## University of Louisville

## ThinkIR: The University of Louisville's Institutional Repository

**Electronic Theses and Dissertations** 

5-2018

## A socioemotional wealth perspective on innovativeness and performance of family businesses.

Vasiliki Kosmidou University of Louisville

Follow this and additional works at: https://ir.library.louisville.edu/etd



Part of the Entrepreneurial and Small Business Operations Commons

## **Recommended Citation**

Kosmidou, Vasiliki, "A socioemotional wealth perspective on innovativeness and performance of family businesses." (2018). Electronic Theses and Dissertations. Paper 2992. https://doi.org/10.18297/etd/2992

This Doctoral Dissertation is brought to you for free and open access by ThinkIR: The University of Louisville's Institutional Repository. It has been accepted for inclusion in Electronic Theses and Dissertations by an authorized administrator of ThinkIR: The University of Louisville's Institutional Repository. This title appears here courtesy of the author, who has retained all other copyrights. For more information, please contact thinkir@louisville.edu.

# A SOCIOEMOTIONAL WEALTH PERSPECTIVE ON INNOVATIVENESS AND PERFORMANCE OF FAMILY BUSINESSES

## By

Vasiliki Kosmidou B.Sc., University of Macedonia, 2010 M.Sc. Ramon Llull University, 2012

A Dissertation
Submitted to the Faculty of the
College of Business of the University of Louisville
in Partial Fullfillment of the Requirements for the Degree of

Doctor of Philosophy in Entrepreneurship

Department of Entrepreneurship University of Louisville Louisville, Kentucky

May 2018

## Copyright 2018 by Vasiliki Kosmidou

All rights reserved

## A SOCIOEMOTIONAL WEALTH PERSPECTIVE ON INNOVATIVENESS AND PERFORMANCE OF FAMILY BUSINESSES

By

Vasiliki Kosmidou B.Sc., University of Macedonia, 2010 M.Sc. Ramon Llull University, 2012

A Dissertation Approved on

March 26, 2018

Dr. Manju K. Ahuja (Dissertation Chair)

Dr. Ghiyoung Im

Dr. Bruce H. Kemelgor

Dr. Howard E. Aldrich

## **DEDICATION**

This dissertation is dedicated to my parents

Lamprini, Lazaros, Vasiliki, and Theodoros,

my first and best teachers,

for their unconditional love and sacrifices for my education and better future.

### **ACKNOWLEDGEMENTS**

Completing this work has been made possible with the support and encouragement of several people to whom I would like to express my sincere gratitude. First and foremost, I would like to thank my advisor, Manju Ahuja. I consider myself extremely fortunate to have worked under the supervision of an advisor who truly cares. She has inspired me in unique ways and devoted much of her time and energy to help me navigate my dissertation journey. I am grateful for her feedback, encouragement, and the example that she has been for what a successful, enthusiastic, and generous scholar is.

Next, I would like to acknowledge my committee members: Howard Aldrich, Ghiyoung Im, and Bruce Kemelgor, who have guided and supported me despite their busy schedules. I feel honored that they have accepted to serve on my committee and I am thankful for their insights and feedback which helped me enhance my dissertation.

I am also indebted to the Forcht Center for Entrepreneurship and the College of Business of the University of Louisville for funding my research and making the empirical part of this work possible.

I would also like to thank my parents, Lamprini, Lazaros, Vasiliki, and Theodoros, my sister Maria, and my parents-in-law Athanasios and Milianna for always believing in me, loving me, and encouraging me to pursue my dreams in life. Finally, I owe my greatest "thank you" to my beloved husband, Theodosios. Thank you for opening the gates of a mythical dimension in love and understanding, and for enlightening my life during the past decade. Please hold my hand forever.

#### **ABSTRACT**

## A SOCIOEMOTIONAL WEALTH PERSPECTIVE ON INNOVATIVENESS AND PERFORMANCE OF FAMILY BUSINESSES

#### Vasiliki Kosmidou

### March 26, 2018

This dissertation is a theoretical and empirical examination of the relationships among socioemotional wealth, innovativeness, and performance in family firms. Building on the Behavioral Agency Theory's predictions that socioemotional wealth of family firms may affect their strategic decision making both positively and negatively, this study theoretically develops and tests a research model that aims at understanding the nuanced influences of different socioemotional wealth dimensions on firm innovativeness and performance. Specifically, the study hypothesizes that a family's socioemotional wealth affects the firm's innovativeness and performance both negatively, in the case of internal socioemotional wealth and positively, in the case of external socioemotional wealth.

Analyzing a sample of 277 US-based, privately-held, and small-sized family firms, I find that internal socioemotional wealth positively affects firm innovativeness. Interestingly, external does not have a significant impact on family firm innovativeness. The results also show that internal socioemotional wealth does not directly influence firm performance whereas external does. Lastly, the results highlight that, overall, socioemotional wealth has a more pronounced direct effect on family firm innovativeness

than it does on financial performance underscoring its importance for understanding the strategic decision-making of family firms.

The study contributes to the discussion of heterogeneity among family businesses in terms of the importance that they attach to different socioemotional wealth dimensions and engages the conversation about the dual effects of such heterogeneity on innovativeness and performance. It also helps advance our understanding of the nuanced effects of internal and external socioemotional wealth on innovativeness and performance. The results yield important practical implications for family business owners. They provide insights to family business owners to help them mitigate the negative effects of their socioemotional wealth on firm innovation through the professionalization of their firms and the promotion of their family brand identity.

## TABLE OF CONTENTS

DEDICATION	III
ACKNOWLEDGEMENTS	IV
ABSTRACT	V
LIST OF TABLES	IX
LIST OF FIGURES	X
CHAPTER 1: INTRODUCTION	1
1.1 SCOPE OF THE STUDY	9 11 16
CHAPTER 2: LITERATURE REVIEW	
2.1 CHAPTER OVERVIEW	27 32 33
CHAPTER 3: THEORETICAL BACKGROUND AND HYPOTHESES	38
3.1 CHAPTER OVERVIEW 3.2 BEHAVIORAL AGENCY THEORY 3.3 SOCIOEMOTIONAL WEALTH PERSPECTIVE 3.4 HYPOTHESES DEVELOPMENT 3.5 CHAPTER SUMMARY	39 41 45
CHAPTER 4: METHODS	65
4.1 CHAPTER OVERVIEW	65 71
4.4.1 Family Business Operational Definition	
4.4.2 Dependent Variable: Firm Performance	

4.4.4 Control Variables	77
4.5 Data Analysis	78
4.6 Chapter Summary	79
CHAPTER 5: RESULTS	80
5.1 Data Quality	80
5.1.1 Non-Response Bias	80
5.1.2 Common-Method Bias	83
5.1.3 Construct Reliability	83
5.1.4 Multicollinearity	84
5.1.5 Endogeneity Bias Testing	85
5.2 SAMPLE DESCRIPTION AND DEMOGRAPHICS	88
5.3 Main Findings	91
5.4 Chapter Summary	96
CHAPTER 6: DISCUSSION AND CONCLUSION	97
6.1 DISCUSSION	97
6.2 Implications	107
6.2.1 Theoretical Implications	107
6.2.2 Empirical Implications	111
6.2.3 Practical Implications	
6.3 Limitations	115
6.4 Future Research	117
6.5 CONCLUSION	119
6.6 Chapter Summary	121
REFERENCES	122
APPENDIX A	145
APPENDIX B	155
CURRICUI UM VITA	156

## LIST OF TABLES

Table 1: Theoretical Definitions & References	15
Table 2: Literature Review.	22
Table 3: Pilot Study Feedback and Implemented Questionnaire Changes	67
Table 4: Scale Reliability Coefficients in Pilot Studies	68
Table 5: Correlations and Descriptive Statistics of Pilot 2 Sample	70
Table 6: ANOVA Testing for Non-Response Bias	82
Table 7: Common Method Bias Testing	83
Table 8: Reliability Coefficients	84
Table 9: Multicollinearity Diagnostics	85
Table 10: Respondent and Firm Demographics	89
Table 11: Industries and Geographic Location of Firms in the Sample	90
Table 12: Correlations and Descriptive Statistics of the Sample	92
Table 13: Regression Results	95
Table 14: Summary of Significant and Not Significant Hypotheses	100

## LIST OF FIGURES

Figure	1: Research Model4	14
I iguic	1. 1Cocuron 1/10dc1	

#### **CHAPTER 1: INTRODUCTION**

The majority of businesses are, indeed, family businesses (Astrachan, 2003). This prevalence of family businesses in the corporate world has been the major argument used by scholars to explain why researching this type of business is important and necessary (Sharma, Chrisman, and Gersick, 2012). However, the prevalence of family businesses is not the only reason why research in this field has gained momentum over the past few years. Family businesses are also unique in theoretical importance thanks to the advantages that they offer, as indicated by their empirical performance differences compared to their non-family counterparts (Gedajlovic, Carney, Chrisman, and Kellermanns, 2012; Sharma, 2004).

One of the major determinants of such documented superior performance has been the innovations in which family businesses engage to gain and sustain performance advantages (De Massis, Frattini, Pizzurno, and Cassia, 2015). Nevertheless, whether family businesses' long-term orientation, defined as their priorities, goals and investments that bring results after five years or more (Le Breton-Miller and Miller, 2006), fosters or inhibits innovation is far from settled (Chrisman, Kellermanns, Chan, and Liano, 2009). On one hand, scholars have used agency theory to argue that the overlap between management and ownership in family firms inhibits risk taking and, as a result, can be detrimental to innovation and entrepreneurship in family firms (Naldi, Nordqvist, Sjoberg, and Wiklund, 2007). On the other hand, studies building on the family embeddedness perspective argue that family firms have a long-term orientation

due to their desire to pass the firm to future generations and that this desire fosters risk taking and innovativeness (Aldrich and Cliff, 2003; Zahra, Hayton, and Salvato, 2004). In other words, a quite significant waiting time is required for a firm to reap the benefits of innovative efforts and family businesses with their long-term orientation might be better equipped for this wait. Chrisman et al. (2009) have noted the mixed evidence in the literature and suggested that understanding the non-monetary goals of family firms is fundamental in advancing our knowledge about family firm innovation. This dissertation is an effort to better understand the non-monetary goals of family firms and examine their impact on family firms' innovativeness and performance. Doing so could help advance our knowledge by reconciling the existence of both positive and negative influences of non-monetary goals of family firms on their innovativeness and performance.

Some of the non-monetary goals that family firms pursue include the family's harmony and social status (Kotlar and De Massis, 2013), family firm control (Klein, Astrachan, and Smyrnios, 2005), authority exercising (Jones, Makri, and Gomez-Mejia, 2008) and family firm commitment (Chrisman, Chua, Pearson, and Barnett, 2012). The majority of non-monetary goals of family businesses are captured by the construct of socioemotional wealth (SEW) which includes the desire of the family to perpetuate the family dynasty, to create jobs for family members, and to maintain family control (Berrone, Cruz, and Gomez-Mejia, 2012; Debicki, Matherne, Kellermanns, and Chrisman, 2009; Gomez-Mejia, Haynes, Nunez-Nickel, Jacobson, and Moyano-Fuentes, 2007). Gomez-Mejia et al. (2007, p. 106) have been the first to theoretically define SEW as the "non-financial aspects of the firm that meet the family's affective needs, such as

identity, the ability to exercise family influence, and the perpetuation of the family dynasty".

Family businesses are highly heterogeneous along several dimensions including the importance that they attach to their SEW and to its protection (Zellweger and Dehlen, 2012). Such heterogeneity is highlighted by the existence of approximately thirty different definitions of what constitutes a family business (Cruz, Justo, and De Castro, 2012; Litz, 2008). It is also indicative of the difference in non-economic goals among family business owners that according to Chrisman et al. (2009) influences innovation in family firms. In other words, the varying innovative efforts among family firms might be better explained by the dimension of SEW to which they assign more importance.

To illustrate, family firms that have as their most important SEW goal to boost their reputation and to be recognized in their communities might be more prone to innovativeness than firms that have as their primary goal different SEW aspects such as maintaining the family harmony or the overall well-being of the family. Specifically, family firms viewing reputation as the most important aspect of their SEW to be protected, might care about achieving positive recognition in the broader community for their accomplishments (Debicki, 2012; Debicki, Kellermanns, Chrisman, Pearson, and Spencer, 2016) and view innovative efforts as one way of achieving that broader, positive recognition. The argument could be made though that not all family firms care about their reputation or other SEW goals in the same way. For instance, Deephouse and Jaskiewitz (2013) have provided empirical evidence that family firms whose name include the family's name have generally better reputation and care more about reputation because they view the family firm's name as an extension of their own name. Therefore, it is

important to understand how the family businesses' non-monetary goals influence innovation differently. Towards this end, this dissertation theorizes about the effects of the different dimensions of SEW on innovativeness and performance in family businesses.

Such effects of SEW have not received adequate attention in the family business literature and even more importantly, when SEW is the focus of a study, rarely has it been measured empirically. Scholars have previously theorized about the non-economic goals of family businesses. Specifically, they have used SEW to explain outcomes such as the family's reluctance to sell the family firm (Zellweger and Astrachan, 2008), its acceptance of lower IPO<sup>1</sup> gains (Leitterstorf and Rau, 2014), the firm's corporate social responsibility (Cruz et al., 2014) and R&D investments (Gomez-Mejia, Campbell, Martin, Hoskinsson, Makri, and Sirmon, 2014). Nevertheless, other than a few notable exceptions (Debicki, 2012; Debicki et al., 2016; Schepers, Voordeckers, Steijvers, and Laveren, 2014; Vandekerkhof, Steijvers, Hendriks, and Voordeckers, 2015), the majority of them has rarely measured SEW directly. To illustrate, researchers have provided empirical evidence that family businesses pollute the environment to a lesser extent than non-family businesses (Berrone, Cruz, Gomez-Mejia, and Lazzara-Kintana, 2010) and accept lower IPO gains (Leitterstorf and Rau, 2014). In both studies, however, the authors used the protection of SEW as an explanatory concept to facilitate the interpretation of their findings without empirically measuring it.

This lack of empirical measurement of SEW has prompted a number of researchers to call for more research on measures rather than speculations about SEW and on the underlying dimensions of SEW (Sharma and Carney, 2012; Vandekerkhof et

4

<sup>&</sup>lt;sup>1</sup> Initial Public Offering

al., 2015). In this dissertation, SEW importance (SEWi) is measured using Debicki's (2012, 2016) valid and reliable scale which consists of three dimensions including family continuity, family enrichment and family prominence. This measure permits not only the empirical examination of SEW, but also helps obtain a more in-depth understanding of its underlying dimensions, responding to the calls highlighted above.

The theoretical underpinnings of the SEW construct are rooted in behavioral agency theory. In fact, SEW has been described as the appropriate theoretical application of behavioral agency theory in the context of family businesses (Nordqvist, Melin, Waldkirch, and Kumeto, 2015). According to this theoretical framework, family businesses tend to be risk averse to situations and decisions that might endanger their SEW (Gomez-Mejia et al., 2007). Even further, family-firm owners may be more tolerant of performance well below their aspirations as long as they can protect their SEW by doing so (Gomez-Mejia et al., 2007). This risk aversion to SEW loss could indicate that family business owners' concerns about protecting their SEW might be influencing firm decisions, including the decision whether or not to innovate as well as the decision to persist when performance is low.

The influence of SEW on innovation could be both positive and negative. Even though the majority of scholars has considered the general effects of SEW as primarily positive (Berrone et al., 2012), there are researchers who emphasize that SEW can be both beneficial and harmful for family businesses (Kellermanns et al., 2012). To understand this duality of the effects of SEW on innovation, it is necessary to dive deeper into the discussion of internal versus external SEW (Cruz, Lazzara-Kintana, Gerces-Galdeano, and Berrone, 2014; Vardaman and Gondo, 2014). External SEW of family

firms captures the desire to have positive recognition (reputation and image) whereas, internal SEW captures the desire to maintain the family's unity and control (Vardaman and Gordo, 2014). This dissertation contributes to the discussions of positive-negative effects of SEW and internal-external SEW by hypothesizing that SEW can affect innovative efforts both positively, in the case of external SEW, and negatively, in the case of internal SEW.

In summary, this study aims at tackling the complex interrelationships between SEW, innovativeness, and performance in family businesses. Based on behavioral agency theory which highlights the family business owners' preoccupation with the protection of their SEW, this study hypothesizes about the different effects of internal and external SEW on firm innovation. Thus, the overarching research question that this study addresses is: "How does the importance of different socioemotional wealth aspects influence innovativeness and performance in family businesses?" By doing so, the study examines issues in areas that family business researchers have considered in need of further investigations. These areas, as well as the more specific research questions that are addressed by the present study, are described in more detail in the following sections.

### 1.1 Scope of the Study

This dissertation is focused on innovativeness in family businesses. The family business literature reveals that many scholars tend to compare family firms with non-family ones (Chua, Chrisman, Steier, and Rau, 2012). For instance, a recent review on innovation in family firms showed that seventeen out of twenty three studies compared the innovation activities of family firms with that of non-family ones (De Massis,

Frattini, and Lichtenthaler, 2012). One should be cautious when conducting such comparisons not only because of the heterogeneity within family firms themselves (Astrachan, 2003; Berrone et al., 2012; Chua et al., 2012; Sharma, 2004), but also, because dichotomies rarely help advance our understanding of firm phenomena.

Let's assume, for instance, that there is a research finding that is applicable to family firms and not applicable to non-family ones. Can one safely conclude that the finding applies to *all* family firms? The answer to this question may significantly influence a study's practical implications. In fact, Melin and Nordqvist (2007) have expressed concern that if researchers do not take into sufficient account the heterogeneity within family firms, research findings may actually harm rather than benefit family businesses when owners apply them blindly to their idiosyncratic situations. On top of this, Jorissen et al. (2005) point out that family businesses are not as different as studies comparing them with non-family businesses show. The authors also highlight that in many instances the observed differences between family and non-family businesses are not real, but instead are sample-based differences attributed to sample demographics.

For these reasons, the focus of this dissertation will be limited to *family businesses only* and not to comparisons between family and non-family businesses. In particular, the focus will be placed on *private family businesses* which differ in terms of their strategic decision making from the well-studied public firms (Carney, Van Essen, Gedajlovic, and Heugens, 2013). Besides, any results from large publicly-traded family firms are rarely applicable to small, private ones which researchers consider in need of further study (Classen, Carree, Van Gils, and Peters, 2014; Short et al., 2009). A family business is theoretically defined for the purposes of this study as a firm that is "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, Chrisman, and Sharma, 1999, p.25).

In addition, this dissertation examines in detail how family characteristics affect the firm and in particular, in what ways does socioemotional wealth relate to innovativeness and performance in family firms. SEW is a firm level construct (Deephouse and Jaskiewitz, 2013), which makes any linkage to other firm-level constructs, such as innovativeness and performance, appropriate from a unit of analysis perspective. The argument could be made though that in any firm's strategic decision-making process, factors such as the environmental conditions also exert a significant influence. The scope of this dissertation however, is limited to family influences on innovativeness that have been described as in need of further research examination (Basco and Rodriguez, 2009; Berrone et al., 2012). As a result, any environmental factors that could possibly affect the innovative efforts of family businesses, including environmental munificence/hostility (Covin and Covin, 1990) and environmental dynamism (Miller and Friesen, 1982) are controlled.

Last but not least, researchers posit that SEW should not be measured in the same way that economic wealth is measured because its value for a family is defined more by the subjective importance that the family attaches to it than by an amount that can be objectively measured (Debicki et al., 2016). This does not mean that SEW is not an endowment, but rather that it is the importance that families attach to SEW that influences their strategic decision making (Berrone et al., 2016; Miller and Breton-Miller,

2014). Therefore, the present study argues that the importance that a family attaches to SEW (SEWi<sup>2</sup>) represents the family's SEW endowment. The section that follows outlines in more detail the gaps in the literature on family firms' innovation.

### 1.2 Gaps in What We Know about Innovation in Family Firms

Three primary reflections explain why the relationship between SEW and innovativeness in family firms is in need of further research. First, the issue of whether the long-term orientation of family firms, an aspect of the continuity dimension of SEW, fosters or inhibits innovation remains still unresolved (Chrisman et al., 2009). Some scholars have used agency theory to propose that family firms do not undertake innovative efforts because innovating involves risk taking and family firms are more risk averse due to the overlap between management and ownership (Naldi et al., 2007). Other scholars have relied on a family embeddedness perspective to argue that family firms' long-term orientation, which stems from their desire to pass the firm to future generations, strengthens rather than weakens their risk-taking behavior and as a result, it fosters their innovativeness (Aldrich and Cliff, 2003; Zahra et al., 2004). The reason why risk taking is strengthened is attributed to the significant waiting time that is required for a firm to reap the benefits of innovation. Family businesses with their long-term orientation might be better qualified for waiting longer periods to benefit from their innovative efforts.

Chrisman et al. (2009) have proposed that our knowledge about the innovativeness of family firms can only be advanced if we examine in more detail the

\_

<sup>&</sup>lt;sup>2</sup> SEW and SEWi are used interchangeably.

firms' non-monetary goals which are captured by the construct of SEW. This dissertation intends to do exactly that, by looking at how the three dimensions of family firms' SEW affect innovativeness and performance differently.

Second, there are recent calls for studies that do not isolate the family from the firm (Basco and Rodriguez, 2009; Berrone et al., 2012). Given that family firms share distinctive characteristics including the emotional attachment of the family members to their firms which may affect their decision-making processes (Glover and Reay, 2015), it is relevant to understand the specific ways in which such characteristics captured by SEW affect innovativeness and performance. Besides, there are calls for studying in more detail this exact relationship (Berrone et al., 2012), for not missing the "family" variable when studying family businesses (Dyer, 2003), and for understanding the role of the family for innovation (Cruz and Nordqvist, 2012).

Last but not least, despite its importance, innovation has been such an underexplored topic in family business research (Lumpkin, Brigham, and Moss, 2010; Nordqvist, Habbershon, and Melin, 2008) that researchers highlight the need for more studies on the topic of innovation in family firms (Benavides-Velasco, Quintana-Garcia, and Guzman-Parra, 2013). A recent study found that many long-lived family firms have survived in generations despite demonstrating very low levels of innovation (Zellweger and Sieger, 2012). This might be considered as a rare finding given that firms with higher innovation may have better survival prospects and better financial performance. However, it has been shown that family businesses persist in time regardless of financial performance levels that are well below their aspiration levels because they have non-

financial goals that they seek to satisfy (Chrisman and Patel, 2012; Gomez-Mejia et al., 2007).

This dissertation focuses on such non-financial goals disentangling SEW and examining how its different dimensions (family continuity, family enrichment, and family prominence) could help explain the surprising finding by Zellweger and Sieger (2012) that long-lived family firms have performed well despite very low levels of innovation. In other words, the study seeks to show how low levels of innovativeness in family businesses vary depending on the dimension of SEW that is more important for the family. Authors have made a call for more research on the factors that may impact the varying innovative efforts of family businesses and SEW could be one possible factor (Benavides-Velasco et al., 2013). By emphasizing the importance of SEW for family firms, the present study makes several theoretical and empirical contributions that are discussed in the section right after the following.

## 1.3 Purpose and Research Questions

Very few topics in family business research have adequately addressed the effects of SEW on the innovativeness of family firms (Berrone et al., 2012). Moreover, the majority of researchers have focused on the positive side of SEW, leaving its negative side incompletely understood (Kellermanns, Eddleston, and Zellweger, 2012). Even fewer are the studies that have attempted to empirically measure SEW (Debicki, 2012; Debicki et al., 2016). The purpose of the present dissertation is to respond to all three issues by empirically measuring SEW and testing both its positive and its negative effects on innovativeness and performance of family businesses.

In doing so, there are overall, four research questions to be addressed by the present study. The first two seek to examine the nuanced influences of different SEW dimensions on firm performance. The second two relate to other family factors that can possibly influence the interrelations between SEW, innovativeness, and performance of family businesses. Such family factors, including the number of generations in the management of the business, the presence of non-family managers on the top management team, and the family-brand identity promotion, have been previously used separately in studies to account for a family's ability to pursue non-economic goals such as SEW in the family firm (Cruz et al., 2012). When there are non-family managers in the top management team of a family business, for example, the family firm members cannot pursue SEW as easily because the non-family members are more likely to engage in a decision-making process that is driven more by economic rationale and less by SEW considerations (Blumentritt, Keyt, and Astrachan, 2007).

The first research question addressed by this study is: "How does the importance of different socioemotional wealth goals of families influence innovativeness in family businesses?", whereas the second research question is: "How does the importance of different SEW goals of families influence firm performance?" In doing so, the study draws from the socioemotional wealth perspective to hypothesize about both positive and negative influences of SEW on the innovativeness and performance of family businesses. More specifically, internal SEW dimensions are expected to negatively influence innovativeness whereas external SEW has a positive effect on innovativeness. A more detailed discussion of the reasoning behind these relationships is provided in the hypotheses development section in Chapter 3.

In addition to the main interrelations among SEW, innovativeness, and financial performance, moderating effects on these relationships are also examined. In particular, drawing on the family embeddedness perspective (Aldrich and Cliff, 2003), a conceptual framework reinforcing the strong connection between the family and the business system (Rogoff and Heck, 2003), this dissertation seeks to understand the role of family involvement in the hypothesized relationships. Family embeddedness has been discussed in the literature as a measure of both family firm heterogeneity and extent of family involvement, and the overarching family embeddedness perspective has been previously used to account for a family's ability to pursue non-economic goals such as SEW in the family firm (Cruz et al., 2012).

According to the family embeddedness perspective, transitions such as intergenerational changes, social resources and human resources, can significantly affect the recognition of entrepreneurial opportunities (Aldrich and Cliff, 2003). Therefore, the main variables that capture family involvement, and that are included in the research model, are the *number of generations* as a family transition component, the *presence of non-family managers* involved in the day-to-day management and operations of the business as a human resources component, as well as the *family-brand identity promotion* as a social resource component.

Family-brand identity promotion is defined as a family firm's ability to communicate its family status (brand) to stakeholders in order to inspire trust and it has been linked to competitive advantages (Craig, Dibrell, and Davis, 2008). The moderating influences of these variables on the relationship between SEW and innovativeness constitute the focus of the third research question of the study which can be framed as:

"How do family influences including the number of generations involved in the firm, the presence of non-family managers, and the family-brand identity promotion affect the relationship between SEW and innovativeness in family firms?"

Last but not least, the family embeddedness perspective has been used to also understand the role of promoting the family's participation in management and strategic decision making for innovativeness and performance of family businesses. For instance, Craig et al. (2008) examined the role of family-brand identity promotion on innovation and performance and found a significant influence of the former on both innovativeness and performance. Therefore, the fourth and last research question of this study examines the moderating effect of family-brand identity promotion on the relationship between innovativeness and firm performance and is framed as follows: "How does family-brand identity promotion influence the relationship between family firm innovativeness and performance?" The definitions of all variables used in this dissertation are provided in Table 1 below.

**Table 1: Theoretical Definitions & References** 

Variable/Construct	Definition	Reference(s)
Family Business	A business that is "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, p.25)
Socioemotional Wealth (SEW)	The non-financial benefits specifically associated with the well-being and affective needs of family members that are derived from operating a business enterprise.	(Debicki et al., 2016, p.48)
Family Prominence Importance (SEW dimension)	The importance that a family firm attaches to building and maintaining the image of the family through the business.	(Debicki et al., 2016)
Family Continuity Importance (SEW dimension)	The importance that family firm members attach to family unity, establishing a family dynasty in the business and perpetuating the family values through the operations of the business.	(Debicki et al., 2016)
Family Enrichment Importance (SEW dimension)	The importance that family firm members attach to ensuring family happiness and satisfying family needs in the short-run including family harmony and well-being.	(Debicki et al., 2016)
Generations	The generational involvement or the number of different generations that are involved in the management and decision making of the family firm.	(Kellermanns and Eddleston, 2006)
Presence of non-family managers	This variable captures both the presence or not (binary variable) of non-family managers on a family firm's top management team and the number of non-family in case of presence.	(Stockmans et al., 2010)
Family-Brand Identity Promotion	A family firm's ability to communicate its family status (brand) to stakeholders in order to inspire trust and obtain a competitive advantage.	(Craig et al., 2008)
Innovativeness	A firm's willingness to support creativity and experimentation in introducing new products/services, novelty, technological leadership and research and development in developing new processes.	(Lumpkin and Dess, 2001, p.431)

#### 1.4 Contributions

This dissertation makes three theoretical contributions. First, by providing an in depth examination of SEW it takes the discussion about innovation and performance of family businesses to a new level. SEW is a relevant and theoretically novel perspective to apply to innovation research in family business because it holistically captures the economic and non-economic goals that family businesses have. Most research on innovation of family businesses so far has focused on either agency theory or stewardship theory. Indeed, among 215 annotated family business studies, agency theory ranked first and stewardship theory ranked second (De Massis, Sharma, Chua, and Chrisman, 2012). On one hand, agency theory makes the strong assumption that family firms' major goal is pecuniary benefits which is not necessarily true given the non-economic goals that they often pursue (Astrachan, 2003; Chrisman et al., 2009) and the persistence that they demonstrate even when financial performance is well below their aspirational levels (Chrisman and Patel, 2012; Gomez-Mejia et al., 2007). On the other hand, stewardship theory rests on the assumption that family firms act in a sacrificial way, not pursuing selfish or monetary interests at all (Berrone et al., 2012).

A SEW perspective in innovation in family businesses is a novel (Gomez-Mejia et al., 2007) and more illustrative perspective to apply as it allows for both economic and non-economic goals of family businesses to be taken into account. Under this perspective, family firms behave in risk-taking ways because they care about economic benefits but risk-taking behaviors can reverse to risk-averse ones the moment the family firms' SEW gets threatened (Gomez-Mejia et al., 2007). For instance, there is empirical evidence that family firms are three times less likely to join a very profitable cooperative

due to the consequential loss in their SEW (Gomez-Mejia et al., 2007). Further, the SEW perspective is a more representative perspective to apply to family firms compared to agency theory because SEW not only takes into consideration the emotional aspects of family firms (Baron, 2008), but also accounts for collaborative efforts of family firms with agents that are external to the family (Berrone et al., 2012).

Second, by disentangling the differential effects of internal and external SEW of family businesses on innovation, the study also contributes to the discussion of the dual role of SEW, as both an endowment and a burden for family businesses (Kellermanns et al., 2012). The family business literature is ripe with mixed results about the role of the family and specifically its long-term orientation on the decision to innovate. Scholars have shown that the long-term orientation of a family business can affect innovation both positively (Aldrich and Cliff, 2003; Zahra et al., 2004) and negatively (Naldi et al., 2007) which indicates the existence of a more complex relationship between innovation and the family. The present study seeks to reconcile the two views by suggesting that the differential importance of external versus internal SEW can help explain when SEW will affect innovation positively versus negatively. In other words, by acknowledging the existence of family firm heterogeneity, this dissertation extends the literature by examining the effects of such heterogeneity on innovativeness and performance.

Last but not least, following prior recent research calls, the study contributes to the discussion about the heterogeneity within family businesses with respect to their SEW (Chua et al., 2012; Cruz and Nordqvist, 2012). Although several studies have previously recognized such heterogeneity, most empirical studies examine the heterogeneity between family and non-family businesses which is found to be significantly smaller than

the heterogeneity within family businesses (Chua et al., 2012) and, often, a sample-based artifact (Jorissen et al., 2005). This dissertation provides an empirical demonstration of not only the existence of heterogeneity among family firms in terms of their SEW wealth but also its effects on the innovativeness of family firms. Besides, authors have recently suggested that SEW of family firms be integrated as either an antecedent or a moderator in research models that try to predict and explain variance in strategic firm decision making (Nordqvist et al., 2015).

This dissertation makes also empirical contributions. First, it directly measures a family firm's SEW, avoiding the application of previously used unidimensional ownership proxies which have been widely criticized as oversimplifying and inadequate (Berrone et al., 2012; Nordqvist et al., 2015). The present study uses a three-dimensional measure of SEW which has already been developed and validated (Debicki, 2012; Debicki et al., 2016) and responds to the need for direct measurement of the construct (Strike, Berrone, Sapp, and Congiu, 2015; Vandekerkhof et al., 2015). Second, the study incorporates SEW as an antecedent of a family firm's innovativeness. There have been calls for examining SEW impacts on innovation or for using SEW as a moderator in broader research models that seek to explain and predict the strategic decision making of a family firm (Nordqvist et al., 2015).

#### 1.5 Structure

The study proceeds as follows. Chapter 2 provides an overview of the literature on SEW, its importance for family firms (SEWi), its relationship with innovation in family firms, and its dual (positive and negative) effects on firm outcomes including

innovation and performance. Chapter 3 details the theoretical background on which the research model is based and develops the hypotheses of the study. Chapter 4 discusses the pilot studies that were conducted as well as the overall methods used for main data collection purposes, analysis and testing of the proposed relationships. Chapter 5 offers the results of the empirical testing of the relationships and highlights the support or lack thereof of the proposed hypotheses. Chapter 6 discusses the findings of this study and concludes by addressing its implications, limitations, and future directions.

## 1.6 Chapter Summary

This introductory chapter started by explaining the purpose and motivations of the study along with the overarching research question that is being examined, "How does the importance of different socioemotional wealth dimensions (SEWi) influence innovativeness and performance in family businesses?". It also highlighted the role of the three moderating factors that were examined on the main relationships including generational involvement, presence of non-family managers on the family firm top management teams, and family brand identity promotion.

The chapter then proceeded by outlining the scope of the study which entailed a focus on only family influences in small, US-based, and privately-held family firms. The scope also included a focus on only family firms without any comparisons between family and non-family firms which is justified given that recent research has established the heterogeneity within family firms as much more pronounced than the heterogeneity between family and non-family firms.

The chapter also briefly described the behavioral agency theory and the SEW lens, the theoretical perspectives that have been used for the theory and hypotheses development. Next, the chapter briefly highlighted the theoretical as well as the empirical contributions of this research. Lastly, this first chapter concluded by providing the organization and structure of the present study outlining also what is included in each of the chapters and subsections that follow.

#### CHAPTER 2: LITERATURE REVIEW

## 2.1 Chapter Overview

This chapter is divided into four sections. Section 2.2 describes in detail the nature of the SEW construct and briefly discusses the underlying theories that have been used so far in the literature to study it: behavioral agency theory and the SEW perspective. A more detailed description and development of the theories is provided in the next chapter which entails the theoretical background and hypotheses of the study. This section also discusses different empirical measurements of SEW in the literature introducing the measure that will be used in this study as well.

Section 2.3 of the present chapter discusses the fundamental role that SEW plays in understanding the mixed empirical evidence with respect to the innovativeness of family businesses. Next, section 2.4 presents the relationship between SEW and innovativeness in family businesses as it has been demonstrated in prior quantitative and qualitative work.

Lastly, section 2.5 delves deeper into the dual role of SEW for family firms' innovativeness highlighting both its positive and its darker side. The section also refers to how the positive and negative sides of SEW connect with internal versus external SEW. The key papers that are cited in all four sections of the literature review chapter are summarized based on these four sections in Table 2 and discussed in detail in the subsections that follow.

**Table 2: Literature Review** 

SEW Topic	Citation	Theoretical Lens	Context	Sample	Method	Operationalization of SEW or Reference	Key Findings
Section 2.2: SEW Theoretical and Operational Definitions	Berrone, Cruz and Gomez- Mejia (2012)	N/A - Review Paper	Family firm papers that focus on the nature and operationalization of SEW	N/A	N/A	The authors propose a set of five dimensions that could measure SEW including family control and influence, identification of the family members with the firm, binding social ties, emotional attachment to the firm and renewal of family bonds through succession (FIBER)	Proposition of FIBER dimension and suggestion of research agenda on SEW including how SEW affects innovation and entrepreneurship in family firms
	Debicki (2012)	The author is drawing on Behavioral Theory of the Firm and Prospect Theory	Family firms only	208 family firms	Linear regression analysis for hypothesis testing	The author developed and validated a scale for SEW measurement consisting of three dimensions: family reputation, sustainability and obligations	The importance of SEW influences negatively the extent of internationalization in family firms
	Debicki, Kellermanns, Chrisman, Pearson and Spencer (2016)	The authors are drawing on the SEW literature	Family firms only	17 Polish and 30American family firms for the pre- test and 208 family firms for validation	Exploratory and Confirmatory Factor Analysis	The author developed and validated a scale for SEW measurement consisting of three dimensions: family prominence, continuity and enrichment	The authors developed and validated a SEW scale to empirically measure the importance that family firms attach to their SEW
	Deephouse and Jaskiewitz (2013)	The authors are drawing on Social Identity Theory and SEW literature	Family owned versus non- family-owned firms	194 large firms from eight different countries	Linear regression analysis for hypothesis testing	The authors use the percentage of shares owned by a family as a proxy for the construct of SEW to argue that a possible reason why family firms care about their reputation is to preserve their SEW	Family firms have better reputations than non-family and more when the name of the family is included in the family firm's name

Gomez-Mejia, Haynes,	Behavioral Theory and	Family owned versus non-family	1,237 Spanish family and	Linear regression	The authors use loss of control (turning from a private firm to a	Family firms are willing to accept
Nuñez-Nickel, Jacobson and Moyano- Fuentes (2007)	SEW SEW	owned firms	non-family olive oil mills	analysis for hypothesis testing	public) as a proxy for losing SEW	important performance risks in order to help protect their SEW
Gomez-Mejia, Cruz, Berrone and De Castro (2011)	N/A - Review Paper	Family firms versus non-family firms and their differences across different managerial decisions	N/A	N/A	SEW is the defining feature of family firms and the most important differentiator from the non-family ones	SEW helps explain and understand better many managerial choices and decisions including corporate entrepreneurship, diversification and general risk taking
Schepers, Voordeckers, Steijvers and Laveren (2014)	The authors are drawing upon the SEW literature	Private family firms only	232 Belgian private family firms	Linear regression for hypothesis testing	SEW was operationalized using four questions from the STRATOS questionnaire	Entrepreneurial orientation of family firms positively affects financial performance and SEW moderates the relationship in such a way that the effect becomes less pronounced for higher levels of SEW

	Strike, Berrone, Sapp and Congiu (2015)	The authors are drawing upon the SEW literature	Family owned versus non- family-owned firms	264 family and non- family firms from the S&P 500 (longitudinal data: 3,432 firm-year observations)	Linear regression for hypothesis testing	SEW was measured using the CEO's career horizon (time to retirement) as a proxy	CEO's career horizon affects negatively international acquisitions and the effect is weaker for family firms compared to non-family ones and for family managed family firms compared to non-family managed family firms
Section 2.3: SEW Importance	Chrisman and Patel (2012)	Behavioral Agency Model (BAM) and SEW perspective	Family firms versus non-family firms	964 publicly held family and non- family firms	Linear regression analysis for hypothesis testing	The authors use R&D investments as a proxy for threat of SEW	Family firms are concerned with maintaining the desired levels of SEW but at the same time, when aspirational performance is below the desired levels, their economic and non-economic goals including SEW tend to converge
	Debicki (2012)	Behavioral Agency Model (BAM) and SEW perspective	Family firms only	208 family firms	Linear regression for hypothesis testing	The author developed and validated a SEW importance scale that has three dimensions including family sustainability, obligations and reputation	SEW of family firms influences negatively internationalization of family firms and the effect is moderated by international environmental munificence
	Gomez-Mejia, Haynes, Nuñez-Nickel, Jacobson and Moyano- Fuentes (2007)	Behavioral Theory and SEW	Family owned versus non-family owned firms	1,237 Spanish family and non-family olive oil mills	Linear regression analysis for hypothesis testing	The authors use loss of control (turning from a private firm to a public) as a proxy for losing SEW	Family firms are willing to accept important performance risks in order to help protect their SEW

	Leitterstorf and Rau (2004)	Behavioral Agency Model (BAM) and SEW perspective	Family firms versus non-family firms	153 German family and non-family firms	Linear regression (hierarchical) for hypothesis testing	The authors do not measure SEW directly but use it as an explanation for why family firms sacrifice IPO proceeds compared to non-family firms	Family firms are willing to accept lower IPO gains than non-family firms, in order to protect their SEW
Section 2.4: SEW, Family Influences, and Innovation	Kellermanns and Eddleston (2006)	Family perspective	Family firms only	126 US family firms	Linear regression for hypothesis testing	The authors focus on only one aspect of SEW, generational involvement, arguing that in family firms more generations involved in the management means that the concern of obtaining economic gains is expected to be greater than that of preserving SEW	The authors show that generational involvement in family firms positively affects corporate entrepreneurship because later generations are less concerned about SEW and are thus, more willing to take the risks associated with innovation and entrepreneurship
	Lichtenthaler and Muethel (2012)	Capability- based view	Family versus non-family firms	119 German manufacturin g firms	Linear regression for hypothesis testing	The authors measure family involvement using four items that capture a family's influence on the business, long-term orientation, members' efforts and members' care about the fate and the future of the firm	The degree of family involvement influences positively a firm's capacity to sense/recognize technology-based product innovation opportunities
	Vandekerkhof, Steijvers, Hendriks, and Voordeckers (2015)	Top management team (TMT) and SEW literature	Family firms only	145 Belgian family firms	Linear regression for hypothesis testing	SEW was operationalized using four questions from the STRATOS questionnaire	SEW moderates the effect of innovativeness and internationalization on the appointment of non-family managers

Section 2.5: SEW and Dual (Positive and Negative) Effects on Firm Outcomes	Kellermanns, Eddleston, Sarathy, and Murphy (2012) Cruz and Nordqvist (2012)	Family and generational involvement literature  EO literature and generational involvement perspective	Family firms only  Family firms only	126 US family firms 882 Spanish family firms of small and medium size	Multiple regression analysis for hypothesis testing Hierarchical regression analysis	Only some SEW dimensions were measured empirically including the generational involvement in the firm  Only some SEW dimensions were measured empirically including the generational involvement and the employment of family members in the firm	Having more than 1 generations involved in the family firm influenced negatively firm performance  Generational involvement influences positively all three entrepreneurial orientation dimensions including innovativeness, risk taking, and proactiveness
	Cennamo, Berrone, Cruz, and Gomez- Mejia (2012)	SEW perspective	Family firms only	N/A	N/A	The authors use the FIBER SEW measure developed by BErrone et al. (2010) to develop theoretical propositions about the positive effects of all five dimensions of SEW on proactive stakeholder engagement	Family firms are more prone to engage in proactive stakeholder activities because of SEW preservation and enhancement by doing so
	Kellermanns, Eddleston and Zellweger (2012)	SEW perspective and proactive stakeholder engagement literature	Commentary to (Berrone et al., 2012)	N/A	N/A	The authors engage the conversation of SEW and comment on Berrone et al. (2012) by submitting the logic that SEW is not always positive but can have a negative (darker) side as well	SEW influences negatively proactive stakeholder engagement and some dimensions of SEW can be detrimental for the firm because they lead to a "family- centric" behavior of the family members

# 2.2 Socioemotional Wealth – Theoretical and Operational Definitions

Family firms are distinct from non-family firms because of their ownership and management overlap (Chua et al., 1999). The persistence of family firms in times of low financial performance indicates that they care not only about financial profits, but also about non-monetary benefits including the satisfaction of the need of belonging, the preservation of the family dynasty across generations, the maintenance of a good firm reputation, among others (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010). Research shows that, in fact, these firms care more about the preservation of nonmonetary factors than monetary wealth (Ma, Mattingly, Kushey, and Ahuja, 2013). These non-monetary benefits are captured by the construct of SEW that Gomez-Mejia and colleagues have introduced first to the family business literature (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2010). Although scholars have so far emphasized the observed differences between family and non-family firms as separate grounds (Deephouse and Jaskiewitz, 2013; Cruz et al., 2014), differences within family businesses should also be considered, because family firms are also highly heterogeneous and different from one another. For instance, Miller et al. (2007) report differences between family firms that are managed by founders and those managed by heirs. In fact, the heterogeneity within family businesses is considered much higher than the reported heterogeneity between family and non-family firms (Chua et al., 2012).

SEW is one of the key dimensions across which family firms differ significantly from one another (Gomez-Mejia, Cruz, Berrone and DeCastro, 2011). Another one is the "familiness" which describes how family a family firm is and to what extent the family interacts with the management of the firm (Habbershon and Williams, 1999; Rutherford,

Kuratko, and Holt, 2008). However, although scholars have considered family firms' SEW as the most important distinguishing feature from non-family firms (Gomez-Mejia et al., 2011), little research has attempted to link family firms differences to factors such as SEW (Cennamo et al., 2012). Therefore, a deeper examination of the SEW dimensions is necessary in order to account for differences within family firms and to this end, there have been many calls for research on family firms' SEW (Westhead and Howorth, 2007; Chrisman, Steier, and Chua, 2006).

Researchers have responded to these calls and used SEW to try and explain family firm phenomena including proactive stakeholder commitment (Cennamo, Berrone, Cruz, and Gomez-Mejia, 2012), risk-taking behavior (Gomez-Mejia et al., 2007; Strike, Berrone, Sapp, and Congiu, 2015), IPO underpricing (Leitterstorf and Rua, 2014), and the likelihood of placing a non-family manager in the firm (Vandekerkhof et al., 2015). However, despite the wide use of the construct of SEW in the family business literature researchers have rarely measured it directly. As part 1 of Table 2 above shows, most scholars have relied on proxies instead, recognizing openly the need for direct measurement of the construct (Strike et al., 2015; Vandekerkhof et al., 2015).

One type of the proxies used for SEW includes ownership and involvement proxies. For example, Deephouse and Jaskiewitz (2013) argue that the ability of a family firm to pursue SEW goals depends on its power to influence the status quo of the firm which in turn, can be revealed by the firm's involvement in the ownership and/or management. Based on this proxy, the higher the percentage of shares owned by the family, the higher the implied SEW.

Another category involves the use of the CEO's career horizon as a proxy for a family firm's SEW. In particular, Strike et al. (2015) make the point that CEOs' age is negatively correlated with SEW and that the more CEOs approach retirement, the more they care about financial benefits as opposed to non-financial ones such as SEW. In other words, CEOs' age reveals the time until retirement, and as a result, the older CEOs are expected to have a higher interest for personal financial compensation than the younger ones.

Such use of proxies in order to determine family firms' SEW has been widely criticized as an oversimplification. For example, Berrone et al. (2012) consider the use of percentage of shares owned by the family as unidimensional and insufficient. In addition, other scholars state that SEW of family firms needs to be directly measured and integrated as either an antecedent or a moderator in research models that try to predict and explain variance in strategic firm decision making (Nordqvist, Melin, Waldkirch, and Kumeto, 2015).

Following these recommendations, a few authors have begun to refrain from using proxies to empirically measure family firms' SEW (Berrone et al., 2012; Debicki, 2012; Debicki et al., 2016; Schepers et al., 2014; Vandekerkhof et al., 2015). To the best of my knowledge, there are three notable exceptions to the use of proxies for capturing family firms' SEW. These exceptions are also presented above, in part 1 of Table 2. The first exception is the conceptual paper by Berrone et al. (2012) in which the authors develop a measure of SEW that encompasses five dimensions including "family control, identification of family members with the firm, binding social ties, emotional attachment

of family members and renewal of family bonds to the firm through dynastic succession"<sup>3</sup>. However, although these proposed measurement items have been used by scholars of conceptual papers for the development of propositions (Cennamo et al., 2012), they have never been empirically tested for validity and reliability due to the tremendous challenges that such validation would pose (Berrone et al., 2012).

The second exception relates to the use of part of the Strategic Orientations of Small and Medium-Sized Enterprises (STRATOS) questionnaire for empirically capturing family firms' SEW (Schepers et al., 2014; Vandekerkhof et al., 2015). Four of the items in the STRATOS questionnaire have been used to measure SEW including the objective of the family to maintain 1) family traditions and the family character of the business, 2) jobs for the family, 3) independence in ownership, and 4) independence in management. Authors have relied on this measure of SEW so far to test how SEW moderates either the relationship between entrepreneurial orientation and firm performance in family firms (Schepers et al., 2014), or the relationship between firm internationalization and the likelihood of appointing a non-family manager (Vandekerkhof et al., 2015). However, these authors have openly recognized the use of the STRATOS measure for SEW as a limitation and sided with Berrone et al. (2012) on the need for a better measurement of the SEW construct.

The last exception on the measures of SEW stems from Debicki (2012) and Debicki et al. (2016) who developed and empirically validated a scale for the measurement of the importance of SEW to the members of family firms. This dissertation follows Debicki's validated SEWi measure which includes three dimensions: family continuity, family enrichment, and family prominence. Family continuity is related with

<sup>&</sup>lt;sup>3</sup> The authors call their SEW measure FIBER for brevity.

the importance that the family owners attach to issues including family preservation and continuity as well as maintaining the family values through the operation of the business (Debicki, 2012; Debicki et al., 2016). *Family enrichment*, as a second dimension of SEW, represents the obligations of the family members regarding the fulfillment of responsibilities that they may feel towards the rest of the family. This dimension is related to the satisfaction of the short term needs of the family as well as family happiness (Debicki, 2012; Debicki et al., 2016). The third and last dimension of SEW, *family prominence*, captures the importance that the family members assign to the reputation and the external image of the firm. This dimension is primarily related with how others view and feel about the family firm (Debicki, 2012; Debicki et al., 2016).

This three dimensional SEW scale demonstrates some similarities with the proposed FIBER<sup>4</sup> measure by Berrone et al. (2012) although the dimensions are named differently. In particular, "family prominence" captures the identification and social ties dimensions of the FIBER measure and is operationally defined as the importance that the family attaches to building and maintaining the image of the family through the business (Debicki et al., 2016). Further, "family continuity" relates to the renewal dimension of FIBER and is operationally defined as the importance that the family attached to family unity, to establishing a family dynasty in the business, and to perpetuating the family values through the operation of the business (Debicki et al., 2016). However, "family enrichment" does not encompass any of the FIBER dimensions and based on this observation Debicki et al. (2016) state that their proposed measure of SEW might be targeting a slightly different set of factors that could potentially impact a firm's strategic

\_

<sup>&</sup>lt;sup>4</sup> FIBER: Family control and influence, Identification of the family members with the firm, Binding social ties, Emotional attachment to the firm and Renewal of family bonds through dynastic succession.

behavior. Finally, "family enrichment" is operationally defined as the importance that the family attaches to ensuring family happiness, and to satisfying the family needs in the short run including family harmony and well-being (Debicki et al., 2016).

## 2.3 Importance of Socioemotional Wealth in Family Business Research

Several scholars consider SEW as the defining feature of family firms that differentiates them from non-family ones (Gomez-Mejia et al., 2011). Consequently, these scholars view the SEW perspective as the dominant framework used to explain differences between family and non-family firms (Berrone et al., 2012). Research has shown that SEW is so important to family firms that they can often compromise IPO gains (Leitterstorf and Rau, 2014), decline an offer to join a profitable cooperation (Gomez-Mejia et al., 2007), engage to a lesser extent in internationalization activities (Debicki, 2012) or sacrifice economic gains (Chrisman and Patel, 2012) in order to protect their SEW.

In their seminal paper, Gomez-Mejia et al. (2007) studied family and non-family Spanish olive oil mills and showed that family firms do not mind incurring a performance risk if by doing so they can protect the family's SEW whereas non-family firms engage in a decision-making process that is more driven by financial considerations. The authors have shown that both types of firms may be taking significant risks with the only difference that in the case of family firms, the primary concern is maintaining SEW whereas for the non-family ones the primary concern is advancing financial benefits. On a similar note, Chrisman and Patel (2012) have argued that while family firms are preoccupied with maintaining the desired levels of SEW, when aspirational performance

is below the desired levels, their economic and non-economic goals including SEW tend to converge.

As shown in part 2 of Table 2, researchers have also emphasized the SEWi for family firms not only through the direct discussion of the non-economic goals, but also through SEW's effects on important organizational outcomes including going public (Leitterstorf and Rau, 2014), innovating (Vandekerkhof et al., 2015), and engaging in internationalization (Debicki, 2012). In particular, Leitterstorf and Rau (2014) use SEW to explain why family firms seem to be willing to accept significantly lower IPO gains compared to their non-family counterparts. Similarly, Debicki (2012) has provided empirical evidence that higher SEW of family firms negatively affects the extent to which they are willing to internationalize. The section that follows discusses in detail the association between the SEW of family firms and innovation.

#### 2.4 Socioemotional Wealth and Innovation

Studying innovation in either a family business context or a non-family one is so fundamental that many scholars consider unnecessary the justification of examining innovation. In the words of Damanpour, Walker and Avellaneda (2009, p.650), "the study of innovation hardly needs justification as scholars, policy makers, business executives, and public administrators maintain that innovation is a primary source of economic growth, industrial change, competitive advantage, and public service". Thus, it is no surprise that several scholars in family business research have focused their attention on the examination of innovation and its antecedents.

Much of the research that has been done on innovation in family businesses is quantitative (Craig and Moores, 2006; DeMassis et al., 2013, Hsu and Chang, 2011) although some qualitative papers do exist (Cassia, De Massis, and Pizzurno, 2011). However, despite the abundance of papers examining innovation in family businesses, a review of 190 family business papers published between 1996 and 2003 showed that innovation and entrepreneurship topics were the primary focus in only 5% of them (Chrisman, Chua, and Litz, 2003).

Even though only few, studies have connected family influences including SEW with family firms' innovation as section 2.3 of Table 1 shows. To be more specific, Kellermanns and Eddleston (2006) provide empirical evidence that generational involvement, i.e., having within the family business family members from different generations, influences positively corporate entrepreneurship and innovativeness in family business due to the fact that younger members are expected to have a more entrepreneurial mindset and bring fresh ideas in their firms.

In a similar vein, Lichtenthaler and Muethel (2012) used a sample of German family firms to show that the different levels of family involvement contributed to significant differences in their innovative capabilities and efforts. The authors use the term family involvement to describe family firms' long-term orientation, social capital, as well as socioemotional wealth and find that a higher level of family involvement positively affects the recognition of innovative opportunities. Last but not least, SEW has been examined as a moderator in the relationship between innovativeness and the probability of appointing a non-family manager in the firm. In particular, Vandekerkhof et al. (2015) have shown that family firms' innovativeness decreases the probability of

appointing non-family managers despite the need for new knowledge because such appointment would come with the cost of extending the management and control of the firms outside of the hands of the family and thus, of losing SEW.

Despite such connections, there are still recent calls for research that will focus on examining the role of SEW of family firms to innovation, either as an antecedent or a moderator in other relationships. In the words of Nordqvist et al. (2015, p.51), "...dimensions of social capital and SEW, such as perceptions, values, attitudes, identities and intentions of the dominant coalition in the organization (Argote and Greve, 2007), should be measured and included as antecedents or moderators in the study of family firms' strategic behavior".

The present dissertation tackles this exact issue of examining the effects of SEW of family firms on innovativeness and financial performance in an effort to better understand the family's influence in the innovation levels of the firm. These effects are hypothesized to be not only positive but also negative, depending on which dimension of SEW is more important for the family firm. Besides, prior research has shown that the importance attached to internal SEW goals versus external SEW goals may have different effects on financial performance (Miller & Breton-Miller, 2014). The next subsection discusses in more detail the dual (positive and negative) effects of family firms' SEW on innovativeness.

#### 2.5 The Dual Role of Socioemotional Wealth on Firm Outcomes/Behaviors

The effects of the owning family on managerial outcomes of the firm can be both positive and negative (Dyer and Whetten, 2006) although the majority of the family

business literature focuses on the positive side of SEW (Kellermanns et al., 2012). For instance, Naldi et al. (2013) posit that attaching high importance to firm reputation would be expected to be beneficial for financial performance. However, Kellermanns et al. (2012) shift the attention to the darker side of SEW explaining that family firms with high SEW may seek to satisfy the family's short-term needs first, and sometimes this may happen at the expense of other stakeholders. As mentioned previously, the family enrichment dimension of SEW represents the obligations of the family members regarding the fulfillment of responsibilities that they may feel towards the rest of the family. This dimension is related to the satisfaction of the short-term needs of the family as well as family happiness (Debicki, 2012; Debicki et al., 2016). Thus, it could be argued that in a family firm that cares primarily about the satisfaction of the short-term needs of the family, the family enrichment dimension might be associated with negative firm outcomes, one of which is the reduced innovative efforts in which a firm engages as a way to protect its SEW.

On a similar note, Cennamo et al. (2012) submit the logic that family firms vary on their levels of proactive stakeholder commitment depending on which dimension of SEW is prioritized by the owning and governing family. The authors posit that socioemotional wealth is not a monolithic concept and that there may be differential impacts of its dimensions on firm behaviors. Further, Miller and Breton-Miller (2014) show that the effects of SEW on financial performance vary based on the dimension of SEW that is more important for the family. Based on these arguments, it is suggested in this dissertation that the effects of SEW on the innovativeness of a family firm can be

both positive and negative depending on which goals a family seeks to satisfy or in other words, which SEW dimension is more important for a family.

## 2.5 Chapter Summary

The present chapter has described in detail the nature of the SEW construct and the underlying theories that have been used in the literature, to date, to study it. These theories include behavioral agency theory and its family business variant, the SEW perspective. Chapter 2 has also emphasized the fundamental role that SEW plays in understanding the mixed empirical evidence with respect to the innovativeness of family businesses. Additionally, it has presented in more detail the relationship between SEW and innovativeness in family businesses providing the key papers that are cited in all subsections of the chapter in a table (Table 2). Lastly, the chapter concluded by delving deeper into the dual role of SEW for family firms' innovativeness highlighting both its positive and its darker side for family firm innovation despite the literature's emphasis on the positive side. Chapter 3 that follows provides the theoretical background of this study based on which the hypotheses have been developed.

#### CHAPTER 3: THEORETICAL BACKGROUND AND HYPOTHESES

### 3.1 Chapter Overview

This dissertation examines the role of the family characteristics including SEW on innovativeness and performance in family firms. The proposed model conceptually develops and empirically tests the interrelations between SEW, firm innovativeness, and firm performance. The present chapter provides the theoretical foundations used for the development of the research model. First, I present the behavioral agency model (BAM) which researchers recognize as the precursor of SEW (Cruz and Nordqvist, 2012) and then delve deeper into the SEW perspective which has been characterized by scholars as the family business variant of BAM (Lim, Lubatkin and Wiseman, 2010; Nordqvist et al., 2015).

Using BAM as a framework, researchers have argued that when family businesses face a trade-off between a choice of incurring financial gains (but losing SEW) and the reverse of maintaining SEW (but losing in economic terms), they would be more prone to choose the latter over the former (Gomez-Mejia et al., 2007). Such selection demonstrates that the importance that family businesses attach to family values and other factors included in SEW can also have an influence on their strategic decision making. Therefore, a more detailed discussion of BAM and the SEW perspective is necessary. Both perspectives are presented in the sections below, which are followed by the development of the specific hypotheses of the research model.

### 3.2 Behavioral Agency Theory

The BAM or behavioral agency theory is an integrative theory that combines elements from behavioral, prospect, and agency theory. Wiseman and Gomez-Mejia (1998) were the first to use BAM in order to better understand managers' risk preferences and decision-making processes. The BAM permits the relaxation of the assumption that agency theory makes about the risk preferences of decision makers being consistent and stable over time, and this is why it has been described as a superior alternative to agency theory when it comes to explaining managerial risk taking (Nordqvist et al., 2015). Specifically, BAM combines agency theory with prospect theory (Kahneman and Tversky, 1979) to suggest that the risk preferences of decision makers are not stable, as assumed by agency theory, but rather, contingent upon the wider corporate contexts (Wiseman and Gomez-Mejia, 1998; Gomez-Mejia et al., 2007). In other words, unlike agency theory, the BAM does not assume that principals are always risk averse and agents are always risk seeking.

In contrast, the BAM makes two arguments regarding decision making and the attitude towards risk of decision makers. First, the BAM posits that the strategic decisions are "reference-based" which means that decision makers assess their possible options or courses of action by contemplating about the consequences on their current wealth (Wiseman and Gomez-Mejia, 1998). Second, the BAM suggests that decision makers are mainly "loss averse" which means that their primary concern is reassuring that their decisions will not imply loss of their current wealth (Wiseman and Gomez-Mejia, 1998).

In sum, the BAM is a theoretical framework that has been developed in order to better understand the risk preferences of managers or decision makers in general, stating that managers assess their options by using their current wealth as a reference point and that they can be risk seeking, risk neutral or risk averse under different corporate or contextual circumstances.

However, the BAM makes several assumptions that do not always hold in the case of family firms (Lim, Lubatkin, and Wiseman, 2010). For instance, under behavioral agency theory, the ownership is separated from the management of a firm in such a way that agents are expected to behave in a self-interested way seeking to maximize their own wealth at the expense of the wealth of the principals that they are assumed to serve. In addition, behavioral agency theory assumes decision makers assess wealth maximization only based on financial considerations not accounting for the possibility of non-financial gains.

These assumptions render this theoretical framework not easily applicable to family firms where there is an overlap between management and ownership and where decision makers take into consideration not only financial aspects but also non-financial ones (Astrachan, 2003; Chrisman et al., 2009). For these reasons, the family business literature has adopted the SEW perspective as the family-business variant of the BAM and behavioral agency theory. The following section discusses the SEW perspective in further detail.

### 3.3 Socioemotional Wealth Perspective

Given the limited applications of the behavioral agency theory in the context of family businesses, researchers have developed the socioemotional wealth perspective which is rooted in behavioral agency theory (Sciascia, Nordqvist, Mazzola, and De Massis, 2015). The SEW perspective offers a more relevant application for the case of family firms because it assumes that family business owners make decisions having their SEW as their reference point and that they are primarily loss averse when it comes to protecting and maintaining SEW (Gomez-Mejia et al., 2007; Gomez-Mejia et al., 2011). In other words, family business owners care not only about financial gains when they make decisions, but also about the non-financial benefits that are captured by the construct of SEW.

Under the SEW perspective, family business owners are loss averse because of their goal of avoiding losing their SEW. They are also expected to demonstrate varying levels of risk preferences depending on what is necessary for the protection of their SEW (Nordqvist et al., 2015). Based on these observations, I argue that the three dimensions of family firms' SEW may relate differently with innovation in family firms. Specifically, I hypothesize that the importance a family attaches to the continuity and enrichment dimensions of SEW will both negatively affect firm innovation.

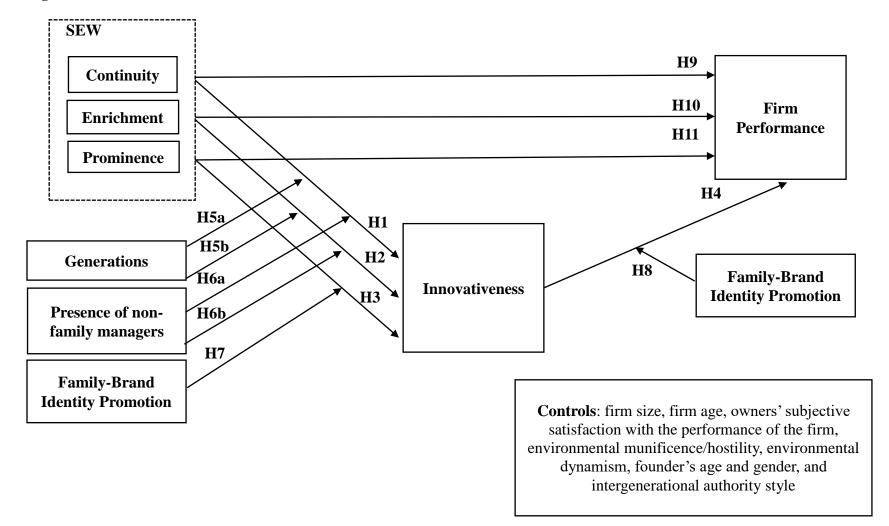
The main reasoning behind these hypotheses is that innovative efforts are likely to be perceived by the family as reducing its control over the business as well as its ability to either provide employment to family members or maintain its unity. In other words, the more important continuity and enrichment are, the more family business decision makers will be framing the decision to innovate based on losses of SEW and thus, the less motivated they will be to engage in innovative actions. By contrast, the importance a family attaches to the prominence dimension of SEW, which relates to the image and reputation that it has, is hypothesized to positively influence the innovativeness of family firms. When reputation is highly important for the family, family members will be more likely to frame in their minds the decision to innovate as bringing gains for SEW thanks to the increased recognition of the family to the broader community and the maintenance of a positive and unique image.

These expectations align with discussions in the family business literature about internal and external SEW (Cruz et al., 2014; Vardaman and Gondo, 2014). SEW may have both positive and negative influences in firm-level outcomes, including innovation, although the majority of scholars has considered the effects of SEW as primarily positive (Berrone et al., 2012). To be more specific, there is research indicating that SEW can be both beneficial and harmful for family businesses if it is conceptualized in a multidimensional way (Kellermanns et al., 2012). External SEW of family firms captures the desire to have positive reputation and image, whereas internal SEW captures the desire to maintain family unity and control (Vardaman and Gordo, 2014).

Research suggests that internal SEW is the primary concern of a family firm because of the desire of the family to preserve the control of the firm's day-to-day operations and the need to first satisfy its short-term needs. Some representative examples that demonstrate this desire of family firms include papers showing that family firms are more likely to resist professionalization (Gomez-Mejia et al., 2011), or to choose a member of the family as a possible successor (De Vries, 2003).

This dissertation engages the discussion of positive-negative effects of SEW and that of internal-external SEW by hypothesizing that SEW can affect innovation both positively, in the case of external SEW (family prominence dimension), and negatively, in the case of internal SEW (family continuity and family enrichment dimensions). The overall research model is depicted in Figure 1 below.

Figure 1: Research Model



### 3.4 Hypotheses Development

## **Family Continuity and Innovativeness**

The family continuity dimension of SEW is defined as the importance that family firm members attach to maintaining family unity, establishing a family dynasty in the business, and perpetuating the family values through the operations of the business (Debicki, 2012; Debicki et al., 2016). As stated above, under the SEW perspective, family members make decisions taking into serious consideration whether or not those decisions will come at the cost of their SEW (Wiseman and Gomez-Mejia, 1998). It is hypothesized here that the importance attached to family continuity by family members will negatively influence firm innovativeness because of three family needs including the need for change, the need for external financial resources, and the need for external human resources. All three of these needs can potentially come at the expense of SEW.

First, engaging in innovative efforts requires the firm to go through organizational changes for which it might not be ready. Family members might fear change as it is often accompanied by conflict (Vago, 2004) or by new firm routines which may be perceived as a threat to control (Choi, Zahra, Yoshikawa, and Han, 2015). Some family members may be resistant to adopt these changes because maintaining the firm's status quo can lessen their SEW loss by allowing for the continuation of "tried and true" operations within the firm (Gomez-Mejia et al., 2011) and for conducting business in a way that is consistent with their preferences and values (Debicki et al., 2016). Both potential loss of control and conflict may threaten family unity which is one of the main continuity aspects of SEW (Debicki et al., 2016).

In addition, innovativeness requires access to financial and human resources, that often come at a cost to SEW in several ways. Regarding financial resources, Schulze,

Lubatkin, and Dino (2003) posit that accessing them through either debt acquisition or stock issuance enables individuals external to the family (such as stockholders or financiers) to intervene in the family firms' operations. Such intervention can again influence negatively the firms' freedom to exercise authority and control, both of which can threaten SEW. In other words, for innovative activities to be pursued effectively, family members may have to seek external financing sacrificing part of their SEW by giving up control (Jones et al., 2008). Family members typically feel strong connections for the family firm including the control and influence that they desire to exert on the firm's operations and therefore, they may not be open to any perceived interference. Further, their sense of belonging, as well as their self-identification may be rooted in the firm. For these reasons, it is expected that family members will not be willing to forgo their ability to exercise control and authority over their firms for the sake of obtaining the necessary financial resources to innovate as this would result in a SEW loss.

Finally, another threat to SEW stems from the possibility that external managerial or other human resources might be needed to support innovative efforts (Jones et al., 2008). Strong ties within a family firm (ties where the reciprocity as well as the time and emotions invested are high (Granovetter, 1973)), although allowing for efficient governance, may have negative influence on the firm's innovativeness because they may not allow fresh ideas to come in. Weak ties, where the reciprocity as well as time and emotions invested are low (Granovetter, 1973), have been associated with higher innovation. Therefore, as Aldrich and Zimmer (1986) posit, it is necessary for a family firm to have a mix of both strong and weak ties for efficient governance and innovativeness because strong ties rarely bring new knowledge or new resources to the

firm. If family continuity as a SEW dimension is considered highly important by a family firm, then the family is likely to strive to work closely as a unit and make decisions together which might hinder its willingness to bring in the family external (non-family) members regardless of the valuable knowledge that they might add to the family firm.

These arguments are not meant to imply that family firms necessarily lack the required talent and skills to innovate. The family may in fact have members with the required expertise and qualifications through their prior work experience or education to effectively innovate. However, fresh ideas often come from the professionalization of family firms through the recruitment of competent managerial talent outside of the family members (Stewart and Hitt, 2012). Even in cases where family members have the necessary knowledge, engaging in innovative efforts may require a higher amount of information processing that family members might not be able to undertake (Gomez-Mejia et al., 2010).

**Hypothesis 1a**: The importance that family firms attach to family continuity (as a dimension of SEW) will negatively influence innovativeness.

However, research has been consistent in supporting that family firms often innovate and take risks as a way to sustain their competitive advantage and gain high economic returns (De Massis et al., 2015; Khedhaouria, Gurau, and Torres, 2015; Naldi et al., 2007). Kellermanns et al., (2011) examined US-based family firms and showed that their innovative efforts yielded superior performance, especially when one generation holds the majority of the firm ownership. Given that the family continuity dimension of SEW reflects a firm's desire to maintain both its control and its dynasty (Debicki et al., 2016), I provide a competing hypothesis about the effects of family continuity, arguing

that it will positively influence family firm innovativeness when family members care about preserving their dynasty.

In other words, family continuity is hypothesized to negatively influence innovativeness when a family attaches high importance to maintaining its control and authority within the family hands. In contrast, family continuity is expected to positively influence innovativeness when family members care about preserving their dynasty, because to do so they will have to engage in innovative efforts.

**Hypothesis 1b**: The importance that family firms attach to family continuity (as a dimension of SEW) will positively influence innovativeness.

#### **Family Enrichment and Innovativeness**

From a corporate entrepreneurship point of view, family firms are expected to be willing to innovate by creating new ventures because doing so would enable them to provide jobs for as many family members as possible (Miller, Steier, and Le Breton-Miller, 2003). In other words, the satisfaction of the family enrichment dimension of SEW which calls for provision of employment to as many family members as possible could be achieved by adopting a corporate entrepreneurship mindset and launching new ventures.

However, using empirical data from the Global Entrepreneurship Monitor (GEM), scholars demonstrate that family firms are more likely to focus on core related innovative efforts and avoid the introduction of new products or technology because of the knowledge limitations that the pool of available family members place (Gomez-Mejia et al., 2011). Besides, as stated earlier, family firms are not always willing to resort to their weak ties whose expertise, along with that of strong ties, might be necessary for

innovation (Aldrich and Zimmer, 1986). Instead, family firms seem more willing to focus on their strong ties for the sake of efficient governance and for the satisfaction of SEW objectives such as provision of employment for their family member (Miller et al., 2003).

Furthermore, family firms are reluctant to incorporate non-family members to their firms because doing so would introduce the need to forgo the informal environment among family members and to set up formal, professional monitoring systems (Dekker, Lybaert, Steijvers, and Depaire, 2015). In other words, the desire to provide jobs to as many family members as possible and to retain an informal environment may make a family firm less willing to innovate due to knowledge limitations and unwillingness to recruit external members with possible expertise. This implies that the family enrichment dimension of SEW will be expected to reduce a family firm's innovativeness because of the focus of family members on recruiting members internal to the family over external ones.

Lastly, the family enrichment dimension of SEW encompasses the need of the family to maintain harmony and to avoid conflicts between family members (Debicki et al., 2016). Innovativeness, however, might require family firms to also acquire external funding which can be a source of conflict for family firms. In particular, research explains that when family members share the ownership of the firm, conflict might arise not only because of intra-family disagreement over the decision whether to acquire debt or not, but also because of disagreement over the optimal uses of the acquired financial resources (Schulze et al., 2003). As a result, family firms may be more resistant to undertake innovativeness because of the possibility of introducing conflict within the family.

**Hypothesis 2**: The importance that family firms attach to family enrichment (as a dimension of SEW) will negatively influence innovativeness.

#### **Family Prominence and Innovativeness**

The family prominence dimension of SEW relates to the importance that the family attaches to the recognition and appreciation in the broader community for its actions as well as for the gains that it can get from the social relationships that it develops through the business operations (Debicki et al., 2016). As mentioned above, family prominence is also associated with firm reputation which has been described as one SEW goal of family firms (Berrone et al., 2010; Debicki et al., 2016). Both the need for the community recognition and appreciation aspect, as well as the benefits from the social relationships aspect can positively influence a family firm's innovativeness by making the family firm members strongly identify with their family group which they may view as different from other groups.

In this dissertation, it is suggested that the more importance family firms attach to their reputation, the more innovative they will strive to be because through their innovative efforts they may achieve both recognition in their community as well as differentiation from others. The reasoning behind this argument traces to the identification arguments of family members with both the family as a whole and the family firm. In particular, research shows that family members develop strong identification with the family firm which creates an "in-group favoritism" that reinforces the need for reputation building and gives affective gains to the family members (Deephouse and Jaskiewitz, 2013). Family firm members who identify themselves as part of the family group are expected to not only feel positively about that group, but also

want to be different from others (Knippenberg and Schie, 2000) and innovativeness is one of the ways through which this differentiation could be achieved (Craig et al., 2008). Therefore, following the reasoning outlined above it is hypothesized that:

**Hypothesis 3**: The importance that family firms attach to family prominence (as a dimension of SEW) will positively influence innovativeness.

#### **Innovativeness and Firm Performance**

As discussed in section 2.4, whether family firms innovate or not is still inadequately understood. While some authors support the view that family firms do innovate thanks to their long-term orientation, others argue that they are less likely to do so due to their aversion to SEW losses. However, there is a consensus in the literature about the positive influences of innovativeness on the financial performance of family firms that do undertake innovative efforts (Kellermanns et al., 2011; Khedhaouria, Gurău, & Torrès, 2015; Naldi et al., 2007).

For instance, Naldi et al. (2007) examined the effect of a family firm's innovativeness on its performance and found a positive, although marginal, impact. Kellermanns et al. (2011) studied the same relationship and found that innovativeness has a significant and positive effect on a family firm's financial performance. This effect becomes much stronger for the firms where ownership is limited to one generation only. Interestingly, this finding suggests that the integration of family characteristics such as generational involvement might add to the understanding of the effects of innovativeness on firm performance.

In addition, in a recent meta-analysis examining the relationship between entrepreneurial orientation and performance, innovativeness was shown to have a

significant and positive influence on performance (Rausch, Wiklund, Lumpkin, and Frese, 2009). This is consistent with the finding regarding small family firms where entrepreneurial orientation including innovativeness, risk-taking and proactiveness, positively influences the financial performance of private, small family businesses (Khedhaouria et al., 2015). The reasoning outlined above leads to the fourth hypothesis which has been previously examined in the literature:

**Hypothesis 4**: Innovativeness of family firms will positively influence financial firm performance.

### **Moderators on the SEW-Innovativeness Relationship**

The above hypotheses relate to the main relationships examined and seek to unravel the effects of a family's non-economic goals, as captured by the construct of SEW, on innovativeness as well as the effect of innovativeness on firm performance. However, the literature suggests that the level of involvement that a family has on the day-to-day operations may determine the extent to which its non-economic goals captured by SEW influences strategic decision making including innovativeness. This family involvement can take various forms including either generational involvement (Cruz and Nordqvist, 2012; Kellermanns et al., 2012), where the family system has a deeper power on the firm's decision making through the integration of more generations in the day-to-day operations, or the presence of non-family managers (Cruz and Nordqvist, 2012; Vandekerkhof et al., 2015).

Specifically, Cruz and Nordqvist (2012) posit that a family firm's entrepreneurial orientation is influenced by internal factors including both the presence or absence of non-family members from the top management team, as well as the generation stage

which differently affects the strategic behavior of a firm including its innovativeness. In addition, Craig et al. (2008) draw on the family embeddedness perspective to argue that the more families communicate and promote their family brand identity, the more they inspire trust to their customers, and thus, the more the financial performance of the firm is enhanced through the increase of sales.

Therefore, based on prior research discussed above, three moderating effects are examined including *generational involvement*, *presence of non-family managers* on the top management team, and *family-brand identity promotion*. The sections that follow outline the reasoning behind the examined moderators in the research model.

#### Generational Involvement as a Moderator

Research drawing on a generational perspective in family firms suggests that as family firms bring in more generations over time, innovativeness increases because the decision-making process of later generations tends to be based more on financial considerations rather than non-financial considerations including aspects of SEW (Gomez-Mejia et al., 2011; Stockmans, Lybaert, and Voordeckers, 2010). In particular, first-generation family firms tend to consider the preservation of SEW as a more important goal than do later-generation family firms because of the founders' attachment to their start-up efforts. This consideration of first-generation family firms has been linked to several firm behaviors including more upward earnings management by the family firm (Stockmans et al., 2010) and less innovativeness (Beck, Janssens, Debruyne, and Lommelen, 2011; Cruz and Nordqvist, 2012; Kellermanns and Eddleston, 2006).

Later-generation family firms tend to adopt a more innovation-oriented culture (Zahra, 2005), to identify more entrepreneurial opportunities (Salvato, 2004), and to have

more formally educated and experienced members (Cruz and Nordqvist, 2012; Sonfield and Lussier, 2004). They also tend to have higher chances of including non-family members in the firm (Dyer, 1988; Bammens, Voordeckers, and Van Gils, 2008) which positively influences the extent to which they can be innovative (Damanpour, 1991).

Quantitative research has provided empirical evidence that later-generation family firms have higher levels of innovativeness either when comparing first-generation family firms with second-generation ones (Beck et al. 2011), or when comparing first-generation with second-generation and with third-generation ones (Cruz and Nordqvist, 2012; Kellermanns and Eddleston, 2006). In Salvato's words (2004), it is harder for family firms to engage in innovative efforts "without the fresh momentum added to the firm by second- [or later] generation members" (Salvato, 2004, p.73). Researchers also posit that as the generational involvement increases over time, innovative efforts also increase because it becomes easier for family members to internalize their collective expert knowledge and develop a shared understanding of who knows what (Chirico and Salvato, 2016; Salvato and Melin, 2008).

Thus, the above reasoning suggests that the generational stage of family firms might have significant influences in their strategic decision-making including innovativeness. First-generation family firms place more attention to the family goals and values than do later-generation firms (Westhead, 2003). Given that the importance of family values is captured by the family continuity dimension of SEW and the importance of family needs and goals is captured by the family enrichment dimension of SEW, it is hypothesized that the generational involvement will influence both the effect of family

continuity on family firms' innovativeness and the effect of family enrichment on innovativeness.

**Hypothesis 5a**: The effect of family continuity on innovativeness will be less pronounced for later-generation family firms than it will be for first-generation family firms.

**Hypothesis 5b**: The effect of family enrichment on innovativeness will be less pronounced for later-generation family firms than it will be for first-generation family firms.

### Presence of External (Non-Family) Managers as a Moderator

In addition to the generational stage of the family firm, the presence of non-family (external) managers on the top management team has been described by researchers as an important contingency variable for the effects of SEW on managerial decision making (Gomez-Mejia et al., 2011).

To begin with, the presence of non-family managers in family firms has been shown to directly affect innovativeness positively because innovative firms have higher needs for human capital and expertise which may not be readily satisfied from the available human resources within the family (Miller, Minichilli, and Corbetta, 2013). The knowledge and expertise addition to family firms by the external members enhances the prospects of the firm for growth and innovativeness (Gedajilovic, Lubatkin, and Schulze, 2004). Moreover, the inclusion of non-family managers in a family firm not only adds knowledge to the firm, but also helps in cases of family conflicts (Yoo and Sung, 2015) which may be holding innovative efforts back. Specifically, non-family managers who are more distanced from emotional considerations in their decision making can help reconcile differences that may arise between family members (Yoo and Sung, 2015).

However, the presence of non-family members affects a family firm's innovativeness not only directly but also indirectly through its interaction with two SEW dimensions including family continuity and family enrichment. One reason why this might happen is that any non-family members of the top management team of family firms are expected to engage in the decision-making process through acts of rationalization and objectivity (Blumentritt et al., 2007) instead of taking into account SEW considerations. In other words, in family firms that include external members in their top management teams, family continuity and family enrichment will have less pronounced negative effects on innovativeness because decisions will be made with more rational and less emotional (SEW) considerations. This reasoning leads to the following two hypotheses:

**Hypothesis 6a**: The effect of family continuity on innovativeness will be less pronounced for family firms with the presence of non-family members on the top management team than it will be for those without non-family managers.

**Hypothesis 6b**: The effect of family enrichment on innovativeness will be less pronounced for family firms with the presence of non-family members on the top management team than it will be for those without non-family managers.

## Family-Brand Identity Promotion as a Moderator

Having a positive reputation can create a competitive advantage for firms (Nordqvist et al., 2015). Family firms have been shown to care about their reputation more than non-family firms, not only because of the potential competitive advantage but also because of family firms' names which are often perceived as an extension of the families' identity (Deephouse and Jaskiewitz, 2013). The concern for reputation has been

described as an explanatory factor for family firms' behavior (Nordqvist et al., 2015) including innovativeness.

A family firm's reputation can also be boosted by communication of the family firm status to external stakeholders (Apéria, Brønn, & Schultz, 2004). For instance, Craig et al. (2008) showed that family firms that communicate their family brand identity to suppliers, customers, financiers and advertising material have better reputations and that this communication is further associated with not only growth-related decisions (such as the decision to innovate) but also with performance outcomes. In other words, family firms that are concerned about their reputation as one of their SEW and at the same time promote their family-brand identity are in a better position to attract highly skilled employees (Turban and Cable, 2003) and financial resources from investors and/or creditors (Nordqvist et al., 2015), both of which are necessary for undertaking innovative efforts.

The reasoning outlined above leads to the following hypothesis about the interaction effect between the family prominence dimension of SEW, which is connected to reputation, and the promotion of the family-brand identity of the family firm on family firms' innovativeness:

**Hypothesis 7**: The effect of family prominence on innovativeness will be more pronounced for family firms with stronger family-brand identity promotion.

## **Moderators on the Innovativeness-Performance Relationship**

The hypothesized relationship between family firms' innovativeness and financial performance may be influenced by several factors. The most studied factors include environmental factors such as environmental dynamism and munificence/hostility (Covin

and Covin, 1990). However, as discussed in more detail in section 1.1, these factors will not be included in the research model but will instead be controlled because the focus of this dissertation is to understand the family influences on innovativeness and financial performance of family firms. Thus, the examined moderating variable of the relationship between innovativeness and performance will be family-brand identity promotion.

# Family Brand Identity Promotion on the Innovativeness-Performance Effect

This dissertation hypothesizes that the promotion of the family brand identity will also strengthen the effect of innovativeness on performance. Scholars have already submitted the logic that actions of the family can interact with innovativeness and affect financial performance. For instance, Kellermanns et al., (2012) have provided empirical evidence that generational involvement as well as family members reciprocity interact with innovativeness negatively affecting financial performance.

Cassia et al. (2011) have shown that small and medium size family firms with a desire to promote and communicate the reputation and the family-firm name demonstrate more successful new product development results. Nordqvist et al. (2015) explain that the communication of the family-brand identity evokes positive feelings towards the quality of the offered new and older products by the firm in external stakeholders such as customers leading to increased sales and as a result, better financial performance.

In a similar vein, researchers argue that innovative family firms that promote their family-brand identity demonstrate superior financial performance through the advantages that they obtain from the sense of trustworthiness that their family status evokes to customers (Micelotta and Raynard, 2011). Furthermore, protectiveness of the family name motivates innovative family firms to strive to offer superior customer service (Orth

and Green, 2009) and high quality products (Teal, Upton, and Seaman, 2003) both of which can be financially beneficial for family firms. Based on the above arguments and on prior research, it is hypothesized that:

**Hypothesis 8**: The effect of innovativeness on financial performance will be more pronounced for family firms with stronger family-brand identity promotion.

#### **SEW and Performance**

In addition to affecting the innovativeness of a family firm, SEW might also have direct effects on firm performance. Chrisman, Chua, and Sharma (2005) reviewed the literature about family influences on financial performance and concluded that family involvement does indeed have an impact on performance of large family firms but called for more research for the case of smaller firms. Further, Lee (2006) examined public family firms and found that family involvement is associated with better firm performance. However, there are also studies providing evidence that family involvement can have detrimental effects on firm performance (Olson et al., 2003). For instance, Cruz et al. (2012) show that family employment, a non-economic goal of family firms, leads to negative profitability highlighting an existing trade-off between economic and non-economic gains within family businesses. Given this, further testing of this link is warranted.

This dissertation also examines the direct effects of family firms' SEW on firm performance given that the level of family involvement is linked to the importance attached to SEW and is thus expected to influence the performance of family firms (Deephouse and Jaskiewitz, 2013). Disentangling the effects of the different dimensions of SEW on firm performance could help reconcile the positive and negative effects found

by showing that family involvement can influence firm performance both positive and negative at the same time, depending on which dimension of SEW is more salient and important for the family.

The development of the last three hypotheses of the study predicting the relationship of family continuity, family enrichment, and family prominence with performance is provided below. Once again, the effects of family continuity and family enrichment are hypothesized to be negative whereas that of family prominence is hypothesized to be positive.

# **Family Continuity and Firm Performance**

The family continuity dimension of SEW captures the need of the family to maintain its unity, values, and dynasty (Debicki et al., 2016) all of which could potentially influence the firm's financial performance negatively. Leitterstorf and Rau (2014) have shown that the desire of the family to protect its SEW, and specifically to minimize the dispersion of ownership and control to non-family shareholders, could lead to negative economic performance results such as lower IPO gains. Researchers have explained that such desire affects negatively financial performance because keeping the family firms in the hands of the owning family fosters the practice of nepotism, the lack of professional management, and the susceptibility of the family firms to entrenchment (Lansberg, Perrow, and Rogolsky, 1988; Rutherford et al., 2008).

Maintaining the values of the firm, keeping the firm in the hands of the family, and continuing the family dynasty can all have a detrimental impact on the firm's financial performance because of the family-centric behavior of the firm that can at times come at an economic cost for the family (Kellermanns et al., 2012). For instance, Gomez-

Mejia et al. (2007) show that between the option of joining a profitable cooperation with high prospects of financial gains but loss of family control and that of not joining, retaining full firm control but sacrificing financial gains, family firms are more likely to favor the latter. In other words, the authors show empirically how maintaining the control of the firm within the hands of the family as a SEW goal can be detrimental to financial firm performance.

**Hypothesis 9**: The importance that family firms attach to family continuity (as a dimension of SEW) will negatively influence firm performance.

### **Family Enrichment and Firm Performance**

The family enrichment dimension of SEW encompasses among other aspects, the need of the family employment of family members as well as the desire for harmonious familial relationships (Debicki et al., 2016). As discussed above, research on the effects of family involvement on the financial performance of family firms is still inconclusive (Cruz et al., 2012). Yet, a recent meta-analysis showed that the power of a family firm, which is defined as the percentage of family members working within the firm, could have detrimental financial effects (Rutherford et al., 2008). In particular, a higher percentage of family members working in the firm had a significant and negative effect on not only employee and sales growth but also perceived financial performance due to the practice of nepotism, the lack of professional management, and the susceptibility of the family firms to entrenchment (Rutherford et al., 2008).

In addition to these findings, Cruz et al. (2012) have used a family embeddedness perspective to show that employing family members in the family firm leads to negative profitability and is therefore, indicative of a trade-off between the non-financial, affective

goals of the family and financial firm performance. This negative effect can be explained by the informal character that employment of family members takes in a family business context, which combined with the lack of monitoring systems, can pave the ground for lower quality employee work as well as worse financial performance (Fama and Jensen, 1983).

**Hypothesis 10**: The importance that family firms attach to family enrichment (as a dimension of SEW) will negatively influence firm performance.

# **Family Prominence and Firm Performance**

The family prominence dimension of SEW is associated with the concern of the family firm for good image and reputation, for accumulation and preservation of social capital and for positive recognition in the broader community (Debicki, 2012; Debicki et al., 2016). Research shows that family firms care a great deal about their reputation (Cruz et al., 2014; Deephouse and Jaskiewitz, 2003). To illustrate, Deephouse and Jaskiewitz (2003) showed that family firms are concerned about their firm's reputation because, often, their name is included in the family firm's name which is often perceived as an extension of the family name. Further, research shows that this concern of family firms about their reputation and name in the broader community, often leads to actions that are more socially responsible (Cruz et al., 2014). These actions can potentially enhance the reputation results and help to significantly improve the financial performance of family firms (Dyer and Whetten, 2006).

In addition, family firms that care about their reputation are more likely to strive to do business in an honest and respectful way (Debicki et al., 2016) in order to evoke to their customers' feelings of trustworthiness which are shown to lead to increased sales

and higher financial performance (Micelotta and Raynard, 2011). In a similar vein, Craig et al. (2008) show that family firms communicate their family status to outside stakeholders inspiring trust to not only customers but also, suppliers and employees which supports the view that family firms are in a better position to attract highly skilled employees who can positively impact the firm's financial performance (Turban and Cable, 2003).

In sum, the basic argument outlined in this hypothesis is that family firms care about their reputation and that this concern will likely drive their behavior mostly towards actions that will benefit the firm's name in the broader community. In addition, the generous actions of the family firm will in turn bring in better financial performance (profitability) because customers are influenced by a firm's reputation in their decision to buy and because highly skilled employees are more likely to be attracted to family firms with good reputation.

**Hypothesis 11**: The importance that family firms attach to family prominence (as a dimension of SEW) will positively influence firm performance.

#### 3.5 Chapter Summary

This chapter provided the conceptual model based on which the interrelationships between SEW, firm innovativeness, and firm performance have been developed. It first presented the behavioral agency model (BAM) along with its main premises and assumptions. Then, it delved deeper into the SEW perspective as a more appropriate lens for the case of family firms. Lastly, it discussed in more detail the different factors that may influence the main examined relationships including the number of generations in

the family firm, the presence of non-family managers involved in the day-to-day management and operations of the firm, and the family-brand identity promotion.

#### **CHAPTER 4: METHODS**

# **4.1 Chapter Overview**

This chapter describes the research methods that were used to empirically test the hypotheses that were theoretically developed in the previous chapter. Section 4.2 provides an overview of the two pilot studies that were conducted in order to implement the necessary changes in the questions of the survey instrument, such as rewording questions and/or adding items to scales that demonstrated poor reliability coefficients. The chapter continues with section 4.3 which outlines the applied data collection method providing a detailed description of the sample that was collected and used for the main analysis. Section 4.4 covers the measures for the dependent, the independent, and the control variables. Lastly, section 4.5 details the data analysis methodology.

All survey questions and scale items are provided in Appendix A. The collection of the sample of this dissertation has been approved by the Human Subjects Protection Program Office (HSPPO) on March 27, 2017 with IRB number 17.0249 and reference number 638610.

### **4.2 Pilot Studies**

A first pilot study was conducted on April 13<sup>th</sup>, 2017 on a sample of 47 participants using Amazon's Mechanical Turk (mTurk). The purpose of this pilot sample was to confirm that all questions were comprehensive and easy to understand and to

ensure that the reliability coefficients of all scales were satisfactory and above the suggested .70 threshold (Nunnally, 1978, p.245).

Through the description of the task in mTurk, participants were instructed to take the survey only once and were asked for their ID to confirm that. There were no violations of this request except for one participant who turned out to have two different businesses at the same time and, as a result, both of his/her completed questionnaires were kept in the pilot dataset. From the 47 completed and usable questionnaires, two participants were excluded because of reporting peculiar numbers in profits and/or assets rendering the calculation of performance (ROA) impossible. In addition, five respondents were excluded for having missing data, and one for misreporting that the family members in his/her firm had 10% of the firm's ownership when they had only 7%. This resulted in a pilot sample of 39 family business owners.

To assess their comprehension of the survey questions, participants were asked four open-ended questions at the end of the survey. These included the following questions: 1) "What problems did you experience while filling this survey out? (Please explain)", 2) "How difficult was this survey? (Please explain)", 3) "Were there any specific questions in the survey that you found confusing or difficult to understand? (Please explain)", and lastly, 4) "If you have any additional comments about the survey, please write them here". Although most participants indicated that they did not encounter any difficulties, some of their feedback demonstrated the need for implementing a couple of changes in the questionnaire and the structure of the survey before launching the main survey. Table 3 below summarizes the feedback that was received along with the implemented changes on the survey instrument.

**Table 3: Pilot Study Feedback and Implemented Questionnaire Changes** 

<b>Question in Pilot 1</b>	Response provided/Feedback	Questionnaire changes for the 2 <sup>nd</sup> pilot
	"Well, you asked about children that I have, not my husband's children whom will take over the business one day. He has two, his daughter has a child."	The question, "How many children do you have?" was reworded to "How many children do you have including step-children and/or adopted children?"
What problems did you experience while filling this survey out? (Please explain)	"None. Except I caught your attention check that said not to click, but I'd already clicked and you didn't give any way to unclick it."	This question's structure was fixed in the platform. It was programmed in such a way as to give participants the option of unclicking their response in the attention check question.
Capiani	"None, I just wanted to mention I just started my business this year 2017 and I don't have any profits for 2016 since I own a new business."	One more screening question was added, "Has your business been operating for at least 3 years?" This was necessary for profits reporting as well as innovativeness questions where participants are asked how often they have engaged in certain innovative activities for the past three years.
How difficult was this survey? (Please	"Slightly, I am not as familiar with the business numbers as my husband is."	One more question was added "How familiar do you think you are with the numbers of your business such as profits?" (1 = far too little, 7 = far too much), to be able to possibly screen out responses of participants who feel they are not very familiar with their firms' numbers.
explain)	"It wasn't difficult, just a bit longer than expected."	Instead of showing one question at a time to prevent random clicking, the whole structure of the questionnaire was changed to blocks of questions for the different constructs. Questions were randomized within blocks to make sure the order in which participants saw the questions did not bias their responses.
If you have any additional comments about the survey, please write them here.	"Extend the timer."	The timer was extended from 1 hour in the first pilot, to 2 hours in the second; although Qualtrics' estimation of the total time needed to complete the questionnaire was approximately 20 minutes.

To assess the internal consistency of all scales to be used in the main analysis, I calculated the reliability coefficients that are reported in Table 4 below (Column 3). Although most of them were beyond the .70 threshold (Nunnally, 1978), three of them turned out quite low, indicating the need to either abandon those measures or add some items to be able to keep them for the main analysis.

**Table 4: Scale Reliability Coefficients in Pilot Studies** 

Construct/Scale	Number of Items	Cronbach a Pilot 1	Cronbach a Pilot 2
1. Socioemotional Wealth Construct			_
1.1. Family Continuity Dimension	5	.811	0.835
1.2. Family Enrichment Dimension	6	.785	0.750
1.3. Family Prominence Dimension	4	.740	0.698
2. Innovativeness Construct	4	.878	0.761
3. Family-Brand Identity Promotion	4	.820	0.861
4. Performance			
4.1. Comparison with competitors	8	.760	0.914
4.2. Subjective satisfaction	3	.846	0.812
5. Environmental Dynamism	4	.757	0.692
6. Environmental Munificence	5	.612	0.677
7. Intergenerational Authority	5	.741	0.810

A second pilot study was conducted on May 1<sup>st</sup>, 2017 after all the questionnaire changes summarized in Table 3 above were implemented. The purpose of the second pilot study was to ensure that all questions were comprehensive after the implemented changes, and to obtain primary correlations among the main variables. Such correlations were needed for the power analysis, i.e. the a-priori calculation of the required sample size for the main analysis. From the 44 completed and usable questionnaires, ten participants were excluded for the same reasons as in pilot 1 (reporting peculiar numbers in profits and/or assets, having missing data, etc.). This resulted in a pilot 2 sample of 34 family business owners. Respondents' answers to the open-ended questions at the end of

the survey indicated that, this time, all questions were comprehensive and no further changes to the questionnaire were needed for collecting the sample for the main analysis. The reliability coefficients of all scales, reported in Table 4 (Column 4), were either very close or beyond the .70 threshold (Nunnally, 1978).

The correlations among the main variables from the second pilot sample are reported in Table 5 below. All three socioemotional wealth dimensions are strongly correlated with innovativeness (mean r = .40) and moderately correlated with performance (mean r = .16). As a result, a moderate effect size of r = .20 was used in G\*Power software to determine the required sample size in a conservative way. The used input parameters were: effect size (r = .20), desired power level (.80) and alpha (.05). The value of 0.80 has been the recommended threshold of power adequacy (Cohen, 1988) and the one that has been mostly used in prior research (Boyd, Gove, and Hitt, 2005). The power analysis results indicated that a sample size of 146 participants would be required for the purposes of the main analysis in order to achieve adequate power of 0.80 or, in other words, in order to have an 8 in 10 chance to successfully detect a relationship that exists. The power analysis output is provided in Appendix B.

None of the 73 participants from the two pilot studies was included in the main sample. Section 4.3 that follows describes in detail the sample that was collected via an online survey for the purposes of the main analysis. All participants were recruited through Qualtrics and were guaranteed anonymity and confidentiality.

Table 5: Correlations and Descriptive Statistics of Pilot 2 Sample

	Mean	S.D	Min	Max	Fcont	Fenrich	Fprom	Innovat.	Generations	PNFM	FBIP	ROA
Fcont	3.91	0.76	2.20	5.00	1.000							
Fenrich	3.39	0.71	2.17	5.00	0.614**	1.000						
Fprom	3.86	0.68	2.25	5.00	0.554**	0.558**	1.000					
Innovat.	3.76	1.13	1.50	6.50	0.042	-0.059	-0.147	1.000				
Generations	1.88	0.54	1.00	3.00	0.093	0.057	0.078	-0.211	1.000			
PNFM	0.32	0.47	0.00	1.00	-0.019	-0.068	-0.067	-0.104	-0.084	1.000		
FBIP	4.65	1.32	2.50	7.00	0.202	0.241	0.317	-0.047	0.250	-0.372*	1.000	
ROA	1.40	2.44	0.001	10.00	0.218	0.076	0.114	0.338	-0.113	-0.035	-0.195	1.000

N = 34, \* p < .05, \*\* p < .01

 $Fcont = family\ continuity,\ Fenrich = family\ enrichment,\ Fprom = family\ prominence,\ Innovat.\ 1 = innovativeness\ 1,\ Innovat.\ 2 = innovativeness\ 2,\ PNFM = presence\ of\ non-family\ managers,\ FBIP = family\-brand-identity\ promotion,\ ROA = return\ on\ assets$ 

#### 4.3 Data Collection using Qualtrics

Qualtrics is a commercial panel provider that works with several industry partners in order to recruit targeted participants. Researchers offer Qualtrics information regarding their desired sample size, general screening criteria, participant demographics, and the survey length in minutes in order to receive a quote for their panel data. Qualtrics' pool of participants is large and diverse which can result in demographically heterogeneous, flexible, and high-quality samples with low participant attrition (Brandon et al., 2013). In addition, Qualtrics offers the replacement of 10 percent of responses that are considered unusable due to missing data, failing attention checks, etc. On the downside, Qualtrics is more expensive than other platforms for data collection such as mTurk for participant recruitment and more time consuming for the completion of the data collection. Moreover, the cost of a project can be estimated only through a free quote process since there is no specific cost structure that is publicly available to researchers.

A sample of 277 small, private, and US-based family firms was collected using Qualtrics without any specific industry requirement due to the prohibitively high cost of narrowing down to firms within only one industrial sector. The response rate was 34.32% as 807 family business owners were contacted in total and some were excluded because they did not meet the screening criteria. The screening criteria are detailed in block 1 of the survey questionnaire (screening questions a through i) in Appendix A. Participants were also asked to describe a picture in two to three sentences in order to ensure that they were English speakers. The picture that was used depicted a couple of professionals during a meeting and is provided in Appendix A after the end of the screening questions.

#### 4.4 Measures

# 4.4.1 Family Business Operational Definition

The family business literature is full of approximately thirty different definitions of what a family business is (Cruz et al., 2012; Litz, 2008). The variety of these definitions not only highlights the heterogeneity across family businesses but also points to how crucial it is to make clear which operational definition is used. Thus, before proceeding with the measures of the dependent, independent, and control variables of this study, it is necessary to operationally define the subject of the study which is the family firm.

Some researchers have relied on the perception of family business owners themselves to determine whether a business is family or not (Craig, Dibrell, and Davis, 2008). In other words, authors have asked the surveyed business owners whether they would classify their business as a family business or not. This approach in determining a family business however can be at least suboptimal at times. To be more specific, 17% of the families in the sample of a study did not perceive themselves to be part of a family business despite the majority family control, whereas 15% of the families did feel as part of a family business despite the low level of family control (Zellweger, Nason, Nordqvist, and Brush, 2013). These cases indicate that relying solely on the perception of family business owners themselves might not be the optimal way to operationally define what a family business is.

Other family business researchers have exclusively used variations of ownership percentages to operationally define a family business. Some of them relied on majority ownership (50% or more) as a threshold to determine a family business, arguing that the

majority of ownership is indicative of majority in decision-making rights as well (Classen et al., 2014; De Massis et al., 2015; Vandekerkhof et al., 2015). Others, however, have used a much lower ownership threshold, such as 25% (Kraiczy, Hack and Kellermanns, 2014; Leitterstorf and Rau, 2014), 20% (Bartholomeusz and Tanewski, 2006), 15% (Denison, Lief and Ward, 2004) or even as low as 5% (Strike et al., 2015).

As Gomez-Mejia et al., (2011) remind us, an agreement of family business researchers regarding a clear and transparent operational definition of a family business is quite unlikely and authors are encouraged to choose a definition wisely and explain how it fits within the broader context of their studies. Given these recommendations and the approaches followed by previous researchers, a "family business" is operationally defined in this dissertation as a business where the following three conditions are simultaneously satisfied. First, two or more managers should have a family relationship and second, those family members should share at least 10% of the firm's ownership (Gomez-Mejia et al., 2007; Jones et al., 2008), a threshold that has been described as a "stringent ownership threshold" (Jones et al., 2008).

In addition to these two conditions, the business owners should perceive and classify their firms as family firms, a requirement that is consistent with prior research practice (Bammens et al., 2008; Craig et al., 2008). This operational definition takes into consideration both the perception and the control through the ownership threshold approach. The participants to whom the survey was administered, both in the two pilot samples (mTurk workers) and the main sample, were allowed to take the survey only if they satisfied all three conditions that were previously mentioned and owned/managed a firm at the time they took the survey (Sonfield and Lussier, 2004).

# 4.4.2 Dependent Variable: Firm Performance

The dependent variable in this study is firm performance. Firm performance is currently the most widely used dependent variable in family business research, a fact that according to Sharma and Carney (2012) symbolizes a major shift of the field from an early focus on succession matters to a current emphasis on performance-related issues. Financial performance of family firms along with longevity and growth in the assets are the three highly relevant performance measures outlined in a recent special issue (Uhlaner, Kellermanns, Eddleston, and Hoy, 2012).

Following prior studies (Schepers et al., 2014; Cruz et al., 2012), firm performance was measured using the accounting measure of returns on assets (ROA) which was included in the most frequently used measures of performance (Mazzi, 2011; Uhlaner et al., 2012). This continuous variable was calculated as the ratio of annual firm profits to firm assets, and conformed to authors' recommendations that profitability measures should account for the risk that a firm takes (Watson and Robinson, 2003). ROA is superior over return on sales (ROS) because, in a case of similar percentage reduction of profit and sales, ROS would remain unchanged (Harris and Helfat, 1997). In addition, the same authors caution that ROA is superior over return on equity (ROE) because family firms finance their total assets using equity in a very heterogeneous way.

Using only one indicator of financial performance such as ROA though would not be sufficient given the complexity of the concept of performance (Colli, 2012; Sharma and Carney, 2012). Further, researchers caution against the use of single item measures for any variable or construct, let alone for the dependent variable. As Boyd, Gove, and Hitt (2005, p. 244) put it, "Single indicators, at the nadir of methodological

sophistication, provide the researcher with the least assurance that a measure is a valid and reliable proxy of a construct and no estimates of reliability, and thus error, are possible."

Thus, multiple indicators for measuring firm performance were used. Participants were asked to also compare the performance of their firm with that of their primary competitors for the past three years. Adopting the measure that Kellermanns et al. (2011) have used in their study, the items of comparison included sales growth, market share growth, growth in the number of employees, profitability growth, ROA, ROE, profit margin to sales ratio, and the ability to fund growth from profits. All items had three possible choices including "much better," "about the same," and "much worse" and were averaged to get an overall performance score that compared the owner's firm performance to that of the firm's primary competition (Kellermanns et al., 2011). Last, participants provided information regarding their firm's growth rate as well as their subjective satisfaction with both ROA and the firm growth rate.

#### 4.4.3 Independent Variables

SEW Importance (SEWi): Socioemotional wealth importance was measured using the scale developed and validated by Debicki et al. (2016). This scale is reliable and valid and has three dimensions including family continuity, family enrichment, and family prominence (Debicki et al., 2016). Each of these dimensions has multiple measurement items and all items were measured using a 5-point Likert scale anchored by (1) not at all important, (2) slightly important, (3) moderately important, (4) very important, and (5) extremely important. More details about the measures can be found in Appendix A.

*Innovativeness:* Innovativeness was measured using measures that have been previously used in family business literature (Kellermanns et al., 2012; Zahra, 2005). The items were all anchored by importance ranging from 1 to 7.

Generations: The generational involvement of the family firms was measured via asking participants how many generations were involved in the management of their firms (Kellermanns and Eddleston, 2006) and that of which generation had the decision-making power in the firm at the time of the survey (Bammens et al., 2008; Cruz and Nordqvist, 2012).

Presence of non-family members: The presence of non-family or external members on the top management team of family firms was assessed in two ways. The first way was categorical with 1 or 0 for the cases where the top management team of the family firm had or did not have non-family (external) members (Stockmans et al., 2010). The second way was proportional and it captured the percentage of family to non-family members in the top management team of family firms (Sonfield and Lusier, 2004). Using both ways to capture the integration of non-family members in the top management team of family firms was superior to using just one. The categorical measure captured only the presence or absence of non-family members whereas the proportional measure revealed also the extent of non-family presence/absence. Both measures have been used in the literature before (Vandekerkhof et al., 2015) and were used in this study as well.

Family-brand identity promotion: The promotion of family brand identity was measured using the measure of Craig et al. (2008), based on which respondents were asked to assess the extent to which they tend to promote the family status of their firms to their suppliers, customers, financiers and in advertising material. Participants were also

asked about the ways through which such promotion have taken place in general including email communication, social media, and word of mouth.

#### 4.4.4 Control Variables

Three types of control variables were used in this study including firm-level controls, individual or respondent-level controls, and environmental-level control variables. Firm age has been shown to affect a firm's innovation level in both a positive (Kimberly and Evanisko, 1981) and a negative (Rao and Drazin, 2002) way. Firm size may also affect a firm's innovation according to literature. Larger firms have more resources and more sophisticated planning systems in order to engage effectively in innovative efforts (Kellermanns et al., 2012b; Zahra et al., 2004). As a result, firm size was controlled in order to avoid bias in the results. Following prior studies, the logarithm of the number of a firm's employees was used to control for firm size (Cruz and Nordqvist, 2012; Kellermanns and Eddleston, 2006). Firm size was controlled also because of the focus of the present study on SEW. In particular, research shows that owners of larger family firms are more likely to take into account in their decision making financial considerations rather than psychological ones such as SEW (Gomez-Mejia et al., 2011). In addition to firm size and age, firm industry influences were indirectly controlled for through the participants' assessment of their performance compared to their primary competitors, as it has been done in prior studies (Kellermanns et al., 2011).

Other than firm control variables, context control variables were also used as research shows that family firms are often influenced by the broader environmental and economic context in which they operate (Cruz and Nordqvist, 2012; Lumpkin and Dess,

2001). Therefore, environmental munificence/hostility as well as environmental dynamism was controlled using the measures by (Covin and Covin, 1990) and (Miller and Friesen, 1982), respectively.

Last but not least, the respondents' demographics were controlled including age, gender, and education level. The founder's age was also controlled because founders tend to become more risk averse as they approach retirement and their career horizon lessens (Strike et al., 2015), and this can influence their incentive for engaging in innovative efforts (Levesque and Minniti, 2006). The family's *intergenerational authority style* which is defined as the "degree of liberty or constraint in working relationships from generation to generation" was finally controlled as a way of accounting for the freedom that later generation family members are given from the founders to pursue their own ideas and courses of action (Bjornberg and Nicholson, 2007, p.234).

### 4.5 Data Analysis

The proposed relationships in the research model were tested using linear regression analysis which is the most prevalent method used in family business research according to the methods column of Table 2. The performed regression was hierarchical so that only control variables were entered in the model first, followed by the independent variables in the second block, and by the independent variables and moderating/interaction variables in the third and last block.

# **4.6 Chapter Summary**

This chapter detailed the research methods that were used to empirically test the hypotheses that were theoretically developed in chapter 3. It started by providing an overview of the pilot studies that were conducted in order to implement the necessary changes in the questions of the survey instrument, such as rewording questions and/or adding items to scales that demonstrated poor reliability coefficients. It then outlined the applied data collection methods, describing the sample that was collected for the main analysis via Qualtrics. Lastly, the chapter covered the measures for the dependent variable, the independent variables, and the control variables and concluded with the data analysis methodology. The chapter that follows describes the preliminary and main results from the performed tests.

#### **CHAPTER 5: RESULTS**

This chapter presents the empirical results from the main analysis. Section 5.1 starts out by examining the quality of data. In specific, section 5.1 presents the testing for non-response, common-method, and endogeneity bias and discusses construct reliability as well as the testing for multicollinearity threats. Section 5.2 proceeds with a detailed presentation of the descriptive statistics and the demographics of the participants included in the main sample. Section 5.3 presents the main findings of the study and lastly, section 5.4 concludes the chapter providing a brief summary of the chapter.

### **5.1 Data Quality**

Several tests were performed in order to ensure the quality of the data collected before proceeding with the regression techniques. I first tested the data for non-response bias because it can be a severe threat to the explanatory power of the obtained results. I then examined the data for the existence of common-method bias, as all answers were obtained from a single source. Lastly, I looked into construct reliability, multicollinearity threats, and sample representativeness, all of which can potentially threaten the validity of the results.

#### **5.1.1 Non-Response Bias**

The explanatory power of results can be seriously threatened by the existence of non-response bias which occurs when the responses of respondents are significantly

different from those of non-respondents (Oppenheim, 1966). Research has shown that non-response bias and common-method bias are the two largest weaknesses of entrepreneurship research (Crook, Shook, Morris, and Madden, 2010; Short, Ketchen, Combs, and Ireland, 2010).

Non-response bias was tested in this study by comparing the responses provided by late respondents with those provided by early respondents because it has been shown that the responses of late respondents are very similar to those of non-respondents (Armstrong and Overton, 1977). In specific, the responses of late respondents to the main variables examined in this dissertation were compared with those of early respondents using analysis of variance (ANOVA). For the main sample of this study, the first 138 participants were assigned to the early respondents group and the rest of the participants (139) were assigned to the late respondents group.

The results are presented below in Table 6. As shown in the table, there is no statistically significant difference in the mean values of the main variables when comparing early with late respondents included in the sample. Only in few control variables was there a statistically significant difference between the mean values of early and late respondents. In specific, early and late respondents differed significantly at the .05 level in their mean values in environmental dynamism, environmental munificence, owners' age, and firm age, all of which were control variables.

**Table 6: ANOVA Testing for Non-Response Bias** 

Variable	Respondents Group	N	Mean Score	F- value	Significance
Financial Performance - ROA	Early	138	55.03	0.001	0.971
Financial i cirofinance - ROA	Late	139	54.67	0.001	0.971
Financial Performance - Comparison	Early	138	2.43	0.037	0.848
i manetari errormanee Comparison	Late	139	2.44	0.037	0.040
SEW_Family Continuity	Early	138	4.20	0.162	0.688
SEW_1 anning Continuity	Late	139	4.16	0.102	0.000
SEW_Family Enrichment	Early	138	3.68	0.001	0.980
SEW_I anniy Emicinient	Late	139	3.68	0.001	0.700
SEW_Family Prominence	Early	138	4.01	1.336	0.249
SEW_I anniy I formience	Late	139	3.90	1.550	0.249
Innovativeness	Early	138	5.27	2.391	0.123
milo vati veliess	Late	139	5.48	2.371	0.123
Family Brand Identity Promotion	Early	138	5.03	0.382	0.537
Taiming Brand Identity Tromotion	Late	139	5.14	0.502	0.557
Generations	Early	138	1.93	0.205	0.651
Generations	Late	139	1.90	0.203	0.051
Presence of non-family managers	Early	138	0.27	2.307	0.130
Tresence of non-running managers	Late	139	0.35	2.507	0.130
Environmental Dynamism	Early	138	4.77	7.970	0.005
Ziivii oiiiiieittai Zyitaitiisiii	Late	139	5.12	7.570	0.002
Environmental Munificence	Early	138	3.88	4.196	0.041
	Late	139	4.19	,0	0.011
Intergenerational Authority	Early	138	4.59	0.046	0.831
	Late	139	4.55	0.0.0	0.001
Owners' Gender	Early	138	0.40	0.100	0.752
	Late	139	0.42	0.100	0.762
Owners' Age	Early	138	39.91	5.055	0.025
<b></b>	Late	139	36.86	2.025	0.020
Firm Size	Early	138	2.98	0.005	0.943
	Late	139	2.99	2.000	
Firm Age	Early	138	21.68	3.921	0.049
	Late	139	17.04	3.721	0.017

#### **5.1.2 Common-Method Bias**

Although several authors in family business research have argued that the concern for common-method bias is highly overstated (Cruz et al., 2012), I examine its existence in the present study as it might be a concern here, given that all responses for the dependent and independent variables were obtained from the same source. Common-method bias occurs when a unique common factor explains most of the variance.

To control for common method bias, I embedded five marker items that were theoretically unrelated to the dependent, independent, moderating, and control variables of this study (Lindell and Whitney, 2001). The correlations between the marker variable and each of the main variables of the study are presented in Table 7 below. The examination of such correlations reveals that common method bias is not a concern for this study as almost all associations are not statistically significant and also close to zero.

**Table 7: Common Method Bias Testing** 

Construct/Scale	Correlation with marker variable
Socioemotional Wealth Construct	
Family Continuity Dimension	120*
Family Enrichment Dimension	.028
Family Prominence Dimension	036
Innovativeness Construct	012
Family-Brand Identity Promotion	030
Generations	035
Presence of Non-Family Managers	.062
Firm Performance	057

### **5.1.3** Construct Reliability

The reliability of multi-item measures of constructs was assessed through the examination of Cronbach alphas  $(\alpha)$  which is the most common way of testing the

reliability of multi-item measures (Cronbach, 1951; Nunnally, 1978). Reliability values that are greater than .70 are recommended (Nunnally, 1978).

**Table 8: Reliability Coefficients** 

Construct/Scale	Number of Items	Cronbach α
1. Socioemotional Wealth Construct		
1.1. Family Continuity Dimension	5	0.837
1.2. Family Enrichment Dimension	6	0.827
1.3. Family Prominence Dimension	4	0.768
2. Innovativeness Construct	4	0.867
3. Family-Brand Identity Promotion	4	0.867
4. Performance		
4.1. Comparison with competitors	8	0.806
4.2. Subjective satisfaction	4	0.872
5. Environmental Dynamism	4	0.743
6. Environmental Munificence	5	0.767
7. Intergenerational Authority	5	0.750

As shown in Table 8 above, the coefficients ranged between .743 and .872, demonstrating that the reliability of the examined constructs was satisfactory to proceed to the main analysis.

### **5.1.4** Multicollinearity

Before proceeding to the main analysis, I also checked for any multicollinearity issues in the main sample. Multicollinearity occurs when two or more of the examined variables are highly correlated. When this happens, the standard errors of the coefficients are inflated distorting the regression analysis results (Field, 2009). To check for multicollinearity threats, I used SPSS to calculate the variance inflator factors (VIF) and the tolerance values for all variables. Field (2009) suggests that VIF values that are below

5 and tolerance values that are greater than .1 are indicative of the absence of multicollinearity concerns.

**Table 9: Multicollinearity Diagnostics** 

Construct/Scale	VIF	Tolerance
Socioemotional Wealth Construct		
Family Continuity Dimension	2.304	0.434
Family Enrichment Dimension	2.060	0.485
Family Prominence Dimension	2.509	0.399
Innovativeness Construct	1.364	0.733
Family-Brand Identity Promotion	1.450	0.689
Generations	1.127	0.887
Presence of Non-Family Managers	1.216	0.822
Environmental Dynamism	1.373	0.728
Environmental Munificence	1.320	0.758
Intergenerational Authority	1.353	0.739

Table 9 above details the VIF and tolerance values for all variables in the main sample. As shown, all VIF values are well below the recommended threshold (<5) for the sample. Similarly, all tolerance values are higher than .1 in both, indicating that there is no multicollinearity issue.

### **5.1.5** Endogeneity Bias Testing

Endogeneity is considered a threat in empirical research because it leads to biased coefficient estimates and inaccurate causal claims when it is not properly addressed (Antonakis, Bendahan, Jacquart, and Lalive, 2014). Such biased estimates may stem from the omission of relevant variables or the possibility of reverse causality. For instance, while it was hypothesized here that SEW of family firms influences firm innovativeness

and performance, reverse causality would translate to firm innovativess and performance also affecting family firms' SEW. Therefore, testing for endogeneity bias was necessary.

Hamilton and Nickerson (2003) have suggested that a two-stage least squares regression approach (2SLS) can mitigate the threat of endogeneity bias. Such an approach instruments endogenous variables using instrumental variables. To evaluate the extent to which endogeneity is a problem, I performed a Hausman test for exogeneity (Hausman, 1979). The main idea behind this test is that it compares the coefficient estimates from an ordinary least squares regression (OLS) with those obtained through a two-stage least squares regression or instrumental-variables regression.

To perform a 2SLS regression, proper instrumental variables are needed. For the main SEW-innovativess and SEW-performance relationships that were examined in this research, proper instruments should exhibit high correlation with SEW dimensions and no correlation with firm innovativeness and firm performance. For family continuity, a variable that would be highly correlated with the family's need to maintain the dynasty and not correlated with innovativeness and performance was needed. The number of children of the owner was used as an instrumental variable for family continuity because the more children the owners have, the more important it will be for them to maintain their family firm dynasty. In other words, the number of the owners' children is highly correlated with family continuity and not correlated with firm innovativeness and performance.

Similarly, for family enrichment, a variable was needed that would be highly correlated with the family's need to employ family members in the firm and not correlated with innovativeness and performance. The intention of the owners' children to

stay in the firm was selected as an instrumental variable for family enrichment, because the higher the intention of the owners' children to remain in the family firm, the more important it will be for the owners to employ family members in their firms. Lastly, for family prominence, a variable was needed that would be highly correlated with the family's need to build and maintain a strong reputation and not correlated with firm innovativeness and performance. The inclusion of the family's name in the firm name was selected as an instrumental variable for family prominence because reputation is more important for those family firms that have their family name included in their firm's name (Deephouse and Jaskiewitz, 2013). All three instruments had moderate and significant correlations with the three SEW dimensions indicating that they are proper for use.

Following such procedures, the three SEW dimensions were instrumented through the number of children of the owner, their intention to stay in the firm, and whether the family's name was included in the firm name. A Hausman test was performed in STATA to test the null hypothesis that the three SEW variables were exogenous for innovativeness and performance. The results showed that when innovativeness was the dependent variable, neither the Durbin score [chi2 (3) = 1.919, p = .59] nor the Wu-Hausman statistic [F(3,270) = .628, p = .60] were statistically significant. Similarly, when performance was the dependent variable, neither the Durbin score [chi2 (3) = 4.834, p = .18] nor the Wu-Hausman statistic [F(3,270) = 1.598, p = .19] were statistically significant.

On such basis, I failed to reject the null hypotheses that the three SEW variables were exogenous in the SEW-innovativeness and SEW-performance relationships. These

findings indicated that there would be no statistically significant difference between the coefficients obtained through OLS and instrumental-variables regression. Thus, the application of OLS would be appropriate (Baum, Lewbel, Schaffer, and Talavera, 2012). As a result, following prior research (Ucbasaran, Westhead, and Wright, 2008), I report OLS coefficient estimates in my results table.

#### **5.2 Sample Description and Demographics**

The descriptive statistics of the sample are presented in Table 10 below. Although the operational definition of family firms used in the present study required that the family members owned at least 10% of the company for a firm to be defined as family firm, the majority of family members owned collectively, on average, 78.22% of the firm.

The participants of the sample took on average 22.30 minutes to complete the survey and have been approximately ten years on average in their firms. The majority of them were founders (57.50%), female (59.29%), and white (67.50%). Regarding firm descriptive statistics in the main sample, family firms were on average 21.67 years old and had on average 68.52 total employees, 11.42 family members and 1.91 generations involved in the management of the firm. Lastly, the recruited participants were owners of family firms that operated in a variety of industrial sectors.

Table 11 below presents the industries represented in the family firms recruited. Family firms are quite heterogeneous with respect to the industrial sector to which they belong. As shown in Table 11, about 50% of the sample belongs to industrial sectors including retail, services, construction, utilities, and food service. Lastly, the geographic location of the family firms included in the sample is also presented in Table 11. As

shown, half of the family firms that were recruited were located in the states of Alabama, California, Florida, Illinois, New York, Pennsylvania, and Texas.

**Table 10: Respondent and Firm Demographics** 

	Mean	%
Gender		
Male	114	40.72%
Female	166	59.29%
Age	38.30	-
Race		
African American	37	13.21%
Asian	7	2.50%
Hispanic/Latino	8	2.86%
Native American	36	12.86%
White	189	67.50%
Prefer not to answer	3	1.07%
Education		
High School	63	22.50%
Bachelor's	119	42.50%
Master's	57	20.36%
MBA	12	4.29%
PhD	10	3.57%
Other	19	6.79%
Tenure (years)	9.60	-
Founder		
Yes	161	57.50%
No	119	42.50%
Duration (minutes)	22.30	-
Family Ownership	-	78.22%
Family Members	11.42	_
Generations	1.91	_
Firm Age (years)	21.67	-
Firm Size (employees)	68.52	-

Qualtrics, N=277

**Table 11: Industries and Geographic Location of Firms in the Sample** 

Industries Represe	nted				State	s Represe	nted	
Advertising	5	1.79%	AL	12	4.29%	MT	2	0.71%
Business services/Consulting	12	4.29%	AZ	5	1.79%	NE	1	0.36%
Computer (hardware/software)	7	2.50%	AR	3	1.07%	NV	1	0.36%
Construction	32	11.43%	CA	31	11.07%	NH	1	0.36%
Education	10	3.57%	CO	4	1.43%	NJ	5	1.79%
Engineering consulting	2	0.71%	CT	2	0.71%	NM	1	0.36%
Entertainment/recreation	16	5.71%	FL	22	7.86%	NY	21	7.50%
Finance/banking/insurance	6	2.14%	GA	10	3.57%	NC	10	3.57%
Food service	18	6.43%	ID	1	0.36%	OH	11	3.93%
Healthcare/medical	9	3.21%	IL	13	4.64%	OK	2	0.71%
Internet	4	1.43%	IN	3	1.07%	OR	7	2.50%
Legal	5	1.79%	KS	3	1.07%	PA	12	4.29%
Manufacturing	4	1.43%	KY	6	2.14%	SC	4	1.43%
Real estate	6	2.14%	LA	4	1.43%	TN	10	3.57%
Research/science	1	0.36%	ME	1	0.36%	TX	28	10.00%
Retail	44	15.71%	MD	1	0.36%	UT	1	0.36%
Services	33	11.79%	MA	7	2.50%	VA	4	1.43%
Technology	7	2.50%	MI	7	2.50%	WA	4	1.43%
Telecommunications	2	0.71%	MN	5	1.79%	WV	2	0.71%
Transportation/distribution	7	2.50%	MS	3	1.07%	WI	2	0.71%
Utilities	21	7.50%	MO	8	2.86%	Total	277	100.00%
Wholesale	5	1.79%						
N/A	24	8.57%						
Total Sample	277	100.00%						

# **5.3 Main Findings**

Having tested and discussed above the quality of the data, I proceed below providing the correlations table for the sample and presenting the results of the main analysis. The correlations among the main variables for the sample are presented in Table 12.

The table shows strong and statistically significant correlations among the main variables to be examined including the three socioemotional wealth dimensions (family continuity, family enrichment, and family prominence), innovativeness, and firm performance. Specifically, socioemotional wealth dimensions correlate strongly with both innovativeness and firm performance. All correlations among socioemotional wealth dimensions and innovativeness for the sample are also statistically significant at the .01 level, ranging between .221 and .310. In addition, all correlations among socioemotional wealth dimensions and firm performance are also statistically significant at the .01 level, ranging between .188 and 0.265. These statistically significant correlations are a first indication that there is moderate association among the three socioemotional wealth dimensions and innovativeness and firm performance in the sample.

92

**Table 12: Correlations and Descriptive Statistics of the Sample** 

_		Mean	S.D	Min	Max	1	2	3	4	5	6	7	8
	1. Firm Size	2.99	1.63	0.00	6.00	1							
	2. Firm Age	19.35	19.62	1.00	121.00	.281**	1						
	3. Environmental Munificence	4.03	1.25	1.00	7.00	.218**	078	1					
	4. Environmental Dynamism	4.94	1.06	1.75	7.00	.075	089	.171**	1				
	5. Owners' Age	38.38	11.34	18.00	79.00	295**	.037	132*	160**	1			
	6. Owners' Gender	0.41	0.49	0.00	1.00	.199**	.058	.045	130**	.034	1		
	7. Owners' Education	2.43	1.35	1.00	6.00	.016	.078	056	.033	.136*	060	1	
	8. Intergenerational Authority	4.57	1.22	1.00	7.00	.173**	.053	.331**	.383**	086	.017	012	1
	9. Family Continuity	4.18	0.71	1.20	5.00	060	025	049	.279**	.047	048	050	.179**
	10. Family Enrichment	3.68	0.77	1.50	5.00	.102	.013	.150*	.314**	032	.053	018	.309**
9	11. Family Prominence	3.96	0.79	1.50	5.00	.056	.028	.089	.353**	.020	.007	.019	.296**
5	12. Innovativeness	4.14	1.02	1.00	7.00	.287**	.059	.234**	.326**	125*	006	118	.218**
	13. Generations	1.92	0.65	1.00	3.00	.245**	.340**	016	.114	063	086	004	.136*
	14. PNFM	0.31	0.46	0.00	1.00	.414**	.140*	.299**	.053	176**	033	.016	.097
	15. FBIP	5.09	1.42	1.00	7.00	.040	.101	065	.275**	007	.016	181**	.165*
	16. Return on Assets (%)	54.84	80.66	01	500	.044	094	067	032	014	042	021	.052
_	17. Performance Comparison	2.43	0.37	1.12	3.00	.140*	.056	055	.232**	005	.043	149*	.075

N = 277, \* p < .05, \*\* p < .01

 $Perf\_Satisfaction = owners'$  satisfaction with past performance, PNFM = presence of non-family managers, FBIP = family-brand-identity promotion, ROA = return on assets

Table 12: Correlations and Descriptive Statistics of the Sample ctn'd

	9	10	11	12	13	14	15	16	17
9. Family Continuity	1								
10. Family Enrichment	.601**	1							
11. Family Prominence	.666**	.648**	1						
12. Innovativeness	.249**	.310**	.221**	1					
13. Generations	.167**	.190**	.167**	.132*	1				
14. PNFM	210**	.006	046	.144*	.086	1			
15. FBIP	.408**	.396**	.459**	.260**	.257**	050	1		
16. Return on Assets (%)	112	029	040	122*	.021	.004	022	1	
17. Performance Comparison	.206**	.188**	.265**	.256**	.187*	.046	.329*	.013	1

N = 277, \* p < .05, \*\* p < .01

 $Perf\_Satisfaction = owners'$  satisfaction with past performance, PNFM = presence of non-family managers, FBIP = family-brand-identity promotion, ROA = return on assets

To test for the hypotheses of the research model, I conducted hierarchical regressions in SPSS, entering control variables in the first model, independent variables in the second model, and moderating variables (interaction terms) in the third and last model. I used innovativeness as a dependent variable to test for hypotheses 1 through 7 and firm performance to test for hypotheses 8-11. The main findings from the conducted regressions on the sample are presented in Table 13 below. There are six presented models in total. The first three have as the dependent variable firm innovativeness, whereas the last three have firm performance as the dependent variable. In each case, model 1 included only the control variables and models 2 and 3 included also the independent and interaction terms, respectively.

As presented in the table, five hypotheses were supported and one, although supported, was of the reverse sign than the one predicted. Specifically, hypothesis 1b predicted that the family continuity dimension of SEW will be positively related with firm innovativeness and it was supported (b = 0.269, p < .05). Similarly, hypothesis 6b predicting that the relationship between family enrichment and firm innovativeness will be less pronounced for firms with presence of non-family managers in their top management teams, was supported (b = -0.321, p < .10). Family-brand identity promotion strengthened the relationship between family prominence and innovativeness (b = 0.028, p < .05), as well as that between innovativeness and performance (b = 0.014 p < .001) providing support for hypothesis 7 and hypothesis 8, respectively. From the last three hypotheses (9-11) that predicted the relationship between the three SEW dimensions and firm performance, only hypothesis 11 was supported. Family prominence had a positive and significant relationship with performance (b = 0.096, p < .05).

**Table 13: Regression Results** 

	DV –	Firm Innova	tiveness	DV –	Firm Perfo	rmance
Parameter	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3
Intercept	1.818***	0.865^	1.340**	1.926***	1.625***	1.850***
Control variables						
Firm Size	0.145***	0.149***	0.131**	0.034*	0.024	0.027^
Firm Age	0.001	0.002	0.001	0.000	0.000	0.000
Environmental Munificence	0.107*	0.119*	0.129**	-0.037^	-0.042*	-0.033^
Environmental Dynamism	0.266***	0.213***	0.198***	0.093***	0.055*	0.047*
Intergenerational Authority	0.024	-0.005	-0.001	-0.002	-0.014	-0.016
Owner's Age	0.001	0.000	0.000	0.002	0.001	0.002
Owner's Gender	-0.050	-0.064	-0.055	0.037	0.037	0.031
Main variables						
Family Continuity (FC)	-	0.269*	0.136	-	0.004	-0.007
Family Enrichment (FE)	-	0.203*	0.283*	-	-0.015	-0.023
Family Prominence (FP)	-	-0.138	-0.321^	-	0.096*	0.066
Innovativeness	-	-	-	-	0.068**	-0.011
Interactions						
PNFMxFC	-	-	0.308^	-	-	-
PNFMxFE	-	-	-0.321^	-	-	-
FBIPxFP	-	-	0.028*	-	-	-
InnovativenessxFBIP	-	-	-	-	-	0.014***
$\mathbb{R}^2$	0.194	0.246	0.274	0.091	0.155	0.187
F-value	9.265	8.692	7.628	3.867	4.420	5.056
Significance	0.000	0.000	0.000	0.000	0.000	0.000
FO C 1			0.0604444			
FC, first generation firms <sup>1</sup>	-	-	0.262***	-	-	-
FC, later generation firms <sup>1</sup>	-	-	0.389***	-	-	-
FE, first generation firms <sup>2</sup>	-	-	0.369*	-	-	-
FE, later generation firms <sup>2</sup>	-	-	0.415***	-	-	-

N = 277, p values: \*\*\* .001, \*\* .01, \* .05, ^ .10

<sup>&</sup>lt;sup>1</sup>FC and first generation later generation differences Welch's t-test (t-stat = -.68, not significant)

<sup>&</sup>lt;sup>2</sup> FE and first generation later generation differences Welch's t-test (t-stat = -.27, not significant)

# **5.4 Chapter Summary**

This chapter presented the results that were obtained from the empirical analysis that was performed to test the hypotheses of the research model. It started by examining the quality of the data including non-response and common bias testing and by ensuring construct reliability and absence of multicollinearity threats. It then proceeded with a detailed presentation of the descriptive statistics and the demographics of the participants included in the main sample, which was collected using Qualtrics. Lastly, the chapter concluded by detailing the main findings of the regressions. In Chapter 6 that follows, I proceed in the interpretation of the results and conclude the study discussing also limitations, avenues for future research, and implications for theory and practice.

#### CHAPTER 6: DISCUSSION AND CONCLUSION

Having presented the empirical results of this dissertation in Chapter 5, I now proceed with the discussion of the findings and the conclusion of the study. This final chapter starts with the interpretation and discussion of the findings in section 6.1, including possible explanations for the hypotheses that turned out to the reverse direction from the one that was anticipated and those that were not supported. The chapter then provides a detailed discussion of the theoretical, empirical, and practical implications of the findings in section 6.2. Section 6.3 outlines the limitations of the study and section 6.4 offers possible avenues for future research on family firm innovativeness. Lastly, section 6.5 concludes the study summarizing its main findings and contributions.

#### **6.1 Discussion**

The main premise of this dissertation is that family firm research can be advanced through a more in-depth examination of the effects of different SEW dimensions on family firm innovativeness and performance. Specifically, by studying how SEW affects firm innovativeness and performance, both negatively, in the case of internal SEW and positively, in the case of external SEW, we can better understand the conditions under which SEW is a facilitator and those under which it is an inhibitor for family firm innovativeness. Extant literature has considered so far the positive side of SEW for strategic outcomes and performance of family firms. However, this study shows that although some dimensions positively influence innovativeness and performance, others

yield negative effects for firm outcomes. Doing so, this dissertation engages and extends the conversation about the duality of effects of family firms' SEW on both firm innovativeness and performance emphasizing also the dark side of SEW (Kellermanns et al., 2012).

Overall, the results reveal family firm heterogeneity across SEW dimensions (Chrisman et al., 2009) and its dual effects on family firm innovativeness and performance. Therefore, the study contributes to family firm research by shifting the attention from the homogeneous emphasis on SEW (Berrone et al., 2010; Gomez-Mejia et al., 2007) to the heterogeneous reality of family firm SEW (Zellweger and Dehlen, 2012). Although both internal and external SEW dimensions moderately affect family firm innovativeness, only external SEW has a direct influence on firm performance. Specifically, SEW facilitates innovativeness in family firms that are concerned with maintaining control in family hands and employing family members. One reason may be the effective tacit knowledge management that family firms experience when employing multiple family members (Jaskiewitz et al., 2013). Another reason may be that employing multiple family members promotes family values of support, connectedness, and solidarity within family firms which boosts employees' perceptions of organizational support and increases innovativeness (Stavrou et al., 2007). By contrast, SEW inhibits innovativeness in family firms that are concerned with building and maintaining their reputation because such family firms may fear the reputation damage that results from unsuccessful innovative efforts (Dyer and Whettem, 2006; Miller et al., 2008).

Table 14 below summarizes all findings along with the significance or not for each of the hypothesized relationships. The first hypothesis concerns the relationship

between the family continuity dimension of SEW and family firm innovativeness. There are two competing hypotheses that have been developed for this relationship including hypothesis 1a and hypothesis 1b. On one hand, in hypothesis 1a, the importance attached to family continuity is expected to influence negatively innovativeness because family firms that fear losing firm control tend to resist the need for change, external financial resources, and external human capital that is required for innovation (Jones et al., 2008). On the other hand, in hypothesis 1b, the importance attached to family continuity is expected to influence also positively innovativess because family firms that wish to build and maintain a dynasty tend to innovate and take risks (De Massis et al., 2015; Khedhaouria et al., 2015; Naldi et al., 2007). Family continuity has a positive and statistically significant relationship with firm innovativess ( $\beta = .269$ , p < .05) indicating that maintaining the family dynasty component of the continuity SEW dimension is more salient than maintaining family control. This finding provides support for hypothesis 1b but not for its competing hypothesis 1a.

Further, family enrichment is expected in hypothesis 2 to have a negative relationship with firm innovativeness because family firms that are concerned with employing family members will tend to focus more on their core activities and resist innovation. One reason for this tendency is the knowledge limitations of the pool of available family members (Gomez-Mejia et al., 2011). Another reason is that given such knowledge limitations, family firms would need the expertise of external (non-family) members in order to engage in successful innovative efforts, and this need would come at the cost of having to alter their informal business environment and set up professional monitoring systems (Dekker et al., 2015).

Table 14: Summary of Significant and Not Significant Hypotheses

Hypotheses	N=277	
	Beta	Significant
H1a: FC – Innovativeness (-)	0.269*	Significant, reverse
H1b: FC – Innovativeness (+)	0.269*	Significant
H2: FE – Innovativeness (-)	0.203*	Significant, reverse
H3: FP – Innovativeness (+)	-0.138	Not Significant
H4: Innovativeness – Performance (+)	-0.011	Not Significant
H5a: Generations on FC – Innovativeness (-)	z = -0.68	Not Significant
H5b: Generations on FE – Innovativeness (-)	z = -0.27	Not Significant
H6a: PNFM on FC – Innovativeness (-)	0.308^	Significant, reverse
H6b: PNFM on FE – Innovativeness (-)	-0.321^	Significant
H7: FBIP on FP – Innovativeness (+)	0.028*	Significant
H8: FBIP on Innovativeness – Performance (+)	0.014***	Significant
H9: FC on Performance (-)	0.004	Not Significant
H10: FE on Performance (-)	-0.015	Not Significant
H11: FP on Performance (+)	0.096*	Significant

<sup>\*\*\*:</sup> p < .001, \*\*: p < .01, \*: p < .05, ^: p < .10

The results show that family enrichment has a positive and statistically significant relationship with innovativeness ( $\beta = .203$ , p < .05), indicating that hypothesis 2 is supported but with a reverse sign. This is an unexpected finding, which can be explained in terms of family enrichment. Family enrichment captures the need of family firms to employ family members in the firm and to maintain harmonious relationships among them (Debicki et al., 2016). At the same time, employing family members in the firm has been linked to nepotism phenomenon (Jaskiewitz, Uhlenbruck, Balkin, and Reay, 2013). However, although nepotism has been described as primarily detrimental for family businesses (Lee, Lim, and Lim, 2003), it can also be beneficial for them under certain conditions. This study shows that employing family members in the firm is beneficial for family firm innovativeness. Such finding aligns with prior research by Jaskiewitz et al., (2013) which highlights that employing family members in a family firm fosters the development of generalized social exchange relationships between them which in turn, result in more effective tacit knowledge management. Effective tacit knowledge management among family members working in the family firm may be one reason why family enrichment is positively related to innovativeness in the present study ( $\beta = .203$ , p < .05). Another explanation for this finding could link to research suggesting that family firms employing multiple family members are more likely to promote in their firm practices family values such as connectedness, solidarity, and support (Stavrou, Kassinis, and Filotheou, 2007). Scholars have found that these values tend to spread to family firm employees fostering their feelings of perceived organizational support and increasing their innovative work (Bammens, Notelaers, and Van Gils, 2015) which can lead to higher firm innovativeness as well.

Hypothesis 3 predicts that family prominence will be positively associated with innovativeness because family firms that want to build and maintain a strong reputation often develop an "in-group favoritism" (Deephouse and Jaskiewitz, 2013) which reinforces their need to provide different products/services and be, in general, different from others (Knippenberg and Schie, 2000). Although the relationship is found to be negative, it is not statistically significant ( $\beta = -.138$ , p > .05), providing no support for hypothesis 3. This negative coefficient, however, could indicate that the higher the importance attached to reputation by family firms, the lower their innovative activity.

Family firms may be afraid to undertake the risks associated with innovation because reputation is influenced, among other factors, by financial success (Fombrun and Shanley, 1990). Therefore, any unsuccessful innovative effort may result not only in a financial loss, i.e. loss of the invested capital, but also in a damaged reputation (Dyer and Whetten 2006; Miller et al., 2008). In family firms, where the identification of family members with the firm is high (Deephouse and Jaskiewitz, 2013), the possibility of such reputation damage might be perceived as a more threatening loss and mitigate the firms' willingness to take risks and innovate.

Hypothesis 4 predicts that innovativeness will be positively related with performance in family firms in accordance with other studies that have examined this relationship in the past (Naldi et al., 2007; Kedhaouria et al., 2015; Rausch et al., 2009; Schepers et al., 2013). Although this hypothesis is not supported here ( $\beta = -.011, p > .05$ ), the result aligns with prior research findings in terms of its low strength. For example, Naldi et al. (2007) have examined the effect of a family firm's innovativeness on its performance and found only a marginal impact. Similarly, Kellermanns et al. (2012) have

studied 70 US family firms and showed that the effect of innovativeness on performance is strong when the ownership is concentrated on only one generation. The multigenerational nature of the family firms included in this sample could explain the weakness of the relationship between innovativeness and firm performance. Testing the relationship between innovativeness and firm performance on a larger sample of one generation family firms could lead to a stronger result.

Hypotheses 5a and 5b predict a moderating effect of generational involvement on the relationships between family continuity and family enrichment with innovativeness, respectively. Generational involvement is expected to weaken the relationship of both family continuity and family enrichment with innovativeness because later-generation family firms, compared with first-generation ones, are more innovative (Beck et al., 2011; Cruz and Nordqvist, 2012) and base their decision making more on financial than SEW considerations (Stockmans et al., 2010). Neither of these two hypotheses is supported, indicating that generational involvement does not interact with internal SEW in affecting innovativeness.

One reason that could account for these findings may be that it has not been possible to compare first-generation family firms with third-generation ones in this study. Researchers taking a generational perspective in family firm innovation have tested how first-generation family firms innovate less compared to later-generation ones including second- and third-generation (Cruz and Nordqvist, 2012; Kellermanns and Eddleston, 2006) as it was done here. However, the highest and most significant differences in innovation levels have been observed between first-generation and third-generation family firms (Beck et al., 2011). Such group comparison test though could not be

performed here due to the uneven size of the three groups and the fact that only 48 of the 277 firms in the sample were third-generation family firms. Future research could perform additional subgroup tests if obtaining more equal group sizes is achieved.

Hypotheses 6a and 6b, on the other hand, predict a moderating effect of the presence of non-family managers in a family firm on both the relationship between family continuity and innovativeness (H6a) and that between family enrichment and innovativeness (H6b). The presence of non-family managers strengthens rather than weakens the relationship between family continuity and innovativeness ( $\beta = .308$ , p <.10). Although marginally significant, this relationship is reverse from the one that was hypothesized. However, given that the main relationship between family continuity and innovativeness has been positive, this finding is not surprising. Specifically, maintaining the family dynasty component of family continuity has been more salient that maintaining family control, which indicates that family firms are more concerned about continuing their firm than they are about maintaining the control in family hands. Therefore, if family firms are willing to relinquish family control (indicated by some presence of non-family managers in their top management team) they could benefit from the knowledge added by those managers and demonstrate higher innovativeness compared to that in the absence of non-family managers.

By contrast, the presence of non-family managers weakens the relationship between family enrichment and innovativeness ( $\beta = -.321$ , p < .10) supporting hypothesis 6b. This finding indicates that in professionalized family firms having non-family managers on their top management teams, family enrichment, or the need to employ family members in the firm and maintain harmonious relationships among them, has

indeed a weaker relationship with firm innovativeness. This is not a surprising finding given that the decision-making process of non-family managers in a family firm depends more on acts of rationalization and objectivity that on SEW or other non-economic considerations (Blumentritt et al., 2007).

Hypothesis 7 and hypothesis 8 predict the moderating effects of family brand identity promotion (FBIP) on the relationship between family prominence and innovativeness, and that between innovativeness and firm performance, respectively. FBIP strengthens significantly both the relationship between family prominence and innovativess ( $\beta = .028$ , p < .05) and that between innovativeness and performance ( $\beta = .014$ , p < .001), supporting both hypothesis 7 and hypothesis 8.

The support for hypothesis 7 shows that family firms that are concerned about their reputation (family prominence) and promote their family brand identity demonstrate higher levels of innovativess. This finding is not surprising given that such firms are in a better position to attract highly skilled employees (Turban and Cable, 2003) and financial resources from investors and/or creditors (Nordqvist et al., 2015), both of which are necessary for undertaking innovative efforts successfully.

Similarly, the support for hypothesis 8 shows that innovative family firms that promote their family-brand identity demonstrate superior financial performance. This finding aligns with prior research showing that the innovative efforts of family firms that promote their family brand yield better financial results, because of the sense of trustworthiness that the family status evokes to customers (Micelotta and Raynard, 2011), the superior customer service (Orth and Green, 2009), and the higher quality products (Teal, Upton, and Seaman, 2003).

The last three hypotheses concern the direct relationships between each of the three SEW dimensions and firm performance. Hypothesis 9 predicts a negative relationship between the family continuity dimension of SEW and firm performance because family firms that strive to maintain their firm control and minimize ownership dispersion are less likely to professionalize and more likely to experience nepotism and entrenchment phenomena (Lansberg et al., 1988; Rutherford et al., 2008) which are harmful for firm performance. The results indicate that there is not a statistically significant relationship between family continuity and firm performance ( $\beta = .004$ , p > .05). This finding offers no support for hypothesis 9.

Hypothesis 10 predicts that family enrichment will also be negatively related with family firm performance because employing family members in the firm is often accompanied by lack of monitoring systems and informal business environments which pave the ground for lower quality employee work and as a result, lower firm performance (Fama and Jensen, 1983). The findings demonstrate that there is not a statistically significant relationship between family enrichment and firm performance ( $\beta = -.015$ , p > .05), offering no support for hypothesis 10.

Finally, hypothesis 11 predicts that family prominence will be positively related with firm performance because firms that care about their reputation often strive to do business in honest and respectful ways (Debicki, et al., 2016), inspiring feelings of trustworthiness to their customers, and increasing their sales and financial performance (Micelotta and Raynard, 2011). The results indicate that there is a positive and statistically significant relationship between family prominence and firm performance ( $\beta = .096$ , p < .05), supporting hypothesis 11.

# **6.2 Implications**

# **6.2.1 Theoretical Implications**

The findings of this study have important theoretical, empirical, and practical implications. Regarding theory and research, this study provides a detailed examination of SEW taking the discussion about innovation and performance of family businesses to a new level. SEW is a relevant and theoretically novel perspective to apply to family firm innovation research because it holistically captures both the economic and the non-economic goals of family firms. The present study shows that an SEW perspective on innovation and performance in family businesses is a novel approach (Gomez-Mejia et al., 2007) and a more illustrative perspective to apply as it not only accounts for economic and non-economic goals of family firms, but also explains how the latter influence the former. This is critical as most research on family firm innovation to date, has focused on either agency theory or stewardship theory (De Massis et al., 2012) capturing only one of the two types of goals.

Specifically, the findings indicate that there are both positive and negative effects of SEW on firm innovativeness and performance which not only underscores the dual influence of SEW on family firm outcomes, but also contributes to SEW research. In specific, the study uses a multidimensional SEW measure and disentangles differential effects of each SEW dimension on firm outcomes including innovativeness and performance. In that sense, this study contributes to the literature on family firm SEW by showing that single-item proxies for the measurement of family firms' SEW such as ownership shares (Deephouse and Jaskiewitz, 2013) or founders' age (Strike et al., 2015)

do not allow researchers to disentangle the differential effects of each SEW dimension. Given the duality of SEW effects on family firm decision making, future researchers are encouraged to refrain from the use of oversimplifying single-item proxies for its measurement and utilize instead multidimensional SEW scales (Berrone et al., 2012; Debicki et al., 2016) that can provide richer and more accurate measurements as well as more solid conclusions.

These findings also extend the SEW perspective by showing that family firm loss aversion varies depending on which dimension is important for the owning family. In other words, family firms can be both willing and resistant to take risks and innovate, and disentangling their SEW dimensions helps us to theoretically better understand their decision-making processes. In specific, this study shows that when family firms attach importance to family continuity or family enrichment, they tend to take risks and innovate. This happens because employing family members in the firm and exercising family control reinforces the promotion of the family values of connectedness and support (Stavrou et al., 2007) and fosters the development of generalized social exchange relationships between family members (Jaskiewitz et al., 2013), both of which increase effective tacit knowledge management, employee innovative work, and firm innovation. By contrast, when family firms attach importance to family prominence and reputation, especially in cases where the family members have a strong sense of identification with their firm, they are not as willing to take such risks because they may fear the reputation damage caused by unsuccessful innovative efforts (Dyer and Whetten 2006; Miller et al., 2008).

Examining family firm innovation through an SEW lens also responds to recent research calls about not isolating the family from the firm (Basco and Perez-Rodriguez, 2009; Berrone et al., 2012), not missing the family variable (Dyer, 2003), and understanding the critical role of the family for firm innovation (Cruz and Nordqvist, 2012). Given that SEW is the defining feature of family firms and what differentiates them from their non-family counterparts (Berrone et al., 2012; Gomez-Mejia et al., 2007), its importance has been fundamental for family firm behavior. This study reinforces prior research emphasizing that the emotional attachment of the family members with their family firm is so intense, especially in the context of small family firms, that it significantly influences their decision making (Glover and Ray, 2015).

Second, this study separates the effects of internal and external SEW of family businesses on both innovation and performance revealing that they both play a more important role for strategic decision making than firm performance of family firms. Interestingly, the beta coefficients for the main relationships between the three SEW dimensions and firm performance were all quite small. They were either statistically insignificant as in H9 and H10 (.004 and -.015, respectively) or statistically significant but still weak as in H11 (.096). Contrary to the SEW-performance coefficients, the beta coefficients for the relationships between the three SEW dimensions and firm innovativeness were much stronger and statistically significant, ranging from -0.14 to 0.27. T-tests were performed for the comparison of these coefficients. The results highlight that SEW affects innovativeness in family firms moderately (Gomez-Mejia et al., 2011; Kotlar et al., 2014; Nordqvist et al., 2015) and more than it influences firms' financial performance directly (t-tests for the difference of the respective betas were >2).

In other words, despite the relevance of emotional considerations in permeating family firm behavior (Baron, 2008; Berrone et al., 2012) and prior research findings indicating that negative emotions can harm firm performance directly (Eddleston and Kellermanns, 2007), this study shows that the direct relationship between SEW and family firm performance is weak. In that sense, an important research implication is that the relationship between SEW and firm performance should be examined in the future through possible mediating mechanisms. For instance, Cennamo et al. (2012) have suggested that family firm SEW leads to higher proactive stakeholder engagement which limits their ability to innovate and significantly influences firm performance (Cennamo et al., 2009). Given this, future research could examine the mediating role of proactive stakeholder engagement or other variables in the relationship between SEW and performance in family firms.

Last but not least, the study also contributes theoretically to the discussion about the heterogeneity of family businesses regarding their SEW (Chua et al., 2012; Cruz and Nordqvist, 2012). Understanding family firm heterogeneity is vital for research findings to be beneficial for family firms because Melin and Nordqvist (2007) have expressed concern that if researchers do not sufficiently account for the heterogeneity of family firms, any findings may actually harm rather benefit family business owners when applied blindly to their idiosyncratic cases. Although several studies have previously recognized such heterogeneity, most empirical studies examine the heterogeneity between family and non-family businesses which is found to be significantly smaller than the heterogeneity within family businesses (Chua et al., 2012) and, often, a sample-based artifact (Jorissen et al., 2005). Zellweger and Dehlen (2012) have stressed the theoretical

importance of the heterogeneity of family firms across their SEW dimensions and Chrisman et al., (2009) have argued about the effects of such heterogeneity on family firm innovation.

Indeed, some family firms are determined to maintain their family harmony and social status (Kotlar and De Massis, 2013; Gomez-Mejia et al., 2011), while others strive to build and preserve a strong reputation (Deephouse and Jaskiewitz, 2013). For some family firms, their priority is to maintain family control (Klein et al., 2015), while for others it is to exercise authority (Jones et al., 2008) or to employ family members in the firm (Cruz et al., 2012).

This dissertation contributes to these discussions by demonstrating not only the existence of heterogeneity among family firms in terms of their SEW, but also its effects on the innovativeness and performance of family firms. Doing so, it responds to research calls that authors have recently made for the theoretical integration of SEW as either an antecedent or a moderator in research models that examine family firms' behavior and strategic-decision making (Nordqvist et al., 2015).

### **6.2.2 Empirical Implications**

This dissertation makes also some empirical contributions. First, it directly measures family firm SEW, avoiding the application of previously used unidimensional ownership proxies which have been widely criticized as oversimplifying and inadequate (Berrone et al., 2012; Nordqvist et al., 2015). Specifically, a valid and reliable three-dimensional measure of SEW has been used, responding to the need for direct

measurement of the SEW construct (Berrone et al., 2012; Sharma and Carney, 2012; Strike et al., 2015; Vandekerkhof et al., 2015).

This is one of the few attempts that have been made in family firm literature to empirically capture SEW. Although researchers have studied SEW as a way to explain why family owners do not sell their firm (Zellweger and Astrachan, 2008), accept lower IPO gains (Leitterstorf and Rau, 2014), engage in corporate social responsibility (Cruz et al., 2014) and invest in R&D (Gomez-Mejia et al., 2014), they have rarely measured SEW directly. Except for a few other notable exceptions (Debicki, 2012; Debicki et al., 2016; Schepers et al., 2014; Vandekerkhof et al., 2015), most researchers have either used SEW as an explanatory concept to facilitate the interpretation of their findings (Berrone et al., 2010; Leitterstorf and Rau, 2014) or relied on SEW proxies (Deephouse and Jaskiewitz, 2013; Strike et al., 2015).

Second, the study examines family firms' SEW as an antecedent of their innovativeness contributing to recent calls of family business researchers for studying how SEW impacts innovation as well as for using SEW as a moderator in research models that seek to explain the strategic-decision making of family firms (Berrone et al., 2012; Nordqvist et al., 2015). In addition, by examining the interactions between generational involvement and SEW dimensions the study not only more closely examined the influence of the family on firm innovativeness, but also empirically contributed to recent calls for considering generations when studying the entrepreneurial behavior of family firms (Cruz and Nordqvist, 2012).

Third, this study empirically demonstrates that the importance family firms attach to SEW is more strongly associated with their strategic-decision making than it is with their financial firm performance. Although prior research has called for a closer examination of performance effects of family firms' non-economic goals (Berrone et al., 2010), this dissertation establishes that the importance of SEW for strategic-decision making (Gomez-Mejia et al., 2011; Kotlar et al., 2014; Nordqvist et al., 2015) is higher than it is for firm performance. In doing so, the findings contribute to prior research that has shown that the effects of SEW on firm performance are not direct, but indirect through mediating mechanisms such as proactive stakeholder commitment (Cennamo et al., 2012).

## **6.2.3 Practical Implications**

This dissertation also has practical implications for owners of small and privately-held family businesses. First, the findings of this study confirm the role of SEW as both an endowment and a burden for family firms (Kellermanns et al., 2012) contributing to the awareness of family firm owners of the dual effects of their non-economic goals for their strategic-decision making and firm performance. More specifically, family firm owners know that family continuity and enrichment foster, whereas family prominence inhibits, their firm innovativeness. They also know that their SEW dimensions have an impact on their innovativeness, but do not influence as much their firm performance. Given the inherent nature of SEW for family firms though, there might be little room for the owners to intervene and alter their SEW endowment and the importance that they attach to different SEW dimensions.

However, one way in which they can benefit from the results of this study is by knowing that the negative effects of SEW on innovativeness become significantly lower

when they intervene in the governance of their firms and professionalize them. In other words, when non-family managers are included in the top management team of family firms, the negative effects of non-economic goals, as captured by SEW, on innovativeness become weaker. This is explained by the fact that non-family managers engage in a decision-making process that is more based on rationalization and objectivity (Blumentritt et al., 2007) and thus, SEW is less likely to play a dominant and negative role for innovation of professionalized family firms. Therefore, family firm owners who attach high importance to the family enrichment dimension of their SEW are encouraged to consider professionalizing their firm to help mitigate the negative effects of SEW on their firm innovativeness.

Second, the study shed light on one interesting way through which the financial performance of family firms' innovativeness can become more pronounced. In particular, this study found that family firm innovativeness interacts with family-brand identity promotion in affecting firm performance. This finding revealed that family firms might boost the effects of their innovative efforts on firm performance by promoting their family brand status to their customers because doing so evokes in them a sense of trustworthiness that leads to increased sales and higher financial returns.

Third, another interesting implication for family business owners relates to how they can reverse the negative effect of the family prominence dimension of their SEW on innovativeness to a positive one. The results showed that family firms with reputation concerns are reluctant to innovate. A possible reason for this reluctance may be that reputation can be influenced, among other factors, by financial success (Fombrun and Shanley, 1990) and unsuccessful innovative effort can lead not only to financial losses for

family firms, but also to damaged reputations (Dyer and Whetten 2006; Miller et al., 2008). In family firms, where the identification of family members with the firm is high (Deephouse and Jaskiewitz, 2013), the possibility of such a reputation damage might be perceived as more threatening and mitigate the firms' willingness to take risks and innovate.

The findings of the study support that family-brand identity promotion reverses such negative effect of family prominence of family firms on their innovativeness. In other words, although family prominence influenced negatively firm innovativeness, the effect reversed to a positive one when family firms promoted their family status. As a result, this dissertation calls on family firms to mindfully promote their family status to customers, employees and other stakeholders, because by doing so they can attract higher skilled employees (Turban and Cable, 2003), gain easier access to financial resources from investors and creditors (Nordqvist et al., 2015) and increase their innovativeness.

### **6.3** Limitations

There are some important limitations to be taken into account when interpreting the results of this dissertation. First, the present study was based on cross-sectional data that was collected at one point in time indicating that one can draw safe conclusions about associations between the examined variables and not so much about causal relationships between them. It would be interesting for future research to measure the SEW level of family firms and outcome variables such as innovativeness and performance at different points in time, in order to be able to establish causal relationships. However, the results of the Hausman test for the presence of endogeneity

bias that was performed mitigated the concern about the causality of the examined relationships.

Second, I used only one of the family business owners as the main participant of the survey during my data collection process, assuming that responses of one family member accurately reflect the views of the family as a whole. However, scholars have argued that family business research would greatly benefit from data obtained through multiple respondents within a family firm (Kellermanns and Eddleston, 2016; Kraiczy et al., 2014; Uhlaner et al., 2012). For instance, while Kraiczy et al., (2014) suggest that obtaining data from multiple family members within a family firm significantly reduces informant biases, Uhlaner et al., (2012) take a step further to suggest that it would be very interesting to get data about the dependent variable from one family member and data about the predictors or independent variables from another. Although such an approach would impose certain practical challenges regarding the data collection process and was not followed in this study, it would certainly provide very interesting and rich datasets.

Third, the present study has focused on family firms that are US-based, privately-owned, and small-sized (<500 employees). As a result, the findings may not be generalizable to firms that are located in a non-US context, that are publicly-traded, or that have significantly larger size. Although Rutherford et al., (2008) have cautioned that the use of public firms is not a representative way to understand family influences in family firms, future research may look into family firm SEW and innovativeness in this distinct context to test whether the results hold or change significantly.

A final limitation concerns the examination of generational involvement in this study. Specifically, the innovativeness of first-generation family firms was compared

with that of later-generation family firms including both second- and third-generation ones because of lack of sufficient data of third generation family firms and uneven group sizes. Conducting innovativeness comparisons between first- and second- as well as second- and third- generation family firms would have yielded richer results, but would require more third-generation family firms. Thus, it would be interesting for future researchers to compare family firm innovation between first-generation and third-generation firms to understand whether they indeed exhibit the highest and most significant differences in their innovation levels as suggested in the literature (Beck et al., 2011). These limitations present research opportunities on family firm SEW and innovativeness. The section that follows concludes the study by offering more avenues for future research.

### **6.4 Future Research**

The present study examined innovative activity as a whole and did not distinguish between different types of innovation such as incremental versus radical innovation. Research, however, has shown that different types of innovation lead to different levels of SEW losses for family firms (De Massis et al., 2015; Nieto, Santamaria, and Fernandez, 2015). Further, using empirical data from the Global Entrepreneurship Monitor (GEM), scholars have shown that family firms are more likely to focus on corerelated innovative efforts and avoid the introduction of radically new products or technology because of the knowledge limitations that the pool of available family members place on the firm (Gomez-Mejia et al., 2011). Thus, it would be very interesting

if future research examined the present model while differentiating between different types of innovation such as radical versus incremental.

In addition, although this dissertation focused on family-level antecedents of family firm innovation, research has shown that family-level factors interact with environmental-level ones when influencing innovation (Chirico et al., 2014). For example, Chirico, Naldi, and Criaco (2014) have shown that family involvement fosters (inhibits) innovation when environmental munificence is low (high), indicating that family- and environment-level antecedents of innovation can be interdependent at times. Newbert and Craig (2017) have also recently underscored such interdependence and recommended the study of SEW of family firms within the environmental context in which they operate. Given that environmental factors such as munificence and dynamism were controlled, such interdependency has not been examined in the present study, but would certainly be an interesting avenue for future research. For example, researchers could apply a configurational approach in the examination of family firm innovativeness in order to understand how family-level factors such as SEW and environmental-level ones such as environmental munificence and dynamism interact with each other when influencing family firm innovativeness.

Furthermore, it would also be interesting for future researchers to examine SEW longitudinally, across different generations. There are calls in family business research for more studies on the evolution of SEW over time and, specifically, across generations (Berrone et al., 2012). It would be interesting, for instance, to understand how SEW as an endowment changes during the transition from one generation to another as well as

whether family members belonging in different generations assign different weights in different SEW dimensions.

Another exciting area for future research would be the examination of the relationship between SEW of family firms and entrepreneurial orientation (EO) as a whole. In other words, research could examine all five dimensions of EO, including innovativeness, risk taking, proactiveness, autonomy, and competitive aggressiveness (Lumpkin and Dess, 1996), and how they relate with SEW in the context of family firms. Given that research has shown risk taking to be a distinct dimension of EO in family firms which negatively influences firm performance (Naldi et al., 2007), it would be interesting for future researchers to study how SEW relates to other EO dimensions such as risk taking in the context of family firms.

Lastly, as mentioned in chapter 2, there have been different SEW proxies that were used in the literature to capture SEW including first, ownership and involvement proxies (Deephouse and Jaskiewitz, 2013) or, in other words, the percentage of shares owned by the family, and second, the CEO's career horizon (Strike et al., 2015). It would be interesting to examine how the overall relationship between family firms' SEW - including all three dimensions- and innovativeness changes or not depending on the type of measure used to empirically capture SEW (percentage of shares hold by family members, family CEO's career horizon, or a SEW scale).

#### 6.5 Conclusion

Despite the importance of SEW of family firms for their decision making, very few studies have acknowledged the heterogeneity of family firms across different SEW

dimensions. Indeed, some family firms are determined to maintain their family harmony and social status (Kotlar and De Massis, 2013; Gomez-Mejia et al., 2011), while others strive to build and preserve a strong reputation (Deephouse and Jaskiewitz, 2013). For some family firms, their priority is to maintain family control (Klein et al., 2015), while for others it is to exercise authority (Jones et al., 2008) or to employ family members in the firm (Cruz et al., 2012). However, current research often assumes the existence of SEW through the family firm status and rarely measures it directly. This assumption oversimplifies the complexity of the construct of family firm SEW and does not facilitate our understanding of the differential effects of each SEW dimension on family firm outcomes such as innovativeness and performance.

This dissertation builds on the behavioral agency theory's predictions that SEW affects family firm decision making both positively and negatively in order to examine how different SEW dimensions influence family firm innovativeness and performance. Disentangling the effects of each SEW dimension of family firms on their innovativeness and performance, the study engages and theoretically extends the conversation about the duality of effects of SEW on family firm outcomes. Analyzing a sample of 277 US-based, privately-held, and small-sized family firms, I find that internal SEW leads positively to firm innovativeness while external SEW does not have a significant impact. The results also show that internal SEW does not directly influence firm performance whereas external SEW does. Lastly, the results highlight that SEW has a more pronounced direct effect on family firm innovativeness than it has on financial performance underscoring the importance of SEW for understanding the decision-making process of family firms.

The study shifts the current research focus from the homogeneity of family firms regarding their SEW to the more heterogeneous reality of family firms. Family firms are heterogeneous in terms of the importance that they attach to different SEW dimensions and acknowledging such heterogeneity holds promise for a better understanding of their decision-making processes.

## **6.6 Chapter Summary**

This final chapter concluded the study starting with the discussion of the main findings. It first provided an interpretation of the results focusing not only on supported hypotheses but also on surprising results and possible explanations for their interpretation. It then provided a detailed discussion of the theoretical, empirical, and practical implications of the findings highlighting also its contributions. The chapter proceeded with two sections outlining the limitations of this dissertation as well as offering suggestions for future research. Lastly, it concluded summarizing the main contribution.

### REFERENCES

- Agarwal, R., & Prasad, J. (1998). A conceptual and operational definition of personal innovativeness in the domain of information technology. *Information Systems Research*, 9(2), 204-215.
- Aiken L.S., West S.G., & Reno, R.R. (1991). *Multiple Regression: Testing and Interpreting Interactions*. SAGE Publications: Newbury Park, CA.
- Aldrich, H. E., & Cliff, J. E. (2003). The pervasive effects of family on entrepreneurship:

  Toward a family embeddedness perspective. *Journal of Business Venturing*, 18(5), 573-596.
- Aldrich, H.E., & Zimmer, C. (1986). Entrepreneurship through social networks. In D. Sexton, & R. Smilor (Eds.). *The art and science of entrepreneurship*. Ballinger, Cambridge, MA, 3-23.
- Anderson, B. S., Covin, J. G., & Slevin, D. P. (2009). Understanding the relationship between entrepreneurial orientation and strategic learning capability: an empirical investigation. *Strategic Entrepreneurship Journal*, *3*(3), 218-240.
- Antonakis, J., Bendahan, S., Jacquart, P., & Lalive, R. (2014). Causality and endogeneity: Problems and solutions. *The Oxford handbook of leadership and organizations*, 1, 93-117.

- Apéria, T., Brønn, P. S., & Schultz, M. (2004). A reputation analysis of the most visible companies in the Scandinavian countries. *Corporate Reputation Review*, 7(3), 218-230.
- Argote, L., & Greve, H. R. (2007). A behavioral theory of the firm–40 years and counting: Introduction and impact. *Organization Science*, *18*(3), 337-349.
- Armstrong, J. S., & Overton, T. S. (1977). Estimating nonresponse bias in mail surveys.

  \*\*Journal of Marketing Research\*, 396-402.
- Astrachan, J. H. (2003). Commentary on the special issue: The emergence of a field. *Journal of Business Venturing*, 18(5), 567-572.
- Bammens, Y., Notelaers, G., & Van Gils, A. (2015). Implications of family business employment for employees' innovative work involvement. *Family Business Review*, 28(2), 123-144.
- Bammens, Y., Voordeckers, W., & Van Gils, A. (2008). Boards of directors in family firms: A generational perspective. *Small Business Economics*, *31*(2), 163-180.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328-340.
- Bartholomeusz, S., & Tanewski, G. A. (2006). The relationship between family firms and corporate governance. *Journal of Small Business Management*, 44(2), 245-267.
- Basco, R., & Pérez Rodríguez, M. J. (2009). Studying the family enterprise holistically evidence for integrated family and business systems. *Family Business Review*, 22(1), 82-95.

- Baum, C. F., Lewbel, A., Schaffer, M. E., & Talavera, O. (2012, September).

  Instrumental variables estimation using heteroskedasticity-based instruments.

  In *United Kingdom Stata User's Group Meetings* (Vol. 7).
- Beck, L., Janssens, W., Debruyne, M., & Lommelen, T. (2011). A study of the relationships between generation, market orientation, and innovation in family firms. *Family Business Review*, 24(3), 252-272.
- Benavides-Velasco, C. A., Quintana-García, C., & Guzmán-Parra, V. F. (2013). Trends in family business research. *Small Business Economics*, 40(1), 41-57.
- Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional wealth in family firms theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258-279.
- Berrone, P., Cruz, C., Gomez-Mejia, L. R., & Larraza-Kintana, M. (2010). Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less?. *Administrative Science Quarterly*, 55(1), 82-113.
- Björnberg, Å., & Nicholson, N. (2007). The family climate scales—Development of a new measure for use in family business research. *Family Business Review*, 20(3), 229-246.
- Blumentritt, T. P., Keyt, A. D., & Astrachan, J. H. (2007). Creating an environment for successful nonfamily CEOs: An exploratory study of good principals. *Family Business Review*, 20(4), 321-335.

- Boeker, W. (1997). Strategic change: The influence of managerial characteristics and organizational growth. *Academy of Management Journal*, 40(1), 152-170.
- Boyd, B. K., Gove, S., & Hitt, M. A. (2005). Construct measurement in strategic management research: Illusion or reality? *Strategic Management Journal*, 26(3), 239-257.
- Brandon, D. M., Long, J. H., Loraas, T. M., Mueller-Phillips, J., & Vansant, B. (2013).

  Online instrument delivery and participant recruitment services: Emerging opportunities for behavioral accounting research. *Behavioral Research in Accounting*, 26(1), 1-23.
- Breton-Miller, L., & Miller, D. (2006). Why do some family businesses out-compete?

  Governance, long-term orientations, and sustainable capability. *Entrepreneurship Theory and Practice*, 30(6), 731-746.
- Buhrmester, M., Kwang, T., & Gosling, S. D. (2011). Amazon's Mechanical Turk a new source of inexpensive, yet high-quality, data? *Perspectives on Psychological Science*, 6(1), 3-5.
- Carney, M., Van Essen, M., Gedajlovic, E. R., & Heugens, P. P. (2013). What Do We Know About Private Family Firms? A Meta-Analytical Review. *Entrepreneurship Theory and Practice*, 39(3), 513-544.
- Cassia, L., De Massis, A., & Pizzurno, E. (2011). An exploratory investigation on NPD in small family businesses from Northern Italy. *International Journal of Business, Management and Social Sciences*, 2(2), 1-14.

- Cennamo, C., Berrone, P., Cruz, C., & Gomez-Mejia, L. R. (2012). Socioemotional Wealth and Proactive Stakeholder Engagement: Why Family-Controlled Firms Care More About Their Stakeholders. *Entrepreneurship Theory and Practice*, 36(6), 1153-1173.
- Cennamo, C., Berrone, P., & Gomez-Mejia, L. R. (2009). Does stakeholder management have a dark side?. *Journal of Business Ethics*, 89(4), 491-507.
- Chirico, F., Naldi, L., & Criaco, G. (2014, January). When the Environment Gets Tough, the Family Gets Going: Innovation in Family Firms. In *Academy of Management Proceedings* (Vol. 2014, No. 1, p. 17730). Academy of Management.
- Chirico, F., & Salvato, C. (2016). Knowledge internalization and product development in family firms: When relational and affective factors matter. *Entrepreneurship Theory and Practice*, 40(1), 201-229.
- Choi, Y. R., Zahra, S. A., Yoshikawa, T., & Han, B. H. (2015). Family ownership and R&D investment: The role of growth opportunities and business group membership. *Journal of Business Research*, 68(5), 1053-1061.
- Chrisman, J. J., Chua, J. H., & Litz, R. (2003). A unified systems perspective of family firm performance: An extension and integration. *Journal of Business Venturing*, 18(4), 467-472.
- Chrisman, J. J., Chua, J. H., Pearson, A. W., & Barnett, T. (2012). Family involvement, family influence, and family-centered non-economic goals in small firms. *Entrepreneurship Theory and Practice*, 36(2), 267-293.

- Chrisman, J. J., Chua, J. H., & Sharma, P. (2005). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555-576.
- Chrisman, J. J., Kellermanns, F. W., Chan, K. C., & Liano, K. (2009). Intellectual foundations of current research in family business: An identification and review of 25 influential articles. *Family Business Review*, 23(1), 9-26.
- Chrisman, J. J., & Patel, P. C. (2012). Variations in R&D investments of family and nonfamily firms: Behavioral agency and myopic loss aversion perspectives.

  \*\*Academy of Management Journal, 55(4), 976-997.
- Chrisman, J.J., Steier, L.P., & Chua, J.H. (2006). Personalism, particularism, and the competitive behaviors and advantages of family firms: An introduction. *Entrepreneurship Theory and Practice*, 30(6), 719–729.
- Chua, J. H., Chrisman, J. J., & Sharma, P. (1999). Defining the Family Business by behavior. *Entrepreneurship Theory and Practice*, 23(4), 19-39.
- Chua, J. H., Chrisman, J. J., Steier, L. P., & Rau, S. B. (2012). Sources of heterogeneity in family firms: An introduction. *Entrepreneurship Theory and Practice*, *36*(6), 1103-1113.
- Classen, N., Carree, M., Van Gils, A., & Peters, B. (2014). Innovation in family and non-family SMEs: an exploratory analysis. *Small Business Economics*, 42(3), 595-609.
- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. Erlbaum. Hillsdale, NJ.

- Colli, A. (2012). Contextualizing performances of family firms: The perspective of business history. *Family Business Review*, 25(3), 243-257.
- Conley, C., & Tosti-Kharas, J. (2014). Crowdsourcing content analysis for managerial research. *Management Decision*, 52(4), 675-688.
- Covin, J. G., & Covin, T. J. (1990). Competitive aggressiveness, environmental context, and small firm performance. *Entrepreneurship Theory & Practice*, *14*(4), 35-50.
- Covin, J.G. & Slevin, D.P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal*, *10*(1), 75–87.
- Craig, J. B., Dibrell, C., & Davis, P. S. (2008). Leveraging family-based brand identity to enhance firm competitiveness and performance in family businesses. *Journal of Small Business Management*, 46(3), 351-371.
- Craig, J. B. L., & Moores, K. (2006). A 10 year longitudinal investigation of strategy, systems, and environment on innovation in family firms. *Family Business Review*, 19(1), 1-10.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297-334.
- Crook, T. R., Shook, C. L., Morris, M. L., & Madden, T. M. (2010). Are we there yet?

  An assessment of research design and construct measurement practices in entrepreneurship research. *Organizational Research Methods*, *13*(1), 192-206.
- Cruz, C., Justo, R., & De Castro, J. O. (2012). Does family employment enhance MSEs performance?: Integrating socioemotional wealth and family embeddedness perspectives. *Journal of Business Venturing*, 27(1), 62-76.

- Cruz, C., Larraza-Kintana, M., Garcés-Galdeano, L., & Berrone, P. (2014). Are Family Firms Really More Socially Responsible? *Entrepreneurship Theory and Practice*, 38(6), 1295-1316.
- Cruz, C., & Nordqvist, M. (2012). Entrepreneurial orientation in family firms: A generational perspective. *Small Business Economics*, *38*(1), 33-49.
- Daly, T. M., & Nataraajan, R. (2015). Swapping bricks for clicks: Crowdsourcing longitudinal data on Amazon Turk. *Journal of Business Research*, 68(12), 2603-2609.
- Damanpour, F. (1991). Organizational innovation: A meta-analysis of effects of determinants and moderators. *Academy of Management Journal*, 34(3), 555-590.
- Damanpour, F., Walker, R. M., & Avellaneda, C. N. (2009). Combinative effects of innovation types and organizational performance: A longitudinal study of service organizations. *Journal of Management Studies*, 46(4):650-675.
- Debicki, B. J. (2012). Socioemotional wealth and family firm internationalization: The moderating effect of environmental munificence (Doctoral dissertation, Mississippi State University).
- Debicki, B. J., Kellermanns, F. W., Chrisman, J. J., Pearson, A. W., & Spencer, B. A. (2016). Development of a socioemotional wealth importance (SEWi) scale for family firm research. *Journal of Family Business Strategy*, 7(1), 47-57.
- Debicki, B. J., Matherne III, C. F., Kellermanns, F. W., & Chrisman, J. J. (2009). Family business research in the new millennium an overview of the who, the where, the what, and the why. *Family Business Review*, 22(2), 151-166.

- Deephouse, D. L., & Jaskiewicz, P. (2013). Do family firms have better reputations than non-family firms? An integration of socioemotional wealth and social identity theories. *Journal of Management Studies*, 50(3), 337-360.
- Dekker, J., Lybaert, N., Steijvers, T., & Depaire, B. (2015). The effect of family business professionalization as a multidimensional construct on firm performance. *Journal of Small Business Management*, 53(2), 516-538.
- De Massis, A., Di Minin, A., Frattini, F., Miller, D., Wright, M., Le Breton-Miller, I., & Tyson, L. D. (2015). Family-driven innovation: resolving the paradox in family firms. *California Management Review*, 58(1), 5-19.
- De Massis, A., Frattini, F., & Lichtenthaler, U. (2012). Research on technological innovation in family firms: Present debates and future directions. *Family Business Review*, 26(1), 10-31.
- De Massis, A., Frattini, F., Pizzurno, E., & Cassia, L. (2015). Product innovation in family versus nonfamily firms: an exploratory analysis. *Journal of Small Business Management*, 53(1), 1-36.
- De Massis, A., Sharma, P., Chua, J. H., & Chrisman, J. J. (2012). Family business studies: An annotated bibliography. Edward Elgar Publishing.
- Denison, D., Lief, C., & Ward, J. L. (2004). Culture in family-owned enterprises: recognizing and leveraging unique strengths. *Family Business Review*, 17(1), 61-70.
- De Vries, M. F. K. (2003). Leaders, fools and impostors: Essays on the psychology of leadership. IUniverse.

- Dyer, W. G. (1988). Culture and continuity in family firms. *Family Business Review*, *1*(1), 37-50.
- Dyer, W. G. (2003). The family: The missing variable in organizational research. *Entrepreneurship Theory and Practice*, 27(4), 401-416.
- Dyer, W. G., & Whetten, D. A. (2006). Family firms and social responsibility:

  Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), 785-802.
- Eddleston, K. A., & Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, 22(4), 545-565.
- Fama, E. F., & Jensen, M. C. (1983). Agency problems and residual claims. *The Journal of Law and Economics*, 26(2), 327-349.
- Field, A. (2009). Discovering statistics using SPSS. Sage publications.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, *33*(2), 233-258.
- Gedajlovic, E., Carney, M., Chrisman, J. J., & Kellermanns, F. W. (2012). The adolescence of family firm research taking stock and planning for the future. *Journal of Management*, 38(4), 1010-1037.
- Gedajlovic, E., Lubatkin, M. H., & Schulze, W. S. (2004). Crossing the threshold from founder management to professional management: A governance perspective. *Journal of Management Studies*, 41(5), 899-912.

- Glover, J. L., & Reay, T. (2015). Sustaining the Family Business With Minimal Financial Rewards: How Do Family Farms Continue?. *Family Business Review*, 28(2), 163-177.
- Gomez-Mejia, L. R., Campbell, J. T., Martin, G., Hoskisson, R. E., Makri, M., & Sirmon, D. G. (2014). Socioemotional wealth as a mixed gamble: Revisiting family firm R&D investments with the behavioral agency model. *Entrepreneurship Theory and Practice*, 38(6), 1351-1374.
- Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties:

  Socioemotional wealth preservation in family firms. *The Academy of Management Annals*, 5(1), 653-707.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J., & Moyano-Fuentes, J. (2007). Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Administrative Science Quarterly*, 52(1), 106-137.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust webbased studies? A comparative analysis of six preconceptions about internet questionnaires. *American Psychologist*, 59(2), 93.
- Granovetter, M. S. (1973). The strength of weak ties. *American Journal of Sociology*, 1360-1380.
- Habbershon, T. G., & Williams, M. L. (1999). A resource-based framework for assessing the strategic advantages of family firms. *Family Business Review*, 12(1), 1-25.

- Hamilton, B. H., & Nickerson, J. A. (2003). Correcting for endogeneity in strategic management research. *Strategic Organization*, *1*(1), 51-78.
- Harris, D., & Helfat, C., (1997). Specificity of CEO human capital and compensation. Strategic Management Journal, 18(11), 895-920.
- Hausman, J. A. (1978). Specification tests in econometrics. *Econometrica: Journal of the Econometric Society*, 1251-1271.
- Hsu, L. C., & Chang, H. C. (2011). The role of behavioral strategic controls in family firm innovation. *Industry and Innovation*, 18(7), 709-727.
- Jaskiewicz, P., Uhlenbruck, K., Balkin, D. B., & Reay, T. (2013). Is nepotism good or bad? Types of nepotism and implications for knowledge management. *Family Business Review*, 26(2), 121-139.
- Jones, C. D., Makri, M., & Gomez-Mejia, L. R. 2008. Affiliate directors and perceived risk bearing in publicly traded, family-controlled firms: The case of diversification. *Entrepreneurship Theory and Practice*, 32(6), 1007-1026.
- Jorissen, A., Laveren, E., Martens, R., & Reheul, A. M. (2005). Real versus sample-based differences in comparative family business research. *Family Business Review*, 18(3), 229-246.
- Kahneman, D., and Tversky, A. (1979). Prospect theory: An analysis of decision under risk, *Econometrica*, 47(2), 263-291.
- Kellermanns, F. W., & Eddleston, K. A. (2006). Corporate entrepreneurship in family firms: A family perspective. *Entrepreneurship Theory and Practice*, *30*(6), 809-830.

- Kellermanns, F. W., Eddleston, K. A., Sarathy, R., & Murphy, F. (2012). Innovativeness in family firms: A family influence perspective. *Small Business Economics*, *38*(1), 85-101.
- Kellermanns, F. W., Eddleston, K. A., & Zellweger, T. M. (2012). Extending the socioemotional wealth perspective: A look at the dark side. *Entrepreneurship Theory and Practice*, 36(6), 1175-1182.
- Khedhaouria, A., Gurău, C., & Torrès, O. (2015). Creativity, self-efficacy, and small-firm performance: the mediating role of entrepreneurial orientation. *Small Business Economics*, 44(3), 485-504.
- Kimberly, J. R., & Evanisko, M. J. (1981). Organizational innovation: The influence of individual, organizational, and contextual factors on hospital adoption of technological and administrative innovations. *Academy of Management Journal*, 24(4), 689-713.
- Klein, S. B., Astrachan, J. H., & Smyrnios, K. X. (2005). The F-PEC scale of family influence: Construction, validation, and further implication for theory. *Entrepreneurship Theory and Practice*, 29(3), 321-339.
- Knippenberg, D., & Schie, E. (2000). Foci and correlates of organizational identification. *Journal of Occupational and Organizational Psychology*, 73(2), 137-147.
- Kotlar, J., & De Massis, A. (2013). Goal setting in family firms: Goal diversity, social interactions, and collective commitment to family-centered goals. *Entrepreneurship Theory and Practice*, *37*(6), 1263-1288.

- Kraiczy, N. D., Hack, A., & Kellermanns, F. W. (2015). What makes a family firm innovative? CEO risk-taking propensity and the organizational context of family firms. *Journal of Product Innovation Management*, 32(3), 334-348.
- Krantz, J. H., & Dalal, R. (2000). Validity of Web-based psychological research. In M.H. Birnbaum (Ed.), Psychological experiments on the Internet (pp. 35–60). San Diego, CA: Academic Press.
- Lansberg, I., Perrow, E. L., & Rogolsky, S. (1988). Family business as an emerging field.

  Family Business Review, 1(1), 1-8.
- Lee, J. (2006). Family firm performance: Further evidence. *Family Business Review*, 19(2), 103–115.
- Lee, K. S., Lim, G. H., & Lim, W. S. (2003). Family business succession: Appropriation risk and choice of successor. *Academy of Management Review*, 28(4), 657–666.
- Leitterstorf, M. P., & Rau, S. B. (2014). Socioemotional wealth and IPO underpricing of family firms. *Strategic Management Journal*, *35*(5), 751-760.
- Levesque, M., & Minniti, M. (2006). The effect of aging on entrepreneurial behavior. *Journal of Business Venturing*, 21(2), 177-194.
- Lichtenthaler, U. & Muethel, M. (2012). The impact of family involvement on dynamic innovation capabilities: Evidence from German manufacturing firms.

  Entrepreneurship Theory and Practice, 36(6), 1235–1253.
- Lim, E. N., Lubatkin, M. H., & Wiseman, R. M. (2010). A family firm variant of the behavioral agency theory. *Strategic Entrepreneurship Journal*, 4(3), 197–211.

- Lindell, M. K., & Whitney, D. J. (2001). Accounting for common method variance in cross-sectional research designs. *Journal of Applied Psychology*, 86(1), 114.
- Litz, R. A. (2008). Two Sides of a One-Sided Phenomenon: Conceptualizing the Family Business and Business Family as a Möbius Strip. *Family Business Review*, 21(3), 217-236.
- Lumpkin, G. T., Brigham, K. H., & Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship and Regional Development*, 22(3-4), 241-264.
- Lumpkin, G. T., & Dess, G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *Academy of Management Review*, 21(1), 135-172.
- 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.
- Ma, D., Mattingly, E. S., Kushev, T., & Ahuja, M. K. (2013, January). Entrepreneurial Persistence: Family Business Focus on Nonfinancial Benefits. In *Academy of Management Proceedings* (Vol. 2013, No. 1, p. 16634). Academy of Management.
- Mason, W., & Suri, S. (2012). Conducting behavioral research on Amazon's Mechanical Turk. *Behavior Research Methods*, 44(1), 1-23.

- Mazzi, C. (2011). Family business and financial performance: Current state of knowledge and future research challenges. *Journal of Family Business Strategy*, 2(3), 166-181.
- Melin, L., & Nordqvist, M. (2007). The reflexive dynamics of institutionalization: The case of the family business. *Strategic Organization*, 5(3), 321-333.
- Micelotta, E. R., & Raynard, M. (2011). Concealing or revealing the family? Corporate brand identity strategies in family firms. *Family Business Review*, 24(3), 197-216.
- Miller, D., & Breton-Miller, L. (2014). Deconstructing socioemotional wealth.

  Entrepreneurship Theory and Practice, 38(4), 713-720.
- Miller, D., & Friesen, P. H. (1982). Innovation in conservative and entrepreneurial firms:

  Two models of strategic momentum. *Strategic Management Journal*, *3*(1), 1-25.
- Miller, D., Le Breton-Miller, I., Lester, R. H., & Cannella, A. A. (2007). Are family firms really superior performers?. *Journal of Corporate Finance*, *13*(5), 829-858.
- Miller, D., Minichilli, A., & Corbetta, G. (2013). Is family leadership always beneficial? *Strategic Management Journal*, 34(5), 553-571.
- Miller, D., Steier, L., & Le Breton-Miller, I. (2003). Lost in time: Intergenerational succession, change, and failure in family business. *Journal of Business Venturing*, 18(4), 513-531.
- 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*, *37*(6), 1341-1360.

- 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.
- Newbert, S., & Craig, J. B. (2017). Moving Beyond Socioemotional Wealth: Toward a Normative Theory of Decision Making in Family Business. *Family Business Review*, 30(4), 339-346.
- Nieto, M. J., Santamaria, L., & Fernandez, Z. (2015). Understanding the innovation behavior of family firms. *Journal of Small Business Management*, 53(2), 382-399.
- Nordqvist, M., Habbershon, T. G., & Melin, L. (2008). Transgenerational entrepreneurship: Exploring EO in family firms. In H. Landstrom, H. Crijns, & E. Laveren (Eds.), *Entrepreneurship, sustainable growth and performance:*Frontiers in European Entrepreneurship Research (pp. 93-116).
- Nordqvist, M., Melin, L., Waldkirch, M., & Kumeto, G. (Eds.). (2015). *Theoretical perspectives on family businesses*. Edward Elgar Publishing.
- Nunnally, J. C. (1978). Psychometric theory (2<sup>nd</sup> ed.). New York: McGraw-Hill.
- Olson, P. D., Zuiker, V. S., Danes, S. M., Stafford, K., Heck, R. K., & Duncan, K. A. (2003). The impact of the family and the business on family business sustainability. *Journal of Business Venturing*, 18(5), 639-666.
- Oppenheim, A.N. (1966). *Questionnaire design and attitude measurement*. New York: Free Press.

- Orth, U. R., & Green, M. T. (2009). Consumer loyalty to family versus non-family business: The roles of store image, trust, and satisfaction. *Journal of Retailing and Consumer Services*, 16(4), 248-259.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & 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.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, *12*(4), 531-544.
- Rao, H., & Drazin, R. (2002). Overcoming resource constraints on product innovation by recruiting talent from rivals: A study of the mutual fund industry, 1986–1994.

  \*\*Academy of Management Journal, 45(3), 491-507.
- 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.
- Rogoff, E. G., & Heck, R. K. Z. (2003). Evolving research in entrepreneurship and family business: Recognizing family as the oxygen that feeds the fire of entrepreneurship. *Journal of Business Venturing*, 18(5), 559-566.
- Rosen, P. A. (2005). Effect of Personal Innovativeness on Technology Acceptance and Use. (Unpublished Doctoral Dissertation). Oklahoma State University.
- Ruef, M. (2002). Strong ties, weak ties and islands: structural and cultural predictors of organizational innovation. *Industrial and Corporate Change*, 11(3), 427-449.

- Rutherford, M. W., Kuratko, D. F., & Holt, D. T. (2008). Examining the link between "familiness" and performance: can the F-PEC untangle the family business theory jungle? *Entrepreneurship Theory and Practice*, 32(6), 1089-1109.
- Salvato, C. (2004). Predictors of entrepreneurship in family firms. *The Journal of Private Equity*, 7(3), 68-76.
- Salvato, C., & Melin, L. (2008). Creating value across generations in Family-Controlled businesses: The role of family social capital. *Family Business Review*, 21(3), 259-276.
- Schepers, J., Voordeckers, W., Steijvers, T., & Laveren, E. (2014). The entrepreneurial orientation–performance relationship in private family firms: the moderating role of socioemotional wealth. *Small Business Economics*, 43(1), 39-55.
- Schulze, W. S., Lubatkin, M. H., & Dino, R. N. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, 18(4), 473-490.
- Sciascia, S., Nordqvist, M., Mazzola, P., & De Massis, A. (2015). Family ownership and R&D intensity in small-and medium-sized firms. *Journal of Product Innovation Management*, 32(3), 349-360.
- Sharma, P. (2004). An overview of the field of family business studies: Current status and directions for the future. *Family Business Review*, 17(1), 1-36.
- Sharma, P., & Carney, M. (2012). Value creation and performance in private family firms: Measurement and methodological issues. *Family Business Review*, 25(3), 233-242.

- Sharma, P., Chrisman, J. J., & Gersick, K. E. (2012). 25 years of family business review:

  Reflections on the past and perspectives for the future. *Family Business Review*, 25(1), 5.
- Short, J. C., Ketchen Jr, D. J., Combs, J. G., & Ireland, R. D. (2010). Research methods in entrepreneurship: Opportunities and challenges. *Organizational Research Methods*, 13(1), 6-15.
- Short, J. C., Payne, G. T., Brigham, K. H., Lumpkin, G. T., & Broberg, J. C. (2009). Family Firms and Entrepreneurial Orientation in Publicly Traded Firms A Comparative Analysis of the S&P 500. *Family Business Review*, 22(1), 9-24.
- Sonfield, M. C., & Lussier, R. N. (2004). First-, second-, and third-generation family firms: a comparison. *Family Business Review*, *17*(3), 189-202.
- Stavrou, E., Kassinis, G., & Filotheou, A. (2007). Downsizing and stakeholder orientation among the Fortune 500: Does family ownership matter?. *Journal of Business Ethics*, 72(2), 149-162.
- Steelman, Z. R., Hammer, B. I., & Limayem, M. (2014). Data collection in the digital age: Innovative alternatives to student samples. *MIS Quarterly*, *38*(2), 355-378.
- 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.
- Stockmans, A., Lybaert, N., & Voordeckers, W. (2010). Socioemotional wealth and earnings management in private family firms. *Family Business Review*, 23(3), 280-294.

- Strike, V. M., Berrone, P., Sapp, S. G., & Congiu, L. (2015). A socioemotional wealth approach to CEO career horizons in family firms. *Journal of Management Studies*, 52(4), 555-583.
- Teal, E. J., Upton, N., & Seaman, S. L. (2003). A comparative analysis of strategic marketing practices of high-growth US family and non-family firms. *Journal of Developmental Entrepreneurship*, 8(2), 177-195.
- Turban, D. B., & Cable, D. M. (2003). Firm reputation and applicant pool characteristics. *Journal of Organizational Behavior*, 24(6), 733-751.
- Ucbasaran, D., Westhead, P., & Wright, M. (2008). Opportunity identification and pursuit: does an entrepreneur's human capital matter? *Small Business Economics*, 30(2), 153-173.
- Uhlaner, L. M., Kellermanns, F. W., Eddleston, K. A., & Hoy, F. (2012). The entrepreneuring family: a new paradigm for family business research. *Small Business Economics*, 38(1), 1-11.
- Vago, M. (2004). Integrating change management: Challenges for family business clients and consultants. *Family Business Review*, 17(1), 71–80.
- Vandekerkhof, P., Steijvers, T., Hendriks, W., & Voordeckers, W. (2014). The effect of organizational characteristics on the appointment of nonfamily managers in private family firms: The moderating role of socioemotional wealth. *Family Business Review*, 28(2), 104-122.
- Vardaman, J. M., & Gondo, M. B. (2014). Socioemotional wealth conflict in family firms. *Entrepreneurship Theory and Practice*, *38*(6), 1317-1322.

- Watson, J., & Robinson, S. (2003). Adjusting for risk in comparing the performances of male-and female-controlled SMEs. *Journal of Business Venturing*, 18(6), 773-788.
- Westhead, P. (2003). Company performance and objectives reported by first and multigeneration family companies: A research note. *Journal of Small Business and Enterprise Development*, 10(1), 93-105.
- Westhead, P., & Howorth, C. (2007). Types of private family firms: An exploratory conceptual and empirical analysis. *Entrepreneurship and Regional Development*, 19(5), 405–431.
- Wiseman, R. M., and L. R. Gomez-Mejia. (1998). A behavioral agency model of managerial risk taking. *Academy of Management Review*, 23(1), 133–153.
- Yoo, T., & Sung, T. (2015). How outside directors facilitate corporate R&D investment? Evidence from large Korean firms. *Journal of Business Research*, 68(6), 1251-1260.
- Zahra, S. A. (2005). Entrepreneurial risk taking in family firms. *Family Business Review*, 18(1), 23-40.
- 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.
- Zellweger, T. M., & Astrachan, J. H. (2008). On the emotional value of owning a firm. *Family Business Review*, 21(4), 347-363.

- Zellweger, T. M., & Dehlen, T. (2012). Value is in the eye of the owner: Affect infusion and socioemotional wealth among family firm owners. *Family Business Review*, 25(3), 280-297.
- Zellweger, T. M., Nason, R. S., Nordqvist, M., & Brush, C. G. (2013). Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrepreneurship Theory and Practice*, *37*(2), 229-248.
- Zellweger, T., & Sieger, P. (2012). Entrepreneurial orientation in long-lived family firms. *Small Business Economics*, *38*(1), 67-84.

## APPENDIX A

## Survey Questionnaire<sup>5</sup>

## **BLOCK 1 (Default). <Family Firm Definition and Screening Questions>**

a) Are you currently the owner/manager of a business?
<ul><li>☐ Yes.</li><li>☐ No.</li></ul>
If the answer is no, then the survey STOPS
b) Is your business based in the US?
<ul><li>☐ Yes.</li><li>☐ No.</li></ul>
If the answer is no, then the survey STOPS
c) Does your firm have fewer than 500 employees?
<ul><li>☐ Yes.</li><li>☐ No.</li></ul>
If the answer is no, then the survey STOPS
d) Does the top management team of your firm include two or more individuals from the same family?
<ul><li>☐ Yes.</li><li>☐ No.</li></ul>
If the answer is no, then the survey STOPS
e) How many individuals from the same family (family members) does the top management team of the firm include?
☐ Family members
f) Do the family members of the top management team of your firm have at least 10% of the firm's ownership?
Yes.

 $<sup>^{5}</sup>$  The construct names are provided within <> on top of each question for easy reference. They were not included in the survey.

☐ No.
If the answer is no, then the survey STOPS
Sources: (Gomez-Mejia et al., 2007; Jones et al., 2008)
g) What is the exact percentage of ownership that the family has in this firm?
The family owns \( \square\) % of the firm.
h) Do you perceive the firm you are part of to be a family firm?
<ul> <li>Yes, I perceive the firm that I am part of to be a family firm.</li> <li>No, I do not perceive the firm that I am a part of to be a family firm.</li> </ul>
If the answer is no, then the survey STOPS
i) Has your business been operating for at least 3 years?
<ul><li>☐ Yes.</li><li>☐ No.</li></ul>
If the answer is no, then the survey STOPS
End of Screening/Qualifying Questions

**SEW Importance>** (1 = Not at all important, 2 = slightly important, 3 = moderately important, 4 = very important, 5 = extremely important) \*

Please indicate the importance of the following statements/questions on a 1-5 scale.

Measu	rement Items (15)	Importance					
<blo< th=""><th>CK 2: Family Continuity&gt;</th><th></th><th></th><th></th><th></th><th></th></blo<>	CK 2: Family Continuity>						
		1	2	3	4	5	
1.	Maintaining the unity of the family: How important is it						
	that the business gives the members of your family an						
	opportunity to work as a unit?	1	2	3	4	5	
2.	Maintaining the unity of the family: How important is it						
	that the business gives the members of your family an						
	opportunity to make decisions together?						
3.	Maintaining the unity of the family: How important is it	1	2	3	4	5	
	that the business gives the members of your family an						
	opportunity to work toward agreement?						

	Preservation of family dynasty in the business: How important is it that the firm remains in the hands of the family and that the business decisions are directed at developing and motivating future generations toward taking over the control of the firm?  Maintaining our family values through the operation of our business: How important is it that the company serves as a vessel through which your family values are maintained and promoted to younger generations of family members?	1	2	3	4	5
<blo< td=""><td></td><td></td><td></td><td></td><td></td></blo<>						
1.	Happiness of family members outside the business: How important is it that through operating a business enterprise, you can ensure the enhancement of happiness of your family not directly involved in the business?	1	2	3	4	5
2.	Enhancing family harmony through operating the business: How important is improving the family life and the relationships among family members through operating your business?	1	2	3	4	5
3.	Consideration of the needs of our family in our business decisions: To what extent do the needs of your family, such as the need for employment, affect the business-related decisions?	1	2	3	4	5
4.	Consideration of the needs of our family in our business decisions: To what extent do the needs of your family, such as the need for financial stability, affect the business-related decisions?	1	2	3	4	5
5.	Consideration of the needs of our family in our business decisions: To what extent do the needs of your family, such as the need for belonging, affect the business-related decisions?	1	2	3	4	5
6.		1	2	3	4	5
<blo< td=""><td>CK 4: Family Prominence&gt;</td><td></td><td></td><td></td><td></td><td></td></blo<>	CK 4: Family Prominence>					
1.	Recognition of the family in the domestic community for generous actions of the firm: If it is important that the family gain recognition and appreciation in your community, as a company you will engage in actions that have the greatest potential to benefit the family in this regard.	1	2	3	4	5
2.	Accumulation and conservation of social capital: How	1	2	3	4	5

	important is it that the family can benefit from social					
	relationships developed through your business?					
3.	Accumulation and conservation of social capital: How	1	2	3	4	5
	important is it that the business can benefit from your					
	family relationships?					
4.	Maintenance of family reputation through the business: If	1	2	3	4	5
	family reputation is important, as a family you will strive to					
	conduct business in ways that do not jeopardize the					
	family's reputation (i.e. ethically, honestly, respectfully).					

Source: (Debicki et al., 2016)

<BLOCK 5: Innovativeness> (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = neither agree nor disagree, 5 = somewhat agree, 6 = agree, 7 = strongly agree)

Measurement Items	Agreement								
actions in positioning itself and its products or services over the past 3 years"	1								
b) "Our firm has shown a strong commitment to research and development, technological leadership and innovation"	1	2	3	4	5	6	7		

Source: (Kellermanns et al., 2012)

#### **Attention Check Question**

**SELOCK 6: Family-Brand Identity Promotion>** \* **(4)** (1 = never, 2 = rarely, in less than 10% of the chances I could have, 3 = occasionally, in about 30% of the chances I could have, 4 = sometimes, in about 50% of the chances I could have, 5 = frequently, in about 70% of the chances I could have, 6 = usually, in about 90% of the chances I could have, 7 = every time)

Measurement Items (4)	Extent								
1. You promote the fact that you are a family	1	2	3	4	5	6	7		
business to your suppliers									
2. You promote the fact that you are a family	1	2	3	4	5	6	7		
business to your customers									
3. You promote the fact that you are a family	1	2	3	4	5	6	7		
business to your financiers									
4. You include something about the fact that you	1	2	3	4	5	6	7		
are a family business on your advertising									
material, for example, letterhead, website,									
vehicles etc.									

## <BLOCK 7: Firm Performance> (11)

Please provide the following information regarding your firm:

2	Firm's	profite	during	the last	voor (	<i>(</i> 2)	
a.	rim s	proms	auring	the fast	vear: (	<b>D</b> 1	

1	7D 4 1	1	C .	1	1 .	41 1	ast year:	
n	LOTAL	niimher	ot emn	IOVEES	dilring	the I	act vear	
v.	1 Otal	Humber	OI CILID.	IO V CCS	uurme	uici	asi veai.	

C.	Firm <sup>3</sup>	's tota	1 assets	during	the	last	vear:	<b>(\$</b>
$\sim$ .	T 11 111	5 1010	ı abbetb	auring	uic	Iust	y Cui .	ıΨ

d. Compare your firm performance to that of your competitors for the past 3 years along the following aspects (where 1 = much worse, 2 = about the same and 3 = much better):

Comparison Aspects (8)	A	Assessment					
1. Growth in sales	1	2	3				
2. Growth in market share	1	2	3				
3. Growth in number of employees	1	2	3				
4. Growth in profitability	1	2	3				
5. Return on Assets (Profits/Assets)	1	2	3				
6. Return on Equity	1	2	3				
7. Profit margin to sales ratio	1	2	3				
8. Ability to fund growth from profits	1	2	3				

Source: (Kellermanns et al., 2011)

	e. How satisfied are you with your firm's financial performance (profits) during the past year?																	
1	2	3	4	5	6	7												
f. Ho	f. How satisfied are you with your firm's sales growth rate during the past year?																	
1	2	3	4	5	6	7												
g. How satisfied are you with your firm's growth in the number of employees during the past year?																		
1	2	3	4	5	6	7												
h. How satisfied are you with your firm's growth in the number of employees during the past year? This question is repeated as an attention check. If you are paying attention, please ignore it this time.																		
1	2	3	4	5	6	7												
2 = I 3 = I 4 = I 5 = I 6 = I 7 = I	1 = I am completely dissatisfied 2 = I am mostly dissatisfied 3 = I am somewhat dissatisfied 4 = I am neither satisfied or dissatisfied 5 = I am somewhat satisfied 6 = I am mostly satisfied 7 = I am completely satisfied <block 8:="" importance-alternative="" measure="" sew="" stratos=""> (1 = Not at all important, 2 = slightly important, 3 = moderately important, 4 = very important, 5 =</block>																	
Moo	CIIRON	nont	Itoma	· (4)									1 7	Imn	ort	ona	<u> </u>	I
Measurement Items (4)  1. Maintaining family traditions/character of the business									2000	1		orta						
						the far			OI L	ne t	usii	1088	1	2 2	3	4 4	5 5	
					vnersl		3						1	2	3	4	5	
4. Independence in management									1	2	3	4	5					

Source: (Schepers, Voordecker, Steijvers and Laveren, 2014)

# <<u>BLOCK 9: Generations> (2)</u> a. How many generations are currently involved in the management of the family firm? One generation. Two generations. Three generations. Source: (Cruz and Nordqvist, 2012; Kellermanns and Eddleston, 2006) b. Please indicate which generation has currently the decision power in the firm: The first generation has currently the decision power in the firm. The second generation has currently the decision power in the firm. The third generation has currently the decision power in the firm. Source: (Bammens et al., 2008) **<BLOCK 10: Presence of non-family managers> (1)** Does the top management team of your firm include managers who are external to the family? Yes. No. Source: (Stockmans, Lybaert, and Voordeckers, 2010) <BLOCK 11: Number of non-family managers> (1) \*

If the top management team of this firm includes external managers, what is the percentage of family to external (non-family) managers?

The percentage of family to non-family members in this firm is: \\_ \%

Source: (Sonfield and Lussier, 2004)

#### <Control Variables>

#### <BLOCK 12: Environmental Dynamism>

On a seven-point scale ranging from *strongly disagree* (=1) to *strongly agree* (=7), please respond to the following statements:

- 1. Actions of competitors are generally quite easy to predict.
- 2. The set of competitors in my industry has remained relatively constant over the last three years.
- 3. Product demand is easy to forecast.
- 4. Customer requirements/preferences are easy to forecast.

Source: (Anderson et al., 2009)

## <BLOCK 13: Environmental Munificence/Hostility>

Please indicate your level of agreement (by circling the appropriate number) with each statement as it applies to your perception of the industry in which your business operates. *Strongly disagree* (=1) to *strongly agree* (=7)

- 1. Competitive intensity is high in my firm's industry.
- 2. Customer loyalty is low in my firm's industry.
- 3. Severe price wars are characteristic of my firm's industry.
- 4. Low profit margins are characteristic of my firm,'s industry.
- 5. Attractive market opportunities are scarce in my firm's industry.

*Source: (Covin, Slevin and Heeley, 2000)* 

#### **<BLOCK 14: Intergenerational Authority> (8)**

Measurement Items (8)							
In this family,							
1. the younger generations try to conform with what the older		2	3	4	5	6	7
generation would want							
2. the wishes of the older generation are obeyed	1	2 2 2	3	4	5	6	7
3. the authority of the older generation is not questioned	1	2	3	4	5	6	7
4. family members of the older generation set the rules	1	2	3	4	5	6	7
5. we make decisions with every person having an equal say,	1	2	3	4	5	6	7
regardless of seniority (R)							
6. older and younger generations have equal amounts of power (R)	1	2	3	4	5	6	7

7. the word of the older generation is law	1	2	3	4	5	6	7
8. the younger generation is encouraged to freely challenge the	1	2	3	4	5	6	7
opinions of the older generation (R)							

Source: (Bjornberg and Nicholson, 2007)

## <BLOCK 15: Respondent's Background Information/Demographics>

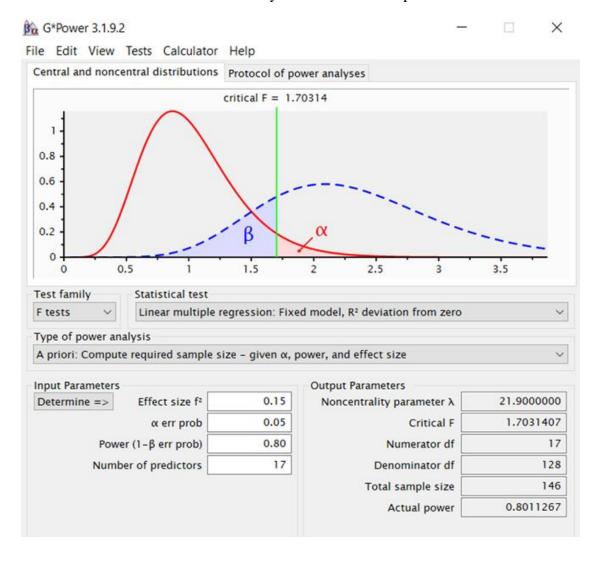
Please provide the following	ng general backg	round information about yourself:					
a. Approximate Age:    < 35	b. Gender  Male Female	c. Highest Educational Qualification  High-school Degree Bachelor's Degree Master's Degree M.B.A Doctorate Degree Other					
d. Your job title is		<del>-</del>					
e. How many years have y	ou been in this fi	rm? (years)					
f. Are you the founder of this firm?							
g. If you are not the founder, how old is the founder of this firm?							
h. Is your family name included in the firm's name?							
i. How many children, including step-children and/or adopted children, do you have?							
stay in the firm?		tep-children and/or adopted children intent to					
< BLOCK 16: Responde	nt's Firm Chara	<u>cteristics&gt;</u>					
Please provide the following	ng information ab	oout your firm:					
a. During which year was	your business wa	as founded?					
b. What is the industry in	which your firm	does business?					
c. What was the approx \$	ximate annual re	evenue of your firm during the last year?					
d. Please indicate where i	s your business lo	ocated (city and state):					

## < BLOCK 17: Feedback Questions Included in Pilot Studies Only>

- 1. What problems did you experience while filling this survey out? (Please explain)
- 2. How difficult was this survey? (Please explain)
- 3. Were there any specific questions in the survey that you found confusing or difficult to understand? (Please explain)
- 4. If you have any additional comments about the survey, please write them here.

## APPENDIX B

#### Power Analysis in G\*Power Output



#### **CURRICULUM VITA**

#### Vasiliki Kosmidou

## **EDUCATION**

#### Ph.D. in Entrepreneurship

College of Business University of Louisville, Louisville, Kentucky Graduation: May, 2018

#### **Master of Science in Finance**

ESADE Business School Ramon Llull University, Barcelona, Spain Graduation: November, 2012

#### **Bachelor in Accounting and Finance**

School of Business Administration University of Macedonia Graduation: October, 2010

#### **Exchange Studies (Erasmus)**

Business Management and Administration Autonomous University of Madrid February-June 2010

#### **PUBLICATIONS**

Fiet, J.O., Kerrick, S., Kosmidou, V., & Naskar, S. (2015). Specific Knowledge as a Key to Launching Successful New Ventures. *Frontiers of Entrepreneurship Research*, *35* (16), 384-390.

Triana, P., & Kosmidou, V., (2013). Transatlantic Leverage. *Corporate Finance Review*, 17(4), 39-47.

- Triana, P., & Kosmidou, V., (2012). Basel 2.5: How Stringent? *Corporate Finance Review*, 17(3), 42-47.
- Triana, P., & Kosmidou, V., (2012). VaR and the Crisis: Empirical Analysis. *Corporate Finance Review*, 17(2), 38-46.

#### **CONFERENCE PRESENTATIONS**

- Kosmidou, V. (2017). The Relationship between Generational Involvement and Performance in Family Firms: a Meta-Analytic Review. *Midwest Academy of Management Annual Meeting*, Chicago, Illinois. \**Best Student Paper Award*
- Jessri, M., Kosmidou, V., & Ahuja, M. (2016). Corporate Employee Trade-Offs in Their Decision to Participate in Corporate Ventures. *Academy of Management Annual Meeting*, Anaheim, California.
- Fiet, J.O., Kerrick, S., Kosmidou, V., & Naskar, S. (2015). Specific Knowledge as a Key to Launching Successful New Ventures. *Babson College Entrepreneurship Research Conference*, Wellesley, Massachusetts.
- Fiet, J.O., Kerrick, S., Kosmidou, V., & Naskar, S. (2015). Do the Venture Ideas of Repeat Entrepreneurs Change After Their Discovery? *Babson College Entrepreneurship Research Conference*, Wellesley, Massachusetts.

#### TEACHING EXPERIENCE

#### **Sole Instructor**

- MGMT 340/ ENTR 350 (Entrepreneurial Creativity & Innovation)
  - Spring 2016 Enrollment: 34, Average overall teaching effectiveness: 4.65/5, (response rate: 76.47%)
- FIN 345 (Entrepreneurial Finance)
  - Spring 2016 Enrollment: 25, Average overall teaching effectiveness: 4.35/5, (response rate: 68.00%)
  - Spring 2017 Enrollment: 27, Average overall teaching effectiveness: 4.22/5, (response rate: 66.67%)
  - o Fall 2017 Enrollment: 29, Average overall teaching effectiveness: **4.42/5**, (response rate: 85.71%)

## SCHOLARLY DEVELOPMENT

Theoretical Training	Professor
<ul> <li>Foundations of Entrepreneurship Research</li> <li>Contemporary Entrepreneurship</li> <li>Economic Theory of the Firm</li> <li>Finance Theories</li> <li>Venture Capital Theories</li> <li>Economic Perspectives of Entrepreneurship</li> <li>Theories of Opportunities</li> <li>Organizational Behavior and HR Issues</li> <li>Psychological and Cognitive Perspectives</li> <li>Quantitative Entrepreneurship</li> <li>Sociological Foundations of Entrepreneurship Research</li> </ul>	James O. Fiet Scott Shane Yong Chao David Dubosfky James O. Fiet Simon Parker James O. Fiet Ryan Quinn Dean Shepherd Per Davidsson Howard Aldrich
Strategic Perspectives of Entrepreneurship Research	Robert Garrett
<ul> <li>Methodological Training</li> <li>Research Design/Methods</li> <li>Experimental Research Design</li> <li>Topics in Entrepreneurship Research</li> <li>New Product Strategy/Marketing</li> <li>Systematic Reviewing and Meta-Analysis</li> <li>Intermediate Applied Statistics</li> <li>Multivariate Statistic Techniques</li> <li>Advanced Computer Applications (Structural Equation Modeling</li> <li>Hierarchical Linear Modeling</li> <li>Pedagogical and Writing Training</li> </ul>	Professor  Manju Ahuja Manju Ahuja Pankaj Patel Robert Carter Jeff Valentine Marco Muñoz  g) George Higgins Jill Adelson
Graduate Teaching Academy (2014-2015) Delphi Center for Teaching and Learning  Grant Writing Academy (Spring 2017) Delphi Center for Teaching and Learning	Michelle Rodems Beth Boehm Marie Kendal-Brown Michelle Rodems Beth Boehm
<b>Dissertation Writing Retreat</b> (Spring 2017) Delphi Center for Teaching and Learning	Bronwyn T. Williams Cassie Book

#### ACADEMIC SERVICE

#### **Professional Service**

- Ad-Hoc Reviewer Entrepreneurship Theory and Practice Journal, ET&P (2016)
- Ad-Hoc Reviewer Academy of Management Conference, AOM (2016-2018)
- Ad-Hoc Reviewer Babson College Entrepreneurship Research Conference, BCERC (2016-2018)
- Ad-Hoc Reviewer Family Enterprise Research Conference, FERC (2017-2018)
- Ad-Hoc Reviewer Midwest Academy of Management Conference, MAM (2017)
- Ad-Hoc Reviewer Eastern Academy of Management Conference, EAM (2018)

#### **University of Louisville Service**

- College of Business Student Grievance Committee Graduate Student Representative, 2015-2016
- Graduate Student Council Graduate Student Representative, 2013-2015

#### **AWARDS AND HONORS**

- Best Student Paper Award, Midwest Academy of Management Conference (2017)
- Outstanding Reviewer Award, Midwest Academy of Management (2017)
- Outstanding Reviewer Award, Academy of Management (2017)
- **Selected Participant**, Early Career Development Consortium (ECDC), Academy of Management (2017)
- **Selected Participant**, Research Methods Division Consortium (RMDC), Academy of Management (2017)
- **Research Funding Recipient,** Forcht Center for Entrepreneurship, University of Louisville (2017)
- Research/Travel Grant, Graduate Student Council, University of Louisville (2017)
- **Doctoral Teaching Excellence Award,** Forcht Center for Entrepreneurship, University of Louisville (2016)
- **Research/Travel Grant**, Delphi Center for Teaching and Learning, University of Louisville (2015)
- Graduate Research Assistantship, University of Louisville, Louisville, KY (2013)
- Master Thesis Competition Finalist (15 finalists from 200+ participants), 29th International Economics and Finance Master Thesis Competition, "Centre des Professions Financieres", Paris, France (2013)
- **Honors Master Thesis Award** (awarded to top 5%), ESADE Business School, Barcelona, Spain (2012)
- Merit-Based Scholarship Recipient for Graduate Studies, Greek State Scholarship Foundation and European Commission, Athens, Greece (2011)
- Erasmus Scholarship Recipient for Exchange Studies, Greek State Scholarship Foundation and European Union, Athens, Greece (2010)

#### **PROFESSIONAL AFFILIATIONS**

- Academy of Management, (ENTR, RM Divisions Entrepreneurship, Research Methods)
- Midwest Academy of Management (ESEISB Track—Entrepreneurship/Social Entrepreneurship/Innovation/Small Business)

#### PROFESSIONAL EXPERIENCE

March - June 2012 AXA Group (Mediterranean and Latin Region), Barcelona, Spain Derivatives Department Intern