

6-4-2021

## The Impact of Family Member CEO Demographics on Entrepreneurial Orientation and Financial Performance in Family Firms

Jaly Vibeth Chea Menéndez  
*Florida International University, jchea005@fiu.edu*

Follow this and additional works at: <https://digitalcommons.fiu.edu/etd>



Part of the [Business Administration, Management, and Operations Commons](#)

---

### Recommended Citation

Chea Menéndez, Jaly Vibeth, "The Impact of Family Member CEO Demographics on Entrepreneurial Orientation and Financial Performance in Family Firms" (2021). *FIU Electronic Theses and Dissertations*. 4808.

<https://digitalcommons.fiu.edu/etd/4808>

This work is brought to you for free and open access by the University Graduate School at FIU Digital Commons. It has been accepted for inclusion in FIU Electronic Theses and Dissertations by an authorized administrator of FIU Digital Commons. For more information, please contact [dcc@fiu.edu](mailto:dcc@fiu.edu).

FLORIDA INTERNATIONAL UNIVERSITY

Miami, Florida

THE IMPACT OF FAMILY MEMBER CEO DEMOGRAPHICS ON  
ENTREPRENEURIAL ORIENTATION AND FINANCIAL PERFORMANCE IN  
FAMILY FIRMS

A dissertation submitted in partial fulfillment of the  
requirements for the degree of  
DOCTOR OF BUSINESS ADMINISTRATION

by

Jaly Vibeth Chea Menéndez

2021

To: Interim Dean William Hardin  
College of Business

This dissertation, written by Jaly Vibeth Chea Menéndez, and entitled The Impact of Family Member CEO Demographics on Entrepreneurial Orientation and Financial Performance in Family Firms, having been approved in respect to style and intellectual content, is referred to you for judgment.

We have read this dissertation and recommend that it be approved.

---

Wendy Guess

---

Arun Upadhyay

---

George Marakas, Co-Major Professor

---

Walfried Lassar, Co-Major Professor

Date of Defense: June 4, 2021

The dissertation of Jaly Vibeth Chea Menéndez is approved.

---

Interim Dean William Hardin  
College of Business

---

Andrés G. Gil  
Vice President for Research and Economic Development  
and Dean of the University Graduate School

Florida International University, 2021

© Copyright 2021 by Jaly Vibeth Chea Menéndez

All rights reserved.

## DEDICATION

“So, no matter what I say, what I believe, and what I do, I’m bankrupt without love.”

1 Corinthians 13:3-7 (b) MSG

This dissertation is dedicated to the perfect Love, the Lord my God, to the Father, Jehovah, to the Son, Jesus Christ, and the Counselor, Holy Spirit, all three in One.

## ACKNOWLEDGMENTS

Completing a dissertation may seem like a great accomplishment, but there are two main reasons behind this milestone, first, the favor of God, and second, the people surrounding me. Without both, I could not have made it. I am grateful for my family, friends, coworkers, advisors, professors, and all the people who have been a blessing in my life to become a better Jaly.

Thanks to my mom (Emy Menéndez de Chea) and dad (Javier Chea), who continually teach me how to travel the road of life with unsurmountable love and hard work, to my sister (Ingrid Chea) who inspires me with her love, discipline and effort.

I appreciate the support of my friends. This is without a doubt a unique journey and you have made it much easier, just getting in touch, asking me about how I was coping with my life, and being there has been a real treasure to my heart, thank you! Deeply grateful with my wolf pack for adopting me even when I was thousands of miles away!

I would also like to thank my team at UFM, your teamwork, dedication, and excellence in all you do, have given me the impetus to do my best, thanks for supporting me in so many ways. To Helmuth Chávez who since the beginning of this endeavor continually told me “This is going to get tougher”, you were right.

Finally, I would like to thank my fellow doctoral students, the FIU staff, professors, my committee and particularly to Dr. Walfried Lassar who served as my chair, you have made the difference in this journey, your excellence, advice and commitment, made this dissertation possible, thank you!

ABSTRACT OF THE DISSERTATION  
THE IMPACT OF FAMILY MEMBER CEO DEMOGRAPHICS ON  
ENTREPRENEURIAL ORIENTATION AND FINANCIAL PERFORMANCE IN  
FAMILY FIRMS

by

Jaly Vibeth Chea Menéndez

Florida International University, 2021

Miami, Florida

Professor Walfried Lassar, Co-Major Professor

Professor George Marakas, Co-Major Professor

Drawing on the upper echelons theory, this study investigates how entrepreneurial orientation is impacted by the family member CEO's demographic characteristics (age, gender, educational level, tenure, and generation) and how entrepreneurial orientation (innovativeness, proactiveness, and risk-taking) influences the family firm's financial performance. The model was empirically tested with survey data of 1314 family firms CEO respondents from 33 countries worldwide using data from the "Successful Transgenerational Entrepreneurship Practices Project" (STEP Project) applying Partial Least Squares analysis.

Moreover, it was considered the moderating effect of national culture (uncertainty avoidance and gender egalitarianism). The findings highlight no significant relation from any of the family member CEO's demographic characteristics, age, educational level, tenure, generation, and gender with innovativeness. Educational level, tenure, and gender of the family member CEO were significant in relationship with proactiveness.

Educational level and generation of the family member CEO were significant in relationship with risk-taking. The findings also indicate that innovativeness has no significant effect on financial performance, but proactiveness and risk-taking have a significant and positive relationship with financial performance.

Furthermore, gender egalitarianism moderates the relationship between proactiveness and financial performance so that when gender egalitarianism is high, the relationship between proactiveness and financial performance is stronger. In countries with high uncertainty avoidance levels, the relationship between risk-taking and financial performance is weaker. In family firms, the results suggest that what drives the family firm's financial performance are proactivity and risk-taking.

The results inform managers of family firms to consider the educational level of the CEO as a relevant demographic characteristic that has an effect on proactiveness and risk-taking. It also advises that innovativeness has no significant effect on financial performance so efforts should focus on proactiveness and risk-taking.

Keywords: family firms, entrepreneurial orientation, financial performance, national culture, upper echelons theory.



## TABLE OF CONTENTS

CHAPTER	PAGE
CHAPTER I. INTRODUCTION .....	1
Introduction .....	1
Significance of the study .....	4
Demographics of the CEO and entrepreneurial orientation .....	4
Entrepreneurial orientation and Financial Performance .....	5
Upper Echelons Theory .....	6
Subjectivist theory of entrepreneurship .....	6
Stewardship theory .....	7
Research Purpose and Objectives .....	7
Dissertation Organization .....	9
CHAPTER II. LITERATURE REVIEW .....	10
Review of Literature .....	10
Theoretical Frameworks .....	10
Upper Echelons Theory- Defined .....	10
Upper Echelons Theory- Research .....	11
Upper Echelons Theory- Application .....	12
Upper Echelons Theory- Justification for use .....	14
Stewardship Theory – Defined .....	15
Stewardship Theory – Research .....	15
Stewardship Theory – Justification for use .....	16
Demographics of the CEO .....	19
Entrepreneurial Orientation .....	23
Financial performance .....	27
Moderating Variables .....	28
National Culture .....	28
Control Variables .....	31
Market dynamics .....	31
CHAPTER III. HYPOTHESIS DEVELOPMENT .....	33
Proposed Research model .....	33
CHAPTER IV. RESEARCH METHODOLOGY .....	40
Sampling Frame, Sample, and Procedures .....	40
Instrument .....	42
Measures .....	43
Validity .....	47
CHAPTER V. ANALYSIS AND RESULTS .....	48
Means, Standard Deviations, Skewness, and Kurtosis .....	48

Data Demographics .....	50
Exploratory factor analysis .....	52
Model Estimation and fit indices.....	54
Measurement model .....	55
Structural Model .....	58
Results .....	61
Moderating effects .....	63
Moderation results .....	64
CHAPTER VI. CONCLUSIONS.....	65
Summary of results .....	65
Hypothesis .....	65
Theoretical and Practical Implications .....	67
Limitations and Future Research.....	72
REFERENCES .....	74
APPENDIX .....	86
VITA.....	99

## LIST OF TABLES

TABLE	PAGE
Table 1: Upper Echelons Theory.....	13
Table 2: List of hypotheses and relationships .....	39
Table 3: Demographics of the firms (n = 1314).....	42
Table 4: Means, Standard Deviation, Skewness, and Kurtosis .....	49
Table 5: Demographics of the CEO (n = 1314) .....	51
Table 6: Varimax-rotated matrix based on principal component factoring analysis.....	53
Table 7: Validity and Reliability .....	56
Table 8: Fornell-Larcker criterion .....	58
Table 9: Hypotheses and results including moderation effects .....	64

LIST OF FIGURES

FIGURE	PAGE
Figure 1: Research Model .....	33
Figure 2: Summarized Structural Model .....	60

## CHAPTER I. INTRODUCTION

### Introduction

In the context of a family firm, the firm's entrepreneurial orientation is determinant to financial performance (Bauweraerts, 2019; Rauch et al., 2009; Wiklund & Shepherd, 2005). This study represents an opportunity to address the CEO effect in terms of demographic characteristics on entrepreneurial orientation and how entrepreneurial orientation impacts financial performance, considering that CEOs have a meaningful impact on the firm decision-making process (Belot & Serve, 2018).

By 2003, in the United States, family firms generated 64% of GDP or \$5.9 trillion, 82 million jobs or 62% of domestic employment (Astrachan & Shanker, 2003), which means that family businesses contribute more to GDP than non-family firms. Family businesses represent a significant role in economic activity worldwide (Shu-hui Lin & Shing-yang Hu, 2007). They have a low survival rate independent of cultural context or economic environment (Lank et al., 1994). Family business impacts employment, job creation, gross domestic product, and wealth generation (Basco, 2015). In a family firm, the figure of the owner/CEO is critical because the success of the business depends on the CEO's decision-making process (Feltham et al., 2005).

As in any field, it is essential to establish a clear definition of what is a family firm, even though there is no consensus definition; Chua, Chrisman, and Sharma (1999) developed a table with 21 different definitions with three qualifying combinations of ownership and management, a) family-owned and family-managed; b) family-owned but not family-managed; and c) family managed but not family-owned (Chua et al., 1999).

One of the most common definitions used is “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” (Chua et al., 1999). Most researchers interpret the components of family involvement as ownership, management, governance, and succession (Chua et al., 1999).

The demographic characteristics of CEOs and board members such as age, educational level, board experience, professional experience, and gender, have been studied in the context of internationalization (Ramón-Llorens et al., 2017), corporate risk-taking (Farag & Mallin, 2018) R&D spending (Vincent L. Barker & George C. Mueller, 2002), cash holding behavior (Orens & Reheul, 2013) and dividend payouts (Briano-Turrent et al., 2020). The study of the CEO characteristics is relevant because in a firm the CEO exerts substantial influence on the firm performance (Shen, 2021). In this particular case, I will study the demographic characteristics of a family member CEO in terms of age, educational level, tenure, gender, and generation in the context of a family firm.

Firms committed to an entrepreneurial orientation manage their resources based on practices, methods, and decision-making processes in an entrepreneurial way (Lumpkin & Dess, 1996). Entrepreneurial orientation includes the following dimensions: Innovativeness, risk-taking, proactiveness, autonomy, and competitive aggressiveness (Lumpkin & Dess, 1996; Miller, 1983). Hernández-Linares and López-Fernandez (2018) mapped the entrepreneurial orientation field and determined that the relationship between

entrepreneurial orientation and performance has been extensively reviewed, but there is a gap to work in the context of family firms.

This study also includes the national culture's moderating effect of uncertainty avoidance between entrepreneurial orientation dimensions innovativeness and risk-taking, and financial performance. Entrepreneurial activities increases uncertainty because it requires action, commitment of resources, taking risks and investments in a future that is unknowable (McMullen & Shepherd, 2006; Rauch et al., 2013). And the moderating effect of gender egalitarianism between entrepreneurial orientation dimension proactiveness and financial performance. In cultures with low gender egalitarianism, social sanctions are impose to women who get involved in activities that do not fit the gender role (Batjargal et al., 2019), entrepreneurial efforts are traditionally viewed as a more masculine activity (Gupta et al., 2013)

This study's contribution consists of building knowledge on entrepreneurial orientation and financial performance in the context of a family firm where the family member CEO is the leading decision-maker. The entrepreneurial orientation construct is represented by its three dimensions, innovativeness, proactiveness and risk-taking which is novel in the existing literature, by dividing the entrepreneurial orientation construct I will contribute to the existing knowledge finding out how each dimension impacts the financial performance. Furthermore, another contribution is the moderating effect of national culture between entrepreneurial orientation and financial performance which has not been studied in the past. To address the topic, I propose the following research question: What is the effect of the family member CEO demographics on entrepreneurial

orientation, and how does entrepreneurial orientation impact financial performance in family firms?

### **Significance of the study**

#### Demographics of the CEO and entrepreneurial orientation

The demographics of the CEO are characteristics that influence the decision-making process; in general, these characteristics include age, gender, tenure, and educational level; particularly in family firms, it is relevant to know also the generation that the CEO represents.

It is important to understand and examine, in the context of family firms, the CEO demographic characteristics because family firms tend to depend on the figure of a single decision-maker (Feltham et al., 2005) and top executives have a decisive influence in the engagement and endorsement of entrepreneurial activities (Zahra et al., 2000).

This study represents the opportunity to explore these five demographic characteristics and their relationship with entrepreneurial orientation, according to the upper echelons theory, characteristics such as age, tenure and educational level are a proxy to the cognitive behavior (Carpenter et al., 2004). In the context of family firms is important to look at the generation of the CEO, and the other characteristic in the study is the gender of the CEO. Determining how these characteristics of the CEO impact or benefit entrepreneurial orientation in family firms can represent a step forward in the literature to detect what is the more effective profile for a CEO in a family firm, knowing



that continuity and long term orientation is critical for a family business (Zahra et al., 2004).

### Entrepreneurial orientation and Financial Performance

Entrepreneurial orientation involves innovativeness, proactiveness, and risk-taking (Miller, 1983), in order to generate a profitable business is essential to take decisions that involve entrepreneurial activities. In a family firm is important to assure good financial performance; in the long run, it is not only about the business, it is about the family and the legacy that will pass through generations (Naldi et al., 2007).

Taking into account the importance of the heritage that involves a family business, it may lead to consider taking more conservative decisions reducing the entrepreneurial orientation. Taking risks is a pillar of entrepreneurial orientation, therefore, embarking into new endeavors may take several years to succeed, and it can put significant pressure on the business's continuity (Zahra et al., 2000).

Exploring the link between entrepreneurial orientation using its three dimensions and the relationship with the financial performance of a family business represent an opportunity to determine how each dimension contributes to the financial performance and how promoting certain behaviors may lead to an increase in the performance of the family firm.

## Upper Echelons Theory

Upper echelons theory suggests that organizations are a reflection of their top management teams. This theoretical framework relies on the executives' demographic characteristics to indicate individual and group cognition and behaviors (Carpenter et al., 2004).

Miller (1983), in his seminal work on entrepreneurial orientation indicated that “for firms of the size included in this research [i.e., 6–500 employees], the key manager acts as the brain of the organization and is the key determinant of the strategic posture of the firm”, taking into consideration how the key managers impact the strategic posture of a firm, it is important to evaluate which demographic characteristics influence the entrepreneurial decisions.

Drawing on this theory, and as I have mentioned, in family firms, there is a tendency to have a single decision-maker (Feltham et al., 2005), I argue that family members CEOs demographic characteristics influence the entrepreneurial orientation of a family firm, and is relevant to explore which of these demographic characteristics have a significant effect.

## Subjectivist theory of entrepreneurship

The subjectivist theory of entrepreneurship indicates that the central figure of the entrepreneurial process is the entrepreneur, the individual who interacts in the marketplace and allocates resources to create new ventures (Byus, 2018). Subjectivist theory suggests that the entrepreneur's prior experience and knowledge influence the perceptions of opportunities, this perception is used to explain why, for example, in some

firms, the same technology or knowledge can lead to higher levels of entrepreneurial orientation but not in others (Covin & Lumpkin, 2011).

The positive influence of entrepreneurial orientation on performance has been confirmed, and this field has been reviewed extensively (Rauch et al., 2009; William J. Wales et al., 2013; William John Wales, 2016). Therefore, how the family member CEO perceptions based on prior knowledge or experience and how it can lead to higher levels of entrepreneurial orientation and this entrepreneurial orientation leads to the financial performance in a family firm is one of this study's contributions.

#### Stewardship theory

The stewardship theory indicates that many executives are intrinsically motivated and are not self-serving; on the contrary, they are pro-organizational. They have a collectivistic view and are aligned with the shareholders' objectives to wealth maximization (Davis et al., 1997).

Some stewardship determinants are: comprehensive strategic decision making, long-term orientation, or continuity of the business across generations; these determinants become antecedents for entrepreneurial orientation in family firms (Hernández-Linares & López-Fernández, 2018).

#### **Research Purpose and Objectives**

Family firms, by 2003, in the United States generated 64% of the Gross Domestic Product equivalent to US\$5.9 trillion, and 82 million jobs (Astrachan & Shanker, 2003), with this numbers in mind family firms successful financial performance is important due

to their contribution to employment, job creation, gross domestic product and wealth generation (Basco, 2015).

According to upper echelons theory, CEOs decisions are shaped by previous experiences, values, and personalities (Hambrick & Mason, 1984). In the context of family firms this is particularly important because family firms tend to rely on a single decision-maker (Feltham et al., 2005).

This study attempts to better understand how entrepreneurial orientation is impacted by the family member CEO's demographic characteristics and how entrepreneurial orientation influences the family firm's financial performance. The family member CEO's demographic characteristics considered are age, gender, educational level, tenure, and generation. The three dimensions of entrepreneurial orientation considered are innovativeness, proactiveness, and risk-taking.

The particular research objectives are the following

- Examine the relationship between demographic characteristics of the family member CEO (age, educational level, tenure, generation, and gender) toward innovativeness, proactiveness, and risk-taking, as the dimensions of entrepreneurial orientation.
- Examine the relationship between each of the dimensions of entrepreneurial orientation towards the family firms' financial performance.
- Examine how national culture dimension uncertainty avoidance moderates the relationship between innovativeness and financial performance.
- Examine how national culture dimension uncertainty avoidance moderates the relationship between risk-taking and financial performance.

- Examine how national culture dimension gender egalitarianism moderates the relationship between proactiveness and financial performance.

### **Dissertation Organization**

This dissertation is comprised of the following sections:

Chapter II – Literature Review

Chapter III - Hypotheses Development

Chapter IV - Research Methodology

Chapter V - Analysis and Results

Chapter VI – Conclusions

Chapter II reviews the literature from the theoretical perspective and constructs, demographic characteristics of the CEO, entrepreneurial orientation, financial performance, and national culture. Chapter III presents the research model and develops the hypotheses. Chapter IV deals with research methodology. It presents sampling, data collection methods, and the constructs. Chapter V includes the analysis and discusses results. Chapter VI summarizes my findings and discusses the implications, future research, and limitations of my study.

## **CHAPTER II. LITERATURE REVIEW**

### **Review of Literature**

The literature review presented focuses on the Upper Echelons Theory's theoretical framework, proposed research model, family business, demographics of the CEO family member, national culture, entrepreneurial orientation, and financial performance.

### **Theoretical Frameworks**

#### **Upper Echelons Theory- Defined**

The Upper Echelons Theory is founded on the premise that executives' experiences, values, and personalities are shaped by interpretations and decisions. To some extent, the executive's decision-making process impacts business performance (Hambrick & Mason, 1984). There are two postulates in this theory, "(1) executives act on the basis of their personalized interpretations of the strategic situations they face, and (2) these personalized construals are a function of the executives' experiences, values, and personalities" (Hambrick, 2007: 334). The theory is built on the assumption of bounded rationality (March & Simon, 1958). Executives continuously face uncertainty and complexity; consequently, they need to understand the situations and make decisions based on their previous experiences and knowledge. The theory also assumes that executives' demographic characteristics can be used as proxies of executives' cognitive frames, even though they are imprecise (Hambrick, 2007). It also indicates that scholars

can reliably use executives' functional backgrounds, firm tenures, educational credentials, and affiliations to estimate strategic decisions (Hambrick, 2007).

#### Upper Echelons Theory- Research

In 1984, Hambrick and Mason published the seminal paper "Upper Echelons: The Organization as a Reflection of Its Top Managers," which proposed a model of how the characteristics of the theory were reflected in the outcomes of the organization, also addressed the literature review and lastly provided the foundation for future research (Hambrick & Mason, 1984).

Finkelstein (1992) studied how power is related to the decision-making process in executive leadership. CEOs are part of the top management team; in some cases, CEOs can exercise a dominant power and shape the direction of the firm (Finkelstein, 1992). When CEOs exert power and unilaterally shape the organization's strategy, the CEO's values, previous experience, and personality influence the decision-making process (Hambrick & Finkelstein, 1987).

Carpenter, Geletkanycz, & Sanders (2004), 20 years later, indicated that more than 500 journal articles had referenced the Upper Echelons Theory showing a relevant impact and far-reaching scope. Two avenues have emerged from past research, one focused on the initial recommendation of Hambrick and Mason related to the top management team (Abdul Wahab et al., 2018; Certo et al., 2006; Díaz-Fernández et al., 2020; Tihanyi et al., 2000; Wei et al., 2020). The other one focused on the chief executive officer (CEO) (Bai et al., 2020; Belot & Serve, 2018; Farag & Mallin, 2018;

Ramón-Llorens et al., 2017; Vincent L. Barker & George C. Mueller, 2002; L. Wang et al., 2021). The focus that I will be using in this study is the latter.

Neely, Lovelace, Cowen, and Hiller (2020), more than 35 years later, recognized the theory as one of management's most influential perspectives. They analyzed the past decade of research, synthesized the familiar critics and established a common vocabulary to facilitate consistency in the discussion between scholars, and offered recommendations for researchers to move forward (Neely et al., 2020).

#### Upper Echelons Theory- Application

Hambrick and Mason (1984) determined that “organizational outcomes-strategic choices and performance levels- are partially predicted by managerial background characteristics” (Hambrick & Mason, 1984). Some studies have used the demographic characteristics of the CEO as proxies to investigate the Upper Echelons perspective (Carpenter et al., 2004). Upper Echelons Theory had been used in different domains, particularly for this study; the application refers to family member CEOs running the family business. The following table highlights a list of some studies which have utilized the Upper Echelons Theory. It includes a summary of the significant findings reported for each study.



**Table 1: Upper Echelons Theory**

Study	Domains Researched	Findings
Finkelstein & Hambrick, 1990	Managerial discretion	Top executive tenure was positively related to strategic persistence and conformity.
Hambrick, Cho & Chen, 1996	Firm's competitive moves	Educational level and tenure had a positive effect on airline performance and market share in heterogeneous teams.
Levesque & Minniti, 2006	Entrepreneurial behavior	Empirical evidence shows that younger executives are expected to start a new firm than older ones.
Henderson, Miller & Hambrick, 2006	Industry dynamism	In a stable industry, tenure allowed an improvement in the firm-level performance. In a dynamic industry, firm performance declined consistently across their tenures.
Orens & Reheul, 2013	Cash holdings in SMEs	Older CEOs and CEOs with no experience are more interested in holding cash and less interested in the opportunity cost of the cash, as a consequence firms accumulate more cash.
Luo, Kanuri & Andrews, 2013	Firm-employee and firm-customer relationships	CEO tenure has a positive effect on firm-employee relationship strength but an inverted U-shaped relationship with firm-customer relationship strength.
Wang, Holmes, Oh & Zhu, 2016	Meta-analytic research	Based on 308 studies, CEO characteristics are significantly related with firm strategic choices, which are significantly associated to the firm performance future.
Ramón-Llorens, García-Meca & Duréndez, 2017	Family Firms Internationalization	Family firm leaders seeking more significant internationalization levels should take into consideration the qualifications of their CEO. Gender does not predict propensity to export.
Farag & Mallin, 2018	Corporate Risk-Taking	Younger CEOs with shorter tenure and with postgraduate education are more inclined to take riskier decisions. Female CEOs compared with male CEOs are not risk-averse.

## Upper Echelons Theory- Justification for use

The Upper Echelons Theory, as mentioned before, has studied over the past 35 years how executives' experiences, values, and personalities shape the strategic actions and decision-making process, which in the end, impact the business performance (Hambrick & Mason, 1984). The theory is built on the assumption of bounded rationality (March & Simon, 1958), which refers to the limitations in using and interpreting information given the complexity and ambiguity when the decision process is taken (Hambrick & Mason, 1984). The theory also assumes that executives' demographic characteristics can be used as proxies of executives' cognitive frames (Hambrick, 2007).

The studies have revealed that CEO characteristics are significantly associated with firm strategic actions, such as acquisitions, divestiture, international and product diversification, capital investing, firm risk-taking, leverage, product innovation, to name some; and these strategic actions are also significantly related to the business performance (G. Wang et al., 2016). The Upper Echelons Theory's justification in this study seems to be in line with the previous usage. In the context of family firms, I want to apply the theory exploring five demographic characteristics (age, educational level, tenure, generation, and gender) of a family member CEO, its relationship with entrepreneurial orientation which represents a strategic posture (Covin & Lumpkin, 2011), and this entrepreneurial orientation effect, in its three dimensions (innovativeness, proactiveness, and risk-taking) on the financial performance of the family firm.

## Stewardship Theory – Defined

The Stewardship theory is founded on the premise that "managers are not motivated by individual goals, but rather are stewards whose motives are aligned with the objectives of their principals" (Davis et al., 1997: 21). The theory assumes that managers are willing to do a good job and want to take care of the organization's assets (Donaldson & Davis, 1991).

The stewardship theory originated in psychology and sociology and was developed for researchers to evaluate situations in which managers as stewards are motivated to perform in the organization's best interest (Davis et al., 1997; Donaldson & Davis, 1991). The steward behavior appreciates cooperation, collectivistic and pro-organizational behaviors, rather than individualistic and self-serving behaviors, the steward objectives are aligned with the organization (Davis et al., 1997).

Empowering governance structures and mechanisms in the organization are critical to the functionality of a steward. A steward can be trusted, so high autonomy and authority are expected to maximize the relationship between the shareholders and the steward (Davis et al., 1997).

## Stewardship Theory – Research

In 1991, Donaldson and Davis published "Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns," in which they contrasted different perspectives on governance and incentives of the CEO, the stewardship theory which was introduced in that paper, and the agency theory.

In 1997, Davis, Schoorman and Donaldson, published "Toward a stewardship theory of management" to reconcile the differences between agency theory and stewardship theory because of both depicted contrarian perspectives. The agency theory assumed an individualistic, opportunistic, and self-serving approach, and the stewardship theory proposed a collectivistic, pro-organizational, and trustworthy approach (Davis et al., 1997).

Miller and Le Breton-Miller (2006) published an article developing propositions related to stewardship theory in family firms. In their paper, they examined why some family firms outperform and others don't. Using agency and stewardship theory, they indicate that the attitudes of a steward are prevalent among family firms because their leaders are members of the family or emotionally connected to the family (Miller & Le Breton-Miller, 2006).

In 2019, Chrisman published "Stewardship Theory: Realism, Relevance and Family Firm Governance" Chrisman indicates that stewardship theory's assumptions should be updated to increase its relevance and realism. He discusses the particularities of a family firm, such as altruism in treating some family members or that family firms are less professionalized than non-family firms, so they impose fewer formal controls; finally, he gives some recommendations to improve the conceptualization of the theory (J. J. Chrisman, 2019).

#### Stewardship Theory – Justification for use

The stewardship theory assumes that CEOs are driven by a desire to contribute to their organizations, their objectives are mutually aligned. They are not looking to serve

themselves but the organization, they care about the organizational mission, and they are committed to making it succeed (Davis et al., 1997; Miller & Le Breton-Miller, 2006). The application of the theory has been focused on family firms because executives in family firms commit to the mission of the business, are looking for the longevity of the firm, feel motivated to act in the best interest of the family, and value the employees and stakeholders (Miller & Le Breton-Miller, 2006).

The context of this study is family firms, and particularly I am studying the demographic characteristics of family members CEOs. The CEO that according to the theory, is looking for a collectivistic and pro-organizational behavior looking for the long term orientation and the continuity of the business (Hernández-Linares & López-Fernández, 2018)

### **Family business – Context**

When talking about the family business and the continuity of the company, it is essential to talk about the theoretical perspective of the stewardship theory, which “is based on a steward whose behavior is ordered such that pro-organizational, collectivistic behaviors have higher utility than individualistic, self-serving behaviors” (Davis et al., 1997, p. 24). When family members become stewards of their firms, they are motivated to pursue the organizational goals and maximize the organization's performance (Davis et al., 1997). Some stewardship determinants are: comprehensive strategic decision making, long-term orientation, or continuity of the business across generations; these determinants become antecedents for entrepreneurial orientation in family firms (Hernández-Linares & López-Fernández, 2018).

To study family firms, it is critical to define what is a family business; even though there is no agreed definition in the field, several authors have reviewed the definitions and tried to consolidate and conceptualize one (Chua et al., 1999; Handler, 1989; Litz, 1995). Most of the definitions contemplate two main areas, the vision and control mechanisms used in the firm and the creation of unique resources and capabilities (J. Chrisman et al., 2003; Habbershon et al., 2003; Sharma, 2004).

The possible combinations of thoughts to define a family business are a) family-owned and family-managed, b) family-owned but not family managed, and c) family managed but not family-owned (Chua et al., 1999). Considering those possible combinations, the definition I will use is “ 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” (Chua et al., 1999).

Family businesses are necessary because of their contribution to economic growth. Memili, Fang, Chrisman and De Massis (2015) showed in an empirical study that a balanced mix of family firms and non-family is better for economic growth. A couple of decades ago, 60% of U.S. revenue was generated by family businesses and provided jobs for over half of the nonagricultural labor force (Heck & Stafford, 2001). By 2003, in the United States, family firms generated 64% of GDP or \$5.9 trillion, and 82 million jobs or 62% of domestic employment (Astrachan & Shanker, 2003).

Family businesses are different in terms of ownership, governance, returns, rewards, networks, leadership, careers, and management compared to nonfamily

companies (A. Stewart & Hitt, 2012). In terms of ownership, a family firm is more concentrated compare to more dispersed ownership in a non-family business. The ownership and control are united compared to split ownership and control in a non-family business. The returns in a nonfamily business are economically defined compared to noneconomic outcomes; the latter are important for a family business. Rewards are merit-based, and there is a universalistic criterion to evaluate employees in non-family firms, compared to nepotism and particularistic standards in a family business (A. Stewart & Hitt, 2012).

Different authors have studied how a family business has developed a competitive advantage, and it is because there are some particular characteristics that family businesses nurture (Feltham et al., 2005). These unique characteristics include the commitment of the family to the success of the company (Dyer & Handler, 1994), the involvement in the community playing an active role, the interaction with the customer to develop loyalty, and the culture of shared values (Montgomery & Sinclair, 2000).

There are empirical studies that revealed the importance of management in the family business's success and how it overlaps between the family and the company (Olson et al., 2003). Given that management is vital in family firms, it is crucial to define the factors or attributes to take into consideration for a succession (J. J. Chrisman et al., 1998).

### **Demographics of the CEO**

Referring to the CEO demographic characteristics is essential to talk about the upper echelons theory's theoretical perspective, which states, “organizational outcomes-

strategic choices and performance levels- are partially predicted by managerial background characteristics” (Hambrick & Mason, 1984). In an update, Hambrick (2007) states that executives' experiences, values, and personalities influence their interpretations and, therefore, their decisions (Hambrick, 2007).

Orens and Rehuel (2013) affirm that the demographic characteristics of the CEO, such as gender, age, educational level, tenure, and experience, are a proxy of the social, cognitive, and psychological characteristics of the CEOs, which influence the CEOs decisions (Orens & Reheul, 2013).

It is important to understand the figure of the CEO in a family firm, Feltham, Feltham, and Barnett in 2005 wrote a paper about the dependence of family businesses on a single decision-maker, who is the owner-manager. They found that 75% of the CEOs believed the organization was dependent or very dependent on them, and 65% responded that they made all the major decisions across the five functional areas of the firm (Feltham et al., 2005).

Particularly in the literature about succession in family firms, several studies are focusing on the characteristics or attributes that are relevant when choosing a CEO (J. J. Chrisman et al., 1998; Madison et al., 2018; Shu-hui Lin & Shing-yang Hu, 2007). The desirable attributes related to demographic characteristics are the age of successor, educational level, and the experience inside and outside the family business (J. J. Chrisman et al., 1998; Ramón-Llorens et al., 2017).

The demographic characteristics of the CEO have been studied in relation to innovation (Kitchell, 1997), R&D firm spending (Vincent L. Barker & George C.



Mueller, 2002), cash holding behaviors (Orens & Reheul, 2013), internationalization (Ramón-Llorens et al., 2017) and corporate risk-taking (Farag & Mallin, 2018).

The CEO age, according to the upper echelons theory, Orens and Reheul (2013) found that older CEOs have shorter time perspectives, which means they are not interested in the long term, and also younger CEOs are less conservative and risk-averse than older CEOs. Older CEOs adopt a traditional management posture, and they are less determinant when they face aggressive investment strategies (Marianne Bertrand & Antoinette Schoar, 2003). Levesque and Minniti (2006) claim that CEOs will decline their entrepreneurial endeavor as they get older in terms of entrepreneurial behavior. Therefore, the age of the principal decision-maker in an organization is essential for entrepreneurial orientation (Lévesque & Minniti, 2006).

The CEO educational level reflects the knowledge and skills in which the CEO has been trained. Hambrick and Mason (1984) indicate that education decisions could serve as a metric of personal values and cognitive preferences. They also reflect on the findings that educational level positively relates to innovation, and educational level also suggest the involvement in certain socioeconomic groups (Hambrick & Mason, 1984). The educational level is also associated with developing problem-solving skills and creative solutions (Goll et al., 2007; Wincent et al., 2009). Directors with a higher educational level are more likely to use external information, create networks, hire external consultants, and monitor the organizational accounting systems (Barroso et al., 2011). The highly educated CEOs are more likely to manage and lead more innovative organizations (Vincent L. Barker & George C. Mueller, 2002).

CEO tenure refers to the number of years the CEO has remained in that role. Zahra (2005) studied the positive and negative relationship between the CEO tenure and risk-taking to find out, according to his results, that long tenure is negatively associated with entrepreneurial risk-taking (Zahra, 2005). Chen and Zheng (2014) studied tenure and risk-taking, and they argue that the impact between tenure and risk-taking is ambiguous. They also mentioned that most of the literature indicates that longer tenure is associated with higher risk aversion (Chen & Zheng, 2014; Hambrick & Fukutomi, 1991). When CEOs have remained in the same position for years, they might be worried about stability and efficiency and less likely willing to take more risky and strategic decisions (Thomas et al., 1991). On the other side, longer tenure increases their contacts and networks, which results in awareness of recent developments in the market (Orens & Reheul, 2013).

CEO generation refers to the number of generations of the family to which the CEO represents. The presence and active participation of multiple generations in the family firm may cultivate entrepreneurship (Salvato, 2004). New generations of family firms often stimulate and influence entrepreneurship and are more open to change (Zahra, 2018). Usually, the founder of the family firm established the business through innovative ideas, but they may lose the entrepreneurial behavior (Salvato, 2004). When multiple generations participate in the company, they nurture entrepreneurial behavior because, in contrast with the founder, newer generations are interested in increasing the business and ensuring the company (Kellermanns et al., 2008).

CEO gender refers to the gender of the CEO. The 2010 American Family Business Survey results report that 24% of family firms have a female CEO or president,

and only 31% of family firms expect to have a female successor (Ahrens et al., 2015). In the literature related to internationalization, female-owned businesses are less likely to export than men (Ramón-Llorens et al., 2017). Another study mentions that women are less likely to start a new venture and are less entrepreneurial than males (Bird & Brush, 2002). Farag and Mallin (2018) indicate that female directors are more risk-averse. Weber and Zulehner (2010) suggest that it is hard to find evidence that women make better managers due to the “glass ceiling” that prevents women from advancing to higher positions (Weber & Zulehner, 2010).

Faccio, Marchica, and Mura (2016) explain that female CEOs are more risk-averse than male CEOs; this has been recognized widely. Still, they refer to the fact that women are less confident than men on average (Huang & Kisgen, 2013). They also conclude that males allocate capital more efficiently than female CEOs; financial and investment decisions are less risky when companies are managed by a female CEO (Faccio et al., 2016).

Chadwick and Dawson (2018) found that non-family firms led by females are positively related to the organization's financial performance. Still, in family firms, the relationship is negative; their explanation is related to a higher focus on emotional attachment, preserving the legacy and socioemotional wealth than economic goals when the organization is managed by females (Chadwick & Dawson, 2018).

### **Entrepreneurial Orientation**

The theoretical framework that is important in this study is the subjectivist theory of entrepreneurship, which affirms that entrepreneurs' prior experience and knowledge

can influence the perceptions of opportunity and resource usage (Covin & Lumpkin, 2011; William John Wales, 2016). The subjectivist theory might be useful to illustrate why the availability of specific innovation-facilitating resources such as technological knowledge, organizational slack, skilled labor, among others, explains high levels of entrepreneurial orientation in some firms than others (Covin & Lumpkin, 2011).

The starting point for entrepreneurial orientation began with Miller (1983) when he suggested a definition of an entrepreneurial firm, “engages in product market innovation, undertakes, somewhat risky ventures, and is first to come up with proactive innovations, beating competitors to the punch.” This definition brought into the scene of entrepreneurship three main aspects: Innovativeness, Risk-Taking, and Proactiveness (Miller, 1983).

More than ten years later, Lumpkin and Dess (1996 p. 137) indicated the key dimensions that should be included in the entrepreneurial orientation are “a propensity to act autonomously, a willingness to innovate and take risks, and a tendency to be aggressive toward competitors and proactive relative to marketplace opportunities” and they also defined the concept of entrepreneurial management as “it reflects the organizational processes, methods and styles that firms use to act entrepreneurially” (Lumpkin & Dess, 1996). According to Lumpkin and Dess (1996), there are five dimensions of entrepreneurial orientation: autonomy, innovativeness, risk-taking proactiveness, and competitive aggressiveness.

The three dimensions developed by Miller (1983) are defined as 1. Innovativeness is “the exhibition of experimentation, exploration, and creative acts”; 2. Risk-taking is “the willingness to commit resource to projects, ideas, or processes whose outcomes are

uncertain and for which the cost of failure would be high”; 3. Proactiveness is “engaging in forward-looking actions targeted at the exploitation of opportunity in anticipation of future circumstances, as would be typical of firms that lead and/or pre-empt the actions of others” (Covin & Wales, 2012 p. 694). Lumpkin and Dess (1996) extended to five the number of dimensions, adding 4. Competitive aggressiveness is “the intensity of a firm’s efforts to outperform industry rivals, characterized by a combative posture and a forceful response to competitor’s actions” and 5. Autonomy is “independent action by an individual or team aimed at bringing forth a business concept or vision and carrying it through to completion” (Lumpkin & Dess, 2001 p. 431).

Wales, Gupta, and Mousa (2013) indicate that 80 percent of the empirical articles published adopted the Miller (1983) approach adopting entrepreneurial orientation using the three standard dimensions, Innovativeness, risk-taking, and proactiveness (William J. Wales et al., 2013). The next common approach with 7 percent of articles is consistent with Miller and Friesen (1982) using only Innovativeness and Risk tanking. And 3 percent used the five dimensions of EO proposed by Lumpkin and Dess (1996). And around 9 percent of papers used some combination of the five theoretical dimensions (William J. Wales et al., 2013).

Wales, Gupta, and Mouse (2013) also indicate that there is substantial convergence in the literature on Miller (1983) referring to the entrepreneurial orientation conceptualization, which means it is relevant to use innovativeness, risk-taking, and proactiveness (William J. Wales et al., 2013).

Usually, entrepreneurship is related to new venture creations. Still, the entrepreneurial behavior is also present in existing firms because it refers to taking

opportunities in a competitive environment, contributing to progress, expansion, and value creation (Kellermanns et al., 2008). On the other hand, what is an orientation? Covin and Lumpkin (2011, p. 857) defined entrepreneurial orientation, “general or lasting direction of thought, inclination or interest pertaining to entrepreneurship” (Covin & Lumpkin, 2011). Voss, Voss, and Moorman (2005, p 1134) defined EO as “a firm-level disposition to engage in behaviors (reflecting risk-taking, innovativeness, proactiveness, autonomy, and competitive aggressiveness) that lead to change in the organization or marketplace” (Giraud Voss et al., 2005).

Entrepreneurial orientation at a firm-level represents a strategic posture to the sustainability of the business, the life-cycles of firms and products are shortening, industries evolve continuously, what seems to be a competitive advantage is not sustainable (Covin & Lumpkin, 2011), and it is crucial to understand why and how there are firms who can renew and grow and others not (Morris et al., 2010).

Until the 2000s, entrepreneurial orientation was not studied in relation to family firms (Zahra et al., 2004). From there, it has become a construct that has attracted academic attention and has shown that entrepreneurial behavior is a typical trait of family firms (Zahra, 2005, 2018; Zahra et al., 2004). The positive influence of entrepreneurial orientation on organizational performance has been confirmed, and this field has been reviewed extensively (Rauch et al., 2009; William J. Wales et al., 2013; William John Wales, 2016). Hernandez-Linares and López Fernández (2018) pointed out that even though entrepreneurial orientation and performance has been extensively studied, none of those studies have focused on using Entrepreneurial orientation as a mediator between

CEO family member demographic characteristics and financial performance in family businesses (Hernández-Linares & López-Fernández, 2018).

### **Financial performance**

The efforts on entrepreneurial activities may lead to positive results for an organization depending on the measures on which performance is measured. It is recommended to use multiple financial performance measures such as sales growth, market share, and profitability (Lumpkin & Dess, 1996). Zahra and colleagues (2000) argue how acquiring new skills, launching new ventures, develop new revenue streams could improve growth, performance, and profitability in organizations (Kellermanns et al., 2008). Rauch and colleagues (2009) highlight that firms benefit from newness, responsiveness, and boldness. When they need to respond quickly to a constantly changing market and seek new opportunities, it could result in a strong performance (Rauch et al., 2009).

It is accepted that entrepreneurial orientation positively influences financial performance (Rauch et al., 2009; Wiklund & Shepherd, 2005). But it is also essential to review that literature shows that performance and entrepreneurial orientation relationship depends on the firm context (Wiklund & Shepherd, 2005). Rauch (2009) mentions that, for example, in small companies is less favorable than in large organizations. Other authors indicate that entrepreneurial orientation and performance relationship depends on state ownership (Tang et al., 2017). Wang and colleagues (2017) report that new ventures find more adversities in earning financial benefits from their entrepreneurial activities (T. Wang et al., 2017).

In the context of family firms, there is a low amount of research relating entrepreneurial orientation and performance (Bauweraerts, 2019), family firms represent an ideal context to study the relationship because of the characteristics in terms of resources, capabilities, ownership, management, and corporate governance structures (Jose C. Casillas et al., 2010; José C. Casillas & Moreno, 2010).

Usually, a family firm is managed by a family member or several family members with particular goals, skills, and orientations; there is excessive power held by the family management (Bauweraerts, 2019). In this context, the management team's ability to create profit might be confronted with the entrepreneurial activities to respond to the market conditions (Naldi et al., 2013).

Performance is a multidimensional concept, and the link between entrepreneurial orientation and financial performance depends on the indicators used to assess performance (Lumpkin & Dess, 1996). To report financial performance, researchers can rely on self-report data (Rauch et al., 2009).

## **Moderating Variables**

### **National Culture**

There are two main frameworks in terms of national culture; the first one who developed a framework related to national culture was Hofstede, who defines culture as “the collective programming of the mind that distinguishes the member of one category of people from those of another” (Hofstede, 1984, p. 389). Hofstede (1980) developed a definition for the national culture, which considers a collective values system that differentiates one from the other group members in one setting. Contemplating four



dimensions 1) Power Distance, 2) Uncertainty avoidance, 3) Individualism-Collectivism, and 4) Masculinity-femininity (Hofstede, 1980). Some years later, the same author added another dimension, 5) Long term orientation (Hofstede, 1991).

In 2004, another framework was published, the Global Leadership and Organizational Behavior research (GLOBE), GLOBE considers nine dimensions to measure national culture 1) Performance Orientation, 2) Assertiveness, 3) Future orientation, 4) Humane orientation, 5) Institutional collectivism, 6) In-group collectivism, 7) Gender egalitarianism, 8) Power Distance, and 9) Uncertainty avoidance (House, 2004). Some of the GLOBE dimensions overlap with Hofstede cultural dimensions.

Researchers have argued that cultural values influence how societies consider entrepreneurial orientation (Hayton et al., 2002). Engelen (2010) suggests that some cultures will be more aligned with entrepreneurial orientation than others (Engelen, 2010). The GLOBE research represents the most recent attempt to conceptualize and measure national culture (Parboteeah et al., 2008). In this study, the focus will be on uncertainty avoidance and gender egalitarianism, using the GLOBE approach.

The GLOBE defines uncertainty avoidance as “The extent to which a society, organization, or group relies (and should rely) on social norms, rules, and procedures to alleviate unpredictability of future events. The greater the desire to avoid uncertainty, the more people seek orderliness, consistency, structure, formal procedures, and laws to cover situations in their daily lives” (House, 2004). Low levels of uncertainty avoidance positively impact entrepreneurship (T. V. Nguyen et al., 2009).

Venaik and Brewer (2010) reviewed the uncertainty avoidance construct in the international business and management literature and found that between 2004 when

GLOBE data became available, and 2009, 21 studies were published. Only four studies used GLOBE data (Venaik & Brewer, 2010), which means there is an opportunity to use the GLOBE approach, to expand the literature, in terms of uncertainty avoidance national culture dimension, and apply it to a model moderating the relationship between entrepreneurial orientation and financial performance.

Uncertainty avoidance refers to the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity (Nam, 2018). Firms with strong entrepreneurial orientation face two types of uncertainty, 1) associated with the pursuit of innovation and 2) relational uncertainty related to strategic alliances and the goals associated (Marino et al., 2002).

The GLOBE defines gender egalitarianism as “The degree to which a collective minimizes (and should minimize) gender inequality” (House, 2004). In societies with high levels of gender egalitarianism less gender segregation exists, women are often employed in authority positions and educational opportunities are the same for male and females (Canestrino et al., 2020).

Gender egalitarianism indicates the extent to which an organization or society reduces gender diversities and discrimination (House, 2004). In countries with high levels of gender equality there are higher levels of females leading new ventures (Baughn et al., 2006). In contrast, in countries where female entrepreneurship is seen with lower legitimacy than male entrepreneurship, female new ventures seem reduced as a consequence of women’s self-perceptions (Achtenhagen & Welter, 2003).

Gender egalitarianism significantly influences entrepreneurial activity (Canestrino et al., 2020; Griffiths et al., 2013).

## **Control Variables**

### **Market dynamics**

The theoretical framework to understand market dynamics refers to dynamic capabilities, which indicate that a firm's processes use resources to match and create change (Eisenhardt & Martin, 2000). Dynamic capabilities consist of processes like product development, alliancing, and strategic decision making to create value in high changing markets (Eisenhardt & Martin, 2000).

The market dynamism can be defined as the degree of change in the market (Seo & Chae, 2016). Some fundamental elements of market dynamism are the changes in market structure, market demand instability, and intense fluctuation in supply materials (Justin J. P. Jansen et al., 2006; Sirmon et al., 2007).

In a highly dynamic market, organizations suffer due to uncertainty; it is more difficult to predict the future, to plan and organize resources and respond to the situation with the existing knowledge and processes in place (Justin J. P. Jansen et al., 2006; Seo & Chae, 2016). Organizations need to respond with innovation to meet customers' needs in a highly dynamic market environment (Oliver Schilke, 2014). Firms need to create a knowledge base on specific situations; existing knowledge can be a disadvantage (Eisenhardt & Martin, 2000).

In a low dynamic market, the participants are well known, market boundaries are clear, modifications to products rarely happen, demand is stable, the behavior in this type of market is predictable (Eisenhardt & Martin, 2000; Oliver Schilke, 2014).

Higher levels of market dynamics are related to developing new processes more frequently, which can benefit the organizations due to market dynamics (H. Nguyen & Harrison, 2019).

## CHAPTER III. HYPOTHESIS DEVELOPMENT

In this chapter I present the proposed research model, see figure 1, and the development of hypothesis.

### Proposed Research model

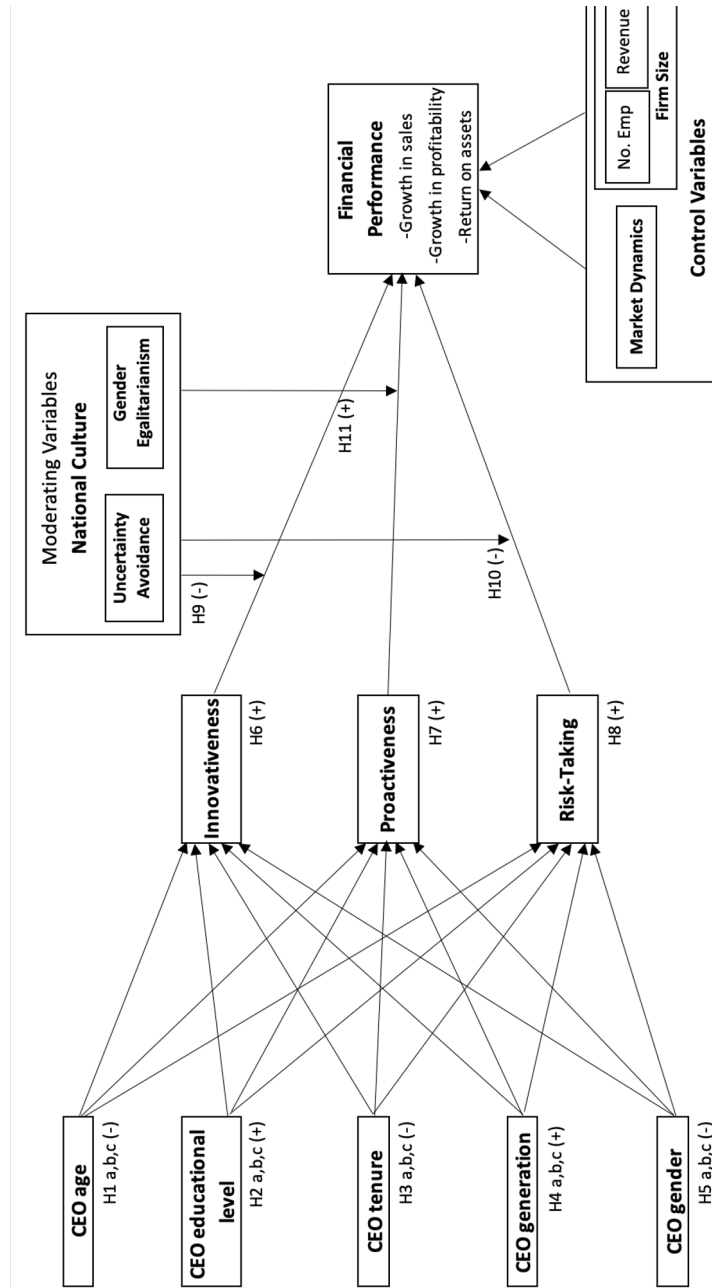


Figure 1: Research Model

### **Relationship between CEO age and entrepreneurial orientation**

Based on the literature review, younger entrepreneurs respond faster and are more sensitive to new information than older entrepreneurs (Parker, 2006). Age has been studied and found negatively correlated to risk-taking and innovativeness (W. H. Stewart et al., 1999). Hambrick and Mason (1984) indicate that older executives tend to be more conservative and may have more challenges learning and grasping new ideas (Vincent L. Barker & George C. Mueller, 2002). Therefore, older family member CEOs are less likely to influence entrepreneurial orientation compared with younger family member CEOs who are more entrepreneurial; hence, I hypothesize the following:

Hypothesis 1a: The age of the family member CEO will be negatively related to innovativeness.

Hypothesis 1b: The age of the family member CEO will be negatively related to proactiveness

Hypothesis 1c: The age of the family member CEO will be negatively related to risk-taking

### **Relationship between CEO formal educational level and entrepreneurial orientation**

Based on the discussion above, the family member CEO educational level indicates a skill base, and it serves as a measure of cognitive preferences (Hambrick & Mason, 1984), it contributes to evaluating different paradigms and perspectives, which leads to being less risk-averse, more open-minded to innovation, and are better informed about external opportunities (Anderson et al., 2011; Beber & Fabbri, 2012; Thomas et al.,

1991; Vincent L. Barker & George C. Mueller, 2002). Therefore, the higher the educational level of the family firm CEO, the higher the entrepreneurial orientation compare with a lower educational level of the family member CEO; hence, I hypothesize:

Hypothesis 2a: The formal educational level of the family member CEO will be positively related to innovativeness.

Hypothesis 2b: The formal educational level of the family member CEO will be positively related to proactiveness.

Hypothesis 2c: The formal educational level of the family member CEO will be positively related to risk-taking.

### **Relationship between CEO tenure and entrepreneurial orientation**

Based on the literature review, the family member CEO tenure in the early stages adopts a riskier posture more innovative and entrepreneurial. As tenure increases, at some point, the entrepreneurial orientation starts to decrease, they stop being bold, fearless, and adventurous, they rely more on their knowledge and experience instead of pursuing aggressive change (Feltham et al., 2005; Hambrick & Fukutomi, 1991; Kellermanns et al., 2008; Lévesque & Minniti, 2006; Zahra, 2005). Therefore, the longer the family member CEO tenure is less likely to influence entrepreneurial orientation compare to the early stages of the family member CEO tenure, taken that consideration, I hypothesize:

Hypothesis 3a: The tenure of the family member CEO will be negatively related to innovativeness.

Hypothesis 3b: The tenure of the family member CEO will be negatively related to proactiveness.

Hypothesis 3c: The tenure of the family member CEO will be negatively related to risk-taking.

### **Relationship between CEO generation and entrepreneurial orientation**

I argue that the generation of the family member CEO generation will be positively related to entrepreneurial orientation. Building on the literature review, there are studies which manifest that the more generations involved in the family firm, the more innovative they become because of the freshness new generations bring to the organization and they are willing to foster entrepreneurship (Salvato, 2004) , more generations engaged in the business will nurture a rejuvenating environment, and they will be continually reinventing themselves (Hoy, 2006; Kellermanns et al., 2008; Zahra, 2005). The newer the generation of the family member CEO, the more entrepreneurial orientation will be promoted. Therefore:

Hypothesis 4a: The generation of the family member CEO will be positively related to innovativeness.

Hypothesis 4b: The generation of the family member CEO will be positively related to proactiveness.

Hypothesis 4c: The generation of the family member CEO will be positively related to risk-taking.

### **Relationship between CEO gender and entrepreneurial orientation**

Based on the literature review, there is a social expectation for females and males. Males are expected to assume leadership roles, and females are



encouraged to relational intimacy (G. Wang et al., 2018). Females may analyze their careers considering more factors, putting a particular value in relationships and not so much on taking risks or firm performance (G. Wang et al., 2018).

Females are less likely to start a new venture and are less entrepreneurial than males (Bird & Brush, 2002). Females are also more conservative and risk-averse (Farag & Mallin, 2018). Therefore:

Hypothesis 5a: Female family member CEOs are less innovative than male family member CEOs.

Hypothesis 5b: Female family member CEOs are less proactive than male family member CEOs.

Hypothesis 5c: Female family member CEOs are less risk-taking than male family member CEOs.

### **Relationship between entrepreneurial orientation and financial performance**

Based on the literature review, entrepreneurial activities, such as acquiring new skills, launching new ventures, develop new revenue streams can improve financial performance measures as sales growth, market share, and profitability (Kellermanns et al., 2008; Lumpkin & Dess, 1996; Rauch et al., 2009; Zahra et al., 2000) But also it is vital to notice that it depends on the context, in this study the context is family firms (Wiklund & Shepherd, 2005). Hence, I hypothesize:

Hypothesis 6: Innovativeness will be positively related to the financial performance.

Hypothesis 7: Proactiveness will be positively related to the financial performance.

Hypothesis 8: Risk-taking will be positively related to the financial performance.

### **Moderating effect of Uncertainty avoidance between innovativeness and risk-taking, and financial performance**

Based on the discussion above, uncertainty avoidance refers to the extent a society feels threatened by uncertain conditions. If uncertainty avoidance is high, cultures focus on stability, security, and are less entrepreneurial (Canestrino et al., 2020; House, 2004; T. V. Nguyen et al., 2009), which affects the financial performance. Hence, I hypothesize:

Hypothesis 9: The relationship between innovativeness and financial performance is weaker in countries with high levels of uncertainty avoidance than countries with low levels of uncertainty avoidance.

Hypothesis 10: The relationship between risk-taking and financial performance is weaker in countries with high levels of uncertainty avoidance than countries with low levels of uncertainty avoidance.

### **Moderating effect of gender egalitarianism between proactiveness and financial performance**

Based on the literature review, gender egalitarianism refers to the extent a society reduces gender diversities and discrimination (Canestrino et al., 2020; House, 2004) . If gender egalitarianism is high, there are equal opportunities for males and females entrepreneurial activities (Baughn et al., 2006; Canestrino et al., 2020; Griffiths et al., 2013), which affects the financial performance. Hence, I hypothesize:

Hypothesis 11: The relationship between proactiveness and financial performance is

stronger in countries with high levels of gender egalitarianism than countries with low levels of gender egalitarianism.

**Table 2: List of hypotheses and relationships**

<b>Hypotheses</b>	<b>IV</b>	<b>DV</b>	<b>Moderation</b>	<b>Relation</b>
H1a	Age	Innovativeness		Negative
H1b	Age	Proactiveness		Negative
H1c	Age	Risk-taking		Negative
H2a	Educational level	Innovativeness		Positive
H2b	Educational level	Proactiveness		Positive
H2c	Educational level	Risk-taking		Positive
H3a	Tenure	Innovativeness		Negative
H3b	Tenure	Proactiveness		Negative
H3c	Tenure	Risk-taking		Negative
H4a	Generation	Innovativeness		Positive
H4b	Generation	Proactiveness		Positive
H4c	Generation	Risk-taking		Positive
H5a	Gender	Innovativeness		Negative
H5b	Gender	Proactiveness		Negative
H5c	Gender	Risk-taking		Negative
H6	Innovativeness	Financial Performance		Positive
H7	Proactiveness	Financial Performance		Positive
H8	Risk-taking	Financial Performance		Positive
H9	Innovativeness	Financial Performance	Uncertainty Avoidance	Deteriorating effect
H10	Risk-taking	Financial Performance	Uncertainty Avoidance	Deteriorating effect
H11	Proactiveness	Financial Performance	Gender egalitarianism	Amplifying effect

## CHAPTER IV. RESEARCH METHODOLOGY

### Sampling Frame, Sample, and Procedures

This study focuses on a quantitative research design to investigate the influence of the family member CEO's demographic characteristics on entrepreneurial orientation and financial performance in a family firm's specific context. I used data from the “Successful Transgenerational Entrepreneurship Practices Project” (STEP Project). The STEP project is a research network committed to collaboratively research transgenerational entrepreneurship to produce highly relevant and applied research.

The STEP project included 48 affiliate institutions at the time of the data were collected from 33 countries across five world regions (Europe & Central Asia, North America, Latin America & the Caribbean, Asia & the Pacific, and the Middle East & Africa). The survey was launched on October 25th, 2018, and completed on March 31st, 2019.

The questionnaire was designed by an experienced research team with more than ten years of experience researching transgenerational family firms from the STEP project. The STEP questionnaire was based on prior validated scales. It was pre-tested by the STEP survey committee, conformed by six members who are experienced academics affiliates to the STEP project.

The survey was originally in English and then translated into seventeen other languages: Dutch, French, German, Italian, Japanese, Russian, Spanish, Swedish, Chinese, and others. In all cases, professional translation services were hired. The survey focused on family businesses' entrepreneurship, succession, and governance.

The survey respondent was the most senior family leader in the family firm. Usually, this person would be the CEO. In situations where the CEO was not a family member, the respondent was the primary shareholder, chairman of the board, chair of the family council, or other significant non-CEO position.

The family firms were reached through each affiliate institution's contacts, the family business center network, students, alums, friends, family, and partnerships with other institutions. Each affiliate institution was committed to collect at least 25 surveys. The questionnaire was distributed via e-mail. The STEP project collected 1833 completed questionnaires. Because this study focuses on family member CEOs, my final sample comprises 1,314 completed questionnaires.

The final survey responses had 38% from Europe and Central Asia, 24% from Latin America and the Caribbean, 19% from Asia and the Pacific, 12% from North America, and 7% from the Middle East and Africa. In regard to number of employees 33% of the firms have below 20, 20% between 21 and 50, 14% between 51 and 100, 10% from 101 to 200, 11% from 201 to 500, 5% from 501 to 1,000, 4% from 1,001 to 2,000, and 3.5% above 2,001. And in terms of revenue, 18% corresponds to firms below 1 million, 24% between 1 million and 5 million, 11% between 5 million to 10 million, 10% from 10 million to 20 million, 11% from 20 million to 50 million, 11% from 50 million to 250 million, and 5% above 250 million. Table 3 shows the demographics of the firm.

**Table 3: Demographics of the firms (n = 1314)**

Demographics	Variable description	Frecuency	Percent
Region	Europe & Central Asia	493	38%
	North America	157	12%
	Latin America & the Caribbean	318	24%
	Asia & the Pacific	251	19%
	Middle East & Africa	95	7%
Number of Employees	Below 20	437	33.3%
	21-50	264	20.1%
	51-100	179	13.6%
	101-200	133	10.1%
	201-500	143	10.9%
	501-1,000	65	4.9%
	1,001-2000	47	3.6%
	2001-10,000	36	2.7%
	10,001-30,000	5	0.4%
	30,001-50,000	4	0.3%
	50,001-100,000	1	0.1%
Revenue of the firm	Below \$1,000,000	361	27.5%
	\$1,000,001-\$5,000,000	316	24.0%
	\$5,000,001-\$10,000,000	147	11.2%
	\$10,000,001-\$20,000,000	136	10.4%
	\$20,000,001-\$50,000,000	146	11.1%
	\$50,000,001-\$250,000,000	143	10.9%
	\$250,000,001-\$500,000,000	35	2.7%
	Above \$500,000,001	30	2.3%

**Instrument**

The STEP project developed a questionnaire that contained nearly 115 questions. This questionnaire was based on prior validated scales. The platform used to distribute and manage the data collection was Qualtrics.

The survey contained twelve blocks: Identification of the respondent, information about the respondent if the respondent is the CEO, information about the respondent if the respondent is not the CEO, information about the former CEO, succession (future CEO), business information, culture, business culture (autonomy) and entrepreneurial orientation, succession satisfaction, financial performance, family and business governance and market dynamics. The questionnaire is provided in Appendix A.

## **Measures**

I had five blocks of measures, demographics of the CEO, entrepreneurial orientation, financial performance, national culture and market dynamics. All items, measures, and reliability values are provided in Appendix B. A discussion below will help understand each block and its measurement items.

### **Demographics of the CEO**

Orens and Rehuel (2013) affirm that the demographic characteristics of the CEO, such as gender, age, educational level, tenure, and experience, are a proxy of the social, cognitive, and psychological characteristics of the CEOs, which influence the CEOs decisions. Age, educational level, tenure, generation, and gender of the family member CEO were measured through self-reported questions.

Age is measured by asking to indicate the age of the CEO, the study used eight age level ranges, (1 = younger than 20) and (8 = 81 or above).

Educational level is measured by asking to tell the highest level of education completed, and the study used nine educational level ranges, (1 = no formal schooling) and (9 = Doctorate).

Tenure was measured by asking how many years the individual has been the CEO and the study used nine tenure level ranges going from (1 = 1-5) to (9 = 41 or more).

Generation was measured by asking which generation of the family business do the individual represents, and the study used five generation responses being the top (1 = first) and the bottom (5 = Other, please specify).

Finally, gender was measured by asking to indicate the individual gender, and the coding used to analyze data (1 = female, 0 = male).

### Entrepreneurial Orientation

According to Miller (1983), the three dimensions to measure entrepreneurial orientation are innovativeness, proactiveness, and risk-taking. Measures were adapted using the nine-item scale developed by Covin and Slevin (1989), which had prevailed over the years when researching entrepreneurial orientation (Rauch et al., 2009).

### Financial Performance

The efforts on entrepreneurial activities may lead to positive results for an organization, it is recommended to use multiple financial performance measures such as sales growth and profitability (Lumpkin & Dess, 1996). To measure financial performance, three items were used using a 5-point Likert scale. The respondents were asked to rate the growth in sales compared to competitors in the last three years, rate the



growth in profitability compared to competitors in the last three years, and rate the return on total assets compared to competitors in the last three years.

## National Culture

Researchers have argued that cultural values influence how societies consider entrepreneurial orientation (Hayton et al., 2002). Engelen (2010) suggests that some cultures will be more aligned with entrepreneurial orientation than others. The GLOBE research represents the most recent attempt to conceptualize and measure national culture (Parboteeah et al., 2008), and includes nine dimensions, in this study the focus will be on two dimensions, uncertainty avoidance and gender egalitarianism.

Uncertainty avoidance refers to the degree to which the members of a society feel uncomfortable with uncertainty and ambiguity (Nam, 2018). Firms with strong entrepreneurial orientation face two types of uncertainty, 1) associated with the pursuit of innovation and 2) relational uncertainty related to strategic alliances and the goals associated (Marino et al., 2002).

Gender egalitarianism refers to the degree to which a collective minimizes (and should minimize) gender inequality (House, 2004). In societies with high levels of gender egalitarianism less gender segregation exists, women are often employed in authority positions and educational opportunities are the same for male and females (Canestrino et al., 2020).

Each dimension is estimated based on a Likert scale from 1 to 7, (1) meaning very low, and (7) meaning very high; for each country, the values were extracted from the webpage [globeproject.com](http://globeproject.com). (House, 2004).

## Control variables

In the past, the size of the business and industry has been used as a control variable for some studies in entrepreneurial orientation. For this study, it was not suitable to use industry as a control variable because the question related to industries asked to select all the industries in which participated the family group without identifying which industry contributed more to the business's revenue or profits.

Instead, I decided to use market dynamics to replicate market conditions. In a highly dynamic market, organizations suffer due to uncertainty; it is more difficult to predict the future, to plan and organize resources and respond to the situation with the existing knowledge and processes in place (Justin J. P. Jansen et al., 2006; Seo & Chae, 2016). Organizations need to respond with innovation to meet customers' needs in a highly dynamic market environment (Oliver Schilke, 2014). Market dynamics were measured, adjusting the five items scale measured on a 5-point Likert scale developed by Volverda and Van (1997).

To measure the size of the business, two control variables are used: number of employees and revenue. The number of employees was measured by asking approximately how many employees the family business has. Revenue was measured by asking to select from 8 categories, which category best described the most recent annual sales of the business in US dollars.

## **Validity**

The STEP project questionnaire was reviewed by the survey committee, which included two academics from each region to test the content validity. Before conducting the full study, the questionnaire was also tested for time and flow and incorporated the feedback based on clarity and grammar.

A link to the questionnaire was distributed to each of the STEP project's affiliate universities, which committed to collecting at least 25 surveys. Each university developed a family business database in their country and distributed the link in the local language.

Reviewing the market dynamics scale, one item was dropped from the five items in the scale. The item deleted was the only one that referred to a specific time frame and had an issue with the sentence's meaning. The item read “in a year, nothing has changed in our market,” the four items that remained on the scale can be found in the Appendix B.

## CHAPTER V. ANALYSIS AND RESULTS

In this chapter, I will report means, standard deviations, skewness, and kurtosis; followed by the data demographics which describe the sample. I also report the Exploratory Factor Analysis and discuss about the reliability of the scales used to measure each construct including convergent and discriminant validity. Lastly, the full structural model is presented, and the testing of hypotheses findings will be reported.

### **Means, Standard Deviations, Skewness, and Kurtosis**

The Statistical Package for the Social Sciences (SPSS) 26 was used to overview the data. Each variable was compute the minimum, maximum, mean, standard deviation, skewness measures, and kurtosis reported in table 4.

For the current data set, the mean ranged from a high 6.42 (Educational level) to a low 0.20 (Gender). The highest value for the educational level was 9, which corresponded to a doctoral degree. In terms of gender, the value 0 was to indicate if the respondent was a male and 1 if the respondent was a female.

To evaluate the symmetry of the data, Skewness values were determined. The value of 0 represents a symmetric distribution (Myers & Well, 2003). To assess the normality of the data, Kurtosis values were determined, which reflect the peaks or flatness of the distribution (Myers & Well, 2003). The generally accepted values of skewness are lower than 3 in absolute terms, and the accepted values of kurtosis are below 10 in absolute terms (Kline, 2005).

The highest value of skewness is 1.88, and kurtosis is 6.34, corresponding to the same variable, generation of the CEO. Both values, for the present data set, are accepted according to the general rule. Normality and symmetry can be assumed.

**Table 4: Means, Standard Deviation, Skewness, and Kurtosis**

Construct	Item	Min	Max	Mean	STD	Skew.	Kurts.
Demographics of the CEO	Age of the CEO	1	8	4.53	1.27	0.02	-0.17
	Educational Level of the CEO	1	9	6.42	1.90	-1.06	0.01
	Tenure of the CEO	1	9	3.46	2.18	0.70	-0.36
	Generation of the CEO	1	9	1.88	1.02	1.88	6.34
	Gender of the CEO	0	1	0.20	0.40	1.50	0.23
Innovativeness	Innovation1	1	5	3.43	1.38	-0.42	-1.04
	Innovation2	1	5	2.92	1.30	0.04	-1.04
Proactiveness	Proactivity1	1	5	3.34	1.09	-0.26	-0.45
	Proactivity2	1	5	3.32	1.21	-0.30	-0.78
Risk-taking	Risktaking1	1	5	2.96	1.14	-0.02	-0.70
	Risktaking2	1	5	2.85	1.11	0.03	-0.65
	Risktaking3	1	5	2.93	1.14	-0.02	-0.76
Financial Performance	Growthsales	1	5	3.66	0.98	-0.53	-0.04
	Growthprofit	1	5	3.51	1.02	-0.40	-0.30
	ROA	1	5	3.49	0.98	-0.37	-0.16
Market Dynamics	MarketD1	1	5	3.74	1.10	-0.73	-0.20
	MarketD2	1	5	3.49	1.12	-0.54	-0.46
	MarketD3	1	5	3.75	1.09	-0.82	0.06
	MarketD5	1	5	3.27	1.18	-0.29	-0.80
National Culture	UA_Globe	2.88	5.19	4.02	0.53	0.10	-0.30
	Gender_Globe	2.89	4.08	3.40	0.32	0.46	-0.45
Employees	Number of Employees	1	11	2.93	2.03	1.00	0.29
Revenue	Revenue of the firm	1	8	3.08	1.97	0.67	-0.67

## **Data Demographics**

The sample consists of 1,314 CEOs family members. Regarding gender, 20.1% of respondents were female, compared to 79.9% male. The majority of the respondents were in the age range 51-60 (30.2%), followed by respondents 41-50 (28.2%), 61-70 (15.5%), 31-40 (14.6%), 21-30 (5.5%), 71-80 (4.8%), 81 and above (0.8%) and younger than 20 (0.3%). The educational level showed that 35.9% of respondents had a 4-year degree, followed by master's degree at 29.4%, high school graduate at 10.8%, some college at 8.1%, 2-year degree at 4.7%, doctorate degree at 3.7%, Less than high school at 3.4%, trade school at 3.1%, and no formal schooling at 0.8%. The tenure of the CEO showed that 23.7% of respondents were in the tenure range 1-5, followed by 6-10 (17.9%), 11-15 (15.5%), 16-20 (12.2%), 21-25 (11.9%), 26-30 (8.3%), 31-35 (4.9%), 36-40 (2.9%) and 41 and above (2.7%). The generation of the CEO showed that 41.7% of respondents were first-generation, followed by second-generation 39.1%, third-generation 12.7%, fourth-generation 4.3%, fifth-generation 1.4%, sixth and above 0.8%. Demographics of the CEO are listed in table 5.

**Table 5: Demographics of the CEO (n = 1314)**

Variable	Variable Value	Frecuency	Percent
Gender	Female	264	20.1%
	Male	1050	79.9%
Age	Younger than 20	4	0.3%
	21-30	72	5.5%
	31-40	192	14.6%
	41-50	371	28.2%
	51-60	397	30.2%
	61-70	204	15.5%
	71-80	63	4.8%
	81 or above	11	0.8%
Generation	First	548	41.7%
	Second	514	39.1%
	Third	167	12.7%
	Fourth	56	4.3%
	Fifth	19	1.4%
	Sixth	5	0.4%
	Eight	4	0.3%
	Nineth	1	0.1%
	Educational Level	No formal schooling	10
Less than high school		45	3.4%
High school graduate		142	10.8%
Trade school		41	3.1%
Some college		107	8.1%
2 year degree		62	4.7%
4 year degree		472	35.9%
Masters degree		386	29.4%
Doctorate		49	3.7%
Tenure	1-5	312	23.7%
	6-10	235	17.9%
	11-15	204	15.5%
	16-20	160	12.2%
	21-25	156	11.9%
	26-30	109	8.3%
	31-35	64	4.9%
	36-40	38	2.9%
	41 or more	36	2.7%

Since the data was collected by the STEP project, common method bias could potentially affect the relationships between constructs (Podsakoff et al., 2003). The common method bias was controlled using both procedural and statistical methods.

In the study design, respondents were allowed to preserve their anonymity, it was indicated that there were no right or wrong answers, and it was requested to answer the survey as honestly as possible (Podsakoff et al., 2003).

Concerning the statistical methods, I conducted a Harman one-factor test, to test the data's method variance issues. The Harman test requires running a factor analysis. If a single factor account the majority of variance, it should be considered an issue compromising the quality of the data (Podsakoff & Organ, 1986). It was found that no single factor exceeded the threshold of more than 50% of the total variance.

### **Exploratory factor analysis**

A principal component factor analysis was conducted on the fourteen items with varimax rotation for entrepreneurial orientation. The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis,  $KMO = 0.794$ .

In the first attempt to calculate the factors, I use the extraction based on Eigenvalues greater than 1, and the results came from extracting only two factors. One was taking into account all items for risk-taking, and the other one including the items of both innovativeness and proactivity. Based on the literature on entrepreneurial orientation (Covin & Lumpkin, 2011; Covin & Slevin, 1989; Miller, 1983; Rauch et al., 2009), the analysis was forced to obtain three factors in terms of entrepreneurial orientation, and a total of five factors adding market dynamics and financial performance. In combination,



the three factors corresponding to entrepreneurial orientation explained 56.48% of the variance.

Table 6 shows the factor loadings after rotation. This is the main table for EFA. The items that cluster on the same factor suggest that factor 1 represents innovativeness, factor 2 represents proactiveness, factor 3 risk-taking, factor 4 market dynamics, and factor 5 financial performance. All values for individual items were greater than 0.737, which is well above the acceptable limit of 0.50.

**Table 6: Varimax-rotated matrix based on principal component factoring analysis**

Item	Factor					$\alpha$ value
	1	2	3	4	5	
Innovation1	0.796					0.64
Innovation2	0.797					
Proactivity1		0.834				0.64
Proactivity2		0.76				
Risktaking1			0.757			0.78
Risktaking2			0.831			
Risktaking3			0.83			
MarketD1				0.766		0.79
MarketD2				0.737		
MarketD3				0.845		
MarketD5				0.753		
Growthsales					0.814	0.86
Growthprofit					0.914	
ROA					0.893	

### Reliability

For this study, two items were dropped from the original scales based on the literature. Lumpkin and Dess (2001) found that one item associated with proactiveness emerge as an independent factor, separating it into proactiveness and competitive

aggressiveness. And according to George and Marino (2011), numerous studies found that one item measuring innovativeness consistently had shown low reliability (George & Marino, 2011). Two items were used to measure innovativeness, two items to measure proactiveness, and three items to measure risk-taking. All items were measured using a 5-point Likert scale.

To assess internal consistency and reliability, Cronbach's Alpha was calculated for each of the questionnaire scales. The range of reliabilities was from 0.64 to 0.86. A generally accepted rule is that Cronbach's alpha of 0.6-0.7 indicates an acceptable reliability level (Hair et al., 2019). Alpha values for each construct are listed in table 6.

### **Model Estimation and fit indices**

There are two approaches when using structural equation modeling, CB- SEM (covariance-based and PLS-SEM (partial least square). CB-SEM is more appropriate when the study is confirmatory. PLS-SEM is more convenient when the study is exploratory. PLS- SEM is appropriate to minimize the amount of unexplained variance and maximize the R square values, it handles constructs measured with single and multi-item measures, incorporates the relationship between constructs and indicators which in this case is a reflective measurement model, has a high level of statistical power (Hair et al., 2017).

Given all the advantages of PLS-SEM, it is the best method of analysis to evaluate the model and hypothesis. The data analysis to validate measurement and structural models is performed using the software SmartPLS 3.3.2. Before testing the structural model, reliability and validity are assessed.

## **Measurement model**

As previously discussed for skewness and kurtosis, all items met the requirements to not violate normal distribution assumptions. The first step to evaluate a reflective measurement model is to estimate the relationship between the reflective latent variables and their corresponding indicators (outer loadings) (Hair et al., 2017). The table 7 indicates all outer loadings for each of the reflective latent variables: innovativeness, proactiveness, risk-taking, market dynamics, and financial performance, which are above the threshold value of 0.70, suggesting sufficient levels of indicator reliability (Hair et al., 2017).

**Table 7: Validity and Reliability**

Latent Variable	Indicators	Convergent validity			Internal Consistency Reliability		Discriminant Validity
		Loadings	Indicator Reliability	AVE	Composite Reliability	Cronbach's Alpha	
Innovativeness	Innov_1	0.897	0.805	>0.50	0.844	0.638	Yes
	Innov_2	0.811	0.658				
Proactiveness	Proact_1	0.849	0.720	>0.50	0.847	0.639	Yes
	Proact_2	0.866	0.749				
Risk Taking	RiskT_1	0.761	0.579	>0.50	0.871	0.777	Yes
	RiskT_2	0.873	0.762				
	RiskT_3	0.859	0.737				
Market Dynamics	MarketD_1	0.706	0.499	>0.50	0.862	0.792	Yes
	MarketD_2	0.829	0.687				
	MarketD_3	0.809	0.654				
	MarketD_4	0.778	0.605				
Financial Performance	FinP_1	0.899	0.807	>0.50	0.914	0.861	Yes
	FinP_2	0.872	0.761				
	FinP_3	0.880	0.774				

## Convergent Validity

Convergent validity reflects the extent to which the observed measures for a latent variable converge to capture the construct (Carlson & Herdman, 2012). When using structural equation modeling, convergent validity is assessed by 1. The outer loadings for each of the indicators corresponding to a latent variable, and 2. The average variance Extracted (AVE) for each of the latent constructs.

To establish convergent validity, all outer loading reflects a value above the threshold value of 0.70 (Hair et al., 2017). Outer loadings range from 0.706 to 0.899, as shown in table 7. AVE values for each of the latent variables reflect the amount of variance captured by the latent variable in relation to the construct's measurement error. In this case, AVE values range from 0.611 to 0.781. All values reflect a value above the threshold value of 0.50 (Hair et al., 2017).

Based on outer loadings and AVE values for each latent variable, convergent validity can be assumed.

## Discriminant Validity

Discriminant validity reflects the extent to which the observed measures for a latent variable truly distinct from the other latent variables. It implies that a construct is unique and captures phenomena not represented by other constructs in the model (Hair et al., 2017). In structural equation modeling for a reflective model to assess discriminant validity is used the Heterotrait-Monotriat (HTMT) ration. It is needed to run the bootstrapping procedure, and the software derives a bootstrap confidence interval in which is assumed a certain level of confidence (95%), if the confidence interval contains

the value of 1, it indicates a lack of discriminant validity (Hair et al., 2017). In this case, for all latent variables, HTMT confidence interval does not include 1.

As confirmation of discriminant validity, it can be observed in table 8 the Fornell-Larcker criterion, which is a second approach to assess discriminant validity. The square root of AVE of the first order constructs was calculated and all the values exceeded the correlations between the construct and other constructs (Hair et al., 2017).

**Table 8: Fornell-Larcker criterion**

	<b>Financial Perf</b>	<b>Innovative</b>	<b>Market Dyn</b>	<b>Proactive</b>	<b>Risk-taking</b>
<b>Financial Perf</b>	<i>0.88</i>				
<b>Innovative</b>	0.18	<i>0.86</i>			
<b>Market Dyn</b>	0.08	0.30	<i>0.78</i>		
<b>Proactive</b>	0.27	0.44	0.18	<i>0.86</i>	
<b>Risk-taking</b>	0.23	0.30	0.16	0.41	<i>0.83</i>

Square root AVE is in italics on the diagonal. Correlations are below diagonal.

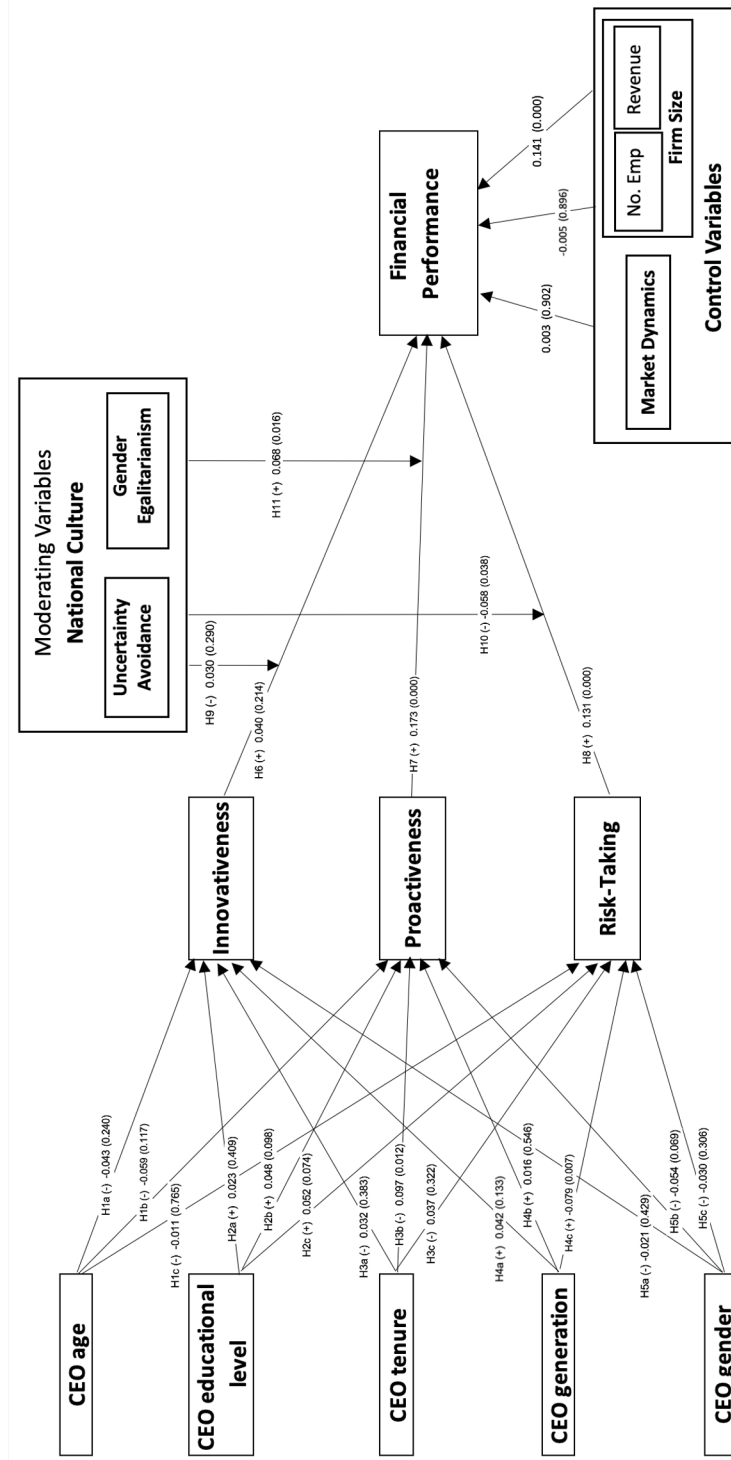
### **Structural Model**

To evaluate the structural model results without moderation effects, Smartpls bootstrapping (5000 subsamples) was used to determine the distribution statistics, path coefficients, t-statistics, and p-values (Hair et al., 2017). The results of the PLS-SEM model enable us to determine that proactiveness has the strongest effect on financial performance (0.173), followed by risk-taking (0.14) and innovativeness (0.038). Moreover, the three constructs explain 11.2% of the variance of the construct financial performance ( $R^2 = 0.112$ ). In addition, the demographic variables CEO age, educational level, tenure, generation, and gender jointly explain 0.4% of the variance of

innovativeness, 1.1% of the variance of proactiveness, and 1% of the variance of risk-taking. The full structural model is summarized in figure 2.

A critical caveat, as you read, is the low R square values, and I need to remind the objectives of this study. Examine the relationship between demographic characteristics of the family member CEO (age, educational level, tenure, generation, and gender) toward innovativeness, proactiveness, and risk-taking as the dimensions of entrepreneurial orientation. And examining the relationship between each of the dimensions of entrepreneurial orientation towards the family firms' financial performance. Rights and Sterba (2019) indicate that "high R2 does not indicate that a model accurately reflects the data-generating process in the population; conversely, a low R2 does not preclude a model from being informative for theory testing" (Rights & Sterba, 2019). Even though my results show low R squares, the model was tested, and the relationships were examined.

Figure 2: Summarized Structural Model





Results reveal that education of the CEO has partially significant effects on Proactiveness ( $\beta = 0.048$ ,  $t\text{-value} = 1.686$ ,  $p = 0.092$ ) and risk taking ( $\beta = 0.052$ ,  $t\text{-value} = 1.767$ ,  $p = 0.077$ ). CEO gender has partially significant effects on proactiveness ( $\beta = 0.054$ ,  $t\text{-value} = 1.83$ ,  $p = 0.067$ ). Proactiveness has significant effects on financial performance ( $\beta = 0.173$ ,  $t\text{-value} = 5.455$ ,  $p < 0.001$ ), and risk-taking has significant effects on financial performance ( $\beta = 0.14$ ,  $t\text{-value} = 4.499$ ,  $p < 0.001$ ). Hence, H2b, H2c, H5b were partially supported, and H7 and H8 were supported. Among the eighteen hypotheses, the relationship between proactiveness and financial performance was the strongest based on the path coefficient (0.173). The results are outlined in table 9.

## **Results**

In hypothesis 1, I stipulated that the age of the family member CEO has a negative effect on innovativeness, proactiveness and risk-taking. For innovativeness (H1a), it can be observed that the relationship is negative but not significant ( $\beta = -0.043$ ,  $p = 0.24$ ). For proactiveness (H1b), it can be observed that the relationship is negative, however, again not significant ( $\beta = -0.059$ ,  $p = 0.117$ ). And finally, for risk-taking (H1c) the relationship is also negative but not significant ( $\beta = -0.011$ ,  $p = 0.765$ ).

In hypothesis 2, I stipulated that the formal educational level of the family member CEO has a positive effect on innovativeness, proactiveness and risk-taking. In fact, all the relationships were positive. It was significant for proactiveness (H2b) ( $\beta = 0.048$ ,  $p = 0.098$ ), and risk taking (H2c) ( $\beta = 0.052$ ,  $p = 0.074$ ). However, it was not significant for innovativeness (H2a) ( $\beta = 0.023$ ,  $p = 0.409$ ).

In hypothesis 3, I stipulated that the tenure of the family member CEO has a negative relation to innovativeness, proactiveness and risk-taking. However, for all tenure relationships there is a positive relation. For proactiveness (H3b) the effect is significant ( $\beta = 0.097$ ,  $p = 0.012$ ). Nonetheless, the effect is not significant for innovativeness (H3a) ( $\beta = 0.032$ ,  $p = 0.383$ ), and risk-taking (H3c) ( $\beta = 0.037$ ,  $p = 0.322$ ).

In hypothesis 4, I stipulated that the generation of the family member CEO has a positive effect on innovativeness, proactiveness and risk-taking. In fact, the relationship was positive for innovativeness and proactiveness, but negative for risk-taking. For innovativeness (H4a) ( $\beta = 0.042$ ,  $p = 0.133$ ) and proactiveness (H4b) ( $\beta = 0.016$ ,  $p = 0.546$ ) the effect is not significant, but for risk-taking (H4c) it is significant ( $\beta = -0.079$ ,  $p = 0.007$ ).

In hypothesis 5, I stipulated that female family member CEOs are less innovative, proactive and risk taking than male CEOs. In fact, the relationship is negative for innovativeness, proactiveness and risk-taking. For innovativeness (H5a) ( $\beta = -0.021$ ,  $p = 0.429$ ) and risk-taking (H5c) ( $\beta = -0.030$ ,  $p = 0.306$ ) the effect is not significant, nonetheless for proactiveness (H5b) it is significant ( $\beta = -0.054$ ,  $p = 0.069$ ).

In hypothesis 6, I stipulated that innovativeness has a positive effect on financial performance. The relationship between innovativeness and financial performance is positive but not significant ( $\beta = 0.040$ ,  $p = 0.214$ ).

In hypothesis 7, I stipulated that proactiveness has a positive effect on financial performance. The relationship between proactiveness and financial performance is positive and significant ( $\beta = 0.173$ ,  $p < 0.001$ ).

In hypothesis 8, I stipulated that risk-taking has a positive effect on financial performance. The relationship between risk-taking and financial performance is positive and significant ( $\beta = 0.131$ ,  $p < 0.001$ ). The results are outlined in table 9

### **Moderating effects**

In hypothesis 9, I stipulated that the relationship between innovativeness and financial performance is weaker in countries with high levels of uncertainty avoidance than countries with low levels of uncertainty avoidance. However, the relationship is positive and not significant ( $\beta = 0.030$ ,  $p = 0.290$ ).

In hypothesis 10, I stipulated that the relationship between risk-taking and financial performance is weaker in countries with high levels of uncertainty avoidance than countries with low levels of uncertainty avoidance. In fact, the relationship is negative and significant ( $\beta = -0.058$ ,  $p = 0.038$ ).

Lastly, in hypothesis 11, I stipulated that the relationship between proactiveness and financial performance is stronger in countries with high levels of gender egalitarianism than countries with low levels of gender egalitarianism. The relationship is positive and significant ( $\beta = 0.068$ ,  $p = 0.016$ ).

Results for moderation effects reveal that uncertainty avoidance has a significant effect on the relationship between risk-taking and financial performance ( $\beta = -0.058$ ,  $t$ -value = 2.080,  $p = 0.038$ ). Gender egalitarianism has a significant effect on the relationship between proactiveness and financial performance ( $\beta = 0.068$ ,  $t$ -value = 2.412,  $p = 0.016$ ). Hence, H10 and H11 were supported.

**Table 9: Hypotheses and results including moderation effects**

	Structural Path	Coefficients	t Values	P Values	Result
H1a (-)	CEO Age -> Innovativeness	-0.043	1.176	0.240	Not Supported
H1b (-)	CEO Age -> Proactiveness	-0.059	1.566	0.117	Not Supported
H1c (-)	CEO Age -> Risk-taking	-0.011	0.298	0.765	Not Supported
H2a (+)	CEO Education -> Innovativeness	0.023	0.826	0.409	Not Supported
H2b (+)	CEO Education -> Proactiveness	0.048	1.657	0.098	Partially Supported
H2c (+)	CEO Education -> Risk-taking	0.052	1.789	0.074	Partially Supported
H3a (-)	CEO Tenure -> Innovativeness	0.032	0.872	0.383	Not Supported
H3b (-)	CEO Tenure -> Proactiveness	0.097	2.528	0.012	Not Supported
H3c (-)	CEO Tenure -> Risk-taking	0.037	0.990	0.322	Not Supported
H4a (+)	CEO Generation -> Innovativeness	0.042	1.503	0.133	Not Supported
H4b (+)	CEO Generation -> Proactiveness	0.016	0.604	0.546	Not Supported
H4c (+)	CEO Generation -> Risk-taking	-0.079	2.684	0.007	Not Supported
H5a (-)	CEO Gender -> Innovativeness	-0.021	0.791	0.429	Not Supported
H5b (-)	CEO Gender -> Proactiveness	-0.054	1.819	0.069	Partially Supported
H5c (-)	CEO Gender -> Risk-taking	-0.030	1.023	0.306	Not Supported
H6 (+)	Innovativeness -> Financial Performance	0.040	1.243	0.214	Not Supported
H7 (+)	Proactiveness -> Financial Performance	0.173	5.508	0.000	Supported
H8 (+)	Risk-taking -> Financial Performance	0.131	4.250	0.000	Supported
H9 (-)	Moderating Globe UA-Innov -> Financial Performance	0.030	1.058	0.290	Not Supported
H10 (-)	Moderating Globe UA-RT -> Financial Performance	-0.058	2.080	0.038	Supported
H11 (+)	Moderating Globe gender - Proac -> Financial Performance	0.068	2.412	0.016	Supported

## CHAPTER VI. CONCLUSIONS

This chapter summarizes my findings and discusses the implications, future research and limitations of my study.

### **Summary of results**

#### Hypothesis

The first three hypothesis in the model were related to the family member CEO age, on which the hypotheses predicted a negative relationship between age and innovativeness, proactiveness and risk-taking, in fact the results show that there is a negative relationship but not significant, the three hypotheses weren't supported.

The hypothesis in the model related to the family member CEO education, predicted a positive relationship between education and innovativeness, proactiveness and risk-taking, in fact the results show that there is a positive relationship but not significant in the case of innovativeness and partially significant for proactiveness and risk-taking.

The hypothesis in the model related to the family member CEO tenure, predicted a negative relationship between tenure and innovativeness, proactiveness and risk-taking. The results show a positive relationship contrary to what was predicted and not only the relationship is positive but also for proactiveness the relationship is significant.

The hypothesis in the model related to the family member CEO generation, predicted a positive relationship between generation and innovativeness, proactiveness

and risk-taking. In this case there are mixed results in term of the relationship, for innovativeness and proactiveness there is a positive relation but not significant, but in for risk-taking contrary to what was expected the relationship is negative and also significant.

Finally, the hypothesis in the model related to the demographic characteristics of the family member CEO gender, it was predicted that female CEOs were less innovative, proactive and risk-taking than males. In fact, the results show that females are less innovative, proactive and risk-taking than males but only referring to proactiveness the relationship is partially significant, for the rest it is not significant.

The hypothesis in the model related to proactiveness, innovativeness and risk taking, predicted a positive relationship with financial performance. The results show a positive relationship in the three cases, but only significant for proactiveness and risk-taking.

The hypothesis in the model with the moderation effect were separated into two, uncertainty avoidance between the relationship between innovativeness and risk-taking, and gender egalitarianism and proactiveness. The moderation effect of uncertainty avoidance was predicted to weaken the relationship between innovativeness and financial performance, on the contrary it was stronger. The moderation effect of uncertainty avoidance was predicted to weaken the relationship between risk-taking and financial performance, and the results show the relationship was weaker and significant. Lastly, the moderation effect of gender egalitarianism was predicted to strengthen the relationship between proactiveness and financial performance, and in fact the relationship was strengthen and significant.

## **Theoretical and Practical Implications**

In the last 35 years, the upper echelons theory has been used to study how executives' experiences, values, and personalities influence the decision-making process and, therefore, business performance (Hambrick & Mason, 1984). Hambrick (2007) indicated that executives' demographic characteristics such as educational credentials, firm tenures, and affiliations could be used to estimate their firms' strategic decisions. This paper applied the upper echelons perspective of organizations to family firms, studying mainly the family member CEO demographic characteristics in relation to the three dimensions of entrepreneurial orientation, innovativeness, proactiveness and risk-taking, and their relationship with financial performance.

This paper's findings referring to the demographic characteristics of the family member CEO and the relationship with innovativeness, proactiveness, and risk-taking can be interpreted as mixed results. There is no significant relation from any of the family member CEO's demographic characteristics, age, educational level, tenure, generation, and gender with innovativeness. Educational level, tenure, and gender of the family member CEO were significant in relationship with proactiveness. Educational level and generation of the family member CEO were significant in relationship with risk-taking.

The findings reflect that the family member CEO's age does not influence the entrepreneurial orientation in any of its three dimensions. This could be an important finding because it does not matter if the CEO of the family firm is younger or older; this is not a relevant demographic characteristic related to entrepreneurial mindset, even

though literature has pointed out a negative relation (Lévesque & Minniti, 2006; Marianne Bertrand & Antoinette Schoar, 2003; Orens & Reheul, 2013).

The findings indicate that the CEO's educational level is relevant to the entrepreneurial orientation in terms of two dimensions, proactiveness and risk-taking. In the sample, it can be noticed that 70% of respondents obtained a four-year degree or higher; it can be implied that education is vital for family firm CEOs considering that the well-being of the whole family is at risk. Educational level of the CEO contributes with different perspectives and gives assurance to be better informed about the external environment (Farag & Mallin, 2018), and is also associated with developing problem-solving skills and creative solutions (Goll et al., 2007; Wincent et al., 2009).

The findings also reveal that the family member CEO's tenure has no significant relation with innovativeness and risk-taking and significant relation with proactiveness. Even though longer tenures show no relation to taking more risks or being innovative, it suggests that given the particularities of a family firm in terms of governance, ownership, and management, what matters is the company's continuity. Therefore, being proactive is essential; CEOs need to anticipate future needs, problems, or changes (Lumpkin & Dess, 1996).

Findings related to the family firm CEO's generation reflect a negative and significant effect only on risk-taking, which means the higher the number of the generation involved in the business, the more risk-averse it is. This result is in line with Martin and Lumpkin (2003), who found that risk-taking decreases as more generations became involved in the family business. This finding has implications on how different



generations perceive entrepreneurial orientation, and it cannot be assumed that all generations perceived it in the same way.

Findings associated with the gender of the family firm CEO indicate a negative relation with the three entrepreneurial orientation dimensions. The negative relations mean that females are less innovative, proactive, and risk-taking, even though the relationship is only significant with proactiveness. This result is consistent with Cruz and Nordqvist (2012), who found that there is a lower entrepreneurial posture for women, with the difference that in this case, it came up significant just for proactiveness.

The results point out that from the five demographic characteristics of the family member CEO, educational level reflects the demographic characteristic that influences the decision-making process concerning entrepreneurial orientation. The higher the educational level, the more significant impact on proactiveness and risk-taking. In family firms where a single decision-maker has more influence than in no family firms (Feltham et al., 2005) it is one factor to consider thinking on succession and governance given the implications in the long term and the impact that family firms have in the economy (Astrachan & Shanker, 2003).

The findings also indicate that entrepreneurial orientation dimensions in relationship with financial performance reflect mixed results. Innovativeness has no significant effect on financial performance. On the contrary, proactiveness and risk-taking are significant in their relationship with financial performance.

The entrepreneurial orientation construct has been defined to require the presence of the three dimensions, innovativeness, proactiveness, and risk-taking (George & Marino, 2011). The results show that innovativeness has a particular behavior because it

lacks significant relationship when studied with the family member CEO's demographic characteristics and with the firm's financial performance. In family firms, the results suggest that what drives the family firm's financial performance are proactivity and risk-taking.

The moderation effects included in the study were associated with two dimensions of national culture, uncertainty avoidance, and gender egalitarianism. Uncertainty avoidance only had an impact on moderating the relationship between risk-taking and financial performance. This means that in countries with high levels of uncertainty avoidance, the relationship is weaker. Findings suggest that cultural values influence how societies perceive entrepreneurial orientation (Hayton et al., 2002), and family firms should be aware of the impact culture may have on the business's performance.

Gender egalitarianism was found to have an amplifying effect on the relationship between proactiveness and financial performance. In countries with higher levels of gender equality, females are more willing to lead new ventures (Baughn et al., 2006). This relationship is consistent with the significance found in the relationship with the gender of the family member CEO and proactiveness. The findings suggest that females leading family businesses are more proactive. At the same time, the effect between proactiveness and financial performance is amplified in countries where there is gender equality.

This study contributes to the literature in three ways. First, a contribution to entrepreneurial orientation literature studying its three dimensions and showing how the family member CEO characteristics impact each dimension, innovativeness, proactiveness, and risk-taking, simultaneously adding to the upper echelons' theory

literature. Second, a contribution to the literature on entrepreneurial orientation and its relationship with a family firm's financial performance. And lastly, a contribution to the literature on entrepreneurial orientation in family firms considering the impact of national culture as a moderator in relationship with financial performance, using the GLOBE approach, which is the most recently developed.

My results reflect managerial implications in family firms. First, the CEO role in family firms is critical because they tend to rely on a single decision-maker. My findings reflect that the educational level affects proactiveness and risk-taking, having higher degrees is a desirable characteristic for a CEO in a family firm, this has implications related to the current management but also in succession planning, for the current managers family firms should develop an educational plan and for future generations it should be a requirement to the CEO position.

My findings also reflect that innovation has no significant effect on the financial performance of the family firm. Still, proactiveness and risk-taking are two critical dimensions to improve financial performance. Splitting the entrepreneurial orientation into its three dimensions can help managers focus on driving the financial performance and have better results in family firms.

Finally, some family firms operate in different countries, which means different cultures. Managers should consider that national culture impacts how proactiveness and risk-taking affect the financial performance in family firms and view the various dimensions of national culture to evaluate the effects.

## **Limitations and Future Research**

This study considered a sample of family firms around the world before the pandemic Covid-19. Future research should consider how an event of this nature potentially impacts the entrepreneurial orientation in family firms and, therefore, the financial performance, considering that family firm's successful financial performance is vital because of their contribution to employment, job creation, gross domestic product, and wealth generation (Basco, 2015). The effects of the world's situation need to be followed and investigated, including how the CEOs approach the decision-making process in an uncertain environment.

A study's limitation relates to the dimensions of entrepreneurial orientation I considered. I decided to use Miller (1983) approach, using innovativeness, proactiveness, and risk-taking. Two other dimensions were not taken into account. Future research may want to expand the dimensions studied as part of entrepreneurial orientation. It will add to the literature if the other two dimensions are considered, autonomy and competitive aggressiveness, and evaluate how the family member CEO's demographic characteristics impact each of them and, at the same time, how these dimensions contribute to the financial performance of the family firm.

Future research should consider not only the demographic characteristics of the CEO but the top management team, so the robustness of findings could be associated not with just one individual but the top management team that make the decisions on the different spheres of the family business and expand the literature applying the upper echelons perspective (Hambrick, 2007)

It could be valuable to the literature to develop a longitudinal study considering the CEO's demographic characteristics, how they evolve and measure its impact on the entrepreneurial orientation, and, therefore, the financial performance in a family firm. From the methodological point of view, a limitation of this study is that I used a database developed by the STEP project in 2019, which compose an international data set that is reliable. Still, it does not allow to build on it with longitudinal analysis. As it has been said, family firms need to survive in the long run. The better understanding the world gets to what drives entrepreneurial orientation, the better the decision-making process should take place in aligning incentives, governance structures, and succession planning in family firms.

A limitation of this study is that it did not include the family firm's industry as a control variable, even though I had the information of all industries in which the family business operated. It could not be used because it was not identified how each industry contributed to the family business. For future research, it should be essential to consider in detail the industries in which family firms operate, how they impact the revenue or profits of the whole business because it can be insightful to find out how different industries may take advantage of the various dimensions of the entrepreneurial orientation and the characteristics of the CEO family member.

## REFERENCES

- Abdul Wahab, N. S., Ntim, C. G., Mohd Adnan, M. M., & Tye, W. L. (2018). Top management team heterogeneity, governance changes and book-tax differences. *Journal of International Accounting, Auditing and Taxation*, 32, 30–46. <https://doi.org/10.1016/j.intaccaudtax.2018.07.002>
- Achtenhagen, L., & Welter, F. (2003). *Female entrepreneurship in Germany: Context, development and its reflection in German Media* (pp. 71–100).
- Ahrens, J.-P., Landmann, A., & Woywode, M. (2015). Gender preferences in the CEO successions of family firms: Family characteristics and human capital of the successor. *Journal of Family Business Strategy*, 6(2), 86–103. <https://doi.org/10.1016/j.jfbs.2015.02.002>
- Anderson, R. C., Reeb, D. M., Upadhyay, A., & Zhao, W. (2011). The Economics of Director Heterogeneity. *Financial Management*, 40(1), 5–38. <https://doi.org/10.1111/j.1755-053X.2010.01133.x>
- Astrachan, J. H., & Shanker, M. C. (2003). *Family Businesses' Contribution to the U.S. Economy: A Closer Look*. 10.
- Bai, X., Tsang, E. W. K., & Xia, W. (2020). Domestic versus foreign listing: Does a CEO's educational experience matter? *Journal of Business Venturing*, 35(1), 105906. <https://doi.org/10.1016/j.jbusvent.2018.10.004>
- Barroso, C., Villegas, Ma. M., & Pérez-Calero, L. (2011). Board Influence on a Firm's Internationalization. *Corporate Governance: An International Review*, 19(4), 351–367. <https://doi.org/10.1111/j.1467-8683.2011.00859.x>
- Basco, R. (2015). Family business and regional development—A theoretical model of regional familiness. *Journal of Family Business Strategy*, 6(4), 259–271. <https://doi.org/10.1016/j.jfbs.2015.04.004>
- Batjargal, B., Webb, J. W., Tsui, A., Arregle, J.-L., Hitt, M. A., & Miller, T. (2019). The moderating influence of national culture on female and male entrepreneurs' social network size and new venture growth. *Cross Cultural & Strategic Management*, 26(4), 490–521. <https://doi.org/10.1108/CCSM-04-2018-0057>
- Baughn, C. C., Cao, J. S. R., Le, L. T. M., Lim, V. A., & Neupert, K. E. (2006). Normative, social and cognitive predictors of entrepreneurial interest in china, vietnam and the philippines. *Journal of Developmental Entrepreneurship*, 11(01), 57–77. <https://doi.org/10.1142/S108494670600026X>

- Bauweraerts, J. (2019). Entrepreneurial orientation and performance in private family firms: A configurational model. *Canadian Journal of Administrative Sciences / Revue Canadienne Des Sciences de l'Administration*, 36(3), 418–431. <https://doi.org/10.1002/cjas.1513>
- Beber, A., & Fabbri, D. (2012). Who times the foreign exchange market? Corporate speculation and CEO characteristics. *Journal of Corporate Finance*, 18(5), 1065–1087. <https://doi.org/10.1016/j.jcorpfin.2012.07.004>
- Belot, F., & Serve, S. (2018). Earnings Quality in Private SMEs: Do CEO Demographics Matter? *Journal of Small Business Management*, 56, 323–344. <https://doi.org/10.1111/jsbm.12375>
- Bird, B., & Brush, C. (2002). A gendered perspective on organizational creation. *Entrepreneurship: Theory and Practice*, 3, 41.
- Briano-Turrent, G. D. C., Li, M., & Peng, H. (2020). The impact of family-CEOs and their demographic characteristics on dividend payouts: Evidence from Latin America. *Research in International Business and Finance*, 51, 101086. <https://doi.org/10.1016/j.ribaf.2019.101086>
- Byus, K. (2018). Observe, Orient, Decide, Act: A Subjectivist Model of Entrepreneurial Decision Making. *Journal of Managerial Issues*, 30(3), 349–302.
- Canestrino, R., Ćwiklicki, M., Magliocca, P., & Pawełek, B. (2020). Understanding social entrepreneurship: A cultural perspective in business research. *Journal of Business Research*, 110, 132–143. <https://doi.org/10.1016/j.jbusres.2020.01.006>
- Carlson, K. D., & Herdman, A. O. (2012). Understanding the Impact of Convergent Validity on Research Results. *Organizational Research Methods*, 15(1), 17–32. <https://doi.org/10.1177/1094428110392383>
- Carpenter, M. A., Geletkanycz, M. A., & Sanders, Wm. G. (2004). Upper Echelons Research Revisited: Antecedents, Elements, and Consequences of Top Management Team Composition. *Journal of Management*, 30(6), 749–778. <https://doi.org/10.1016/j.jm.2004.06.001>
- Casillas, José C., & Moreno, A. M. (2010). The relationship between entrepreneurial orientation and growth: The moderating role of family involvement. *Entrepreneurship & Regional Development*, 22(3–4), 265–291. <https://doi.org/10.1080/08985621003726135>
- Casillas, Jose C., Moreno, A. M., & Barbero, J. L. (2010). A Configurational Approach of the Relationship Between Entrepreneurial Orientation and Growth of Family

- Firms. *Family Business Review*, 23(1), 27–44.  
<https://doi.org/10.1177/0894486509345159>
- Certo, S. T., Lester, R. H., Dalton, C. M., & Dalton, D. R. (2006). Top Management Teams, Strategy and Financial Performance: A Meta-Analytic Examination. *Journal of Management Studies*, 43(4), 813–839. <https://doi.org/10.1111/j.1467-6486.2006.00612.x>
- Chen, D., & Zheng, Y. (2014). *CEO Tenure and Risk-Taking* (SSRN Scholarly Paper ID 2038064). Social Science Research Network.  
<https://doi.org/10.2139/ssrn.2038064>
- Chrisman, J., Chua, J., & Litz, R. (2003). A unified systems perspective of family firm performance: An extension and integration. *JOURNAL OF BUSINESS VENTURING*, 18(4), 467–472. [https://doi.org/10.1016/S0883-9026\(03\)00055-7](https://doi.org/10.1016/S0883-9026(03)00055-7)
- Chrisman, J. J. (2019). Stewardship Theory: Realism, Relevance, and Family Firm Governance. *Entrepreneurship Theory and Practice*, 43(6), 1051–1066.  
<https://doi.org/10.1177/1042258719838472>
- Chrisman, J. J., Chua, J. H., & Sharma, P. (1998). Important Attributes of Successors in Family Businesses: An Exploratory Study. *Family Business Review*, 11(1), 19. Academic OneFile.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the Family Business by Behavior. *Entrepreneurship Theory and Practice*, 23(4), 19–39.  
<https://doi.org/10.1177/104225879902300402>
- Covin, J. G., & Lumpkin, G. T. (2011). Entrepreneurial Orientation Theory and Research: Reflections on a Needed Construct. *Entrepreneurship Theory and Practice*, 35(5), 855–872. <https://doi.org/10.1111/j.1540-6520.2011.00482.x>
- Covin, J. G., & Slevin, D. P. (1989). Strategic Management of Small Firms in Hostile and Benign Environments. *Strategic Management Journal (John Wiley & Sons, Inc.)*, 10(1), 75–87. <https://doi.org/10.1002/smj.4250100107>
- Covin, J. G., & Wales, W. J. (2012). The Measurement of Entrepreneurial Orientation. *ENTREPRENEURSHIP THEORY AND PRACTICE*, 36(4), 677–702.  
<https://doi.org/10.1111/j.1540-6520.2010.00432.x>
- Davis, J. H., Schoorman, F. D., & Donaldson, L. (1997). Toward a Stewardship Theory of Management. *Academy of Management Review*, 22(1), 20–47.  
<https://doi.org/10.5465/AMR.1997.9707180258>
- Díaz-Fernández, M. C., González- Rodríguez, M. R., & Simonetti, B. (2020). Top management team diversity and high performance: An integrative approach based



- on upper echelons and complexity theory. *European Management Journal*, 38(1), 157–168. <https://doi.org/10.1016/j.emj.2019.06.006>
- Donaldson, L., & Davis, J. H. (1991). Stewardship Theory or Agency Theory: CEO Governance and Shareholder Returns. *Australian Journal of Management*, 16(1), 49–64. <https://doi.org/10.1177/031289629101600103>
- Dyer, W. G., & Handler, W. (1994). Entrepreneurship and Family Business: Exploring the Connections. *Entrepreneurship Theory and Practice*, 19(1), 71–83. <https://doi.org/10.1177/104225879401900105>
- Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic Capabilities: What Are They? *Strategic Management Journal (John Wiley & Sons, Inc.)*, 21(10/11), 1105. [https://doi.org/10.1002/1097-0266\(200010/11\)21:10/11<1105::AID-SMJ133>3.0.CO;2-E](https://doi.org/10.1002/1097-0266(200010/11)21:10/11<1105::AID-SMJ133>3.0.CO;2-E)
- Engelen, A. (2010). Entrepreneurial orientation as a function of national cultural variations in two countries. *Journal of International Management*, 16(4), 354–368. <https://doi.org/10.1016/j.intman.2010.09.006>
- Farag, H., & Mallin, C. (2018). The Influence of CEO Demographic Characteristics on Corporate Risk-Taking: Evidence from Chinese IPOs. *European Journal of Finance*, 24(16), 1528–1551.
- Feltham, T. S., Feltham, G., & Barnett, J. J. (2005). The Dependence of Family Businesses on a Single Decision-Maker. *Journal of Small Business Management*, 43(1), 1–15. <https://doi.org/10.1111/j.1540-627X.2004.00122.x>
- Finkelstein, S. (1992). Power in Top Management Teams: Dimensions, Measurement, and Validation. *Academy of Management Journal*, 35(3), 505–538. <https://doi.org/10.2307/256485>
- George, B. A., & Marino, L. (2011). The Epistemology of Entrepreneurial Orientation: Conceptual Formation, Modeling, and Operationalization. *ENTREPRENEURSHIP THEORY AND PRACTICE*, 35(5), 989–1024. <https://doi.org/10.1111/j.1540-6520.2011.00455.x>
- Giraud Voss, Z., Voss, G. B., & Moorman, C. (2005). An empirical examination of the complex relationships between entrepreneurial orientation and stakeholder support. *European Journal of Marketing*, 39(9/10), 1132–1150. <https://doi.org/10.1108/03090560510610761>
- Goll, I., Brown Johnson, N., & Rasheed, A. A. (2007). Knowledge capability, strategic change, and firm performance: The moderating role of the environment.

*Management Decision*, 45(2), 161–179.  
<https://doi.org/10.1108/00251740710727223>

- Griffiths, M. D., Gundry, L. K., & Kickul, J. R. (2013). The socio-political, economic, and cultural determinants of social entrepreneurship activity: An empirical examination. *Journal of Small Business and Enterprise Development*, 20(2), 341–357. <https://doi.org/10.1108/14626001311326761>
- Gupta, V. K., Turban, D. B., & Pareek, A. (2013). Differences between Men and Women in Opportunity Evaluation as a Function of Gender Stereotypes and Stereotype Activation. *Entrepreneurship Theory and Practice*, 37(4), 771–788.  
<https://doi.org/10.1111/j.1540-6520.2012.00512.x>
- Habbershon, T. G., Williams, M., & MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing*, 18(4), 451. [https://doi.org/10.1016/S0883-9026\(03\)00053-3](https://doi.org/10.1016/S0883-9026(03)00053-3)
- Hair, J. F., Jr., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* (2nd Edition). SAGE.
- Hair, J. F., L.D.S. Gabriel, M., da Silva, D., & Braga Junior, S. (2019). Development and validation of attitudes measurement scales: Fundamental and practical aspects. *RAUSP Management Journal*, 54(4), 490–507. <https://doi.org/10.1108/RAUSP-05-2019-0098>
- Hambrick, D. C. (2007). Upper Echelons Theory: An Update. *The Academy of Management Review*, 32(2), 334–343. JSTOR. <https://doi.org/10.2307/20159303>
- Hambrick, D. C., & Finkelstein, S. (1987). Managerial discretion: A bridge between polar views of organizational outcomes. *Research in Organizational Behavior*, 9, 369–406.
- Hambrick, D. C., & Fukutomi, G. D. S. (1991). The Seasons of a Ceo's Tenure. *Academy of Management Review*, 16(4), 719–742.  
<https://doi.org/10.5465/amr.1991.4279621>
- Hambrick, D. C., & Mason, P. A. (1984). Upper Echelons: The Organization as a Reflection of Its Top Managers. *Academy of Management Review*, 9(2), 193–206.  
<https://doi.org/10.5465/AMR.1984.4277628>
- Handler, W. C. (1989). Methodological Issues and Considerations in Studying Family Businesses. *Family Business Review*, 2(3), 257–276.  
<https://doi.org/10.1111/j.1741-6248.1989.00257.x>

- Hayton, J. C., George, G., & Zahra, S. A. (2002). National Culture and Entrepreneurship: A Review of Behavioral Research. *Entrepreneurship Theory and Practice*, 26(4), 33–52. <https://doi.org/10.1177/104225870202600403>
- Heck, R., & Stafford, K. (2001). *Destroying myths and creating value in family business*.
- Hernández-Linares, R., & López-Fernández, M. C. (2018). Entrepreneurial Orientation and the Family Firm: Mapping the Field and Tracing a Path for Future Research. *Family Business Review*, 31(3), 318–351. <https://doi.org/10.1177/0894486518781940>
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values* (FIU Hubert Library (BBC) General Collection - 3rd Fl. GN502 .H63). Sage Publications.
- Hofstede, G. (1984). The Cultural Relativity of the Quality of Life Concept. *Academy of Management Review*, 9(3), 389–398. <https://doi.org/10.5465/amr.1984.4279653>
- Hofstede, G. (1991). *Cultures and organizations: Software of the mind* (FIU Hubert Library (BBC) General Collection - 3rd Fl. HM258 .H574 1991). McGraw-Hill.
- House, R. J. (2004). *Culture, leadership, and organizations: The GLOBE study of 62 societies* (FIU Hubert Library (BBC) General Collection - 3rd Fl. HD57.7 .L4323 2004). Sage Publications.
- Hoy, F. (2006). The complicating factor of life cycles in corporate venturing. *Entrepreneurship: Theory and Practice*, 6, 831.
- Justin J. P. Jansen, Frans A. J. Van Den Bosch, & Henk W. Volberda. (2006). Exploratory Innovation, Exploitative Innovation, and Performance: Effects of Organizational Antecedents and Environmental Moderators. *Management Science*, 52(11), 1661. <https://doi.org/10.1287/mnsc.1060.0576>
- Kellermanns, F. W., Eddleston, K. A., Barnett, T., & Pearson, A. (2008). An Exploratory Study of Family Member Characteristics and Involvement: Effects on Entrepreneurial Behavior in the Family Firm. *Family Business Review*, 21(1), 1–14. <https://doi.org/10.1111/j.1741-6248.2007.00107.x>
- Kitchell, S. (1997). CEO characteristics and technological innovativeness: A Canadian perspective. *Canadian Journal of Administrative Sciences (Canadian Journal of Administrative Sciences)*, 14(2), 111.
- Kline, R. B. (2005). *Principles and practice of structural equation modeling* (FIU Green Library General Collection QA278 .K585 2005; 2nd ed.). Guilford Press.

<http://ezproxy.fiu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat06026a&AN=fiu.020245783&site=eds-live>

- Lank, A., Owens, R., Martinez, J., Reidel, H., & Visscher, F. (1994). *The State of Family Business in Various Countries Around the World*. Family Business Network Newsletter.
- Lévesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177–194. <https://doi.org/10.1016/j.jbusvent.2005.04.003>
- Litz, R. A. (1995). The Family Business: Toward Definitional Clarity. *Academy of Management Best Papers Proceedings*, 100–104. <https://doi.org/10.5465/AMBPP.1995.17536337>
- Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the Entrepreneurial Orientation Construct and Linking It to Performance. *The Academy of Management Review*, 21(1), 135–172. JSTOR. <https://doi.org/10.2307/258632>
- Lumpkin, G. T., & Dess, G. G. (2001). Linking two dimensions of entrepreneurial orientation to firm performance: The moderating role of environment and industry life cycle. *Journal of Business Venturing*, 16(5), 429–451. [https://doi.org/10.1016/S0883-9026\(00\)00048-3](https://doi.org/10.1016/S0883-9026(00)00048-3)
- Madison, K., Daspit, J. J., Turner, K., & Kellermanns, F. W. (2018). Family firm human resource practices: Investigating the effects of professionalization and bifurcation bias on performance. *Journal of Business Research*, 84, 327–336. <https://doi.org/10.1016/j.jbusres.2017.06.021>
- March, J. G., & Simon, H. A. (1958). *Organizations* (FIU Hubert Library (BBC) General Collection - 3rd Fl. HD31 .M298). Wiley. <http://ezproxy.fiu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=cat06026a&AN=fiu.020985933&site=eds-live>
- Marianne Bertrand & Antoinette Schoar. (2003). Managing with Style: The Effect of Managers on Firm Policies. *The Quarterly Journal of Economics*, 118(4), 1169.
- Marino, L., Strandholm, K., Steensma, H. K., & Weaver, K. M. (2002). The moderating effect of national culture on the relationship between entrepreneurial orientation and strategic alliance portfolio extensiveness. *Entrepreneurship: Theory and Practice*, 4, 145.
- McMullen, J. S., & Shepherd, D. A. (2006). Entrepreneurial Action and the Role of Uncertainty in the Theory of the Entrepreneur. *Academy of Management Review*, 31(1), 132–152. <https://doi.org/10.5465/AMR.2006.19379628>

- Miller, D. (1983). The Correlates of Entrepreneurship in Three Types of Firms. *Management Science*, 29(7), 770.
- Miller, D., & Le Breton-Miller, I. (2006). Family Governance and Firm Performance: Agency, Stewardship, and Capabilities. *Family Business Review*, 19(1), 73–87. <https://doi.org/10.1111/j.1741-6248.2006.00063.x>
- Montgomery, B. J., & Sinclair, A. M. (2000). All in the family. *Business & Economic Review*, 46(2), 3.
- Morris, M. H., Kuratko, D. F., & Covin, J. G. (2010). *Corporate Entrepreneurship & Innovation*. Cengage Learning.
- Myers, J. L., & Well, A. (2003). *Research Design and Statistical Analysis: Vol. 2nd ed.* Taylor & Francis [CAM].  
<http://ezproxy.fiu.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=nlebk&AN=79464&site=eds-live>
- Naldi, L., Cennamo, C., Corbetta, G., & Gomez-Mejia, L. (2013). Preserving socioemotional wealth in family firms: Asset or liability? The moderating role of business context. *Entrepreneurship: Theory and Practice*, 6, 1341. <https://doi.org/10.1111/etap.12069>
- Naldi, L., Nordqvist, M., Sjöberg, K., & Wiklund, J. (2007). Entrepreneurial Orientation, Risk Taking, and Performance in Family Firms. *Family Business Review*, 20(1), 33–47. <https://doi.org/10.1111/j.1741-6248.2007.00082.x>
- Nam, T. (2018). Examining the anti-corruption effect of e-government and the moderating effect of national culture: A cross-country study. *Government Information Quarterly*, 35(2), 273–282. <https://doi.org/10.1016/j.giq.2018.01.005>
- Neely, B. H., Lovelace, J. B., Cowen, A. P., & Hiller, N. J. (2020). Metacritiques of Upper Echelons Theory: Verdicts and Recommendations for Future Research. *Journal of Management*, 46(6), 1029–1062. <https://doi.org/10.1177/0149206320908640>
- Nguyen, H., & Harrison, N. (2019). Leveraging customer knowledge to enhance process innovation: Moderating effects from market dynamics. *Business Process Management Journal*, 25(2), 307–322. <https://doi.org/10.1108/BPMJ-03-2017-0076>
- Nguyen, T. V., Bryant, S. E., Rose, J., Tseng, C.-H., & Kapasuwan, S. (2009). Cultural Values, Market Institutions, and Entrepreneurship Potential: A Comparative Study of the United States, Taiwan, and Vietnam. *Journal of Developmental Entrepreneurship*, 14(1), 21.

- Oliver Schilke. (2014). On the Contingent Value of Dynamic Capabilities for Competitive Advantage: The Nonlinear Moderating Effect of Environmental Dynamism. *Strategic Management Journal*, 35(2), 179. <https://doi.org/10.1002/smj.2099>
- Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K. Z., & Duncan, K. A. (2003). The impact of the family and the business on family business sustainability. *Journal of Business Venturing*, 18(5), 639. [https://doi.org/10.1016/S0883-9026\(03\)00014-4](https://doi.org/10.1016/S0883-9026(03)00014-4)
- Orens, R., & Reheul, A.-M. (2013). Do CEO demographics explain cash holdings in SMEs? *European Management Journal*, 31(6), 549–563. <https://doi.org/10.1016/j.emj.2013.01.003>
- Parboteeah, K. P., Hoegl, M., & Cullen, J. B. (2008). Managers' Gender Role Attitudes: A Country Institutional Profile Approach. *Journal of International Business Studies*, 39(5), 795–813. JSTOR.
- Parker, S. C. (2006). Learning about the unknown: How fast do entrepreneurs adjust their beliefs? *Journal of Business Venturing*, 21(1), 1–26. <https://doi.org/10.1016/j.jbusvent.2004.07.005>
- Podsakoff, P. M., MacKenzie, S. B., Jeong-Yeon Lee, & Podsakoff, N. P. (2003). Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies. *Journal of Applied Psychology*, 88(5), 879. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., & Organ, D. W. (1986). Self-Reports in Organizational Research: Problems and Prospects. *Journal of Management*, 12(4), 531. <https://doi.org/10.1177/014920638601200408>
- Ramón-Llorens, M. C., García-Meca, E., & Duréndez, A. (2017). Influence of CEO characteristics in family firms internationalization. *International Business Review*, 26(4), 786–799. <https://doi.org/10.1016/j.ibusrev.2017.01.007>
- Rauch, A., Frese, M., Wang, Z.-M., Unger, J., Lozada, M., Kupcha, V., & Spirina, T. (2013). National culture and cultural orientations of owners affecting the innovation—Growth relationship in five countries. *ENTREPRENEURSHIP AND REGIONAL DEVELOPMENT*, 25(9–10), 732–755. <https://doi.org/10.1080/08985626.2013.862972>
- Rauch, A., Wiklund, J., Lumpkin, G. T., & Frese, M. (2009). Entrepreneurial Orientation and Business Performance: An Assessment of past Research and Suggestions for the Future. *Entrepreneurship Theory and Practice*, 33(3), 761–787. <https://doi.org/10.1111/j.1540-6520.2009.00308.x>

- Rights, J. D., & Sterba, S. K. (2019). Quantifying explained variance in multilevel models: An integrative framework for defining R-squared measures. *Psychological Methods, 24*(3), 309–338. <https://doi.org/10.1037/met0000184>
- Salvato, C. (2004). Predictors of Entrepreneurship in Family Firms. *The Journal of Private Equity, 7*(3), 68–76. JSTOR.
- Seo, Y. W., & Chae, S. W. (2016). Market Dynamics and Innovation Management on Performance in SMEs: Multi-agent Simulation Approach. *Procedia Computer Science, 91*, 707–714. <https://doi.org/10.1016/j.procs.2016.07.060>
- Sharma, P. (2004). An overview of the field of family business studies: Current status and directions for the future. *Family Business Review, 1*, 1.
- Shen, Y. (2021). CEO characteristics: A review of influential publications and a research agenda. *Accounting & Finance, 61*(1), 361–385. <https://doi.org/10.1111/acfi.12571>
- Shu-hui Lin & Shing-yang Hu. (2007). A Family Member or Professional Management? The Choice of a CEO and Its Impact on Performance. *Corporate Governance: An International Review, 15*(6), 1348–1362. <https://doi.org/10.1111/j.1467-8683.2007.00650.x>
- Sirmon, D. G., Hitt, M. A., & Ireland, R. D. (2007). Managing Firm Resources in Dynamic Environments to Create Value: Looking Inside the Black Box. *Academy of Management Review, 32*(1), 273–292. <https://doi.org/10.5465/AMR.2007.23466005>
- Stewart, A., & Hitt, M. A. (2012). Why Can't a Family Business Be More Like a Nonfamily Business?: Modes of Professionalization in Family Firms. *Family Business Review, 25*(1), 58–86. <https://doi.org/10.1177/0894486511421665>
- Stewart, W. H., Watson, W. E., Carland, J. C., & Carland, J. W. (1999). A proclivity for entrepreneurship: A comparison of entrepreneurs, small business owners, and corporate managers. *Journal of Business Venturing, 14*(2), 189–214. [https://doi.org/10.1016/S0883-9026\(97\)00070-0](https://doi.org/10.1016/S0883-9026(97)00070-0)
- Tang, J., Tang, Z., & Cowden, B. J. (2017). Exploring the Relationship Between Entrepreneurial Orientation, CEO Dual Values, and SME Performance in State-Owned vs. Nonstate-Owned Enterprises in China. *ENTREPRENEURSHIP THEORY AND PRACTICE, 41*(6), 883–908. <https://doi.org/10.1111/etap.12235>
- Thomas, A. S., Litschert, R. J., & Ramaswamy, K. (1991). The performance impact of strategy - manager coalignment: An empirical examination. *Strategic Management Journal, 12*(7), 509–522. <https://doi.org/10.1002/smj.4250120704>

- Tihanyi, L., Ellstrand, A. E., Daily, C. M., & Dalton, D. R. (2000). Composition of the Top Management Team and Firm International Diversification. *Journal of Management*, 26(6), 1157–1177. <https://doi.org/10.1177/014920630002600605>
- Venaik, S., & Brewer, P. (2010). Avoiding uncertainty in Hofstede and GLOBE. *JOURNAL OF INTERNATIONAL BUSINESS STUDIES*, 41(8), 1294–1315. <https://doi.org/10.1057/jibs.2009.96>
- Vincent L. Barker, I. & George C. Mueller. (2002). CEO Characteristics and Firm R&D Spending. *Management Science*, 48(6), 782.
- Wales, William J., Gupta, V. K., & Mousa, F.-T. (2013). Empirical research on entrepreneurial orientation: An assessment and suggestions for future research. *International Small Business Journal*, 31(4), 357–383. <https://doi.org/10.1177/0266242611418261>
- Wales, William John. (2016). Entrepreneurial orientation: A review and synthesis of promising research directions. *International Small Business Journal*, 34(1), 3–15. <https://doi.org/10.1177/0266242615613840>
- Wang, G., Holmes, R. M., Devine, R. A., & Bishoff, J. (2018). CEO gender differences in careers and the moderating role of country culture: A meta-analytic investigation. *Organizational Behavior and Human Decision Processes*, 148, 30–53. <https://doi.org/10.1016/j.obhdp.2018.04.002>
- Wang, G., Holmes, R. M., Oh, I., & Zhu, W. (2016). Do CEOs Matter to Firm Strategic Actions and Firm Performance? A Meta-Analytic Investigation Based on Upper Echelons Theory. *Personnel Psychology*, 69(4), 775–862. <https://doi.org/10.1111/peps.12140>
- Wang, L., Jiang, W., & Ma, X. (2021). The effect of CEO entrepreneurial orientation on firm strategic change: The moderating roles of managerial discretion. *Journal of Engineering and Technology Management*, 59, 101616. <https://doi.org/10.1016/j.jengtecman.2021.101616>
- Wang, T., Thornhill, S., & Castro, J. O. D. (2017). Entrepreneurial Orientation, Legitimation, and New Venture Performance. *Strategic Entrepreneurship Journal*, 11(4), 373–392. <https://doi.org/10.1002/sej.1246>
- Wei, Q., Li, W. H., De Sisto, M., & Gu, J. (2020). What types of top management teams' experience matter to the relationship between political hazards and foreign subsidiary performance? *Journal of International Management*, 26(4). <https://doi.org/10.1016/j.intman.2020.100798>



- Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing*, 20(1), 71–91. <https://doi.org/10.1016/j.jbusvent.2004.01.001>
- Wincent, J., Anokhin, S., & Boter, H. (2009). Network board continuity and effectiveness of open innovation in Swedish strategic small-firm networks. *R&D Management*, 39(1), 55–67. <https://doi.org/10.1111/j.1467-9310.2008.00539.x>
- Zahra, S. A. (2005). Entrepreneurial Risk Taking in Family Firms. *Family Business Review*, 18(1), 23–40. <https://doi.org/10.1111/j.1741-6248.2005.00028.x>
- Zahra, S. A. (2018). Entrepreneurial Risk Taking in Family Firms: The Wellspring of the Regenerative Capability. *Family Business Review*, 31(2), 216–226. <https://doi.org/10.1177/0894486518776871>
- Zahra, S. A., Hayton, J. C., & Salvato, C. (2004). Entrepreneurship in Family vs. Non-Family Firms: A Resource-Based Analysis of the Effect of Organizational Culture. *Entrepreneurship Theory and Practice*, 28(4), 363–381. <https://doi.org/10.1111/j.1540-6520.2004.00051.x>
- Zahra, S. A., Neubaum, D. O., & Huse, M. (2000). Entrepreneurship in Medium-Size Companies: Exploring the Effects of Ownership and Governance Systems. *Journal of Management*, 26(5), 947–976. <https://doi.org/10.1177/014920630002600509>

## APPENDIX

### Appendix A

Survey

Impact of demographics of the CEO on entrepreneurial orientation and performance

Start of Block: Default Question Block

Q1 Are you currently the CEO of the business?

Yes (1)

No (2)

Q2 How many years have you been the CEO?

1-5 (1)

6-10 (2)

11-15 (3)

16-20 (4)

21-25 (5)

26-30 (6)

31-35 (7)

36-40 (8)

41 or more (9)

Q3 How many years have you been employed by the family business?

1-5 (1)

6-10 (2)

11-15 (3)

16-20 (4)

21-25 (5)

26-30 (6)

31-35 (7)

36-40 (8)

41 or more (9)

Q7 Please indicate your gender

Male (1)

Female (2)

Q4 Please indicate your age

Younger than 20 (1)

21-30 (2)

- 31-40 (3)
- 41-50 (4)
- 51-60 (5)
- 61-70 (6)
- 71-80 (7)
- 81 or above (8)

Q5 Please indicate your highest level of education completed

- No formal schooling (1)
- Less than high school (2)
- High school graduate (3)
- Trade school (4)
- Some college (5)
- 2 year degree (6)
- 4 year degree (7)
- Masters degree (8)
- Doctorate (9)

Q6 How many siblings do you have?

- 0 (1)
- 1 (2)
- 2 (3)
- 3 (4)
- 4 (5)
- 5 or more (6)

Q8 What is your birth order?

- 1 (1)
- 2 (2)
- 3 (3)
- 4 (4)
- 5 or higher (5)

Q9 Which generation of the family business do you represent?

- First (1)
- Second (2)
- Third (3)
- Fourth (4)
- Other. Please specify (5) \_\_\_\_\_

Q10 Please indicate your role(s) in the family business (mark all that apply)

- CEO (1)
- Chairperson of the Board (2)

- Member of the top management team (3)
- Board member (4)
- Majority shareholder (owner) (5)
- Minority shareholder (6)

Q11 In your opinion what is the likelihood that...

	Extremely unlikely (1)	Somewhat unlikely (2)	Neither likely nor unlikely (3)	Somewhat likely (4)	Extremely likely (5)
The ownership of this business will be passed on to the next generation of the owning family? (1)					
The next CEO of the business will be a family member? (2)					

Q12 If you were to continue in your family business, at what age would you expect to retire?

- Younger than 40 (1)
- 41-45 (2)
- 46-50 (3)
- 51-55 (4)
- 56-60 (5)
- 61-65 (6)
- 66-70 (7)
- 71-75 (8)
- 76-80 (9)
- 81 or older (10)

Q13 Would you and your family ever accept a CEO from outside of the owning family?  
Yes (1)  
No (2)

Q14 How many CEOs have led the company since its establishment?

1 (1)

2 (2)

3 (3)

4 (4)

5 (5)

6 (6)

7 (7)

Other. please specify (8) \_\_\_\_\_

Q16 Please indicate the gender of the former CEO

Male (1)

Female (2)

Q17 To the best of your knowledge, at what age did the former CEO leave his/her position?

Younger than 40 (1)

41-45 (2)

46-50 (3)

51-55 (4)

56-60 (5)

61-65 (6)

66-70 (7)

71-75 (8)

76-80 (9)

81 or older (10)

Q18 To the best of your knowledge, how many years was the former CEO in the position?

1-5 (1)

6-10 (2)

11-15 (3)

16-20 (4)

21-25 (5)

26-30 (6)

31-35 (7)

36-40 (8)

41 or more (9)

Q19 Did a formal succession plan exist in the family firm at the time of the last CEO succession?

Yes (1)  
No (2)

Q20 Has the next CEO for the business been identified?

Yes (1)  
No (2)

Q21 Is the next CEO a family member?

Yes (1)  
No (2)

Q22 Are you a member of the owning family?

Yes (1)  
No (2)

Q23 In which year was the family firm established?

---

Q24 Approximately how many employees does the family business have?

Below 20 (1)  
21-50 (2)  
51-100 (3)  
101-200 (4)  
201-500 (5)  
501-1,000 (6)  
1,001-2000 (7)  
2001-10,000 (8)  
10,001-30,000 (9)  
30,001-50,000 (10)  
50,001-100,000 (11)  
100,000 and above (12)

Q25 Which category best describes the most recent annual sales of the business in USD?

Below \$1,000,000 (1)  
\$1,000,001 - \$5,000,000 (2)  
\$5,000,001 - \$10,000,000 (3)  
\$10,000,001 - \$20,000,000 (4)  
\$20,000,001 - \$50,000,000 (5)  
\$50,000,001 - \$250,000,000 (6)  
\$250,000,001 - \$500,000,000 (7)  
Above \$500,000,001 (8)

Q26 Which industry best represents what the family business or businesses do (mark all that apply)?

Agriculture, forestry, fishing (1)

- Construction (2)
- Finance and insurance (3)
- Mining (4)
- Manufacturing (5)
- Public administration (6)
- Real estate (7)
- Retail trade (8)
- Services (9)
- Technology (10)
- Transportation and utilities (11)
- Wholesale trade (12)
- Other, please specify (13) \_\_\_\_\_

Q27 In what country/region/jurisdiction is the family business headquartered?

▼ Afghanistan (1) ... Zimbabwe (201)

Q28 Is the country/region/jurisdiction where the family business is headquartered the country of origin for the family?

▼ Afghanistan (1) ... Zimbabwe (201)

Q29 How many family members are currently employed by the business?

\_\_\_\_\_

Q30 What percentage of your prior year sales came from "new" products or services (products or services that are less than 3 years old)?

\_\_\_\_\_

Q31 What was your average growth in sales (percent) over the past three years?

\_\_\_\_\_

Q32 What was your average growth in profits (percent) over the past three years?

\_\_\_\_\_

Q33 Please select the choice that best describes the strategy of the business

	1	2	3	4	5	
	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	
My firm supports the efforts of individuals and/or teams that						My firm requires individuals or teams to rely on senior managers

work  
autonomously.

In general, the  
top managers of  
my firm believe  
that the best  
results occur  
when individuals  
and/or teams  
decide for  
themselves what  
business  
opportunities to  
pursue

Individuals  
and/or teams  
pursuing business  
opportunities  
made decisions  
on their own  
without  
constantly  
referring to their  
supervisors.

In my firm, the  
CEO and top  
management  
team play a major  
role in  
identifying and  
selecting the  
entrepreneurial  
opportunities my  
firm pursues.

In my firm, we  
have not  
marketed any  
new lines of  
products or  
services in the  
last 5 years.

to guide their  
work

The best results  
occur when the  
CEO and top  
managers provide  
the primary  
impetus for  
pursuing business  
opportunities

Individuals  
and/or teams  
pursuing business  
opportunities are  
expected to  
obtain approval  
from their  
supervisors  
before making  
decisions.

Employee  
initiatives and  
input play a  
major role in  
identifying and  
selecting the  
entrepreneurial  
opportunities my  
firm pursues.

In my firm, we  
have marketed  
many new lines  
of products or  
services in the  
last 5 years.



Changes in product or service lines have been mostly of a minor nature.

In dealing with its competitors, my firm typically responds to actions which competitors initiate.

In dealing with its competitors, my firm is very seldom the first business to introduce new products/services, administrative techniques, operating technologies etc.

In dealing with its competitors, my firm typically seeks to avoid competitive clashes, preferring a "live and let live" posture.

In general, the top managers of my firm believe that owing to the nature of the environment, it is best to explore it gradually via cautious,

Changes in product or service lines have usually been quite dramatic.

In dealing with its competitors, my firm typically initiates actions to which competitors then respond.

In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.

In dealing with competitors, my firm typically adopts a very competitive, "undo the competition" posture.

In general, the top managers of my firm believe that owing to the nature of the environment, bold, wide-ranging acts are necessary to

<p>incremental behavior.</p> <p>In general, the top managers of my firm have a strong tendency for low-risk projects (with normal and certain rates of return)</p> <p>When confronted with decision-making situations involving uncertainty, my firm typically adopts a cautious, "wait and see" posture in order to minimize the probability of making costly decisions</p>		<p>achieve the firm's objectives.</p> <p>In general, the top managers of my firm have a strong tendency or high-risk projects (with chances of very high returns)</p> <p>When confronted with decision-making situations involving uncertainty, my firm typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities.</p>
--	--	---

Q34 How would you rate your business performance as compared to that of your competitors in the last three years in terms of the following?

	Much worse (1)	Somewhat worse (2)	About the same (3)	Somewhat better (4)	Much better (5)
1. Growth in sales (1)					
2. Growth in market share (2)					
3. Growth in number of employees (3)					

- 4. Growth in profitability (4)
- 5. Return on equity (5)
- 6. Return on total assets (6)
- 7. Profit margin on sales (7)

Q35 How would you rate the following statements regarding the market in which your family business operates?

	Strongly disagree (1)	Somewhat disagree (2)	Neither agree nor disagree (3)	Somewhat agree (4)	Strongly agree (5)
1. Changes in our market are intense (1)					
2. Our clients regularly ask for new products and services (2)					
3. In our market, changes are taking place continuously (3)					
4. In a year, nothing has changed in our market (4)					

5. In our market, the volumes of products and services to be delivered change fast and often (5)

End of Block: Default Question Block

---

## Appendix B

Variable name	Variable description	Variable Value
<b>Age</b>	Please indicate your age.	Younger than 20 (1), 21-30 (2), 31-40 (3), 41-50 (4), 51-60 (5), 61-70 (6), 71-80 (7), 81 or above (8)
<b>Educational level</b>	Please indicate your highest level of education completed.	No formal schooling (1), Less than high school (2), High school graduate (3), Trade school (4), Some college (5), 2 year degree (6), 4 year degree (7), Masters degree (8), Doctorate (9)
<b>Tenure</b>	How many years have you been the CEO?	1-5 (1), 6-10 (2), 11-15 (3), 16-20 (4), 21-25 (5), 26-30 (6), 31-35 (7), 36-40 (8), 41 or more (9)
<b>Generation</b>	Which generation of the family business do you represent?	First (1), Second (2), Third (3), Fourth (4), Other. Please specify. (5)
<b>Gender</b>	Please indicate your gender.	Female (0), Male (1)

Variable name	Likert Scale = 1	Likert Scale = 5
<b>Innovativeness</b>	In my firm, we have not marketed any new lines of products or services in the last 5 years.	In my firm, we have marketed many new lines of products or services in the last 5 years.
	Changes in product or service lines have been mostly of a minor nature.	Changes in product or service lines have usually been quite dramatic.
<b>Cronbach's Alpha: 0.637</b>		
<b>Proactiveness</b>	In dealing with its competitors, my firm typically responds to actions which competitors initiate.	In dealing with its competitors, my firm typically initiates actions to which competitors then respond.
	In dealing with its competitors, my firm is very seldom the first business to introduce new products/services, administrative techniques, operating technologies etc.	In dealing with its competitors, my firm is very often the first business to introduce new products/services, administrative techniques, operating technologies, etc.
<b>Cronbach's Alpha: 0.637</b>		
<b>Risk Taking</b>	In general, the top managers of my firm believe that owing to the nature of the environment, it is best to explore it gradually via cautious, incremental behavior.	In general, the top managers of my firm believe that owing to the nature of the environment, bold, wide- ranging acts are necessary to achieve the firm's objectives.
	In general, the top managers of my firm have a strong tendency for low-risk projects (with normal and certain rates of return).	In general, the top managers of my firm have a strong tendency or high-risk projects (with chances of very high returns).
	When confronted with decision- making situations involving uncertainty, my firm typically adopts a cautious, "wait and see" posture in order to minimize the probability of making costly decisions.	When confronted with decision- making situations involving uncertainty, my firm typically adopts a bold, aggressive posture in order to maximize the probability of exploiting potential opportunities.
<b>Cronbach's Alpha: 0.777</b>		

Variable name	Variable description	Variable Value
<b>Financial Performance</b>	Rate your growth in sales compared to your competitors in the last three years	Much worse(1) - Much better (5)
	Rate your growth in profitability compared to your competitors in the last three years	
	Rate your return on total assets compared to your competitors in the last three years	
<b>Cronbach's Alpha: 0.861</b>		

Variable name	Variable description	Variable Value
<b>Number of Employees</b>	Approximately how many employees does the family business have?	1, Below 20; 2, 21-50; 3, 51- 100; 4, 101-200; 5, 201-500; 6, 501-1,000; 7, 1,001-2,000; 8, 2,001-10,000; 9, 10,001- 30,000; 10, 30,001-50,000; 11, 100,000 and above
<b>Revenue</b>	Which category best describes the most recent annual sales of the business in USD?	1, Below \$1,000,000; 2, \$1,000,001 - \$5,000,000; 3, \$5,000,001 - \$10,000,000; 4, \$10,000,001- \$20,000,000; 5, \$20,000,001 - \$50,000,000; 6, \$50,000,001 - \$250,000,000; 7, \$250,000,001 - \$500,000,000; 8, Above \$500,000,001
<b>Market Dynamics</b>	Changes in our market are intense	Strongly disagree (1) - Strongly agree (5)
	Our clients regularly ask for new products and services	
	In our market, changes are taking place continuously	
	In our market, the volumes of products and services to be delivered change fast and often	
<b>Cronbach's Alpha: 0.791</b>		

Variable name	Variable description	Variable Value
<b>Uncertainty Avoidance</b>	The extent to which a society, organization, or group relies on social norms, rules, and procedures to alleviate unpredictability of future events. GLOBE project.	Each dimension is based on a Likert scale from 1 to 7, (1) meaning very low, and (7) meaning very high
<b>Gender Egalitarianism</b>	The degree to which a collective minimizes gender inequality. GLOBE project.	Each dimension is based on a Likert scale from 1 to 7, (1) meaning very low, and (7) meaning very high

VITA

JALY VIBETH CHEA MENÉNDEZ

Guatemala, Guatemala

- 2000 – 2004            B.S., Industrial Engineering  
Universidad Francisco Marroquín  
Guatemala
- 2007 – 2009            Master of Business Administration  
Universidad Francisco Marroquín  
Guatemala
- 2007 – 2009            Master of Management  
Tulane University  
New Orleans
- 2015 – 2015            Master of Leadership  
EADA  
Barcelona
- 2018 – 2021            Doctor of Business Administration  
Florida International University  
Florida
- Associate Dean  
School of Business  
Universidad Francisco Marroquín  
Guatemala