options as mixed gambles as they present an opportunity for CEOs to increase wealth by taking risk while at the same time jeopardizing existing wealth. The mixed gamble perspective on SEW is seen in the case of R&D investment (Gomez-Mejia et al., 2014), as well as acquisitions (Gomez-Mejia et al., 2018) where performance hazard and other factors can revalue SEW in favor of R&D or acquisitions. When studying IPO underpricing in family firms, Kotlar et al. (2018) consider a two-stage gamble model and find that family firms' SEW stock changes at different stages of the IPO process. Gomez-Mejia et al. (2018) also find that the mixed gamble does not end with the decision to acquire made, but persists to how the acquisition is carried out, such as, whether it will be in a related or unrelated industry.

We extend their (and other previous) research by studying how SEW affects the valuation of target firms in the acquisition process. More specifically, while Granata and Chirico (2010) focus on the valuation of family firms as potential targets, we focus on the opposite - how acquiring family firms value potential targets. As the decision to acquire is a mixed gamble, we expect that family firms will try to minimize SEW losses and maximize SEW gains as they move on through the acquisition process. Firstly, we will look at how family firms might differ from non-family firms in valuating individual M&A deals. We evaluate the valuation of a target or post-merger entity by using the discounted cash flow technique by estimating the present value of all future free cash flows (FCFs) available using the weighted average cost of capital (WACC) as the discount factor.

We begin by building on the behavioral agency model prediction that family firms are going to be loss-averse to SEW and hence less likely to acquire due to the potential loss of control resulting from them. So when they do value targets for acquisition, we argue that family firms will subjectively discount the utilities from the acquisition to take into account the addition of a non-family member (the target). The incorporation of this non-family member may mean that the family part of the firm now has lower autonomy to make decisions to preserve socioemotional wealth of the family. For example, Kim et al. (2019) suggest that family firms are more likely to

possess a culture of place-basedness because family firms enhance their SEW by transferring family values to the organization; however, it may not be possible to align the family culture with the corporate culture of the target. During valuation, this threat of potential loss of SEW is going to manifest itself in the form of an additional risk premium. Thus, the present value of all future free cash flows will have a higher discount factor that incorporates this risk, leading to a lower valuation of the post-acquisition combined entity.

CEOs are often motivated to engage in acquisitions in order to enlarge their compensation as acquisition is a primary way to increase the firm size, which has been found to be the main driver of CEOs' pay (Aguinis et al. 2018; Kolev et al., 2017; Tosi et al., 2000). Thus, CEOs are willing to offer a larger premium to the target's shareholders in order to ensure the success of transaction, resulting in additional cost on shareholders of acquiring firms. In addition, Hubris of managers can lead to overly optimistic forecasts of future free cash flows, which also lowers shareholder value (Hayward & Hambrick, 1997; Parvinen & Tikkanen, 2007). As family wealth is largely undiversified and tied up in the family firm, family shareholders have greater incentives to play a monitoring role. As a result, we expect a lower likelihood of overbid on acquisition targets and more prudent estimation by managers in the presence of family shareholders. Hence, we hypothesize the following:

H1a: Family firms tend to have lower M&A deal valuations than their non-family counterparts do.

On the other hand, one component of socioemotional wealth is the satisfaction of leaving the firm as a legacy to children or the next generation(s) of the family. Family members in charge thus want the business to survive and perform well for an infinite period into the future. James (1999) shows that one of the reasons why family firms perform better than non-family firms is having 'extended horizons' of decision-making due to their wish to pass on the firm to future generations. Using a sample of manufacturing companies from five states in the U.S., Zahra et al. (2004) show evidence that long-term orientation of family firms is a resource that can be used as a competitive advantage (Barney, 1991; Wernerfelt, 1984) because it promotes greater entrepreneurship. They further show that family firms in particular (vis-à-vis non-family firms) are able to leverage this resource as family culture plays a stronger role in guiding behavior and actions of employees. Studies based on Canadian companies (Miller et al., 2008) and S&P 1500

firms (Gentry et al., 2016) provide further evidence that family firms are more long-term oriented than non-family firms.

The long-term orientation of family firms can have special implications when it comes to valuing potential acquisitions because they may be more open to benefits from acquisitions that accrue over a longer period. This also means that family firms may be able to create greater synergies with the target firm and accordingly, forecast higher future free cash flows (Barney, 1988; Collis, Montgomery, & Montgomery, 1998; Harrison, Hitt, Hoskisson, & Ireland, 1991). However, non-family firms may face greater pressure from investors to exhibit short-term performance (Laverty, 1996) and accordingly, will charge a higher WACC in discounting future cash flows. Under the long-term orientation hypothesis, indeed, the family firm may find other ways of countering the threat of losing control by using control-enhancing devices within the deal structure, e.g. by limiting the autonomy of management in the target company, while still creating economic value through acquisitions (Barontini & Caprio, 2006; Caprio et al., 2011). Therefore, we propose the following competing hypothesis:

H1b: Family firms tend to have higher M&A deal valuations than their non-family counterparts do.

2.2.2 The Role of Payment Mode

Cash, as an instrument of payment, has the advantage of being accepted on face value by both acquirers and targets, and thus facilitates the valuation of deals in a transparent manner. Use of cash is also found to simplify the deal (Servaes & Zenner, 1996). However, a cash payment increases the leverage of the acquirer, which may thence lose its competitive advantage and increase its predation risk (Fresard, 2010; Opler, Pinkowitz, Stulz, & Williamson, 1999); it also eliminates the option of co-opting target shareholders into the post-acquisition entity.

The other option is to pay through an equity swap or a private placement of equity through secondary issue; this contingent payout mode has the advantage of tying in the shareholders of the target company and induces negative insider information (if any) to come to the surface (Hansen, 1987). However, an equity transaction is usually perceived by the (stock) market as a signal of stock being overvalued (Myers & Majluf, 1984), resulting in a market correction (Amihud et al., 1990; Brown & Ryngaert, 1991; Servaes, 1991; Travlos, 1987; Wansley, Lane, & Yang, 1987), which makes target shareholders demand greater number of equity ex ante. Plus, if the stock is in

fact undervalued, using it as payment may mean the acquirer giving up more value (Hansen, 1987; Myers & Majluf, 1984). Apart from this, target shareholders may perceive an offer of stock payment just like the market, and upon receiving such an offer, presume that the stock must be overvalued and hence demand more. Thus, in conditions of high information asymmetry, bidders are more inclined to finance with equity, but at the cost of paying more (Hansen, 1987).

From a capital gains tax perspective, a cash payment mode would cause the target shareholders to pay tax on realized capital gain immediately whereas an equity payment mode would allow the tax to be deferred until the stock is actually sold. While this might influence targets to demand lower premiums in equity-based transactions, the empirical evidence fails to support any relationship between the tax-paying circumstances of target shareholders and choice of acquisition payment mode (Amihud et al., 1990; Auerbach & Reishus, 1987; Niden, 1986).

While firms in general have a variety of motivations, some of which may conflict at times, family firms are unique in their needs to protect socioemotional wealth which can be affected if an acquisition is financed through equity. Retaining control of the family business is perhaps the most important thing to enhancing SEW. It is a utility in and of itself (Schulze et al., 2001) as a reward for the hard work put into the business, and is also a necessary condition to maximize other aspects of SEW. For example, Gomez-Mejia et al. (2007) find that family-controlled Spanish olive oil mills refrained from joining a coop in order to protect their autonomy in firm decisions, even though doing so would be financially beneficial. As control is essential to the preservation of SEW, family firms would be likely to choose cash for financing acquisitions, as doing so can preserve the existing ownership structure of the family firm, and minimizes the threat of losing management control to target shareholders, who might otherwise develop a keener interest in the firm and intervene in ‘family matters’, so to speak (Caprio et al., 2011). While non-family firms that value control (such as those with concentrated ownership) may have similar preference for cash financing (Faccio & Masulis, 2005; Jung, Kim, & Stulz, 1996; Stulz, 1988; Shleifer & Vishny, 2003; Harris & Raviv, 1988), this is especially salient for family firms. Without control, family members will find it difficult to preserve the symbols and rituals that strengthen the family culture in the firm (Kellermans et al., 2012); likewise, it will be difficult to use the firm as a conduit for familial altruism as other dominant factions will question its economic rationality. In other words, paying by equity raises the threat to socioemotional wealth of the family.

Given the influence of the mode of payment on transaction values (Fuller, Netter, & Stegemoller, 2002) and acquisition outcomes (Haleblian et al., 2009), we expect the payment mode to influence the deal valuation in family firm acquisitions. From the SEW perspective of family firms, equity-based payment would increase the risk premium due to dilution of ownership and control whereas a cash-based payment, being a control enhancing mechanism, would likely reduce the risk premium related to making acquisitions. The risk premium for non-family firms which value control (e.g. blockholder preferences) can also be expected to be higher in comparison with non-family firms that do not; however, this would still be lower than family firms for whom control retention is not just an economic, but also an emotional utility. Moreover, as acquisitions are a mixed gamble for family firms, a cash-based acquisition potentially allows them to enhance SEW in the newly merged entity by being able to exercise greater control over it. Hence, if family firms pay through equity, the deal valuation is likely to be lower to reflect the fact that the family's 'socioemotional position' in the combined firm is weaker.

H2: When the payment mode is equity (cash)-dominant, family firms are more likely to have lower (higher) deal valuations than their non-family counterparts.

2.2.3 The Role of Public Governance

Poor public governance is associated with lower accountability, government effectiveness and regulatory quality; it is also associated with poor rule of law, high corruption and political instability (Kaufmann et al., 2003, 2006). Firms, both family and non-family, usually perceive greater risk in operating in countries that have weak political-legal or institutional framework. Under such circumstances, firms often incur greater transaction costs, for example, in the form of paying bribes, and are subject to higher uncertainty of outcomes (Holburn & Zelner, 2010). Foreign acquisitions are influenced by country-specific determinants, such as, institutional, regulatory, and political environments, as well as the level of corruption (Xie et al., 2017). The 'National Institutional Distance' (NID) between the countries of the acquirers and the target can alter the intended integration strategy, as well as integration outcomes (Kostova, 1999; Mtar, 2010). The incremental costs and risks associated with a target that operates under poor public governance need to be taken into account ex ante, that is, when the firm values the target³.

³Several studies also point out certain benefits to acquiring in countries with poor governance. For example, Feito-Ruiz and Menendez-Requejo (2010) find that acquirer shareholders respond positively to acquisition of targets in countries with weaker legal and institutional environments because targets are more likely to be undervalued in such countries. Xie et al. (2017) provide an in-

While these risks and benefits apply to all firms, family firms will feel particularly concerned about the quality of the public governance under which the target operates. For family firms, the aforementioned risks are more pronounced because they pose threats to socioemotional wealth too. Under conditions of poor governance, family firms will be concerned about the engagement of the acquired entity in activities that undermine the integrity and reputation of the family firm, for example, if the acquired entity gets embroiled in a corruption controversy. Reputation is an important component of socioemotional wealth, and is ‘dearer’ to family firms as it can affect the family members at a personal (via close emotional attachment) and social (via society’s tied-perception of the family and the business) level. A tarnished reputation also reduces the legitimacy of the firm and thereby its value in the long run, which goes against the family principals’ desire to leave the firm as a legacy to successive generations (another key component of socioemotional wealth, Berrone et al., 2012). As such, family firms will discount future cash flows even more than non-family firms for such targets.

Consequently, the risk associated with loss of socioemotional wealth will be higher when family firms evaluate target firms operating in poor public governance systems and vice versa. Thus, the valuation of targets under better public governance will be higher than those under poor public governance.

H3: When targets operate under good (poor) public governance, family firms are more likely to have higher (lower) deal valuations than their non-family counterparts.

2.2.4 The Role of Cross-border Acquisitions

There is generally a greater amount of information asymmetry involved when firms carry out cross-border acquisitions, leading to increased moral hazard and adverse selection problems. This arises due to the liability of foreignness (Eden & Miller, 2001; Hymer, 1976; Mezas, 2002; Zaheer, 1995) which is defined as ‘costs only foreign firms incur when operating abroad, costs foreign firms incur disproportionately to domestic firms, and benefits denied to foreign firms that are enjoyed exclusively by domestic firms.’ (Mezas, 2002, p. 268). As such, we might expect firms in general to increase their WACC in order to account for these liabilities.

depth literature review of both benefits and costs associated with country-level factors in foreign acquisitions. We do not delve too much into this here as we are more focused on factors that may have a differential impact on family firms vis-à-vis non-family firms. Also, in theory, we construe quality of public governance broadly and not just as a country-level phenomenon.

However, family firms may ultimately value targets higher than non-family firms. Unlike the latter, family members usually have most of their wealth tied up in the firm (Anderson & Reeb, 2003). In such a situation, portfolio theory (Markowitz, 1952) predicts that family members would diversify their portfolios through the operations of the business itself. One way to do that is through international acquisitions, which facilitates geographic diversification. Even though this benefit is not exclusive to family firms, it would be more valuable to them because of their undiversified position. Non-family firms, on the other hand, have shareholders who have presumably diversified their shareholdings by investing in other companies, which means that they are not particularly worried about the firm-specific risk related to holding the stock of a particular company. In other words, the marginal utility of risk diversification through an international acquisition will be higher for family firms. As such, they will have a lower WACC, leading to a higher valuation of targets.

The extent to which family firms value diversification - not just from an economic perspective but from a socioemotional perspective - qualifies the above argument. Gomez-Mejia et al. (2018) show that family firms prefer to make acquisitions that are related - possibility of losing socioemotional wealth (e.g. loss of control due to hiring new employees with required skills) trumps the benefits of diversification associated with making unrelated acquisitions. A recent meta-analysis of 76 studies by Arregle et al. (2017) echoes similar thoughts on internationalization of family firms; as with unrelated acquisitions, internationalization entails venturing into uncharted territory which creates a need to rely on human or other resources that are not available within the family. This increases the threat of losing control (and thereby SEW), for which family firms tend to internationalize less. However, Arregle et al. (2017) did not consider acquisitions as a mode of internationalization. In fact, cross-border acquisitions may be a particularly attractive way for family firms to internationalize because it presents a unique opportunity to diversify while maintaining socioemotional wealth by keeping the acquired entity 'loosely coupled' from the core family firm (Glassman, 1973; March & Olsen, 1975; Weick, 1976).

Loosely coupled units of an organization are connected, but each unit also 'preserves its own identity and some evidence of its physical or logical separateness' (Weick, 1976, p. 3). As the target firm is in a different country, the family firm should be more able to segregate the operations of this firm and operate it in a loosely coupled manner. If the acquired entity is loosely coupled, it will be able to respond to its own needs or the local environment without affecting the whole family organization. Loosely coupled systems 'potentially can retain a greater number of mutations

and novel solutions' (Weick, 1976, p. 7), so, while still integrating to the extent required to build synergies, the family firm might find it feasible to restrict the influence of the acquired target on the family core of the firm.

Therefore, we argue that the risk premium that family firms associate with loss of control and socioemotional wealth when acquiring (and as for that matter, internationalizing), can be lower in the case of cross-border acquisitions. By acquiring internationally, family firms are able to maximize the benefits of much-needed risk diversification while minimizing the potential loss to socioemotional wealth. In other words, family firms in pursuit of the mixed gamble of acquisitions see this as an opportunity to minimize SEW-loss (related to their decision to acquire) and maximize SEW-gain (related to having a more financially sound business as a result of risk diversification). As a result, their valuation of foreign targets will be higher than those of non-family firms.

H4: In the case of cross-border M&As, family firms are more likely to have higher deal valuations than their non-family counterparts.

2.3 Methodology

2.3.1 Sample

Our empirical study focuses on the firms (acquirers) from the list of Standard and Poor's (S&P) 500 index in 2003, among which 177 companies are specified as family firms by Business Week (2003). As for the information related to M&A, we extract the data from Thomson Reuter's SDC Platinum database, which not only provides the required information for the deal structure, such as the mode of payment and transaction value, but also offers basic accounting information about the target firms. Other firm-level information of acquirers is obtained from Compustat. Public governance data is from Worldwide Governance Indicators⁴ database, which assesses country-level legal and business environments on six dimensions individually. Our regression sample size is jointly determined by the available information in SDC and Compustat after we remove the financial and utility companies from the list. In the sample period of 2003-2016, we ultimately had 515 M&A cases, out of which 219 M&A deals were conducted by family firms.

⁴Definition and description can be found at <http://info.worldbank.org/governance/wgi/#home>

2.3.2 Variables

Dependent variable, Transaction value (TV): Acquisition premium, the percentage difference between the targets' pre-announcement trading price and that paid by the acquirer in acquisition (e.g. Haunschild, 1994), is frequently adopted in the literature to explore how the acquirer values the target firm. But such a measure reflects shareholder perception which is not the focus of our study. Here, we use the transaction value itself as it reflects more truly the actual valuation of targets by the managers of the acquiring firm; doing this also gives us the latent benefit of including target companies in our sample which are privately-held and do not have market price information. Further, we control the target's total assets value and the percentage of shares that acquirer seeks to purchase in the regression to minimize the concern that a larger transaction value is only due to the larger target firm; we also take the natural logarithm of the transaction value for normality issue.

Independent variable, Family firm (Family): Business Week (2003) identified 177 family firms in the S&P 500 index in 2003. Similar to that in Anderson and Reeb (2003), a firm is defined as family business if the family is actively engaged in top management, firm governance or holds considerable equity ownership. Thus, a dummy variable (*Family*) is employed to indicate whether the firm is a family business, where it is recorded as 1 for the firm with its name in the list of 177 family firms and 0 otherwise. Having a binary variable to reflect family influence allows us to take into account the variety of ways that control can be exercised by family members, e.g. through ownership, presence in the board and/or top management; in that sense, it is a more composite measure. Furthermore, using differences in the amount of shares owned may not actually reflect the amount of family influence (Anderson and Reeb, 2003). We used the same list of family firms for the entire sample period from 2003 to 2016 in order to control potential survivorship bias.

Moderating variable, Stock as dominant payment mode (Stock): The way that acquirers choose to pay (cash or stock) target firms' shareholders is the outcome of negotiation between the two parties and is a 'complex' choice (Fuller et al., 2002, p. 1791). Since many acquisition cases are completed by using a combination of stock and cash as the payment mode, we measure the payment choice (equity-dominant) in the acquisition deal by a dummy variable, which is valued at 1 if the % of stock used outweighs % of cash used to finance the transaction and 0 otherwise.

Moderating variable, Cross-border acquisition (cross_acq): We employ a dummy indicator to denote the target firm location. If the target is outside US, the indicator is valued at 1 and 0 otherwise.

Moderating variable, Public Governance (PG): We employ the measures in World Governance Indicator, which assesses the country-level legal and business environment on six dimensions. The six measures refer to Voice and Accountability (VA), Political Stability and Absence of Violence (PSAV), Government Effectiveness (GE), Rule of Law (RL), Control of Corruption (CC) and Regulatory Quality (RQ). Since the six measures are in the same scale between -2.5 to 2.5, we compute the average value to proxy the aggregate rating for quality of public governance (PG). To compare the different environments under which target firms operate, we then created 7 dummy indicators to specify whether the target operates under better quality of public governance using each of the six dimensions and overall. Each dummy is valued at 1 if the target is in a region with better public governance and 0 otherwise.

Control variables: The following control variables are adopted to mitigate the influence of both acquirer and target firm characteristics on acquisition deal value based on the extant literature (Collins et al., 2009; Huizinga & Voget, 2009; Martynova & Renneboog, 2008; Miller et al., 2010; Morosini et al., 1998). In terms of acquirer firm, we control for *Size*, which is the natural logarithm of acquirer's total asset value and *Leverage* which is captured by the ratio of total debt over total assets. *Cash* tracks the cash-holding of acquirer firm to proxy its ability to use cash payment for the deal. *Age* records the months the acquirer firm has operated since it first appeared in Compustat as it grasps the potential experience that acquirer has in dealing with acquisition. *TobinQ* measures whether the shares of acquirer firms are overvalued and is computed by the sum of total debt and market equity value over total assets. *PPE* is the ratio of property, plant and equipment value scaled by total assets, and *ROA* refers to the firm operating performance. For the target firms with limited information in SDC, we can only control for *T_asset*, which is the total assets value of target firm. *Shares%* records the percentage of target firm shares that acquirer is seeking to purchase. *Div* which is to explore whether acquirer and target firms are in different industries as the benefits for family firms to diversify their risk by acquiring firms in other industry may enable acquirer to make a concession in deal value they are willing to pay, and *T_private*, which documents whether the target firm is privately held since greater information asymmetry makes it harder for the acquirer to predict target firm value.

2.3.3 Empirical Analyses & Results

We employ the multiple regression techniques to test our hypotheses. In addition, we run the analysis with robustness standard errors to alleviate the heteroscedasticity concerns and control the industry and year effects for industrial characteristics and business cycle. The family firm indicator as the independent variable is to determine whether family firm differs with non-family firm in target firm valuation, while the interaction terms between family indicator and moderators including payment mode, international acquisition and legal environment of target company are used to capture the moderating effect.

Table 2.1 reports the descriptive statistics and correlations for the full sample. The average value of M&A transaction is at 460 million US dollars ($\ln 460 = 6.132$) and 42.5% of our sample deals are completed by family firms. Acquirers are less likely to choose stock (5%) as the main payment mode and tend to avoid privately-held targets (9%) possibly due to higher levels of information asymmetry. In addition, 45% of the acquirers are looking for targets outside their own industry. On average, the acquiring firm has been established for more than 40 years (482 months) and has positive operating performance. Many of the variables are significantly correlated with each other. Transaction value is positively related to family acquirers but not significant. Further, transaction value is also significantly related to the payment mode and target location such that when stock is used as the payment mode or targets are in US, the transaction value tends to be significantly higher. The correlation matrix also indicates that family acquirers have shorter life span (*Age*) and higher firm value (*TobinQ*). Meanwhile, they are less likely to use stock for payment or conduct cross-border acquisitions.

Table 2.2 provides the comparison of our key variables in terms of their descriptive statistics. There are 296 deals conducted by non-family acquirers and 219 deals by family acquirers. Non-family acquirers tend to be larger, and the targets they are seeking are also larger. Further, non-family acquirers are more experienced and have higher leverage. As for the cross-border acquisitions, the average and median deal values are significantly lower than those in domestic acquisitions. In addition, acquirers use more cash than stock in international acquisitions, and are looking for overseas targets located in regions with better business and legal environment.

Table 2.1 Descriptive Statistics and Correlations

	N	Mean	SD	Med.	TV	Family	Stock	Cross_acq	Size	Leverage
TV	515	6.132	1.956	6.214	1.000					
Family	515	0.425	0.495	0.000	0.049	1.000				
Stock	429	0.049	0.216	0.000	0.144***	-0.047	1.000			
Cross_acq	515	0.338	0.473	0.000	-0.336***	-0.083*	-0.090*	1.000		
Size	515	9.890	1.280	9.892	0.288***	-0.059	-0.055	-0.010	1.000	
Leverage	515	0.474	0.176	0.463	0.116***	-0.243***	-0.019	-0.074*	0.145***	1.000
Cash	515	0.100	0.078	0.080	-0.138***	0.174***	-0.018	-0.036	-0.182***	-0.232***
Age	515	482.136	220.516	528.000	0.098**	-0.328***	-0.008	-0.020	0.398***	0.394***
TobinQ	515	2.084	1.139	1.830	-0.153***	0.159***	0.002	0.119***	-0.157***	-0.267***
PPE	515	0.385	0.287	0.295	-0.009	-0.126***	0.117**	0.082*	-0.039	0.180***
ROA	515	0.068	0.076	0.070	-0.084*	-0.036	-0.093*	0.096**	0.193***	-0.077*
T_asset	515	1717.370	5356.732	248.000	0.290***	-0.066	0.090*	-0.025	0.282***	0.076*
Share%	515	84.189	32.233	100.000	0.458***	0.013	0.065	-0.338***	-0.141***	0.020
Div	515	0.454	0.498	0.000	-0.036	-0.059	0.036	-0.009	0.144***	-0.045
T_private	515	0.089	0.285	0.000	-0.249***	0.006	-0.064	0.280***	-0.178***	-0.053
PG	515	0.219	0.414	0.000	-0.212***	-0.095**	-0.055	0.742***	-0.056	-0.094**
	Cash	Age	TobinQ	PPE	ROA	T_asset	Share%	Div	T_private	PG
Cash	1.000									
Age	-0.320***	1.000								
TobinQ	0.251***	-0.367***	1.000							
PPE	-0.305***	0.249***	-0.198***	1.000						
ROA	0.021	-0.007	0.391***	-0.070	1.000					
T_asset	-0.116***	0.135***	-0.155***	0.088**	-0.067	1.000				
Share%	-0.024	0.031	-0.192***	-0.064	-0.111**	-0.099**	1.000			
Div	-0.088**	0.088**	-0.084*	0.022	0.064	-0.019	0.079*	1.000		
T_private	0.085**	-0.120***	0.058	-0.062	0.063	-0.088**	0.072	0.029	1.000	
PG	-0.014	0.005	-0.012	0.070	0.044	-0.054	-0.111**	0.063	0.229***	1.000

Table 2.2 Descriptive Statistics of Subsamples

*** p<0.01, ** p<0.05, * p<0.1

	<i>Family=0</i>			<i>Family=1</i>			Compare-mean	Compare-median	<i>Cross_acq=0</i>			<i>Cross_acq=1</i>			Compare-mean	Compare-median
	n	Mean	Median	n	Mean	Median			n	Mean	Median	n	Mean	Median		
<i>TV</i>	296	6.050	6.133	219	6.242	6.300	-1.101	-1.135	341	6.600	6.783	174	5.214	5.231	8.070***	7.714***
<i>Stock</i>	242	0.058	0.000	187	0.037	0.000	0.971	0.971	312	0.061	0.000	117	0.017	0.000	1.876*	1.871*
<i>Size</i>	296	9.955	10.011	219	9.803	9.698	1.340*	1.411	341	9.899	10.024	174	9.873	9.738	0.218	0.653
<i>Leverage</i>	296	0.511	0.510	219	0.424	0.417	5.677***	5.941***	341	0.484	0.465	174	0.456	0.446	1.679*	1.934*
<i>Cash</i>	296	0.088	0.070	219	0.116	0.097	-4.001***	-4.914***	341	0.102	0.081	174	0.096	0.075	0.811	0.924
<i>Age</i>	296	544.338	648.000	219	398.064	336.000	7.787***	7.286***	341	485.238	534.000	174	476.057	528.000	0.447	0.497
<i>TobinQ</i>	296	1.929	1.768	219	2.295	1.936	-3.655***	-2.722***	341	1.987	1.830	174	2.274	1.830	-2.722***	-1.455
<i>PPE</i>	296	0.416	0.322	219	0.343	0.214	2.884***	4.342***	341	0.368	0.273	174	0.418	0.343	-1.863*	-2.016
<i>ROA</i>	296	0.070	0.068	219	0.065	0.071	0.818	-0.206	341	0.063	0.069	174	0.078	0.073	-2.177**	-2.195**
<i>T_asset</i>	296	2022.467	243.850	219	1305.002	275.100	1.505*	-0.111	341	1814.551	332.800	174	1526.919	170.350	0.576	3.593***
<i>Share%</i>	296	83.833	100.000	219	84.671	100.000	-0.291	-0.147	341	91.964	100.000	174	68.953	100.000	8.134***	8.544***
<i>Div</i>	296	0.480	0.000	219	0.420	0.000	1.344	1.343	341	0.457	0.000	174	0.448	0.000	0.198	0.198
<i>T_private</i>	296	0.088	0.000	219	0.091	0.000	-0.137	-0.137	341	0.032	0.000	174	0.201	0.000	-6.608***	-6.350***
<i>PG</i>	296	0.253	0.000	219	0.174	0.000	2.171**	2.163**	341	0.000	0.000	174	0.649	1.000	-25.085***	-16.827***

Table 2.3 Main Results

	(1) <i>TV</i>	(2) <i>TV</i>	(3) <i>TV</i>	(4) <i>TV</i>
<i>Family</i>	0.177 (0.197)	0.124 (0.386)	0.054 (0.712)	-0.083 (0.596)
<i>Stock</i>		1.138*** (0.000)		
<i>Family*Stock</i>		-1.189** (0.014)		
<i>Cross_acq</i>	-0.363** (0.026)	-0.284 (0.107)		-0.675*** (0.001)
<i>Family*Cross_acq</i>				0.819*** (0.005)
<i>PG</i>			-0.456** (0.048)	
<i>Family*PG</i>			0.674* (0.054)	
<i>Size</i>	0.454*** (0.000)	0.447*** (0.000)	0.456*** (0.000)	0.455*** (0.000)
<i>Leverage</i>	0.780** (0.041)	1.123** (0.010)	0.879** (0.021)	0.846** (0.028)
<i>Cash</i>	-1.490* (0.068)	-1.114 (0.206)	-1.118 (0.172)	-1.186 (0.145)
<i>Age</i>	-0.001** (0.015)	-0.001*** (0.007)	-0.001** (0.014)	-0.001** (0.015)
<i>TobinQ</i>	0.135* (0.063)	0.112 (0.183)	0.134* (0.058)	0.117 (0.103)
<i>PPE</i>	0.130 (0.635)	-0.105 (0.710)	0.089 (0.742)	0.110 (0.685)
<i>ROA</i>	-1.873* (0.053)	-1.433 (0.279)	-2.081** (0.025)	-2.063** (0.029)
<i>T_asset</i>	0.000** (0.030)	0.000*** (0.001)	0.000** (0.036)	0.000** (0.027)
<i>Share%</i>	0.031*** (0.000)	0.028*** (0.000)	0.033*** (0.000)	0.031*** (0.000)
<i>Div</i>	-0.361*** (0.008)	-0.470*** (0.003)	-0.359*** (0.008)	-0.377*** (0.005)
<i>T_Private</i>	-1.346*** (0.000)	-1.087*** (0.000)	-1.457*** (0.000)	-1.330*** (0.000)
Controls	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes
Observations	515	429	515	515
R-squared	0.502	0.522	0.503	0.511
F-test/Wald-chi2	44.84***	28.98***	44.81***	43.81***

*** p<0.01, ** p<0.05, * p<0.1

The main results from our regression analyses are displayed in Table 2.3. The coefficient of *Family* in Column (1) is positive but not statistically significant, suggesting that family acquirers in general will not differ from non-family acquirers in evaluating the target. So, our hypothesis 1 is rejected. Hypothesis 2 is examined by introducing the interaction term into Column (2) which explores whether family acquirers will pay less if the stock is the primary payment mode. Indeed, the interaction term of family acquirer and stock payment is negative and significant, indicating that when stock is chosen as payment method, family acquirer will pay a lower transaction value since the stock payment may dilute the family ownership and weaken family control, imposing a loss to family SEW. On the other hand,, when cash is chosen family acquirers can accept a higher transaction value to preserve family SEW. Therefore, hypothesis 2 is supported. In column (3), we see whether the target operating under better quality of public governance influences the transaction value. As expected, the coefficient of interaction is significantly positive at 0.674. In addition, we explore and display the influence of each of the six dimensions of public governance in the left panel of Table 2.4 and find that the moderating effect is consistently positive. Thus, we find support for Hypothesis 3 that family acquirers will pay more for target companies operate under better legal and business environments, which reduce threats to their socioemotional wealth. The results related to cross-border acquisition are summarized in Column (4) where a positive and significant coefficient of interaction term indicates that family acquirers are willing to pay more for those targets outside US as loosely coupled international acquisitions can bring diversification benefits to the firm, providing empirical evidence for Hypothesis 4.

2.4 Robustness Check and Post-hoc Analysis

In this section, we check the robustness of the results for hypothesis 3 using a different measure for the environment under which the target firm operates. La porta et al. (1997, 1998) initially compiled the anti-director index as a measure to gauge the shareholder protection in different countries. The index has six components, three of which are related to voting rights and the rest are concerned with minority shareholder protection. Djankov et al. (2008) put forward a new measure by focusing on minority protection based on the legal rules of 72 countries in 2003. Spamann (2009) revisited the anti-director index and gave the most updated version of shareholder right protection in 2005. To make it consistent with our sample years, we adopt the two indices

(ADR03⁵ and ADR05) from Djankov et al. (2008) and Spamann (2009), respectively. Further, we also take the average of the two indices as an additional measure. Similar to how we construct the variable of public governance, we use three dummy indicators (ADR05_dum, ADR03_dum and ADR0305_dum) to specify whether target country has better shareholder right protection and they are coded as 1 if target country has better shareholder right protection. In addition, we also record the real differences of shareholder protection between acquirer and target countries in the following three continuous variables: dADR03, dADR05 and dADR0305. A positive value indicates that target country has better shareholder right protection. The results are presented in the right panel of Table 2.4 and strongly reconfirm hypothesis 3. The interaction terms in all columns except Column (3) are significantly positive, indicating family firms will have a lower valuation when the target is located in regions with weak investor protection. This is also in line with the results of Requejo et al. (2018) who find that legal systems that have strong shareholder orientation positively influence the family firm's propensity towards making an acquisition.

⁵ The scales of several countries are not given in ADR05, leading to less observations for regression sample.

Table 2.4 Moderating Effects of Public Governance Dimensions & Results from Robustness Tests

	(1)	(2)	(3)	(4)	(5)	(6)		(1)	(2)	(3)	(4)	(5)	(6)
Family	-0.023 (-0.877)	0.047 (-0.745)	0.978*** (-0.003)	0.071 (-0.625)	0.009 (-0.950)	0.066 (-0.642)	Family	-0.031 (-0.836)	-0.044 (-0.774)	0.063 (-0.670)	-0.048 (-0.757)	-0.045 (-0.766)	-0.091** (-0.561)
VA	-0.718*** (-0.002)						dADR05	-0.282*** (0.000)					
Family*VA	0.910*** (-0.008)						Family*dADR05	0.268** (-0.018)					
PSVA		-0.454** (-0.038)					dADR05_dum		-0.699*** (-0.001)				
Family*PSVAV		0.682** (-0.046)					Family* dADR05_dum		0.673** (-0.026)				
GE			-0.604*** (-0.007)				dADR03			-0.337** (-0.015)			
Family*GE			0.973*** (-0.007)				Family*dADR03			0.261 (-0.208)			
RL				-0.393 (-0.106)			dADR03_dum				-0.735*** (-0.001)		
Family*RL				0.655* (-0.072)			Family* dADR03_dum				0.667** (-0.041)		
CC					-0.625*** (-0.006)		dADR0305					-0.357*** (-0.001)	
Family*CC					0.870** (-0.013)		Family* dADR0305					0.359** (-0.022)	
RQ						-0.538** (-0.041)	dADR0305_dum						-0.722*** (-0.001)
Family*RQ						0.873** (-0.035)	Family* dADR0305_dum						0.771** (-0.012)
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Constant	Yes	Yes	Yes	Yes	Yes	Yes
Control	Yes	Yes	Yes	Yes	Yes	Yes	Control	Yes	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes	Yes	Year dummy	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes	Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes
Observation	515	515	515	515	515	515	Observation	514	514	501	501	501	501
R-squared	0.51	0.503	0.507	0.501	0.507	0.504	R-squared	0.511	0.511	0.501	0.509	0.507	0.509
F-test	43.66***	42.86***	45.28***	42.60***	44.63***	43.27***	F-test	43.91***	43.73***	40.08***	41.01***	40.88***	41.03***

*** p<0.01, ** p<0.05, * p<0.1

Till now we have seen how SEW can create differential valuations between family and non-family firms under three circumstances. Here, we narrow our focus to heterogeneity in the governance of family firms and whether it creates differential valuation between family firms. The board chair is arguably the apex decision-maker within the firm, especially in the case of decisions like M&As. This role attains additional significance when in family firms the chair is a family member; in such family firms, the impact of SEW on decisions is likely to be greater (Berrone et al., 2012). We hand-collect data from the annual reports and proxy statements of companies in the sample during the sample period and build the following three variables: (1) *Family Chair*, which is 1 if the Chairperson of the Board of Directors is a family member, and zero otherwise; (2) *Founder Chair*, which is 1 if the Chairperson of the Board is a founding family member and zero otherwise; and (3) *Descendant Chair*, which is 1 if the Chairperson of the Board is a descendant of the founder(s) and zero otherwise.

We first run ANOVA analysis to examine the difference of means with regard to transaction value for four different groups including non-family firms, family firms with founder board chair, family firms with descendant board chair and family firm with non-family board chair. This transaction value is scaled by the acquired percentage of target shares so that it denotes the target value as a whole. The results are displayed in Table 2.5 where mean value of the deal in each group is presented and number of observations is also reported in brackets. To examine the statistical significance of difference in mean, we adopt Tukey tests for each pairwise comparison. Among our family acquisition sample, 75 deals were completed by firms with family board chair and 131 deals were conducted by firms with non-family board chair. Further, family board chairs are classified into two subgroups by their generations, resulting in 57 transactions of family firm with founder board chair and 18 transactions of family firm with descendant board chair. In the full-sample comparison, we do not find any significant difference in means of the four groups. When stock dominates the payment mode, however, founder board chairs and descendant board chairs show large difference in the bid price of target with 1.208 from founder board chair and 4.182 from descendant board chair. However, the comparison result of these two groups might not be convincing due to the limited number of observations, which in turn suggests that family board chairs are very unlikely to use stock as payment mode in acquisition. When target is located outside the U.S, furthermore, we find significantly different behavior from family firms with descendant

board chair. Specifically, family firms with descendant board chair on average are willing to pay a considerably higher price to target compared with family firm with founder board chair and non-family firm and this distinct behavior is also pronounced for those acquisitions with targets located in better environment of public governance.

To further explore the heterogeneity issue (governance) of family firm and its impact on target valuation, we also conduct the multiple regression analysis in our family acquisition sample by using family board chair indicator as independent variable. As seen in the left panel of Table 2.6, family firms whose board chair is also a family member pay less than other family firms when the acquisition is paid for by equity. This effect is highly significant (at the 1% level) and suggests that the effects of SEW can vary even among family firms. Interestingly, we do not find any differences when it comes to making acquisitions of foreign targets and those operating under better public governance.

So we dig a bit further for finer grained heterogeneity and check for any differences in behavior between a founder family chair and a descendant family chair (the right panel of Table 2.6). As expected, they behave similarly when it comes to using the mode of payment as a stop-(SEW)-loss tool, but differently in the other two contexts. We argue that these differences exist because founders and descendants perceive SEW in different ways. We discuss these findings more in the following section.

Table 2.5 Results from ANOVA Analysis with Regard to Transaction Value

Group	Full sample	Payment mode		Geographic distance		Target legal environment	
		Cash	Stock	Domestic	International	Poor	Sound
1:Non-family firm	2.198 (296)	2.331 (228)	3.406 (14)	2.514 (186)	1.663 (110)	2.384 (221)	1.648 (75)
2:Family firm with founder chair	2.124 (57)	2.306 (46)	1.208 (1)	2.306(35)	1.834 (22)	2.257 (42)	1.750 (15)
3:Family firm with descendant chair	2.575(18)	2.345 (12)	4.182 (1)	2.246 (10)	2.986 (8)	2.465 (17)	4.446 (1)
4:Family firm with non-family chair	2.279 (131)	2.273 (111)	2.930 (4)	2.295 (102)	2.222 (29)	2.269 (112)	2.340 (19)
Between-group comparison*(* p<0.1)					3>1,2		3>1,2

Table 2. 6 Family Board Chair and Transaction Value of Acquisition & Founder Board Chair Vs. Descendant Board Chair

	(1)	(2)	(3)	(4)		(1)	(2)	(3)	(4)
Family Chair	-0.27 (-0.214)	0.025 (-0.916)	-0.169 (-0.496)	-0.181 (-0.464)	Founder Chair	-0.225 (-0.369)	0.055 (-0.837)	0.122 (-0.660)	-0.028 (-0.920)
Stock		0.407 (-0.434)			Descendant Chair	-0.406 (-0.255)	-0.084 (-0.829)	-0.907** (-0.017)	-0.482 (-0.189)
Family Chair*Stock		- (0.000)			Stock		0.39 (-0.457)		
Cross_acq			0.297 (-0.360)		Founder Chair*Stock		-1.692** (-0.030)		
Family Chair* Cross_acq			-0.314 (-0.480)		Descendant Chair*Stock		-1.938** (-0.028)		
PG				0.195 (-0.700)	Cross_acq			0.321 (-0.320)	
Family Chair*PG				-0.399 (-0.480)	Founder Chair*Cross_acq			-0.774* (-0.100)	
					Descendant			1.241* (-0.053)	
					PG				0.089 (-0.867)
					Foundre Chair*PG				-0.631 (-0.278)
					Descendant Chair*PG				1.701** (-0.020)
Constant	Yes	Yes	Yes	Yes	Constant	Yes	Yes	Yes	Yes
Control	Yes	Yes	Yes	Yes	Control	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Year dummy	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Industry dummy	Yes	Yes	Yes	Yes
Observation	515	515	515	515	Observation	514	514	501	501
R-squared	0.51	0.503	0.507	0.501	R-squared	0.511	0.511	0.501	0.509
F-test	43.66**	42.86***	45.28**	42.60***	F-test	43.91***	43.73***	40.08***	41.01***

*** p<0.01, ** p<0.05, * p<0.1

2.5 Discussion

The decision to acquire is a quandary for family firms much like the scenario facing Sophie in the novel, “Sophie’s Choice” (Styron, 1979), where Sophie is a mother who is forced to choose to let only one of her two children survive. Previous studies suggest that family firms will acquire other firms (and lose some control in the process) only when not doing so poses a threat to their survival. So what happens next, after the question has been answered and Sophie has made her choice? Does the urge to protect socioemotional wealth have any influence on the acquisition process? This paper is our attempt to answer that question to some extent by focusing on the target valuation part of the acquisition process. The findings suggest that family firms can differ from non-family firms in their valuation of targets depending on whether the context of the deal presents losses and/or gains to SEW.

The first context we look at is the payment mode. One way that families can preserve control is to avoid paying the target by equity to limit dilution of family ownership. Paying (at least in majority) by cash means that the firm can have more controlling votes within the family and less among ex-shareholders of the target. However, it is not always possible to pay by cash. Target shareholders may have their own preferences and the family firm may also be strapped for liquidity given that it is not doing well financially. In such cases, it does not have a choice but use equity to finance the transaction. In that case, we do see that family firms tend to discount the associated loss of control resulting in lower target valuations.

We find further evidence of the contextual influence of SEW when we see that family firms have a higher deal valuation when the target companies operate in environments characterized by better quality of public governance and also when family firms make international acquisitions. For family firms who have decided to acquire, going cross-border is highly attractive because it allows them to retain control of the core family firm by treating the acquired target as a ‘loosely coupled’ unit. Through loose coupling of the foreign target, the firm can integrate enough to take advantage of the synergies of the acquisition while the geographic distance allows them to keep the management and owners of the target at arm’s length. This ability to ‘loosely couple’ the acquired target is also an especially lucrative opportunity for family firms looking to diversify. Gomez-Mejia, Makri and Kintana (2010), looking at 160 family firms (and 200 non-family firms) during the period 1998-2001, find that socioemotional wealth concerns lead family firms to

diversify less, but when they do, it is done domestically rather than internationally. They use the entropy index to measure overall diversification and foreign sales/total sales as a measure of international diversification (Hitt et al., 1997), but do not go as far as to differentiate between diversification done organically versus those done through acquisitions. Our results indicate that the loose-coupling attribute of international acquisitions can also make them an attractive avenue for diversification.

Our results illustrate why acquisitions are a mixed gamble for family firms. The need to acquire initiates a juggling game where family firms try to minimize the loss and maximize the gains related to existing and future SEW respectively. Target valuation reflects this game: SEW losses perceived in targets that operate under poor public governance and require equity-payment; potential SEW gains in targets that are located across borders and paid for with cash. In post-hoc analyses, we see heterogeneity in perception of these SEW gains and losses even within family firms. While both founder and descendant board chairs in family firms have similar perceptions in the case of payment mode, they differ in the other two cases.

In comparison to non-family firms, family firms gain additional utility from the reputation of their businesses, and as a result, we find them valuing targets operating under better public governance higher than non-family firms. The onus is on minimizing the SEW loss that might result from jeopardizing reputation in institutionally weak environments. Finer-grained analyses within our family firm sub-sample suggest that descendant leaders are particularly sensitive to this SEW loss and we attribute this to differential perception of SEW (here the reputational component) between founders and descendants. We argue that the referent levels of reputation for descendants are higher than those of the founders. While descendants are used to a certain status or reputation (of family or business), founders have actually built this from scratch. In the initial days of the business, founders likely had to adopt an effectuation approach (Sarasvathy, 2001) where the quality (good or bad) of legal and other institutions were taken as given and something that they had to make the best out of. It was not a choice. Furthermore, they may even draw on family ties to fill such institutional gaps (Ge et al., 2019). Descendants, on the other hand, have the advantage of an established and structured business (Stewart and Hitt, 2012) which allows them to take a causation approach (Sarasvathy, 2001). In other words, the referent level of reputation for founders is zero (or relatively low) while that for descendants is the status quo (or relatively high). Thus

within a family context, descendant leaders see a loss in SEW from acquiring targets operating under poor public governance while founders do not.

Differential perceptions of SEW gains and losses between founders and descendants are also seen in the decision to acquire cross-border. Founders fixate on minimizing SEW loss in a cross-border acquisition while descendants try to maximize the gain. Again, the referent SEW is different for each of them. When it comes to SEW, founders have the satisfaction of having created a successful business -a legacy- that will provide livelihood for current and future family members; their next goal is to pass this on to their successors. Making a cross-border acquisition increases uncertainty and unfamiliarity that the founder would rather not deal with. In other words, the founders are anchored to the original state of SEW that existed when making the decision to acquire (Fang et al., 2019). Descendant leaders, on the other hand, see an opportunity to enhance SEW. Descendant leaders are expected to hold on to the business built by the founding family members while not receiving the credit for the business' success, even if part of that success is a result of their, rather than the founders' efforts. They suffer from the social perception that they have been born with a silver spoon and had their food served on a platter. The foreign acquisition allows them to enhance their SEW in this regard; as it can be loosely coupled, descendant leaders see this as their own little project that they can develop and be known for. Moreover, loose coupling also ensures that the core family firm stays intact, thus preserving what was built by the founders.

Overall, we find in this paper that the influence of SEW is not limited to the acquisition decision itself, but permeates to the process of acquisition such that target valuation is influenced by the family SEW in a context-specific way. Moreover, we see that there is no absolute stock of family SEW; with its roots in cognitive psychology (Sharma et al., 2019), SEW can be perceived in different ways by various family members.

2.6 Conclusion and Future Research Directions

In this paper, we have tried to move beyond the decision to acquire and instead focus on the acquisition process; more specifically, our contribution is in how family firms differ from non-family firms in target valuation under the payment type, institutional and international context. While family firms do not significantly differ from non-family firms in target valuation (*ceteris paribus*), our empirical results confirm that contextual differences do exist. When family firms

engage in equity-based transactions, for example, to outbid a competing acquirer, their valuation of the target is affected negatively due to the additional risk of losing control to a group of non-family ex-target equity-holders. Furthermore, we find that international acquisitions in general are more attractive to family firms due to benefits of risk diversification and loose-coupling – both of these act in concert to increase family firm's valuation of targets. Moreover, family firms are willing to pay more to acquire targets operating under better public governance as they perceive lower reputational risk in associating with them. Post-hoc analyses on the family firm heterogeneity reveal finer-grained findings: while both founder and descendant board chairs value targets that can be financed with cash, descendants show a stronger preference for targets with better public governance and ones that are located cross-border.

Our study suffers several limitations, which in turn pave avenues for multiple future research directions. First, the information of deal structure can only be observed for acquisitions that have been successfully completed, leading to survivorship bias that might blur our results. For the firms in S&P 500 index, their intention for acquisition and corresponding deal value as well as payment mode related to transaction will not be disclosed or captured by the database if the acquisition ultimately fails. However, as these unobserved cases also indicate how the acquirers value the targets, they should ideally be included in regression sample. For instance, compared with non-family acquirers, a large portion of family firms might give a relatively lower deal value to targets; owners of target firms, however, will not accept the bidding price, leading to the failure of the acquisition. As a result, only those family firms with higher bidding price will go through the negotiation and reach consensus with the targets. Thus, we may observe that family firms do not differ from non-family firms in those successful M&As as only family firms with higher bidding prices can “survive”. Future research can attempt to solicit information from investment banks and enrich the empirical test by using a more inclusive sample of intended, as well as, completed acquisitions.

Second, a strong body of literature has established that family firms want to retain control over their businesses to protect their socioemotional wealth and this desire affects entrepreneurial strategies such as acquisitions, diversification, and internationalization. In this paper, we have shown how loose-coupling may allow family firms to protect their SEW while also making acquisitions. We would like to invite scholars to delve further into other contexts where loose coupling opportunities exist for family businesses. A recent study (Chirico et al., 2019) finds that

family firms prefer mergers over other exit options such as dissolution or sale of the firm as they allow them to preserve ‘some’ SEW by continuing to be involved in the business. Future related-research might study whether family firms (as targets) are willing to discount their valuation when being acquired by foreign entities. This may be a possibility if these family firms expect to be more loosely coupled in comparison to being taken over by a local business.

Third, several extant studies identify the link between enlarged CEOs pay and acquisition activities (Aguinis et al., 2018; Kolev et al., 2017; Tosi et al., 2000), CEOs in acquiring firms therefore are very likely to overbid the target at the expense of shareholders. Meanwhile, CEO’s incentives to promote their personal interests might also play a role in the deal structure. For instance, CEO’s bonus in performance-based contract is often tied to earnings per share. Thus, CEO might be reluctant to issue new shares to finance the acquisition as s/he may not be able to exceed the benchmark due to the share dilution (Cheng et al., 2015). The agency issue will also emerge in the target firm when the new manager is hired. Cruz et al. (2010) point out that when it is hard to predict the agent’s behavior, the perception of opportunism will dominate trust. In our case, the information asymmetry between the manager in the target firm and the family shareholders grows the potential of managerial opportunism, leading to the increased principal risk bearing. Consequently, the aggravation of risk perception drives family shareholders to demand a larger risk premium and ultimately to give a lower valuation of the acquisition target. Hence, another future research direction is to look at the CEO’s compensation structure and trust issues in family firm and how they shape the deal structure and target valuation simultaneously in the acquisition.

Fourth, our results demonstrate that sound public governance under which the target operates will mitigate the family owner’s concerns about the loss of SEW in international acquisitions. Yet, several other country-specific determinants also play a critical role in foreign acquisition decisions and complicate the mixed gamble for family firms. For instance, the cultural distance between acquiring and target countries will not only create misunderstanding during the coordination due to the differences in norms and values (Hofstede, 1980), but also bring difficulties in communication and transferring competencies between acquirer and target firms in post-acquisition integration (Kogut and Singh, 1998; Gomez-Mejia et al., 2010) , imposing a higher financial burden on the acquirer as it requires more resources input to resolve the aforementioned problems (Dou et al., 2019). In addition, the operation of foreign target after acquisition calls for

a local manager with the ability of understanding cultural and environmental differences, raising the threat to family control and loss of SEW (Gomez-Mejia et al., 2010). Future studies can investigate whether family acquirers incorporate other country-level factors in addition to public governance such as cultural distance in their target valuation. Finally, our post-hoc analysis reveals the relevance of family board chair in target valuation. Specifically, founder chairs prioritize the preservation of SEW in a cross-border acquisition while descendants tend to maximize the gain. However, the influence of other non-family board members on the perceived mixed gamble of acquisitions for family firms should not be overlooked. Hence, future studies may examine the board composition in family firms and its impacts on acquisition. For instance, the presence of independent board directors may restrain family owners' expropriation (Anderson & Reeb, 2004) and alter the deal valuation as family owners are willing to sacrifice financial wealth (higher target valuation) at the expense of minority shareholders to retain family control (cash payment). Further, several studies (Anderson & Reeb, 2004; Jones et al., 2008) specify the advisory role of affiliate directors in family firm. On one hand, affiliated directors without weakening family control are more likely to facilitate the strategies in acquisition that benefit the family owners' preservation of SEW. On the other hand, their experience and knowledge can help overcome the cultural barrier and mitigate perceived risk in cross-border acquisitions (Jones et al., 2008).

Third, it has been recently recognized that characteristics of top management teams play important roles in promoting firms' entrepreneurial activities (Carpenter, Geletkanycz, & Sanders, 2004; Hambrick, 2007), the area that family firm's acquisitions fall into. Thus, another future research direction is to look at top management teams' characteristics, especially those of family members who are involved in the top management teams, and from the upper echelon perspectives (Hambrick, Humphrey, & Gupta, 2015; Hambrick & Mason, 1984), explore how they interact with firm-level factors, such as corporate governance mechanism, firm performance, etc., and affect family firms' acquisition decisions. By doing so, the theoretical framework will be expanded further along the lines drawn by the behavioral agency theory (Chrisman & Patel, 2012).

Finally, the heterogeneity of family firm strategic behavior should also call for scholars' attention as Chua et al. (2012) suggest. Future studies can address other dimensions of family involvement in business, such as family management and intergeneration succession plan, in terms of M&A activities. For instance, if the founders of family firms have intention to relay the baton to their descendants, they may avoid any activities resulting in equity financing since successors,

unlike the founders with established prestige and long-term relation with other stakeholders, might only rely on family ownership to exert their influence in firm. As a result, they are even less likely to get involved with acquisition or acquisition with stock as payment mode.

CHAPTER 3: ESSAY 2

Groupthink in the board of family firms: the case of institutional investment

Abstract

In this paper, we explore groupthink in the boards of family firms and its implications for institutional investors in these firms. Using Janis' (1982) model of groupthink, we argue that family firms are particularly susceptible to groupthink, which can increase type 2 agency costs between family owners and institutional investors in these firms. Using a sample of firms from the S&P 500, we find that institutional investors, discouraged by groupthink in family firms, invest less in them. However, appropriate corporate governance in the form of greater board diversity, lower director tenure, busier boards, more financial disclosure and bigger shareholder voice can help in alleviating these concerns. We also explore the heterogeneity in family firms that have different generations of family members on board and find that groupthink is likely to be higher in them, but the presence of independent directors can be an alleviating factor.

3.1 Introduction

Though family firms have the advantage of lower type 1 agency costs between family owners and managers, conflicts of interest between family and non-family owners give rise to type 2 agency costs, such as, when families tunnel the firm's wealth towards themselves (Villalonga and Amit, 2010; Bertrand et al., 2002) or use the firm to meet family priorities (Kellermanns et al., 2012). While a strong body of literature has grown around governance and agency issues in family firms (Villalonga et al., 2015), the phenomenon of groupthink has garnered relatively less attention. Groupthink has been described by Janis (1971) as "the mode of thinking that persons engage in when *concurrence-seeking* becomes so dominant in a cohesive ingroup that it tends to override realistic appraisal of alternative courses of action" (p. 84). The pervasiveness of the family on the business can give rise to the risk of groupthink among decision-making groups in family firms whereby even non-family stakeholders, in attempts toward conformity, play chorus to the family's song. The board of directors in a family firm is not immune to it either and this may undermine their control and advisory duties. This is of particular concern to non-family shareholders of the business as it raises principal-principal agency problems.

In this paper, we ask how groupthink in the board affects institutional investments in family firms. Institutional investors are unique in that they are sophisticated investment managers and compared to other stakeholders, they tend to monitor their shareholdings more closely and get involved in the management of the firm when necessary. Because families usually extract private benefits, including non-economic utilities (Gomez-Mejia et al., 2007), from the firm, institutional investors face the risk of obtaining sub-optimal returns on their investments. This agency problem can be mitigated to an extent by playing a more active (or 'activist') role in the governance of the firm. Yet such actions as having a representative on the board will not bear fruit if said board suffers from groupthink. We argue that the boards of family firms are prime breeding ground for groupthink and will consequently detract institutional investors. Using a sample of S&P 500 firms over the period 2003-2014, we find that institutional investment is indeed lower in comparison to non-family firms. Next, we explore several corporate governance variables and argue that greater board diversity, board busyness, disclosures, shareholder voice and lower director tenure will reduce groupthinking tendencies on family boards.

This study makes three main contributions. First, to the best of our knowledge, this paper is one of the few that analyze groupthink in the corporate governance and board processes of family firms. Doing this is important as family firms are particularly prone to inter-principal agency conflicts and attempts to minimize such conflicts without recognizing the possibility of groupthink can limit their effectiveness. Second, we add to the theoretical and empirical literature around groupthink. Groupthink as a theory has received mixed support from various studies (Park, 2000; Petrovic, 2008; Benabou, 2013; Riccobono et al., 2015; Choi and Kim, 1999; Turner and Pratkanis, 1998) which suggests that it may operate in different ways under different contexts. In this paper, we take the context of family firms and their institutional investors which provides a more nuanced understanding of groupthink. Third, by drawing on sociological discourse to study institutional investment in family firms, we also respond to recent calls for research on the use of sociological theories in the study of corporate governance of family firms (Azila-Gbettor et al., 2018). The results of this study has practical implications for family firms and their institutional investors and suggests steps that can be taken to make boards in family firms perform their control and advisory functions more effectively without the influence of groupthink.

In the next section, we begin with how the unique characteristics of family firms make them more prone to groupthink and then argue implications for the board and institutional investors. Then, we look at several corporate governance characteristics which can have the potential to reduce groupthink. Afterwards, we present our empirical methodology and discussion of results.

3.2 Theory and Hypotheses

3.2.1 Groupthink in the board of family firms

Research on family businesses is still in its emergent phase, given that scholars have started to show interest in this area mainly over the last decade. This interest is definitely increasing – the number of published articles, publication outlets, schools offering family business programs, research support by private donors and foundations and the number of family business associations have all been on the rise (Sharma, 2004) – particularly because of greater acceptance by scholars to draw a distinction between family and non-family firms. Various studies have been carried out

to search for and develop this distinction: the effect of founding family's ownership in S&P 500 companies on firm performance (Anderson & Reeb, 2003b), sources of capital for small family businesses (Coleman & Carsky, 1999), differences in strategic orientation of family firms (Gudmudson, Hartman, & Tower, 1999), impact of family involvement in management on firm goals (Lee & Rogoff, 1996), executive compensation (Wheelock, 1992), cost of debt (Anderson, Mansi, & Reeb, 2003), governance (Anderson & Reeb, 2004) and corporate social responsibility (Berrone, Cruz, Gomez-Mejia, & Larraza-Kintana, 2010) to name just a few.

The question one might ask then is, what drives this distinction? Gomez-Mejia et al. (2007) introduce the overarching concept of socioemotional wealth possession as differentiating a family firm from a non-family one. Also termed as 'affective endowment', it collectively comprises of three non-economic factors that distinguish a family firm. The first of these is the emotions vested by the family members/owners in the firm – this intimacy results in emotional satisfaction when the family business owners are able to control their firms (Schulze, Lubatkin, Dino, & Buchholtz, 2001), much like a parent deriving satisfaction out of the upbringing and success of a child. The second component refers to the satisfaction gained from the strong diffusion of family values on to the firm such that the organizational culture becomes synonymous to the family beliefs and values (Dyer, 2003; Aronoff, 2004). The third non-economic factor refers to the family business owners' altruistic behavior whereby the owners derive a sense of satisfaction out of taking care of the family employees regardless of the professional competence level of those employees (Miller, Le Breton-Miller, Lester, & Cannella, 2007). A more recent study describes five dimensions (abbreviated FIBER) of socioemotional wealth as being: family control and influence, identification of family members with the firm, binding social ties, emotional attachment to the firm and renewal of family bonds through dynastic succession (Berrone, Cruz, & Gomez-Mejia, 2012).

Thus, it is the possession of socioemotional wealth that makes family firms unique. A family firm's behavior, decisions and actions are likely to be different from that of non-family firms in areas where SEW preservation conflicts with 'rational' or economic decisions; whereas a nonfamily firm would consider financial criteria to be the most important, the same is not true for family firms because SEW may have higher priority or be considered just as important (Gomez-

Mejia et al., 2007). At the very least, it is an additional metric relevant to family firms, but absent in non-family firm's decision criteria.

The socioemotional connection between the family and the firm and the subsequent embeddedness creates interesting agency issues within family firms. As the family preserves socioemotional wealth in the firm, type 1 agency costs between family owners and the managers of the firm inadvertently become lower. Type 2 agency issues between family and non-family owners and other stakeholders, however, abound as the prioritization of the family interests can mean trading off the interests of other stakeholders. For example, Croci et al. (2011) find that family are less risk-taking due to control issues, resulting in lower conflict with debt providers but higher conflict with minority equity holders.

This affects institutional investors in family firms too. Dawson (2011) studies how private equity investors make decisions about investing in family firms. Using cross-sectional survey data, she finds support for the 'darker' side of socioemotional wealth in that private equity professionals prefer to invest in family firms which are more professionalized, have non-family managers and where family members are looking to exit the firm. Along similar lines, Dawson and Barredy (2018) look at 902 PE deals from 2009-2014 in Canada and find that independent (in comparison to captive) PE firms are less likely to invest in family firms, though the size of the stake size (through a minority deal or syndication) weakens the relationship. A previous study by Upton and Petty (2000) find that venture capitalists are interested in financing of more established family firms that are looking to pass on the baton to the next generation, but the qualifications of the successor and the firm's strategic plans are key criteria that affect their decisions.

One of the ways that institutional investors obtain value out of their investment is through engagement in corporate governance, specifically the board and often by occupying seats on the board. Venture capitalists and private equity investors closely monitor the activities of their firm and provide value-added services (Fraser et al., 2015) unlike the traditional non-family investors. Venture capitalists are able to improve performance of their investee firms (Manigart and Wright, 2013), increase sales (Puri and Zarutskie, 2012) and as well as help with internationalization (George et al., 2005; Lockett et al., 2008) among other things. They do this by often holding seats on the board and having voting rights in excess of their cash flow rights (Winton and Yerramilli, 2008; Kaplan and Stromberg, 2001; Sahlman, 1990). Private equity investors have similar positive

effects on growth (Gilligan and Wright, 2012), productivity and operating performance (Boucly et al., 2011). Hedge funds are able to hold concentrated positions in specific firms and their managers are highly incentivized to obtain returns on their investments. Activism by hedge funds have been found to generate higher returns and in most cases, this involves working cooperatively with the board and management team (Brav et al., 2008). So one thing that is common to these institutional investors is that they play an active role in monitoring the firms where they have invested and like to make changes within the firm that they believe will increase the firm's value and consequently the value of their investments. But adding value to the firms will be difficult if the board is not willing to listen to their ideas. This may be the case in family firms where the board of directors may suffer from groupthink which we argue is a product of the socioemotional wealth preservation of family firms.

In his seminal paper, Janis (1971) describes groupthink as follows: "The more amiability and esprit de corps there is among the members of a policy-making ingroup, the greater the danger that independent critical thinking will be replaced by groupthink, which is likely to result in irrational and dehumanizing actions directed against outgroups." (p.85). While Janis discussed groupthink in the context of American political fiascoes, the theory has relevance for a wide range of disciplines including organizational theory, social psychology and management (Turner and Pratkanis, 1998). The theory holds particular significance for family businesses for reasons that we will argue below, but has received relatively less attention.

According to Janis' model of groupthink, three conditions create groupthink. First, a decision-making group needs to have strong cohesion. The board of directors generally provides control and advisory functions to the firm. We argue that the board of directors in a family firm is going to be a particularly cohesive unit. This is because the board is one of the key mechanisms that families use to exercise their influence and control over the firm, especially when it is a large firm. The board often includes family members themselves or their appointees (Gersick et al., 1997; Johansson & Huse, 2000). The family corporate culture which binds organizational members together will be particularly strong in the board as it tends to be less diluted by non-family members in comparison to the managerial hierarchy of the firm. Thus the board can be considered as a cohesive in-group within the family firm. However, that does not necessarily mean groupthink will be result. In fact, there are many benefits to being a cohesive group.

According to Janis, two other catalysts are required for groupthink to occur. This brings us to the second condition of structural faults within the organization. The structure of family firms is in many ways conducive to encouraging concurrence-seeking within groups. As family owners look to preserve socioemotional wealth, they create a hard and lasting family imprint on the organization, whether it is through transmitting family values, having family members physically work in the firm or having dynastic succession. This gives a clear signal that the family is clearly the most important stakeholder and decisions and actions in the firm are taken on the basis of a family logic rather than an economic logic. As a result of strong family corporate culture, members internalize the dominant family logic. This is especially applicable to boards; being “elite and episodic decision-making groups” (Forbes & Milliken, 1999, p.492) at the top of the organization, they tend to be more isolated from the rest of the organization and therefore more insulated from outside opinions.

Groupthink comes into action when the third condition is met: a situation that can disrupt the harmony of the family logic (which is essentially the group-thought). Such a situation arises when institutional investors want to make changes to the organization through the board of directors. Institutional investors become the ‘out-group’ trying to operationalize policies that presumably go against the family logic, for example, by proposing a leaner organization with a lower number of employees. Board members will find that such proposals run counter to the family logic and wanting to avoid cognitive conflict (Zattoni et al., 2015), may reject them without evaluating the proposal on its financial merit. It is interesting that they will do this not because they might become part of the out-group themselves or out of a desire for social conformity, but because they have internalized the family logic (even if they are not family members).

Groupthink in boards will be of particular concern to institutional investors because they rely on their ability to create changes within the organization to maximize the value of their investments and engaging with the peak governing body of the firm is a prime way to do so. As the board of directors in family firms are more likely to experience groupthink, institutional investors will find family firms a less attractive outlet for their investment in comparison to non-family firms.

H1: Family firms are likely to attract a lower amount of institutional investment in comparison to non-family firms.

3.2.2 Controlling groupthink

Janis (1971) made several recommendations on how decision-making groups can reduce group thinking tendencies by structuring the group and its activities in a manner that not only allows different viewpoints to be aired by members, but also ensures that due consideration is given. We draw on these and extant knowledge of groupthink in the corporate governance literature to suggest three structural corrections that family firms can make in their boards to reduce groupthink. Janis refers to the use of “outside experts”, members playing “devil’s advocate” to the majority position and use of “sub-groups” to overcome groupthink. Kakabadse and Myers (1996) and Hill and Jones (1998) suggest that having diversity within a top management team reduces the risk of groupthink due to the wide range of viewpoints present in the team and the same applies to the board as well (Petrovic, 2008). Abbott et al. (2012) find empirical support for the negative relationship between board diversity and groupthink; they particularly focus on gender diversity and argue that female presence in the board encourages independence of thinking by reducing groupthink within the board. However, Conyon and He (2017) go deeper and study over 3000 US publicly traded firms over the period 2007 to 2014 to find that gender diversity is not enough to overcome groupthink in boards that are faced with the threat of low performance. Kamalnath (2017) further suggest that female representation on boards can reduce groupthink as long as the women directors are independent and have outsiders status while at the same time pointing out that other forms of diversity should have similar effects on controlling groupthink. Bernile et al. (2018), on finding that board diversity reduces stock return volatility, suggest that this is consistent with diversity playing a mitigating role in groupthink. In line with these and other past studies, we argue that diversity within the board will reduce groupthinking tendencies as members with diverse gender, backgrounds, cultures, skills, etc are more likely to have different opinions which may counter the dominant viewpoints of family members. This leads to our second hypothesis.

H2: Board diversity will weaken the negative relationship between family involvement and institutional investment.

Two key tasks of directors are monitoring and advising the top management team of the firm. The effectiveness with which directors can fulfil these key tasks can vary with the amount of tenure, which can be a two-edged sword. Greater tenure can mean that directors have had more time to understand how the organization operates and hence can make better suggestions on improving performance. They have also spent a longer time interacting with the top management team, so the flow of communication may be better. But these advantages may come at the cost of ‘older’ directors being less forward looking and wanting to maintain the status quo which can stifle innovation. Accordingly, Brown et al. (2017), looking at investor reactions to sudden deaths of 274 outside directors, find that shareholders place greater value on directors who range in tenure from 7 to 18 years. In addition to the above, they also mention that greater tenure also makes directors susceptible to groupthink which can pose a constraint on their monitoring function.

Directors who have been on the board of family firms for a long time are at particular risk of being victims of groupthink. This is because groupthink takes effect as group members internalize the dominant viewpoints of family members over time, with time being a key factor. Spending more time increases the cohesiveness of the group as a whole, which is a key antecedent to groupthink (Forbes and Milliken, 1999). Relatively newer directors, however, may introduce cognitive conflict into the board by suggesting new ideas and in the process, disturb the propagation of groupthink. This means that institutional investors have a better chance of convincing the board of changes that they would like to see. We would thus argue that if the family firm board is comprised of members with lower tenure, this would be more encouraging for institutional investors and they will invest more.

H3: Lower director tenure will weaken the relationship between family involvement and institutional investment.

The busyness of boards, defined as many independent directors serving on multiple boards, can have potential positive and negative effects on firm performance (Cashman et al., 2012). On one hand, such directors can be expected to draw on their more extensive networks and provide better access to resources that the firm needs (Booth & Deli, 1996; Mizruchi & Stearns, 1994; Pfeffer, 1972). Moreover, the certification view suggests that busy directors are a sign of better

quality as directors receive more appointments on the basis of their success in previous ones (Fama & Jensen, 1983). On the other hand, busy boards may be stretched thin and over-committed, which can limit the extent to which they are able to devote attention to the individual firms on whose boards they serve, which Jackling and Johl (2009) find evidence of in their sample of Indian firms listed on the Bombay Stock Exchange.

Within the context of family firms, busy boards can have special significance in mitigating groupthink in boards. While independent directors are meant to bring an outside and more neutral perspective into board deliberations, they can easily become victims of groupthink which severely constrains their role as independent and impartial guardians of the firm. However, busy independent directors would be less likely to internalize the dominant thinking of the board and less likely to succumb to concurrence-seeking and groupthink. This is because (i) for groupthink to occur, members have to be or perceive they are part of an in-group and (ii) members need to spend enough time with the in-group to share its norms. Busy independent directors interact on a regular basis with the boards of different firms (which could include other family firms) making it unlikely that they will become a part of the in-group in any of the boards they serve. Moreover, groupthink occurs over a process of acculturation where the board members need to spend considerable time with each other. But since these independent directors are relatively busy, they will not be able to spend enough time with individual boards to personalize the norms of that board. On top of that, the very fact that they are involved with different boards (or potential areas of groupthink), can counteract individual groupthinking tendencies of particular groups. We would thus argue that within family firms, busy boards may be a good thing and enhance the functioning of boards by mitigating groupthink. Busy boards in family firms will therefore signal to institutional investors that their opinions will be given due deliberation by the board without being influenced by family-centred groupthink.

H4: Busy boards will weaken the negative relationship between family involvement and institutional investment.

3.3 Methodology

3.3.1 Sample and data collection

Our study focuses on the US firms listed in the S&P 500 index in 2003. We hand-collected information about family-involvement for the period 2003-2014 from Def-14A and 10-K filings with the Securities and Exchange Commission. Institutional investment data were obtained from Thomson Reuters' 13-F ownership database. Information about board of directors is taken from the directors database of Institutional Shareholders Services (ISS; formerly known as RiskMetrics). Firm-level data used as control variables are obtained from the Compustat North American database. Except for data related to family characteristics which is hand-collected, all other data were accessed through Wharton Research Data Services (WRDS). In line with previous studies, we exclude financial and utility firms from our analysis given the different regulatory issues facing these firms. Our final panel consists of 1773 observations over the period 2003-2014.

3.3.2 Variables

Our dependent variable, institutional investment (*Inv*), is measured as the natural log of the ratio of the market value of shares held by investment managers (code 100s in the ownership database of Thomson Reuters) as a portion of the total market value of the shares outstanding. We use this ratio instead of the actual investment amount to take into account the fact that different firms may have different amounts of shares outstanding. This is in line with Fernando et al. (2014) who use the ratio of shares held to the number of shares outstanding. Our independent variable is family involvement (*Family*). Following Anderson and Reeb (2003b) but with requiring involvement in governance or management, we define a family firm as such when members of the founding family have significant ownership and are involved in the governance or management of the firm. Our dummy independent variable, family, is therefore 1 if the firm in question is categorized as family firm or 0 otherwise. We hand-collect the data related to family firm using BusinessWeek's (2003) classification of 177 family firms in the S&P 500 as a starting point. We use three characteristics of the board as our moderating variables. These are board diversity (*diversity*), average director tenure (*dir tenure*) and board busyness (*busy board*). Since the diversity of thinking on the board can be attained through different forms of diversity, such as,

gender, ethnicity, education, etc, we use ethnic diversity as a proxy for our diversity construct. Similar to Carter et al. (2010), we focus on the presence of non-Caucasian directors on the board as a reflection of diversity and construct board diversity as the ratio of Caucasian directors to total number of directors on the board (i.e. a lower value is reflective of greater diversity). Brown et al. (2017) calculate individual director tenure as the number of years they have served on the board while Patro et al. (2018) take the average of the number of years that independent directors have served on the board. In line with both, but taking a board-level perspective, we measure average director tenure by taking the mean of the number of years each director has served on the board. In line with Cashman et al. (2012) and Fich and Shivdasani (2006), we measure busy boards as the portion of independent directors who serve on more than three other public boards.

In addition, we also use several control variables to account for firm and board characteristics that may have an impact on institutional investment, based on the existing literature. The duality of the CEO role (i.e. CEO and Chairperson is the same) can be discouraging for investors as it may reduce board oversight and result in poor performance (Krause et al., 2014; Finkelstein, 1992; Finkelstein et al., 2009; Jensen, 1993). Moreover, longer tenure of the CEO may indicate CEO entrenchment to potential investors. Chen et al. (2019) find that longer CEO tenure can decrease a firm's CSR performance, which can also demotivate investors. The gender of the CEO can also be a factor that investors consider when putting money in firms as it can impact earnings, risk and survival (Faccio et al., 2016). Hence we control for all these CEO characteristics (*dual CEO*, *CEO tenure*, *CEO gender*). Higher compensation of TMT members can suggest that the firm's wealth is being expropriated by managers and greater agency costs, as such we also control for this by taking log of the total amount of salary and bonuses received by TMT (*comp*). We control for firm characteristics and performance with several variables. *Size* is the log of total assets of the firm. *Salesgrowth* (*salesgrw*) is the ratio of increase in sales from the previous year to the sales of the current year. *Profitability* is the pre-tax income as a portion of the current year's sales. *Firm age* is calculated as the number of years since the IPO of the firm. *Leverage* reflects the risk associated with investing in the firm and is positively associated with institutional ownership and is calculated as the sum of current and long-term debt as a portion of total assets (Fernando et al., 2014; Badrinath, Gay and Kale, 1989; Skinner, 1989). We also take the log of total shareholders' equity to take into account the quantity of shares available for purchase (*equity*) and calculate Tobin's q to control the market valuation of the firm (*tobinq*). In addition, we control

for dividend per share (*div*) as firms paying higher dividends will be more attractive for investors. Last but not the least, we use time and industry dummies to neutralize the impact of positive or negative shocks that might impact firms on certain years or apply to specific industries. Table 3.1 also includes definitions for the key variables discussed in this section.

Table 3.1 Variable Definitions

Variable Name	Variable Definition
<i>Inv</i>	Institutional investment is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding.
<i>Family</i>	Dummy variable indicating whether a firm is family governed or managed.
<i>Diversity</i>	Reverse-coded as the ratio of Caucasian directors to total number of directors on the Board.
<i>Dir Tenure</i>	Average of the number of years served by individual directors on the Board.
<i>Busy Board</i>	Ratio of independent directors who serve on more than three other public boards.
<i>Dual CEO</i>	Dummy variable indicating whether the CEO and Chairperson positions are held by the same person.
<i>CEO tenure</i>	Number of years of tenure of the CEO.
<i>CEO gender</i>	Dummy variable indicating whether the CEO is female.
<i>Comp</i>	Natural log of the total amount of salaries and bonuses received by the top management team.
<i>Size</i>	Natural log of total assets.
<i>Profitability</i>	The ratio of pre-tax income to sales.
<i>Leverage</i>	The ratio of total debt to total assets.
<i>Equity</i>	Natural log of shareholders' equity.
<i>Age</i>	Number of years since the initial public offering.
<i>Div</i>	Amount of dividend per share.
<i>Tobinq</i>	Total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets.
<i>Salesgrw</i>	Salesgrowth is calculated as the ratio of the increase (decrease) in sales this year to the sales of previous year.

3.3.3 Model

We used the following equations (where i and t represent firm and year respectively) to test whether family firms get lower institutional investment and whether this changes under different contexts:

$$Inv_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Controls_{it-1} + \varepsilon_{it}, \quad (1)$$

$$Inv_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Diversity_{it-1} + \beta_3 Family_{it-1} * Diversity_{it-1} + \beta_4 Controls_{it-1} + \varepsilon_{it}, \quad (2)$$

$$Inv_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Dir Tenure_{it-1} + \beta_3 Family_{it-1} * Dir Tenure_{it-1} + \beta_4 Controls_{it-1} + \varepsilon_{it}, \quad (3)$$

$$Inv_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Busy Board_{it-1} + \beta_3 Family_{it-1} * Busy Board_{it-1} + \beta_4 Controls_{it-1} + \varepsilon_{it}, \quad (4)$$

Hypothesis 1 predicts that family firms are less likely to attract institutional investors due to groupthink in boards; we test this using equation 1 and we expect a negative β_1 . Hypotheses 2, 3 and 4 focus on how different board characteristics can mitigate groupthink; as such, we introduce interaction terms into equations 2, 3 and 4 to test the moderating effects of board diversity, tenure and busyness on the amount of institutional investment that family firms can attract. Our theories predict that β_3 will be negative in equations 2 and 3, but positive in equation 4. In other words, lack of diversity and longer tenure of board members strengthen the negative relationship between family and institutional investment while a busier board will weaken the expected negative relationship in equation 1. We carry out ordinary least squared regressions with robust standard errors to test the above hypotheses.

3.4 Results

Table 3.2 shows the descriptive statistics of the full sample. 28.1% of the firms in our sample are owned and either governed or managed by family. This is in line with Anderson and Reeb (2003b) who find that one-third of the S&P 500 firms have family presence in ownership, governance or management. The firms are 56.8 years old (since initial public offering) on average and are not highly levered with debt that is 24% of total assets on average. Members of the board of directors range in tenure from 1 to 26 years on average; while boards vary in terms of the ethnic backgrounds of the directors, on average, 75% of the directors are of Caucasian background. Table 3.3 shows the results of univariate t-tests for the family and non-family firm subsamples; on average, family firms have lower institutional investment in them, lower diversity and directors who serve for a longer period of time in comparison to non-family firms.

Table 3.4 reports the pairwise correlation coefficients for the key variables used in this study. As expected, institutional investment and family involvement is negatively related and significant at the 1% level. Family firms in the sample tend to be smaller (Anderson, Reeb and Zhao, 2012), but more profitable (though not significantly), which is in line with previous research that find that family firms outperform non-family firms due to having lower type 1 agency costs and greater long-term orientation (Anderson & Reeb, 2003b). We also see that family firms are more likely to have directors with longer tenures. However, the board in family firms do appear to have more ethnic diversity. We note that institutional investment is not significantly correlated with diversity or director tenure of firms in general, but goes down as boards become busier.

Table 3.2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Inv	1773	-.294	.204	-.902	.082
Family	1773	.281	.45	0	1
size	1773	9.406	1.268	5.79	13.59
profitability	1773	.119	.144	-2.639	.619
leverage	1773	.242	.145	0	.811
equity	1773	8.405	1.372	2.615	12.069
age	1773	56.836	6.044	39	86
div	1773	.904	1.114	0	27.03
tobinq	1773	1.973	1.001	.448	13.735
comp	1773	8.44	.52	6.732	10.415
CEO tenure	1773	6.468	6.141	0	51
CEO gender	1773	.023	.15	0	1
Dual CEO	1773	.64	.48	0	1
salesgrw	1773	.063	.164	-.782	1.571
diversity	1773	.746	.229	0	1
dir tenure	1773	8.712	3.182	1.091	26.167
busy board	1773	.142	.134	0	.8

Table 3.2 reports descriptive statistics for the full sample. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family* is a dummy variable indicating whether a firm is family governed or managed. *Diversity* is the ratio of Caucasian directors to total number of directors on the Board. *Dir Tenure* is the average of the number of years served by individual directors on the Board. *Busy Board* is the ratio of independent directors who serve on more than three other public boards. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders' equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year.

Table 3.3 Descriptive statistics by subsample of family and non-family firms

Variable	Famil y Mean	Non- family Mean	Diff. in mean	t-stat
Inv	-.345	-.274	.071***	6.699
size	9.202	9.485	.284***	4.254
profitability	.122	.118	-.004	-.479
leverage	.200	.259	.059***	7.848
equity	8.332	8.433	.101*	1.389
age	56.190	57.089	.899***	2.822
div	.644	1.006	.362***	6.219
tobinq	2.107	1.921	-.187***	-3.543
comp	8.455	8.434	-.021	-.763
CEO tenure	8.166	5.803	-2.363***	-7.397
CEO gender	.026	.022	-.004	-.513
Dual CEO	.509	.692	.183***	7.304
salesgrw	.075	.059	-.016**	-1.807
diversity	.717	.758	.041***	3.396
dir tenure	10.071	8.179	-1.891***	-11.679
busy board	.145	.141	-.004	-.552
N	499	1274		

Table 3.3 reports descriptive statistics for the family and non-family sub-samples. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family* is a dummy variable indicating whether a firm is family governed or managed. *Diversity* is the ratio of Caucasian directors to total number of directors on the Board. *Dir Tenure* is the average of the number of years served by individual directors on the Board. *Busy Board* is the ratio of independent directors who serve on more than three other public boards. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders' equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year. ***p<0.01, ** p<0.05, *p<0.1 (p-values reported in parentheses)

Table 3.4 Pairwise correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
(1) Inv	1.000																
(2) Family	-0.157***	1.000															
(3) size	-0.335***	-0.101***	1.000														
(4) profitability	-0.156***	0.011	0.146***	1.000													
(5) leverage	-0.009	-0.183***	0.045*	-0.199***	1.000												
(6) equity	-0.305***	-0.033	0.897***	0.210***	-0.240***	1.000											
(7) age	0.009	-0.067***	0.111***	0.090***	-0.009	0.096***	1.000										
(8) div	-0.151***	-0.146***	0.248***	0.102***	0.116***	0.145***	0.086***	1.000									
(9) tobinq	-0.129***	0.084***	-0.224***	0.372***	-0.194***	-0.169***	-0.025	0.007	1.000								
(10) comp	-0.208***	0.018	0.541***	0.103***	-0.062***	0.488***	0.057**	0.078***	-0.028	1.000							
(11) CEO tenure	-0.003	0.173***	-0.012	0.044*	-0.041*	0.016	0.469***	-0.088***	0.041*	-0.006	1.000						
(12) CEO gender	-0.045*	0.012	0.020	0.008	-0.006	-0.014	-0.030	0.063***	0.100***	0.037	-0.081***	1.000					
(13) dual CEO	-0.055**	-0.171**	0.197***	0.042*	-0.015	0.156***	0.196***	0.109***	-0.047**	0.161***	0.163***	-0.080***	1.000				
(14) salesgrw	-0.009	0.043*	0.020	0.148***	-0.112***	0.065***	0.008	-0.086***	0.142***	0.073***	0.072***	0.001	-0.001	1.000			
(15) diversity	0.010	-0.080***	0.141***	0.066***	0.066***	0.096***	0.060**	0.121***	-0.118***	0.005	-0.036	0.027	0.077***	-0.047**	1.000		
(16) dir tenure	0.032	0.267***	-0.138***	0.105***	-0.112***	-0.083***	0.210***	-0.041*	0.127***	-0.119***	0.366***	-0.052**	-0.060**	0.022	-0.015	1.000	
(17) busy board	-0.046*	0.013	0.147***	-0.038	0.071***	0.106***	-0.042*	0.017	-0.050**	0.166***	-0.051**	-0.012	0.041*	-0.001	-0.066***	-0.124***	1.000

*** $p<0.01$, ** $p<0.05$, * $p<0.1$

Table 3.4 reports pairwise correlation for the full sample. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family* is a dummy variable indicating whether a firm is family governed or managed. *Diversity* is the ratio of Caucasian directors to total number of directors on the Board. *Dir Tenure* is the average of the number of years served by individual directors on the Board. *Busy Board* is the ratio of independent directors who serve on more than three other public boards. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders’ equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year.

Table 3.5 shows the main results of the regression models we use to test our hypotheses. Hypothesis 1 stated that firms with family involvement will be less attractive to institutional investors. In line with this, we see in column 1 that the coefficient of `fam_GM` is negative and significant at the 1% level. This is in support of our first hypothesis. The role of families and the significance of family-oriented goals creates an environment within the firm that is conducive to groupthink. This, of course, is not always a bad thing. Previous studies have found that an organizational culture based around family values and needs can be beneficial to the firm. For example, Kim et al. (2019) find that family firms are more likely to possess the cultural dimension of placebasedness due to values that are transferred from the family and this can improve their social performance. So groupthink need not always result in poor decisions as long as the dominant faction, in this case, the family, is making decisions that meet the interests of all stakeholders. However, the existence of groupthink does reduce the monitoring power of the board of directors in family firms as it hinders their independence of thinking not in any physical way, but psychologically such that even the actors are not aware that they are inadvertently thinking along the same lines as the family leaders (which could be the family owners, directors or managers). Our results show that this effect is not only statistically, but also economically significant – *ceteris paribus*, institutional investment in family firms are 8.25% lower than non-family firms.

The coefficients on our control variables are in line with previous research. Institutional investors, unlike more traditional shareholders, typically like to identify high growth opportunities and want to add some value to the firm by getting involved with management or through shareholder activism. Thus we see that the coefficient on `salesgrowth` is positive and significant, while the coefficients on `profitability` and `dividends per share` are negative and significant. The significant and negative coefficient on `tobin's q` suggests that institutional investors prefer firms that are undervalued. The relationship between `size` and institutional investment is also negative at the 1% level.

Table 3.5 Main results

Variables	(1) DV: Inv	(2) DV: Inv	(3) DV: Inv	(4) DV: Inv	(5) DV: Inv
Family	-0.086*** (0.000)	-0.012 (0.758)	-0.001 (0.982)	-0.141*** (0.000)	-0.025 (0.626)
<i>Diversity</i>		-0.004 (0.848)			-0.002 (0.935)
<i>Family*Diversity</i>		-0.103** (0.033)			-0.090* (0.061)
<i>Dir tenure</i>			0.007*** (0.000)		0.007*** (0.000)
<i>Family*Dir tenure</i>			-0.010** (0.014)		-0.006 (0.147)
<i>Busy board</i>				-0.042 (0.226)	-0.037 (0.294)
<i>Family*Busy board</i>				0.382*** (0.000)	0.369*** (0.000)
<i>size</i>	-0.055*** (0.000)	-0.055*** (0.000)	-0.052*** (0.000)	-0.051*** (0.000)	-0.048*** (0.000)
<i>profitability</i>	-0.109** (0.010)	-0.101** (0.014)	-0.117*** (0.007)	-0.114*** (0.008)	-0.116*** (0.007)
<i>leverage</i>	-0.149*** (0.001)	-0.151*** (0.001)	-0.152*** (0.001)	-0.163*** (0.000)	-0.162*** (0.000)
<i>equity</i>	-0.009 (0.416)	-0.010 (0.357)	-0.010 (0.341)	-0.012 (0.268)	-0.013 (0.202)
<i>age</i>	0.001 (0.400)	0.001 (0.349)	0.000 (0.689)	0.001 (0.553)	0.000 (0.782)
<i>div</i>	-0.014* (0.065)	-0.014* (0.066)	-0.014* (0.067)	-0.013* (0.072)	-0.013* (0.075)
<i>tobinq</i>	-0.045*** (0.000)	-0.047*** (0.000)	-0.046*** (0.000)	-0.043*** (0.000)	-0.046*** (0.000)

comp	0.012 (0.388)	0.011 (0.408)	0.012 (0.410)	0.006 (0.663)	0.006 (0.657)
CEO tenure	0.000 (0.960)	0.000 (0.867)	-0.001 (0.511)	0.000 (0.943)	-0.001 (0.368)
CEO gender	-0.014 (0.685)	-0.011 (0.744)	-0.020 (0.556)	-0.012 (0.723)	-0.011 (0.751)
Dual CEO	0.006 (0.587)	0.008 (0.466)	0.008 (0.501)	0.010 (0.378)	0.014 (0.212)
salesgrw	0.064*** (0.008)	0.062** (0.011)	0.064*** (0.008)	0.065*** (0.007)	0.064*** (0.009)
Constant	0.250** (0.048)	0.344*** (0.008)	0.291** (0.021)	0.392*** (0.002)	0.345*** (0.008)
Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes
N	1445	1445	1445	1445	1445
R-squared	0.271	0.276	0.278	0.287	0.297
F-test	20.797***	19.751***	19.245***	20.319***	17.89***

Table 3.5 reports the main results of OLS regressions. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family* is a dummy variable indicating whether a firm is family governed or managed. *Diversity* is the ratio of Caucasian directors to total number of directors on the Board. *Dir Tenure* is the average of the number of years served by individual directors on the Board. *Busy Board* is the ratio of independent directors who serve on more than three other public boards. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders' equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (p-values reported in parentheses)

Columns 2-4 show the moderating role of diversity, tenure and busyness. In column 2, we can see that the coefficient on the interaction term between family involvement and Caucasian ratio is negative and significant at the 5% level. This means that as diversity on the board decreases (increases), the negative relationship between family involvement and institutional investment is strengthened (weakened). More specifically, institutional investment in family firms are 10% lower in a board that has no diversity (no non-Caucasian directors) at all. A more diverse board will be less likely to be influenced by groupthink due to the variety of perspectives acting as a counter-mechanism to the setting of groupthink. Thus we find support for hypothesis 2. In column 3, we explored whether the length of time that individual directors have been on the board impact groupthink in family firms and how this can be discouraging for institutional investors by constraining their ability to make changes within the organization. The results obtained in column 3, in the form of the negative coefficient (at the 5% significance level) on the interaction term, provide evidence in support of this argument and hypothesis 3. More specifically, for each additional year in average director tenure, institutional investment in family firms goes down by a further 1%. In column 4, we look at the context of busy boards. While busy boards may mean that directors do not have enough time to contribute to individual firms, within family firms this may have a special significance. Being involved in several other boards can broaden the perspectives of the directors and dilute the internalization process that can result in them becoming victims of groupthink within family firms. In line with this, we find that busier boards in family firms weaken the negative relationship between family involvement and institutional investment and this is significant at the 1% level. The effect of busy boards is also economically significant; in our data, for example, if half of the independent board comprising of busy directors (that is, 0.5 unit increase) results in approximately 21% bump in institutional investment. Thus hypothesis 4 is also supported. In column 5, we put in all of the interaction variables together; while the interaction between family involvement and director tenure loses significance (though with a negative coefficient still), the interactions with diversity and busy board hold strong.

We further check the robustness of our results by using alternative variations of the definition of family firms. *Family 1* defines family involvement in terms of ownership, *family 2* considers both ownership and governance where family members serve on the board of directors; *family 3* attempts to quantify the size of the presence of family on the board by scaling the *family 2* variable by the ratio of family members present on the board. Results of the empirical analyses

using these alternative definitions are presented in table 3.6 and are qualitatively similar to what we have discussed previously.

Table 3.6 Results using alternative definitions of family firms

Variables	(1) DV: Inv	(2) DV: Inv	(3) DV: Inv	(4) DV: Inv	(5) DV: Inv
<i>Family1</i>	-0.081*** (0.000)	-0.004 (0.923)	0.004 (0.922)	-0.127*** (0.000)	0.004 (0.935)
<i>Diversity</i>		-0.002 (0.923)			0.004 (0.878)
<i>Family1*Diversity</i>		-0.107** (0.025)			-0.100** (0.037)
<i>Dir tenure</i>			0.007*** (0.000)		0.007*** (0.000)
<i>Family1*Dir tenure</i>			-0.010** (0.010)		-0.007* (0.085)
<i>Busy board</i>				-0.018 (0.618)	-0.010 (0.770)
<i>Family1*Busy board</i>				0.320*** (0.000)	0.305*** (0.000)
R-squared	0.270	0.275	0.277	0.283	0.293
F-test	20.59***	19.62***	19.10***	19.78***	17.58***
<i>Family2</i>	-0.084*** (0.000)	-0.009 (0.807)	0.015 (0.698)	-0.137*** (0.000)	-0.008 (0.884)
<i>Diversity</i>		-0.006 (0.788)			-0.002 (0.947)
<i>Family2*Diversity</i>		-0.103** (0.038)			-0.094* (0.057)
<i>Dir tenure</i>			0.007*** (0.000)		0.007*** (0.000)
<i>Family2*Dir tenure</i>			-0.011*** (0.005)		-0.007* (0.090)
<i>Busy board</i>				-0.024 (0.496)	-0.017 (0.635)
<i>Family2*Busy board</i>				0.369***	0.354***

				(0.000)	(0.000)
R-squared	0.270	0.274	0.278	0.286	0.297
F-test	20.37***	19.33***	18.96***	19.81***	17.52***
<i>Family3</i>	-0.728*** (0.000)	-0.293 (0.322)	-0.161 (0.521)	-1.102*** (0.000)	-0.164 (0.683)
<i>Diversity</i>		-0.006 (0.781)			0.006 (0.812)
<i>Family3*Diversity</i>		-0.577 (0.107)			-0.788** (0.018)
<i>Dir tenure</i>			0.008*** (0.000)		0.008*** (0.000)
<i>Family3*Dir tenure</i>			-0.064** (0.019)		-0.042 (0.105)
<i>Busy board</i>				-0.040 (0.251)	-0.036 (0.301)
<i>Family3*Busy board</i>				2.949*** (0.000)	2.985*** (0.000)
Constant	Yes	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes
N	1410	1410	1410	1410	1410
R-squared	0.297	0.299	0.306	0.316	0.329
F-test	20.98***	19.96***	19.28***	20.20***	18.31***

Table 3.6 reports the main regression results using alternative definitions of family firms. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family 1* is a dummy variable indicating whether a firm is family-owned; *Family2* is a dummy variable indicating whether a firm is family owned and governed; *Family3* is a continuous variable that scales the family owned and governed dummy by ratio of family members on BoD. *Diversity* is the ratio of Caucasian directors to total number of directors on the Board. *Dir Tenure* is the average of the number of years served by individual directors on the Board. *Busy Board* is the ratio of independent directors who serve on more than three other public boards. The following control variables are also used. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders' equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred

taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (p-values reported in parentheses)

3.5 Post-hoc Analysis

To complement our main set of results, we carry out further analyses using situational variables that affect the governance of a firm. Earlier, we have looked at how groupthink on the board of family firms can generally act as a deterrent for institutional investors who are keen on taking an active role in the firm and board characteristics that can alleviate this issue. While having a more diverse and busier board comprised of younger (lower tenure) directors is a good signal for institutional investors, there are also other factors, vis-à-vis groupthink, that can play a role in the decision to invest in family firms and subsequently governing them. Groupthink affects how information is processed by decision-makers such as members of the board; metaphorically speaking, the information goes through a screen that has been ex ante colored a certain way based on the perspectives of the dominant faction which is the family in our study. While the processing function itself is where groupthink exerts its prejudicial impact, the quality and quantity of the raw data being processed is also crucial. When the information asymmetry is greater, then board members are more likely to fall back on system 1 thinking (Kahneman, 2003; Stanovich & West, 2000) that relies on heuristics based on the groupthink. Using our sample, we tested if this holds empirically. When firms have strong disclosure over financial reporting, the information asymmetry is lower and board members are more likely to engage in system 2 thinking which allows them to consciously assess information based on logic. Conversely, firms have weak disclosure, users of data will more likely resort to system 1 thinking looking for cues and scripts that groupthink will provide. In column 1 of table 3.7, using management's indication that there are significant deficiencies in disclosure of financial reports as a proxy, we find that this is indeed the case (statistically significant at the 5% level) - institutional investment in family firms is an additional 7% lower.

One way to altogether circumvent the issue of groupthink in the boardroom is to govern through shareholder voice by putting forth proposals and going against management's recommendation on voting items in the annual meeting. Previous studies suggest that shareholder screening of proposals is particularly beneficial when management's objectivity is questionable (Maug & Rydqvist, 2003); this is especially relevant to family firms where groupthink exacerbates the conflict of interest between family and non-family principals. Family firms that have strong

shareholder voice may therefore be more attractive to institutional investors as they are more likely to be successful in shareholder activism. Following Brochet et al. (2018), we obtain data about voting results from Institutional Shareholder Services (ISS) and use the extent to which shareholders' vote against management's recommendations to reflect strength of shareholder voice and monitoring. A positive coefficient of 0.677 (Table 3.7, column 2) provide strong evidence at the 1% significance level that strong shareholder voice weakens the negative relationship between family firms and institutional investment. In other words, institutional investors are more willing to invest when they see other routes of exercising governance that are free from groupthink of the family faction within the firm.

We also carried out post-hoc tests on our subsample of family firms to shed some light on whether heterogeneity within family firms impact the groupthink phenomenon. We particularly focused on the differences that can arise when different generations of family members are present on the board. On one hand, the presence of multiple generations brings diversity into the board which can improve decision-making and has the potential to counteract groupthink. However, despite being from different generations, these members are still part of the same family and still driven by socio-emotional wealth. This increases family social capital (which has its benefits), but Herrero and Hughes (2019) argue that at high levels this can be problematic as 'solidarity among family members can over-embed these members preventing new ideas and information from entering the network' (p.3). When new information is being filtered out, it creates ideal conditions for groupthink. We find strong support for this in our subsample of family firms – as seen in column 3 of Table 3.7, family firms which have different generations of family members on the board, attract 23% less institutional investment. Herrero and Hughes (2019) further argued that the dysfunctional effects of high family social capital can be reduced by high organizational social capital. Based on this, we extended our empirical analysis to testing whether having more independent directors on the board of these family firms can increase the amount of institutional investment attracted; as shown in column 4 of table 3.7, the positive and highly significant coefficient suggests that this is indeed true for the family firms in our sample.

Table 3.7 Results of post-hoc analyses

Variables	(1) DV: Inv	(2) DV: Inv	(3) DV: Inv	(4) DV: Inv
<i>Family</i>	-0.091*** (0.000)	-0.090*** (0.000)		
<i>Deficiency_disc</i>	0.007 (0.574)			
<i>Family*Deficiency_disc</i>	-0.070** (0.020)			
<i>Sh_voice</i>		0.141* (0.096)		
<i>Family*Sh_voice</i>		0.677*** (0.000)		
<i>Family_diff_gen</i>			-0.260*** (0.000)	-1.201*** (0.000)
<i>Independent dir</i>				-0.131 (0.250)
<i>Family_diff_gen*independent dir</i>				1.450*** (0.000)
Constant	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes
N	1506	1789	507	428
R-squared	0.319	0.270	0.276	0.283
F-test	26.31***	22.49***	7.80***	8.44***

Table 3.7 reports the results of post-hoc analyses. *Inv* is calculated as the natural logarithm of the ratio of market value of shares held by investment managers to the market value of total shares outstanding. *Family* is a dummy variable indicating whether a firm is family governed or managed. *Deficiency_disc* is a dummy variable that is 1 if management indicates the existence of significant deficiencies in the disclosure of financial reports or 0 otherwise. *Sh_voice* reflects shareholder voice and is calculated as the portion of voting items that go against recommendation of management. Models 3 and 4 are OLS regressions on the subsample of family firms. *Family_diff_gen* is a dummy variable indicating the presence of different generations of family members on the board. *Independent Dir* is the ratio of independent directors to total number of directors on the board. The following control variables are also used. *Dual CEO* is a dummy variable indicating whether the CEO and Chairperson positions are held by the same person. *CEO Tenure* is the number of years of tenure of the

CEO. *CEO Gender* is a dummy variable indicating whether the CEO is female. *Comp* is the natural log of the total amount of salaries and bonuses received by the top management team. *Size* is the natural log of total assets. *Profitability* is the ratio of pre-tax income to sales. *Leverage* is the ratio of total debt to total assets. *Equity* is the natural log of shareholders' equity. *Age* is the number of years since the initial public offering. *Div* is the amount of dividend per share. *Tobinq* is the total assets plus market value of common stock less book value of common stock and deferred taxes as a ratio of total assets. *Salesgrw* is the ratio of the increase (decrease) in sales this year to the sales of previous year. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$ (p-values reported in parentheses)

Table 3.8 Derivation of regression sample

Step	Details
0	Compustat data - 5126 (493 firms); Institutional investment data - 4115 (410 firms); Family firm data - 2124 (182 firms); Execucomp - 7724 (485 firms)
1	After merging the above, we have 5517 obs, 493 firms
2	After dropping financial and utility firms, we have 4298 obs (370 firms)
3	After merging with ISS data, we have 4325 obs (370 firms)
4	Listwise deletion of regression variables that are missing results in 1773 obs, 224 firms
5	Due to taking lag in regression model, regressions have 1745 obs.

3.6 Conclusion and future research directions

The pursuit of family-oriented goals or socioemotional wealth creates multi-faceted implications for various stakeholders of family firms. Some of these implications have positive and some have negative effects. In this paper, we focused on the phenomenon of groupthink in the board of family firms and what it means for institutional investors who want to get involved with the governance and management of the firm to extract more value out of their investment. Using Janis' model of groupthink, we find that the board of directors in family firms are more likely to succumb to groupthink making it difficult for institutional investors to implement changes within the firm; this discourages institutional investment in family firms. This results in a governance challenge for family firms as they appear less attractive to an important investor group. Our subsequent analyses and findings provide evidence that this can be mitigated by having boards that are more diverse, with directors having shorter tenures, but greater involvement with other boards. We explore mitigating factors further in post-hoc analyses and find that transparent financial reporting and strong shareholder voice encourage institutional investment; moreover, we see that while inter-generational involvement of family members on the board amplify groupthink, appointing more independent directors acts to reduce this impact.

While previous studies on family firms have referred to groupthink in passing, there is a lack of focused research in this area. This is surprising because, as we show in this paper, the structure of family firms creates prime breeding ground for groupthink. Future research on the boards of family firms can explore other mechanisms that can counter the forces of groupthink and thus make them more effective monitors and advisors. Moreover, some family firms have family boards which operate parallel to the traditional board of directors of the firm. It will be interesting to look at whether such firms are more likely to become victims of groupthink as having a separate family board usually ensures a unified family voice on the firm's board of directors. Just like the board of directors, the top management team in large family firms is also a cohesive group of people usually comprising of family and non-family members. Researchers can further explore the dynamics within this key decision-making group, as well as how bridging members, such as a dual CEO, impact groupthink at both the board and TMT level.

CHAPTER 4: ESSAY 3

Title: An analysis of long term decision making in family firms using temporal motivation theory

Abstract

In this paper, we use the framework of temporal motivation theory to study long term orientation in family firms. We focus on the four key aspects of this theory (time sensitivity, expectancy, value and the framing of losses and gains) and test whether its predictions apply to long term decision making in family firms which is proxied by a composite measure based on asset durability, capital expenditure and research and development expenses. Our findings on an international sample of publicly listed firms from 2007-2018 support the predictions of temporal motivation theory. Our results show that while family firms have lower sensitivity to time delays in future utilities, whether they actually make long term decisions are significantly influenced by their economic and non-economic performance, as well as whether founders or descendants are in control.

4.1 Introduction

Past studies show that family members derive non-economic utilities from their business; these utilities have also been referred to as socioemotional wealth, preservation of which is prioritized by family firms (Aronoff, 2004; Dyer, 2003; Gomez-Mejia et al., 2007; Miller et al., 2007; Schulze et al., 2001). These utilities include the satisfaction of leaving a flourishing business to family successors which requires a forward-looking perspective and family firms are thus expected to be more long-term oriented than non-family firms. Zahra et al. (2004,p.367) define it as the ‘family firm’s disposition toward long-term value creating activities that have a low probability of success, but are important for new business creation and revenue generation’. However, studies also indicate that the long-term orientation of family firms are tenuous and subject to the mechanisms of behavioral agency, intertemporal choice and challenges of multitemporality (Chrisman & Patel, 2012; Breton-Miller & Miller, 2011; Lumpkin & Brigham, 2011).

The extant literature has mainly studied long-term orientation in family firms as a value orientation or a dimension of organizational culture. However, the concepts of intertemporal choice and multitemporality indicate that firms may need to trade-off between short- and long-term decisions. Even though the idea of trade-off between short- and long-term is not new, there is a need to better understand the boundary conditions surrounding long-term orientation in family firms. In that spirit, we draw on temporal motivation theory (Steel and Konig, 2006) to study long-term orientation in family firms. Temporal motivation theory (hereafter, TMT) integrates piceoeconomics (Ainslie, 1992), expectancy theory (Vroom, 1964), cumulative prospect theory (Tversky & Kahneman, 1992) and needs theory (Dollard & Miller, 1950) and in doing so, provides a framework that allows us to study long term oriented decision-making in family firms by incorporating both value and practical dimensions.

More specifically, we ask the following research questions: do family firms make more long term decisions in comparison to non-family firms due to being less sensitive to time delays (i.e. more long term oriented in value)? Does this differ when the family’s economic and non-economic wealth is at risk? Is the generation in control of the firm relevant to its long-term decision making calculus? Our findings, based on an international sample of firms from 37 countries over

the period 2007 to 2018 with 3147 observations, suggest that while family firms have more long term values that reduce their time sensitivity in comparison to non-family firms, this is very much subject to the firm's economic and non-economic performance that shape the expectancy of utilities as well as whether they are framed as losses or gains; moreover, perceptions of these losses or gains differ depending on whether the firm is founder or descendant-controlled.

This paper has three main contributions to the literature on long term decision making in family firms. First, we adopt TMT as the theoretical umbrella for understanding long-term decision-making in family firms. Most studies (e.g. Memili et al., 2018; Berrone et al., 2010) in the family business literature tend to adopt theoretical approaches which assume that having long term oriented values will lead to long term oriented decisions, however, they ignore contextual factors that influence these decisions. TMT helps address that gap as it not only takes into account the value-based long term orientation of family firms, but also factors such as expectancy, value and the framing of gains and losses. This provides us with an understanding of family firm LTD (long term decision making) that is more holistic and big picture. Second, we highlight the different psychological mechanisms at play when there is threat to economic and non-economic wealth of the family and when decisions are being undertaken in family firms that are founder vs descendant controlled. Our findings, in line with TMT, support the fact that LTD is a complex phenomenon in family firms. Metaphorically speaking, there are several cogs in the wheel that drives long term decision making in family firms and while mere presence of long term values or orientation is necessary, it is not sufficient by itself. Third, we empirically take into account that family firms make decisions in a broadly framed manner (Fang et al., 2021). We do this by using an aggregate measure of long term decision making that reflects three different decisions that firms have to make regarding long term value generation, namely, asset durability, capital expenditure and research and development. A challenging feature of carrying out a quantitative study on long term decision making is the quality of the proxy being used and to what extent it reflects the temporal aspect of the decision at hand. By doing this, we are better able to neutralize the non-temporal risks inherent in these decisions.

4.2 Theory and Hypotheses

4.2.1 Temporal Motivation Theory

By drawing on hyperbolic discounting theory (Ainslie, 1992; Ainslie & Haslam, 1992), expectancy theory (Vroom, 1964), cumulative prospect theory (Tversky & Kahneman, 1992; Kahneman & Tversky, 1979) and need theory (Murray, 1938), TMT “indicates that motivation can be understood by the effects of expectancy and value, weakened by delay, with differences for rewards and losses” (Steel & Konig, 2006, p. 897). Decision-makers make temporal choices based on the aggregate of utilities derived. The aggregate utility of a temporal choice is determined by (i) the summation of expected gains and losses derived from the said choice, where (ii) the gains and losses are equal to the objective or subjective value assigned by the decision-maker scaled by the expectancy that the desired outcome will occur and (iii) the gains and losses are discounted by the temporal distance to fruition as well as how time sensitive the decision-maker is. In other words, a temporal decision is motivated by the net utility derived from the decision; this net utility depends on the value of resultant incremental losses or gains based on a referent point. However, this value is weighted on the basis of expectancy – the likelihood that the utility will materialize, as well as the significance and the intensity of the need it satisfies; moreover, it is discounted by the extent to which decision-makers are sensitive to time such that more short-termist decision-makers will see lower net utility in comparison to more long term oriented decision makers assuming that expectancy and value remain constant. The use of TMT is particularly amenable to our research questions as it incorporates time sensitivity or orientation into the decision-making function while at the same time recognizing the importance of boundary or contextual conditions as manifested in the valuation of gains and losses. . Being able to incorporate all of these important factors into one overarching theory is particularly relevant to the study of long term oriented decision-making in family firms - unlike non-family firms, family firms do not always make decisions based on the rational expected utility model; family firms are motivated by socioemotional wealth which affects the decision-making calculus as represented by TMT. In the proceeding paragraphs, we first draw on extant literature to argue how family firms are less sensitive to time delays (hypothesis 1) and we equate this with the long term values of family firms; we argue that this will influence family firms to make more long term decisions as predicted by the hyperbolic discounting part of TMT. Subsequently, we delineate two boundary conditions,

namely economic performance hazard and non-economic performance hazard that we expect to impact the expectancy dimension of TMT (hypothesis 2 and 3). Last but not the least, we consider whether it matters that the founder or descendant is in control of the firm and how it impacts the value dimension of TMT.

4.2.2 Time Sensitivity

The study of the long term orientation of family firms is not new. As far back as the 1980s, the need for strategic planning of family businesses has been highlighted, especially in response to the fact that only 13% of family firms last through the third generation and among this 13%, only 3% perform well (Ward, 2016, 1988). The same studies also showed that family issues affected the strategy of the business. Family firms can afford to be more oriented towards the long-term as they may not need to justify short-term financial performance to outside shareholders, though they are also subject to familial pressures to harvest the business ‘to reward the family for years of sacrifice with an improved standard of living’ (Ward, 1988: 112). Given that the business is financially sound, the extent to which current profits are reinvested in order to improve the long run prospects of the business will depend on how long family members want the business to operate and how much more prosperity they desire in the future (Ward, 1988). Indeed, the family and business are two interlocking systems and each affects the other (Hollander and Elman, 1988).

One of the utilities family members in control of the firm derive out of the business is the satisfaction of leaving the firm as a legacy to children or the next generation(s) of the family (Berrone, Cruz & Gomez-Mejia, 2012). Family members in charge thus want the business to survive and perform well for an infinite period of time into the future. The resultant long-term orientation hypothesis is put to test on a sample of 676 Canadian family owned-managed vs founder owned-managed companies in Miller et al. (2008). As family members have socio-emotional wealth tied up in business (Gomez-Mejia et al., 2007), family firms are expected to care more about the long-term prospects of the business. Such long-term thinking, also referred to as the stewardship perspective, can be manifested in long-term investments in research and development, reputation development, market development, training and development of qualified and loyal human resources, customer relationship management, etc.

Lumpkin and Brigham (2011: 1152) define long term orientation as ‘the tendency to prioritize the long-range implications and impact of decisions and actions that come to fruition

after an extended time period' and argue that family firms are more likely to have a LTO because, otherwise, they would not be able to fulfil many of their non-economic objectives. They develop three dimensions of LTO – futurity, continuity and perseverance – and show how each dimension is more likely to be salient in family firms. Futurity refers to the dominant coalition of the family firm deriving utility out of the long range consequences of current actions or decisions. Since passing on the firm to the next generation is tied to the socioemotional wealth, the firm will exhibit futurity. Continuity 'is based on the belief that that which is long-lasting and endures has value' (Lumpkin and Brigham, 2011: 1153). Family firms exhibit continuity not only by their intention to pass the firm on to future generations, but also by preserving the current reputation and past heritage of the firm. Perseverance, the third LTO dimension, can involve powering through difficult times, deferring consumption to finance reinvestment, etc. Family firms are motivated to persevere because they derive satisfaction out of what the firm might become in the future (through succession). Overall, family firms can thus be expected to exhibit greater LTO. Later, Brigham et al. (2014) validate the LTO construct as having these three dimensions which are formative in nature and find empirical evidence that family firms are more likely to score higher on all three dimensions.

More recently, Fang (forthcoming) finds that family firms tend to be strategically more persistent partly due to their long term orientations and Dou et al. (2019a) find that having a long-term orientation is necessary to fulfil the non-economic goals of the family. According to temporal motivation theory, the appraisal of temporal choices involves a discounting function comprised of the delay involved, as well as the decision-maker's sensitivity to that delay. We submit that while the delay itself remains constant among family and non-family firms, the former is more likely to have lower time sensitivity or greater long-term orientation as indicated by the extant literature. This makes it more likely for family firms to obtain utilities on long-term oriented decisions that are greater than those for non-family firms, leading to the following hypothesis:

H1: Relative to non-family firms, ceteris paribus, family firms are more likely to make long-term decisions.

However, family firms do not make long-term decisions in a vacuum and the assumption of ceteris paribus needs to be relaxed. A firm is faced with an intertemporal choice when the 'value or utility of a choice is influenced by how much time passes before the consequences of the

decision are realized (Lumpkin and Brigham, 2011: 1156). Drawing on theories from economics, psychology and neuroscience, Lumpkin and Brigham (2011) suggest that intertemporal choices will be affected by how the decision-makers in the firm frame the intertemporal choice relative to a reference point (representation), the extent to which they can mentally limit giving in to short-term desires (self-control) and the extent to which they desire or value the future event or returns (anticipation). So even though family firms are long-term oriented in general, actual intertemporal choices will be subject to mental processing which is not constant over all decisions.

Le Breton Miller and Miller (2011) extend this by associating anticipation with futurity, representation with continuity and self-control with perseverance. They also consider the intertemporal choice problem and suggest that firms with a long term orientation need to attend to the ‘ever-present need to satisfy all stakeholders in the near and intermediate term and to be sufficiently supple to meet unexpected challenges and opportunities’. Thus firms need to meet both short and long term challenges simultaneously, a phenomenon which they refer to as ‘multitemporality’. Tseng (2020), for example, finds that family firms are able to create long-term value for the firm, but it is subject to the mitigation of agency costs net of type 1 and type 2 under family governance, highlighting that long term oriented decision making is a complex process that is heterogeneous to factors beyond time sensitivity.

4.2.3 Expectancy

Long-term choices are not solely based on the time preferences of decision-makers. While the time preferences certainly affect how utilities further down the line are discounted back to present value, TMT also suggests that the expected value of the utilities themselves may differ depending on the particular context at hand. This is because the expected value of utilities is not merely determined by the normative value of the utility itself, but also its expectancy or decision weight or need intensity. Here, we focus on the economic and non-economic performance hazard of family firms, with our thesis being that the expectancy of utilities will differ depending on whether the family firm perceives a threat to their socioemotional wealth. Under constant circumstances, family firms will stand to gain the non-economic utility of being able to pass on the firm to the next generation which non-family firms will not and they will assign a certain significant value to it. However, when the firm is not performing well financially, the expectancy of being able to leave the firm to the next generation goes down, thus reducing the utility of a long-

term oriented choice even though the actual time sensitivity has not changed. At the same time, this is subject to the certainty effect (Kahneman & Tversky, 1979). When performance is above aspiration levels, the matter of leaving the firm to the next generation will be perceived as a given, something that is bound to happen in the future. According to prospect theory, decision-makers overweight outcomes of certainty. Thus, when economic performance is above aspiration levels, expectancy of outcomes will be higher and vice versa when there is performance hazard and economic performance is below aspiration levels. As a result, the net utility of long term decisions will vary as the level of expectancy changes with the performance hazard of the family firm. This leads to the second hypothesis:

H2: Economic performance hazard will moderate the relationship of family involvement with long term decisions, such that family firms will be less likely to make long term decisions when there is performance hazard.

Looking at over 2000 Chinese firms, Xu et al. (2019) find that low performing firms in general want a quick solution to their problems and are short-termist while higher performing firms want to maintain their competitiveness in the long run. Maintaining and building the reputation of the family firm is an important component of the socioemotional wealth of the family as family members identify with the firm and are emotionally attached to it. Thus when the firm's reputation is at risk, family members will see this as a potential loss of socioemotional wealth. When faced with long term decisions under such circumstances, family firms will perceive a loss associated with diverting resources towards long-term returns that will need to be traded off against the non-economic gain from the long term decision. However, when presented with gains and losses simultaneously, losses will loom larger (Kahneman & Tversky, 1979) and family firms are going to be loss averse which will increase the expectancy or decision weight of loss. As the long term decision is the sum of gains and losses, this loss aversion will reduce the net utility from it, thereby reducing its likelihood. Moreover, expectancy is related to the intensity of the need that the utility is satisfying. When faced with a potential loss, family will find the need to mitigate that loss more intense in comparison to a need (e.g. succession) whose satiation lies in the future and is dependent on the loss being minimized. This is akin to considering total utility as the sum of need to achieve and the need to avoid failure (Atkinson, 1964); in case of the family firm, the need to achieve will likely only be fulfilled if the firm's reputation is intact. Furthermore, drive strength depends on the

gradient of reinforcement (Dollard & Miller, 1950) or how immediately the effects of rewards and losses are felt. This leads to the third hypothesis:

H3: Reputation risk will moderate the relationship of family involvement with long-term decisions, such that greater risk will weaken the relationship and vice versa.

4.2.4 Value

According to temporal motivation theory and cumulative prospect theory, losses and gains are not evaluated as absolute values, but are rather incremental values in reference to a status quo. This status quo is the current socioemotional of the family, but it may differ from one family member to another. We argue that founders will see greater utility in leaving a legacy to the next generation in comparison to their descendants. While both will see gains in socioemotional wealth, this will be higher for founders as they will be the first family members to envision the firm being passed on to their successors; in other words, they have a comparatively low referent point. On the other hand, descendants, by definition, have already seen the firm being passed on to them and they assume this is going to continue, so their referent point is higher which makes incremental gains lower. Thus family firms are likely to exhibit heterogeneity in long-term decision making such that founder-controlled firms can be expected to derive greater utility out of long-term decisions than descendant-controlled firms. This leads to our fourth hypothesis:

H4: In comparison with descendant-controlled family firms, founder-controlled family firms are more likely to make long-term decisions.

4.3 Methodology

4.3.1 Sample and data

Our study draws on mainly four databases. We begin with the family firm data provided by NRG Metrics. NRG Metrics provides information related to the identification of family firms, covers listed firms from over 40 countries from 2007 onwards and has been used in recent research on family businesses (e.g. Miroshnychenko et al., 2020). Information on the procedure of their data collection is available on their website as well as in Miroshnycenko et al., 2020. Subsequently, we

obtain financial, as well as data on capital expenditure, asset durability and research and development from Compustat North America and Compustat Global which is accessed via Wharton Research Data Services (WRDS). Data on reputation risk of firms is obtained from the basic RepRisk dataset, which was also accessed via WRDS. We also used World Bank's Worldwide Governance Index to obtain data on country-level governance quality and NRG Metrics' audit database to obtain other supplementary data. After cleaning and merging NRG Metric's family firm data, Compustat's financial data and World Bank data, we have 3,147 firm-year observations over the 12 year period 2007-2018.

4.3.2 Variables

Long term decisions (ltd):

Our dependent variable, *ltd*, is a measure of the long term decisions made by firms. To measure long term decision making, we focus on three specific decisions: capital expenditure, asset durability and research and development. Capital expenditure represents the firm's purchase of property, plant and equipment whose lives last longer than a year and usually involve significant upfront costs while benefits are enjoyed over time (Souder & Bromiley, 2012). As such, it has been used as a measure of long term investment in tangible capital (Bena et al., 2017). While the decision to incur capital expenditure is a long term one, managers also need to choose the durability of the assets to be purchased, a decision that also incurs incremental immediate costs and long-term consequences. We derive asset durability from the depreciation expense and amount of new capital expenditure by following the steps described in detail in Souder & Bromiley (2012). Similar to Souder & Bromiley (2012), we also restrict our sample to firms that use straight line depreciation and that have asset durability between 1 and 40 years. The third decision we look at involves spending on research and development. Research and development expense has been widely used in previous studies as a measure of a firm's long-term strategic orientation and decision making (Lundstrum, 2002; Bena et al., 2017; Miller & Xu, 2020). To gain a broader picture of a firm's long term decision making, we are able to generate a factor comprising of asset durability, capital expenditure (scaled by total assets and winsorized at 2%) and r&d (scaled by total assets and winsorized at 2%) with eigenvalue>1. We use this factor as our key dependent variable, *ltd*.

Family involvement (family):

Our primary independent variable, family, is a dummy variable that takes the value of 1 if at least one member of the founding family owns more than 5% shares (individually or with other family members) or is an officer or director in the firm; otherwise, it is zero. This measure is similar to the one employed by Anderson & Reeb (2003) who identify family ownership either through presence of a founding family member on the board or through fractional equity ownership. Other scholars have measured family involvement using different configurations of ownership stake, board presence and management presence (e.g. Faccio & Lang, 2002; La Porta et al., 1999; Chrisman & Patel, 2012; Chua et al., 1999). We kept our primary measure of family involvement relatively broad by considering ownership, governance and management, but we consider several variations of this measure to check the robustness of our findings. In Family1, we presume family involvement if the family is the largest voteholder and has at least one family officer and one family director. Family2 indicates that one or more family members are directors or blockholders, but there are no family officers. In Family 3-5, we move from a dummy to a continuous approach of measurement by looking at the ownership stake within the family in general and within the board and management specifically. In other words, Family3 is the proportion of shares held by the family while Family4 and Family5 measures the percentage of family ownership within the board and within executives respectively.

Performance hazard:

Consistent with previous research, we consider historical (internal) performance and peer (industry) performance and use a spline function to distinguish between performance above and below aspiration levels (Chrisman & Patel, 2012; Xu et al., 2019). The return on assets ratio is used to proxy economic performance of the firm and then compared to a benchmark or aspiration level. For internal performance, the benchmark is calculated as last 5 years' average ROA, while for external performance, the industry median of last 5 years' average ROA is used. Based on these benchmarks, we calculate 4 variables. Positive internal performance gap is the absolute value of performance above the internal benchmark, otherwise it is 0 (i.e. when performance is at or below the benchmark). Internal performance hazard (i.e. negative internal aspiration gap) is the absolute value of performance below the internal benchmark, otherwise it is 0 (i.e. when performance is at or above the benchmark). We create positive external performance gap and

external performance hazard similarly, but in this case, using the benchmark for industry performance. Following Kotlar et al. (2014) and Gomez-Mejia et al. (2015), we interact the performance hazard variables while controlling positive internal and external performance gaps.

Reputation risk:

Reputation risk is a moderating variable. It is a dummy variable that takes the value of 1 if a company scores above 50 in the RepRisk Index score, otherwise 0. The RepRisk Index is a proprietary algorithm developed by RepRisk and reflects a firm's exposure to reputational risks related to environmental, social and governance issues by using the amount of media and stakeholder (e.g. thinktanks, regulators) attention given to these issues. According to RepRisk, a score of 50 or above is considered to be in the high risk exposure categories.

Founder control:

In order to compare the effect of founder and descendant control in the long term decision making within family firms, we measure founder control as a dummy variable that is 1 if the founder of the family firm is the Chairperson or CEO or both. In other words, we assume that the founder has a controlling influence over the firm's decisions even if a descendant occupies one of the roles of CEO or Chairperson. In our empirical analysis, we limit our sample to the family firms that do not have dual CEOs who have been hired. This allows us to equate a 0 value in the dummy founder control variable as control by descendant.

We additionally control for several variables that may affect long term decisions based on existing literature. *Size* is the natural log of total assets. *Slack* is calculated using cash and short-term investments scaled by total assets. *Leverage* is calculated as the sum of short and long term debt scaled by total assets. *Age* is calculated as the number of years since the firm's initial public offering. *Profitability* is calculated as pre-tax income by total sales and winsorized at 5% to account for outliers. *Salesgrw* is the growth in sales from previous year and winsorized at 5%. *Wgi_average* is the average of the scores of individual countries on the Worldwide Governance Index and is used to control for country-level differences in quality of public governance. We also control for industry and time with respective dummy variables.

4.3.3 Model

Due to the possibility of self-selection bias in the firms that report research and development expenses (Chrisman & Patel, 2012; Yu et al., 2018), we use Heckman's two-step procedure to test our hypotheses. The selection equation is estimated using two variables that can impact whether a firm decides to report its r&d expenditure. This is relevant for our dependent variable, *Ltd*, as one of the parameters used in its generation was research and development expense. The two variables we use to predict selection are *Big4* and *DualClassShares*. *Big4* is an indicator variable that is 1 if the firm is audited by one of the big 4 accounting firms. Especially given the differing institutional strengths of countries around the world, the logic is that firms hiring big 4 auditors will be more likely to be transparent in their disclosures. *DualClassShares* is a dummy variable that is 1 if the firm issues more than one share class and can predict the differences in corporate disclosure quality (Tinaikar, 2014; Ali et al., 2007). Data on both of these variables are obtained from NRG Metrics. Additionally, we retain size, leverage, age and profitability from the outcome equation. After running the selection equation in the first step of the Heckman selection model, we use the predicted inverse mill's ratio (IMR) in the following equations (where *i* and *t* represent firm and year respectively) to test hypotheses 1-3 respectively:

$$Ltd_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Controls_{it-1} + \beta_3 Industry\ dummies_{it} + \beta_4 Year\ dummies_{it} + \beta_5 IMR + \varepsilon_{it}, \quad (1)$$

$$Ltd_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Internal\ Performance\ Hazard_{it-1} + \beta_3 Family_{it-1} * Internal\ Performance\ Hazard_{it-1} + \beta_4 Controls_{it-1} + \beta_5 Industry\ dummies_{it} + \beta_6 Year\ dummies_{it} + \beta_7 IMR + \varepsilon_{it}, \quad (2)$$

$$Ltd_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 External\ Performance\ Hazard_{it-1} + \beta_3 Family_{it-1} * External\ Performance\ Hazard_{it-1} + \beta_4 Controls_{it-1} + \beta_5 Industry\ dummies_{it} + \beta_6 Year\ dummies_{it} + \beta_7 IMR + \varepsilon_{it}, \quad (3)$$

$$Ltd_{it} = \beta_0 + \beta_1 Family_{it-1} + \beta_2 Reputation\ Risk_{it-1} + \beta_3 Family_{it-1} * Reputation\ Risk_{it-1} + \beta_4 Controls_{it-1} + \beta_5 Industry\ dummies_{it} + \beta_6 Year\ dummies_{it} +$$

$$\beta_7 IMR + \varepsilon_{it}, \quad (4)$$

$$Ltd_{it} = \beta_0 + \beta_1 Founder\ Control_{it-1} + \beta_2 Controls_{it-1} + \beta_3 Industry\ dummies_{it} + \beta_4 Year\ dummies_{it} + \beta_5 IMR + \varepsilon_{it}, \quad (5)$$

Models 1 to 4 represent the second step in the Heckman selection model with ordinary least squares regression with robust standards errors being used. While models 1-4 are run on the full sample, model 5 is run on the subsample of family firms that do not have a hired Chairperson or CEO to make a meaningful comparison between founder and descendant-controlled family firms. As such, we directly carry out ordinary least squares regression with robust standard errors instead of a two-step Heckman model.

4.4 Results

Table 4.1 provides the definitions for all variables. Table 4.2 shows the descriptive statistics in the full sample. Being a factor generated from the parameters of asset durability, capital expenditure and research and development expenses, the long term decisions variable (*ltd*) has both negative and positive values, with a mean of approximately 0. The dummy family involvement variable has an average of 0.38, indicating that 38% of the firms in our sample are family firms. The firms in our sample are not highly leveraged, with a maximum debt that is 1.872 times total assets, while the mean is 0.212. Table 4.3 shows descriptive statistics for subsamples comprised of family and non-family firms respectively. Results of univariate t-tests indicate that in our sample non-family firms are larger and older, have greater performance hazard, more reputation risk and more leverage; on the other hand, family firms have more slack and higher growth in sales. Table 4.4 shows the country-wise distribution of family and non-family firms. 63.7% of our sample belong to the Americas region, while 24.2% and 12% belong to the Europe, Middle-East & Africa (EMEA) and Asia-Pacific (APAC) regions respectively. The pairwise correlations in table 4.5 indicate that family firms have lower reputation risk likely due to the fact that family firms are more concerned about their reputation as it closely affects and reflects the social image of the family members. In line with previous studies, we also see that family firms tend to be smaller (Anderson, Reeb & Zhao, 2012), younger, have more slack resources and lower leverage.

Table 4.1 Variable definitions

Variable Name	Variable Definition
<i>Ltd</i>	Long-term decision making is represented by a factor generated from three variables: asset durability, capital expenditure and r&d. Asset durability is the expected life of fixed assets purchased in a given year and is calculated using depreciation expenses and capital expenditure. Capital expenditure is the amount spent on new property, plant and equipment scaled by total assets. R&D is the amount spent on research and development of new products and services scaled by total assets.
<i>Family</i>	Dummy variable indicating that at least one member of the founding family owns more than 5% shares (individually or with other family members) or is an officer or director in the firm. 5 additional measures of family involvement are used in the robustness checks. Family1 is a dummy variable that is 1 if the family is the largest voteholder and has at least one family officer and one family director. Family2 indicates that one or more family members are directors or blockholders, but there are no family officers. Family3 is the proportion of shares held by the family. Family4 measures the percentage of family ownership within the board. Family5 measures the percentage of ownership within executives respectively.
<i>Positive Internal Performance Gap (PIPG)</i>	Absolute value of performance (ROA) above aspiration level (average ROA of previous 5 years); takes the value of 0 if performance is at or below aspiration level.
<i>Internal Performance Hazard (IPH)</i>	Absolute value of performance (ROA) below aspiration level (average ROA of previous 5 years); takes the value of 0 if performance is at or above aspiration level.
<i>Positive External Performance Gap (PEPG)</i>	Absolute value of firm performance (ROA) above aspiration level (industry median of the average ROA of previous 5 years); takes the value of 0 if performance is at or below aspiration level.
<i>Negative Performance Hazard (NPH)</i>	Absolute value of performance (ROA) above aspiration level (industry median of the average ROA of previous 5 years); takes the value of 0 if performance is at or above aspiration level.
<i>Reputation Risk</i>	Dummy variable that is 1 if the firm faces high reputation risk, otherwise 0.

<i>Founder Control</i>	Dummy variable that is 1 if the founder occupies the position of Chairperson or/and CEO.
<i>Size</i>	Natural log of total assets.
<i>Slack</i>	Cash and short-term investments scaled by total assets
<i>Profitability</i>	The ratio of pre-tax income (profit) to sales.
<i>Leverage</i>	The ratio of total debt to total assets.
<i>Age</i>	Number of years since the initial public offering.
<i>Salesgrw</i>	Salesgrowth is calculated as the ratio of the increase (decrease) in sales this year to the sales of previous year.
<i>Wgi_average</i>	Average of the scores of individual countries on the Worldwide Governance Index

Table 4.2 Descriptive Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
LtD	3147	-.032	.991	-3.605	5.737
Family	3147	.38	.485	0	1
Internal Performance Hazard	3147	.03	.071	0	1.395
Positive Internal Performance Gap	3147	.025	.055	0	.757
Negative Performance Hazard	3147	.029	.083	0	1.945
Positive External Performance Gap	3147	.048	.077	0	1.104
Reprisk	2316	.022	.148	0	1
Founder Control	3147	.239	.426	0	1
Size	3147	7.888	2.124	.142	17.643
Slack	3147	.195	.168	.001	.911
Leverage	3147	.212	.189	0	1.872
Age	3147	16.778	7.682	5	69
Profitability	3147	.087	.192	-1.144	.433
Salesgrw	3147	.093	.177	-.402	.959

Table 4.3 Descriptive statistics by subsample of family and non-family firms

Variable	N	Family	N	Non-family		
		Mean		Mean	Diff. in mean	t-stat
LtD	1196	-.046	1951	-.024	.022	.610
Internal Performance Hazard	1196	.028	1951	.032	.005**	1.778
Positive Internal Performance Gap	1196	.026	1951	.025	-.001	-0.413
Negative Performance Hazard	1196	.027	1951	.029	.002	0.739
Positive External Performance Gap	1196	.05	1951	.047	-.003	-0.941
Reprisk	830	.014	1486	.027	.012**	1.942
Founder Control	1196	.628	1951	0	-.628***	-57.363
Size	1196	7.689	1951	8.011	.322***	4.143
Slack	1196	.22	1951	.18	-.040***	-6.572
Leverage	1196	.183	1951	.23	.047***	6.780
Age	1196	16.105	1951	17.191	1.087***	3.860
Profitability	1196	.093	1951	.084	-.009	-1.264
Salesgrw	1196	.112	1951	.082	-.030***	-4.517

***p<0.01, p<0.05, p<0.1

Table 4.4: Country-wise sample of family and non-family firms

Country	Region	Non-family	Family	Total
Australia	APAC	38	12	50
Austria	EMEA	14	13	27
Belgium	EMEA	18	6	24
Brazil	AMER	20	0	20
Bulgaria	EMEA	1	0	1
Canada	AMER	24	8	32
Czech	EMEA	6	0	6
Denmark	EMEA	1	1	2
Finland	EMEA	17	2	19
France	EMEA	59	37	96
Germany	EMEA	103	56	159
Greece	EMEA	4	4	8
Hong Kong	APAC	23	61	84
India	APAC	4	15	19
Indonesia	APAC	21	7	28
Ireland	EMEA	13	5	18
Israel	EMEA	5	5	10
Italy	EMEA	24	30	54
Japan	APAC	1	0	1
Malaysia	APAC	22	8	30
Mexico	AMER	6	0	6
Netherlands	EMEA	19	4	23
New Zealand	APAC	5	4	9
Norway	EMEA	48	6	54
Philippines	APAC	19	25	44
Portugal	EMEA	2	0	2
Russia	APAC	11	2	13
Singapore	APAC	42	10	52
South Africa	EMEA	4	0	4
Spain	EMEA	17	8	25
Sweden	EMEA	31	11	42
Switzerland	EMEA	48	20	68
Taiwan	APAC	17	11	28
Thailand	APAC	13	7	20
Turkey	EMEA	0	13	13
USA	AMER	1163	784	1947
United Kingdom	EMEA	88	21	109
Total		1951	1196	3147

Table 4.5 Pairwise Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
(1) LtD	1.000													
(2) Family	-0.011 (0.542)	1.000												
(3) IPH	-0.129* (0.000)	-0.032 (0.075)	1.000											
(4) PIPG	-0.109* (0.000)	0.007 (0.679)	-0.196* (0.000)	1.000										
(5) EPH	-0.161* (0.000)	-0.013 (0.460)	0.736* (0.000)	-0.060* (0.001)	1.000									
(6) PEPG	-0.024 (0.182)	0.017 (0.347)	-0.152* (0.000)	0.412* (0.000)	-0.215* (0.000)	1.000								
(7) Reprisk	0.055* (0.008)	-0.040 (0.052)	-0.022 (0.282)	-0.013 (0.536)	-0.020 (0.335)	0.021 (0.311)	1.000							
(8) Founder Control	-0.045 (0.011)	0.715* (0.000)	-0.003 (0.866)	-0.002 (0.905)	0.009 (0.619)	0.012 (0.514)	-0.007 (0.748)	1.000						
(9) Size	0.370* (0.000)	-0.074* (0.000)	-0.107* (0.000)	-0.192* (0.000)	-0.230* (0.000)	0.062* (0.001)	0.225* (0.000)	-0.136* (0.000)	1.000					
(10) Slack	-0.376* (0.000)	0.116* (0.000)	0.048* (0.007)	0.219* (0.000)	0.076* (0.000)	0.206* (0.000)	-0.008 (0.714)	0.149* (0.000)	-0.285* (0.000)	1.000				
(11) Leverage	0.165* (0.000)	-0.120* (0.000)	0.070* (0.000)	-0.108* (0.000)	0.116* (0.000)	-0.151* (0.000)	-0.033 (0.115)	-0.128* (0.000)	0.186* (0.000)	-0.347* (0.000)	1.000			
(12) Age	0.034 (0.058)	-0.069* (0.000)	-0.059* (0.001)	-0.071* (0.000)	-0.093* (0.000)	0.092* (0.000)	0.032 (0.129)	-0.081* (0.000)	0.255* (0.000)	-0.051* (0.005)	0.040 (0.025)	1.000		
(13) Profitability	0.182* (0.000)	0.023 (0.206)	-0.490* (0.000)	0.060* (0.001)	-0.695* (0.000)	0.434* (0.000)	0.038 (0.069)	0.006 (0.721)	0.302* (0.000)	-0.057* (0.001)	-0.098* (0.000)	0.139* (0.000)	1.000	
(14) Salesgrw	-0.030 (0.092)	0.080* (0.000)	-0.191* (0.000)	0.293* (0.000)	-0.150* (0.000)	0.198* (0.000)	0.021 (0.321)	0.078* (0.000)	-0.022 (0.224)	0.148* (0.000)	-0.061* (0.001)	-0.069* (0.000)	0.185* (0.000)	1.000

* $p < 0.01$ (p-values reported in parentheses)

Table 4.6 Main Results

Variables	1st stage DV: Select	(1) DV: Ltd	(2) DV: Ltd	(3) DV: Ltd	(4) DV: Ltd	(5) DV: Ltd
Family		0.064** (0.043)	0.111*** (0.002)	0.080** (0.022)	0.071* (0.057)	
<i>IPH</i>			-0.363 (0.509)			
<i>Family*IPH</i>			-2.118*** (0.002)			
<i>EPH</i>				-0.651 (0.121)		
<i>Family*EPH</i>				-0.748 (0.223)		
<i>Rep Risk</i>					0.182 (0.165)	
<i>Family*Rep Risk</i>					-0.501** (0.049)	
<i>Founder Control</i>						0.116** (0.021)
<i>PIPG</i>			-0.814** (0.014)			
<i>PEPG</i>				-0.351 (0.120)		
<i>leverage</i>	-0.367*** (0.000)	0.035 (0.734)	0.063 (0.559)	0.078 (0.475)	-0.044 (0.704)	0.071 (0.702)
age	-0.014*** (0.000)	-0.008** (0.010)	-0.004 (0.222)	-0.004 (0.249)	-0.005 (0.182)	-0.014*** (0.000)
size	-0.087*** (0.000)	0.111*** (0.000)	0.119*** (0.000)	0.120*** (0.000)	0.117*** (0.000)	0.110*** (0.000)
profitability	0.704*** (0.000)	0.497*** (0.000)	0.304** (0.020)	0.275* (0.051)	0.517*** (0.002)	0.572*** (0.000)
Big4	0.291*** (0.000)					

Dual Shares	0.008 (0.864)					
slack		-1.606*** (0.000)	-1.599*** (0.000)	-1.623*** (0.000)	-1.605*** (0.000)	-1.516*** (0.000)
salesgrw		0.193* (0.060)	0.072 (0.498)	0.053 (0.626)	0.201 (0.126)	0.129 (0.429)
Wgi_average		-0.158*** (0.000)	-0.189*** (0.000)	-0.196*** (0.000)	-0.145*** (0.001)	-0.153*** (0.009)
IMR		-0.204 (0.304)	-0.365* (0.066)	-0.374* (0.061)	-0.249 (0.297)	
Constant	0.243*** (0.000)	-0.082 (0.725)	0.020 (0.931)	0.050 (0.831)	-0.183 (0.476)	0.036 (0.969)
Industry dummy	No	Yes	Yes	Yes	Yes	Yes
Year dummy	No	Yes	Yes	Yes	Yes	Yes
N	11989	2978	2701	2701	2186	1074
(Pseudo) R2	(0.084)	0.340	0.356	0.353	0.293	0.378
(Wald chi2) F-test	1614.83***	62.35***	54.05***	52.86***	35.41***	28.00***

***p<0.01, p<0.05, p<0.1 (p-values reported in parentheses)

Table 4.6 shows the main regression results. Column 1 shows the results of the probit model that is the first step of the Heckman selection model that we use to test our hypotheses. The coefficient on big 4 is positive and significant ($p < 0.01$), suggesting that our selection equation is suitably identified. The inverse mill's ratio generated from this probit regression is subsequently fed into the second-step regressions as a control variable to take into account selection bias. In column 2, we see the results for the first hypothesis. Hypothesis 1 stated that with everything else held constant, family firms will be more likely to make long-term decisions. Consistent with this, we see that the coefficient on the family variable is positive and significant ($p < 0.05$). Thus, with expectancy and value held constant, family firm's lower sensitivity to time delays results in greater utilities from long term decisions as future utilities are discounted back at a lower rate in comparison to non-family firms. We further see that larger and more profitable firms are more long-term oriented; firms with more slack tend to make less long term decisions perhaps due to a lower risk appetite.

In column 3 and 4, we have the results for hypothesis 2, where we argue that economic performance hazard will moderate the extent to which family firms can make long term decisions. Column 3 shows the results using internal or historical performance hazard while column 4 shows those for external or industry performance hazard. In line with hypothesis 2, we expected a negative coefficient on both internal and external performance hazard. However, we find that only the negative historical aspiration gap or internal performance hazard is significant and highly so ($p < 0.01$). This suggests that when economic performance of family firms is poor and below their own aspirational benchmark, they perceive that the firm might have lower chance of surviving into the future which lowers the expectancy that future utilities, such as being able to leave the firm to the next generation, will be possible. This is more vividly depicted in Figure 4.1, where we can see that with greater negative aspiration gaps (represented by the blue and the purple lines), *ltd* decreases in family firms. On the other hand, external performance hazard or negative industry aspiration gaps do not seem to matter (column 4). Thus we find only partial support for our second hypothesis. We also note the significance of the inverse mill's ratio suggesting that the model was able to reduce selection bias. In column 5, we see whether reputation risk influences how family firms make long term decisions (hypothesis 3). The coefficient on the interaction term is negative

and significant ($p < 0.05$) which is in line with our expectations. A more immediate threat to a non-economic utility will trump over future non-economic utilities. Figure 4.2 plots the results of this interaction: the negative gradient of dotted navy blue line indicates that *ltd* in family firms is lower when reputation risk is high, while positive gradient of the blue line indicates *ltd* in family firms is lower when reputation risk is low.

Column 6 shows the regressions results for hypothesis 4. Here, we look at the subsample of family firms that do not have a dual hired CEO to facilitate a comparison between founder and descendant controlled firms. According to temporal motivation theory and prospect theory, the calculus of gains and losses are incremental on the reference points used by decision-makers and we posited earlier that the socioemotional reference points for founder and descendant will differ in the sense that each have different starting points in their career vis-à-vis the family firm and perceive the current stock of socioemotional wealth and incremental utilities in different ways. In line with this, we see that the coefficient on founder control is positive and significant ($p < 0.05$) suggesting that founders tend to see greater utilities from transgenerational succession and consequently make more long term decisions. Thus hypothesis 4 is supported.

Figure 4.1 Long term decisions, internal performance hazard and family

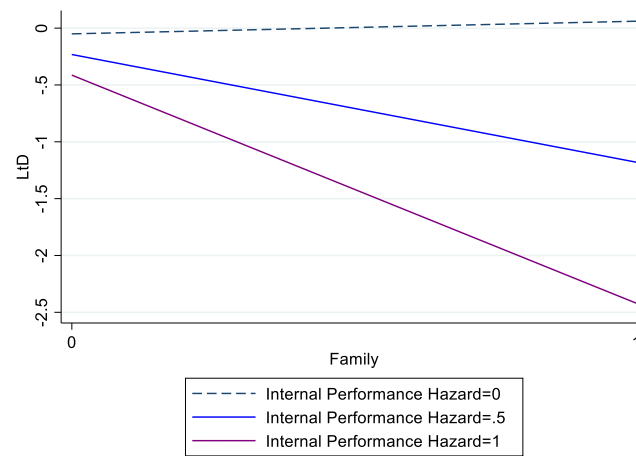
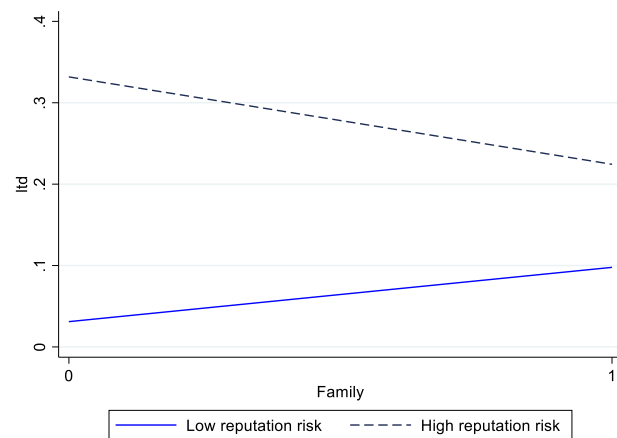


Figure 4.2 Long term decisions, reputation risk and family



4.5 Robustness Checks

Next we check the robustness of our results using different definitions of family involvement in the business. We use four different measures of family firm identification. Family1 is a dummy variable that is 1 if the family is the largest voteholder and has at least one family officer and one family director. Family2 indicates that one or more family members are directors or blockholders, but there are no family officers. Family3 is the proportion of shares held by the family while Family4 and Family5 measures the percentage of family ownership within the board and within executives respectively. As can be seen on tables 4.7a and 4.7b, our results are largely similar in a qualitative sense.

Table 4.7a Robustness tests

Variables	(1) DV: Ltd	(2) DV: Ltd	(3) DV: Ltd	(4) DV: Ltd	(5) DV: Ltd	(6) DV: Ltd	(7) DV: Ltd	(8) DV: Ltd
<i>Family1</i>	0.140*** (0.000)	0.164*** (0.001)	0.122*** (0.008)	0.084* (0.091)				
<i>IPH</i>		-0.740 (0.153)				-0.335 (0.536)		
<i>Family1*IPH</i>		-1.942** (0.043)						
<i>EPH</i>			-0.915** (0.024)				-0.669 (0.112)	
<i>Family1*EPH</i>			0.210 (0.797)					
<i>Rep Risk</i>				0.160 (0.175)				0.187 (0.155)
<i>Family1*Rep Risk</i>				-0.764** (0.030)				
<i>Family2</i>					0.083*** (0.008)	0.138*** (0.000)	0.103*** (0.003)	0.087** (0.020)
<i>Family2*IPH</i>						-2.309*** (0.001)		
<i>Family2*EPH</i>							-0.740 (0.231)	
<i>Family2*Rep Risk</i>								-0.515** (0.043)
N	2978	2701	2701	2186	2978	2701	2701	2186
R-squared	0.342	0.356	0.354	0.293	0.341	0.358	0.354	0.294
F-test	61.82***	53.16***	51.84***	34.95***	62.61***	54.34***	53.09***	35.63***
IMR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Year dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
***p<0.01, p<0.05, p<0.1 (p-values reported in parentheses)								
Family1 is a dummy variable that is 1 if the family is the largest voteholder and has at least one family officer and one family director. Family2 indicates that one or more family members are directors or blockholders, but there are no family officers.								

Table 7b: Robustness Tests

Variables	(1) DV: Ltd	(2) DV: Ltd	(3) DV: Ltd	(4) DV: Ltd	(5) DV: Ltd	(6) DV: Ltd	(7) DV: Ltd	(8) DV: Ltd	(9) DV: Ltd	(10) DV: Ltd	(11) DV: Ltd	(12) DV: Ltd
<i>Family3</i>	0.003*** (0.008)	0.003*** (0.009)	0.002* (0.074)	0.001 (0.290)								
<i>-IPH</i>		-0.786 (0.138)				-0.723 (0.158)				-0.737 (0.144)		
<i>Family3*IPH</i>		-0.038 (0.109)										
<i>EPH</i>			-0.935** (0.022)				-0.948** (0.017)				-0.947 (0.017)	
<i>Family3*EPH</i>			0.017 (0.494)									
<i>Rep Risk</i>				0.161 (0.166)				0.177 (0.128)				0.166 (0.147)
<i>Family3*Rep Risk</i>				-0.046** (0.038)								
<i>Family4</i>					0.007*** (0.000)	0.009*** (0.000)	0.005** (0.028)	0.008*** (0.004)				
<i>Family4*IPH</i>						-0.125*** (0.003)						
<i>Family4*EPH</i>							0.019 (0.582)					
<i>Family4*Rep Risk</i>								-0.062*** (0.004)				
<i>Family5</i>									0.008*** (0.000)	0.009*** (0.000)	0.005** (0.044)	0.009*** (0.004)
<i>Family5*IPH</i>										-0.135*** (0.001)		
<i>Family5*EPH</i>											0.027 (0.457)	
<i>Family5*Rep Risk</i>												-0.062*** (0.004)
N	2978	2701	2701	2186	2978	2701	2701	2186	2978	2701	2701	2186
R-squared	0.341	0.355	0.354	0.293	0.342	0.356	0.354	0.296	0.343	0.357	0.354	0.297
F-test	62.35***	53.89***	52.33***	35.11***	62.26***	54.33***	52.09***	35.53***	62.23***	54.31***	52.05***	35.47***
IMR	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year dummy	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

***p<0.01, **p<0.05, *p<0.1 (p-values reported in parentheses)

Family3 is the proportion of shares held by the family while Family4 and Family5 measures the percentage of family ownership within the board and within executives respectively.

4.6 Discussion

In this paper, we studied long term decision making in family firms using temporal motivation theory. We found that family firms in general are less sensitive to time delays which we consider to be their long term orientation; in other words, when contextual factors are held constant, family firms will see greater non-economic utilities emanating from long term decisions. However, we also find that time sensitivity or long-term value orientation alone does not solely determine whether long-term decisions are made. The expectancy associated with the utilities, as well as the perception of the non-economic gains are also very important. Consistent with that, we find that when performance is below historical aspiration levels and when there is high reputation risk, the calculus changes such that the likelihood of making long term decisions is reduced. Moreover, among founder and descendant controlled family firms, the former are more likely to value non-economic utilities related to transgenerational succession and make more long term decisions. A key highlight is that even though family firms are long term oriented in value, in practice the impact of expectancy and valuation based on referent points of socioemotional wealth will strongly influence the making of long term decisions.

A significant point of emphasis in this paper is the distinction between long term orientation and long term decision making. When looking at the behaviour of family firms, scholars in the past have argued that the transgenerational succession aspect of socioemotional wealth (which makes family firms unique) will lead family firms towards long term oriented decisions. However, decisions in family firms are made not just on the basis of this one dimension, but is rather more complex. In contrast to other theories, Temporal Motivation Theory provides us with an integrated framework to understand this better by combining hyperbolic discounting, expectancy theory, cumulative prospect theory and needs theory under one umbrella. Thus we argue that the goal of transgenerational succession will certainly make family firms less sensitive to longer time frames when it comes to returns by discounting future returns at a lower rate, but at the same time, we need to be cognizant of the fact that this lower time sensitivity is only one component of what motivates long term decision making. In other words, this is a cultural value (of both family and organization) translated into a discount factor that makes future utilities appear attractive (and in

comparison to non-family firms), but it is equally important to note that there are additional considerations to be made. According to TMT, these additional considerations are the expectancy and value of not just utility gains, but also losses.

While we argue that we can expect family firms to be less time sensitive in general, the expectancy and value of gains and losses is very context-specific. In this paper, we focused on three scenarios; one, when there is economic performance hazard, two, when there is non-economic performance hazard and three, when there is founder (vs descendant) control. Our findings support the predictions of TMT and find that all of these scenarios matter when it comes to long term decision making. However, the mechanisms through which these scenarios impact decisions are different. In the case of economic performance hazard, we see that family firms are less likely to make long term decisions because the expectancy of their primary utility is lower, i.e. transgenerational succession seems less likely when there is a possibility that the firm might not survive till then. We considered the threat to reputation as a form of non-economic performance hazard and found that family firms are also less likely to make long term decisions in this situation. In this case, they tend to focus on the imminent loss of non-economic wealth (reputation) and over-weight it relative to the gain in non-economic wealth (succession), i.e. expectancy of losses is significantly higher than that of gains. While economic performance hazard worked through expectancy of gains and non-economic performance hazard worked through expectancy of losses, our results drawn from the family subsample indicate that founder vs descendant control influences long term decision making through the actual value assigned to the utility of succession. These values are incremental gains or losses based on the referent point of socioemotional wealth. However, the referent points differ depending on whether the family member belongs to the founding or subsequent generations such that the former has a lower referent point than the latter thus also resulting in perceptions of greater incremental gains.

4.7 Conclusion and Future Research Directions

We tried to consider a net amount of long term decision making by using a factor generated from asset durability, capital expenditure and research and development in this study. Future research can incorporate more variables that reflect long term decision making in firms, for example,

sustainability performance, human resource practices, etc. Future research can also look at other contextual factors, such as the extent to which national cultures are individualistic. Individualism is ‘the degree to which people in a country prefer to act as individuals rather than as members of groups’; ‘In individualist societies, a child learns very early to think of itself as “I” instead of as part of “we”. It expects one day to have to stand on its own feet and not to get protection from its groups any more; and therefore it also does not feel a need for strong loyalty.’ (Hofstede, 1993: 89-90). In societies that are high in individualism, family members running the business may not derive as much satisfaction out of leaving the business to children. They may want their children to make their own fortunes by working in an organization that has not been built by their parents. The children themselves are likely to want to pursue their own goals and ambitions in their own way and have weaker sense of loyalty towards their parents or the family business.

Thus, in more individualistic countries, family members in the business may potentially find the idea of succession less motivating and to that extent, focus less on maximizing long-term value of the business. Furthermore, this can also be affected by how long term oriented the national culture is. ‘On the long-term side one finds values oriented towards the future, like thrift (saving) and persistence. On the short-term side one finds values rather oriented towards the past and present, like respect for tradition and fulfilling social obligations’ (Hofstede, 1993, p.90). Thus, in a society that values the long-term, family business owners and managers will believe that it is worth sacrificing current consumption in favor of reinvestment for future rewards from the business.

It can be argued that the family firm will have different levels of resource constraint as it moves through the different stages in its life cycle. At the beginning of its life, the family firm is likely to face limited access to capital, human and other resources. It will also be suffering from the liabilities of newness. The founder’s priorities will be on maintaining the family’s standard of living through the earnings of the business. This is the point at which the family and the business will face greatest resource constraint. As a result, the marginal utility out of taking a dollar out of the business instead of reinvesting will be high. As the business develops, so does the socioeconomic condition of the family. When the business earns enough to provide the family at a level such that the marginal utility out of withdrawing an additional dollar out of the business starts decreasing, the family will start reinvesting more into the business. Thus, the further along

the stages of the life cycle the business progresses, it more likely it may be that the family's long term values convert into actual long term decisions.

CHAPTER 5

GENERAL CONCLUSION

In this thesis, I explored how family principals' goals of increasing socioemotional wealth or non-economic utilities make family firms strategically unique, specifically in terms of their acquisition, board and long-term decision-making processes. Chapter 2 of the dissertation focused on whether family goals affect how acquisition deals are valued. I find that when family firms pay by equity (majority), they incorporate the additional risk of dilution of ownership and control by increasing the discount rate of future returns, such that they have a lower valuation in comparison to non-family firms. They value similarly downwards when the target operates under poor quality of public governance as the marginal cost related to loss of reputation is higher for family firms as the identity of the family is closely linked with the organizational identity of the family firm (Zellweger et al., 2012). I also find that family firms value foreign targets more than non-family firms due, in part, to greater marginal benefit of geographic risk diversification, but more so because cross-border acquisitions can be loosely coupled (Weick, 1976) from the core firm. Further post-hoc analyses on the family firm sub-sample reveal heterogeneous perception of SEW by founder and descendant board chairs, motivating me to explore in greater detail the board processes of family firms in the next chapter.

Chapter 3 of the dissertation focused on groupthink in the board of family firms. Using Janis' model of groupthink, I find that the board of directors in family firms are more likely to succumb to groupthink making it difficult for institutional investors to implement changes within the firm; this discourages institutional investment in family firms. This results in a governance challenge for family firms as they appear less attractive to an important investor group. Subsequent analyses and findings provide evidence that this can be mitigated by having boards that are more diverse, with directors having shorter tenures, but greater involvement with other boards. I explore mitigating factors further in post-hoc analyses and find that transparent financial reporting and strong shareholder voice encourage institutional investment; moreover, I see that while inter-generational involvement of family members on the board amplify groupthink, appointing more independent directors acts to reduce this impact.

In chapter 2, I did not find support for the hypothesis that long-term orientation of family firms will make them value deals higher due to an accounting of longer time frame. This led me to conduct more in-depth research on the long-term decision-making process in family firms. Drawing on Temporal Motivation Theory (Steel & Konig, 2006), I found that family firms in general are less sensitive to time delays which I consider to be their long term orientation; in other words, when contextual factors are held constant, family firms will see greater non-economic utilities emanating from long term decisions. However and more importantly, I also find that time sensitivity or long-term value orientation alone does not solely determine whether long-term decisions are made. The expectancy associated with the utilities, as well as the perception of the non-economic gains are also very important. Consistent with that, I find that when performance is below historical aspiration levels and when there is high reputation risk, the calculus changes such that the likelihood of making long term decisions is reduced. Moreover, among founder and descendant controlled family firms, the former are more likely to value non-economic utilities related to transgenerational succession and make more long term decisions.

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