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Performance of German Family Firms: A Focus on
Foundation Ownership and Board Diversity

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LIST OF ABBREVIATIONS

Dr.	Doctor
DDW	Die Deutsche Wirtschaft
e.g.	Exempli Gratia —“for example”
et al.	et alii (masculine), et aliae (feminine) — “and others”
etc.	Et cetera — “and other similar things”
H	Hypothesis
i.e.	id est — “that is”
IFERA	International Family Enterprise Research Academy
JFBM	Journal of Family Business Management
JFBS	Journal of Family Business Strategy
Ln	Natural logarithm
N/A	Not applicable

List of Abbreviations

OLS	Ordinary least square
p	Probability
Prof.	Professor
R&D	Research and Development
SEW	Socioemotional wealth
SIC	Standard industrial classification
VIF	Variance inflation factor
WHU	Wissenschaftliche Hochschule für Unternehmensführung

ABSTRACT AND KEYWORDS

This doctoral dissertation compiles three essays written within the scope of my doctoral study. The first part of the dissertation will briefly describe the relevance of my dissertation to the field of family business in general and with literature on corporate governance, ownership, and board diversity in particular. It will also highlight the significance of my empirical research work within the current stream of literature on family businesses. In addition, it will discuss the need to conduct these research studies by highlighting the research gaps and elaborate on used theoretical frameworks and applied methods. Moreover, it will summarize the findings of individual essays. The second part of the dissertation will present three complete essays. Lastly, this dissertation will

Abstract

summarize the contributions, practical implications, limitations, and potential avenues for future research.

Keywords: family firms, ownership structures, goals, board demographic diversity, firm performance, firm risk-taking behavior

INTRODUCTION TO THE DOCTORAL DISSERTATION

BACKGROUND AND MOTIVATION

In the domain of management, family business research has addressed a diversity of topics. Family business scholars remained engaged for decades to build the gap between management research and practice (e.g., Debicki, Matherne, Kellermanns, & Chrisman, 2009; König, Kammerlander, & Enders, 2013). The broad nature of family businesses helps scholars to extend and connect this stream of research with other disciplines, such as sociology, psychology, and economics (e.g., von Schlippe & Schneewind, 2014).

At the same time, research advances in multiple ways, offering significant contributions to understanding how

family firms differ from non-family firms in their emotional attachment to firm ownership (e.g., Zellweger, Kellermanns, Chrisman, & Chua, 2012), corporate governance practices (Jones, Makri, & Gomez-Mejia, 2008), and with R&D and innovation activities (Duran, Kammerlander, Van Essen, & Zellweger, 2016; König et al., 2013). In all types of firms, individuals must guide and direct their relationships, which may result in complex interactions within internal and external organizational environments (Shepherd, 2016). The importance of investigating the reciprocal relationships between family structures, processes, events, and linkages and their effect on individual and organizational consequences is evident (Aldrich & Cliff, 2003).

Hollenbeck (2008) categorizes contributions into two broad categories: consensus shifting and consensus creating. Studies focusing on commonly used assumptions

and challenging them to extend and update existing theory are shifting consensus. For example, a review by Soleimanof, Rutherford, and Webb (2018) points out that studies based on institutional complexities may shift consensus related to underlying institutional inconsistencies between family and other logics. Therefore, essay 1 attempts to modify institutional theory by illustrating the multiplicity of institutional logics and different organizational responses from heterogeneous firms. Thus the aim of essay 1 is to deepen our understanding of how institutional theory explains the behavior of family firms within the constellations of institutional logic.

However, those studies which build on clarifying existing debates by providing evidence and opportunities for future research create consensus. As Jiang and his colleagues (2012) highlight in a review, scholars can

explore the response of firm-level variables affected by individual and group-level interactions by following a micro-foundations perspective. Moreover, regarding board demographics, research highlights the significance of various types of diversities and their influences. However, little is known about cultural and age diversity (Roberson, Holmes, & Perry, 2017). Therefore, essays 2 and 3 focus on board demographic diversity such as age, gender, and nationality, considered valuable and unique resources that are a source of competitive advantage for firms. Moreover, these two essays also identify the relationship between available diversity resources and contexts in which distinct firms are embedded. Thus, essays 2 and 3 attempt to integrate research domains across macro and micro levels.

Even with the advancement in the field of family business, as emphasized by Rovelli and her colleagues

(2021), some basic questions remain unanswered. Therefore to extend this line of research, family business scholars need to shift their focus from ‘what’ to ‘why’ and ‘how’ questions. Building on this legacy, essays included in this dissertation help to understand ‘how’ questions that have important implications for individual actors, families, firms, and communities. Essay 1 investigates how different firms holding multiple institutional logics behave differently. It also highlights how differences in goals of foundation-owned family and non-family firms and non-foundation-owned family and non-family firms impact their firm performance.

Moreover, essays 2 and 3 examine how different age, gender, and nationality board diversities affect firm performance and risk differently than non-family firms. Furthermore, essays 2 and 3 study if family firms differ from non-family firms in their level of board demographic

diversity. An intriguing line of research in strategic management is to understand the micro-foundations of SEW and non-economic benefits within firms, influencing sustainable organizational performance and other outcomes (Richard, Devinney, Yip, & Johnson, 2009). Therefore, the three essays included in this dissertation attempt to make a significant contribution to the field of management and family business.

CENTRAL THEMES AND THEORETICAL FRAMEWORKS

This section will elaborate on prominent themes and frameworks used in this doctoral dissertation. This dissertation is based on the research topics in the field of management, in general, and family firms, in particular, such as goal duality in family firms, corporate governance, and board demographic diversity.

Family Firms

Family businesses surpass the number of non-family businesses worldwide and significantly contribute to employment creation and economic activity¹ (De Massis, Minin, & Frattini, 2015; Gedajlovic, Carney, Chrisman, & Kellermanns, 2012). In Germany, around 90 percent of all organizations are family firms (Feninger, Kammerlander, & De Massis, 2019). In the last decades, research on family business has grown exponentially (Debicki et al., 2009; Kempers, Leitterstorf, & Kammerlander, 2019; Xi, Kraus, Filser, & Kellermanns, 2015). However, family business literature still highlights the need to explore and understand this dominant organizational form compared to

¹ Family firms are contributing toward 70-90 percent of world's GDP and around 85 percent of start-ups all around the world are established with family investment.

other organizational structures (Williams, Pieper, Kellermanns, & Astrachan, 2018).

In family firms, their idiosyncratic characteristics, the influence and embeddedness of the owning family, and specific family business goals are key factors that distinguish them from their non-family counterparts (Gagne, Sharma, & De Massis, 2014). Family firms are supposed to have more goals than non-family firms (Chrisman, Chua, Pearson, & Barnett, 2012). Perhaps the presence of family in the business adds family goals with business goals to the firm's goal sets (Zellweger, Nason, Nordqvist, & Brush, 2013).

Family business goals are vital to the firm organization and its functions. Goals are considered building blocks to family business definitions (Chua, Chrisman, & Sharma, 1999; De Massis, Kotlar, Chua, & Chrisman, 2014), a determining factor to firm behavior and various firm

strategic decisions (Chrisman, Fang, Kotlar, & De Massis, 2015). Hence, various scholars studied family business goals to advance the field of family business research (Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, & Moyano-Fuentes, 2007; Zellweger et al., 2013). Depending on the focus of this dissertation, a commonly used definition of family firms given by Chua et al. (1999) is adopted. Based on their definition, “the family business is a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families” (p. 25).

One of the primary outcomes of the family business goals is socioemotional wealth (SEW), including its generation and preservation (Patel & Chrisman, 2014;

Williams et al., 2018). In family firms, the goal of preserving socioemotional wealth may affect the firm's performance risk (Gomez-Mejia et al., 2007), thus, limiting the ability of family firms to attain economic benefits from entrepreneurial activities (Schepers, Voordeckers, Steijvers, & Laveren, 2014). Moreover, family business goals may lead to forming different governance structures within the firm (Jaskiewicz & Klein, 2007; Pieper et al., 2008). Similarly, pursuing family-oriented non-economic goals make it hard for family firms to manage and monitor the firm (Patel & Chrisman, 2014; Chua et al., 2009). Therefore, depending on the pursuit of economic and non-economic goals, family firms often encounter trade-offs between social and economic benefits, affecting the firm's strategic decision-making and performance (Gomez-Mejia et al., 2007). Following this stream of research, essays 1, 2, and 3 focus

on finding how the duality of economic and non-economic goals in family firms, which are central to the formation of a governance structure affects the firm outcomes, including firm performance and firm risk-taking behavior. Given the importance of economic and non-economic goals in family firms, the next section will elaborate on goal duality in family firms.

Goal Duality in Family Firms

Goals characterize the desired outcomes of the firm, and family firms are widely accepted as pursuing multiple goals related to both economic and non-economic aspects (Williams et al., 2019). In family firms, the dominant family has the discretion to define and control the firm's goals, thus, aligning their idiosyncratic desires and interest (Chua et al., 1999). It is typical for family firms to pursue several goals that could or could not be mutually

exclusive. Consequently, the level of complexity embedded in the goals pursued by family firms is more than non-family firms (Kotlar, De Massis, Fang, & Frattini, 2014). Given the duality of purpose in family firms, they are considered as interesting phenomena to study organizational goals.

Management literature provides that economic goals particularly focus on profit maximization. In addition, the corporate social responsibility literature recognizes a variety of non-economic goals, for instance, good citizenship, serving the community, and enhancing public image (Keim, 1978). These economic and non-economic goals co-exist, which under different situations, either conflict or complement each other.

Organizational goals can also be categorized into internal and external goals based on their sources (Cyert & March, 1963). The internal goals represent the desires of

the coalition within the firm; for instance, the non-economic internal goals of the family firm reflect the interests of the founding families, such as control and influence over the decisions, a transgenerational succession of the business, and desires for family identification (Gomez-Mejia et al., 2007). The external goals are reflected by the external shareholders having a heterogeneous set of interests such as rankings, status, etc.

Research documents that a firm's coalitions and different individuals may possess more than a single goal that gives rise to a goal diversity (Cyert & March, 1963). Scholars assert that family firms prioritize the goals of various stakeholders to develop a goal set with minimum divergence from a set of whole family business goals. The convergence of these family and non-family goals guide the family firm's action and determines organizational performance.

Similar to family firms, there are some other types of organizations that are often embedded with dual identities as they strive for both economic (profit-based) and non-economic (community-based) goals (Moss, Short, Payne, & Lumpkin, 2011). For instance, foundation-owned firms, either charitable or non-charitable. Foundations also own some family firms, thus, this type of ownership increases the goal complexity underlying various family, business, and social goals. Research provides that social and family businesses may encounter similar situations and issues (Bacq & Eddleston, 2018; Basco, Calabro, & Campopiano, 2019). However, interdisciplinary research focusing on both family and social businesses is rare (Bacq & Lumpkin, 2014). To address this research gap in the field of family business and social enterprises, essay 1 focuses on extending theory and findings to better understand the role of multiple co-existing goals in

shaping outcomes of distinct types of organizations, including foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-owned non-family firms.

An institutional theory is an appropriate lens to understand how organizational coalitions differ in their goal set and do different ownership structures with multiple goals differ in their performance. According to institutional theory (Thornton & Ocasio, 2008), institutional logics play a significant role in guiding social behaviors and economic activities (e.g., Goodrick & Reay, 2011; Greenwood et al., 2010; Martin, Currie, Weaver, Finn, & McDonald, 2017). Among seven² key societal institutions, literature has determined the family as an important institution that influences business

² Other six institutions are community, corporation, market, profession, religion, and state.

organizations (Thornton & Ocasio, 1999). Guiding family logic emphasizes preserving family values and beliefs; business logic mainly focuses on norms and standards affecting efficiency and effectiveness. Family firms, along with family and business logic, often have to deal with logics related to community, religion, and politics, thus, exerting pressure on firms while making strategic decisions (Greenwood, Diaz, Li, & Lorente, 2010; Reay, Jaskiewicz, & Hinings, 2015). The confluence of multiple institutions is characterized by mutual reinforcement, co-integrated and inseparable nature, and dynamic interaction of distinct rules and norms, resulting in different outcomes compared to single or various institutions standing alone (Batjargal, Hitt, Tsui, Arregle, Webb, & Miller, 2013).

Research states that institutional overlap in family firms leads to a dilemma of prioritizing between family and business norms (Lansberg, 1983); thus, high

dependency on social capital elevates the influences of informal institutions on family firms' behaviors and outcomes (Stewart, 2003). Consequently, institutional overlap in family firms resulting from the intersection of family and business institutions is likely to emphasize the concerns of SEW preservation in family firms (Reay, 2009). Therefore, in family business research, the institutional theory presents a significant relevance with questions of how firms instilled in organizational contexts, driven by multiple institutional logics, such as social, family, business, etc., can effectively direct their pluralistic institutional environments (Thornton & Ocasio, 2008).

The subjects of balancing the effects of multiple co-existing institutional logics, either conflicting or complementary, have been of great interest to the field of institutional theory. In previous research, most studies

focused on the business side of the family firm while neglecting the family side (e.g., Stewart, 2003). However, family firms present different levels of preference for various types of logics (Reay et al., 2015). Moreover, family firms not only connect family and business institutions but also mediate and drive complex interactions between these institutions (Stewart, 2003). Therefore, there is a need for deepening the knowledge of external and internal organizational factors affecting decision-making in family firms that differ based on multiple conflicting or complementary institutional logics underlying various situations (Soleimanof et al., 2018).

Hence, family firm scholars are supposed to make substantial theoretical contributions to institutional theory (Soleimanof et al., 2018). Therefore, the use of institutional theory seems significant, especially under those circumstances where other theoretical frameworks

have failed to explain and clarify the behaviors of family firms and their performance difference from non-family firms (Breton-Miller & Miller, 2009; Wright, Chrisman, Chua, & Steier, 2014). Given the lack of attention the institutional theory has received in the field of family business research, essay 1 investigates the following research questions:

- (1) Do foundation-owned firms perform better than non-foundation-owned firms?*
- (2) Does family ownership weaken the relationship between foundation ownership and firm performance?*

To address these research questions, based on the arguments from institutional theory, essay 1 argues that the duality of purpose (social and business) embedded in foundation-owned firms may embrace them with an enhanced collection of practices; thus, leading to increased

organizational flexibility, enhanced access to resources, improved innovation, and work integration (Pache & Santos, 2013). Moreover, the increased level of support received by foundation-owned firms (Smets, Jarzabkowski, Burke, & Spee, 2015) may improve their performance over non-foundation-owned firms. However, in foundation-owned family firms, the interaction of family logic with competing institutional logics of social and business may negatively affect their performance compared to foundation-owned non-family firms with only social and business logics.

Corporate governance serves as a mechanism to implement institutional prescriptions and make family firms different from non-family firms in their strategic decision-making (Soleimanof et al., 2018). Informal institutions provide family firms with advantages of social capital based on their social linkages, flexible structure,

and informal long-term relationships compared to non-family firms, which are mostly restricted by more formal and inflexible procedures and structures (Miller, Lee, Chang, & Breton-Miller, 2009). Therefore, the focus of the next section will be corporate governance in family firms, with its primary focus on family governance.

Corporate Governance in Family Firms

In family business research, corporate governance has received substantial attention (Debicki et al., 2009; Siebels & Zu Knyphausen-Aufseß, 2012). Corporate governance is a broad and complex concept, defined as systems of structures and processes by which organizations are guided and controlled to secure their legitimacy and economic concerns (Neubauer & Lank, 2016). Corporate governance structures comprise of ownership, board, and management. However, corporate governance processes

describe the interaction among governance actors in defined governance structures (Sarbah & Xiao, 2015).

Various scholars have extensively studied ownership as a dimension of corporate governance. Previous literature provides mixed findings on the relationship between ownership and firm performance. Few studies document a positive and significant association (e.g., Anderson & Reeb, 2003), while others have found a negative or insignificant relationship between ownership and performance (e.g., Mazzi, 2011).

Firm boards, another dimension of corporate governance, are organizational bodies that may help managers in strategic decision-making and their implementation (Bezemer et al., 2007; Huse, 2007). Many studies have found multiple aspects related to the role and structure of the firm board; however, the literature on these findings remains inconclusive. Various studies found a

positive and significant effect of a firm board on its performance (e.g., Abor & Biekpe, 2007), while others have presented a negative or insignificant relationship between the board and firm performance (e.g., Bennedsen, Kongsted, & Nielsen, 2008).

In family business research, multiple studies have used the corporate governance perspective to explain the behavior, outcomes, and performance differences of family firms from non-family firms (Goel, Jussila, & Ikkäheimonen, 2014; Mazzi, 2011; Siebels & Zu Knyphausen-Aufseß, 2012). Distinct ownership and control embedded in family firms featuring unique corporate governance structures differentiate them from non-family firms (Carney, 2005). In family firms, governance structures are required to control and monitor management practices, establish cohesion and shared

vision, and avoid conflicts within family firms (Mustakallio, Autio, & Zahra, 2002).

The multiple roles of family members within the family and firm (Tagiuri & Davis, 1996) give rise to family governance, a subsystem of internal governance in family firms (Klein, 2009). The goal of the family governance subsystem is to protect and maintain the cohesion among family members, comprising a family council and shareholder's meeting (Gallo & Kenyon-Rouvinez, 2005; Mustakallio et al., 2002). However, the goal of the business governance subsystem is to organize and control business activities and it comprises a board of directors, a top management team, and shareholder's meeting (Gallo & Kenyon-Rouvinez, 2005; Neubauer et al., 1998). Consequently, the family and the business governance are two interacting subsystems of internal

governance of family firms (Gallo & Kenyon-Rouvinez, 2005).

All essays included in this dissertation focus on the ownership dimension of corporate governance. However, essays 2 and 3 are based on the second core element of governance structure, i.e., the board of directors. Moreover, all three essays describe the role played by an integral component of family internal governance structure, i.e., family governance.

Board Demographic Diversity

In the field of corporate governance, as suggested by researchers and regulators, studies on board diversity are seen as substantial as these studies provide potential means of improving corporate governance. Board diversity is generally categorized into two groups: structural diversity, referring to the degree of board independence, and

demographic diversity, referring to the proportion of directors with respect to their age, experience, education, race, gender, ethnicity, etc. Board's gender diversity remained in debate for a long time; even some countries have legislation on implementing a quota for gender diversity on boards³ (Baker, Pandey, Kumar, & Haldar, 2020).

Research documents that any form of diversity is beneficial if it enhances thinking (Barrett & Moores, 2020). Consequently, it improves board functioning and the firm's entrepreneurial outcomes (Zhang & Luo, 2013).

Previous literature on board demographic diversity shows that board diversity has both benefits and costs. Based on

³ In Norway, it is mandatory to have a minimum 40 percent representation of each gender on firm's board; however, firms in other countries including Belgium, Denmark, France, Germany, Iceland, Italy, Malaysia, the Netherlands, and Spain are required to implement 30 to 40 percent mandatory quota for gender diversity. Moreover, some countries mandated a representation of at least one women on boards, including Finland, India, Israel, and the UAE.

organizational research, diverse boards bring more opinions, experiences, networking, and expertise (Kang, Cheng, & Gray, 2007). Moreover, diverse boards are more innovative, flexible, and better able to monitor activities (Miller & Triana, 2009), which improves corporate governance (Perryman, Fernando, & Tripathy, 2016). Moreover, scholars have found that boards with age, gender, nationality, and race diversity may make more informed decisions and are likely to solve complex issues (Srinidhi, Gul, & Tsui, 2011). Consequently, enhance the firm's financial, social, environmental, and governance outcomes (Conyon & He, 2017; Kim & Lim, 2010). Contrary to this, prior literature also documents negative consequences of board diversity. For instance, board diversity may become the source of forming in-groups and out-groups among board members leading to more conflicts, reduced cohesion, and poor communication

(Eulerich, Velte, & Van Uum, 2014). Additionally, board diversity leads to slow decision-making by the board members (Triana, Miller, & Trzebiatowski, 2014).

Board diversity is identified as the combination of both human and social capital, which governs the board's functions (Van der Walt & Ingley, 2003). One of the main focuses of research on board diversity is examining the firm outcomes. Various studies show that board diversity improves firm governance (Adams & Ferreira, 2009); however, mixed findings are available on the relationship between board diversity and firm performance. Different studies have found that board diversity positively affects firm performance (Francoeur, Labelle, & Sinclair-Desgagne, 2008; Terjesen, Couto, & Francisco, 2016). In contrast, many scholars have found a non-significant and negative relationship between board diversity and firm performance (Adams & Ferreira, 2009).

Finding antecedents of board diversity also remains the central focus of a few studies on board diversity. Discussions on the contextual factors, affecting board diversity, highlight multiple social, economic, political, and legal institutions that impact board diversity (Grosvold & Brammer, 2011). Similarly, researchers suggest that firm-specific characteristics like firm size, strategic direction, network connections, and external environment positively relate to board diversity (Brammer, Millington, & Pavelin, 2007). Furthermore, industry type and institutional factors such as corporate legislation and governance guidelines are related to board diversity (Terjesen, Aguilera, & Lorenz, 2015).

In addition to the firm outcomes of board diversity, researchers have also investigated various channels through which board diversity influences firm performance. For example, Dezsó and Ross (2012) find

that in terms of performance, only those firms focusing on innovation strategy can benefit from board diversity. Similarly, scholars have found board diversity positively related to firm innovation, reputation, and board's strategic control (Bear, Rahman, & Post, 2010; Miller & Triana, 2009). Moreover, researchers find a positive relationship of board diversity with environmental performance and corporate social responsibility (Bear et al., 2010).

The majority of research in the field of board diversity focuses on outcomes of board diversity, mainly firm performance; however, antecedents of board diversity have not received much attention. Therefore, essay 2 examines the impact of family firm status on board demographic diversities. Furthermore, essay 3 investigates the impact of board diversities on a firm's risk-taking behavior, which as compared to other firm outcomes

remains under-investigated. Moreover, gender diversity has received significant attention while other demographic attributes of the board of directors have been neglected. Despite the research advancement in the area of board diversity, it lacks clarity and direction around some key relations. Based on the research gaps identified, essays 2 and 3 focus on three attributes of demographic diversity, including age, gender, and nationality, instead of concentrating on a single measure of diversity. Hence, these essays aim to find the impact of various board demographic diversities on firm outcomes and address the following research questions.

- (1) How does family firm status affect board diversity?*
- (2) How do board age, gender, and nationality diversities influence a firm's risk-taking behavior?*

In family firms, the board of directors is one of the core elements of the governance structure, which controls and advises the top management team intending to align the interests of managers and family shareholders (Voordeckers, Van Gils, & Van den Heuvel, 2007). Most of the studies in prior literature concentrate on the role of non-economic family concerns and the risk of expropriation associated with it (e.g., Bammens, Voordeckers, & Van Gils, 2011). Research shows that, based on a strong incentive involved, family-controlled boards are at a higher risk of entrenchment due to control exerted by family shareholders (Nicholsen & Kiel, 2007). Scholars have identified multiple aspects such as family's fear of losing control and influence on decision-making, socioemotional attachment with family goals, and risk of board independence that are likely to affect board composition in family firms (Anderson & Reeb, 2003).

Therefore, it is generally assumed that to achieve both economic and non-economic benefits, family firms are likely to develop best-fit governance structures appropriate to the nature and extent of family business overlap (Nordqvist, Sharma, & Chirico, 2014). Hence, it seems interesting to investigate the board demographic structure, which is at the core of family and business governance subsystems. Following an intriguing stream of research on board diversity in family firms, essays 2 and 3 concentrate on finding the impact of board age, gender, and nationality diversities on firm performance and risk-taking behavior. Moreover, by addressing the following research questions, these essays examine the performance and risk differences underlying family and non-family firms based on their different levels of board demographic diversities.

- (1) How do board age, gender, and nationality diversities affect performance in family vs. non-family firms?*
- (2) How do board age, gender, and nationality diversities affect a firm's risk-taking behavior in family vs. non-family firms?*

OVERVIEW OF ESSAYS AND RESEARCH OBJECTIVES

This doctoral dissertation is quantitative in nature and comprises three inter-related essays addressing organizational behavior and corporate governance in family firms. Each essay builds on a specific theoretical framework and employs a unique data set. Table 0 - 1 gives an overview of three essays included in this doctoral dissertation.

The first essay is a quantitative empirical study that looks at different ownership structures underlying various

business, family, and social goals. Ownership structures are a vital dimension of corporate governance and are characterized as the combination of different economic and non-economic goals encompassing multiple institutional logics. This essay looks at the performance difference of four sets of firms, including foundation-owned family and non-family firms and non-foundation-owned family and non-family firms. It investigates how co-existing conflicting or collaborating institutional logics, namely family, business, and social, across different organizational structures lead to varying firm performance. This essay concludes that the family logic interacts negatively with the combination of social and business logics, thus, resulting in decreased firm performance, as evident by the findings of essay 1 related to foundation-owned family firms.

The second essay is also a quantitative empirical study, which looks at both dimensions of corporate governance, including ownership and board of directors. To extend the findings of essay 1, essay 2 illustrates the importance of distinct ownership structures underlying various goals guided by different institutional logics, as suggested by essay 1, in directing different board demographic diversities. Based on the significance and relevance of socioemotional wealth theory (SEW), essay 2 builds on SEW construct to determine the impact of firm ownership on its board demographic composition. The findings of essay 2 present that the board of family firms is less diverse in age, gender, and nationality than the board of non-family firms. Therefore, this essay highlights the significance and importance of the role played by different owners in constructing their board structures. Age and nationality diversities, which have been neglected in

previous research, remain the focus of essay 2. Thus this essay contributes to the literature on board diversity (e.g., Miller & Triana, 2009).

Essay 3 extends the findings of essay 2 by shifting the focus from antecedents of board diversity to its under-investigated outcome, i.e., firm risk-taking behavior. Essay 3 aims to find the impact of board demographic diversity on a firm's propensity to take risks and how their relationship differs in family and non-family firms. The findings of essay 3 reflect that board age and nationality diversity are positively associated with firm risk-taking behavior; however, family ownership weakens the relationship of age and gender board diversity with a firm's risk-taking behavior. The board of directors plays a significant role in making a firm's strategic decisions and may alter a firm's propensity toward risk. Moreover, the distinct preferences and goals of family firms make them

different from non-family firms; therefore, the decisions of the board of directors in family firms are likely to be influenced by family members. Therefore, looking at their firm risk-taking affected by board demographic diversities seems substantial.

In sum, the research foci of three essays included in this dissertation contribute to the literature on goals duality, corporate governance, and board demographic diversity in family firms. Moreover, the findings of these essays have great relevance to actors involved inside and outside family firms. Therefore, the overall results present important theoretical, practical, societal, and political implications. This doctoral dissertation brings the attention of all stakeholders toward the role and importance of different ownership structures and board demographic diversity in family firms and a broader context.

Table 0 - 1: Overview of Essays included in Doctoral Dissertation. (Source: Own)

	Essay 1	Essay 2	Essay 3
Title	Foundation-owned firm performance: A competing institutional logics perspective.	A closer look at diversity and performance in family firms.	Board diversity and risk-taking behavior: Does the family firm ownership matter?
Research Questions	<p>(1) Do foundation-owned firms perform better than non-foundation-owned firms?</p> <p>(2) Does family ownership weaken the relationship between foundation ownership and firm performance?</p>	<p>(1) How does family firm status affect board diversity?</p> <p>(2) How does board diversity affect performance in family vs. non-family firms?</p>	<p>(1) Do board age, gender, and nationality diversity matter for the firm's risk-taking behavior?</p> <p>(2) How does board diversity (age, gender, and nationality) affect a firm's risk-taking in family versus non-family firms?</p>
Theoretical Frameworks	Institutional theory	Socioemotional wealth (SEW)	Socioemotional wealth (SEW)

Introduction

	Essay 1	Essay 2	Essay 3
Methodology	A quantitative empirical study based on ordinary least square regression (OLS) and matched-pair analysis.	A quantitative empirical study based on ordinary least square regression (OLS).	A quantitative empirical study based on ordinary least square regression (OLS).
Sample	Cross-sectional data on 528 German firms comprised foundation-owned family and non-family firms and non-foundation-owned family and non-family firms ranging from 2007-2015.	Cross-sectional data on 341 public and private German firms, including 125 family and 216 non-family firms ranging from 2014-2018.	Cross-sectional data on 146 listed German firms, including 55 family and 91 non-family firms, ranging from 2014-2018.
Data Collection	Amadeus, Dafne, Firm websites, Die deutsche wirtschaft (DDW).	Dafne, BoardEx, Firm websites, Die deutsche wirtschaft (DDW).	Datastream from Eikon, BoardEx, Dafne, Worldscope Datastream, Firm websites, Die deutsche wirtschaft (DDW).

Introduction

	Essay 1	Essay 2	Essay 3
Dependent Variable(s)	Firm performance	(1) Firm performance (2) Age diversity (3) Gender diversity (4) Nationality diversity	Firm risk-taking behavior
Independent Variable(s)	Foundation-owned firm dummy	Family firm status	(1) Age diversity (2) Gender diversity (3) Nationality diversity (4) Family firm ownership
Moderating Variable(s)	Family ownership	(1) Age diversity (2) Gender diversity (3) Nationality diversity	Family firm ownership

Introduction

	Essay 1	Essay 2	Essay 3
Main Findings	<p>(1) Foundation-owned firms carrying conflicting logics of social and business do not perform significantly better than non-foundation-owned firms</p> <p>(2) Family firms holding conflicting logics of family and business outperform non-family firms.</p> <p>(3) The performance of foundation-owned firms starts decreasing when a family or families holds an equity share in a firm.</p>	<p>(1) Board of family firms is less diverse in age, gender, and nationality than boards of non-family firms.</p> <p>(2) There is no significant difference in the performance of family and non-family firms following an increase in board demographic diversity.</p>	<p>(1) Age and nationality diversity significantly increase a firm's risk-taking behavior.</p> <p>(2) Family firms take more risk than non-family firms.</p> <p>(3) Family ownership significantly moderates the relationship between board diversity (age and gender) and the risk-taking of the firm.</p>

Introduction

	Essay 1	Essay 2	Essay 3
Main Contributions	<p>(1) Elaborate on understanding multiple co-existing institutional logics within four different types of organizations, either competing or collaborating.</p> <p>(2) Examine how different combinations of logics can guide firm actions leading to varying firm performance.</p> <p>(3) Extend the current knowledge of firm performance within the context of family firms conceptualized on family, business, and social logic as a whole. Compare the performance of foundation-owned family firms with their counterparts holding different sets of multiple institutional logics (family, business, and/or social).</p>	<p>(1) Extend research about the family firm-board diversity relationship by investigating the impact of family firm status on board diversity, measured by three different diversity attributes: age, gender, and nationality.</p> <p>(2) Contribute by comparing differences across family and non-family firms based on their board demographic diversity explained by the theory of SEW.</p> <p>(3) Advance the diversity literature by specifying and justifying demographic diversity as either separation, variety, or disparity based on a board's specific interest.</p>	<p>(1) Contribute to the literature on board demographic diversity by examining the role of different attributes of the board of directors (age, gender, and nationality) toward the risk-taking behavior of the firm.</p> <p>(2) Extend the literature on family firms by examining the risk-taking behavior of family versus non-family firms.</p> <p>(3) Contribute to the stream of research following SEW perspective by investigating the influence of family firm ownership between the relationship of board demographic diversity and firm risk-taking.</p>

Introduction

	Essay 1	Essay 2	Essay 3
Conference Presentations (order chronologically)	<p>(1) Presented at the International Family Enterprise Research Academy (IFERA) Annual Conference, June 2017, Zadar, Croatia.</p> <p>(2) Presented at the Copenhagen Business School Research Seminar, February 2020, Denmark.</p> <p>(3) Presented in the Workshop on the Performance of Foundation-Owned Enterprises, December 2020, Copenhagen Business School, Denmark.</p> <p>(4) Presented at the Research seminar of WHU – Otto Beisheim School of Management, in January 2021, Vallendar, Germany.</p>	N/A	N/A

Introduction

	Essay 1	Essay 2	Essay 3
Journal Submission	N/A	<p>(1) Special Issue on “Advancing Diversity Research in Family Business” of the Journal of Family Business Strategy (JFBS; initial submission of an earlier version in May 2021, went under review, rejected in August 2021).</p> <p>(2) Journal of Family Business Management (JFBM; initial submission of an earlier version in December 2021, received “Revise and Resubmit” in January 2022”, a revised version resubmitted in June 2022, accepted for publication in June 2022).</p>	N/A
Publication Status	Unpublished Working Paper.	Paper accepted for publication.	Unpublished Working Paper.
Co-Authors	Prof. Dr. Nadine Kammerlander.	Prof. Dr. Nadine Kammerlander.	Prof. Dr. Nadine Kammerlander.

Abstracts of the Essays

Abstract of Essay 1

The relationship between firm's ownership configuration and their goals is critical to firm outcomes. In this study, we analyze how different combinations of logics, such as family, business, and social logics, impact the performance outcomes of firms with multiple ownership structures. We draw on institutional logic to examine the performance difference between foundation-owned and non-foundation-owned family and non-family firms. For this purpose, we collected matched-pair data on 528 German firms belonging to four different ownership structures, covering a period from 2007-2015. Our findings suggest that family ownership negatively affects the performance of foundation-owned firms. This study contributes to the family business literature by providing empirical evidence on the role of family ownership in

guiding firm performance when competing or complementary logics interact with family, business, and social goals.

Abstract of Essay 2

Ownership structure plays a significant role in determining board demographic diversity. However, it is still unclear how different ownership configurations impact the structure of a firm's board and how board diversity influences firm performance. This study aims to investigate the relationship between ownership and board diversity. Therefore, in this study, we argue that family firms have a lower level of board demographic diversity (in terms of age, gender, and nationality) than non-family firms and that family ownership moderates the relationship between board demographic diversity and firm performance. To test our hypotheses, we draw our

data from a sample of 341 German family and non-family firms for a period from 2014 - 2018. The results show that family firms are less diverse in terms of age, gender, and nationality than non-family firms. This study contributes to the general understanding of family firms and the particular role ownership plays in shaping board demographic diversity.

Abstract of Essay 3

The aim of this study is to investigate the impact of board demographic diversity, including age, gender, and nationality, on firm's risk-taking behavior for 146 listed German firms for a period from 2014 - 2018. Moreover, it examines whether the relationship between board demographic diversity and firm's risk-taking behavior significantly differs in family and non-family firms. Our findings suggest that age and nationality diverse boards enable firms to take more risk. However, the study finds

that board age and gender diversity increases firm's propensity to take risk less in family firms than in non-family firms. With this study, we contribute to the literature on board diversity and family business that incorporates the perspective of socioemotional wealth.

Empirical Data Analyzed in the Essays and their Importance

Foundation-owned firms are either fully or partly owned by private or charitable foundations. There are more than 400 foundation-owned firms in Germany (Achleitner, Bazhutov, Betzer, Block, & Hosseini, 2020), and around 5 percent of all German foundations are family foundations (Haag & Tischendorf, 2020). Moreover, these foundation-owned firms include some renowned businesses that are substantial to the economy and are operating globally, for instance, Bosch, Bertelsmann, Carl

Zeiss, Thyssenkrupp, & Würth. They include both listed and non-listed firms; however, non-listed foundation-owned firms are more in number. Based on the importance of foundation-owned firms and the significant rise in their number during the last decades, essay 1 analyses the performance difference between different sets of German foundation-owned and non-foundation-owned firms.

In essay 1, cross-sectional data was collected on 528 German listed and non-listed firms. These German firms were categorized into four different sets: foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-owned non-family firms, based on their distinct ownership structures. The data on study variables were collected for nine years ranging from 2007 to 2015. These four sets of different firms were made by adopting the matched-pair technique. Moreover, the firm's financial and ownership

data were collected from Amadeus and Dafne databases of Bureau van Dijk. In addition, firm websites and the Die Deutsche Wirtschaft (DDW) database were also checked to get information about family firms.

For the last two decades, there has been a controversial debate in Germany on introducing quota legislation regarding increasing board gender diversity (Bschorr & Lorenz, 2013). However, among other European countries, Germany lags behind in introducing gender diversity on its boards (European Women on Boards, 2016). Unlike other European countries, diversity on board of German firms remains voluntary, and no legal bindings were developed. For over a decade, no political success was achieved on this issue due to a huge resistance from industry associations. Hence, the share of women on the firm's boards was not improved.

Moreover, recent megatrends in Germany, such as migrations and the expected shortage of skilled labor, have led to increased attempts to recruit skilled foreign workers (Mayer, 2017). In addition, growing levels of internationalization in the German labor market have increased firm's top management exposure to distant cultures (Shin, Seidle, & Okhmatovski, 2016). Therefore, German firms are an important case for acquiring scientific knowledge on board diversity (Braendle, & Stiglbauer, 2017) and how different firms respond to various types of diversity. The analyses in essays 2 and 3 build on the sample of German firms.

In essay 2, a study sample is comprised of 341 German public and private firms. Among these firms, 125 were family firms, and 216 were non-family firms. Moreover, data on financial and governance variables ranged from 2014-2018. For collecting data on financial and ownership

variables, the Dafne database was used, while a database of BoardEx was used to gather information about board demographic diversity variables such as age, gender, and nationality. Additionally, data on the family ownership variable was triangulated with the use of firm websites and the Die Deutsche Wirtschaft (DDW) database.

In essay 3, empirical data is based on 146 German listed firms, including 55 family firms and 91 non-family firms. The data covered the time span of 2014 to 2018. Databases including Refinitiv Datastream, Worldscope, and Dafne were used to collect financial data. However, data on governance variables regarding board demographic diversity and firm ownership was collected from Dafne and BoardEx. Moreover, firm websites and the Die Deutsche Wirtschaft (DDW) database were also consulted to confirm the family status of the family firms.

Structure of the Dissertation and Authorship

This dissertation is divided into three chapters, and each chapter presents one of three essays written during my doctoral study. My first supervisor Prof. Dr. Nadine Kammerlander was the only co-author of all three essays. She has made a valuable contribution, with her guidance, suggestions, and time, to each and every part of the dissertation, including theoretical frameworks, research designs, data analyses, and writing a dissertation.

ESSAY 1: FOUNDATION-OWNED FIRM PERFORMANCE: A COMPETING INSTITUTIONAL LOGICS PERSPECTIVE⁴

INTRODUCTION

There is an increasing debate in the literature on how firms with multiple goals perform differently (Kotlar, De Massis, Wright, & Frattini, 2018; Williams et al., 2018). Most of the studies assume goal variation is engendered by the focus and the source of different coalitions within the firm (Zellweger & Astrachan, 2008). Previous research

⁴ This Essay is an unpublished working paper based on Mubarka, K., and Kammerlander, N. (2022) with the title “Foundation-owned firm performance: a competing institutional logics perspective.” Earlier versions of the Essay were presented at (1) the *Conference of International Family Enterprise Research Academy (IFERA)* in June 2017 in Zadar, Croatia, (2) the Research Seminar of Copenhagen Business School in February 2020, Denmark, and (2) the *Workshop on the Performance of Foundation-Owned Enterprises* in December 2020 in Copenhagen Business School, Denmark.

adopts the categorization of goals as economic or non-economic based on the focus of various coalitions/stakeholders within the firm and as internal or external goals based on the interest of different coalitions/individuals within (founder, family, management) and outside the firm (institutions, regulatory bodies, customer, media, community), respectively (Cyert & March, 1963). With an increase in pluralistic institutional environments (Pache & Santos, 2013; Seo & Creed, 2002), Thornton and Ocasio (2008) proposed institutional logics as an important categorizing factor for organizational goals. Over time, organizations are confronted with multiple institutional logics that demonstrate what enacts legitimate behavior and provide taken-for-granted conceptions of appropriate goals and consistent means to achieve these goals (Lounsbury, 2007; Thornton & Ocasio, 2008). These institutional logics

direct firms' attention in specific ways (Thornton, Ocasio, & Lounsbury, 2012).

Earlier conceptualizations propose that firm behavior is guided by one dominant logic; however, more recent approaches see multiple co-existing logics driving the firm behavior (e.g., Thornton et al., 2012). In the case of family firms, numerous studies showed the impact of family logic and business logic, individually, on firm performance (Gomez-Mejia et al., 2007; Kotlar, De Massis, Fang, & Frattini, 2014; Schepers et al., 2014). In contrast, only a few studies investigate the integration of these two logics (Basco, 2017; Michael-Tsabari, Labaki, & Zachary, 2014). Moreover, only a few studies also consider community logic (in addition to family and business logics) in understanding firm behavior (Aparicio, Basco, Iturralde, & Maseda, 2017; Miller, Le Breton-Miller, Amore, Minichilli, & Corbetta, 2017; Reay et al., 2015).

In a few studies, researchers also highlighted situations where competing logics continued to co-exist for a long time (Marquis & Lounsbury, 2007; Reay & Hinings, 2005). In line with these studies, a foundation-owned firm illustrates a structure where multiple logics, economic (business) and non-economic (family and/or social), co-exist for a longer time.

In the last few years, the complex foundation structure has become more common among many European firms. By 2010, 40 out of 100 largest family-owned firms in Germany had turned to foundation-owned family firms,⁵ mainly because of the increasing focus on preserving the family influence. Among other firms, large family foundations include Bertelsmann, Hertie, Heraeus, and Haniel; moreover, as investment foundations, the

⁵ See Leendertse, “Stiftungen boomen wie nie zuvor”, in: Die Zeit, 20 Jan. 2010.

Schickedanz Holding, Diehl-Stiftung & Co., and Würth family foundations are highly famous. Moreover, a foundation law amendment in 2002, exempting the (charitable) foundations from inheritance, gifts, and all income taxes, led to increased recognition of charitable status. Thus, the foundation-owned structure became a more viable alternative for many medium-sized family firms after that amendment.

Research on the performance of foundation-owned firms carrying multiple logics is so far mainly conceptualized on agency theory and transaction cost economics (Hansmann 1987; Thomsen & Rose, 2004), focusing only on an economic perspective derived from the business logic and ignoring all other logics involved, e.g., the family logic and the social logic. According to Greenwood et al. (2010), markets are only one institutional order in society, and various non-market forces determine

market-based practices. Therefore, it is essential to understand which institutional logics are salient in the particular context (Durand & Thornton, 2018). In short, it is difficult to assess the complete picture of a foundation-owned firm's performance without considering logics other than business logic.

To address this research gap, we conceptualize institutional theory in assessing the performance of foundation-owned firms that embody multiple co-existing institutional logics, namely business and social logics, and in some cases also, family logic. To investigate how co-existing logics, driven by goals of different firm coalitions, affect firm performance, we compare the performance of foundation-owned firms with their non-foundation-owned counterparts. Moreover, we also study whether the family logic of dominant coalitions within a family firm compete (Gomez-Mejia et al., 2007; Morck & Yeung, 2004) or

collaborate (Habbershon & Williams, 1999; Miller & Le Breton-Miller, 2005) with the business and the social logics of foundation-owned firms. We propose that foundation-owned firms perform better than non-foundation-owned firms, and family ownership weakens the relationship between foundation ownership and firm performance. We examine four different sets of German firms: foundation-owned family and non-family firms and non-foundation-owned family and non-family firms. In total, our sample comprises 528 German firms. Regression and matched-pair analysis are performed to test our hypotheses.

We make at least three contributions to the institutional and family business literature. First, by following the institutional perspective, this study elaborates on the understanding of multiple co-existing institutional logics, either competing or collaborating, within different types of

organizations (Glynn & Lounsbury, 2005; Goodrick & Raey, 2011; Greenwood, Raynard, Kodeih, Micelotta, & Lounsbury, 2011; Reay & Hinings, 2009) and how different combinations of logics can guide firm actions leading to varying firm performance. Second, we extend the current knowledge of firm performance within the context of family firms conceptualized on family, business, and social logic as a whole (Aparicio et al., 2017; Miller et al., 2017; Reay et al., 2015). Third, this work is the first attempt in a family business scholarship that compares the performance of foundation-owned family firms with their counterparts holding different sets of multiple institutional logics (family, business, and/or social).

THEORETICAL BACKGROUND

Goals and Institutional Logics

In classic economic theory, assuming perfect rationality, firms are seen as monolithic actors that pursue a unitary goal of profit maximization (Friedman, 1970). However, many scholars have criticized this conventional perspective over the years and made notable extensions to this perspective. For example, Cyert and March (1963) argued that organizational goals are not unitary and defined a firm as a coalition of individuals and groups, which may include shareholders, managers, employees, and so on, each with their own goals. Thus, multiple stakeholders are involved in the process of goal formation that may lead to the emergence of a broad and heterogeneous array of organizational goals focusing on economic or non-economic dimensions (Greve, 2003; Kotlar et al., 2018).

Moreover, the internal vs. external status of firms' coalitions or individuals could also be a source of diversity

among these organizational goals. Multiple stakeholders within a firm give rise to internal organizational purposes, for example, profit maximization (Cyert & March, 1963), growth, and familial goals of a business family (Gomez-Mejia et al., 2007; Kotlar & De Massis, 2013). However, multiple external stakeholders, including the regulatory bodies, customers, media, community, and institutions (e.g., DiMaggio & Powell, 1983), pursue, as emphasized by institutional theorists, heterogeneous external goals of ranking excellence, certifications, status, and sustainability among many others.

According to the institutional theory (Thornton & Ocasio, 2008), firms or individuals are nested in interactions built on institutionally standardized social categories formed by cognitive, normative, structural, and emotional connections. Each institutionalized group develops its institutional logic (Jackall, 1988).

Institutional logics are defined as “the socially constructed historical patterns of cultural symbols and material practices, assumptions, values, and beliefs by which individuals produce and reproduce their material subsistence, organize time and space, and provide meaning to their daily activity” (Thornton & Ocasio, 1999, p. 804).

Institutional logics defines the organization’s focus of attention and goal schema (Thornton et al., 2012). According to Thornton et al. (2012, p.87), in “various institutional logics – state, market, community, professional, family, religion – social actors have multiple goals. The content of these goals does differ between the goals embedded in alternative institutional logics.” Therefore, firm-specific goals are provoked by the institutional logics of the firm coalitions or the multiple

stakeholders and direct the firms' focus of attention (Thornton et al., 2012).

In management literature (e.g., Miller & Le Breton-Miller, 2005; Miller et al., 2009; Reay et al., 2015), firms are primarily investigated under three institutional logics, namely commercial logic (i.e., guiding firms to make profits), family logic (i.e., guiding firms to benefit family members), and community logic (i.e., guiding firm to serve community needs). Initially, a theory proposed that one dominant institutional logic guides individual or organizational behavior (Meyer, 1982; Thornton & Ocasio, 1999). But the more recent approaches highlight the co-existence of multiple (potentially complementary or contradictory) logics that concurrently influence organizational behavior (Goodrick & Reay, 2011; Greenwood et al., 2011; Thornton et al., 2012). The dominant institutional logic held by the individuals in a

firm may act as a determining force in setting the business goals. In short, the multiple institutional logics within a firm manifest their differences in goal formation, strategic and management processes, managerial behaviors, and decision-making, affecting performance outcomes (Gomez-Mejia, Cruz, Berrone, & De Castro, 2011).

Friedland (1991) proposes that firms select, adopt, and adapt logics in ways that suit their goals and purposes. When goals are weakly correlated and/or contradictory, then organizational decision-makers adopt the behavior of sequential attention or temporal differentiation, where the realization of one goal comes at the cost of other goals (Ethiraj & Levinthal, 2009). Under this situation, decision-makers make decisions primarily based on their consideration of objectives concerning their current and prospective wealth (Martin, Gomez-Mejia, & Wiseman, 2013), either in terms of financial or non-financial wealth

(Kotlar et al., 2018). Contrary, when goals are not correlated or contradictory, then decision-makers pay simultaneous attention to multiple goals regulated by different rules (Ethiraj & Levinthal, 2009; Gaba & Joseph, 2013; Greve, 2008; Ocasio, 1997). Thus, multiple organizational goals that are not always exclusive may have an additive or an interactive effect on organizational outcomes like performance (Greve, 2008).

Studies showed three different ways firms select a set of co-existing logics (e.g., Glynn & Lounsbury, 2005; Goodrick et al., 2011; Reay & Hinings, 2009). First, different types of organizations within a field adopt different guiding logics. Second, firms divide their activities so that each set of activities is organized or regulated by a different logic. Third, two or more logics can combine to create a new hybrid logic.

Foundation-Owned Firms and Institutional Logics

In recent years, many firms changed their ownership status to that of foundation-owned firms, as evident by their growing number in countries like Germany (Thomsen, 2012). As of 2017, many large German firms of various industries are owned by foundations including Bertelsmann, Bosch, Korber, ThyssenKrupp, ZF Friedrichshafen, Aldi, Lidl, and Freudenberg. Given the omnipresence of foundation-owned firms, it is interesting to investigate how they might differ from non-foundation-owned firms, particularly as they hold different combinations of institutional logics. In this study, we define a foundation as a non-governmental and non-profit organization with funds usually provided by a single source such as an individual, family, or corporation and managed by its trustees or directors. The foundation can have both charitable and business goals. Firms owned by

foundations embrace distinctive characteristics of traditional profit and non-profit organizations, yet the primary goals of these two types of organizations are very different (Dees, 1998). Therefore, foundation-owned firms may pursue multiple goals (social, family, and/or business) specific to their organizational purpose resulting in various subsequent strategies.

Until now, there are only a few studies on foundation-owned firms investigating the effect of their ownership on performance. Some studies found no significant difference in foundation-owned firms' performance compared to other private and public firms (Dzansi, 2012; Thomsen & Rose, 2004). Other studies observed slightly higher performance of foundation-owned firms than other firms (Hansmann & Thomsen, 2013) whereas some studies also documented the underperformance of foundation-owned firms compared to the other firms (Achleitner et al., 2020;

Hansmann & Thomsen, 2013). Some studies also investigate the characteristics of foundation-owned firms, particularly their organizational structure (Brody & Strauch, 1990; Gersick, Lansberg, & Davis, 1990; Ylvisaker, 1990) and tax considerations (Hayes & Adams, 1990). Yet there is still a lot to be investigated about the behavior of foundation-owned firms.

So far, in previous literature, the behavior of foundation-owned firms is mainly described by two theoretical perspectives: agency theory and transaction cost economics (Hansmann, 1987). Foundation-owned firms seem to violate agency principles because, in foundations, lower incentive efficiency may lead to poor performance of managers (Zellweger & Kammerlander, 2015). Moreover, foundation ownership usually remains with a single entity, which enhances their likelihood of being risk-averse. Therefore, given agency theory,

foundation-owned firms should be less competitive in highly volatile and changing markets than non-foundation-owned firms. However, transaction cost theory (Hansmann, 1987) assumes that foundation-owned firms behave as patient investors (Stein, 1989) and act loyally toward the founder who strives for the benefit of the firm (Stonehill & Dullum, 1990).

Both conceptualizations, agency theory and transaction cost theory, overlook the fact that wealth maximization is not the primary goal of many foundation-owned firms and their founders. Specifically, charitable foundations pursue social goals more strongly than commercial goals, and family foundations possess family goals along with social and commercial goals (Aparicio et al., 2017; Dees, 1998; Reay et al., 2015).

The available mixed findings on the performance of foundation-owned firms may attribute to the failure of

agency and transaction cost theory to assimilate non-economic goals of foundation-owned firms, including family and social goals. Even with an increasing interest shown by firms in the foundation structure, no research has been performed on understanding the organizational implications of complex institutional plurality in foundation-owned firms.

Therefore, we argue that it is helpful to go beyond agency theory, which is too narrowly focused on economic self-interest, to examine the institutional logics of foundation-owned firms and their performance implications. Besides commercial and family goals that are typically studied in family firm articles (Basco, 2017; Gomez-Mejia et al., 2007; Kotlar et al., 2014; Michael-Tsabari et al., 2014; Schepers et al., 2014), we will also pay close attention to social goals in this study. Social goals are the foundation and central to most foundation-

owned firms. As stated by Dees (1998, p.3), “[m]ission-related impact becomes the central criterion, not wealth creation. Wealth is just a means to an end.” It is often a critical objective of the foundation-owned firms to earn income at least to maintain their existence (Boschee & McClurg, 2003) and, simultaneously, achieve the goals of solving social needs, giving back to the community, and contributing to their welfare (Lahdesmaki & Takala, 2012).

Foundation-owned firms could prefer making profits because it provides them with a higher level of self-sufficiency. To be sustainable, however, there is a need to achieve both social value and profitability because it lowers firm dependence on outside funding and enables the firm to fund social activities by its profit-generating segment (Weisbrod, 1998). However, other researchers undermine the importance of economic value for firms

having social goals, as earned income could generate tensions that may influence the process of decision-making (Seelos & Mair, 2005).

Although income-generating enterprises with a pronounced focus on establishing social benefits are not bent on profits, they are not very likely to retain their complex nature and get unstable over time (Scott, Meyer, Powell, & DiMaggio, 1991). Evidence suggests that this instability may be caused by the tensions and conflicts that arise from multiple institutional logics when one logic suppresses others (Selznick, 1949). The situation gets even more complex in the case of foundation-owned *family* firms, where foundations are an essential means for business families to attain their multiple objectives. Such objectives include protecting their family assets beyond the current generation, keeping business running in case of family conflicts, limiting the control of external

stakeholders, and mitigating income tax or the inheritance tax (Hayes & Adams, 1990). Along with the financial goals, non-financial goals, including stability, family legacy, and reputation, are also paramount in family foundations (Chrisman, Chua, & Litz, 2003). Thus, it is often necessary for foundation-owned (family) firms to manage pluralistic institutional logics to maintain legitimacy among their different classes of stakeholders (Pratt & Foreman, 2000). This previous research raises the questions of why and how multiple institutional logics affect this distinct type of organization and the firm-level consequences of such multiple institutional logics.

Based on multiple goals linked to different institutional logics, we study four different sets of firms: foundation-owned family and non-family firms and non-foundation-owned family and non-family firms. These firms differ from each other in terms of the centrality of

their social, family, and commercial goals (see Table 1 – 1 for an overview). Foundation-owned firms face the challenge of combining social and commercial logics and then dealing with the rising tensions and conflicts between these logics. In the case of foundation-owned family firms, they encounter an additional family logic that makes managing and structuring organizational strategies more complex.

Table 1 – 1: Institutional Logic Goal-based Categorization of Firms

Organizational Form	Non-Foundation-Owned Non-Family Firm	Non-Foundation-Owned Family Firm	Foundation-Owned Non-Family Firm	Foundation-Owned Family Firm
Mission	<ul style="list-style-type: none"> • Profit maximization 	<ul style="list-style-type: none"> • Family legacy • Profit maximization 	<ul style="list-style-type: none"> • Social mission/well being • Profit sustainability 	<ul style="list-style-type: none"> • Social mission/well being • Family legacy • Profit sustainability
Focused Stakeholders	<ul style="list-style-type: none"> • Owners • Customers 	<ul style="list-style-type: none"> • Founder family • Owners • Customers 	<ul style="list-style-type: none"> • Beneficiaries • Society 	<ul style="list-style-type: none"> • Founder family • Beneficiaries, possibly owners • Society
Institutional Logics	<ul style="list-style-type: none"> • Commercial logic 	<ul style="list-style-type: none"> • Family logic • Commercial logic 	<ul style="list-style-type: none"> • Social logic • Commercial logic 	<ul style="list-style-type: none"> • Social logic • Family logic • Commercial logic

HYPOTHESES DEVELOPMENT

Conflicting or competing institutional logics instill different institutional demands that may differ concerning legitimate ideological goals or the prescribed means of action (Pache & Santos, 2013). These divergent prescribed goals of two or more logics affect organizational outcomes differently. Extant literature asserting the relationship between organizational goals and firm performance is already available (Bart, Bontis, & Taggar, 2001). Studies provide that organizational goals affect organizational innovativeness and performance because they stimulate workers' motivation to achieve goals (Bart, 1996). Campbell and Yeung (1991) noted that firms following both social and commercial goals are better able to perform than those firms that only pursue commercial goals. The inclusion of social values into organizational goals puts more thought, discussion, and determination

into developing guiding and motivating plans (Drucker, 1989). Firms with only economic goals like non-foundation-owned firms that solely follow business logic base their planning on financial returns and often lack the well-constructed organizational goals of firms following also social goals (Drucker, 1989). However, firms with social goals may use their limited resources on projects which are interesting or look profitable (Drucker 1989, p. 89). Thus, social goals are more powerful in guiding firm behavior than solely financial ones.

Moreover, the perspective of resource mobilization characterizes social organizations; for instance, foundation-owned firms as more sustainable organizations emphasize long-term survival over rapid growth (Weerawardena & Mort, 2006), suggesting a low chance of failure for social organizations compared to purely financially oriented organizations. Another behavior seen

during recent years is the increased market competition and perceived pressure from the stock market that pushes publicly traded companies to forego long-term investment projects and opt for short-term but less profitable projects (Hansmann & Thomsen, 2013). In contrast, boards of foundation-owned firms experience no such threats, which may increase their attention toward long-term investment projects to be more profitable (Hansmann & Thomsen, 2013).

Foundation-owned firms that strive for social goals via commercial activities may find themselves between the competing demands of the market logic and the social logic. Foundation-owned firms have to generate economic resources, including profits, to achieve social goals. Therefore, we argue that foundation-owned firms can be considered more money-conscious than purely commercially oriented businesses. Moreover, foundation-

owned firms built their strategies by mainly focusing on social goals rather than making money (Drucker, 1989) due to the dominant institutional logic of social welfare.

Although the duality of purpose in foundation-owned firms might seem paradoxical, it results in a broader collection of practices, and extended spanning of categorical boundaries increases organization flexibility (Pontikes, 2012). It also enhances access to resources, innovation, multiple sources of legitimacy, and work integration enterprises (Pache & Santos, 2013). Therefore embracing the blend of social and business logics within a foundation-owned firm strengthens the support and funding for its organizational goals (Smets et al., 2015). Thus, we assume that foundation-owned firms show better performance than non-foundation-owned firms.

H1. Foundation-owned firms perform better than non-foundation-owned firms.

We adopt the most common definition of family firms given by Chua et al. (1999, p. 25): “the family business is a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families.” Family firms are characterized by different stakeholders’ interests and demands with specific intrinsic values and goals (Donaldson & Preston, 1995). Prior studies showed that the owner-manager designs goals within a family firm in multiple contexts, namely environmental/social, organizational (Raymond,

Marchand, St-Pierre, Cadieux, & Labelle, 2013), and family.

In family firms, the family stands as an essential coalition exerting control over the firm's management, ownership, and governance more than any other party (Klein, Astrachan, & Smyrniotis, 2005). We expect the family to interpret and reinterpret its goals (Thornton & Ocasio, 1999). Several researchers also emphasize the importance of family business goals in determining resource allocation, firm behavior, and firm performance (Chrisman, Memili, & Misra, 2014; Gomez-Mejia et al., 2011; Zellweger et al., 2013). In short, the specific family logic in which individuals are embedded in a family firm, shaping particular organizational behavior, differentiates family firms from non-family firms. The importance of family members in a family firm, as the principal agent, implies that family members embedded in a dominant

family logic activate priorities and goals that focus their attention and thus determine organizational decision-making, which affects firm behavior and performance. Therefore, families are a more powerful and influential group than others in a firm, and they are likely to decide on organizational responses to multiple institutional logics in a way that reflects their particular interests (Greenwood et al., 2011).

The family firm adopts multiple logics of business and family, but there is a lack of consensus in the literature on whether these co-existing logics compete or complement each other. Lansberg (1983) considers this co-existence of logics as an institutional overlap resulting in a conflict between family and firm, which lowers the firm profitability. Several researchers take a similar perspective that building firms' strategy focusing on family goals decreases the firms' ability to achieve financial goals

(Berrone, Cruz, & Gomez-Mejia, 2012; Schulze, Lubatkin, & Dino, 2003). This stream of research suggests that accentuating family goals, norms, and values may reduce the prevalence of family firms with time and results in failure (Morck & Yueng, 2004).

Alternatively, another stream of literature considers family and business logics as complementary. It is mainly based on the concept of ‘familiness’ introduced by Habbershon and Williams (1999) that “the unique bundle of resources a particular firm has because of the system’s interaction between the family, its individual members, and the business” (p. 11). Research shows that the unique set of resources based on familiness varies across firms and that it proves beneficial to the firm (Sirmon & Hitt, 2003). Thus, following the family logic leads to valuable and difficult to imitate firm resources. For example, families’ commitment to their firm reflects the importance

of their idiosyncratic knowledge and social capital (Sirmon, Arregle, Hitt, & Webb, 2008) and families' intention for succession. Hence, family firms emphasize focusing on long-term and more profitable investments (Miller & Le Breton-Miller, 2005). Therefore, the firm guided by family logic enjoys a unique set of familial resources and the productive synergy between the family and the business logics.

Prior research on institutional logics has implicitly discussed the dependence of organizational responses on the number of logics and the degree of incompatibility between multiple logics. According to Goodrick and Salanick (1996), the ambiguity ingrained in the goals and practices shapes the level of organizational discretion. It enforces that when institutions focus on goals and their pursuit and are available with divergent and unspecified means to the goals, corporate interests are more influential

in selecting conformance strategies (Goodrick & Salanick, 1996). In other words, high ambiguity in conflicting logics increases an organization's ability to reconcile competing logics by framing or blending structures and practices. For example, in the case of the family-owned and -managed firms, strategies and decisions are, unlike non-family firms, also influenced by community norms instead of exclusive market norms (Miller et al., 2017). Therefore, we assume that the underlying high ambiguity and low specificity resulting from the co-existence of two competing logics of family and business allows family firms to exploit the best out of this combination with an enhanced organizational discretion and less constrained choices.

Embracing conflicting logics could also be valuable if the firm manages them successfully to reap their complementarities (Smets et al., 2015). For instance, in

family firms, the family logic may strengthen the stewardship behavior to secure a family legacy, wealth, reputation, and sustainability across generations (Eddleston, Kellermanns, & Zellweger, 2012). At the same time, market logic controls destructive nepotism and protects family legacy by creating positive synergy with constructive socioemotional tendencies derived from family logic. Therefore, we propose the following:

H2. Family firms perform better than non-family firms.

Family foundations are entities whose funds stem from a family or some of its members who might also play a significant role in governing or managing the foundation (Gersick et al., 1990). Due to the increased benefits of foundation ownership in the last few years, many family foundations have become the owners of their respective family firms. The resulting foundation-owned family

firms have multiple different purposes, including social impact and family unity (Block, Jarchow, Kammerlander, Hosseini, & Achleitner, 2020; Gersick et al., 1990), protecting and educating next generations about the family legacy (Hansen, 1990) and tax exemption (Hayes & Adams, 1990).

According to Scott (1994, p. 211), in the presence of multiple co-existing institutional logics, organizational behaviors are mainly driven by “two or more strong, competing or conflicting belief systems.” The co-existence of multiple institutional logics characterizes a foundation-owned family firm; hence an interplay of social, family, and business logic is expected. Family logic guides a firm’s specific behavior toward satisfying the needs of the family members in accord with family values and norms. Contrary to this, business logic focuses on increasing the firm’s profitability, and lastly, social logic

guides the firm to act to better society and fulfill community needs. Previous research remains inconclusive on whether these logics are complementary or competing (Chua et al., 1999).

Different ownership forms may also affect organizational responses toward institutional complexity differently, as evidenced by various studies (Hwang & Powell, 2009). Organizations with a broad and inclusive participation structure in decision processes are more problematic because of the lack of agreement and cooperation they experience (Malhotra & Morris, 2009). In organizations, some groups are more influential than others. Hence, organizational decisions are the function of those groups' relative degree of influence (Greenwood et al., 2011). Therefore, corporate responses are likely to be determined by the interest of the most powerful group within an organization (Greenwood et al., 2011). In other

words, prioritization within multiple logics is more likely to be performed by those actors in an organization who hold more power and influence. This relationship between power and logics ambiguity (or specificity) defines the effect of ownership (Goodrick & Salancik, 1996).

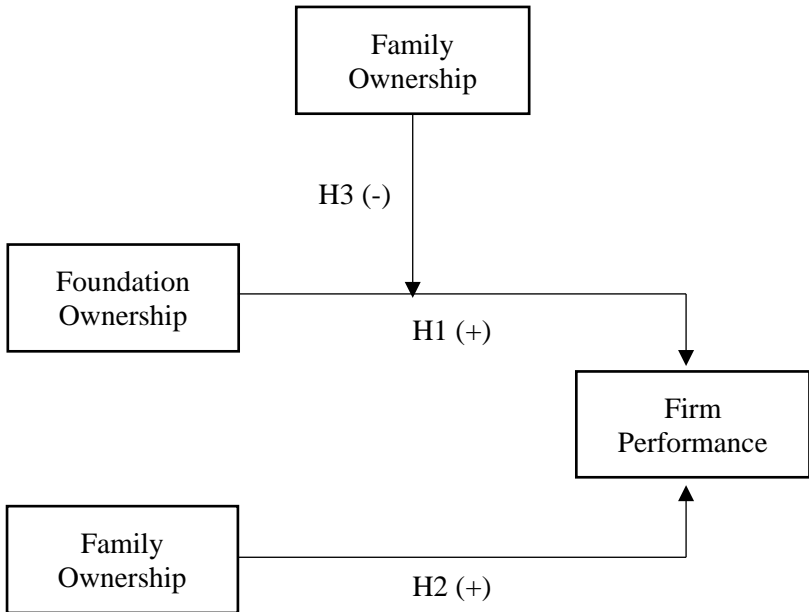
The extent to which family logic is privileged depends on the discretion of family actors; thus, the risk of slippage remains high in collaboration. The probability of drift or slippage resulting from the mutual dependence of competing logics may cause harm by slipping toward one set of demands (e.g., family) over another (e.g., social welfare), as evident from documented scandals in the past (e.g., Grey, 2003). Therefore, the detrimental effects of slippage eliminate the creative friction of competing logics that feeds the innovative capacity of an organization (Smets et al., 2015).

We build on the blend of competing institutional logics, including social welfare, family, and market, which could lead to blending risks that may undermine the performance of foundation-owned family firms (Battilana & Dorado, 2010). Therefore, we propose that:

H3. Family ownership weakens the relationship between foundation ownership and firm performance.

Figure 1 – 1 presents the conceptual model and the proposed relationships of the study variables.

Figure 1 – 1: Conceptual Model — Foundation Ownership, Family Ownership, and Firm Performance. (Source: Own)



RESEARCH METHODS

Sample and Data Sources

We use a comprehensive panel dataset of German firms. Our sample consists of four types of German firms: foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-owned non-family firms. We collected cross-sectional data from 2007 to 2015. We analyzed data on 528 companies as we restricted the sample to firms with accessible data taken from Amadeus and Dafne databases and firm websites. Moreover, the database of Die Deutsche Wirtschaft (DDW) based on German family firms was used to identify the family firm status of the firms. All financial firms, government-controlled firms, and non-profit firms mostly belonging to the educational, health, and social care sectors are not part of the sample.

Moreover, firms with missing data are also not included in the sample. Foundation-owned firms were dispersed across different industries; therefore, we employ a matched-pair sampling technique to strengthen and refine the estimation of bidirectional effects. This approach is consistent with multiple previous studies on firm performance of family firms (e.g., Mishra, Randoy, & Jenssen, 2001) and foundation-owned firms (e.g., Draheim & Franke, 2015). By adopting a two-stage data collection process, in the first step, we identified foundation-owned firms (family and non-family) in Germany with accounting data available from 2007 to 2015. We only include those foundation-owned firms in our sample which have twenty percent or more foundation ownership. In the second step, by keeping the foundation-owned family firms as a base, we looked for matched non-foundation-owned family and non-family firms. Again,

non-foundation-owned family firms are taken into our sample only if they have twenty percent or more shares held by a family member or family/families. To avoid idiosyncrasies of the matched firm, for each foundation-owned family firm, we select six (maximum) non-foundation-owned counterparts, both family and non-family. These counterparts are closest in terms of firm size (measured by firm assets within the range of plus or minus ten percent of each foundation-owned family firm assets) and industry (three-digit NAICS Code). In a few cases, when no match of a foundation-owned family firm was found within the specified range of ten percent, the range was extended to plus/minus twenty percent of the firm assets in a particular industry.

Measures

Dependent Variable:

The dependent variable of the study is firm accounting performance, measured by return on assets (ROA). Most of the foundation-owned firms in our sample are non-listed, thus leaving us with only an accounting measure of performance. ROA is measured as the earnings before interest, taxes, and depreciation to total assets. The selection of ROA as a performance variable is consistent with previous studies conducted on foundation-owned firms and family firms (e.g., Draheim & Franke, 2015).

Independent Variables:

The independent variable of the study is foundation-owned firms, operationalized as a dummy variable, coded 1 if a foundation holds at least 20 percent of common equity and 0 otherwise. Regarding the second independent variable, a firm is considered a family firm if the common equity held by a family or family member is 20 percent or

above (Block, Miller, Jaskiewicz, & Spiegel, 2013). For our regressions, we use family ownership as a continuous variable in order to avoid interacting dummy variables.⁶

Control Variables:

To ensure that family and foundation ownership effects on firm performance are not due to the firm age, we include the variable of firm age in the calculations (Hansen, 1992). Consistent with previous research, we also control for firm size, which is measured by total assets (Hansen, 1992), and for debt to assets (Anderson & Reeb, 2003). To assure normality, we logarithmized all control

⁶ Using a continuous variable for both family and foundation ownership in a single model was impossible with our dataset because of data overlap. In some cases, they are not exclusive to each other. For instance, in our sample, foundation-owned family firms like Mahle GmbH and Adolf Würth GmbH & Co. KG show 100 percent ownership of a family foundation. Therefore, if we use a continuous variable of 100 percent for both family and foundation ownership in wholly foundation-owned family firms, this could lead to the problem of repetition because of information overlap. Thus, we employ a continuous variable for family ownership and a dummy variable for foundation ownership.

variables. We used two-digit NAICS codes as industry dummies to control industry effects.

RESULTS

Descriptive Statistics and Bivariate Correlations

The descriptive statistics and correlation matrix of all study variables are provided in Table 1 – 2. On average, in our data set, foundations hold 78.42 percent of the equity in their respective firms. However, results show that our data set also includes firms wholly owned by the foundation. 61 percent of the sample firms are family firms. In our sample, families, on average, own 92.1 percent of their respective family firms. On average, firms are 49 years old and hold assets valuing 713 million euros. The correlation matrix shows that the correlation between variables lies within the normal range.

In addition to this, we also check for an issue of multicollinearity by calculating the variance inflation factor. Overall, the VIF score for all variables does not illustrate any multicollinearity problem, as the observed maximum value is 2.30 (Hair, Black, Babin, Anderson, & Tatham, 2006).

Table 1 – 2: Descriptive Statistics and Pairwise Correlations.

		Summary statistics				Correlations					
		Mean	S.D.	Min	Max	1	2	3	4	5	6
1.	ROA	0.13	0.11	-0.89	0.86	1					
2.	Ln Age	3.50	0.94	0.00	5.35	0.07***	1				
3.	Ln Assets	11.13	1.88	3.35	18.16	-0.09***	0.05***	1			
4.	Debt/Assets	0.16	0.40	-0.02	23.39	-0.06***	-0.03*	-0.05***	1		
5.	Foundation- Owned Firm Dummy	0.19	0.39	0.00	1.00	0.03	0.13***	0.11***	-0.01	1	
6.	Family Ownership	0.92	17.47	0.20	1.00	0.11***	0.08***	-0.10***	-0.02	-0.09***	1

*, **, *** Correlation is significant at the 0.05 level, 0.01 level, 0.001 level (2-tailed).

Hypotheses Testing

To test our hypotheses, we ran OLS regression on our total sample containing four different sets of firms. Table 1 – 3 shows the regression results. In Model 1, we include all control variables. The result indicates that assets and leverage have a significant adverse effect on firm performance, which is in line with the findings of previous studies (Bethel, Liebeskind, & Opler, 1998). In Model 2, we include a foundation-owned firm dummy and all control variables. The result does not provide any significant impact of foundation ownership on firm performance. This leads to the rejection of Hypothesis 1, which suggests that foundation-owned firms perform better than non-foundation-owned firms.

In Model 3, in addition to control variables, we add family ownership. In support of hypothesis 2, the result reveals the significant positive effect of family ownership

on firm performance ($\beta = 0.06$; $p < 0.05$). Lastly, by keeping the control variables in Model 4, we include both independent variables of the foundation-owned firm and family ownership and their interaction term of foundation-owned firm dummy \times family ownership. Results supporting hypothesis 3 show that family ownership significantly lowers foundation-owned firms' performance ($\beta = -0.11$; $p < 0.05$).

Table 1 – 3: Family Firms Ownership, Foundation-Owned Firms, and Firm Performance.

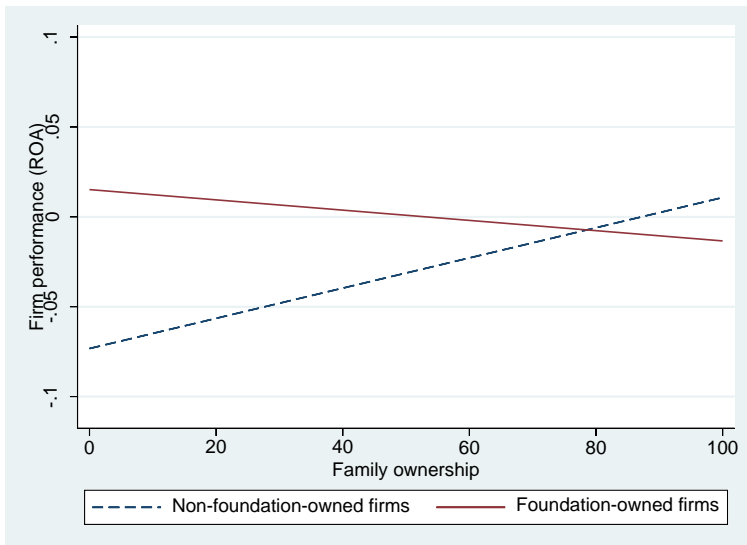
Dependent Variable: ROA				
	Model 1	Model 2	Model 3	Model 4
Lagged ROA	0.71*** (0.01)	0.71*** (0.01)	0.71*** (0.01)	0.71*** (0.01)
Ln Age	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)	0.01 (0.01)
Ln Assets	-0.02** (0.01)	-0.02** (0.01)	-0.01* (0.01)	-0.02* (0.01)
Debt/Assets	-0.12* (0.0)	-0.12* (0.06)	-0.12* (0.06)	-0.12* (0.06)
Foundation-Owned Firm Dummy		0.03 (0.03)		0.09* (0.04)
Family Ownership			0.06* (0.02)	0.08** (0.03)
Foundation-Owned Firm Dummy x Family Ownership				-0.11* (0.06)
Industry	Yes	Yes	Yes	Yes
Year	Yes	Yes	Yes	Yes
F	181.2***	174.8***	175.2***	163.8***
No. of Observations	3967	3967	3967	3967
Adjusted R-squared	0.55	0.55	0.55	0.55
Number of firms	528	528	528	528

Standard errors in parentheses

*** p < 0.001, ** p < 0.01, * p < 0.05

Figure 1 - 2 shows the interaction in graphical form. It clearly shows that the performance of foundation-owned firms starts decreasing when a family or families holds an equity share in a firm.

Figure 1 - 2: The Interactive Impact of Family Ownership and Foundation-Owned Firms on Firm Performance.



DISCUSSION AND CONCLUSION

Friedland (1991) introduced logics into the institutional theory to highlight the importance of social context. Most of the institutional scholars assert the existence of multiple logics within a single actor (e.g., Thornton et al., 2008); however, only a few types of organizations where multiple logics co-exist have been investigated (Aparicio et al., 2017, Goodrick & Reay, 2011; Greenwood et al., 2011; Miller et al., 2017; Reay & Hinings, 2009; Reay et al., 2015). Researchers have made a consensus on embracing the arising institutional complexity because of the logic integration, but still, there is little information about how it is attained and managed. Moreover, the literature on institutional logics lacks empirical evidence examining which institutional logic is salient in the particular context (Durand & Thornton, 2018). Foundation-owned firms also encounter

institutional pluralism, which gets even more complex with family involvement in foundation-owned family firms. Even with an increasing interest shown by firms in the foundation structure, scarce research is available on understanding the organizational implications of institutional complexity in foundation-owned firms.

Some studies analyzed the performance of foundation-owned firms in comparison to other groups of firms with different ownership structures but mostly employed the lens of the agency framework (Achleitner et al., 2020; Dzansi, 2012; Thomsen et al., 2004; Hansmann & Thomsen, 2013). There are mixed findings available from these studies. Few studies revealed the better performance of foundation-owned firms compared to non-foundation-owned firms (Hansmann & Thomsen, 2013; Herrman & Franke, 2002), while others found no significant difference in their performance (Dzansi, 2012; Thomsen

& Rose, 2004). Unfortunately, the findings of these studies are based only on the economic perspective followed by the agency theory; however, they neglect entirely the central role played by the social logic.

To address these gaps in previous literature, we attempt to advance the understanding of how institutional pluralism brings distinct advantages for different types of organizations with sets of different logics and constitutes a viable organizational form. Our research also responds to the research gap highlighted by Pache and Santos (2013), who emphasize the need for research on organizations' performance with multiple institutional logics compared to their peer organizations who stay either with a single logic or different combinations of logics. Lastly, we contribute to the growing research stream focusing on a blend of logics in diverse organizational settings to provide insights into the institutional theory in

general and institutional logics in specific. Therefore, with our findings, we built on the micro-foundations of institutional theory and shed light on how organizations with various logics respond to institutional pluralism in firm performance.

Our finding that foundation-owned firms carrying conflicting logics of social and business do not perform significantly better than non-foundation-owned firms leads to the rejection of our hypothesis 1. This inconsistent finding could be due to the inclusion of two very different sets of firms in the comparison group of non-foundation-owned firms. Non-foundation-owned firms observed in this study include both firms with dispersed ownership (non-family firms) and firms with dominant shareholders (family firms). Multiple studies in the literature assert the existence of goal differences in widely held firms and family firms based on different institutional logics and the

co-existence of multiple goals (Aparicio et al., 2017; Thornton et al., 2012; Kotlar & De Massis, 2013). The foundation-owned firms are characterized by having one kind of large shareholders, but unlike family firms, they lack personal financial interests in monitoring the management because of the absence of residual claimants and the lack of connection between the financial affairs of the foundation and its management (Dzansi, 2012). It implies that despite having dominant shareholders, the management of the foundation-owned firms will be monitored inadequately, similar to widely held firms (Dzansi, 2012).

Moreover, we found that family firms holding conflicting logics of family and business outperform non-family firms. These findings are consistent with previous studies that claim better performance of family businesses (Anderson & Reeb, 2003; Villalonga & Amit, 2006).

However, our findings contrast with the studies that claim that family firms underperform non-family firms (e.g., Bennedsen, Nielsen, Perez-Gonzalez, & Wolfenzon, 2007). Therefore, we extend the knowledge about family firms that sustain competing logics over a long time. Our study provides crucial insights into whether family and business logics are complementary (Habbershon & Williams, 1999; Miller & Le Breton-Miller, 2005) or competitive (Gomez-Mejia et al., 2007; Morck & Yueng, 2004). Seemingly, a philosophy of fostering the family does not imperil the firm's viability.

By considering social, family, and business logics in an ownership structure of foundation-owned family firms, we get a more nuanced understanding of family firm behavior and their heterogeneity. Our findings suggest that family involvement in the foundation-owned firm lowers the level of performance, as suggested by H3. It indicates

that family logic interacts negatively with social and business logic in guiding firm behavior. This finding goes in line with our assumption of the lower performance of foundation-owned firms with the influence of a family.

Lastly, our sample set selection comprising four different types of firms is notable. It provides valuable context for studying and comparing potential organizational implications of a different set of co-existing logics that are often conflicting yet complementary. Our matched sampling and panel-data regression on a large cross-sectional dataset provides a sound approach to investigating the performance of a diversified set of firms with different ownership structures underlying various combinations of institutional logics and distinct goals. Further, it also responds to the need for multimethod research in the field of institutional logic emphasized by Durand and Thornton (2018). Current scholarship on

institutional logics provides case studies and qualitative evidence to describe and understand the relationships of constitutive elements of the logics with an actor's behavior and responses. Still, it lacks the systematic analysis that identifies underlying causation (Durand & Thornton, 2018).

LIMITATIONS AND FUTURE DIRECTIONS

This study has several limitations that depict the constraints of its contributions and reveal opportunities for future research. Established literature provides some studies analyzing the organizational implications of institutional pluralism, usually restricted to two logics. We investigated how two and more logics complicate adopting a suitable organizational structure. However, still more research is required to find out the underlying interplay of multiple institutional logics to understand the multiplexity

of different pressures given by a plurality of institutional logics.

Although we have investigated foundation-owned firms' behavior in terms of performance in the presence of conflicting or competing institutional logics, future research needs to explore how firms should manage multiple institutional logics to attain their best additive effect. As Kraatz and Block (2008) suggested, the organizations able to incorporate various logics sustainably are likely to be more legitimate. They are more likely to extract the social and material support required for their survival efficiently. It would also require understanding the role of organizational leaders, especially in foundation-owned family firms, in managing institutional pluralism to explain their abilities and specific behavior in dealing with the challenge of handling institutional complexity. It is essential to investigate how

foundation-owned family firms could balance competing institutional logics of family, business, and social to reap their complementarities. One should study the integration of practices governed by different logics in a successful foundation-owned family firm to understand better the institutional complexity that keeps competing logics in a constructive tension (Smets et al., 2015).

Furthermore, with this research, we have taken a step forward in elaborating on the implications of multiple institutional logics underlying different organizational goals on firm performance. However, incorporating the organizational goals into an institutional theory is still inconclusive. We do not directly access the intersection of different goals associated with varying institutional logics. Therefore, future empirical studies on organizations with multiple institutional logics need to study organizational goals as an independent dimension that predates firm

performance in line with previous research (Basco, 2017; Gomez-Mejia et al., 2011). Due to the various dimensions of goals, especially family business goals, it could be necessary to build on how different dimensions affect organizational behavior differently concerning management and governance decision-making.

Regarding foundation-owned family firms, the lack of investigation of a generational effect is a major limitation of this study. The impact of involved generation in family business could be an essential factor for the divergence in family business goals (Basco & Calabro, 2017). Therefore, to have a better understanding, it is necessary to understand how different dimensions of family business goals evolve or alter over time with the shifts in family generations and the involvement of multiple generations. This is an important consideration because, with time, change in hidden goals associated with the multiple

institutional logics may change the strategic decision-making and, ultimately, the way families respond to the institutional complexity (Aparicio et al., 2017).

Lastly, unfortunately, our analysis could not wholly avoid the bi-directional causality of logics and performance. To overcome this limitation, qualitative approaches may compare logics ingrained in distinct goals held by different actors and thus enable scholars to build more direct connections among logics, family characteristics, and family firm outcomes.

ESSAY 2: A CLOSER LOOK AT DIVERSITY AND PERFORMANCE IN FAMILY FIRMS⁷

INTRODUCTION

Whether boards of family firms are different from boards of non-family firms is widely debated in the literature (Bammens et al., 2011). Scholars have found that the board compositions of family firms are likely different from those of non-family firms as family firms often have

⁷ This Essay is an unpublished working paper based on Mubarka, K., and Kammerlander, N. (2022) with the title “A closer look at diversity and performance in family firms.” Earlier versions of the Essay were submitted to (1) a special issue on “Advancing Diversity Research in Family Business” of the *Journal of Family Business Strategy* (JFBS; initial submission of an earlier version in May 2021, went under review, was rejected in August 2021), and (2) the *Journal of Family Business Management* (JFBM; initial submission of an earlier version in December 2021, went under review, and received a “Revise and Resubmit” in January 2022”, and a revised version was resubmitted in June 2022, and accepted for publication in June 2022).

several family members serving as directors on their boards (Bammens et al., 2011) and acting as blockholders (Garcia-Sanchez, Martin-Moreno, Khan, & Hussain, 2021). Moreover, family firms may have unique characteristics and preferences due to the close linkage between the family and the business (Broccardo, Truant, & Zicari, 2019); thus, family members are likely to represent family-specific goals rather than only firm goals (Chrisman et al., 2012). Prior literature affirms that contextual idiosyncrasies embedded in different ownership configurations act as a determining factor for board diversity (Ben-Amar, Francoeur, Hafsi, & Labelle, 2013; Klein et al., 2005; Joshi & Roh, 2009); in other words, it is the family owners that decide on how the board should function and make strategic decisions, depending on the needs it fulfills (Adams & Funk, 2012), which consequently, affects firm performance (Sur, 2009).

However, the precise influence of family ownership on board diversity remains unclear so far. In particular, previous research has mainly focused on either family firms or non-family firms; however, comparisons of the two groups regarding their diversity are scarce (Ararat, Aksu, & Tansel, 2015; Ben-Amar et al., 2013; Jain, Fernando, Tripathy, & Bhatia, 2021; Singal & Gerde, 2015). To date, the majority of research on demographic diversity has focused exclusively on gender disparities while ignoring other attributes (Baker et al., 2020). However, directors could differ across multiple dimensions, such as age, education, and nationality (Johnson, Schnatterly, & Hill, 2013), leading to the emergence of subgroups within a firm's board.

Moreover, research has shown that diversity is a “double-edged sword” (Hambrick, Cho, & Chen, 1996): Several studies suggest that the advantages of diversity can

potentially outweigh the associated disadvantages. For example, Hambrick et al. (1996) argue that the benefits of board diversity, such as an increase in diverse knowledge, greater innovation, and broader networks, have the capacity to counterbalance diversity's drawbacks, such as internal and external biases, conflicts, and slow decision-making. These inconsistent empirical findings necessitate an identification of the confounding factors that likely influence the role board diversity plays within a firm (Jain et al., 2021; Post & Byron, 2015).

Despite the significance of ownership and diversity linkages, the literature lacks an explicit focus on how ownership influences different types of diversity on boards of directors (Lyngsie & Foss, 2017; Perryman et al., 2016) and the subsequent consequences for firm performance. Given the lack of research on board demographic diversity, we consider a comparison of family and non-

family firms important to unfold multiple aspects leading to their different performances. Hence we ask the following research questions: *How does family firm status affect board diversity? And how does board diversity affect performance in family vs. non-family firms?*

To theoretically address our research questions, we use the perspective of socioemotional wealth (Berrone et al., 2012) and the diversity conceptualization given by Harrison and Klein (2007), who articulate a multifaceted interpretation of diversity that depends on the particular contexts leading to diverging outcomes. To test our hypotheses, we run regression analyses on a longitudinal sample of 341 German firms, including both family and non-family firms.

This study contributes to family business research in particular and governance literature in general. First, in the field of a family business, we extend research about the

family firm-board diversity relationship by investigating the impact of family firm status on board diversity, which we measure with three different diversity attributes: age, gender, and nationality. Second, this study makes a significant contribution by comparing differences across family and non-family firms based on their board demographic diversity explained by the theory of SEW (Neubaum & Micelotta, 2021). Thus with this study, we add to the current research stream focusing on the differences between family and non-family firms (Kammerlander, Menges, Herhausen, & Kipfelsberger, 2022; Veltri, Mazzotta, & Rubino, 2021). Finally, we advance the diversity literature by specifying and justifying demographic diversity as either separation, variety, or disparity based on a board's specific interest, thereby addressing the need highlighted by Harrison and Klein (2007). Different conceptualizations of these

demographic variables might help to explore the specific reasons for the propensity of different types of owners to adopt board diversity. Moreover, by adding empirical evidence on the family firm-board diversity association, based on different theoretical conceptualizations with a dataset comprising two distinct groups, we respond to a theory-building discussion regarding contextualizing theory (Reay & Whetten, 2011; Salvato & Aldrich, 2012).

THEORETICAL BACKGROUND

In the extant governance literature, board diversity has received a reasonable amount of attention in terms of structural and demographic diversity (Binacci, Peruffo, Oriani, & Minichilli, 2016) and has been analyzed in various contexts, such as corporations, family firms, and institutions (Sur, 2009). Structural diversity is a board construct that indicates board independence, which is

measured by the percentage of dependent board members; demographic diversity represents the innate and acquired characteristics of the members of a board of directors, including gender, age, race, culture, nationality, and experience (Ararat et al., 2015; Ben-Amar et al., 2013; Hambrick & Mason, 1984; Tasheva & Hillman, 2018). However, there is no single or agreed-upon definition of diversity in the literature. Because of its broad nature, different scholars have different understandings of board diversity. For instance, Van der Walt and Ingley (2003) define it as the combination of various attributes, characteristics, and experiences held by members of a board that influence board processes and decision-making. According to Harrison and Klein (2007), all scholarly definitions of diversity discuss differences but do not define the patterns or distributions of those differences; hence, the understanding of what constitutes the most or

least diverse board remains unclear. In our study, we use the following diversity definition given by Harrison and Klein (2007, p. 1200): “the distribution of differences among the members of a unit with respect to a common attribute, X, such as tenure, ethnicity, conscientiousness, task attitude, or pay.”

Board Diversity in Family Firms

With regard to the drivers of diversity and what determines board composition, the literature provides a limited amount of empirical evidence. Thomsen and Pedersen (2000) argue that different owners, based on their interests and risk concerns, seek different types of directors on their boards. Therefore, the intentions of shareholders may determine board governance and board functionality (Gompers, Ishii, & Metrick, 2004), thus ultimately influencing firm performance. Furthermore, the

primary imperative of family firms is to have a board of directors that provides them with resources that address specific concerns for individuals or family owners and promote their chosen strategies and objectives, thereby securing firm longevity (Thomsen & Pedersen, 2000).

There is a consensus in the literature that, in contrast to non-family firms, family firms are not only concerned about economic objectives but non-economic incentives also substantially influence their behavior (Gomez-Mejia et al., 2007). These non-economic goals, referred to as socioemotional wealth (SEW), are comprised of five major dimensions, including the ability to exercise family control and influence, identification of family members with their firm, social ties of the family firm, emotional attachment, and preservation of family dynasty (Berrone et al., 2012; Gomez-Mejia et al., 2007). The attainment of non-economic goals is associated with implementing a

family governance mechanism to maintain family control of the firm (Chrisman et al., 2014). These non-economic interests of the family hold more significance for them than traditional business objectives such as growth, innovation, and profit maximization (Voordeckers & Van den Heuvel, 2007). Based on the importance of SEW for boards of family firms (Zellweger et al., 2013), we use this construct to investigate the role of ownership in shaping a firm's board diversity.

Salvato and Aldrich (2012) demonstrate that within family firms, family managers achieve a higher position faster than non-family managers. Similarly, promotional chances are higher for managers who share the beliefs of family members and identify themselves with a family firm's history and achievements (Arregle, Hitt, Sirmon, & Very, 2007). Furthermore, Fiegener and his colleagues (1996) document that compared to family managers,

family firms underestimate highly educated and well-trained non-family managers in some cases. Moreover, family firms can successfully inhibit external pressures to diversify, which can affect board composition (Singal & Gerde, 2015) because of high ownership concentration, access to family patient capital, and survivability capital (Sirmon & Hitt, 2003), in addition to limiting the number of external institutional investors (Fernando, Schneibler, & Suh, 2014) who may exert pressure on family firms to follow societal norms and pay attention to diversity when staffing board positions.

Board Diversity and Firm Performance

It is important to examine how board diversity affects the performance of boards, and ultimately the firms they steer, that generally function collectively, whereby any change in group composition likely influences collective

performance and the decision-making process (Van Knippenberg, De Dreu, & Homan, 2004).

Research on board composition documents how board demographic attributes likely affect performance both negatively and positively (Van Knippenberg et al., 2004). Hillman, Withers, and Collins (2009) determine board diversity to be a provider of key resources. Board diversity offers a larger talent pool with multiple experiences and viewpoints (Helfat, Harris, & Wolfson, 2006), which leads to an increase in creativity and board discussions, a better approach toward problem-solving, and an improved understanding of a firm's marketplace (Carter, Simkins, & Simpson, 2003; Finkelstein & Hambrick, 1996; Van Knippenberg et al., 2004). For instance, young directors are typically equipped with higher education and advanced technology (Hatfield, 2002; Jhunjhunwala & Mishra, 2012), while older directors are more experienced. Thus,

the combination of older and younger directors' attributes creates synergy and ultimately improves firm strategic decision-making. Similarly, male and female directors contribute different sets of skills, knowledge, and perspectives, and thus, their integration results in better decisions (Rogelberg & Rumery, 1996). Some studies find that demographic diversity on boards is beneficial to firm performance, as it likely increases the monitoring and advising capabilities of a firm (Anderson, Reeb, Upadhyay, & Zhao, 2011; Ben-Amar et al., 2013).

However, multiple studies have identified negative outcomes of diversity, including conflict, dissatisfaction, dissolution, and division (Miller & del Carmen Triana, 2009; Post & Byron, 2015; Tasheva & Hillman, 2018). Diversity can also have an adverse effect on commitment and communication (Tsui, Egan, & O'Reilly, 1992). Furthermore, Tajfel (1978) and Turner and his colleagues

(1987) suggest diversity is a drawback to firms because individuals categorize themselves into various social groups based on their demographic attributes.

These mixed findings and inconclusive research on diversity may be the results of missing contextual factors in extant research designs (e.g., Petrovic, 2008). As Bammens et al. (2011) suggest, context could be a potential theme for future research in the literature on board governance, particularly on the boards of family firms. Therefore, we explicitly answer the call for research on diversity by exploring different contexts, i.e., how firm ownership configuration affects the level of board diversity and how the level of board diversity influences the performance of firms with different ownership structures, comparing family and non-family firms.

HYPOTHESIS DEVELOPMENT

Age diversity mainly refers to generational gaps across the board of directors; it brings together heterogeneous knowledge and expertise of members from different age groups that may either obstruct collective decision-making (Carpenter, 2002) or strengthen the decision-making process with a wide array of potential thoughts and ideas (Kellermanns & Eddleston, 2004).

First, we propose that family firms, as they are dominated by the control and influence dimension of SEW, prefer to keep their level of board age diversity low; such boards can thereby preserve the senior generation's internal control and influence on their firm's strategic decisions and other affairs (Berrone et al., 2012). Turner et al. (1981) document how age-diverse boards are at a higher risk of forming in-groups and out-groups. Scholars have argued that both older and younger directors are likely to form groups with directors of their respective age

groups (Twenge, Campbell, Hoffman, & Lance, 2010). Thus, the family decision-makers may find inter-group heterogeneity across directors of different age groups and intra-group interaction among directors of the same age inappropriate (Arregle *et al.*, 2007). The lack of interaction and closure may affect the fulfillment of mutual obligations and conformance with behavioral norms (Bourdieu, 1986), which are integral to family social capital (Arregle *et al.*, 2007).

In contrast to non-family firms, based on the SEW model, family members pursuing similar goals and collective benefits often develop high levels of interdependence between family members and directors (Nahapiet & Ghoshal, 1998). Age differences among older and younger directors lead to the adoption of multiple dissimilar personal values by board members (Wang, 2010), which strengthens the separation aspect of age

diversity (Harrison & Klein, 2007). Thus, we argue that the social ties dimension of SEW in a family firm may be impaired by the formation of subgroups when an older or younger director manages its board.

Moreover, unlike non-family firms, family firms have a strong incentive to develop long-lasting and loyal relationships with their board of directors mainly due to the undiversified and concentrated ownership among the family members (Weber, Lavelle, Lowry, Zellner, & Barrett, 2003). Hence, family firms prioritize stability, referring to time spent with their group members, which facilitates cohesion and increases integration (Bourdieu, 1986). Therefore, family firms may prefer to select and retain older members who bring more stability and have long-term involvement with the firm (Anderson et al., 2011). According to the SEW perspective, firms with family ties are very crucial for their family shareholders

and employees; however, in non-family firms, employees, non-family shareholders, and managers typically share a distant, individualistic, utilitarian, and transitory relation with their firm (Chua, Chrisman, & Sharma, 2003). Therefore, it is likely that family firms prefer and promote older employees that share family norms and goals and are more likely to preserve founding values (Anderson et al., 2011), thereby preserving interpersonal linkages and emotional attachment (two key dimensions of SEW).

Younger managers tend to be more creative and less risk averse, with a high propensity to challenge company rules and processes (Hambrick & Mason, 1984). Therefore, the behavior of younger managers is inconsistent with family firm culture; family firms are more risk averse and less able to adapt than their counterparts (Sonfield & Lussier, 2004). In contrast to young directors, older directors are more likely to be

conservative and risk averse and are therefore more psychologically suited to family firm interests (Stevens, Beyer, & Trice, 1978).

Moreover, younger directors may lack knowledge and experience particular to certain situations; thus, they are likely unable to understand involved decision complexity which is embedded in the collective decision-making process of family firms (Mustakallio et al., 2002). However, older directors have experienced a higher level of anxiety in making decisions (Mueller, Kausler, Faherty, & Oliveri, 1980); thus are better able to manage conflictive relationships preserved in family firms and protect non-economic benefits particular to family firms in addition to financial gains.

Moreover, particularism in family firms, i.e., the ability to adopt self-chosen criteria in decision-making often based on ideological and value-based considerations

(Sur, 2009; Carney, 2005), may further encourage family members to favor the decisions of only a few reliable and long-standing managers in order to ensure transgenerational sustainability dimension of SEW (Sirmon & Hitt, 2003). Therefore, in family firms, most top managers enjoy long careers, and even during economic downturns, shedding human capital is very rare (Singal & Gerde, 2015), perhaps due to their social ties with the family and the firm. Hence, a family firm will avoid appointing a new, younger director who does not have family ties with the firm to its board.

Based on our arguments, we propose that in family firms, the levels of board diversity regarding age are likely lower than in non-family firms. Thus, we hypothesize the following:

H1a. Family firms have lower levels of age diversity on their boards of directors than non-family firms.

Among the various types of diversity, gender diversity is typically highlighted and has recently received increased attention from various scholars (Helfat et al., 2006). Gender diversity adds to the pool of a firm's human and social capital, offering more resources to address potential threats to firm survival, reducing conflicts, and promoting risk averse behaviors (Adams & Funk, 2012).

Recent studies have identified an emerging, specific behavior among family firms with regard to the gender preferences on their boards (Bianco, Ciavarella, & Signoretti, 2015). That is, due to ongoing shifts in the demographic structures of firm families, female family members (daughters and wives) are now more often in leadership positions on family firms' boards (Lerner &

Malach-Pines, 2011). However, the strong influence of transgenerational sustainability and internal control within family firms, essential aspects of SEW, may keep them from drawing from a superior pool of qualified female outsiders to structure their boards. Deep-rooted historical and patriarchal norms (Garcia-Alvarez & Lopez-Sintas, 2001), impelled by the pursuit of internal control and influence amid a lack of stakeholder pressures, likely compel family firms to continue nepotistic hiring practices for their boards while deterring them from seeking outside professionals; selecting board members from a shallow pool of applicants that is mostly male dominated could be their least desirable option.

Accordingly, we suggest that the commonly held (though un-true) assumptions that women lack sufficient human capital for board positions (Karatas-Özkan, Erdogan, & Nicolopoulou, 2011) and are less competent

than their male counterparts (Carli, 1990) may still affect the recruitment decisions of board selectors regarding female candidates and generate status differences among male and female board members. As noted by Harrison and Klein (2007), status differences between individuals within a group lead to disparity.

Specifically, we argue that family firms show a high level of gender discrimination. According to Bennedsen et al. (2007), family firms prefer to pass control to firstborn male children rather than to firstborn female children. Furthermore, scholars assert that homosociability is also evident in family firms; thus, male board members attract male members to their boards to promote male-dominated power structures (Holgerson, 2013). Moreover, Kang et al. (2007) report that the reluctance to appoint female members to boards is higher in firms with shareholder concentration than other types of firms, mainly because of

a lack of pressure to introduce board diversity in the former. Hence, many family firms consider female family members unsuitable for monitoring and advisory roles.

In family firms, women, particularly non-family members, play invisible roles (Martinez Jimenez, 2009). Similarly, women often underrate their performance and are reluctant to accept their critical role (Karatat-Özkan et al., 2011; Verheul, Uhlaner, & Thurik, 2005); thus, they are not considered for promotion (Vega, 1999) and are an undervalued resource in the family firms (Lee et al., 2006). Consequently, it reduces women's motivation to join the family firm (Campopiano, De Massis, Rinaldi, & Sciascia, 2017). Moreover, family firms may avoid women on the board due to their open behavior toward raising questions as compared to their male counterparts (Huse & Solberg, 2006), which may enhance board independence,

ultimately endangering the desire for control and influence, a key dimension of SEW, dominated by family.

Therefore, the embedded gender bias in family firms may increase disparity among male and female board members and lead to an underrepresentation of women on firm's boards. Thus, we assume the following:

H1b. Family firms have lower levels of gender diversity on their boards of directors than non-family firms.

Nationality diversity is defined as the presence of individuals from distinct national backgrounds and is characterized as a social category that provides cognitive resources (Ayub & Jehn, 2006). Furthermore, nationality diversity also extends the cultural distance between board members, which implies differences in their managerial values, norms, and mindsets (Hofstede, 1980). Therefore, nationality diversity may lead to a separation of team

members, a lack of coordination and communication, as well as an inconsistent information flow within an organization (Harrison & Klein, 2007; Shenkar, 1995). Thus, amid an increase in communication problems, managerial conflicts between board members may arise (Earley & Mosakowski, 2000).

Particularly in family firms with tightly held family beliefs and values, appointing unrelated professional outsiders with no knowledge of family principles to their boards leads to a risk of diluted or conflicted power sharing (Cruz, Firfiray, & Gomez-Mejia, 2011), the loss of firm-specific knowledge limited to family members (Jones et al., 2008), and of increased managerial opportunism (Firfiray, Cruz, Neacsu, & Gomez-Mejia, 2018). However, it is easier to build a coherent identity among individuals who share the same language and a common identity (Finkelstein & Hambrick, 1996); this leads to

advantages in dispute resolution, information exchange, and cooperation. Thus, based on the control and influence and the emotional attachment dimension of SEW, the desire to maintain family values and harmony may also restrain family firms from appointing board members with cultural dissimilarities, even if their presence could enhance the financial interests of the family firm (Singal & Gerde, 2015).

Unlike non-family firms, family firms select their boards of directors with careful screening to ensure that they are able to meet their goals to protect their prevailing norms and strong family culture, an important dimension of SEW (Singal & Gerde, 2015). Moreover, it implies that managers without cultural competence will not be effective in family firms (Hall & Nordqvist, 2008).

We argue that in homogenous boards, board members may prefer to approach their fellow board members who

share similar values, beliefs, and other attributes; hence, in culturally diverse boards, the separation aspect of diversity (Harrison & Klein, 2007) may lead to the formation of in-groups and out-groups (Turner, 2010). Thus, we suggest that in the case of family firms, this separation of board members may impede firm interdependence and may produce complexities that hinder the implementation of their social agendas. Therefore, we argue that to protect family identity, an integral aspect of SEW, a family firm prefers to hire board members who are culturally similar and have a cultural or social affinity with the family members of the firm (Tabor, Chrisman, Madison, & Vardaman, 2018).

Moreover, in family firms, managers rarely acquire international experience or develop the foreign contacts, language skills, and cultural intelligence required to expand internationally (Okoroafo, 1999). To fill this gap

in managerial capabilities, family firms should hire external personnel as managers with unique values and cultures. However, for family firms, such heterogeneity on their boards may be seen as a threat to their control and influence over decision-making, resulting in a loss of SEW (Gomez-Mejia et al., 2011). Therefore, we argue that family firms prefer to protect their family legacies by assuring board homogeneity.

The inclusion of non-family members on a board who lack knowledge of the particular family and pre-existing social ties to the family firm produces undesired formalization within a family firm. Also, non-family members might find it difficult to adapt to a family firm's idiosyncratic culture (Mitchell, Morse, & Sharma, 2003). Family firms avoid the formalization of their governance due to the negative effects of formalization on their cultures, even when such avoidance generates conflicts of

interest (Stewart & Hitt, 2012). This suggests that family firms are reluctant to hire an external director who belongs to a different culture. Thus, we propose the following:

H1c. Family firms have lower levels of nationality diversity on their boards of directors than non-family firms.

Age diversity provides a more valuable variety of resources, such as experiences, perspectives, and social networks, than other types of demographic attributes (Kearney, Gebert, & Voelpel, 2009). A variety in age may promote the exchange of ideas and produce a synergistic effect of resources, resulting in improved team performance (Kearney et al., 2009). According to Kang et al. (2007), age-diverse boards are equipped with wisdom, expertise, and economic resources of the older members; active responsibilities of the middle age group; and

energy, ideas, and perspectives of the young members. Hence, age diversity is valuable in providing advice instead of purely monitoring board functions (Barrett & Moores, 2020).

In a family firm, the board of directors is likely to have more experience in, commitment to, and competence for understanding the firm's specific governance issues and other matters (Kesner, 1988). Based on the valuable experience and interaction of the older directors, gained from their time spent with family members and from past events in a firm (Li, Lam, & Qian, 2001), they handle management practices more efficiently and contribute to company strategies with better knowledge of firms' resources and operations (Alderfer, 1986). Hence, strong identification and social ties of older directors, two important dimensions of SEW, within family firms play an

effective role in transgenerational sustainability, another dimension of SEW.

Contrary to non-family firms, family firms are more likely to overcome barriers associated with age-diverse boards mainly due to their socioemotional attachment to family and firm (Tsai, Lin, Lin, Lu & Nugroho, 2018), which is a unique characteristic of family firms. Generally, family firms pursue the goal of succession; hence, knowledge exchange often happens among elder and younger generations. Thus, family firms promote intergenerational decision-making (Wade-Benzoni, 2002), ultimately enhancing interdependence and trust. A high interdependence in family firms enables them to balance potential biases from decision-makers (Tsai et al., 2018) of different age groups better than other types of businesses. Correspondingly, dynasty succession and identification in family firms, two important SEW

dimensions, help family firm boards to resolve uncertainties and dynamic situations (Tsai et al., 2018).

Research also provides that firms with concentrated insider ownership, like family firms, are more likely to adopt innovation activities (Lacetera, 2001). Therefore, the intentions of family firms may align better with the characteristics of younger directors because younger directors have more advanced knowledge (Hatfield, 2002) and are equipped with the latest technologies (Jhunjhunwala & Mishra, 2012). They are hence more likely to adopt the risky strategies that are vital for embracing innovation and creativity. Thus, firms with younger directors on their boards are better able to achieve higher growth than other firms (Hambrick & Mason, 1984).

Therefore, when the variety embedded in age diversity reflects the “composition of differences in kind, source, or

category of relevant knowledge or experience among unit members” (Harrison & Klein, 2007, p. 1203) increases, the availability of valuable resources provided by age diversity and idiosyncratic attributes of family firms facilitates a family firm’s goals, collective decision-making, interpersonal linkages, and organizational identification by integrating the attributes of younger and older directors that complement each other and improve strategic decision-making, leading to increased firm performance. Hence, we propose the following:

H2a. High levels of age diversity on boards of directors have a more positive effect on firm performance in family firms than in non-family firms.

We continue to argue that the representation of women on firms’ boards may trigger the disparity aspect of diversity, thereby separating male and female board

members (Harrison & Klein, 2007). For example, individual characteristics divide actors into social categories and attach a distinct status value to individuals (Berger, Cohen, & Zelditch, 1972). This division then generates perceptions about different performance levels and beliefs about individual qualities that are specific to each social category.

However, gender interactions play a significant role in the processes of organizations (Gagliarducci & Paserman, 2012). Male and female directors have unique knowledge and perspectives and share different skill sets, whose integration results in higher-quality decisions (Rogelberg & Rumery, 1996). On a firm's board, women are viewed as change agents (Hambrick et al., 1996) because of the multiple characteristics attributed to them, including superior information processing, monitoring, planning, and risk aversion, better peer relationships, and more

socially responsible behavior (Glass, Cook, & Ingersoll, 2016). By encompassing unique skill sets and sociocognitive properties, women increase cognitive diversity and enhance outcomes (Carpenter, Geletkanycz, & Sanders, 2004). Family firms that tend to be less bureaucratic and more flexible as compared to non-family firms can take particular advantage of the skills and abilities women have; they are more aware of the sensitivity of the relationships (Lansberg, 1992) and, therefore, better able to manage family firms efficiently.

Research shows that the presence of women on board provides better monitoring, thus, reducing irregularities and fraudulent activities (Ghafoor, Zainudin, & Mahdzan, 2019). Nadeem and his colleagues (2020) document that in addition to financial returns, women in family firms are likely to increase non-economic value, perhaps due to their emotional leadership and relationship-building attitude

(Salganicoff, 1990), which is integral to family firms' SEW. Moreover, female directors tend to be more oriented toward non-economic goals than male directors and are better able to handle conflicts (Brown, Brown, & Anastasopoulos, 2002). Thus, their social behavior enables them to facilitate cooperation and the alignment of interests between family and non-family board members (Bertrand & Schoar, 2006) and improves firm performance (Cruz et al., 2011). Therefore, we argue that female board members might be even better suited to family firms than non-family firms.

Similarly, women in a family firm act as mediators in personal and business relationships, particularly between fathers and sons, to maintain stability, peace, and harmony in the family and the firm (Dumas, 1989). This behavior enables family firms to preserve their family dynasty, an important dimension of SEW; therefore, family firm

boards with women are more likely to foster sustainable strategies across generations (Sirmon & Hitt, 2003).

In contrast to the task-oriented and transactional leadership style of male board members, women typically adopt a unique transformational management style (Dezsö & Ross, 2012; Eagly & Carli, 2003) that is similar to the management style exercised in family firms (Ogbonna & Harris, 2000). Therefore, we argue that women are better able to disseminate the values and culture of an owning family (Paustian-Underdahl, Walker, & Woehr, 2014).

Therefore, we argue that by having an equal number of male and female members on a board, a family firm can attain the benefits of variety that stem from a combination of male and female members. Accordingly, we argue the following:

H2b. High levels of gender diversity on boards of directors have a more positive effect on firm performance in family firms than in non-family firms.

Cultural knowledge is characterized as social capital, a source of financial advantage for a firm; however, individuals from different countries are considered human capital consisting of multiple skills and abilities. Expanding the business and customer base needs to build on social and human capital, which is also critical for training the business's potential successor (Danes, Lee, Stafford, & Heck, 2008). In family firms, the desire to pass a business to future generations, a dimension of SEW, may entail them making their board culturally more diverse than in non-family firms. The existence of informal ties and co-ethnic relations in family firms are likely to

flourish commitment and a sense of identification with firms' goals (Van Auken & Werbel, 2006).

Ruigrok and his colleagues (2007) have found that the cultural knowledge and expertise of foreign directors benefit firms and that their involvement on boards positively affects firm performance. Foreign directors' international experiences and networks of contacts are sources of competitive advantage for firms, particularly in diversification efforts and acquisition strategies. According to Paulus and Nijstad (2003), members with different cultural backgrounds have unique experiences, linguistic skills, communication networks, and values that generate distinctive properties, which represent innovation and creativity.

The social capital gained from having variety embedded in a culturally diverse board is vital for obtaining a competitive advantage (Arregle et al., 2007;

Harrison & Klein, 2007). Due to the idiosyncratic characteristics of family firms pertaining to family identity and social ties dimension of SEW, such as trust, cohesiveness, stability, long-term commitment, and reputation, they are able to manage social capital better than non-family firms (Rondi, De Massis, & Kotlar, 2019). That is, for family firms, social capital is a resource that is tacit, difficult to imitate, and deeply embedded (Dess & Shaw, 2001); therefore, it is a source of family firms' advantages in organizational processes. Accordingly, we argue that culturally diverse boards are a resource that provides family firms with improved access to external resources, including not only trust, networks, knowledge, and information but also connections with institutions that are beneficial to firm performance.

Research suggests that family firms maintain high levels of organizational social capital and internationalize

more than non-family firms. In the internationalization process, family firms often need to establish collaborations with other firms to perform strategic activities (Feranita, Kotlar, & De Massis, 2017). Thus, we argue that foreign directors on boards of a family firm may improve strategic decision-making.

Therefore, we argue that despite the extant cultural distance in a board with both local and foreign directors, family firms are better able to produce collaborations and shared principles based on common goals that facilitate a long-term orientation and low turnover. By having a culturally diverse board amid the rapid pace of ongoing globalization, a family firm can acquire the specialized resources needed for the efficient running of its business. Hence, we propose the following:

H2c. High levels of nationality diversity on boards of directors have a more positive effect on firm performance in family firms than in non-family firms.

Figure 2 – 1 and Figure 2 – 2, present the conceptual models and the proposed relationships of the study variables.

Figure 2 - 1: Conceptual Model — Family Ownership and Board Demographic Diversity. (Source: Own)

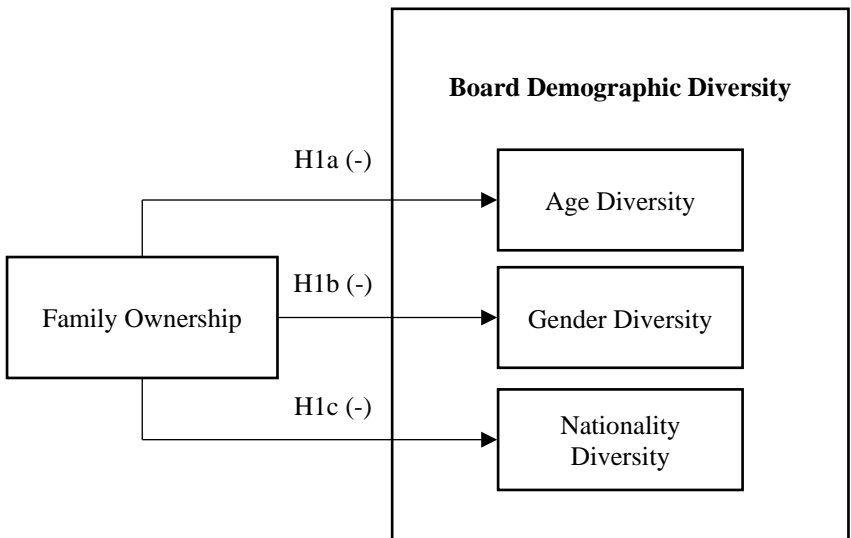
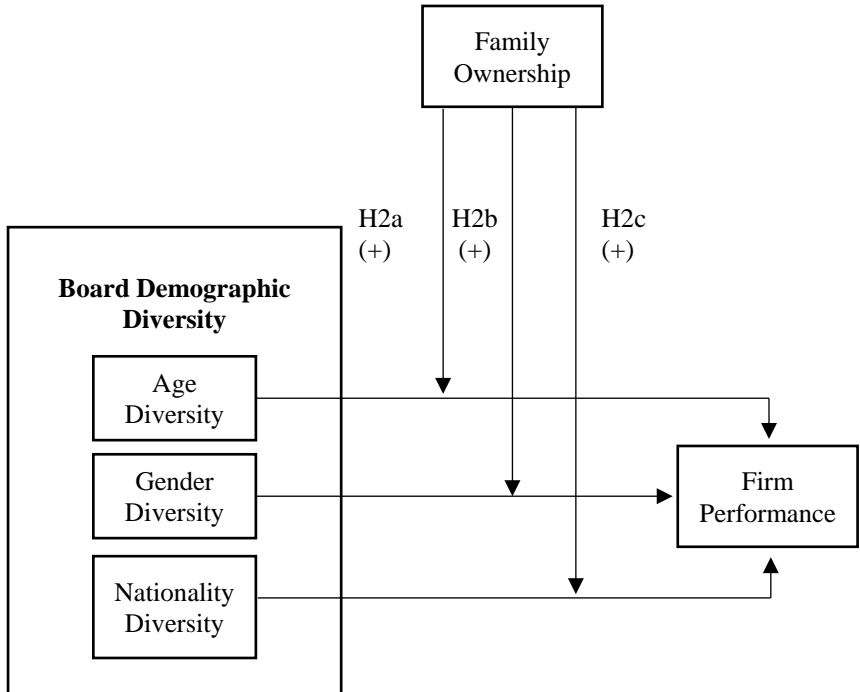


Figure 2 - 2: Conceptual Model — Family Ownership, Board Demographic Diversity, and Firm Performance. (Source: Own)



RESEARCH METHODS

Sample and Data Sources

To test our hypotheses and examine the relationships of diversity, family firm status, and firm performance, we selected a sample of 341 German firms, including both public and private firms, for which we collected data from 2014–2018.

To draw our final sample, we used two main databases, namely, Dafne from the Bureau van Dijk and BoardEx. The Dafne database was used for the financial variables of each firm, while BoardEx was used for demographic variables (age, gender, nationality). In the first step, demographic data for all 714 German firms available on BoardEx were collected, and in the second step, these 714 firms were matched in Dafne by using their specific identification codes. In the third step, financial data for the 538 German firms identified in Dafne were extracted. We

excluded firms with missing ownership data. Furthermore, following an approach used in prior research, we excluded firms regulated by the banking and government sectors due to their discrete regulations and performance measures (Fernando et al., 2014; Jain et al., 2021). Thus, our final merged dataset comprises 341 German firms (125 family and 216 non-family firms). To test our hypotheses, we collected detailed information about the ownership of the family firm-s by investigating company websites and analyzing their proxy statements to calculate their ownership shares.

Measures

ROA

Firm financial performance is calculated by using the accounting measure of return on assets (ROA). ROA is considered a key measure of the firm operating

profitability and is an important indicator of firm financial status that is generally used in studies of firm financial performance (Amore, Garofalo, & Minichilli, 2014; Anderson & Reeb, 2003a; Dezsö & Ross, 2012; Post & Byron, 2015). Moreover, ROA is a commonly used measure of profitability in studies of firm diversity (Conyon & He, 2017; Maury, 2006). Thus, ROA is an important measure of financial profitability to use in analyses of comparison and consistency in this field of research.

Diversity

Age Diversity

To measure age diversity, we used a proxy of time to retirement, which is measured as a coefficient of variation of time to the retirement of directors on a board, consistent with previous studies (Harrison & Klein, 2007; Ji, Peng,

Sun, & Xu, 2021). We considered this proxy a more informed measure of age diversity because board members with different proximities to retirement might have different levels of inclination for identity fit (Westphal & Zajac, 1995).

Gender Diversity

Gender diversity is the proportion of female directors on a board (Ben-Amar et al., 2013; Carter et al., 2003; Dezsö & Ross, 2012; Jain et al., 2021; Perryman et al., 2016).

Nationality Diversity

Nationality diversity is the proportion of directors from non-German countries on a board (Ben-Amar et al., 2013).

Family Firms

We adopted an operationalization of a family business used in previous literature (Anderson & Ross, 2003a). Family ownership is calculated based on the proportion of shares held by family members. We incorporated family and non-family ownership as a dummy variable that takes the value of 1 if a business family owns at least 20 percent firm equity and 0 otherwise. Our variable follows the empirical approaches used by other studies (e.g., Sekerci, Jaballah, van Essen, & Kammerlander, 2021). While many US-based studies consider a minimum value of 5 percent for family firm status, many studies on European family businesses favor a 20 percent threshold due to the legal rights of shareholders. We assume that such an ownership stake indicates both the ability (due to the legal situation) and the willingness (due to the high monetary commitment to one firm) to shape the business along its own interests. Following previous studies, we identified family members

based on surname affinity (Amore et al., 2014) and the information provided in proxy statements. To triangulate data on family ownership in a firm, we accessed and compared four key sources: the Amadeus database, the Dafne database, proxy statements, and company websites.

Control Variables

We controlled for several variables that might affect diversity and firm performance (Amore et al., 2014; Dezsö & Ross, 2012). Specifically, we controlled for firm size, measured by book assets (Dezsö & Ross, 2012), firm age (Perryman et al., 2016), and firm leverage (Ararat et al., 2015; Singal & Gerde, 2015), calculated as the ratio of total debts to total assets. To reduce the problem of skewness, firm size, and firm age were log transformed (Dezsö & Ross, 2012). In addition, we also included a family involvement variable, which takes a value of '1' if

family members are present on the firm board and ‘0’ otherwise. Like previous studies, we used dichotomous classification of family involvement to distinguish between heterogeneous family firms (Anderson & Reeb, 2003b; Garcia-Sanchez et al., 2021). Moreover, we controlled for the identified industries by using a two-digit NAICS code because different industries incorporate different levels of diversity and assets (Kang et al., 2007). Furthermore, we included year dummies to control for variations in firm value across years.

RESULTS

Measurement Model

We tested our hypotheses using OLS regression to evaluate the relationships of family firm status, board diversity, and firm performance while controlling for variables that may affect these relationships. Adoption of

OLS regression is consistent with the approach followed by previous studies. (e.g., Anderson & Reeb, 2003b). This study does not apply firm-fixed effects regression, despite its benefit to control for unobserved heterogeneity in firms, due to the rather stable nature of diversity variables in our models. A firm's levels of board diversity change slowly over time, and our contingency variable (family firm status) is also time-invariant (Veltri et al., 2021). Thus, we mainly focus on between-firm effects instead of within firm variations. Moreover, the use of a random effects model was not supported by the results of the Hausman test for all regression models of the study. The p-value for chi-square was significant in all regression models; hence, rejecting the null hypothesis for the Hausman test and concluding that random effect models are inappropriate for this study.

Descriptive Statistics and Bivariate Correlations

We checked for multicollinearity by calculating variation inflation factor (VIF) statistics; multicollinearity does not present any problems, as all VIF values were lower than the suggested cutoff value of 10 (Hair et al., 2006), with a maximum value of 2.07. Table 2 – 1 shows the descriptive statistics of the sample, including the means, standard deviations, and correlations of the study variables. Descriptive results show that 36 percent of firms in our sample are family firms and the remaining 64 percent are non-family firms. Moreover, the average age of firms in our sample is 48.31 years. The average gender diversity is 12 percent, which means that, on average, firms have 12 percent female members on their boards. Moreover, 20 percent nationality diversity shows that, on average, 20 percent of the firm's board members are

foreigners. The average firm size is €7.3 billion in assets (converted to a natural log of 13.25).

Finally, pairwise correlations reported in Table 2 – 1 show that family firms perform better than non-family firms. Moreover, in comparison to non-family firms, family firms are older and larger. There is a negative and significant correlation between nationality diversity and family firms. It implies that family firms have lower levels of nationality diversity than non-family firms. Furthermore, age, gender, and nationality diversity are positive and significantly correlated with firm size. This means that board demographic diversity by age, gender, and nationality is higher in larger firms. Moreover, the correlation between gender diversity and firm age is positive and significant, which shows that older firms are more diverse in terms of having both male and female board members.

Moreover, a positive and significant correlation between family involvement and age diversity shows that firms with family members on their board have more age-diverse boards, while a negative and significant correlation with nationality diversity depicts that firms with family members on their board have a lower level of nationality diversity on their board. Furthermore, a positive and significant correlation of family involvement with firm age shows that older firms have more family members on their board, while a negative and significant correlation with leverage represents that firms with family members on board are risk averse. Lastly, family involvement is significantly positively correlated with firm performance, which implies that firms with family members on their board are better able to perform than their counterparts.

Table 2 - 1: Descriptive Statistics and Pairwise Correlations.

	Mean	S.D.	1	2	3	4	5	6	7	8	9
1 Firm Performance	0.02	0.16	1								
2 Family Firm Status	0.36	0.48	0.13***	1							
3 Age Diversity	0.39	0.19	-0.03	-0.02	1						
4 Gender Diversity	0.12	0.12	-0.00	0.01	0.11***	1					
5 Nationality Diversity	0.20	0.23	-0.03	-0.18***	0.15***	0.22***	1				
6 Firm Size (Ln)	13.25	2.21	0.26***	0.07**	0.07**	0.32***	0.30***	1			
7 Firm Age (Ln)	3.44	0.92	0.14***	0.28***	-0.04	0.18***	0.05	0.30***	1		
8 Leverage	90.54	118.65	0.04	-0.04	-0.03	-0.00	0.03	0.31***	0.09***	1	
9 Family Involvement	0.18	0.38	0.09***	0.63***	0.05*	0.01	-0.18***	-0.07**	0.06**	-0.07**	1

*, **, *** Correlation is significant at the 0.05 level, 0.01 level, 0.001 level (2-tailed).

Hypotheses Testing

In Table 2 – 2, we present the results of OLS regression, controlling for year fixed effects with diversity as the dependent variable. The results show that with increasing size, firms introduce more diversity in their boards and firms with high levels of leverage have less diverse boards, which is in line with previous research (Singal & Gerde, 2015). Regarding gender diversity, we also observe a positive effect of firm age. Moreover, results show that family involvement has a significant positive impact on board gender and age diversity.

In Column 1, family firm status is negatively and significantly correlated with age diversity ($B = -0.04$, $p < 0.01$). Therefore, H1a is supported. In Column 2, the results show that family firm status is negatively and significantly correlated with gender diversity ($B = -0.04$, $p < 0.001$). Therefore, H1b is supported. In Column 3, we

report the results of OLS regression for nationality diversity as a dependent variable. The relationship between family status and nationality diversity is negative and significant ($B = -0.09$, $p < 0.001$), thereby confirming H1c.

In Column 1 (Table 2 – 3), we estimated the effects of control variables on firm performance, measured by using ROA as the dependent variable. Results show that firm size has a significant positive impact on firm performance, consistent with previous research (Ararat et al., 2015). The family firm involvement coefficient is positive and significant ($B = 0.03$, $p < 0.01$), which is consistent with the findings of prior research (Allouche, Amann, Jaussaud, & Kurashina, 2008). In Column 2, we added the diversity variables of age, gender, and nationality diversity and the variable of family firm status. The coefficient of nationality diversity is negative and significant ($B = -0.03$,

$p < 0.05$), which is in line with Talavera, Yin and Zhang (2018), while the other two diversity types did not exert a significant effect on firm performance.

In Column 3, we included the interaction terms of diversity (age, gender, and nationality) with the family firm variable. All three interaction terms show a non-significant relationship with firm performance, implying that the statistical effect of board diversity on firm performance in family firms is not significantly different from that in non-family firms. Therefore, the results do not support Hypothesis 2a, 2b, and 2c.

Table 2 - 2: Diversity in Family vs. Non-Family Firms.

	1	2	3
	DV = Age diversity	DV = Gender diversity	DV = Nationality diversity
Firm Age	-0.01 (0.01)	0.01** (0.00)	-0.01 (0.01)
Firm Size	0.01*** (0.00)	0.02*** (0.00)	0.04*** (0.00)
Leverage	-0.00** (0.00)	-0.00** (0.00)	-0.00*** (0.00)
Family Involvement	0.06** (0.02)	0.04** (0.01)	-0.03 (0.02)
Family Firm Status	-0.04** (0.01)	-0.04*** (0.01)	-0.09*** (0.02)
Industry Dummies	YES	YES	YES
Year Dummies	YES	YES	YES
Constant	0.31**	-0.09	-0.39**
No. of Observations	1109	1109	1109
Adjusted R-Squared	0.09	0.20	0.17
F	5.12***	11.63***	9.57***

Standard errors in parentheses

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 2 - 3: Family Firms Status, Board Diversity, and Firm Performance.

Dependent Variable: Firm Performance			
	1	2	3
Lagged Firm Performance	0.49*** (0.02)	0.40*** (0.03)	0.40*** (0.03)
Firm Age	0.00 (0.01)	0.00 (0.00)	0.00 (0.00)
Firm Size	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Leverage	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Family Involvement	0.03** (0.01)	0.02* (0.01)	0.02* (0.01)
Family Firm Status		0.00 (0.01)	0.02 (0.02)
Age Diversity		0.02 (0.02)	0.04 (0.03)
Gender Diversity		-0.04 (0.03)	-0.05 (0.04)
Nationality Diversity		-0.03* (0.03)	-0.02 (0.02)
Age Diversity x Family Firm Status			-0.04 (0.05)
Gender Diversity x Family Firm Status			-0.00 (0.07)
Nationality Diversity x Family Firm Status			-0.03 (0.04)
Industry Dummies	YES	YES	YES
Year Dummies	YES	YES	YES
Constant	-0.14*	-0.19**	-0.20*
No. of Observations	1130	999	999
Adjusted R-Squared	0.36	0.27	0.27
F-Stat	25.51***	13.45***	12.26***

Standard errors in parentheses

*** p < 0.001, ** p < 0.01, * p < 0.05

ROBUSTNESS TESTS

To address endogeneity concerns, we carefully designed our research study a priori: We adopted a longitudinal approach by introducing a time lag of one year in our panel data (Nielsen, Skogstad, Matthiesen, & Einarsen, 2016) between measures of diversity (t) and their predictors ($t-1$), and similarly, between the measure of firm performance (t) and its predictors ($t-1$). This is a commonly used approach to tackle endogeneity in this type of study (Abdullah, Ismail, & Nachum, 2016; Dezsö & Ross, 2012).

However, based on the prior studies presenting the effect of ownership structures on firm performance (Demsetz & Villalonga, 2001), we assume that our main findings might be affected by self-selection bias and reverse causality. Therefore, in order to further confirm our findings and control for potential self-selection bias in

a firm's adoption of diversity and family-firm performance, we ran a treatment-effect model by following the Heckman two-stage procedure (Heckman, 1979). Our approach is consistent with previous studies (Maury, 2006). We performed a treatment-effect model both for finding the impact of family firm status on board demographic diversities and for investigating the influence of board demographic diversities on firm performance in the presence of family firm status. The first stage of the procedure includes estimating a probit model for the family firm status, while the second stage used predicted values for family firm status to estimate the dependent variables of demographic diversities and firm performance. We incorporate the same controls in Heckman two-stage correction models as used in our main OLS regressions. In addition, in the first stage of estimating a probit model, we also include a few other

variables which may influence family firm status. We include a performance variable of ROA based on the assumption that firm performance may impact the ownership structure (Demsetz & Villalonga, 2001; Maury, 2006). Results provide that λ is statistically insignificant for all regressions, suggesting that single-equation estimates are not biased. Hence, the findings confirm that our main results are not subject to severe endogeneity problems.

Moreover, we also performed a robustness test to check for the sensitivity of our findings toward the measure of the family firm. In prior studies, researchers used both dichotomous and categorical variables for classifying family and non-family firms (Anderson & Reeb, 2003; Chrisman et al., 2012). However, various researchers believe that categorical variables do not fully represent levels and types of family involvement

(Chrisman et al., 2012; Kotlar et al., 2014). Thus, considering that continuous measures of family firm ownership might be better able to capture varying degrees of family involvement (Klein et al., 2005), we re-estimate our models by using an alternative measure of family firm ownership which is a continuous variable rather than dichotomous. An alternative measure of family firm ownership is based on the percentage of common equity of more than 20 percent held by a family or families in a firm (Block, Miller, D., Jaskiewicz, P., & Spiegel, 2013).

The results of the robustness test are shown in Table 2 – 4; they are similar to our main findings showing that an increase in family ownership results in lower board age, gender, and nationality diversity. Moreover, Table 2 – 5 presents the robust findings on the moderation effect of firm ownership between board diversity and firm performance. Again, similar to our main findings, we do

not find any evidence on the family ownership moderation between board diversity and firm performance, hence, rejecting the H2abc.

Table 2 - 4: Diversity in Family vs. Non-Family Firms.

	1	2	3
	DV = Age diversity	DV = Gender diversity	DV = Nationality diversity
Firm Age	-0.01 (0.01)	0.01** (0.00)	-0.01 (0.01)
Firm Size	0.01*** (0.00)	0.02*** (0.00)	0.04*** (0.00)
Leverage	-0.00** (0.00)	-0.00** (0.00)	-0.00*** (0.00)
Family Involvement	0.05** (0.02)	0.02 (0.01)	-0.05* (0.02)
Family Firm Ownership	-0.04* (0.02)	-0.03* (0.01)	-0.12*** (0.02)
Industry Dummies	YES	YES	YES
Year Dummies	YES	YES	YES
Constant	0.31**	-0.09	-0.41**
No. of Observations	1109	1109	1109
Adjusted R- Squared	0.08	0.19	0.16
F	4.94***	11.11***	9.44***

Standard errors in parentheses

*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$

Table 2 - 5: Family Firms Ownership, Board Diversity, and Firm Performance.

Dependent Variable: Firm Performance			
	1	2	3
Lagged Firm Performance	0.49*** (0.02)	0.41*** (0.03)	0.41*** (0.03)
Firm Age	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Firm Size	0.01*** (0.00)	0.01*** (0.00)	0.01*** (0.00)
Leverage	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
Family Involvement	0.03** (0.01)	0.03** (0.01)	0.03* (0.01)
Family Firm Ownership		-0.00 (0.01)	0.02 (0.03)
Age Diversity		0.02 (0.02)	0.03 (0.03)
Gender Diversity		-0.05 (0.04)	-0.06 (0.04)
Nationality Diversity		-0.04* (0.02)	-0.03 (0.02)
Age Diversity x Family Firm Own.			-0.04 (0.06)
Gender Diversity x Family Firm Own.			0.00 (0.11)
Nationality Diversity x Family Firm Own.			-0.06 (0.06)
Industry Dummies	YES	YES	YES
Year Dummies	YES	YES	YES
Constant	-0.14*	-0.19*	-0.20*
No. of Observations	1130	999	999
Adjusted R-Squared	0.36	0.27	0.27
F-Stat	25.51***	13.44***	12.25***

Standard errors in parentheses

*** p < 0.001, ** p < 0.01, * p < 0.05

DISCUSSION

This study contributes to the recent debate on board demographic diversity in different types of organizations. By integrating the research on board diversity (Ben-Amar et al., 2013; Conyon & He, 2017; Dezsö & Ross, 2012; Talavera et al., 2018) with insights from family firm scholarship (Singal & Gerde, 2015), we investigate the relationship of firm ownership configurations and levels of board demographic diversity in family and non-family firms. Thus, we provide new insights into the antecedents of board demographic diversity (age, gender, and nationality). Using the novel approach of theorizing diversity in multiple aspects, i.e., separation, variety, and disparity, we find that family firms lag non-family firms in the diversity of their boards of directors.

That is, our novel finding is that boards of family firms are less diverse in the dimension of age, gender, and nationality than boards of non-family firms. Consistent with our theoretical arguments, we suggest that family firms are more reluctant to adopt board diversity, measured by the demographic attributes of age, gender, and nationality, than non-family firms. To explain the different behaviors of family and non-family firms regarding board diversity, we use arguments from SEW theory. Hence, we argue that in contrast to non-family firms, family firms that are dominated by SEW (Berrone et al., 2012) and highly concerned with their interdependence perceive board diversity to be a threat to their survival (Nahapiet & Ghoshal, 1998).

Additionally, we suggest that high levels of board demographic diversity accentuate the performance of family firms; however, our empirical results indicate that

the performance of family firms does not benefit from diverse boards more than the performance of non-family firms. In our empirical analysis, our comparison of family and non-family firms shows that there is no significant difference in the performance of family and non-family firms following an increase in board demographic diversity. Here, based on our theoretical argument, we provide plausible explanations for this finding. First, the contractual and transactional costs from dealing with diverse suppliers with which family firms have no long-term relationship ultimately lead to an increase in the firm's overall cost structures (Williamson, 1979). As it is less expensive and more satisfactory for family firms to recruit employees from a familiar source and pool of applicants, they seem more prone to maintain long-term relationships with their employees and their suppliers (Singal & Gerde, 2015). This is mainly because of their

families' effects on and fears of losing control of strategic decisions, whereby family firms focus on avoiding the costs of hiring unfamiliar managers from less trusted sources (Berrone et al., 2012). Thus, for a family firm, the practice of promoting current employees fosters social capital in the form of increased organizational identification and greater loyalty to the firm and its family members (Singal & Gerde, 2015). That is, by ignoring diversity management policies, family firms may obtain a cost advantage over non-family firms.

Second, groups can only attain the performance benefits of diversity until and unless group members are able to overcome the difficulty of interacting effectively with other group members who possess dissimilar attributes (Tsui & O'Reilly, 1989). Specifically, in family firms, women in senior positions do not receive visibility and acceptance (Danes & Olson, 2008); therefore, family

firms do not necessarily provide a constructive environment that benefits from diverse boards.

Third, even if board members have a conducive environment where they can express themselves freely and have open discussions without being ignored by other members, gender diversity can affect real change only when there are three or more women on a board (Konrad, Kramer, & Erkut, 2008). Thus, in family firms, where boards are less diverse in gender than in non-family firms, the inclusion of one or two women on a board does not make a difference.

Fourth, diversity on a board impedes board goals (Kim & Lim, 2010) and decreases the ability of a firm to make prompt strategic decisions (Powell, 1991). The resulting conflict of interest between members of diverse boards is mainly due to the tradeoff between firm performance and board goals (Kim & Lim, 2010). In family firms, this

conflict of interest could increase further due to the presence of extraneous family goals, which may aggravate problematic tradeoff issues between family and board goals and firm performance.

In sum, this study contributes to the growing literature on diversity in family firms (Jain et al., 2021; Singal & Gerde, 2015). However, research on whether the board demographic variables of family firms are different from those of other types of firms (Ben-Amar et al., 2013) is advancing. Our research contributes to this stream of research by providing evidence about the role of ownership configuration in shaping a board's levels of diversity.

LIMITATIONS AND FUTURE RESEARCH

Similar to other studies, this study has some limitations. Based on its sample and empirical design, the

generalizability of the results of this study is limited. First, our sample includes only German firms, and the behavior of firms in general and family firms in particular regarding diversity management and initiatives may differ across different cultures. Prior research has shown that gender, religion, and nationality diversity are perceived differently according to the norms and values of a society (Low, Roberts, & Whiting, 2015). We encourage future research to replicate our model in other geographical contexts with different cultural settings and norms.

Second, in our study, we focus only on two types of firms with distinct ownership configurations, namely, family and non-family firms. There is a need for further research in the field of board diversity to disclose the crucial yet invisible effects of various types of ownership configurations, such as institutional block holders, nonprofit organizations, and financial firms, on board

levels of diversity (Post & Byron, 2015). Moreover, we encourage further studies to establish whether these results also apply across heterogeneous family firms and what might drive heterogeneity among family firms regarding their board diversity. Thus building on our insights, future research should investigate board demographic diversity while considering heterogeneity among family firms.

Third, our study investigates only three demographic diversity attributes: age, gender, and nationality. However, several other diverse facets, such as race, religion, professional background, education, and tenure, contribute to the human and social capital of boards of directors (Tasheva & Hillman, 2018) and may be associated with firm ownership. In future research, it might be interesting to look at various diversity dimensions. To date, research on other types of diversity has mainly focused on single organization settings and has

investigated demographic attributes individually. Hence, future research should not only examine these dimensions in competing types of organizations but also study the combined effects of diversity dimensions to illustrate a holistic picture of them.

Fourth, regarding data, it might also be interesting to identify whether male and female members on a board belong to a family or not. Moreover, it might be useful to study threshold numbers; having only one or two members who are different from the rest of a board might not be sufficient to influence board functioning (Konrad et al., 2008). Therefore, to clearly demonstrate how board diversity affects firm performance, we suggest testing this study's diversity-performance model on a dataset of matched-pair family and non-family firms. In addition, as shown by previous studies, priorities and problems may vary across different generations of family firms (Davis,

Hampton, & Lansberg, 1997); therefore, it is also suggested to control for generational effects on board diversity and firm performance in future research.

Finally, our study measures diversity by adopting constructs that have been readily used in other studies on diversity topics (Carter et al., 2003, Dezsö & Ross, 2012). Hence, the diversity measures in this study capture only one aspect of each diversity variable. However, to explore multiple specifications attached to various diversity attributes, future research needs to build on other aspects of diversity, as suggested by Harrison and Klein (2007). Moreover, in our conceptualization, we theorize multiple aspects of diversity, including disparity, separation, and variety, with respect to the dimensions of age, gender, and nationality, but our data limitations do not allow us to measure these aspects empirically.

CONCLUSION

In this study, we examine the relationships between firm ownership and board demographic diversity in terms of age, gender, and nationality. Furthermore, we investigate the impact of board demographic diversity on the association between firm ownership and firm performance. By integrating the research on the ownership and board diversity with insights from the SEW perspective, we find that boards of family firms are less diverse than those of non-family firms. Thus, by providing a valuable understanding of how family ownership determines the level of board diversity in terms of age, gender, and nationality, theorizing how multiple aspects of diversity manifest, and exploring the vital influence of ownership on board diversity, our study significantly advances existing theory and can help practitioners understand the complex and hidden impacts of ownership

on board composition. Given the relevance of our results to board functions and their significant implications for several research streams, we suggest that further studies explore board diversity management and processes in multiple contexts.

BOARD DIVERSITY AND RISK BEHAVIOR: DOES THE FAMILY FIRM OWNERSHIP MATTER?⁸

INTRODUCTION

In recent years, corporate board diversity has received significant attention from the media, political groups, and researchers. Several countries have made legislation on promoting board diversity (Smith, 2014). Moreover, numerous studies investigated the role of board diversity, particularly gender diversity, which is mainly based on arguments of enhancing social equality or widening the talent pool of the board of directors (Terjesen, Sealy, & Singh, 2009). However, research lacks consensus if board gender diversity is the most significant dimension of

⁸This Essay is an unpublished working paper based on Mubarka, K., and Kammerlander, N. (2022) with the title “Board diversity and risk behavior: Does the family firm ownership matter?”

diversity. Other aspects of diversity, including age, nationality, ethnicity, tenure, race, and experience, are under-examined (Carter et al., 2003; Giannetti & Zhao, 2019). Moreover, most of the previous studies on board diversity examine only a few corporate outcomes, mainly firm performance (Adams & Ferreira, 2009; Ahern & Dittmar, 2012; Carter et al., 2003). Therefore, it is important to explore different features of the board diversity, which may vary in their effect on firm outcomes.

Literature provides evidence on the existence of a relationship between board diversity and firm risk-taking behaviors. However, the direction and magnitude of the effects between board diversity and firm risk-taking behavior and how board diversity affects firm risk-taking under different ownership structures remain unclear (Baker et al., 2020; Perryman et al., 2016). Research provides that the risk-taking behavior of the firm often

depends upon the type of risk involved (Kempers et al., 2019). In this study, we focus on a variability risk referring to the discrepancy between the expected and actual economic returns (McConaughy, Matthews, & Fialko, 2001). We focus on the variability risk due to its high significance for the shareholders and its ability to reflect both ups and downs in the firm's performance (Kempers et al., 2019), reflecting both the short-term and long-term picture of the business. In the view of social psychology literature, diversity results in moderated decisions with a reduced level of risk (Kogan & Wallach, 1996). However, studies on corporate boards lack systematic evidence on the effects of board diversity on firm risk-taking behavior (Bernile, Bhagwat, & Yonker, 2018). Given the importance of risk for firm strategy and governance, the lack of research on the relationship between board diversity and firm risk-taking behavior seems to be a

notable research gap. Therefore, we investigate the effect of board diversity on firm risk-taking. Moreover, we examine the moderating role of family firm ownership in the relationship between board diversity and firm risk-taking behavior, given their idiosyncratic risk attitude.

Family firms consider financial and socioemotional wealth to make strategic decisions (Gomez-Mejia et al., 2007). Therefore, the idiosyncratic attributes of family businesses may differentiate them from non-family businesses relating to their board's strategic decision-making. Specifically, family firms' distinct preferences to preserve family legacy and succeed across generations (Singal & Gerde, 2015) make it important to identify the differences in the relationship between board diversity and risk-taking behavior among family and non-family firms.

Following the literature on organizational behavior, which suggests that board diversity has multiple facets

(Williams & O'Reilly, 1998), we focused on various dimensions of diversity such as age, gender, and nationality (Mubarka & Kammerlander, 2022). We aim to determine which aspects of diversity matter for the firm risk-taking behavior and how differently they affect firm outcomes, in particular firm risk-taking, of family and non-family firms. Specifically, we hypothesize that board age, gender, and nationality diversity increase the level of firm risk-taking. Moreover, building on the perspective of socioemotional wealth, we argue that in family firms, board diversity increases firm propensity to take risk less than in non-family counterparts. This study analyzes three observable and commonly available dimensions of board demographic diversity, including age, gender, and nationality. The empirical analysis is performed using a sample of 146 listed German family and non-family firms in the period 2014-2018. We empirically find that firms

with diverse age and nationality boards take more risk. Moreover, the findings of the study assert that family ownership significantly weakens the relationship between board diversity (age and gender) and its firm's risk-taking behavior.

This study makes several contributions to the literature in the field of organizational behavior and family firms. First, it extends the empirical literature available on various aspects of board diversity that are important to firm outcomes other than firm performance (Bernile et al., 2018; Giannetti & Zhao, 2019; Ji et al., 2021). Second, instead of focusing on only single dimension of diversity, we investigate multiple dimensions, which are often neglected in previous studies (Giannetti & Zhao, 2019). Third, with this study, we also highlight the need of understanding the individual impact board demographic diversities have on firm outcomes (Giannetti & Zhao,

2019), instead of focusing on composite indexes (Anderson et al., 2011; Bernile et al., 2018). Lastly, we also add to the field of family firms (Zahra, 2018; Zhang & Luo, 2021), by investigating the different effects of board diversity, including age, gender, and nationality on risk-taking behavior in family and non-family firms. The moderation effect of family firm heterogeneity based on different levels of family firms' involvement is so far neglected in prior family firm research, which seems to ignore the significance of moderators in explaining the behavior and outcomes of family firms (Chua, Chrisman, Steier, & Rau, 2012).

THEORETICAL BACKGROUND

Board Diversity and Firm Risk-Taking Behavior

By aligning management and shareholder's interests and providing strategic guidance, a board of directors is

essential to the functioning of an organization (Thams, Kelley, & Glinow, 2018). Research on organizational theory provides that diverse boards have both positive and negative consequences.

On the one hand, organizational behavior and psychology literature provides that boards with diversity in age, gender, race, nationality, and tenure are rich with human and social capital. They offer different perspectives, higher experiences, networking, opinions, expertise, and enhanced problem-solving skills (Kaczmarek, Kimino, & Pye, 2014), making them more flexible and innovative than boards with low diversity (Miller & Triana, 2009). Such diversity makes the board more knowledgeable about the market needs and conditions, resulting in better governance, social, financial, and environmental performance (Conyon & He, 2017). Even in complex societal situations, diverse boards

are more likely to effectively respond and manage stakeholders' expectations (Hillman & Dalziel, 2003). Moreover, diversity enables directors to discuss complex issues and make informed decisions better than less diverse boards (Srinidhi, Gul, & Tsui, 2011). In addition, diverse boards are more likely to monitor effectively (Adams & Ferreira, 2009; Terjesen et al., 2009), which results in improved corporate governance (Perryman et al., 2016).

On the other hand, board diversity may enhance conflicts and lowers group cohesion (Hambrick et al., 1996). Moreover, resistance inside the board may make the decision-making process more inefficient and lengthy (Hambrick et al., 1996). In such circumstances, diverse boards may make inefficient decisions with low involved risk due to the difficulty of attaining consensus on riskier policies (Bernile et al., 2018). The low involved risk may

help to gain short term performance goals but are likely to harm the firm's long-term sustainability.

In contrast to diverse teams, a homogenous team is more socially cohesive (O'Reilly, Caldwell, & Barnett, 1989), which may decrease the board's monitoring effectiveness due to group-think and lack of compliance (Herman, 1981). Research shows that board functioning is associated with the collective expertise and background of the board members (Forbes & Milliken, 1999). The effective functioning of the board is likely to impact firms' risk behavior (Colaco, Myers, & Nitkin, 2011).

Previous literature classified board diversity in multiple ways commonly referred to as structural and demographic diversity (Binacci et al., 2016). There are different factors that relate any board to either of these categories (Van der Walt & Ingley, 2003). Moreover, board diversity does not result in similar behavior under

all circumstances (Bernile et al., 2018). Based on the complexity embedded in firms' activities and governance structures, boards pursue different risk-taking behaviors (Zahra, 2018). In sum, directors' preferences, attitudes and decisions may differ across different dimensions of diversity.

Risk Behavior of Family Firms

Multiple studies investigated the risk-taking behavior of family firms. However, they present contradictory findings. A recent theoretical and empirical review on family firms' risk-taking behavior also identifies the controversy on this topic (Kempers et al., 2019). A few studies find a positive association between family firms and their risk-taking, while other studies present negative or non-significant relationships (Llanos-Contreras, Arias,

Maquieira, & 2021; Morck & Yueng, 2003; Anderson & Reeb, 2003).

Based on different theoretical perspectives, the risk preferences of the family firms are framed differently. According to the agency theory, family firms are likely to avoid risk (Kempers et al., 2019). Following the agency perspective, prior literature provides that family firms with centralized decision-making are more concerned about their control of business activities and are less likely to invest in risky projects (Schulze et al., 2003). However, behavioral theory suggests that the risk preferences of an individual depend on framing and loss aversion (Kahneman, 1991). It implies that an individual's risk preferences are more influenced by loss aversion rather than making gains (Tversky & Kahneman, 1989).

Another widely used theoretical perspective in family business research is SEW. Zahra (2018) examined the

ownership concentration of family firms through a lens of SEW and argues that the risk aversion of family firms increases with an increase in their ownership concentration; thus, to protect their wealth and family legacy, family firms prefer to take a low risk. Contrary to this, non-family investors diversify their portfolios by investing in numerous firms and across multiple asset groups; thus, non-family investors tend to take high risks as compared to members of family businesses (Poletti-Hughes & Williams, 2019).

However, Gomez-Mejia et al. (2007) use SEW to explain the behavior of family firms toward risk preferences and performance hazards, especially when their SEW is at stake. Under situations when a family firm's SEW is likely to be threatened, they may adopt loss-averse behavior and forgo short-term performance benefits by investing in risky projects. In contrast, family firms

may avoid risky decisions that hamper their control and influence over the firm activities. For instance, research provides evidence that in situations where family firms were required to lose their controls and firm ownership, they preferred to avoid those opportunities (Berrone et al., 2012).

There are multiple aspects like financial conditions and economic changes that are likely to threaten the socioemotional wealth of the family firm. Studies provide that these aspects change the risk preferences of the family firms (Llanos-Contreras et al., 2021). Similarly, given the significance of various institutional pressures, contextual factors are likely to influence the role of board diversity on firm outcomes (Saeed, Mukkaram, & Belghitar, 2021).

HYPOTHESES DEVELOPMENT

Maximizing the age diversity of the board of directors leads to an increased overall human and social capital (Carter et al., 2003). Age is a proxy for one's life experiences (Mannheim, 1949) and consists of a broad set of factors that influence the formation of multiple personal values in an individual's life. Directors from different age groups are likely to bring different expertise, experiences, social networks, and backgrounds (Arnaboldi, Casu, Kalotychou, & Sarkisyan, 2020). An instilled heterogeneity among board members of different age groups may obstruct (Carpenter, 2002) or improve their collective decision-making (Kellermanns & Eddleston, 2004) and influence their risk preferences (Brenner, 2015).

A meta-analysis by Mata and his colleagues (2011) documents a complex association between aging and risk-taking in decisions. They argue that learning from

experiences enables older individuals to challenge the project's riskiness more than younger individuals. Older directors with more experience can better manage activities and make strategic decisions with increased information about the firm's matters (Alderfer, 1986). Similarly, Kesner (1988) argues that older directors are more equipped with the knowledge of a firm's resources and better understand underlying governance concerns. It implies that older directors are more knowledgeable about the firm's internal environment, which may determine their ability and willingness to take on risky projects.

In addition, young directors are more informed about up-to-date technologies (Jhunjhunwala & Mishra, 2012). They are more familiar with advanced business techniques (Hatfield, 2002), thus, enabling a firm to take on risky projects essential for the growth of the firm's innovation

and creativity. Therefore, age-diverse boards embrace a variety of resources embedded in the distinct backgrounds of older and younger directors. Hence, the variety ingrained in diverse sets of experiences and knowledge (Harrison & Klein, 2007) held by older and younger directors may affect board's risk-taking preferences.

The alternative perspective is that a board with directors from different age groups is more likely to form in-groups and out-groups (Turner & Brown, 1991). Directors may tend to create groups with directors of the same age (Twenge et al., 2010), thus, separating older and younger directors into different age groups (Harrison & Klein, 2007). This separation leads to more conflicts, poor communication, and a lack of cooperation (Simons & Peterson, 2000; Van den Steen, 2010). Consequently, it gives rise to opposite opinions and behaviors, which harm

board practices (Harrison & Klein, 2007). Hence, board diversity may increase conflicts and interfere with decision-making, making it difficult to arrive at a consensus and resulting in uncertain and risky outcomes (Arrow, 1951). Additionally, heterogeneous boards face more problems and frictions, which may increase the reaction time and extend the overall decision-making process (Hambrick et al., 1996). In line with this view, board diversity will likely increase firm risk-taking. Based on the arguments above, we hypothesize that board age diversity may positively influence the firm risk behavior irrespective of its performance outcomes.

H1a. Board age diversity significantly increases a firm's risk-taking.

Multiple studies on risk find that women are generally more risk-averse than men (Croson & Gneezy, 2009). A

meta-analysis on risk-taking behavior presents that as compared to women, men are more likely to involve in intellectual risk-taking, risky experiments, and gambling (Byrnes, Miller, & Schafer, 1999). In addition, Levi, Li, and Zhang (2014) find that firms with male-dominated boards are likely to involve in M&A activities, which are typically considered risky. Contrary to this, research also provides that men and women share similar risk behaviors in financial decision-making (Schubert, Brown, Gysler, & Brachinger, 1999). There are numerous reasons to expect the opposite behavior of female directors beyond the glass ceiling to be more similar to men (Adams & Funk, 2012). For instance, studies suggest that women often avoid competitive environments (Niederle & Vesterlund, 2008). However, women who strive for leadership positions on board may have different characteristics than others, similar to their male counterparts. It asserts that female

directors may also possess risk-taking behavior like their male counterparts.

Moreover, evidence shows that women are often deprived of promotion, mainly because of their too feminine behavior (Branson, 2006). It proposes that only those women who behave and think like men are likely to gain promotion. Furthermore, in contrast to the traditional view of women, females at the director level are “atypical” to conservation and change preferences and are less affected by tradition, conformity, and security (Adams & Funk, 2012). It asserts that women selected for a board position are more competitive and achievement-oriented, more open to change, and prefer to take risks (Adams & Funk, 2012). Therefore, we argue that the risk-taking behavior of male and female directors on the board may increase the ability and willingness of the board to take the risk.

H1b. Board gender diversity significantly increases a firm's risk-taking.

The board of directors acts as a link between the firm and its external environment; therefore, a firm depend upon its board of directors to obtain resources and reduce external dependency. The firm can gain valuable human and relational capital by hiring a director with valuable skills and linkages to the external environment (Hillman & Dalziel, 2003). Nationality diversity refers to a social category, a source of cognitive resources (Ayub & Jehn, 2006). However, board nationality diversity has not been given appropriate attention in the literature, except few studies investigating the effect of a director's distinctive cultural and ethnic attributes on economic outcomes (Fernandez, 2011).

Research shows that board nationality diversity has both potential costs and benefits attached to it. The most widely stated costs of diversity include racism, conflict of preferences, poor communication, and prejudices that lead to disruption (Earley & Mosakowski, 2000). Contrary to this perspective, nationality diversity commonly stated benefits are distinctive abilities, cultures, and experiences, which may increase innovation and creativity and lead to a productive environment (Paulus & Nijstad, 2003). However, by having a diverse board, firms not only have a capable director but an individual who can navigate between cultures which outweighs the cost associated with poor or lack of communication (Blackman, 2004). Therefore we argue that culturally diverse boards may enable firms to expand across distinct cultures and take risks with their enhanced level of exposure, brainstorming, and creativity (Amason, 1996).

Following a different perspective, board members from different countries have different cultures, values, preferences, and beliefs, which impact individual decision-making (Halek & Eisenhuer, 2001). The understanding and interpretation of different financial and strategic decisions vary across directors, who differ in their cultures and norms (Tse, Vertinsky, & Wehrung, 1988), thus leading to different risk preferences. Giannetti and Zhao (2019) find culturally diverse boards are better able to generate more ideas and perform experiments more frequently by switching strategies. They document that boards that have members from different origins are likely to have more experiments regarding the firm's innovation activities. According to them, firms with culturally diverse boards are better able to solve complex problems and make risky decisions; thus, these firms have more cited

patents. Therefore, it implies that culturally diverse boards are more open to take risks.

H1c. Board nationality diversity significantly increases a firm's risk-taking.

Previous studies provide evidence of different risk-taking behaviors of family and non-family firms; they have found that heterogeneity involved in a firm's governance structure is likely to influence the risk propensity of the firm (Carney, 2005). Family firms are able to influence their strategic decision with family ownership and participation on the firm's board (Villalonga, Amit, Trujillo, & Guzmán, 2015). Moreover, family leadership is very likely to derive risk-taking behavior of the family firm (Miralles-Marcelo, del Mar Miralles-Quirós, & Lisboa 2014), hence a leader of a

family firm plays a significant role in defining the firm's exposure to risk.

Following the SEW perspective, we argue that family firms are likely to accept risk, especially when their non-economic wealth is at stake (Gomez-Mejia, et al., 2007). As in family firms, it is very often that the emotional endowments of the family members are attached to the firm (Gomez-Mejia, et al., 2007), thus we assume that family members may prefer to take significant risk and forgo short-term performance returns over the goal of increasing and preserving socioemotional wealth. Similarly, family firms are equipped with long-term objectives, leading to increased involvement in entrepreneurial activities such as improving institutional capabilities, enhanced innovation, and operational activities (Zahra, Jennings, & Kuratko, 1999).

Furthermore, goal divergence and risk aversion are more likely to co-exist when family firms strive for short-term goals. However, when family firms pursue long-term goals such as transgenerational control and long-term sustainability, it is more likely that goal convergence and risk acceptance co-exist (Chua et al., 1999). Therefore, we assume that family firms that are more long-term oriented may take more risk than their counterparts.

H2. Family firms take more risks than their non-family counterparts.

Depending on the firm characteristics, the factors that increase the board's effectiveness may also become the source of downfall (Li & Wahid, 2018). Depending on the context, conflicts arising from age diversity may have benefits and costs. We propose that board diversity may negatively affect the risk-taking behavior of the family

firms, featuring complex governance structures and decision-making processes.

In family firms, heterogeneity in their governance systems may determine the ease of implementing socioemotional agenda (Zahra, 2018) and the ability to undertake risky strategic decisions. Moreover, Zahra (2018) suggested that cohesion and family involvement in family firms also influence the firm's risk-taking behavior.

As documented by Turner and Brown (1981), age-diverse boards may lack cohesion encountering a high risk of forming in and out-groups, thus, separating boards into different age groups (Harrison & Klein, 2007). Decision makers in family firms may find this inter-group heterogeneity and intra-group interactions across different age groups inappropriate to their culture of interdependence, a dimension of SEW, and consider it a source of conflicts. In line with these arguments, we argue

that age-diverse boards with increased levels of conflict may raise a family firm's fear of losing control and influence on strategic decision-making, integral to their SEW, thus reducing the ability and willingness of family firms to take a risk.

However, when family firms need to react quickly to economic changes, they are more open to risky projects if they have low board diversity (Zhang & Luo, 2021). The reason could be that diverse groups are likely to have a slow response time compared to homogenous groups (Zhang & Luo, 2021). An increased age diversity on boards may make it hard for family members to develop strategies favoring their interests (Pucheta-Martinez & Gallego-Alvarez, 2020). Additionally, family firms sensitive to their firm identity and longevity, SEW dimensions, may prefer to avoid risk when underlying

conflicts lead to reputational loss (Gomez-Mejia et al., 2007).

Moreover, in diverse boards, older members may have more experienced and are better able to use that experience to adapt to market changes that may potentially threaten survival. They can bring greater stability to the board and preserve founding values (Anderson et al., 2011). Therefore, older directors are better suited to the needs of family firms (Stevens et al. 1978). However, younger directors may lack knowledge of family firm culture and processes (Sonfield & Lussier, 2004), hence, less able to adapt to the family firm's interests (Stevens et al., 1978). Therefore, diverse boards may have members with their preferences, strategic choices, motivations, risk preferences, and interests, potentially leading to divergent strategic actions (Goodstein, Gautam, & Boeker, 1994). Thus, groups with complex structures, such as family

firms, are likely to downplay risky projects when they need to be accepted by multiple members with different characteristics (Cheng, 2008). Based on our arguments, we hypothesize that:

H3a. Board age diversity increases firm risk-taking in family firms less than in non-family firms.

The “value-in-diversity” concept developed by Cox, Lobel, and McLeod (1991), describes that various stakeholders on which firms depend, such as institutional investors, exert pressure to include women in their upper echelons (Singh, 2005). Gender diversity is likely to improve a firm’s reputation and credibility and adds legitimacy to an organization in both internal and external markets (Daily & Schwenk, 1996). Boards with women participation are seen as diverse boards lacking discrimination, thus giving a positive image of the firm to

its customers, resulting in constructive customer behavior (Smith, Smith, & Verner, 2006), and lowering outcome uncertainty.

However, when family firms promote nepotism and appoint incapable family members on the board rather than skillful non-family members; they face more conflicts than their counterparts, mainly due to a variety of sources such as sibling rivalry, dispersed ownership among family members, and identity conflict (Schulze et al., 2003). Thus, the altruist behavior of family firms may negatively affect the firm's reputation.

Following the perspective of SEW, board gender diversity in family firms results in different roles of female directors, mainly guided by their involvement in the family objectives (Poletti-Hughes & Briano-Turrent, 2019). Furthermore, the attributes of female directors are very likely to influence corporate strategic decisions

(Bennouri, Chtioui, Nagati, & Nekhili, 2018). Gender-diverse boards are associated with increased perspective diversity which introduces a culture of cross-questioning and discussions and ultimately enhances board independence (Van Knippenberg et al., 2004). Research also presents that women on boards are more likely to behave independently than male directors (Adams & Ferreira, 2009). Therefore, we argue that board gender diversity in family firms is likely to reduce the control and influence of family members, a SEW dimension, on the firm strategic decisions. Thereby, it reduces the willingness of family firms to engage in risky strategic decisions.

Members of diverse boards are considered similar to ultimate outsiders (Carter et al., 2003). Therefore, we argue that in family firms, characteristics of gender-diverse boards may harm the interdependence dimensions

of SEW. Therefore, when there is a threat to a family firm's socioemotional wealth, they are more likely to take less risk (Gomez-Mejia, 2007). Consequently, we assume that:

H3b. Board gender diversity increases firm risk-taking in family firms less than in non-family firms.

Board members with different cultural values, norms, and beliefs are likely to form in-groups and out-groups (Turner, 2010), leading to the separation of diverse boards (Harrison & Klein, 2007). This separation of the culturally diverse board may reduce firm interdependence, a SEW dimension, and slows the decision-making process (Halek & Eisenhuer, 2001). Thus, a heterogeneous group takes more time to respond to potential strategic opportunities than a homogeneous group (Zhang & Luo, 2021). As family firms need a fast response to a change in the

economic situation, thus, a culturally diverse board reduces their ability to take risky projects (Zhang & Luo, 2021).

Moreover, members with different attributes are likely to have different strategic choices and risk preferences (Goodstein et al., 1994). Hence, the individual preferences of culturally diverse members make it difficult to achieve mutual consensus (Arrow, 1951). Therefore, ingrained complexity in a culturally diverse board, as in family firms, is likely to reduce the ability and willingness to take risk projects, especially when they need to be accepted by members with different attributes (Cheng, 2008).

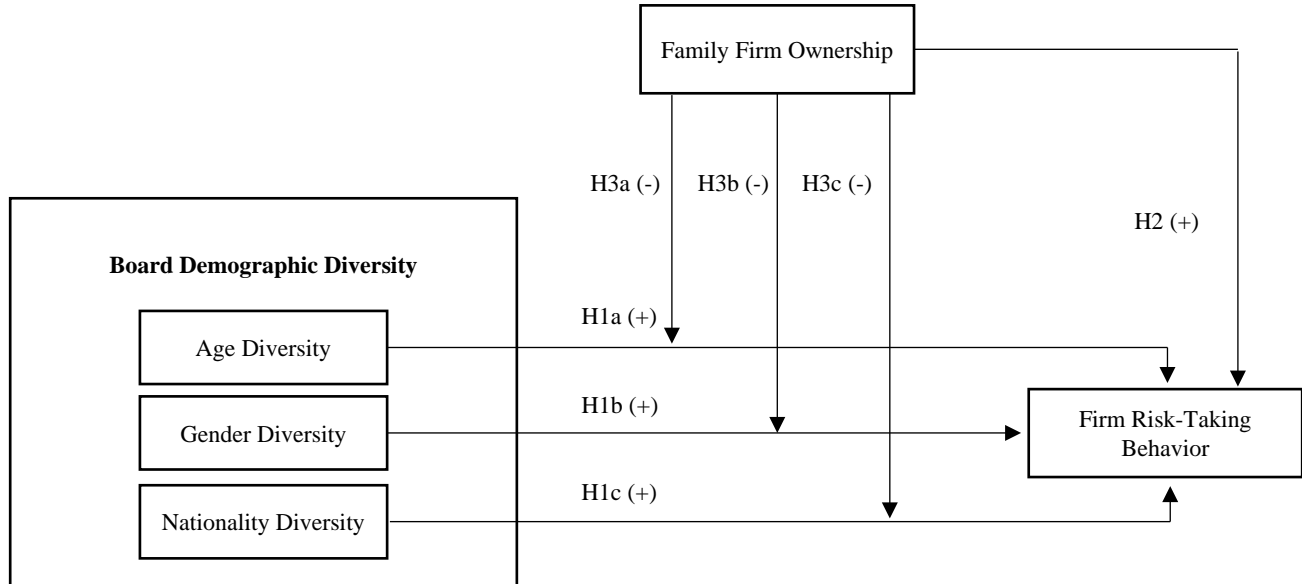
Moreover, in family firms, the presence of board members with limited knowledge of the family culture and values are likely to increase complexity in strategic decision-making and managerial opportunism (Cruz et al., 2011; Firfiray et al., 2018). Similarly, Hall and Nordqvist

(2008) also documented that managers who lack cultural competence in family firms are less effective. Perhaps, due to increased conflicts resulting from divergence in opinions and attitudes. Therefore, we argue that family firms are less likely to be involved in risky projects with culturally diverse boards.

H3c. Board nationality diversity reduces firm risk-taking more in family firms than in non-family firms.

Figure 3 – 1 presents the conceptual model and the proposed relationships of the study variables.

Figure 3 - 1: Conceptual Model — Board Demographic Diversity, Family Firm Ownership, Firm Risk-Taking Behavior. (Source: Own)



RESEARCH METHODS

Sample and Data Sources

To investigate the effect of three different attributes of board diversity, including age, gender, and nationality, on firm risk-taking behavior, along with testing the moderation effect of family firm ownership on the relationship between board diversity and firm risk-taking behavior, we generate a sample of 146 German public firms. To collect data, we looked into three databases: Datastream from Eikon, BoardEx, and Dafne from the Bureau van Dijk. This sample is selected based on the availability of data on the boards' demographic diversity and stock return volatility of the firm. We also did not include firms with missing ownership data. In this sample, we have data ranging from 2014-2018 for family and non-family firms. The data on financial variables are collected from the Worldscope data in Datastream. We obtained

data on board-related variables from BoardEx. In addition, we collected ownership data of the family firms from their websites and proxy statements. Furthermore, our sample does not include financial and utility firms due to the different regulations followed by these two sectors (Fernando et al., 2014; Jain et al., 2021).

Measures

Dependent Variable

Firm risk-taking

Consistent with previous literature on firm risk-taking (Bernile et al., 2018; Ji et al., 2021; Sila et al., 2016), we conceptualize firm risk-taking as the total risk. Our measure of risk is a combination of different types of risk, thus reflecting the complete risk preferences of a particular firm. It includes both firm's total stock return volatility and risk associated with the management of the company's

assets and liabilities and the company's market perception.

It is measured by calculating the annualized standard deviation of the daily stock returns in year t , which is multiplied by the market to book value of the firm's total assets in year t , multiplied by the square root of 250 (trading days in a year). Our approach of using total risk as a measure of firm risk-taking is in line with previous studies (Poletti-Hughes & Briano-Turrent, 2019) that support using both the market-based and accounting measures of firm risk-taking. Unlike using only accounting measures of firm risk-taking, which reflect an ex-post picture of financial decisions, the market measures of firm risk give the perception of market participants related to the firm's riskiness. Moreover, it reflects the market participant's perception of the firm's financial, strategic, and investment decisions and its cash flow variability.

Independent Variables

Board age diversity

Board age diversity is measured by the standard deviation of the age of directors on the firm's board, which is in line with previous studies (Ji et al., 2021; Harrison & Klein, 2007; Westphal & Zajac, 1995)

Board gender diversity

Board gender diversity is measured by the proportion of female directors on the firm's board, consistent with previous studies on board gender diversity (Ben-Amar et al., 2013; Dezso et al., 2012; Graham, Belliveau, & Hotchkiss, 2017; Ji et al., 2021; Perryman et al., 2016; Oliveira & Zhang, 2022).

Board nationality diversity

Board nationality diversity is measured by the proportion of foreign directors on the firm's board (Ben-Amar et al., 2013; Ji et al., 2021).

Moderator Variable

Family firm

Following the definition of the family firm used in previous studies (Anderson & Reeb, 2003a; Chua et al., 1999), we included family ownership as a continuous variable. Based on the previous studies, the continuous variable of family ownership is more likely to capture the varying levels of family involvement (Klein et al., 2005). Ownership was thereby calculated as the ratio of equity shares held by families or family members. Only family firms with more than 20 percent of the firm's equity were considered family firms. Similar to previous studies, we identified family members with their matched surname affinity (Amore et al., 2014). Further assurance of the data is gained by looking at firms' websites and the Die Deutsche Wirtschaft (DDW) database.

Control Variables

Following prior family business and management literature, we use various control variables that may affect the risk-taking behavior of the firm. Like previous studies, we include multiple firm-level control variables. To capture the effect of firms' scope and complexity on board of directors' attributes (Coles, Daniel, & Naveen, 2008), we include firm size measured by the natural logarithm of the book value of the firm's total assets and firm age. Moreover, firm leverage reflects firms' complexity and is often used to determine firm risk-taking behavior (Ji et al., 2021; Sila et al., 2016). In a firm with high leverage, managers may take more risk as it favors them to shift wealth from creditors to shareholders (Leland, 1998). Contrary to this, a high chance of facing financial distress may limit the firms' ability to engage in risky projects

(Friend & Lang, 1998). Therefore, to control the effects of leverage, we include the debt to total assets ratio.

Following previous studies, we also include variables depicting the investment and growth opportunities of the firm, as firms with increased opportunities for growth and investments can go for risky projects (Ji et al., 2021; Sila et al., 2016). To capture the effect of growth options, we include three measures: capital expenditure measured by the ratio of capital expenditure on fixed assets over the total assets; sales growth calculated by an increase in sales over the sales in the last year; and market to book ratio is the market value of firms' total assets divided by the book value of firms' total assets. Lastly, we also include return on assets calculated by the ratio of net income to total assets (Sila et al., 2016).

RESULTS

Measurement Model

We use a panel data OLS regression analysis to test the impact of board age, gender, and nationality diversity on firm risk-taking behavior. Further, to scrutinize the moderating role of family firm ownership on the relation between board diversity and firm risk-taking behavior, we introduce an interaction term between variables of board diversity and family firm ownership. Our approach is consistent with numerous previous studies (Bernile et al., 2018; Ji et al., 2021; Poletti-Hughes & Briano-Turrent, 2019; Sila et al., 2016). To overcome the concerns of omitted variable bias originating from specific financial and economic variables, we controlled for a year and industry variables by introducing two-digit SIC industry codes and year effects.

We carefully selected our research model to deal with the potential problem of endogeneity, as highlighted by

different studies (Poletti-Hughes & Briano-Turrent, 2019). Moreover, there might be a possibility of reverse causality between firm risk-taking behavior and the level of board demographic diversity (Sila et al., 2016). Thus, we used a longitudinal approach by introducing one year lagged board-level and firm-level predictors of firm risk-taking behavior. Our approach to addressing the issue of endogeneity is in line with previous studies of similar nature (Abdullah et al., 2016).

Descriptive Statistics and Bivariate Correlations

Table 3 – 1 provides descriptive statistics and pairwise correlations for all study variables. In our sample, the average number of women on the firm board is 13 percent, while firms have, on average, 21 percent of foreign directors on their board. Moreover, our sample includes 37 percent of family firms holding about 59 percent of the

firm's equity. Further, the average firm in our sample holds around 8.4 million assets and is approximately 48 years old.

Table 3 – 1 also shows the pairwise correlations between our study variables. It presents that all coefficients are reasonably low, with the highest relevant correlation coefficient of 0.44 between gender diversity and firm size. Moreover, we calculate the variance of inflation factors (VIF) to check for multicollinearity concerns. The highest VIF value observed in our variables is (1.78), which is below the cut-off level of 10. Therefore, we assume that multicollinearity does not cause a problem in our regression analysis. It reports that firm risk-taking is positively correlated with firm age and size, implying that older and larger firms are more likely to take the risk. In addition, findings show that age, gender, and nationality diverse boards are associated with taking more risks.

Family ownership is also significantly positively correlated with firm risk-taking, depicting the risk-taking behavior of family firms.

Hypotheses Testing

Table 3 – 2 presents the results of OLS regression, with firm risk-taking behavior as a dependent variable. In column 1, only control variables are regressed on firm risk-taking. The results show that older and larger firms are significantly positively correlated with firm risk-taking, which asserts that old and large firms are more likely to take the risk. Moreover, it also shows that firms with high leverage are less likely to take the firm risk, as leverage negatively impacts firm risk-taking behavior. It is in line with the view that firms with high financial distress are less likely to engage in risky projects (Friend & Lang, 1998). Contrary to this, as reflected by sales growth, firms

with more growth opportunities are more inclined toward risk-taking, as shown by the significant positive impact of sales growth on firm risk-taking behavior.

In Column 2, independent variables of board demographic diversity, including age, gender, and nationality, are added along with the variable of family firm ownership. The results provide that age diversity and nationality diversity on board significantly and positively affect the firm's risk-taking, with the coefficients of ($B = 1.25, p < 0.01$) and ($B = 0.67, p < 0.05$), respectively. The findings illustrate that age and nationality diverse boards are more open to taking a risk, thus, increasing the firm's performance volatility. The results are consistent with H1a and H1c, thus leading to the acceptance of H1a and H1c. However, results found no significant impact of gender diversity on the risk-taking behavior of the firm, therefore, rejecting H1b. The results further show a significant

positive effect of family firm ownership on the firm's level of risk ($B = 0.00$, $p < 0.05$), which supported the H2.

In Column 3, we included the interaction terms between board diversity variables (age, gender, nationality) and family firm ownership. The results show that the interaction term of age diversity and family firm ownership is negative and significant ($B = -0.02$, $p < 0.05$). It asserts that family firm ownership significantly negatively moderates between the relationship of board age diversity and the firm's risk-taking, consistent with H3a. Thus, it leads to the acceptance of H3a. It depicts that age diversity on board affects the risk-taking behavior of family and non-family firms differently.

Similarly, results show that family firm ownership significantly negatively moderates between the board gender diversity and the firm's risk-taking ($B = -0.05$, $p < 0.01$), confirming H3b. It illustrates that board gender

diversity increases a firm's risk less in family firms than in non-family firms. Moreover, results do not provide any significant effect of family ownership on the linkage between board nationality diversity and a firm's risk-taking. Therefore, it leads to the rejection of H3c.

Table 3 - 1: Descriptive Statistics and Pairwise Correlations. (Source: own)

		Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12
1	Firm Risk-Taking	4.39	1.61	1											
2	Firm Age	3.53	0.84	0.14***	1										
3	Firm Size	13.46	2.16	0.27***	0.42***	1									
4	Return on Assets	0.03	0.19	0.09*	0.05	0.15***	1								
5	Leverage	87.44	99.57	-0.04	0.20***	0.33***	0.13***	1							
6	Market to Book ratio	2.80	4.22	0.49***	-0.03	-0.01	0.41***	0.27***	1						
7	Sales Growth	0.05	0.25	0.11**	-0.10**	-0.03	0.03	-0.05	0.11**	1					
8	Capital Expenditure	0.03	0.03	0.03	0.10**	0.04	0.08*	0.07*	0.02	-0.01	1				
9	Board Age Diversity	0.38	0.15	0.13***	0.13***	0.10**	-0.03	0.00	0.00	-0.02	0.05	1			
10	Board Gender Diversity	0.13	0.11	0.18***	0.33***	0.43***	-0.00	0.08*	-0.06	-0.09*	0.00	0.25***	1		
11	Board Nationality Diversity	0.21	0.22	0.11**	0.11**	0.35***	-0.00	0.05	-0.02	-0.04	-0.12**	0.15***	0.18***	1	
12	Family Firm Ownership	59.00	30.72	0.13***	0.27***	0.14***	0.03	-0.04	0.00	0.01	0.00	0.11**	0.14***	-0.17***	1

*, **, *** Correlation is significant at the 0.05 level, 0.01 level, 0.001 level (2-tailed).

Hypotheses Testing

Table 3 - 2: Family Firm Ownership, Board Diversity, and Firm Risk-Taking Behavior. (Source: own)

Dependent Variable: Firm Risk-Taking			
	1	2	3
Firm Age (ln)	0.21* (0.08)	0.17* (0.08)	0.16 (0.08)
Firm Size (ln)	0.29*** (0.03)	0.22*** (0.04)	0.22*** (0.04)
Return on Assets	-0.53 (0.38)	-0.40 (0.37)	-0.45 (0.37)
Leverage	-0.00*** (0.00)	-0.00*** (0.00)	-0.00*** (0.00)
Market to Book ratio	0.12*** (0.01)	0.11*** (0.01)	0.11*** (0.01)
Sales Growth	0.91*** (0.24)	1.17*** (0.25)	1.18*** (0.25)
Capital Expenditure	0.50 (1.94)	1.12 (2.07)	1.30 (2.06)
Board Age Diversity		1.25** (0.45)	1.67** (0.55)
Board Gender Diversity		0.62 (0.69)	1.75* (0.86)
Board Nationality Diversity		0.67* (0.33)	0.54 (0.35)
Family Firm Ownership		0.00* (0.00)	0.02*** (0.00)
Board Age Diversity x Family Firm Own.			-0.02* (0.01)
Board Gender Diversity X Family Firm Own.			-0.05** (0.01)
Board Nationality Diversity x Family Firm Own.			0.00 (0.01)
Industry dummies	YES	YES	YES
Year dummies	YES	YES	YES
Constant	-0.19	-0.00	-0.05
No. of observations	497	484	484
Adjusted R-squared	0.29	0.32	0.33
F-Stat	9.28***	9.06***	8.77***

Standard errors in parentheses

*** p < 0.001, ** p < 0.01, * p < 0.05

Figures 3 – 2 and 3 – 3 show the interaction plot of age diversity and gender diversity with family firm ownership, respectively. Hence, in Figure 3 – 2, the graphical plot illustrates the moderating effect of board age diversity and family ownership on the risk-taking behavior of the firm.

Figure 3 - 2: The moderating effect of family ownership between the relationship of board age diversity and risk-taking behavior of the firm. (Source: Own)

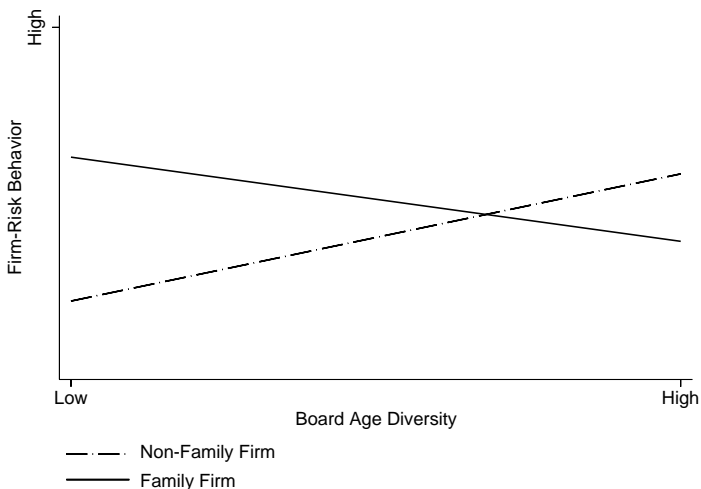
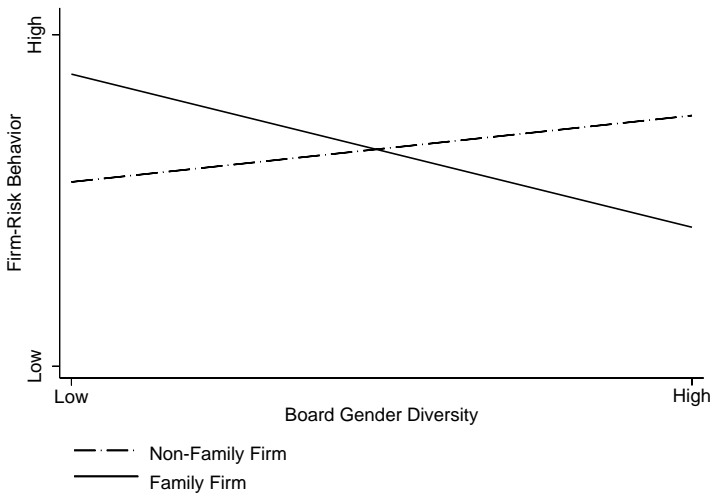


Figure 3 - 3: The moderating effect of family ownership between the relationship of board gender diversity and risk-taking behavior of the firm.
(Source: Own)



DISCUSSION

In this study, we argued that board demographic diversity, including age, gender, and nationality, influences the risk-taking behavior of the firm. Moreover, the effect of age, gender, and culturally diverse board on a

firm's risk-taking differs between family and non-family firms. We found that age and nationality diverse boards increase a firm's propensity to take the risk. However, our findings show that there is no significant influence of gender-diverse boards on the risk-taking behavior of the firm. We also found that family firms take more risk than their non-family counterparts. Furthermore, our results show that the interaction between family ownership and the board age and gender diversity negatively moderates our baseline results regarding the board diversity and firm risk-taking behavior. In addition, our empirical analysis depicts that a culturally diverse board does not significantly differ in its risk preferences across family and non-family firms.

With the empirical findings of this study, it attempts to extend the research on the topics of board demographic diversity and risk-taking behaviors. Thus, it advances the

research on board diversity (Ben-Amar et al., 2013; Conyon and He, 2017; Dezsö and Ross, 2012; Talavera et al., 2018) with valuable insights from family business research (Kempers et al., 2019; Poletti-Hughes & Williams, 2019). The theoretical and empirical analyses of this study offer new ways to understand the role of board demographic diversity in a family firm's risk behavior and thus contributes in several ways to management and family business research.

First, with this study, in particular, we add to family business research. Specifically, our findings build on Kempers et al. (2019) and Giannetti & Zhao's (2019) recent work on a firm's risk-taking behavior and board diversity, respectively. Firm ownership structure underlying different economic and non-economic objectives leads to a varying degree of risk adoption or aversion (Kempers et al., 2019). We interpret our results

of high risk-taking in family firms by using the socioemotional perspective of prioritizing non-economic benefits over economic gains (Gomez-Mejia et al., 2007; Poletti-Hughes & Williams, 2019).

Second, we contribute by looking at age and nationality dimensions of board demographic diversity which so far did not receive significant attention in the literature (Giannetti & Zhao, 2019). Previous studies have investigated gender diversity and its antecedents and firm outcomes in different ownership configurations. However, little is known about the significance of various attributes of the board of directors, in addition to gender, regarding their economic impact on the firm (Sila et al., 2016). Therefore, this study provides empirical evidence that the risk-taking behavior of the firm is driven by the level of age and nationality diversity on board. However, this study provides no evidence that the presence of women on board

affects the risk-taking propensity of the firm, which is similar to the findings of previous research (Masta & Miller, 2013; Sila et al., 2016). It implies that a board with the representation of women is not significantly more or less in taking risks than a board dominated by male directors. Our results point to the evidence of gender bias reflected in the board composition of different types of firms (Mubarka & Kammerlander, 2022). Therefore, it is important to look at the between-firm heterogeneous factors that are likely to influence the role of demographic attributes of corporate decision-makers in affecting the risk behavior of the firm. However, previous studies have ignored that the idiosyncratic characteristics of family firms may affect the role of board demographic diversity in shaping the risk preferences of the firm. By comparing family and non-family firms, we highlight the potential

differences in risk-taking across firms with different ownership structures.

Third, our study contributes to a stream of research on socioemotional wealth by explaining the role of SEW in decreasing the impact of board age and gender diversity on risk-taking in family firms. We found that age and gender-diverse boards increase a firm's risk-taking behavior less in family firms than in non-family firms. The family ownership featuring the non-economic goals of the family is likely to change the impact of board diversity on the risk-taking behavior of the firm, mainly due to the underlying mechanisms that protect, support, and enhance their unique identity or socioemotional wealth. Additionally, our theoretical framework expands the explanatory power of SEW by highlighting its dynamic view under different conditions.

In sum, this study provides interesting findings that not only respond to the calls for more research on SEW but have important implications for regulations on implementing a board gender quota in German firms.

LIMITATIONS AND FUTURE DIRECTIONS

Like other studies, this study also carries some limitations. The empirical findings of this study are limited in their scope and thus could not be generalized. The first limitation of this study is its small sample size, which includes only German family and non-family firms. In Germany, within this sample period in 2015, legislation on gender quota was introduced, in which publically listed German companies were legally bound to introduce 30 percent of women on their supervisory board (Dienes & Velte, 2016). However, other European countries have made mandatory legislation on mandatory gender quotas

earlier than our study period. For instance, Norway was the first country to implement this 40 percent gender quota in 2003 (Terjesen et al., 2015), and others include the Netherlands, UK, France, Belgium, Finland, Iceland, and Italy. Therefore, it might be interesting to look at the performance of firms from other European countries once they have passed the compliance period for implementing this quota.

Moreover, the study findings elaborate on the influence of board demographic diversity on firm risk-taking behavior in general and the risk-taking behavior of family firms specifically. With this study, we attempt to extend the literature on board demographic diversity by contributing to family business research. Previous literature on board diversity mainly focuses on structural diversity, and much attention has been paid to gender diversity in demographic diversity. However, all other

types of diversities have been neglected. However, the importance of other types of diversities is also evident from literature as scholars suggest that every kind of diversity, either gender, age, religion, or nationality, has different outcomes depending on the norms and values of the society (Low et al., 2015).

The second limitation of this study is that it only focuses on two types of ownership structures, including family and non-family firms. It compares their propensity to take the risk. However, these firm categories are heterogeneous in nature. Family and non-family firms differ not only from each other but also have unique characteristics that make them different from other family and non-family firms, respectively. Moreover, other types of shareholders, such as institutional investors, creditors, financial institutions, and non-profit organizations, may have different risk preferences and concerns about a firm's

board diversity (Post & Byron, 2015). Therefore, by conducting this study, we encourage fellow researchers to extend this research model across different ownership structures. It might also be interesting to look at the risk behavior of heterogeneous family firms.

The limitation of this study is that the generational effect of family firms is not considered. However, it is likely to affect the firm's risk-taking behavior (Kempers et al., 2019) and the level of board diversity (Singal & Gerde, 2015). The fourth limitation of this study is that it only focuses on three types of board demographic diversities: age, gender, and nationality. However, research provides various other attributes that may add to the human and social capital of the firms (Tasheva & Hillman, 2018). This study examines the individual role of each type of board diversity; however, it might be worthy of investigating their combined influence on firm risk

attitude. Therefore, we encourage researchers in the field of board diversity to examine other aspects of board demographic diversity and their combined impact on business risk.

Further studies could also investigate firms' risk-taking behavior over a long period, including economic and political events and uncertainties that may alter the risk preferences and shift the focus of family firms toward future expectations. Descender (2010) suggested that financial crisis influences performance; therefore, extending the sample period to capture economic events could be interesting.

CONCLUSION

In sum, this study investigates the impact of board age, gender, and nationality diversity on firm risk-taking. Furthermore, it examines the effect of board diversity on

firm risk-taking in family and non-family firms. To conduct this study, we analyzed German family and non-family firms. The findings of this study suggest that socioemotional wealth theory can successfully demonstrate the risk behavior of family firms versus non-family firms with diverse boards. Hence, this study provides evidence that board diversity and firm risk behavior arguments based on SEW theory complement the perspective of agency and stewardship theory in explaining the risk behavior of family and non-family firms with diverse boards. The results show that diversity of boards with age and nationality increases a firm's risk-taking. In addition, age and nationality diverse board have a more adverse effect on risk-taking of family firms than non-family firms. By providing empirical evidence on the impact of board diversity on firm risk-taking and the role board diversity plays in driving a firm's risk behavior

Essay 3 | Board diversity and risk behavior: Does the family firm ownership matter?

differently in different types of firms, our study contributes to family business research and advances research on board diversity.

DISCUSSION AND CONCLUSION OF THE DOCTORAL DISSERTATION

This doctoral dissertation aims to enhance our understanding and knowledge of the topics of corporate governance in family firms. This doctoral dissertation includes three distinct but interconnected essays, which contribute to the extensions and advancement of the ever-growing field of corporate governance. Essay 1 examines the ownership dimension of corporate governance by investigating the role of different ownership structures embedded with distinct institutional goals in shaping their organizational performance. Using an institutional theory, the performance difference of four different sets of firms, including foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-owned non-family firms, has been studied. Essay 2 looks at both dimensions of

corporate governance: ownership and firm board. It explores the role of firm ownership structure in determining the level of board demographic diversity (including age, gender, and nationality) and how differently board demographic diversity affects the performance of family and non-family firms. Lastly, Essay 3 further extends the knowledge on different ownership structures and board demographic diversity, but this time by focusing on the risk behavior of the firms. It investigates the role played by age, gender, and nationality diverse boards in directing the firm's risk preferences. In addition, it analyzes how board demographic diversity has a different impact on the risk preferences of family versus non-family firms.

The remaining chapter will focus on significant theoretical contributions and the practical implications of

all three essays. Moreover, it will highlight the limitations and potential future directions for further research.

Table 4 - 1 gives an overview of broad concepts and topics addressed in this doctoral dissertation.

Table 4 - 1: Overview of Topics Addressed in Doctoral Dissertation. (Source: own)

Main Topics (Theory) [Essay/s]	Research Gap(s)	Theoretical Contribution(s)	Practical Implication(s)	Limitation(s)/Future Directions
Family Firms	Multiple aspects like board diversity and goal complexity have not been thoroughly investigated in a different context of family and non-family firms.	Comparing family and non-family firms enhance the understanding of the different role and behavior of the board of directors in affecting firm outcomes. Moreover, this doctoral dissertation provides empirical evidence on the differences between different types of firms, including family firms.	The findings of this doctoral dissertation have important implications for family business scholars and family firms. It provides them with a critical understanding of the idiosyncratic characteristics of family firms and their role.	It might be interesting to investigate the role of a board of directors and multiple goals across different types of family firms following the family firm heterogeneity perspective.

Discussion and conclusion of the doctoral dissertation

Main Topics (Theory) [Essay/s]	Research Gap(s)	Theoretical Contribution(s)	Practical Implication(s)	Limitation(s)/Future Directions
<p>Corporate Governance</p>	<p>Ownership and board of directors are important aspects of corporate governance. Previous studies have investigated the role of ownership in affecting board diversity; however, it remains inconclusive.</p>	<p>This doctoral dissertation extends the literature on corporate governance by exploring the role of different attributes of the directors on a firm's board. Moreover, it highlights the role of different organizational goals underlying various ownership configurations.</p>	<p>This doctoral dissertation provides implications for firms in general and family firms in particular regarding the importance of board diversity and their different outcomes across different types of organizations.</p>	<p>Scholars can implement the research models used in this doctoral dissertation across various countries that have introduced gender quotas for firm boards.</p>

Discussion and conclusion of the doctoral dissertation

Main Topics (Theory) [Essay/s]	Research Gap(s)	Theoretical Contribution(s)	Practical Implication(s)	Limitation(s)/Future Directions
<p>Different ownership configurations, goals, and firm performance (Institutional Theory) [Essay 1]</p>	<p>A limited amount of studies investigate the performance difference of various types of the organization guided by different multiple co-existing institutional logics. Lack of research on comparing the performance of foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-owned non-family firms. It remains unclear how firms with different ownership structures underlying multiple co-existing goals, either conflicting or complementary behave differently.</p>	<p>Essay 1 contributes to the literature on institutional theory by advancing the understanding of how multiple institutional logics with distinct goals direct the performance of different types of organizations. Moreover, it contributes to family business research by exploring how family ownership influences the performance of foundation-owned firms. It contributes empirically by employing and comparing a unique dataset of four different types of firms.</p>	<p>The findings of essay 1 have important implications for family firm practitioners and scholars. The findings show how conflicting or complementary goals can affect their performance, and their poor convergence can lead to performance reduction.</p>	<p>Future research can extend the findings of this research model by examining different types of organizations holding multiple institutional logics guided by different organizational goals (e.g., hospitals, educational institutions, etc.)</p>

Discussion and conclusion of the doctoral dissertation

Main Topics (Theory) [Essay/s]	Research Gap(s)	Theoretical Contribution(s)	Practical Implication(s)	Limitation(s)/Future Directions
<p>Board Demographic Diversity and Firm Performance in Family Firms (Socioemotional Wealth) [Essay 2]</p>	<p>Limited research is available on the antecedents of different dimensions of board demographic diversity in family firms. The findings of the previous studies lack consensus on how different ownership structures affect the level of age, gender, and nationality diversity on a firm's board. Moreover, how family ownership influences the role of board age, gender, and nationality diversity in firm performance.</p>	<p>Essay 2 contributes to the corporate governance literature, particularly research on corporate boards. Essay 2 highlights the role of different ownership structures in defining the level of a firm board's demographic diversity. Further, Essay 2 contributes to the research of family business by extending the understanding of how family ownership plays its role in determining the level of board age, gender, and nationality diversity. Moreover, Essay 2 significantly explains the predictive power of SEW perspective. It extends the literature by demonstrating the</p>	<p>Essay 2 has important implications for family firm scholars and practitioners to learn the significance of diverse boards. Essay 2 also has implications for board selectors.</p>	<p>Future research can also focus on other demographic diversities such as tenure, race, religion, etc.</p>

Discussion and conclusion of the doctoral dissertation

		<p>role of underlying non-economic benefits embedded in family firms on the relationship between board diversity and firm performance.</p> <p>It makes an empirical contribution by analyzing under-investigated variables of demographic diversity, including age and nationality diversity, across a family and non-family firms dataset.</p>		
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Discussion and conclusion of the doctoral dissertation

Main Topics (Theory) [Essay/s]	Research Gap(s)	Theoretical Contribution(s)	Practical Implication(s)	Limitation(s)/Future Directions
<p>Board Demographic Diversity and Firm Risk Behavior in Family Firms (Socioemotional Wealth) [Essay 3]</p>	<p>A limited number of studies were conducted on board demographic diversity and a firm's risk-taking behavior. The findings of the previous studies remain inclusive in defining the impact of board demographic diversity on a firm's risk-taking behavior, especially in comparing family versus non-family firms. Therefore, it remains unclear how board age, gender, and nationality diversity impact a firm's risk-taking behavior and how family ownership affects the relationship between board demographic diversity (age, gender, and nationality) and the risk-taking behavior of the firm.</p>	<p>Essay 3 contributes to the literature in the field of corporate board and risk behaviors. It highlights the significance of board age, gender, and nationality diversity toward the risk-taking behavior of the firm. It also contributes to the SEW perspective by building on its dynamic view of changing preferences related to economic and non-economic benefits based on the circumstances. It contributes empirically by examining the variable of age and nationality diversity, which so far has not received much attention.</p>	<p>The findings of essay 3 have important implications for academics and practitioners to learn the significance of board attributes while selecting their board of directors.</p>	<p>Future research can also focus on other demographic diversities such as tenure, race, religion, etc. Moreover, researchers can use different measures of board diversity to access a better picture of the role of diverse boards.</p>

SUMMARY OF THE FINDINGS AND THEORETICAL CONTRIBUTIONS

In this dynamic era of research, it is imperative to understand the underlying factors affecting the functioning and processing of an organization. A competitive management field demands significant and up-to-date knowledge to understand the complex nature of family and non-family firms. In the last decades, literature has grown exponentially in family business research regarding corporate governance structure, firm heterogeneity, board diversity, and risk preferences (Kempers et al., 2019; Soleimanof et al., 2018; Tabor et al., 2018; Terjesen et al. 2009). There are a lot of aspects that need further clarity to disentangle deep-rooted and complex linkages. Therefore, this doctoral dissertation attempts to answer new research questions of (1) how

different ownership structures are guided by multiple co-existing conflicting or collaborating institutional logics underlying distinct goals influence the firm performance differently. (2) how family and non-family firms behave differently toward board demographic diversity and how age, gender, and culturally diverse board play their role in influencing the performance of family and non-family firms. (3) how board demographic diversity impacts the risk-taking behavior of the firm and how family ownership influences the relationship between board demographic diversity and the firm's risk-taking behavior.

Essay 1

This essay builds on a quantitative dataset of 528 German firms consisting of four subsets: foundation-owned family firms, foundation-owned non-family firms, non-foundation-owned family firms, and non-foundation-

owned family firms. Based on the conceptualization of institutional theory (Thornton et al., 2012), this essay contributes to a stream of literature focusing on co-existing multiple institutional logics such as family logic (Kotlar et al., 2014), business logic (Basco, 2017; Michael-Tsabari et al., 2014), and social logic (Aparicio et al., 2017; Reay et al., 2015). Essay 1 argues that foundation-owned firms perform better than non-foundation-owned firms, and in the presence of family ownership, the performance of foundation-owned firms decreases. The findings of essay 1 present that the performance of foundation-owned firms decreases with the involvement of family ownership as compared to non-foundation-owned firms.

The importance of foundation ownership has significantly increased over the last two decades when many large German firms shifted their ownership structure

toward the foundation-owned firm. Among these large firms, there were also some renowned German family firms. Previous studies mainly focused on investigating organizations holding one or two multiple co-existing logics (Kotlar et al., 2014; Schepers et al., 2014). However, only a few studies looked at the organizations guided by more than two multiple logics (Aparicio et al., 2017; Goodrick et al., 2011; Greenwood et al., 2011; Miller et al., 2017; Reay et al., 2009; Reay et al., 2015). Moreover, no such study was found that examines four different types of firms as studied in essay 1.

Essay 1 also contributes to the development of institutional theory, as most previous studies on foundation-owned firms were conceptualized on either agency theory or transaction cost economics (Hansmann, 1987; Thomsen, 1996, 1999; Thomsen & Rose, 2004). However, the perspective on underlying social logic was

missing. Thus essay 1 attempts to portray the complete picture of a foundation-owned firm's performance based on business and social logics. In addition to these two logics, the performance of foundation-owned family firms is also influenced by embedded family logic.

Essay 2

Essay 2 focuses on the role of board diversity in family firms. It builds on the dataset of 341 German family and non-family firms. By following the perspective of socioemotional wealth, essay 2 argues that the board of directors in family firms is less diverse concerning the gender, age, and cultural attributes of the directors. Moreover, it argues that a high level of age, gender, and nationality diversity on the board of directors has a more positive effect on the performance of family firms than non-family firms. However, the findings of essay 2 show

that family firms are less diverse than non-family firms regarding age, gender, and nationality diversity. However, results do not find any significant impact of family ownership on the relationship between board demographic diversity and firm performance.

Essay 2 contributes to the growing literature on board demographic diversity. Moreover, it advances the research in the field of the family business by integrating the research on board demographic diversity (Canyon & He, 2017; Talavera et al., 2018) and family firms (Kammerlander et al., 2020; Singal and Gerde, 2015) with the insights from socioemotional wealth perspective (Berrone et al., 2007).

Furthermore, essay 2 adopts a novel approach introduced by Harrison & Klein (2007) to theorize board demographic diversity in multiple aspects of separation, variety, and disparity. It gives a different perspective to

examining various dimensions of board demographic diversity. In addition, essay 2 examines rarely investigated dimensions of board diversity, including age and nationality. Meanwhile, essay 2 compares family and non-family firms regarding their openness toward introducing diversity on the firm board, which is quite salient to understanding the role of different types of firms in enhancing board diversity (Ben-Amar et al., 2013).

Essay 3

Essay 3 attempts to analyze the role of board age, gender, and nationality diversity in affecting the firm's risk-taking behavior. Moreover, it examines how differently board diversity influences the risk-taking behavior of family and non-family firms. To achieve the aim of this study, essay 3 builds on a data set of 146 German family and non-family public firms. Based on the

socioemotional perspective (Gomez-Mejia et al., 2007), essay 3 argues that board age, gender, and nationality diversity increase the firm's risk-taking behavior. Moreover, it argues that board demographic diversity increases risk-taking in family firms less than in non-family firms. The findings of the essay show that age and nationality diverse boards increase the risk-taking behavior of the firm. Moreover, it provides that family ownership weakens the relationship between board demographic diversity (age and gender) and the risk-taking propensity of the firm.

With its findings, essay 3 significantly contributes to the topic of board diversity (Arun *et al.*, 2015; Ben-Amar *et al.*, 2013; Conyon & He, 2017) and family business research (Kempers et al., 2019; Poletti-Hughes & Williams, 2019). In addition to gender diversity, essay 3 also considers age and nationality diversity, which

improves the research on board diversity. Moreover, comparing the risk preferences of family and non-family firms in the presence of a diverse board improves overall understanding of the role of family ownership in affecting the strategic decisions of the firm's board (Giannetti & Zhao, 2019).

In addition, by using the dynamic view of socioemotional perspective, essay 3 better explains the risk-taking behavior of family firms in the presence of age and gender-diverse boards. By doing this, the findings of essay 3 expand the application of socioemotional wealth theory.

SUMMARY OF PRACTICAL IMPLICATIONS

The findings of the three essays included in this doctoral dissertation have strong implications for scholars, practitioners, and policy makers. First, the findings of

essay 1 could be informative and through-provoking for both governance and family business scholars. Family business scholars have recently started investigating the role of goal complexity in different types of organizations (Williams et al., 2018). This dissertation provides performance evidence across different types of firms, in particular, holding both foundation and family ownership. Therefore, it provides a critical understanding of the outcomes resulting from the combination of conflicting and complementary goals.

Moreover, as corporate governance is essential and fundamental to the functioning and processing of the organization, particularly in family firms, due to the underlying complexity involved in their governance structure, family managers cannot just rely on the current status quo. Still, they should keep looking for up-to-date knowledge required to optimize their current conditions.

Our findings are essential for family members who own the foundation-owned family firm and managers who monitor the firm's activities. For efficient running of the business, they need to understand and have a consensus on the underlying goals of the firm and the foundation. To avoid conflicts and poor consequences resulting from the contradictory goals of involved coalitions or individuals, family firms should define their boundaries and design processes that protect the firm's legacy.

Second, the findings of essay 2 highlight the role of board diversity which is vital to the proper functioning of the board. From an academic view, essays 2 and 3 have important implications for the scholars interested in exploring under-investigated attributes of the board of directors. The board of directors plays a significant role in organizational strategic decision-making, which either flourishes or damages the organization. Therefore, the

findings of essays 2 and 3 have significant practical implications for the board selectors and family firms to understand the importance of board diversity. To optimize the firm performance, board selectors should focus on hiring board members optimal for their organization.

In sum, the findings of this doctoral dissertation show that it is significant for family firms to understand their distinctive characteristics and the advantages they have compared to non-family firms. Therefore, family firms should consider leveraging their firm performance with their idiosyncratic abilities.

SUMMARY OF LIMITATIONS AND FUTURE DIRECTIONS

This doctoral dissertation has some limitations that provide room for further discussions and evoke new arenas of research. At first, the main limitation of this doctoral

dissertation is related to its methodology and lack of generalizability, as it only investigates German firms. Therefore, other scholars should implement the research models studied in the three essays, the part of this dissertation, into other contexts. Regarding essay 1, it might be interesting to observe the behavior of foundation and non-foundation-owned firms operating in countries with different legalities. Moreover, one can further explore the goals of different types of firms and investigate how the goals of different coalitions and individuals interact in influencing the entire goal set of the organization. Moreover, the findings of essay 1 encourage other scholars to look at the outcomes of organizational goals affecting group behaviors such as leadership, strategic decision-making, risk-taking behaviors, and conflicts. In addition, relating to family firms, it might be thought-provoking to

examine the role of the foundation-ownership structure in affecting the socioemotional wealth of the family firms.

Secondly, essays 2 and 3 focus on age, gender, and nationality dimensions of board demographic diversity; however, multiple other types of diversities are likely to affect the firm's outcomes. Additionally, essays 2 and 3 encourage scholars to investigate the firm's outcomes after the time given by Germany and other European countries for implementing gender quotas on the firm's board ends.

Third, concerning essay 3, it has the potential to integrate research on risk preferences with insights from psychology and sociology literature. By doing this, new perspectives can explain existing phenomena on board demographic diversities and their risk preferences. Moreover, bringing different perspectives from various fields may enhance our understanding of the behavioral

differences between the board of directors in family and non-family firms.

CONCLUDING REMARKS

Family firms are the backbone of the economy and serve as an important actor in the development of society in different ways through various value creation activities. Among other factors, corporate governance structures are essential to the survival of family firms. This doctoral dissertation highlights the importance of ownership and a board of directors that are the core elements of corporate governance. The empirical findings of this doctoral dissertation provide evidence on the role of multiple co-existing conflicting and complementary goals in shaping organizational behavior, particularly in family firms. Moreover, the findings highlight the importance of diverse

boards in directing firm performance and risk-taking behaviors that impact strategic decision-making.

To conclude, this dissertation attempts to enhance and improve our understanding of the governance structures of family firms and how family firms differ from other types of firms. This dissertation contributes to the research on corporate governance and family businesses by examining (1) how family firms with embedded purpose duality and goal complexity underlying their coalitions with different organizations behave differently than their counterparts, (2) how different attributes of board of directors, such as age, gender, and nationality, influence firm performance differently in family versus non-family firms, and lastly, (3) how age, gender, and nationality diverse boards affect the risk-taking behavior of the family firms differently from non-family firms. On the one hand, this dissertation explores and answers the questions mentioned above. On

the other hand, it opens up a new stream of discussion for scholars interested in family business research.

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