

Longevity of family firms – the influence of
family specific characteristics

inaugural dissertation
to receive the degree of a doctor rerum politicum

by

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Submitted to the Doctoral Candidate Admissions Board of
School of Economic Disciplines of
University of Siegen
in partial fulfillment of the requirements for the degree of
doctor rerum politicarum (Dr. rer. pol.)

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May 2022

Acknowledgements

Diese Arbeit bildet einen wichtigen Abschnitt in meinem Leben, der durch interessante Diskussionen, neue Erfahrungen und Kontakte, bereichernde Erinnerungen aber auch durch lange Nächte und Herausforderungen geprägt ist. All diese Erfahrungen hätte ich ohne eine ständige Unterstützung nicht erleben können, die mich auf dem Weg zur Promotion begleitet, geprägt und so diese Dissertation ermöglicht haben.

Einen großen Dank gilt meinem Doktorvater Prof. Dr. Arndt Werner, der mir die Möglichkeit gab, an seinem Lehrstuhl zu Promovieren. Er gab mir immer die richtige Motivation und die richtigen Impulse, um zu neuen Forschungserkenntnissen und Ansichten zu kommen und mich wissenschaftlich weiterzuentwickeln. Vielen Dank!

Zudem möchte ich mich bei meinem Zweitprüfer Prof. Dr. Marcus Schweitzer bedanken, der mir für die Fertigstellung dieser Arbeit wichtige Anregungen gab. Vielen Dank für deine Unterstützung im Verlauf meiner Promotion. Ebenfalls gilt Dank an meinen Drittprüfer Prof. Dr. Alexander Vossen, der mich auf dem letzten Schritt der Promotion unterstützt hat.

Weiter möchte ich meinen Co-Autoren Prof. Dr. Sabrina Schell und Christoph Stock danken, ohne dessen gute Zusammenarbeit, kritischen Kommentaren und Diskussionen die Forschungsarbeiten dieser Dissertation nicht entwickelt worden wären.

Neben diesen Leuten hatte ich das Glück ein Kollegium um mich zu haben, auf das ich mich immer verlassen konnte und die mich jeder Zeit mit Rat und Tat unterstützt haben. Durch euch wurde die Arbeit am Lehrstuhl zu einem wunderbaren Ort. Vielen Dank Meike Stephan, Katrin Schwan, Christian Schröder und Moonum Zehra. Mein Dank gilt ebenfalls meinen ehemaligen Kollegen Dr. Stefan Hossinger und Dr. Xiangyu Chen.

Dies alles wäre jedoch ohne die Unterstützung meiner Familie, meines Freundes und meiner Freunde nicht möglich gewesen, die in allen Phasen meiner Promotion – guten wie auch schlechten – zu mir gehalten, mich unterstützt und aufgebaut haben, und Erfolge mit mir

gefeiert haben. Sie haben immer zu mir gestanden und mir die Motivation und Kraft gegeben, die ich für diese Reise brauchte. Danke!

„Nicht am Ziel wird der Mensch groß, sondern auf dem Weg dorthin.“ (Ralph Waldo Emerson).

Laura Pütz

Zusammenfassung (auf Deutsch)

Familienunternehmen repräsentieren eine Unternehmensform, die unnachahmlich ist. Sie unterscheiden sich nicht nur von Nicht-Familienunternehmen, sondern sind auch innerhalb ihrer Gruppe von Heterogenität geprägt. Diese Einzigartigkeit ist auf den Einfluss der Familie und ihrer Charakteristika zurückzuführen. Die Familie und das Unternehmen bilden zwei Subsysteme, die sich durch ihre Interaktionen und ihren Ressourcenaustausch auszeichnen. Dabei steigt der Einfluss der Familie auf das Familienunternehmen, umso stärker der Ressourcenaustausch erfolgt.

Der komplexe Einfluss der Familie kann durch die Verwendung der multidimensionalen Konstrukte „Familianness“ und „Socioemotional Wealth“ analysiert und veranschaulicht werden. Dabei spiegelt das Konzept Familianness die einzigartigen Ressourcen und Entscheidungsprämissen des Familienunternehmens wider, die durch die Interaktion der Familie, der Unternehmensmitglieder und des Unternehmens entstehen. Socioemotional Wealth umfasst die nicht-finanziellen Aspekte des Unternehmens, die die affektiven Bedürfnisse der Familie erfüllen. Um Familienunternehmen zu verstehen, müssen daher die Handlungen und Einflüsse der Familie auf das Unternehmen verstanden werden.

Familienunternehmen spielen eine wichtige wirtschaftliche Rolle. Weltweit sind ca. zwei Drittel aller Unternehmen Familienunternehmen; die meisten von diesen sind kleine und mittlere Unternehmen. Obgleich der hohen Anzahl schaffen es viele Familienunternehmen nicht in die zweite Generation – ca. 70% scheitern am Nachfolgeprozess. Gleichzeitig gibt es Familienunternehmen, die bereits mehrere Jahrhunderte erfolgreich tätig sind. Diese Tatsache wirft die Frage auf, wie diese Familienunternehmen ihre Langlebigkeit erreichen und was ihr Erfolgsgeheimnis im Vergleich zu erfolglosen Familienunternehmen ist. Eine Antwort hierauf können die Charakteristika der Familie geben, wie Verhalten, Werte oder Ziele. Familiencharakteristika allein können jedoch nicht über die Langlebigkeit des

Familienunternehmens entscheiden. Vielmehr bestimmt der Einfluss der Familie auf strategische Unternehmensentscheidungen und entscheidende Situationen über die Langlebigkeit des Familienunternehmens. Um weitere Erkenntnisse bezüglich der Familiencharakteristika zu gewinnen, untersucht diese Dissertation den Einfluss der Familienmerkmale auf Corporate Social Responsibility, Absorptive Capacity und der Performance nach der Nachfolge. Da aus der Literatur bekannt ist, dass diese Faktoren die Langlebigkeit des Familienunternehmens beeinflussen und begünstigen können, werden die Zusammenhänge der Analysen dieser Dissertation genutzt, um abzuleiten, wie sie die Langlebigkeit des Familienunternehmens beeinflussen können.

Diese Dissertation zeigt in zwei systematischen Literaturanalysen den zum Teil divergenten Zusammenhang des Familieneinflusses auf Entscheidungen und Ergebnisse des Familienunternehmens. In zwei empirischen Studien kann anhand von multidimensionalen Konstrukten gezeigt werden, dass zwischen den einzelnen Dimensionen der Familiencharakteristika unterschieden werden muss, um die Komplexität des Familieneinflusses zu verstehen.

Die erste systematische Literatanalyse zeigt, dass innerhalb von Corporate Social Responsibility die Einstellung der Familie entscheidet, ob und wie die Ressourcen der Familie für Corporate Social Responsibility Maßnahmen eingesetzt werden. Die Studie demonstriert, dass unter Hinzunahme der familiären Ressourcen das Familienunternehmen wirkungsvoller Corporate Social Responsibility Maßnahmen durchführen kann, die Maßnahmen dadurch jedoch stärker von der Familie beeinflusst werden. Um die Absichten, Ergebnisse und Wirkungsweisen innerhalb von Corporate Social Responsibility in Familienunternehmen zu analysieren, ist es aufgrund des Familieneinflusses unausweichlich zwischen den Subsystemen – Familie und Unternehmen – zu unterscheiden sowie deren Interaktion zu berücksichtigen.

Innerhalb von Absorptive Capacity in Familienunternehmen kann eine Ambivalenz der Ergebnisse aufgezeigt werden. Die zweite systematische Literaturanalyse zeigt, dass die Familienmitglieder einen erheblichen Einfluss auf die Durchführung von Absorptive Capacity nehmen und diesen sowohl fördern wie auch unterbinden können. Die Ergebnisse der Studie in dieser Dissertation zeigen, dass für Analysen in diesem Kontext entscheidend ist, mit welcher Operationalisierung bzw. mit welchem Ansatz das Familienunternehmen und der Familieneinfluss einbezogen wird. So kann durch die Verwendung des behavioral approach – Einbeziehung des Verhaltens der Familie – und dem Heranziehen von multidimensionalen Konstrukten wie Familiness und Socioemotional Wealth, die Komplexität des Familieneinflusses aufgezeigt werden. Dies kann mit dem involvement approach – Unterscheidung durch Eigentum, Management und Kontrolle – nicht gezeigt werden.

Diese Erkenntnisse, die aus den beiden Literaturanalysen gewonnen wurden, wurden in der dritten Studie durch die Analyse von kleinen und mittleren Familienunternehmen vereint. Es konnte durch die Verwendung des Familiness Konstrukts nachgewiesen werden, dass der Einfluss der Familienressource Familiness zum Teil auf Absorptive Capacity durch das Signalisieren von Corporate Social Responsibility Maßnahmen mediiert wird. Dabei zeigt die Ausrichtung der Maßnahmen einen entscheidenden Faktor auf, um die Eigenschaften des Familienunternehmens (Familiness) zu signalisieren. Hieraus kann die Schlussfolgerung gezogen werden, dass der Einsatz von Familienressourcen zur Umsetzung von Corporate Social Responsibility Maßnahmen bei Kunden und Mitarbeitern eine Vertrauenswürdigkeit gegenüber dem Unternehmen erzeugt, wodurch diese bereit sind, Wissen mit dem Unternehmen auszutauschen.

Die letzte Studie befasst sich mit dem Einfluss der Handlungen aufgrund von Socioemotional Wealth und der Performance nach der Nachfolge in kleinen und mittleren Familienunternehmen. Komplikationen bei der Nachfolgeregelung können schnell die

Performance des Unternehmens und damit auch dessen Existenz gefährden. Beispielsweise können Konflikte in der Familie den Nachfolgeprozess negativ beeinflussen. Daher wird argumentiert, dass Socioemotional Wealth dabei helfen kann, familienspezifische Spannungen zu überwinden. Die Analyse zeigt, dass die Erhöhung einzelner Socioemotional Wealth Dimensionen zu einer Erhöhung der Performance nach der Nachfolge führen kann. Daher wird davon ausgegangen, dass Engagement und die zur Verfügungstellung von Ressourcen von Familienmitgliedern gegenüber dem Nachfolger ausschlaggebend ist bei der Erhöhung der Performance.

Aus den gewonnen Erkenntnissen dieser Studien kann ein eindeutiger jedoch ambivalenter Einfluss von Familiencharakteristika auf die Ergebnisse des Familienunternehmens nachgewiesen werden. Setzt man diese in Bezug zur Langlebigkeit des Familienunternehmens wird deutlich, dass das Familienunternehmen stark von den Handlungen, Einflüssen und Absichten der Familie geprägt wird und diese somit die Langlebigkeit fördern, jedoch auch beeinträchtigen können.

Abstract (in English)

Family businesses represent a unique form of enterprise that is inimitable. They differ from non-family businesses and are characterized by heterogeneity within their group. This uniqueness is due to the influence and characteristics of the family. The family and the business form two subsystems characterized by interactions and the exchange of resources. In this context, the family's influence on the family business increases as a stronger exchange of resources takes place.

The complex influence of the family can be analyzed and illustrated by using the multidimensional constructs "familiness" and "socioemotional wealth". Thereby, the concept of familiness reflects the unique resources and decision premises of the family business, created through the interaction of the family, members of the business, and the business. Socioemotional wealth addresses the non-financial aspects of the business that fulfill the affective needs of the family.

Family businesses play an important economic role. Around two-thirds of all companies worldwide are family businesses; most of these are small and medium-sized enterprises. Although the number is high, many family businesses do not reach the second generation – around 70% fail in the succession process. At the same time, there are successful family businesses that have been operating successfully for several centuries. This fact raises the question of how these family businesses achieve longevity and their secret to success, compared to unsuccessful family businesses. Family characteristics, such as behavior, values, or goals, can provide an answer to this. However, family characteristics alone cannot determine the longevity of the family business. Instead, the family's influence on strategic business decisions and crucial situations determine the longevity of the family business. To gain further insights regarding family characteristics, this dissertation examines the influence of family characteristics on corporate social responsibility, absorptive capacity, and post-succession performance. Since it is known from the literature that these factors can influence and favor the

longevity of the family business, the correlations of the analyses of this dissertation are used to derive how they can influence the longevity of the family business.

This dissertation uses two systematic literature analyses to show the sometimes-divergent relationship of family influence on family business decisions and results. In two empirical studies, multidimensional constructs demonstrate that a distinction must be made between the individual dimensions of family characteristics to understand the complexity of family influence. The study shows that with the addition of family resources, the family business can carry out corporate social responsibility measures more effectively, while the family has a stronger influence on the measures. In order to analyze the intentions, results, and modes of action within corporate social responsibility in family businesses, it is imperative to distinguish between the subsystems – family and business – and consider their interaction due to the family influence.

Within absorptive capacity in family businesses, an ambivalence of results can be identified. The second systematic literature analysis shows that family members have a considerable influence on implementing absorptive capacity and can both promote and prevent it. The results of the study in this dissertation show that for analyses in this context, it is crucial which operationalization or approach toward the family business and family influence is included. Thus, the complexity of family influence can be revealed by using the behavioral approach – incorporating family behavior – and drawing on multidimensional constructs such as familiness and socioemotional wealth. This complexity cannot be shown with the involvement approach – distinguished by ownership, management, and control.

These findings, obtained from the two literature analyses, were combined in the third study by analyzing small and medium-sized family businesses. The use of the familiness construct demonstrated that the influence of the family resource familiness on absorptive capacity is partly mediated by signals through corporate social responsibility activities. In this context, the orientation of the measures is a decisive factor in signaling the characteristics of the family

business (familiness). From this, it can be concluded that the use of family resources to implement corporate social responsibility measures generates trustworthiness toward the company among customers and employees, which boosts their willingness to share knowledge with the business.

The last study focuses on the influence of socioemotional wealth and performance after succession in small and medium-sized family businesses. Complications in the succession process can quickly jeopardize the performance of the business as well as its existence. For example, conflicts within the family can negatively influence the succession process. Therefore, it is argued that socioemotional wealth can help overcome family-specific tensions. The analysis shows that an increase in individual socioemotional wealth dimensions can lead to an increase in post-succession performance. Therefore, the assumption is that commitment and the provision of family members' resources to the successor can increase the performance of the family business.

Furthermore, from the findings of these studies, a clear but ambivalent influence of family characteristics on the performance of the family business can be demonstrated. Relating these to the longevity of the family business, it becomes clear that the family business is strongly shaped by the influence and intentions of the family and that these can promote longevity but also impair it.

Table of Contents

Acknowledgements	I
Zusammenfassung (auf Deutsch)	III
Abstract (in English)	VII
Table of Contents	X
List of Tables.....	XIII
List of Figures	XV
List of Abbreviations.....	XVI
A. Introduction	1
1. Relevance of the Topic	1
2. Structure of the Articles and Summary of the Main Findings.....	8
3. Theoretical Background	15
3.1 Characteristics of Family Businesses	15
3.2 Relationship Between Sustainability and Longevity of the Business	23
3.3 Influence of Absorptive Capacity on the Longevity of the Business.....	26
B. Corporate Social Responsibility in Family Firms: Current Status and Future Directions of a Research Field	30
1. Introduction	30
2. Theoretical Framework	33
3. Methodology.....	35
4. Current Research Status of Research Field	37
4.1 Article Characteristics	37
4.2 Theories in Use.....	39
4.3 Content Findings	42
4.3.1 Family Firm Antecedents	42
4.3.2 Family Firm Outcomes.....	46
4.3.3 Contextual Factors.....	49
4.3.4 Corporate Social Responsibility Activities	52
5. Future Directions of the Research Field.....	54
6. Synthesis.....	62
6.1 Discussion	62
6.2 Practical Implications	66
6.3 Limitations	67
6.4 Conclusion.....	67
C. Absorptive Capacity in Family Firms: A Systematic Literature Review	69
1. Introduction	69
2. Theoretical Framework	72

2.1	Absorptive Capacity	72
2.2	Family Influence	74
3.	Methodology.....	76
4.	Article Characteristics	77
5.	Current Research Status	82
5.1	Trigger and Input of Potential and Realized Absorptive Capacity	82
5.2	Family and Firm Influences on Potential and Realised Absorptive Capacity.....	85
5.2.1	Involvement Approach.....	85
5.2.2	Behavioral Approach.....	86
5.3	Outcomes of Potential and Realized Absorptive Capacity	91
6.	Directions for Future Research.....	94
7.	Discussion and Conclusion.....	99
D.	Openness to Knowledge – The Mediating Role of Corporate Social Responsibility on Absorptive Capacity in Family Firms	102
1.	Introduction	102
2.	Theoretical Framework	108
2.1	Familiness.....	108
2.2	Absorptive Capacity	109
2.3	Corporate Social Responsibility and Signaling Theory	110
2.4	The Relationship Between Familiness and Corporate Social Responsibility ...	113
3.	Hypotheses Development.....	115
3.1	The Relationship between Familiness and Absorptive Capacity.....	115
3.2	The Relationship Between Corporate Social Responsibility and Absorptive Capacity.....	116
3.2.1	Employee-Oriented Corporate Social Responsibility Activity and Absorptive Capacity.....	117
3.2.2	Customer-Oriented Corporate Social Responsibility Activity and Absorptive Capacity.....	118
3.2.3	Community-Oriented Corporate Social Responsibility and Absorptive Capacity	119
3.3	The Mediating Role of Corporate Social Responsibility on the Relationship between Familiness and Absorptive Capacity	120
4.	Methods	126
4.1	Data Collection and Sample	126
4.2	Measures.....	127
4.2.1	Dependent Variables	127
4.2.2	Independent Variable	128
4.2.3	Mediator Variables.....	128
4.2.4	Control Variables	129

5.	Results	131
6.	Theoretical and Practical Implications	137
7.	Limitation and Future Research	141
E.	The Moderating Role of Socioemotional Wealth on Post-Succession Performance in Small- and Medium-Sized Family Firms	143
1.	Introduction	143
2.	Theory and Hypotheses	146
2.1	Post-Succession Performance in Family SMEs	146
2.2	The Concept of Socioemotional Wealth and its Relationship to Post-Succession Performance in Family SME's	147
2.3	The Moderating Role of Renewal of Family Bonds through Dynastic Succession	150
2.4	The Moderating Role of Emotional Attachment of Family Members	151
2.5	The Moderating Role of Identification of Family Members with the Firm	153
3.	Method.....	155
3.1	Data Collection and Sample	155
3.2	Measure	156
3.2.1	Dependent Variable.....	156
3.2.2	Independent Variable	156
3.2.3	Moderating Variable	157
3.2.4	Controll Variable.....	157
4.	Results	158
5.	Discussion and Conclusions	164
6.	Limitations.....	166
F.	Discussion.....	168
1.	Summary of the Findings and Concluding Remarks.....	168
2.	Theoretical Implications	173
3.	Managerial Implications	178
4.	Limitations and Future Research.....	181
5.	Conclusions	183
G.	References	184
H.	Appendix	217
1.	Appendix to Chapter B.....	217
2.	Appendix to Chapter C.....	235
3.	Appendix to Chapter D.....	239
4.	Appendix to Chapter E	243

List of Tables

Table A-1: Overview of the integrated studies	14
Table B-1: Most influential journals	37
Table B-2: Research method used.....	39
Table B-3: Theories.....	40
Table B-4: Family antecedents.....	42
Table B-5: Firm antecedents	45
Table B-6: Firm outcomes.....	47
Table B-7: Contextual factors	49
Table B-8: Countries from which the research emanated.....	51
Table B-9: Corporate social responsibility activities in family firms	52
Table B-10: Research questions	55
Table C-1: Used operationalization's of family business and family influence	81
Table D-1: Correlation matrix	132
Table D-2: Regression results	134
Table D-3: Bootstrap estimation for mediation effect.....	135
Table D-4: Results of the hypotheses testing	137
Table E-1: Descriptive statistics and descriptions of variables.....	159
Table E-2: Correlations	160
Table E-3: Regressions results	162
Table F-1: Main results of the four articles.....	173
Table G-1: Content analysis of family firm specific antecedents of CSR	217
Table G-2: Content analysis of family firm specific outcomes of CSR	231
Table G-3: Content analysis of family firm specific antecedents and outcomes of CSR.....	232
Table G-4: Content analysis of antecedents of absorptive capacity in family firms	235

Table G-5: Content analysis of family and firm influence on absorptive capacity in family firms 236

Table G-6: Content analysis of outcomes of absorptive capacity in family firms..... 238

Table G-7: Descriptive Statistics and Descriptions for Variables in Models of Absorptive Capacity in Family Firms 239

Table G-8: Corporate social responsibility scale 240

Table G-9: Absorptive capacity scale 241

Table G-10: Family Influence Familiness Scale (FIFS) 242

Table G-11: Socioemotional wealth scale (REI scale) 243

List of Figures

Figure A-1: Model of the integrated studies	13
Figure B-1: Annual distribution of the 107 reviewed published articles	39
Figure B-2: Model of antecedents and outcomes of CSR in family firms	55
Figure C-1: Distribution of publications and methodology used in years	78
Figure C-2: Countries from which the research emanated.....	79
Figure C-3: Citation analysis between articles from the sample.....	80
Figure C-4: Graphical illustration of the analysis of the AC process	82
Figure C-5: Schematic summary of the core results of the analyzed articles	93
Figure D-1: Conceptual model.....	126
Figure E-1: Derived hypotheses.....	155
Figure E-2: Moderation effects	163

List of Abbreviations

AC	Absorptive capacity
CI	Confidence interval
CFI	Comparative fit index
CSR	Corporate social responsibility
e.g.	Exempli gratia (for example)
EU	European Union
FIFS	Family Influence Familiness Scale
F-PEC	Family Influence on Power, Experience and Culture
gen.	Generation
LL	Lower-level
N	Number of participants
i.e.	Id est (in other words)
<i>p</i>	P-value
p.	Page
R^2	R-squared (coefficient of determination)
R&D	Research and development
RBV	Resource-based view
ref.	Reference
RMSEA	Root mean squared error of approximation
SE	Standard error
SEW	Socioemotional wealth
SFBT	Sustainable family business theory
SME	Small and medium-sized enterprises
UL	Upper-level
UNICEF	United Nations International Children's Emergency Fund
US	United States
VHB (Ranking)	Verband der Hochschullehrer für Betriebswirtschafts (Ranking)
VIF	Variance inflation factor
VRIN	Valuable, rare, inimitable, and non-substitutable

A. Introduction

“By shifting from firm to family level of analysis, one gains a deeper understanding of family firms’ ability to create value across generations.”

Zellweger, Nason, Nordqvist, and Brush (2012b, p. 136)

1. Relevance of the Topic

Family businesses are characterized by the integration of the family into the business and the resulting influence on business decisions (Chua et al., 1999; Handler, 1989; Tagiuri and Davis, 1996). Due to the merging of both systems, a clear distinction cannot be made between family and business (Stafford et al., 1999). The more the family is integrated into the business and the higher the identification with it, the more resources are exchanged and the more family members can exert influence on the business, especially in family-owned small and medium-sized enterprises (family-owned SMEs) (Danes et al., 2008; Stafford et al., 1999). From this inference, the characteristics of the business, with its values, visions, actions, and resources, are formed, leading to heterogeneity between family businesses (Chrisman et al., 2012; Chua et al., 2012; Habbershon and Williams, 1999; Gómez-Mejía et al., 2007) and differentiation from non-family businesses (Amann et al., 2012; Biswas et al., 2019; Forcadell et al., 2018; Price et al., 2013). One theory for deciphering the heterogeneity of family businesses can be sustainable family business theory (SFBT), which is based on the two subsystems of family and business and their exchange of resources to achieve the goals of the family and the business (Danes et al., 2008; Stafford et al., 1999). In this context, the family’s resources serve as additional resources for the business, for example, to manage disruptions and crises. Due to resource constraints, especially in family-owned SMEs, these additional resources can be crucial for the preservation of the business (Danes et al., 2008; Frank et al., 2017; Stafford et al., 1999; Weismeyer-Sammer et al., 2013). However, family members individually decide whether to integrate resources into the business. They also influence how the business’s resources are used,

that is, for family or business goals. These decision premises, family influence and behavior can be measured by familiness and socioemotional wealth (SEW) (Habbershon and Williams, 1999; Gómez-Mejía et al., 2007), by which family business decisions and actions can be partially explained. Decisions made by the family can be contradictory to the business's economic viability (Chrisman et al., 2005a; Chrisman et al., 2012; Gómez-Mejía et al., 2007; Kotlar and De Massis, 2013), as the achievement of non-economic goals such as image and reputation are also partially undertaken at the expense of economic goals such as performance, which can also jeopardize the longevity of the business (Gómez-Mejía et al., 2007; Sageder et al., 2018). However, the stronger the involvement, influence, and identification of the family members with the business, the stronger the long-term orientation and decision premises and resources used to successfully manage the family business to pass it on to the next generation (Frank et al., 2017; Zellweger et al., 2010; Zellweger et al., 2012b).

Family businesses – especially family-owned SMEs – play an important role in the economic life in Germany and worldwide (De Massis et al., 2018b). In Germany, approximately 93.6% of the companies are family businesses and the majority of these are small and medium-sized (De Massis et al., 2018b; Wolter and Sauer, 2017); worldwide, the proportion of family businesses is about two-thirds (De Massis et al., 2018b). Although these numbers are very high, many family businesses eventually fail in the handover process. Roughly 30% of businesses are passed on to the second generation and around 10% to the third (Handler, 1994; Ward, 1987). At the same time, certain family businesses have been successfully operating for several decades (Ahmad et al., 2020a; Koiranen, 2002; Lorandini, 2015). German family-owned SMEs are receiving attention worldwide. They are economically successful and stand out for their innovation, especially in terms of product, process, and service innovation (De Massis et al., 2018a). This reality raises the question of how these family businesses achieve longevity and what their secret to success is compared to unsuccessful family businesses. The longevity of a family business generally describes the ability of a business to

continue over generations and to successfully compete in the long term (Napolitano et al., 2015; Sharma and Salvato, 2013). Various internal and external factors can influence this longevity, such as a business's ability to respond to constantly changing environmental conditions or to acquire resources (Ahmad et al., 2020b; Eddleston et al., 2008; Giner and Ruiz, 2020). Another point for explanation may lie in family characteristics, for example, behaviors, values, and goals (Chrisman et al., 2005a; Berrone et al., 2012; Habbershon and Williams, 1999; Frank et al., 2017). These family characteristics have a crucial influence on decisions and actions and thus also on the results of the family business – both positive and negative – which in turn have an impact on the long-term survival of the family business (Andersson et al., 2018; Chrisman et al., 2012; Daspit et al., 2021; Gómez-Mejía et al., 2007; Habbershon and Williams, 1999). For this reason, the influence of family characteristics may be key to the analysis of the longevity of family businesses.

Family characteristics alone cannot cause the survival or demise of the family business. The influences of family characteristics on strategic decisions and relevant situations are also crucial. To provide further insights regarding family characteristics, this dissertation examines the influence of family characteristics on corporate social responsibility, absorptive capacity, and post-succession performance. Since these factors have been proven to influence and favor the longevity of the family business, the analyses of these correlations will be used to derive how they can influence the longevity of the family business.

Corporate social responsibility (CSR) and its implementation is a strategic decision that affects (family) businesses worldwide (Porter and Kramer, 2006; Stoian and Gilman, 2017; Werther and Chandler, 2005; Werther and Chandler, 2010). Corporate social responsibility describes the social and environmental responsibilities of companies toward their stakeholders (Commission of the European Communities, 2001; World Business Council for Sustainable Development, 2000). The debate about CSR has been ongoing for several decades, but the

underlying question is still relevant: should companies undertake CSR (Davis, 1973)? As CSR activities are often very costly (Davis, 1973; Stoian and Gilman, 2017), this topic is debated within the question of whether the core of CSR is the economic viability of the business or the social aspect (Bhatnagar et al., 2020; Choi et al., 2019; Kashmiri and Mahajan, 2014a; Uhlaner et al., 2004; Sahasranamam et al., 2020; Wu et al., 2014). This question cannot be addressed with an either-or answer because both parts have to be considered together as one strategic tool (Stoian and Gilman, 2017; Werther and Chandler, 2005). Due to globalization and digitalization of information channels, the transparency of companies increases (Du et al., 2016; Ge and Micelotta, 2019); additionally, stakeholders can exert considerable pressure for the implementation of CSR activities in the business (Ge and Micelotta, 2019; Huang et al., 2009; Sánchez-Medina and Díaz-Pichardo, 2017). Companies can or even have to yield to this pressure and implement CSR activities to meet the needs of their stakeholders and to strengthen their competitiveness (Martínez-Ferrero et al., 2016). However, companies can and should use CSR as a strategic tool for increasing their competitiveness and thus their ability to survive (Porter and Kramer, 2006; Stoian and Gilman, 2017; Werther and Chandler, 2005). The implemented CSR activities always have an impact on the family business, regardless of its intention – philanthropic or economic – because even donations can enhance the value of the family business (Maung et al., 2020). The family's characteristics and values strongly determine the resources used for this purpose and the selection of activities (Cruz et al., 2014; Dayan et al., 2019; Le Breton-Miller and Miller, 2016; Zientara, 2017). Families with an ethical orientation tend to use their resources for philanthropic endeavors such as donations; by contrast, families without this background are likely to prioritize economic activities such as increasing the productivity or market value of the business (Déniz and Suárez, 2005). This aspect is particularly important for family-owned SMEs to stand out from larger competitors. However, due to their lower financial resources, they must carry out CSR activities more strategically and carefully to avoid endangering the business through bad investments and meet

the demands of their (regional) stakeholders (Lamb et al., 2017; Uhlaner et al., 2012). Regardless of its intention, the practice of CSR can promote the longevity of family businesses.

Another major ability is the use of absorptive capacity (AC). Absorptive capacity describes the process of external knowledge transfer into the business (Zahra and George, 2002). An ever-faster dynamic change (Barreto, 2010; Filippini et al., 2012), the development of new technologies in a short period, and the rapid exchange of information (David and Foray, 2003; Malerba and McKelvey, 2020; Teece et al., 1997) confirm that access to and processing of information are essential for survival. External knowledge transfer enables (small) companies to compensate for the lack of knowledge (De Massis et al., 2018a; Klewitz et al., 2012). In addition, family businesses invest less in research and development (R&D) compared to non-family businesses, which also need to be compensated for (Chrisman et al., 2015; Veider and Matzler, 2016). Family businesses need to make a strategic decision on whether to exercise AC, as this exercise requires the resources of the business and the family (De Massis et al., 2018a; Hernández-Perlines et al., 2017). For instance, human capital must be used for developing external relationships and cooperations to be able to assimilate and absorb knowledge (Belkhdja and Daghfous, 2020; Boyd and Hollensen, 2012; De Massis et al., 2018a). Resources must be similarly used for transforming the external knowledge, so that it can be subsequently integrated into existing processes, services, or products (Moilanen et al., 2014). Through the successful implementation of AC, the family business can react faster and more flexibly to changing environmental conditions, including evolving industry structures, markets, new technologies, or business crises (Boyd and Hollensen, 2012; Eisenhardt and Martin, 2000; Ramachandran, 2011; Zahra and George, 2002), which could enhance the longevity of the family business. However, family characteristics such as control intention, power preservation, or social capital – social capital consisting of structural, cognitive, and relational capital (Brinkerink, 2018; Wang, 2016b) – can influence this process, either positively or negatively

(Andersén, 2015; Belkhodja and Daghfous, 2020; Brinkerink, 2018; Chrisman et al., 2005b; Daspit et al., 2019; Kotlar et al., 2020).

In addition to these strategic decisions about CSR and AC, relevant events can also influence the longevity of family businesses, such as succession and the post-succession performance, which is the most critical process in family businesses (Handler, 1994; Le Breton-Miller et al., 2004; Nordqvist et al., 2013). The succession process is an extensively studied topic in family businesses (e.g., Chua et al., 1999; Davis and Harveston, 1998; Handler, 1994; Miller et al., 2003; Minichilli et al., 2014; Nordqvist et al., 2013; Schell et al., 2020; Sharma et al., 2001; Werner et al., 2021). The succession determines whether the family business is passed on internally to the next generation or externally to a non-family member from inside or outside the family business (Minichilli et al., 2014; Nordqvist et al., 2013; Wiklund et al., 2013). Internal succession captures one of the essential goals of family businesses: to pass on the family business to the next generation (Chua et al., 1999; Handler, 1994; Sharma et al., 2001; Wiklund et al., 2013). Although the transfer of the business from predecessor to successor theoretically sounds simple, many family businesses demonstrate weak post-succession performance. During the process, many resources of the family and the business are needed; furthermore, complex factors have to be considered, such as the transfer of tacit knowledge (Cabrera-Suárez et al., 2001; Williams and Mullane, 2019), behaviors, values, and norms (Cabrera-Suárez et al., 2001) and the transfer of the social capital of the predecessor to the successor (Schell et al., 2020). This process can be more problematic for family-owned SMEs, as existing resource restrictions reduce the available resources (Danes and Brewton, 2012). Due to these factors mentioned above, among others, succession must be planned for the long term to allow for its successful completion (Bruce and Picard, 2006; Sharma et al., 2001). Even if the succession process is successful, the subsequent years are crucial for the survival of the family business, as many family businesses fail after the succession (Williams and Mullane, 2019; Miller et al., 2003). Additionally, even family businesses that persist in a continuing

generation are not exempt from failure (Handler, 1994; Ward, 1987; Williams and Mullane, 2019). The succession process is a rare and extraordinary event that usually repeats itself only several decades after the last succession. Due to the infrequent repetition, there is often little knowledge and experience available; hence, passing on experiences is usually difficult (Davis and Harveston, 1998; Handler, 1994). Each succession is an event in which the family members must integrate themselves into the business and establish new structures of power distribution and inclusion (Stafford et al., 1999). Family characteristics or the support of the family with its resources can thereby have a decisive influence on the long-term success or failure of the family business.

These results suggest that family members have a considerable influence on the business through familiness and actions related to SEW. Results further suggest that family businesses should recognize the means of effectively using their impact and characteristics, especially as they are already available and can influence business longevity.

Therefore, the aim of this dissertation is to (1) show the influence of family-specific characteristics through corporate social responsibility, absorptive capacity, and post-succession performance and (2) deduce how these elements can favor the longevity of the family business.

The first question was analyzed on the basis of four articles. Two systematic literature reviews based on Tranfield et al. (2003) were conducted to present the state of research on CSR and AC in family businesses. Two quantitative studies were also conducted to uncover the further linkages of successful family-owned SMEs. These companies are characterized by unique structures and are economically successful (De Massis et al., 2018a). For this purpose, a mediation of CSR on familiness and AC and a moderation of SEW on the influence of the

succession event and its effect on post-succession performance were examined. The second question aims to take the four analyses further and derive how they may favor the longevity of family businesses.

This dissertation is structured as follows. Section A provides an introduction into the topic. Chapter 2 presents an overview of the articles and their structure. The terminology and applied theories are subsequently explained. Sections B - E then list the articles used in the dissertation in their entirety. The general findings of the dissertation are summarized in Chapter 1 in Section F. The implications for practice and research are then described. Finally, the limitations of the thesis as well as future research and the conclusion are presented.

2. Structure of the Articles and Summary of the Main Findings

The aim of this dissertation is to demonstrate the influence of family-specific characteristics on the results of family businesses on the topics CSR, AC, and post-succession performance. These topics were considered because previous research has already shown that these factors could be relevant to the longevity of family businesses.

In the first article, a systematic literature review is conducted according to Tranfield et al. (2003), in which the current literature on CSR in family businesses is outlined. The focus of family businesses is often the survival and transgenerational succession of the family business. Therefore, achieving longevity plays a critical role (Handler, 1989; Lumpkin and Brigham, 2011). An important factor for this in family businesses are strong stakeholder relationships (Bingham et al., 2011; Ciravegna et al., 2020) that CSR can foster through sustainable actions and the resulting creation of loyalty (Iglesias et al., 2020; Servera-Francés and Piqueras-Tomás, 2019) and goodwill (Maung et al., 2020; Panwar et al., 2014). CSR used as a strategic management tool can consequently enhance the family business's longevity (Freeman and McVea, 2001). To achieve this in a family business, the resources of the family and the business must be utilized. This also implies that both business and family goals should

be attained through these resources. Thus, it is assumed that family resources are used as antecedents to make the business's outcomes more effective. To examine the existing literature on CSR in family businesses, the following research questions have been posed: *Which antecedents drive a family firm's corporate social responsibility? Which outcomes do family firms realize by conducting corporate social responsibility? Which of the family firm's corporate social responsibility antecedents and outcomes correspond?* The analysis was conducted using SFBT, which divides family businesses into an overlapping subsystem of family and business. Resources are exchanged between the two systems, whereby the family can provide additional resources to the business, enabling it to operate more successfully. The more resources the family provides, the more influence it has on the business (Habbershon and Williams, 1999; Weismeier-Sammer et al., 2013). Based on this inference, the analysis was divided into family and business antecedents and outcomes. The study shows that research on CSR in family businesses is still young but becoming increasingly relevant. It demonstrates that antecedents-related CSR research has mainly focused on the family sphere, whereas outcomes-related CSR research has concentrated on the business sphere. Moreover, the analysis shows that no study has focused on the correspondence between antecedents and outcomes of CSR, opening the black box about this issue. Based on the results of the descriptive analysis, several research gaps were also identified. In particular, internal influences such as family values and external influences such as nationality and community embeddedness need to be further explored to enable the assessment and comparison of CSR outcomes.

The second article is likewise based on a systematic literature review according to Tranfield et al. (2003), and it summarizes the research on AC in family businesses. Absorptive capacity is an important process in business; it maps the different steps from knowledge identification to integration and commercial utilization (Cohen and Levinthal, 1989, 1990; Zahra and George, 2002). As the dynamic ability to assimilate and integrate knowledge and information has evolved as a means of building innovative strength (Chen et al., 2009; Cohen and

Levinthal, 1989) and competitiveness (Cohen and Levinthal, 1989; Volberda et al., 2010), AC can help make a significant contribution to the long-term viability of the business (Lane et al., 2001; Zou et al., 2018). To map the state of the art of research on AC in family businesses, the following research question were analyzed: *To what extent do the characteristics of family firms influence absorptive capacity outcomes?* To investigate the family characteristics, the article was subdivided based on the AC phases: triggers and inputs for creating AC, family and business influences on potential and realized AC, and outcomes. Family influence was analyzed by differentiating between the involvement approach – distinction through ownership, management, and control – and the behavioral approach – inclusion of family behavior. Eight propositions for future research were derived from these results. The study shows the ambivalence of family characteristics and their strong influence on the different phases of AC. Especially on potential AC and realized AC, family characteristics show a divergence in the effects, which can be both positive and negative. These ambivalent effects are also reflected in the propositions, emphasizing the importance of the involvement and behavioral approaches. Due to the complexity of family businesses more and deeper investigations are needed, especially by using multidimensional constructs.

Within the third article, the two analyses above are combined and examined to determine the influence of familiness in German family-owned SMEs on the generation of AC. This relationship is observed through CSR as a mediator and key factor in answering the following research question: *How (and to what extent) does CSR mediate the relationship between family-specific resources (i.e., familiness) and AC in small and medium-sized family businesses?* Signaling theory and dynamic capability theory are used as the basis of the analysis (Spence, 1973; Teece et al., 1997). In this context, the signaling theory represents a supplement that clarifies why CSR can act as a mediator between familiness and AC. The signaling effect of CSR – since only honest companies can send this signal cost-effectively – makes it more credible and thus generates the trustworthiness of the stakeholders toward the business

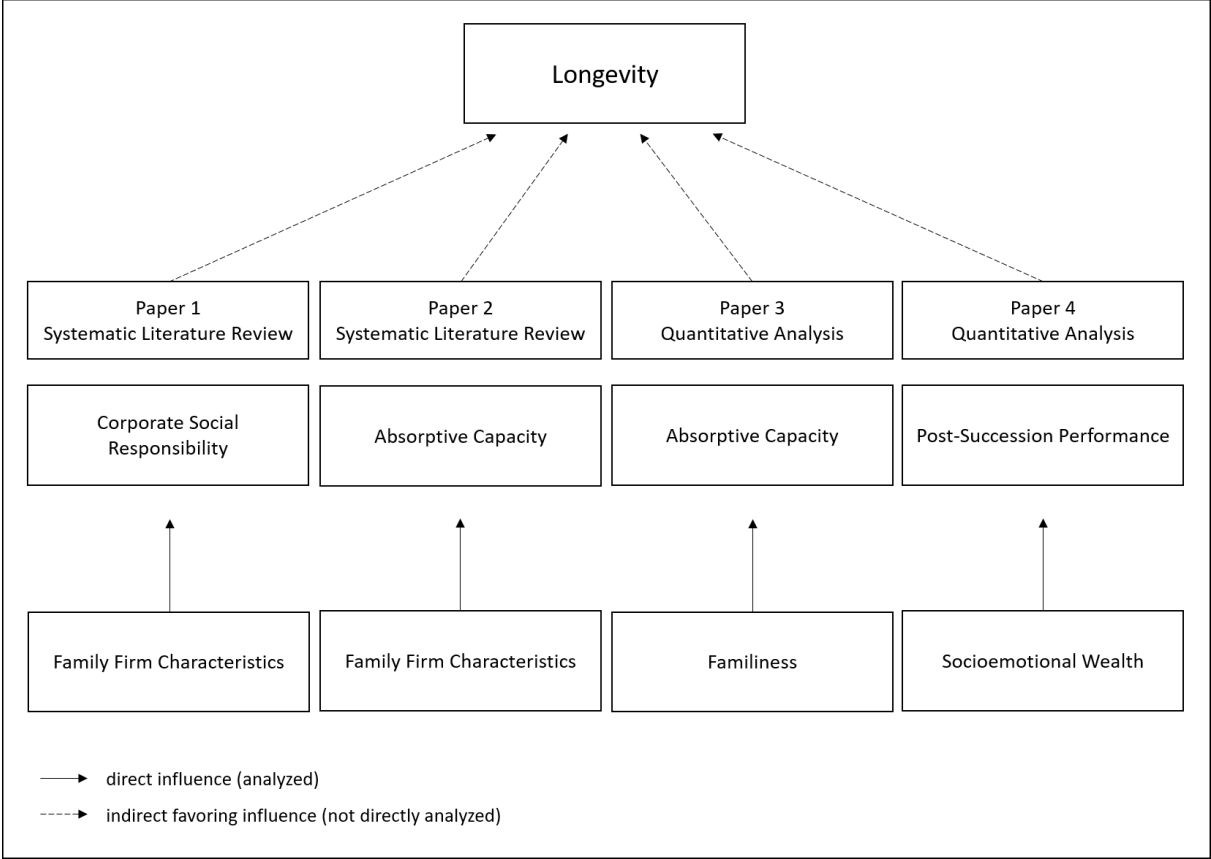
(Connelly et al., 2011; Du, 2015; Spence, 1973). Through the use of AC and acquired knowledge, family businesses can compensate for the lack of resources to better adapt to new environmental dynamics and to survive in the long term (Teece et al., 1997; Cohen and Levinthal, 1990). For this purpose, the knowledge of stakeholders can play a decisive role in recognizing trends and market changes (Eisenhardt and Martin, 2000; Ramachandran, 2011; Zahra and George, 2002). Therefore, the family business must use its resources and build relationships with its stakeholders. To achieve this goal, CSR can signal to the outside world that the business is trustworthy, thus building long-term relationships with (key) stakeholders and encouraging them to share knowledge (Luo and Du, 2015). Corporate social responsibility can also be used as an instrument for family businesses to open up and thus facilitate the efficient use of family resources. The mediation was tested by employee-oriented, customer-oriented, and community-oriented CSR on the effect of familiness and potential and realized AC. The results indicate that potential AC is mediated by customer-oriented CSR, but no effect could be proven for employee- and community-oriented CSR. For realized AC, a mediation for customer- and employee-oriented CSR was found. Overall, no direct effect was identified for realized AC, and the direct effect of familiness on potential AC can also only be partially confirmed. This result indicates that family businesses can actively signal their familiness and that this aspect particularly affects customers; in the areas of employee and community, it is assumed that the signals in these areas were not specific enough and too fuzzy to signal the characteristics of familiness. Nonetheless, investments in customer- and employee-oriented CSR have a positive effect on AC in family businesses by activating and leveraging family-specific resources.

The focus of the fourth and final article is on another central point of German family-owned SMEs, succession. Succession is a crucial event for family businesses, often determining whether the family business will survive (Handler, 1994; Le Breton-Miller et al., 2004; Motwani et al., 2006). The use of family resources to support the successor in their role may

explain why some family businesses survive longer than others (Frank et al., 2017; Williams and Mullane, 2019; Schell et al., 2018). This aspect is problematic for family-owned SMEs due to resource restrictions (Danes and Brewton, 2012). Moreover, within the succession process and accompanying decisions, conflicts often arise in family businesses (Ghee et al., 2015; Jayantilal et al., 2016). Such conflicts can influence the performance of the family business even after a successful handover (Van Auken and Werbel, 2006). Therefore, it is argued that SEW positively influences the relationships of family members by mitigating conflicts, which has a positive impact on post-succession performance by helping the successor set growth impulses. Therefore, this article analyzes the following research question: *What influence does SEW have on post-succession performance in small and medium-sized family businesses?* The impact of SEW on performance was examined on the basis of three dimensions: “renewal of family bonds through dynastic succession,” “emotional attachment of family members,” and “identification of family members with the firm” – the REI scale, a short form of the FIBER scale (Hauck et al., 2016). The original FIBER scale by Berrone et al. (2012) consists of five dimensions. These are those mentioned above, as well as “family control and influence” and “binding social ties”. Only the three dimensions of the REI scale are followed in this analysis. The following conclusion is derived from the analysis. With an increasing number of years since the handover, the performance is positively moderated and increases with a higher SEW dimension, the “renewal of family bonds through dynastic succession” and “identification of family members with the firm.” Family members are more motivated to support the successor in their challenges and provide resources (Razzak and Jassem, 2019). As such, SEW can be used as a strategic tool for successfully managing the succession process and creating the business longevity (Le Breton-Miller et al., 2004; Le Breton-Miller and Miller, 2016).

An overview of the four integrated papers and their topics as well as the analyzed family characteristics is presented in Figure A-1.

Figure A-1: Model of the integrated studies



An overview of the included papers is also given in Table A-1. First, the key data of the paper – who contributed to the paper and which method and which data set were used – are shown. The proportion of the paper that was contributed and at which conferences the paper was presented are also provided.

Table A-1: Overview of the integrated studies

	Paper 1	Paper 2	Paper 3	Paper 4
Titel	Corporate social responsibility in family firms: current status and future directions of a research field	Absorptive Capacity in Family Firms: A Systematic Literature Review	Openness to Knowledge – The Mediating Role of Corporate Social Responsibility on Absorptive Capacity in Family Firms	The moderating role of socioemotional wealth on post-succession performance in small-and medium-sized family firms
Authors	Stock, Christoph Pütz, Laura Schell, Sabrina Werner, Arndt	Pütz, Laura Werner, Arndt	Pütz, Laura Schell, Sabrina Werner, Arndt	Schell, Sabrina Stock, Christoph Pütz, Laura Werner, Arndt
Methodology	Systematic literatur aalysis	Systematic literature analysis	Quantitative mediation analysis with Stata	Quantitative moderation analysis with Stata
Sample	Analysis of 107 papers	Analysis of 23 papers	Survey conducted in 2019 in Germany (N= 327)	Survey conducted in 2019 in Germany (N= 344)
Contribution	I was responsible for the research concept, data collection, and writing of this paper.	I conducted the systematic literature and the writing of this paper.	I collected the data together with the hole chair and was responsible for vast parts of the literature review, helped develop the model, and wrote most parts of this paper.	I collected the data together with the team of the chair and was responsible for the first version of the hypothesis, the method, the limitation, and further general revisions.
Presentation status	Presented at: 24 th Annual Interdisciplinary Conference on Entrepreneurship, Innovation and SMEs (G-Forum), Karlsruhe, Germany (nominated for the besta paper award)	Presented at: Interdisciplinary European Conference in Entrepreneurship Research (IECER) 2021, Virtual Community Conversation Vol. II Accepted at: The Academy of Innovation, Entrepreneurship, and Knowledge conference (ACIEK). Through acceptance at the conference and the presentation, the paper qualifies for publication in the Special Issue of Review of Managerial Science (B)	Presented at: 10. Konferenz der deutschsprachigen Forschungszentren und Institute für Familienunternehmen (FIFU), 2020, University of Witten/ Herdecke, Germany 24 th Annual Interdisciplinary Conference on Entrepreneurship, Innovation and SMEs (G-Forum), Karlsruhe, Germany	Presented at: 41 st Babson College Entrepreneurship Research Conferende (BCERC), Technical University of Munich, Germany Accepted at: 82 nd Annual Meeting of the Academy of Management Conference (AOM), Seattle, Washington, USA (2022) 22 nd European Academy of Management Conference (EURAM), Zurich, Switzerland (2022)

3. Theoretical Background

This thesis analyzes the influence of family members in family businesses within the aspects of CSR, AC, and post-succession performance. To consider these analyses in the overall concept, it is first important to define the terms and theories used in detail and relate them to family businesses. Further, this thesis derives from the four deeper analyses how the family influence in the areas of CSR, AC, and post-succession performance can promote business longevity. To enable this derivation to be examined in the overall context, previous research on longevity and succession, familiness, SEW, CSR, and AC is considered.

3.1 Characteristics of Family Businesses

Family businesses stand out due to their characteristics formed by the interaction of business, family, and ownership (Carlock and Ward, 2001; Tagiuri and Davis, 1996). This intertwining creates a close connection of the destinies of the family to that of the business – the actions of the business are traced back to the family and vice versa, which significantly influences the behaviors and decisions in the business (Kashmiri and Mahajan, 2010; Zellweger et al., 2010; Zellweger et al., 2013). A uniform, overarching definition of family businesses is lacking. Family businesses are distinguished on the basis of their ownership shared by the family as well as the number of family members holding this ownership (Leach et al., 1990; Chua et al., 1999; Barnes and Hershon, 1976), the unity of that ownership and the family's management of the business (Leach et al., 1990; Chua et al., 1999; Handler, 1989; Tagiuri and Davis, 1996), and the intention to pass on the business to the next generation (Ward, 1987; Handler, 1989).

A primary aspect of family businesses – the continuity of the business over generations – describes not only the longevity of a family business but also the ability of the business to successfully compete in the long term (Napolitano et al., 2015; Sharma and Salvato, 2013). Aside from achieving competitive advantage, corporate performance, and innovation capabilities, the adaptability of the business to changing internal and external environmental

conditions plays a decisive role (Ahmad et al., 2020b; Giner and Ruiz, 2020; Napolitano et al., 2015). Ahmad et al. (2020b) identify several factors that influence sustainable corporate longevity: financial strength, strategic perspective, learning and growth, customer orientation, and sustainable production. Likewise, in their literature review, Martynov and Shafti (2016) analyze various factors that have a positive impact on long-term performance. These factors include intangible assets (customer satisfaction, brand value, corporate reputation, R&D, corporate culture), employee satisfaction, knowledge impact and internal knowledge management, CSR performance, and stakeholder orientation. However, longevity comprises not only the long-term survival of the business but also the long-term existence of the owner family (Sharma and Salvato, 2013). A key event that is decisive for this in family businesses is the handover of the business, without the success of which the family business cannot continue (Williams and Mullane, 2019; Miller et al., 2003). The exchange of resources is also important in family businesses, for example, between the family and the business, to enable innovations or the transfer of skills and values from the manager or the family (Giner and Ruiz, 2020). Furthermore, trust-based family relationships are crucial for succession and longevity because they reduce conflicts between family members, which could endanger the business (Eddleston et al., 2008; Sharma et al., 2003; Zellweger et al., 2012b). A detailed examination of these factors, and thus of longevity, requires an understanding of the basic system of family businesses.

According to Stafford et al.'s SFBT, family businesses are based on the fact that the two systems of family and business are combined, and a resource exchange occurs between them (Stafford et al., 1999; Tagiuri and Davis, 1996), and that the family and its characteristics influence the business (Chrisman et al., 2005a; Zellweger et al., 2010). Thus, in addition to these approaches, family businesses can be distinguished by their characteristics, which are also used in this dissertation. The characteristics of the family are based on their behaviors, values, and goals, among others. Moreover, their culture, non-economic goals, and (tacit) knowledge can

influence the family business (Chrisman et al., 2005a; Berrone et al., 2012; Habbershon and Williams, 1999; Frank et al., 2017). Hence, familiness and SEW are two concepts that are considered in more detail (Habbershon and Williams, 1999; Gómez-Mejía et al., 2007). These concepts include the behavior, the resulting influence of the family, and its views and characteristics, which allows for drawing conclusions about the heterogeneity of family businesses.

Familiness, considered in the context of the resource-based view, was introduced by Habbershon and Williams (1999). Familiness is defined as “the unique bundle of resources a particular business has because of the system interaction between the family, its individual members, and the business” (Habbershon and Williams, 1999, p. 11). Familiness resources can be divided into three components, namely the “human” (including reputation and experience), “organizational” (decision making and learning), and “process” (relationships and networks) elements (Irava and Moores, 2010; Barney, 1991). Constructs to measure familiness are the F-PEC scale (family influence on power, experience, and culture) from Rutherford et al. (2008), and the family influence familiness scale (FIFS) from Frank et al. (2017). For familiness, this dissertation uses the FIFS scale from Frank et al. (2017), who consider familiness related to how family members can influence the family business. They consider this under the factor of decision premises, which function as “rules of the game” in the business. In this context, decision premises “have the potential to become resources and capabilities in the sense of the RBV [resource-based view] if they meet the VRIN [valuable, rare, inimitable, and non-substitutable] criteria” (Frank et al. 2017, p. 714). The scale of Frank et al. (2017) consists of six subscales, namely “ownership, management and control,” “proficiency level of active family members,” “sharing of information between active family members,” “transgenerational orientation,” “family-employee bond,” and “family business identity” (Frank et al., 2017, p. 728). Familiness as a “unique, inseparable, and synergistic resource” (Zellweger et al., 2010, p. 54) is formed by the unique historical conditions of the business. Moreover, familiness cannot

be replicated by other businesses (Habbershon and Williams, 1999). In this regard, it is not enough to be a family business; the cultivation of awareness of familiness and ability to transfer this resource across generations are also essential (Irava and Moores, 2010).

Familiness can create not only competitive advantages through its uniqueness but also disadvantages (Habbershon and Williams, 1999; Barney, 1991; Zellweger et al., 2010). The positive impact of familiness can affect the performance, innovations, and competitiveness of the business (Carnes and Ireland, 2013; Daspit et al., 2019; Tokarczyk et al., 2007). The healthy relationship of family members can increase productivity through more effective communication (Van Auken and Werbel, 2006). Familiness creates strong organizational identity and trust between the business and its stakeholders, which results in collective action and provides a performance-enhancing effect (Beech et al., 2020; Zellweger et al., 2010). Additionally, familiness shows the unique and deeply rooted business culture as well as the values of the family toward its stakeholders, especially toward its employees (Beech et al., 2020; Frank et al., 2017; Zellweger et al., 2010). Interaction and sharing of tacit knowledge of family members with non-family members of the business generate new resources (Habbershon and Williams, 1999) that create sustainable competitive advantages and intergenerational potential (Irava and Moores, 2010). Companies with a high degree of familiness exhibit a high market-oriented culture, which results in long-term financial success (Cabrera-Suárez et al., 2011; Tokarczyk et al., 2007). Mzid et al. (2019) revealed in their study that the family capital – human, social, and financial capital – and especially social capital can increase the resilience of the family business in a turbulent business environment. The business maintains continuity and employment stability during fluctuating market phases (Cabrera-Suárez et al., 2011; Frank et al., 2017), which can be supported by the use of additional family resources (Stafford et al., 1999). Better market knowledge can be exhibited as well, which can improve internationalization and expansion (Zaefarian et al., 2016).

Familiness can also have negative effects on business performance. For example, a concentration of family members in management leads to an increase in the potential for conflicts between family members (Frank et al., 2010; Ghee et al., 2015), prioritization of non-financial goals (Sciascia and Mazzola, 2008), or integration of unqualified family members (Kosmidou, 2020). A high concentration of family members in the family business similarly results in negative performance, if hierarchies are unclear (Mihic et al., 2015). Younger family members can be restricted in their actions if older family members are active in the business, and a ruling, authoritarian environment exists (Kosmidou, 2020).

Overall, the positive and negative effects depend on the expression of each dimension and the exercise of familiness (Andersén, 2015; Daspit et al., 2019; Irava and Moores, 2010; Kotlar et al., 2020; Rutherford et al., 2008). The strategic use of the family's resources and the business and avoidance of the negative effects of familiness have the potential to favor the longevity of the family business.

Socioemotional wealth offers another means of showing how the family's behavior to maintain SEW can influence the family business. Socioemotional wealth was introduced by Gómez-Mejía and colleagues in 2007; it is defined 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” (Gómez-Mejía et al., 2007, p. 106). The FIBER scale developed by Berrone et al. (2012) represents the possibility of operationalizing SEW consisting of the dimensions (F) “family control and influence,” (I) “identification of family members with the firm,” (B) “binding social ties,” (E) “emotional attachment of family members,” and (R) “renewal of family bonds to the firm through dynastic succession.” This scale can be used to determine the family's involvement and influence in the family business and identify how the family's needs are being fulfilled. For SEW, this dissertation uses the REI scale from Hauck et al. (2016) – the short form of the FIBER scale – consisting of the

dimensions “renewal of family bonds through dynastic succession,” “emotional attachment of family members,” and “identification of family members with the firm”.

The preservation of the family SEW is a central goal of family members (Gómez-Mejía et al., 2007). One of its consequences is that SEW with its non-economic goals is placed before the financial goals of the family business; as a result, the business shows poorer financial performance (Gómez-Mejía et al., 2011; Martin and Gómez-Mejía, 2016, Memili et al., 2020). SEW in the business is similarly associated with a concentration on family members as well as nepotism (Firfiray et al., 2018; Kosmidou, 2020), which can lead to the integration of unqualified employees (Kosmidou, 2020). Furthermore, prioritizing SEW can result in the inefficient use of resources (Chrisman and Patel, 2012; Gómez-Mejía et al., 2007). However, some studies report the positive effect of SEW on performance (Debicki et al., 2017; Ng et al., 2019; Razzak and Jassem, 2019). Thus, SEW can have a positive impact on the longevity of the family business when family members not only seek private benefits but also use SEW to integrate family resources and socioeconomic values into decision making (Craig and Newbert, 2020). The achievement of SEW is considered to drive risky strategies when the performance level of the family business declines and the family control is at risk (Chrisman and Patel, 2012; Gómez-Mejía et al., 2007; Jiang et al., 2020; Xu et al., 2020). In this context, the dimensions of SEW have a differential impact on performance. Martínez-Romero and Rojo-Ramírez (2017) show in their research that control and influence have a positive effect, whereas dynastic succession and family members’ identification with the business have a negative one. However, the analysis of performance should generally consider not only financial metrics but also non-financial goals such as SEW (Chua et al., 2018; Holt et al., 2017).

In summary, both familiness and SEW can impact strategic decisions and actions in family businesses and thereby favor longevity. Nevertheless, the ambivalence of familiness and

SEW – positive and negative influences – must be considered if family businesses intend to achieve longevity (Nordqvist et al., 2008).

Moreover, the shared focus of familiness and SEW is on the long-term existence of the business; familiness and SEW also have, among other factors, the common goal of transferring the business to the next generation and preserving the business as a family business (Gómez-Mejía et al., 2007; Habbershon and Williams, 1999). The process of family business succession is not only one of the most important processes in a family business but also one of the riskiest – especially in family-owned SMEs because of resource restrictions (Handler, 1994; Danes and Brewton, 2012; Miller et al., 2003; Nordqvist et al., 2013). Family business succession describes the transfer of the business to the successor, in which management and/or ownership are handed over to the successor (De Massis et al., 2008; Le Breton-Miller et al., 2004). Family-owned SMEs primarily strive for intra-family business succession, in which the business is passed on to the next generation of the family. Thus, the business remains in family hands, and it maintains control (Basco and Calabrò, 2017; Chua et al., 1999; Gómez-Mejía et al., 2011; Sharma et al., 2001). The handover process can be divided into several steps. Nordqvist et al. (2013) consider the succession process from an entrepreneurial process perspective and divide it into four steps: pre-succession, planning succession, managing succession, and post-succession. The entrepreneurial perspective assumes that succession is characterized by the incumbent leaving and the successor joining the business (Nordqvist et al., 2013).

An internal succession is characterized by positive aspects. For example, management and ownership remain in the hands of the family, such that the characteristics of a family business as a whole are preserved (Leach et al., 1990; Chua et al., 1999; Handler, 1989; Tagiuri and Davis, 1996) and the orientation of the family business remains long term (Ward, 1987; Handler, 1989). The family business also preserves its unique culture, values, and common language (Daspit et al., 2021; Klein et al., 2005; Zellweger et al., 2012b). Family members have

easier access to the tacit knowledge of the family business through the common language of the family members (Daspit et al., 2019; Zahra et al., 2007). Additionally, the successor brings new resources, knowledge, and ideas to the family business, which can lead to new business opportunities (Nordqvist et al., 2013).

Even if the handover is inevitable and succession to the next generation is one goal of the family business, the risks and problems of the process should not be ignored. A large proportion of family businesses fail in this process, and only a small percentage of family businesses (about 10%) achieve the handover to the third generation (Le Breton-Miller et al., 2004; Ward, 1987; Handler, 1994). A successful handover can therefore be equated with the continued survival and longevity of the business. Among the reasons for failing are failure in the successful takeover of the business and failure after a successful takeover in the post-succession (Lee et al., 2003; Miller et al., 2003). The experience gained from previous successions does not help the family businesses because the time span between the transfers is often too long (Handler, 1994). Failures could emerge from an inadequate planning of the transfer, conflicts within the family due to incongruent goals or different views regarding the successor, or a lack of necessary skills from the next generation to manage the business due to nepotism and a narrow applicant pool. The latter is particularly true in family-owned SMEs (Basco and Calabrò, 2017; Ghee et al., 2015; Gómez-Mejía et al., 2011; Handler, 1994; Miller et al., 2003; Schell et al., 2020; Van Auken and Werbel, 2006). Holding patriarchs can also inhibit the decision-making power of the new business leader; in addition, the self-serving behavior of the successor can harm the family business (Chua et al., 2012; Miller et al., 2003). Furthermore, being accepted by the different stakeholders of the family business and gaining their trust could be difficult for the successor (Fox et al., 1996).

The help of the family and the provision of family resources can make the process of succession and the post-succession phase successful for the family business and thus considerably

contribute to its longevity (Cabrera-Suárez et al., 2001; Frank et al., 2017; Williams and Mullane, 2019; Schell et al., 2018).

3.2 Relationship Between Sustainability and Longevity of the Business

Corporate social responsibility can also influence and encourage the longevity of the business (Antheaume et al., 2013; Le Breton-Miller and Miller, 2016; Pan et al., 2018; Samara and Arenas, 2017). In this context, CSR reflects responsible and sustainable actions toward society and the environment (Rahman, 2011). Corporate social responsibility opens a wide field as well as room for interpretation, similarly caused by different definition of CSR, which reflects the evolution of the business in society through time (Latapí Agudelo et al., 2019). Bowen introduced the concept of CSR in 1953 as “the commitment of businessmen to pursue those policies, make those decisions, or follow those lines of action that are desirable in terms of the goals and values of our society” (Bowen, 1953, p. 6). Based on this definition, Carroll (1991) developed the CSR pyramid, which divides CSR into four dimensions of responsibility – economic, legal, ethical, and philanthropic – each dimension building on the other. By contrast, the triple bottom line model proposed by Elkington (1998) includes three dimensions – economic, social, and environment – where all elements should be equally targeted by the business. Nowadays, the definition of the European Commission has gained acceptance in Europe, which describes CSR in terms of interaction with the various stakeholders. The European Commission defines CSR as “[...] a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis. Being socially responsible means not only meeting legal expectations, but also going beyond compliance and investing “more” in human capital, the environment, and stakeholder relations” (Commission of the European Communities, 2001, p. 6). Because of the broadness of the definition, this dissertation follows the definition of the World Business Council for Sustainable Development, which describes CSR as “the

commitment of businesses to contribute to sustainable economic development by working with employees, their families, the local community, and society at large to improve their quality of life” (World Business Council for Sustainable Development, 2000, p. 10). In this context, however, a key point is that the family business must also pay attention to its economic goals to survive in the market and the long term (Ahmad et al., 2020a; Hsueh, 2018; Stoian and Gilman, 2017; Werther and Chandler, 2005). Due to their strong regional ties, family-owned SMEs in particular need to use CSR to meet the demands of their stakeholders (Basco 2015; Uhlaner et al. 2012). Consequently, CSR is increasingly being used as a strategic tool and strategic management decision to achieve competitive advantages (Porter and Kramer, 2006; Stoian and Gilman, 2017; Werther and Chandler, 2005; Werther and Chandler, 2010).

One of the ways in which companies use CSR is as a signal for communicating the sustainability of their business to the outside world (Zerbini, 2017). This can be explained by signaling theory introduced by Spence (1973). Signaling theory addresses the problem of principal agent theory, in which two parties have an information asymmetry to each other. Signaling is intended to reduce this information asymmetry (Connelly et al., 2011; Spence, 1973). To ensure a credible perception of the receiver, such signals must be costly and hard-to-fake. This shows that only highly qualified companies are able to execute this signal in the long run (Connelly et al., 2011; Spence, 1973). Through this, the business can improve its image and build trust with its stakeholders (Arena and Michelon, 2018; Campopiano and De Massis, 2015; Luo and Du, 2015; Zientara, 2017).

If the resources of the family and the business are properly used for strategically implementing CSR activities in the business and generating these signals, then the longevity of the family business can increase. Corporate social responsibility addresses different stakeholder groups, including the community, employees, customers, and suppliers, who positively respond to the business (e.g. Bennedsen et al., 2019; Bingham et al., 2011; Campopiano and De Massis, 2015;

Peloza and Shang, 2011; Uhlaner et al., 2004). The use of resources within CSR measures can enhance the image and reputation of family businesses, which leads to an improved image of the family, legitimacy, and commitment of its stakeholders, as well as protects SEW and competitive advantage (Arena and Michelon, 2018; Campopiano and De Massis, 2015; Farooq et al., 2014; Zientara, 2017). Furthermore, better outcomes in recruitment and employee retention can be achieved (Jones et al., 2013; Sancho et al., 2018; Wagner, 2010); at the same time, relationships with stakeholders can be established and their loyalty can be won and strengthened, which results in a fixed customer and employee base (Iglesias et al., 2020; Servera-Francés and Piqueras-Tomás, 2019). Additionally, employees show higher support toward the business, lower absenteeism, and higher productivity (Bennedsen et al., 2019; Liang et al., 2011; Peloza and Shang, 2011). Customer behavior toward these companies includes higher trust, satisfaction, and identification (Chung et al., 2015; Iglesias et al., 2020; Martínez and Rodríguez del Bosque, 2013; Pérez and Rodríguez del Bosque, 2015). These responses can have a positive impact on the organization. Orlitzky et al. (2003) and Albertini (2013) show in their meta-analysis that CSR has a positive effect on financial performance (Craig and Dibrell, 2006; Pan et al., 2018; Singal, 2014). Moreover, CSR increases performance (Kashmiri and Mahajan, 2010; Kashmiri and Mahajan, 2014a; Niehm et al., 2008), competitiveness (Cha and Rajadhyaksha, 2021; Porter and Kramer, 2006), access to finance (Cheng et al., 2014), business market value (Cha and Rajadhyaksha, 2021; Nekhili et al., 2017), visibility, image, and reputation of the business (Arena and Michelon, 2018; Bammens and Hünermund, 2020; Campopiano and De Massis, 2015; Uhlaner et al., 2004), as well as the legitimacy of the business's actions (Campopiano and De Massis, 2015; Panwar et al., 2014; Uhlaner et al., 2004). As these factors are confirmed to have an impact on the longevity of a business (Ahmad et al., 2020b; Martynov and Shafti, 2016), they could in turn increase the longevity of family businesses.

3.3 Influence of Absorptive Capacity on the Longevity of the Business

Another concept that is gaining relevance in this knowledge-based society is AC (Cordero and Ferreira, 2019). By assimilating external knowledge, companies can react more rapidly to environmental changes, better identify technological trends, and thus more successfully generate competitive advantages (Cohen and Levinthal, 1994). Cohen and Levinthal (1989, 1990, 1994) introduced AC and laid the foundation for further research. They defined AC as “the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends” (Cohen and Levinthal, 1990, p. 128). They viewed this ability as the prerequisite for companies to act in an innovative manner (Cohen and Levinthal, 1990). This ability is dependent on the knowledge base of the business and its individuals and the ability to share and communicate newly acquired knowledge within the business (Cohen and Levinthal, 1990). Knowledge cumulatively develops; hence, the implementation of AC is dependent on the business’s existing knowledge as well as the capabilities of the individuals within the organization (Cohen and Levinthal, 1990). This concept has been repeatedly expanded and reconceptualized over the years (e.g. Lane and Lubatkin, 1998; Lane et al., 2001, 2006; Volberda et al., 2010; Zahra and George, 2002).

This dissertation follows the definition of Zahra and George (2002), who reconceptualized the concept and added the dimension of “knowledge transformation.” They defined AC as “a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic capability” (Zahra and George, 2002, p. 186). “Acquisition” deals with the business’s ability to identify and acquire relevant external knowledge (p. 189); meanwhile, “assimilation” maps the routines and processes needed to analyze, interpret, and understand the external knowledge (p. 189). Within “transformation,” routines are subsequently developed and refined to combine new knowledge with the business’s existing knowledge (p. 190), which is then integrated into existing processes in “exploitation”

to use it for commercial goals (p. 190). Zahra and George (2002) then divided these four dimensions into potential AC (i.e., acquisition and assimilation capabilities) and realized AC (i.e., transformation and exploitation capabilities). In this context, social integration mechanisms (e.g., networks or internal business coordinators) are crucial for the transition from potential to realized AC. These mechanisms promote the sharing and dissemination of the new knowledge within the business and transfer the knowledge into realized AC (Zahra and George, 2002). Zahra and George (2002) adopted a holistic approach, which maps knowledge discovery to knowledge utilization and is therefore used for the further analyses in this dissertation.

Absorptive capacity is often discussed in connection with dynamic capability. The dynamic capability perspective was introduced by Teece et al. (1997). Its focus is on the process of the business to repeatedly adapt to dynamic environmental changes. Following Teece et al. (1997), dynamic capability is defined “as the firm’s ability to integrate, build, and reconfigure internal and external competencies to rapidly changing environments” (p. 516). To survive in the long term, companies must constantly renew and develop their competencies and use internal and external skills and resources to respond to changes in their environment (Teece et al., 1997; Eisenhardt and Martin, 2000). Therefore, AC can increase the business’s dynamic capability through the constant assimilation of new knowledge (Cordero and Ferreira, 2019).

This adaptability determines the competitiveness of the family business and thus its longevity (Eisenhardt and Martin, 2000; Teece et al., 1997; Zahra and George, 2002). In this context, knowledge sharing can be fostered by long-lasting alliances, as the sources of knowledge are familiar and a common language is built; thus, knowledge can be better integrated (Brinkerink, 2018; Filippini et al., 2012; Flatten et al., 2011). This aspect is particularly important for SME, which often have limited resources. It allows them to conserve resources, reduce knowledge shortages, and build sustainable competitive advantages (Chaudhary and

Batra, 2018; Filippini et al., 2012; Klewitz et al., 2012). Enduring partnerships similarly play an important role for family businesses, as they are critical and reluctant to enter into external partnerships and, due to their unique knowledge, may have problems finding suitable partners with congruent or complementary knowledge where knowledge intersections exist (Andersén, 2015; Belkhodja and Daghfous, 2020; Daspit et al., 2019; Zahra and George, 2002). Between these parties, better knowledge sharing can occur, generating a sustainable competitive advantage (Brinkerink, 2018). Combining valuable, rare, and hard-to-replace resources can also result in superior competitive advantage, which in turn builds new rare resources (Forcadell et al., 2018). This case is especially true for family businesses, which are differentiated by their unique and inimitable knowledge (familiness) from other businesses (Habbershon and Williams; 1999; Irava and Moores, 2010). This resources allows family businesses to respond more quickly to new conditions, including new (technological) innovations, management, and economic trends (Chen et al., 2009; Du, 2015a; Nagati and Rebolledo, 2012), and thus respond more quickly to customer needs (Boyd and Hollensen, 2012; Hassani and Mosconi, 2021; Gancarczyk and Gancarczyk, 2016). This similarly encourages new product and service developments, as well as patents and (process) innovations (Brinkerink, 2018; Chaudhary and Batra, 2018; Lane et al., 2006). Family businesses that integrate new external knowledge into this exhibit higher (innovation) performance (Chen et al., 2009; Hernández-Perlines et al., 2017; Kostopoulos et al., 2011; Muñoz-Bullón et al., 2020). Exercising AC can facilitate the entry into new markets (Gancarczyk and Gancarczyk, 2016) and increase international performance by identifying relevant knowledge and its application more quickly in the new markets (Hernández-Perlines, 2018). These aforementioned factors can improve financial performance (Kostopoulos et al., 2011) and competitive advantage (Chen et al., 2009).

The world today is characterized not only by increasingly rapid (technological) developments (David and Foray 2003; Melnikas, 2010) but also by a knowledge-based economy, in which

knowledge is pivotal to economic growth and competitiveness (Chen et al., 2009; Hassani and Mosconi, 2021). The successful implementation of AC is therefore key to the longevity of family businesses.

B. Corporate Social Responsibility in Family Firms: Current Status and Future Directions of a Research Field

1. Introduction

Many family firms worldwide have been operating successfully for generations – some for more than a century (Ahmad et al., 2020a; Koiranen, 2002; Lorandini, 2015). Since transgenerational survival is often the main aim of family firms, longevity plays a critical role in their basic strategies (Giner and Ruiz, 2020; Handler, 1989; Lumpkin and Brigham, 2011). An important contributing factor to this successful longevity are healthy, sustainable stakeholder relationships (Bingham et al., 2011; Ciravegna et al., 2020). Corporate social responsibility (CSR), understood as responsible and sustainable actions towards various stakeholders (Rahman, 2011), can generate loyalty (Iglesias et al., 2020; Servera-Francés and Piqueras-Tomás, 2019), brand recognition (Hur et al., 2014; Lai et al., 2010), and goodwill from those stakeholders (Maung et al., 2020; Noor et al. 2020; Panwar et al., 2014). Therefore, CSR is an invaluable strategic management tool for building solid relationships with key stakeholders (Bingham et al., 2011), thereby increasing competitive advantage (Freeman and McVea, 2001; Harrison et al., 2010).

Prior research agrees that family firms behave differently from non-family firms regarding CSR (Cabeza-García et al., 2017; Cuadrado-Ballesteros et al., 2017; El Ghouli et al., 2016; Fehre and Weber, 2019; Izzo and Ciaburri, 2018). A family firm understood as a social system made of the two subsystems family and firm (Frank et al., 2017), develops its specific behavior through the owning family integrating its goals and values into the firm's day-to-day business decision making (Astrachan et al., 2020; Chadwick and Dawson, 2018; Kuttner et al., 2021; Meier and Schier, 2020; Singh and Mittal, 2019). In order for the firm to be able to achieve these goals, family resources (i.e., financial, human, and social capital) provided by the owning family (Danes et al., 2008; Weismeier-Sammer et al., 2013) can be used to conduct CSR activities (Branco and Rodrigues, 2006), which in turn helps achieve the family's longevity goals

(Antheaume et al., 2013; Jain and Jamali, 2016; Le Breton-Miller and Miller, 2016; Samara and Arenas, 2017).

The competitive advantage emerging from family resources integration is called *familiness* (Habbershon and Williams, 1999) and can be a differentiating factor for the business activities of a family firm from those of a non-family firm (Chrisman et al., 2005a; Frank et al., 2017; Zellweger et al., 2010). However, family firms' growing research field continuously theorizes about CSR activities being driven by socioemotional wealth (SEW) (Cabeza-García et al., 2017; Dick et al., 2021; Fehre and Weber, 2019; Klein et al., 2018; Kuttner et al., 2021; Preslmayer et al., 2018). Socioemotional wealth summarizes the affective needs of owning families "such as identity, the ability to exercise family influence, and the perpetuation of the family dynasty" (Gómez-Mejía et al., 2007, p. 106). From this perspective, a family firm primarily practices CSR if it helps to maintain the owning family's SEW (Izzo and Ciaburri, 2018; Zientara, 2017).

What we do not know yet is the extent to which family firms are using their resources (i.e., antecedents) strategically to achieve specific outcomes (Choi et al. 2019; Kashmiri and Mahajan, 2014a, 2014b; Maung et al., 2020; Pan et al., 2018). Since the vast majority of family firm research focuses on the SEW narrative (Zientara, 2017), the importance of economic dimensions of family resources (i.e., familiness) remains overlooked. However, since family firms are also run according to business principles and ultimately have to provide for the economic existence of the owning family, it is essential to know how to utilize family firm resources according to the desired family firm outcomes. Following this line of thought, we assume that family resources integrated within the firm are antecedents of CSR and help utilize its firm outcomes more effectively. In order to study this phenomenon, we decided to examine, synthesize, and systemize the growing body of research on family firm's CSR activities to identify the antecedents and outcomes of CSR in family firms.

Consequently, we pose the following research questions:

- (1) *Which antecedents drive a family firm's corporate social responsibility?*
- (2) *Which outcomes do family firms realize by conducting corporate social responsibility?*
- (3) *Which of the family firm's corporate social responsibility antecedents and outcomes correspond?*

Following Tranfield et al.'s (2003) systematic literature review approach, we analyzed 107 peer-reviewed research articles regarding CSR in family firms, applying Stafford et al.'s (1999) sustainable family business theory (SFBT). The SFBT draws from the systems theory and a resource-based view assuming that the specific behavior of a family firm system emerges from the interaction of its subsystems (i.e., family and firm) and the associated resource transaction between those. We find that the probability of CSR activities increases as the owning family's influence on the firm grows and that a firm equipped with family resources can utilize CSR's outcomes better.

Our research findings contribute to a better understanding of CSR in family firms. First, our analysis reveals that family resources integrated into the firm through family influence increase the probability of a firm to conduct CSR activities. Those findings show that family firms can use CSR as a strategic tool as they are rewarded through positive outcomes. This illustrates that family influence within a firm should not be understood as a liability but as a strategic asset. Second, we show that current research often suffers from a misalignment between theory and empirics. While the prevailing assumption of today's family firm research is that family firm's CSR activities are SEW-driven (Preslmayer et al., 2018), CSR outcomes-related studies exclusively examine CSR firm outcomes. Although there is much theorizing about family outcomes that play a significant role in family firm management, we could not identify any empirically related findings. Third, we find that research does not answer the question which (family) firm antecedents are linked to which (family) firm outcomes by which CSR activities. Since our analysis reveals that CSR can be used as a strategic management tool, (family) firms

should know how to allocate their resources in order to achieve their desired outcomes. To clarify the catalytic role of CSR in family firms and to enable family firms to deploy their resources for the appropriate CSR activities, we recommend that future research opens this black box and focus on particular CSR activities' mediating effect on (family) firm antecedents and (family) firm outcomes.

The remainder of the paper is structured as follows: We discuss the theoretical framework on which our literature review is based and describe the method used to establish the reviews' article samples. Our research ascertains current research status and identifies subsequent lacunae. We then present an agenda for future research regarding CSR in family firms deriving nine research questions utilizing Stafford et al.'s (1999) SFBT. Finally, we discuss our findings and provide theoretical and practical implications based on our results.

2. Theoretical Framework

Despite many conceptually and operational attempts to define family firms (Sharma, 2004), there is no generally accepted definition of a family firm (O'Boyle et al., 2012). Criteria used in research literature include ownership shares, participation of several generations, and active management by family members (Shanker and Astrachan, 1996). Chua et al. (1999, p. 25) define a family firm as "a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family or a small number of families in a manner that is potentially sustainable across generations of the family or families." We follow this basic definition, which is compatible with Stafford et al.'s (1999) SFBT, and define a *family firm* as a social system made of two subsystems: family and firm. The unique behavior of a family firm results from the fact that the owning family provides the firm with a particular set of family resources (e.g., financial, human, or social capital) that enable the firm to operate more successfully. The stronger the influence of the family within the firm, the more family resources the firm may access (Habbershon and

Williams, 1999; Weismeier-Sammer et al., 2013). Those family resources integrated within the firm are described as *familiness*, which is “the unique bundle of resources a particular firm has because of the system interaction between the family, its individual members, and the business.” (Habbershon and Williams, 1999, p. 11). Familiness is available regardless of the market situation and can enable a family firm to overcome internal and external disruptions (Danes et al., 2008; Frank et al., 2017; Stafford et al., 1999; Weismeier-Sammer et al., 2013). For family firms to achieve longevity, these resources can be invested in CSR activities (Antheaume et al., 2013; Le Breton-Miller and Miller, 2016; Pan et al., 2018; Samara and Arenas, 2017). Corporate social responsibility is “[...] a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis” (Commission of the European Communities, 2001, p. 6), and as such, can support the goals of the owning family by forming strong, sustainable and long-term stakeholder relationships (Richards et al., 2017; Samara et al., 2018). Corporate social responsibility activities must ultimately promote the economic survival of the firm and subsequently be used as a strategic tool. However, since CSR definitions can be vague and leave room for interpretation (Dahlsrud, 2008), a wide range of different concepts – such as corporate citizenship; business ethics; sustainability (Dahlsrud, 2008; Matten and Moon, 2008; Van Marrewijk, 2013) – are applied in research. Elkington’s (1998) CSR triple bottom line model focuses on three CSR goals equally: economic-, social-, and environmental-related. Following, engagement in social and environmental goals can also impact firm’s economic goals if the CSR activities are used strategically (Porter and Kramer, 2006; Werther and Chandler, 2005).

To holistically understand CSR in family firms we must understand the motivations behind the CSR activities (i.e., antecedents) and its results (i.e., outcomes) (Kuttner and Feldbauer-Durstmüller, 2018; Kuttner et al., 2021). Following the SFBT, family firms with increasing family influence engage in CSR to cultivate their relationships with their stakeholders

(Fitzgerald et al., 2010; Stafford et al., 1999), thereby generating positive firm outcomes for the family firm by the use of resources (Kuttner and Feldbauer-Durstmüller, 2018). Considering that an owning family's financial wealth depends on its firm's performance (Holt et al., 2017), we assume that family firm CSR is a strategic tool used to ensure its longevity and then, secondarily, fulfill the emotional needs of the family. For family firms to effectively use CSR as a strategic tool, it is essential to know whether the antecedents also lead to the desired outcomes. This systematic literature review is conducted to gain a better understanding of these issues.

3. Methodology

To answer our research questions, we applied the Tranfield et al. (2003) methodology, which uses three phases (i.e., planning, conducting, and reporting) for systematic reviewing and collecting of significant scientific contributions in a specific research area. We developed a detailed search strategy and search protocol for English articles in peer-reviewed scientific journals. We then carried out the pre-defined search in the following databases: (1) EBSCO Business Source Elite; (2) Elsevier Science Direct; (3) Emerald; (4) Springer Link; (5) Wiley Online Library; and (6) ISI Web of Science. We searched these databases using a combination (AND conjunction) of two keyword groups. Due to the nascent stage of CSR in family firm research (Kuttner et al., 2021) and the wide range of synonyms regarding CSR (Dahlsrud, 2008; Matten and Moon, 2008; Van Marrewijk, 2013), we decided to apply a wide range of keywords. The first group dealt with the identification of CSR-relevant research using: (CSR OR "corporate social responsibility" OR "social responsibility" OR "corporate responsibility" OR "corporate social" OR "corporate citizenship" OR "environmental management" OR sustainab* OR "social management" OR "ethic" OR SDG OR "sustainable development goals"). The second group concentrated on the relevant literature concerning family firms: ("family firm*" OR "family business*" OR "family enterprise*" OR "family sme*" OR

“family own*” OR “family-own*” OR “family control*” OR “family led” OR “family involve*” OR “family influence*”).

By screening all search results that included both a keyword from the CSR and the family firm keyword group in the title or abstract (current analysis covers published research up to December 31st, 2020), we were able to identify 289 studies. We did not consider articles that included one term of both keyword groups each but did not deal with both categories explicitly or implicitly, as was the case with studies dealing with CSR (or one of its synonyms) using family firms for the analysis without addressing their particularities. Studies dealing with the ethical values in family firms, but not their impact on CSR activities or related concepts, were also excluded. After this initial screening, we excluded all articles in journals that were not ranked as “2 or better” by the Association of Business Schools’ (2021) Academic Journal Guide. By doing this, 107 articles remained as a finale sample for further in-depth analysis. Two authors read all papers independently and extracted information regarding author(s), year, title, journal, research method, applied theory, geographic scope, and key variables using a data-extraction sheet. To better understand the articles within our sample, we also looked up the number of citations per paper using google.scholar.

The 107 articles were then categorized by whether the key variables analyzed were CSR antecedents or outcomes of family firms, or both CSR antecedent and outcomes. Articles that examined the effect of family firm-specifics on CSR were classified into “antecedents,” while articles classified to the “outcome” category examined how family firm-specifics affect CSR’s effects. First, we subdivided antecedents and outcomes in a family’s and a firm’s subcategory as suggested by the SFBT. The SFBT indicates that integrating family and firm resources helps encounter internal and external disruptions (Danes et al., 2008; Stafford et al., 1999). Consequently, we created a subcategory with contextual factors, including institutional settings and community embeddedness, affecting a firm’s longevity. All subdivisions were discussed and iteratively organized by two authors during the analysis process. Two other authors were

consulted where a disagreement occurred, and categorization was discussed extensively among all authors until consensus was found.

4. Current Research Status of Research Field

4.1 Article Characteristics

The 107 reviewed articles were published in 47 journals, mainly of general management, ethics, gender, and social responsibility. It is noteworthy that the journal with the most significant number of publications is the *Journal of Business Ethics*, which is responsible for 20.56% of all publications in our review. We identified a further 14 journals, each publishing at least two articles relevant to our research field. These 14 journals account for 49.53% of all reviewed articles. The remaining 32 journals published one article each, accounting for 29.91% of all reviewed articles. Our citation analysis shows similar results. First, the 107 articles have a general citation count of 11,598. Once again, the *Journal of Business Ethics* stands out covering 23.10% of the citations, followed by *Family Business Review* with 15.28%. Drawing on the Academic Journal Guide (Association of Business Schools, 2021) to evaluate the journal quality (“4” being the highest score and “2” the lowest), 13.08% of the reviewed articles appeared in journals ranked as “4”, 56.07% were ranked as “3”, and 30.84% ranked as “2” (see Table 1).

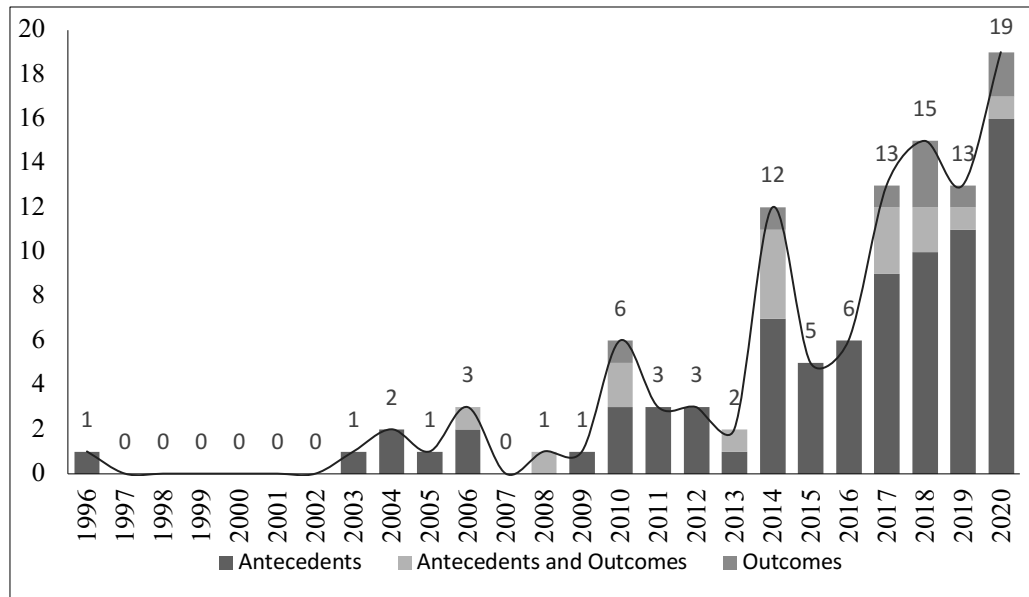
Table B-1: Most influential journals

No.	Journal title	AJG ranking	Number of publications	Number of citations
1	Journal of Business Ethics	3	22 (20.56%)	2679 (23.10%)
2	Business Strategy and the Environment	3	9 (8.41%)	467 (4.03%)
3	Family Business Review	3	8 (7.48%)	1772 (15.28%)
4	Journal of Family Business Strategy	2	6 (5.61%)	301 (2.60%)
5	Journal of Cleaner Production	2	5 (4.67%)	137 (1.18%)
6	Entrepreneurship Theory and Practice	4	4 (3.74%)	1461 (12.60%)
7	Asia Pacific Journal of Management	3	3 (2.80%)	79 (0.68%)
8	Journal of Business Research	3	3 (2.80%)	253 (2.18%)
9	Journal of Small Business and Enterprise Development	2	3 (2.80%)	344 (2.97%)
10	International Journal of Research in Marketing	4	2 (1.87%)	217 (1.87%)
TOTAL			65 (60.75%)	7710 (66.48%)

As Figure 1 shows, the density of publications on CSR in family firms has increased significantly in the last ten years. One reason for this might be that CSR research in general became more attractive since the global financial crisis of 2007/2008 when corporate entities' mismanagement and irresponsible behavior were revealed and made public (Blodgett et al., 2011). This crisis necessitated a major social reassessment and overhaul of business practices in financial and corporate institutions (Crane et al., 2014). Due to their trans-generational orientation (Giner and Ruiz, 2020; Lumpkin and Brigham, 2011), family firms have been discussed as a counter-model to opportunistic, shareholder-value-oriented, non-family firm management (Blodgett et al., 2011), which could explain increased research activities regarding CSR antecedents in family firms. Researchers would like to learn why family firms differ from non-family firms (Adams et al., 1996; Campopiano and De Massis, 2015; Maung et al., 2020) and what both firms can learn from these differences (Craig and Dibrell, 2006; Kashmiri and Mahajan, 2014b; Samara and Arenas, 2017). However, to understand their specific CSR behavior, it is essential to know what benefits they receive from these activities (Pan et al., 2018; Zientara, 2017). Although it is still a significantly under-researched area, the debate about CSR's family firm outcomes has become more popular in the last ten years (Kuttner and Feldbauer-Durstmüller, 2018).

When looking at reviewed article's research methods, quantitative research stands out. When analyzing large firms, quantitative research mainly draws from longitudinal databases such as the Thomson Reuters databases (e.g., El Ghouli et al., 2016; Martínez-Ferrero et al., 2017; Martínez-Ferrero et al., 2018), KLD data (e.g., Block and Wagner, 2014a, 2014b; Lamb and Butler, 2018; Liu et al., 2017; Kim et al., 2017), annual reports (e.g., Biswas et al., 2019; Sundarasan et al., 2016; Zamir and Saeed, 2020) and S&P 500 firms (e.g., Cui et al., 2018; Kashmiri and Mahajan, 2014b; Wagner, 2010).

Figure B-1: Annual distribution of the 107 reviewed published articles



Quantitative studies examining family-owned small and medium-sized enterprises (SMEs) draw from cross-sectional surveyed data (e.g., Dawson et al., 2020; Peake et al., 2017) as there is little publicly available data on SMEs (Miller and Le Breton-Miller, 2007). Qualitative methods were used for inductive exploration of new research issues and theories. For example, Marques et al. (2014), Aragón-Amonarriz et al. (2019), and Bhatnagar et al. (2020) used semi-structured interviews for their case studies.

Table B-2: Research method used

	Antecedent-related	Antecedent- and outcome-related	Outcome-related	TOTAL
Quantitative	70 (65.42%)	14 (13.08%)	8 (7.48%)	92 (85.98%)
Qualitative	8 (7.48%)	1 (0.93%)	0 (0.00%)	9 (8.41%)
Conceptual	4 (3.74%)	1 (0.93%)	1 (0.93%)	6 (5.61%)
TOTAL	82 (76.64%)	16 (14.95%)	9 (8.41%)	107 (100.00%)

4.2 Theories in Use

In sum, we found 96 different applied theories, giving the impression that the research field's theoretical foundation is fragmented. However, most theories played only a minor role within

our sample. When analyzing the applied theories' underlying assumptions, we noted four theories appearing at least once in 52 papers: Principal agency theory, SEW, stakeholder theory, institutional theory (see Table 3). Since the theories have some overlaps, 30 studies combine those by drawing from different assumptions to explain a family firm's CSR activities.

Table B-3: Theories

Theory	Representative Studies
Principal agency theory	Abeyssekera and Fernando (2020); Block (2010); Cui et al. (2018); El Ghoul et al. (2016); Labelle et al. (2018); Wiklund (2006)
SEW	Terlaak et al. (2018); Zientara (2017); Graafland (2020); Samara et al. (2018); Lamb and Butler (2018); Cruz et al. (2014)
Stakeholder theory	Ahmad et al. (2020a); Bingham et al. (2011); Maggioni and Santangelo (2017); Delmas and Gergaud (2014); Uhlaner et al. (2004)
Institutional theory	Bammens and Hünermund (2020); Campopiano and De Massis (2015); Du et al. (2016); Ge and Micelotta (2019); Kim et al. (2017); Singal (2014)

N = 107 articles

In this regard, twenty-one articles drew on the principal agency theory, focusing on conflicts in the relationship between the principal (mainly the owning family) and the agent (mainly non-family managers), characterized by information asymmetry between the two, where the agent has an information advantage against the principal. The unequal distribution of information among these groups leads to the possibility that the agent may not act in the principal's best interest and behaves opportunistically for personal gain (Eisenhardt, 1989; Jensen and Meckling, 1976). In CSR-related family firm research, the principal agency theory shows that the stronger the control of the owning family (through ownership shares or management), the more successfully the owning family will impose its own goals on the firm. Most of those studies argue that higher information asymmetries increase CSR probability as non-family managers improve their image through CSR (Cuadrado-Ballesteros et al., 2015).

Institutional theory was referred to 16 times and focused on how firms need to adapt to the institutional environment to gain legitimacy while conducting their business (Campopiano and De Massis, 2015; Du et al., 2016; Zamir and Saeed, 2020). Institutional theory is mainly used

to examine how specific antecedents affect CSR under different institutional settings. For example, Chen and Cheng (2020) show that the industry in which a company is located influences how family ownership or management affects CSR. The same is true for different cultural contexts (Samara et al., 2018).

Used as a theoretical concept, SEW was applied 15 times. The first article in our sample using SEW was published in 2014, where this concept has gained popularity ever since (Swab et al., 2020). SEW focuses on the family's affective, non-financial goals, such as strengthening the family image (Gómez-Mejía et al., 2007; Labelle et al., 2018; Marques et al., 2014). The most dominant argument among studies influenced by SEW is that the owning family wants to protect its family image and therefore engages in CSR to improve that image, and look good to stakeholders.

The stakeholder theory was used in eleven articles and is one of the fundamental and most dominant theories of general CSR research (Brown and Forster, 2013; Wood, 2010). A vital aspect of this theory is that a company receives resources from its stakeholders (e.g., human resources, information, legitimacy) and must engage in good relations. If a company does not do this, its stakeholders will eventually refuse to cooperate, leading to a decline in performance. CSR-related family firm research assumes that owner families use their firms to pursue financial and non-financial family goals and are more inclined to engage in CSR towards their stakeholders to achieve these goals.

There is a contemporary trend proposing a combination of the four prevailing theories, although, notably, approximately 34% of the articles used no theories at all. However, more recent studies tend towards being theory-driven, indicating that the understanding of family firms has advanced.

4.3 Content Findings

4.3.1 Family Firm Antecedents

In total, 98 of all articles in our sample (91.59%) dealt with the antecedent angle of CSR in family firms. Of these, 82 articles (76.64%) dealt exclusively with antecedents, while 16 (14.95%) dealt with both antecedents and outcomes simultaneously. Antecedents explain why CSR is being implemented by a firm. Following Stafford et al.'s (1999) SFBT, we subdivided the identified family firm CSR antecedents in family and firm antecedents (see Table 4 and 5). While family antecedents emerge from the family subsystem, firm antecedents originate from the firm subsystem. From a familiness perspective family firms differ from non-family firms, since they do not only draw resources from the firm subsystem, but also from the family subsystem, which can result in a competitive advantage (Weismeier-Sammer et al., 2013).

Table B-4: Family antecedents

Family antecedents Effect on CSR		Representative studies
Family firm status	5	
	1 (20.00%) Positive	Gallo (2004)
	1 (20.00%) Negative	Dekker and Hasso (2016)
	3 (60.00%) Not clear	Adams et al. (1996); Déniz Déniz and Carbrera Suárez (2005); Graafland et al. (2003)
Family ownership	42	
	24 (57.14%) Positive	Bammens and Hünermund (2020); Kim et al. (2020); Sahasranamam et al. (2020)
	14 (33.33%) Negative	Abeysekera and Fernando (2020); El Ghouli et al. (2016); Rees and Rodionova (2015)
	4 (9.52%) Not clear	Bergamaschi and Randerson (2016); Labelle et al. (2018); Terlaak et al. (2018)
Family management	19	
	11 (57.89%) Positive	Abeysekera and Fernando (2020); Block (2010); López-González et al. (2019)
	5 (26.32%) Negative	Block and Wagner (2014a); Graafland (2020); Oh et al. (2019)
	3 (15.79%) Not clear	Berrone et al. (2010); Cui et al. (2018); Terlaak et al. (2018)
Family ownership and management	16	
	8 (50.00%) Positive	Dangelico (2017); Dyer and Whetten (2006); Liu et al. (2017)
	3 (18.75%) Negative	Amann et al. (2012); Chen and Cheng (2020); Craig and Dibrell (2006)
	5 (31.25%) Not clear	Doluca et al. (2018); Kim and Lee (2018); Iyer and Lulseged (2013)

Socioemotional wealth	5			
	2	(40.00%)	Positive	Dayan et al. (2019); Kallmuenzer et al. (2018)
	0	(0.00%)	Negative	-
	3	(60.00%)	Not clear	Arena and Michelon (2018); Le Breton-Miller and Miller (2016); Zientara (2017)
Family influence	8			
	6	(75.00%)	Positive	Bingham et al. (2011); Ahmad et al. (2020a); Fitzgerald et al. (2010)
	0	(0.00%)	Negative	-
	2	(25.00%)	Not clear	O'Boyle et al. (2010); Le Breton-Miller and Miller (2016)
Family generation	9			
	7	(77.78%)	Positive	Dawson et al. (2020); Delmas and Gergaud (2014); Uhlaner et al. (2004)
	0	(0.00%)	Negative	-
	2	(22.22%)	Not clear	Aragón-Amonarriz et al. (2019); Richards et al. (2017)
Family values	11			
	10	(90.01%)	Positive	Aragón-Amonarriz et al. (2019); Marques et al. (2014); Sánchez-Medina and Díaz-Pichardo (2017)
	1	(9.09%)	Negative	Zheng et al. (2017)
	0	(0.00%)	Not clear	-
Family's firm name	3			
	3	(100.00%)	Positive	Kashmiri and Mahajan (2010); Kashmiri and Mahajan (2014a); Uhlaner et al. (2004)
	0	(0.00%)	Negative	-
	0	(0.00%)	Not clear	-

N = 98 antecedent-related articles

Since family firm research deals with family firm specifics, it is not surprising that the subcategory of family antecedents predominates among the antecedent-related CSR research (see Table 4). Looking at the articles chronologically, the first four published articles in our sample covering these are those by Adams et al. (1996), Graafland et al. (2003), Gallo (2004) and Uhlaner et al. (2004). While Adams et al. (1996) and Graafland et al. (2003) find no significant differences in regard to CSR between them, Gallo (2004) asked 44 scientists involved in family firm research whether they perceive those firms more socially responsible than non-family firm finding that scientists do perceive family firms as more socially responsible. The study of Uhlaner et al. (2004) is the first in our sample empirically finding family firms to be more inclined to conduct CSR. They conclude that an owning family's influence on a firm leads the firm to establish stronger relationships with its stakeholders and implicitly already theorizes

about family resources (i.e., family social capital towards stakeholder) being antecedents for family firm's CSR activities (Uhlener et al., 2004).

Inspired by these studies, different operationalizations were applied to identify family firm antecedents of CSR with family ownership being the most prominent measure starting in 2006. Although most studies using family ownership as a family antecedent showing positive effects on CSR (e.g., Biscotti et al., 2018; Cordeiro et al., 2020; Kim et al., 2020; Lamb and Butler, 2018; Sahasranamam et al., 2020; Yu et al., 2015), there is no clear effect direction on CSR activities in the 42 studies using family ownership. The reason for this could be that ownership alone is not sufficient enough to actually influence business decisions since the owning family cannot affect internal decision-making processes directly (Terlaak et al., 2018). Block and Wagner (2014a) therefore conclude that it is much better to examine the influence of owning families on their company through family management, which actually can be observed among the 19 studies within our sample (e.g., Dawson et al., 2020; López-González et al., 2019; Oh et al., 2019). 16 further studies used a combination of family ownership and management (e.g., Dangelico, 2017; Dyer and Whetten, 2006; Chen and Cheng, 2020; Kim and Lee, 2018). However, studies using family management, or a combination of family ownership and family management, are not more likely to find a positive effect on CSR than those using family ownership.

Although many studies regarding CSR in family firms make use of the theoretical assumptions of SEW and criticize the insufficient explanatory power of family ownership and management (e.g., Block and Wagner, 2014b; Graafland, 2020; Marques et al., 2014; Samara et al., 2018), we could only find five articles explicitly dedicated to examining the effect of SEW on family firms CSR activities. Of these, only two actually applied empirical SEW measurements (Dayan et al., 2019; Kallmuenzer et al., 2018), while the other three addressed the issue conceptually pointing out how SEW affects a family firm's CSR activities is highly dependent on contextual factors (Arena and Michelon, 2018; Le Breton-Miller and Miller, 2016; Zientara, 2017).

In line with our theoretical assumption, the eight studies aiming to quantify the actual family influence predominantly found positive effects on CSR (Ahmad et al., 2020a; Bingham et al., 2011; Fitzgerald et al., 2010; Samara et al., 2018; Sharma and Sharma, 2011; Uhlaner et al., 2012). These studies argue that as the family influence on day-to-day business increases its opportunity to actually influence internal business decisions also increases (Sharma and Sharma, 2011; Uhlaner et al., 2012). This assumption is further supported by the fact that the nine studies on family generation and the three studies on family's firm name show a very high proportion of studies with positive effects on CSR.

The predominant positive effect of the eleven studies regarding family values on CSR found are further indication of this (e.g., Bhatnagar et al., 2020; Marques et al., 2014; Sánchez-Medina and Díaz-Pichardo, 2017; Zheng et al., 2017). Thus, Le Breton-Miller and Miller (2016) state that especially religious values motivate an owning family to devote their resources to CSR activities. Values emerging from the family subsystem can help to foster management practices (i.e., CSR activities) and therefore understood as a type of family capital having the potential to give the family firm a competitive advantage over non-family firms (Antheaume et al., 2013; Aragón-Amonarriz et al., 2019).

Table B-5: Firm antecedents

Firm antecedents	Effect on CSR	Representative studies
Financial	2	
	2 (100.00%) Positive	Block (2010); Singal (2014)
	0 (0.00%) Negative	-
	0 (0.00%) Not clear	-
Non-financial (internal)	26	
	2 (84.62%) Positive	Biswas et al. (2019); Du (2015a); Martínez-Ferrero et al. (2016, 2017)
	2 (7.69%) Negative	Graafland (2020); Madden et al. (2020)
	2 (7.69%) Not clear	Kim and Lee (2018); Samara et al. (2018)
Non-financial (external)	4	
	3 (75.00%) Positive	Du (2015a); Ge and Micelotta (2019); Martínez-Ferrero et al. (2018)
	0 (0.00%) Negative	-
	1 (25.00%) Not clear	Richards et al. (2017)

N = 98 antecedent-related articles

Since a family firm consists not only of a family subsystem but also of a firm subsystem, we also found studies that examined the influence of general firm antecedents on CSR activities in our sample (see Table 5). These focus mainly on (internal) non-financial antecedents predominantly examining the effect of governance (e.g., El-Kassar et al., 2018; Campopiano et al., 2014; Terlaak et al., 2018) and non-family management (e.g., Martínez-Ferrero et al., 2017; Oh et al., 2019; Samara et al., 2018) on family firms CSR activities. With only two studies examining the effect of financial antecedents, it is apparent that there is still a need for further research. Regardless of the fact that firm antecedents play a rather minor role in our sample, they show that family firms draw resources from two subsystems (i.e., family and firm). The more resources the family firm system can accumulate from both subsystems, the more likely a family firm is to engage in CSR (Fitzgerald et al., 2010). Consequently, the likelihood of finding a positive effect on CSR activities increases when using an operationalization of the family antecedents better reflects the integration of family resources (i.e., familiness) within the family firm system (Sharma and Sharma, 2011). This is consistent with SFBT, which states that a family firms draws on resources from both the family and the firm in order to respond to internal and external disruptions.

4.3.2 Family Firm Outcomes

In total, 25 studies within our sample (23.36%) examined the outcome side of CSR. Of these, nine articles (8.41%) dealt exclusively with outcomes, while 16 (14.95%) dealt with both antecedents and outcomes simultaneously. As in the case of antecedents, we also subdivided them into family and firm outcomes in accordance to the SFBT. In this regard, no study was found examining family outcomes empirically. The reason for this might be that CSR is a firm level concept and research therefore primarily focuses on firm level outcomes as well. We categorized the outcomes of the firm system according to the firm antecedents as defined by Holt et al. (2017) into financial outcomes, internal and external non-financial outcomes (see

Table 6). From a familiness perspective, a family firm should be able to better utilize the outcomes of CSR than non-family firms due to their superior resource base (Weismeier-Sammer et al., 2013).

Table B-6: Firm outcomes

Firm outcomes	Effect of CSR	Representative studies	
Financial	1		
	7		
	1 (56.25%)	Positive	Ahmad et al. (2020a); Niehm et al. (2008); Pan et al. (2018)
	0		
Non-financial (internal)	2 (12.50%)	Negative	Choi et al. (2019); Lin et al. (2020)
	5 (31.25%)	Not clear	Dangelico (2017); Doluca et al. (2018); Liu et al. (2017)
	7		
Non-financial (internal)	6 (85.71%)	Positive	Antheaume et al. (2013); Craig and Dibrell (2006); Wagner (2010)
	0 (0.00%)	Negative	-
	1 (14.29%)	Not clear	Dolucas et al. (2018)
Non-financial (external)	6		
	3 (57.14%)	Positive	Ahmad et al. (2020a); Panwar et al. (2014); Samara and Arenas (2017)
	2 (28.57%)	Negative	Hsueh (2018); Martínez-Ferrero et al. (2018)
	1 (14.29%)	Not clear	Zientara (2017)

N = 25 outcome-related articles

Chronologically, the first outcome-related studies emerged after research on family firm antecedents had already gained momentum. Niehm et al. (2008) were the first to examine financial CSR outcomes (i.e., firm performance), and Wagner (2010) was the first to examine non-financial CSR outcomes (i.e., innovation activities). Interestingly, there is a very balanced relationship between financial and non-financial outcomes compared to antecedents' related research. Thus, nine studies show that family firms improve their financial outcomes such as cost of capital (Wu et al., 2014) or return on new products (Kashmiri and Mahajan, 2014a), but mainly focus on the firm's general performance (e.g., Adomako et al., 2019; Choi et al., 2019; Kashmiri and Mahajan, 2014b). Internal non-financial outcomes where family firms perform better are internal capabilities (Ahmad et al., 2020a), longevity (Antheaume et al., 2013; Samara and Arenas, 2017) or innovation performance (Biscotti et al., 2018; Craig and Dibrell, 2006;

Wagner, 2010). External non-financial outcomes are those like firm reputation (Samara and Arenas, 2017; Zientara, 2017), credibility (Hsueh, 2018; Panwar et al., 2014), or customer orientation (Ahmad et al., 2020a).

Remarkably, most outcome-related studies found that family firms generate better results from CSR activities than non-family firms indicating that family firms are better in utilizing CSR. One study finding a negative effect in terms of non-financial outcomes is that of Martínez-Ferrero et al. (2018), who analyses the effect of CSR disclosures on information asymmetries between family and minority investors. They find that while CSR disclosures normally reduce the asymmetries between both parties, family owners use their power in order to take advantage out of it and do not inform minority investors adequately. Thus, family ownership reduces the effect between CSR disclosures and information asymmetry (Martínez-Ferrero et al., 2018). This shows that the resources out of the family subsystem does not automatically lead to a better utilization of CSR activities. In this case, it seems rather as if the owning family uses its influence to maintain its power over its own company, and thus its SEW (Zientara, 2017).

Although the idea of empirically examining the extent to which CSR outcomes differ between family and non-family firms is still very young, an increase in research activity can be seen since 2014. This shows that the importance of this research angle is increasingly being recognized (Kuttner and Feldbauer-Durstmüller, 2018). In order to increase the relevance of new outcomes-related studies, we recommend looking at family outcomes. According to the SFBT a family firm consist of the subsystems firm and family (Stafford et al., 1999), and both subsystems profit from the family firm performing well. Even though family outcome's importance was sometimes referred to in the reviewed literature (e.g., Campopiano and De Massis, 2015; Niehm et al., 2008; Zientara, 2017), we did not find research providing empirical information on whether CSR-improved stakeholder relations have an impact on such outcomes. Thus, Déniz Déniz and Carbrera Suárez (2005) already report that owning families are personally affected by the relationships with the stakeholders of the firm, since they are

inseparable from it. Furthermore, the findings of Aragón-Amonarriz et al. (2019), who conclude that owning family derives honors from socially responsible behavior, could also act as a starting point for family outcome-related CSR research. We state that it is essential for research on CSR in family firm to extant its scope and start to understand “how organizations influence actors’ families” (Jaskiewicz et al., 2017, p. 309).

4.3.3 Contextual Factors

The SFBT theorizes that a family firm can cope with environmental factors much better than a non-family firm, since it can draw from family resources and therefore becoming more resilient to external disruptions (Stafford et al., 1999). In order to better understand the heterogeneous findings – especially on the antecedents’ side of research – research has therefore increasingly looked at factors outside the family firm system. Thus, we devoted a further category to contextual factors (i.e., institutional pressure and community embeddedness), which affect the relationships between family firm antecedents and CSR activities of family firms (see Table 6) and are to be located outside the two subsystems family and firm.

Table B-7: Contextual factors

Contextual factors	Effect on CSR	Representative studies	
Institutional pressure	19		
	1 (73.68%)	Positive	Labelle et al. (2018); Maggioni and Santangelo (2017); Zamir and Saeed (2020)
	4 (5.26%)	Negative	López-González et al. (2019)
	4 (21.05%)	Not clear	Cuadrado-Ballesteros et al. (2015); Dayan et al. (2019); Le Breton-Miller and Miller (2016)
Community embeddedness	9		
	9 (85.71%)	Positive	Berrone et al. (2010); Dekker and Hasso (2016); Peake et al. (2017)
	0 (0.00%)	Negative	-
	0 (0.00%)	Not clear	-

N = 107 articles

A fundamental assumption of studies analyzing the effect of institutional pressure on family firms is that owning families are more sensitive to institutional pressure than other non-family

owners leading to a greater tendency to implement the requirements of external stakeholders (Ge and Micelotta, 2019). The reason for this is that owning family's assign a higher importance to the firm image, as it partly transfers to them (Amidjaya and Widagdo, 2020; Discua Cruz, 2020; Labelle et al., 2018; Zientara, 2017), especially if the firm shares the same name as they do (Abeysekera and Fernando, 2020; Uhlaner et al., 2004; Kashmiri and Mahajan, 2010) and when the transgenerational orientation is high (Bammens and Hünermund, 2020; Pan et al., 2018). Following the argumentation of the SFBT, an owning family will therefore be more willing to provide family resources to the family firm system in order to meet the institutional pressure for CSR activities.

Although most studies show a positive effect of institutional pressure on CSR activities, it appears evident that how sensitive a family firm reacts to external pressure depends on the region (Ertuna et al., 2019; Ge and Micelotta, 2019; Labelle et al., 2018; Zamir and Saeed, 2020). Thus, while the first studies conducted with US American datasets between 2003 and 2013, the economic relevance of the Asian continent increased over the last years leading to an increase of CSR-related family firm studies applying Asian datasets since 2009 (see Figure 8). While studies using US American data mostly showed positive effects of family antecedents on CSR, the increasing number of Asian studies in recent years more frequently also show a negative effect (Biswas et al., 2019; El Ghouli et al., 2016; Huang et al., 2009; Muttakin and Khan, 2014).

This can be attributed to the fact that the cultural values in the USA – but also other Western countries – are highly stakeholder-oriented and based on “liberal democratic rights, justice and societal structures” (Amann et al., 2012, p. 331) leading to a high institutional pressure for firms to comply accordingly (Campopiano and De Massis, 2015; Dekker and Hasso, 2016). Since the Asian countries have a more shareholder-oriented culture, the social pressure to become CSR compliant has not yet been as strong, as in already in the US or Europe (El Ghouli et al., 2016).

Table B-8: Countries from which the research emanated

	Before 2001	2001-2005	2006-2010	2011-2015	2016-2020	Total
International	0 (0.00%)	1 (0.93%)	0 (0.00%)	2 (1.87%)	11 (10.28%)	14 (13.08%)
USA	1 (0.93%)	0 (0.00%)	9 (8.41%)	11 (10.28%)	11 (10.28%)	32 (29.91%)
Central-America	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	3 (2.80%)	3 (2.80%)
Australia	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.93%)	1 (0.93%)
Europe	0 (0.00%)	3 (2.80%)	0 (0.00%)	6 (5.61%)	13 (12.15%)	22 (20.56%)
Asia	0 (0.00%)	0 (0.00%)	1 (0.93%)	5 (4.67%)	22 (20.56%)	28 (26.17%)
Africa	0 (0.00%)	0 (0.00%)	0 (0.00%)	0 (0.00%)	1 (0.93%)	1 (0.93%)
Conceptual	0 (0.00%)	0 (0.00%)	1 (0.93%)	1 (0.93%)	4 (3.74%)	6 (5.61%)
Total	1 (0.93%)	4 (3.74%)	11 (10.28%)	25 (23.36%)	66 (61.68%)	107 (100.00%)

Thus, owning families tend to focus stronger on their own financial well-being and consequently more often neglect CSR than non-family firms (e.g., Biswas et al., 2019; Du, 2015a; Du et al., 2016; Muttakin and Khan, 2014).

It is noteworthy that the relevance of institutional setting is more pronounced in studies analyzing large firms. For SMEs, studies more usually adopt the idea of community embeddedness. This perspective shifts the focus away from institutions and rather looks at the interpersonal ties of the owning family within their local community. We therefore found nine studies explicitly covering the impact of family community embeddedness on family firm's CSR (e.g. Fitzgerald et al., 2010; Laguir et al., 2016; Peake et al., 2017). These publications argued that family-owned SMEs use CSR as a strategic tool to influence the perception of external stakeholders (i.e., local community) positively which, in turn, leads to closer relationships between them (Lamb et al., 2017; Uhlaner et al., 2012). Interestingly all studies unanimously agree on family firms reacting positively towards it.

As already noted by Block and Wagner (2014a, 2014b), CSR-oriented research is scarce on family-owned SMEs. What can be studied with large, often multinational firms by means of institutional pressure, is with SMEs the pressure of the local community. What is interesting here is that it seems that this pressure also has a strong influence on behavior in developing countries, which is often not observed in large companies. Due to the image spillover from firm

to family, an owning family is more motivated to engage in CSR than non-family firms (Kashmiri and Mahajan, 2010). Thus, family-owned SMEs are often found to be more CSR compliant than SMEs that are not family-owned. Overall, it can be said that context helps to better understand the effects of the above mentioned family firm antecedents and to resolve to some extent the heterogeneity.

4.3.4 Corporate Social Responsibility Activities

Furthermore, we examined which CSR activities were used in the studies of our samples and to what extent their antecedents and outcomes differed from each other. According to Elkington's (1998) triple bottom line approach, we classified the applied CSR measures into environmental-, economic-, and society-related CSR activities (see Table 9).

Table B-9: Corporate social responsibility activities in family firms

CSR activity	Effect in family firms	Representative studies
Aggregated CSR	53	
	3 (58.49%) Positive	Fitzgerald et al. (2010); Gallo (2004); Memili et al. (2020)
	1 (22.64%) Negative	Biswas et al. (2019); Hsueh (2018); Muttakin and Khan (2014)
	2 (18.86%) Not clear	Bergamaschi and Randerson (2016); Iyer and Lulseged (2013); Zientara (2017)
	0	
Environmental-related CSR	23	
	1 (56.52%) Positive	Block and Wagner (2014b); Delmas and Gergaud (2014); Terlaak et al. (2018)
	3 (21.74%) Negative	Amann et al. (2012); Dekker and Hasso (2016); Nadeem et al. (2020)
	5 (21.74%) Not clear	Adomako et al. (2019); Kim and Lee (2018); Doluca et al. (2018)
Economic-related CSR	20	
	1 (70.00%) Positive	Cruz et al. (2019); Kashmiri and Mahajan (2014a); López-González et al. (2019)
	4 (20.00%) Negative	Amann et al. (2012); Nadeem et al. (2020); Zheng et al. (2017)
	2 (10.00%) Not clear	Campopiano and De Massis (2015); Cruz et al. (2014)
Society-related CSR	12	
	1 (83.33%) Positive	Bingham et al. (2011); Niehm et al. (2008); Sahasranamam et al. (2020)
	0 (0.00%) Negative	-
	2 (16.67%) Not clear	Amann et al. (2012); Kim and Lee (2018); Block and Wagner (2014b)

N = 107 articles

Environmental-related CSR activities are those that aim to reduce or compensate for environmentally harmful behavior, e.g. by fostering ecologically sustainable innovations (Bammens and Hünermund, 2020), adapting green investment strategies (Dou et al., 2019), or adopt their behavior according to the standards of eco-certifications (Delmas and Gergaud, 2014). Economic-related CSR activities favor those stakeholders who have a direct relation to the value creation of the company, e.g., employees (e.g., Bennedsen et al., 2019; Block, 2010; Cruz et al., 2019; Zheng et al., 2017), customers (e.g., Bingham et al., 2011; Block and Wagner, 2014b; Dangelico, 2017), or suppliers (e.g., Campopiano and De Massis, 2015; Graafland, 2020; Uhlaner et al., 2004). Society-related CSR includes generalized activities such as donations (Bhatnagar et al., 2020), attention to important and pressing issues of the community (Bingham et al., 2011), or the support of non-profit organizations (Uhlaner et al., 2004). Through these activities, firms manage to maintain or even strengthen the relationships with different stakeholders to the extent that they can considerably increase their own competitive position (Wagner, 2010).

23 articles were allocated to environmental-related CSR (21.30%), 20 to economic-related CSR (18.52%) and twelve articles to society-related CSR (11.11%). Furthermore, we found that with 53 articles (49.07%) the majority of the research is based on CSR measures that do not differentiate between different activities but rather basically average the different activities in one measure (e.g., Gallo, 2004; Hsueh, 2018; Iyer and Lulseged, 2013; McGuire et al., 2012). Looking at the different antecedents and outcomes of the family and firm subsystem through the lens of the different CSR activities, a well balanced view can be identified. None of the CSR activities tend to focus on specific antecedents or outcomes and there are also no major differences in the direction of effect between the activities. It can be concluded that the corresponding CSR activities have not yet been sufficiently differentiated in family firm research. The disproportionately large number of articles that do not distinguish between

different CSR activities also shows this. After all, each CSR activity entails different activities and target groups, which should consequently also result in different antecedents and outcomes.

5. Future Directions of the Research Field

Using the SFBT, we visualized the results of our data sample in Figure 2. Our literature review shows that much research has been done on CSR antecedents, especially on family antecedents. Outcome-oriented CSR research accounts for a rather small, but growing part of the research field. We were also able to identify studies focusing on contextual factors and how family firms respond to them in regard to CSR. In terms of the catalytic role of CSR in family firms, we found that research has not yet been sufficiently differentiated to be able to determine which specific CSR activities (i.e., environmental-, economic- or society-related) are driven by which family firms antecedents and which family firm outcomes they promote. To gain further insights, we propose nine research questions for future exploration. Their examination will open those “black boxes” and consequently will lead to clarify important aspects of family firms CSR activities (see Table 10).

Family firm research traditionally focuses on the examination of family antecedents and only marginally includes firm antecedents in their models. The effects of both family and firm antecedents on CSR is mostly examined independently. For example, Marques et al. (2014) show that family involvement (identification and commitment) and family values have a positive effect on CSR activities, but do not examine the extent to which family and firm antecedents interact with each other. Peake et al. (2017), Sharma and Sharma (2011) and Uhlaner et al. (2012) apply similar conceptual frameworks.

Following the SFBT, we know that the higher the influence of the owning family within its firm, the greater the interaction between family and firm, and the more resources can be transferred between both (Stafford et al., 1999).

Figure B-2: Model of antecedents and outcomes of CSR in family firms

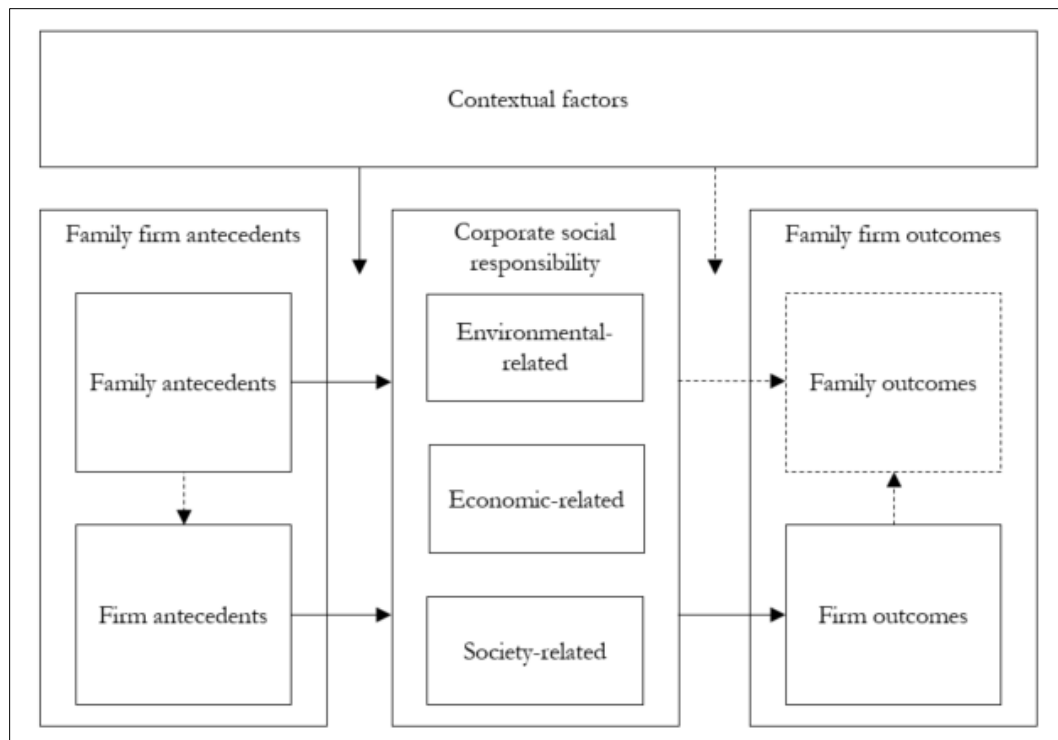


Table B-10: Research questions

Research Question 1a	Which firm antecedents (i.e., firm resources) link/forge the association between family antecedents (i.e., family resources) and CSR activities?
Research Question 1b	Which conflicts can arise during the resource transaction between family and firm subsystem and how does this affect CSR activities?
Research Question 2	Which family outcomes (i.e., family resources) can an owning family generate through the CSR activities of its firm and how do those affect the family firm's CSR activities in subsequent periods?
Research Question 3a	Which firm outcomes (i.e., firm resources) link/forge the association between CSR activities and family outcomes (i.e., family resources)?
Research Question 3b	Which conflicts can arise during the resource transaction between family and firm subsystem and how does this the family firm's CSR outcomes?
Research Question 4	Which contextual factors affect the relationship between CSR activities and outcomes (i.e., family and firm outcomes) of family firms?
Research Question 5a	Which CSR activities (e.g., environmental, economic, or society-related) link which antecedents (i.e., family and firm antecedents) and outcomes (i.e., family and firm outcomes)?
Research Question 5b	How and why do CSR activities link antecedents and outcomes of family firms?
Research Question 6	How and why do CSR activities increase the longevity of family firms?

When family resources are transferred to the firm subsystem, familiness is generated providing the family firm with a larger resource base, ultimately leading to a competitive advantage in the long term (Frank et al., 2017; Habbershon and Williams, 1999; Weismeier-Sammer et al., 2013). These theoretical assumptions are implicitly applied in the work of Aragón-Amonarriz et al (2019), who explain that owning families involved within the firm introduce responsible behavior which will eventually being repaid by its stakeholders. According to them, the family's social capital is a key driver for family firms CSR activities and competitiveness.

What has not yet been examined so far is that the permeability of the two subsystem boundaries and how those affect the effectiveness of the resource transaction. Utilizing the system theoretical perspective of the SFBT, we theorize that the permeability of the subsystems boundaries can differ. Depending on how strong the subsystem boundaries are, the impact of family antecedents (i.e., family resources) can be more or less effective on firm antecedents (i.e., firm resources). If the permeability of the subsystems is low, resources can easily be transferred from one subsystem to another, while such a transaction will be more difficult when the permeability of the subsystems boundaries is high (Danes et al., 2008; Hernes and Bakken, 2003). This permeability, however, can change, e.g. if the non-family management wants to preserve their personal power within the firm subsystem and therefore tries to hamper integration of family's resources. This would mean that the potentially positive effect of family resources (i.e., familiness) could not fully unfold, not only on CSR, but also in general.

Thus, although we found that future family firm research should especially focus on the outcome angle of CSR, we believe that the antecedent's angle of research should be developed more sophisticated. In this regard, we also propose to examine which factors could hamper the transaction of family and firm subsystem resources between the subsystems and whether this could affect the CSR activities of family firms.

Research Question 1a: Which firm antecedents (i.e., firm resources) link/forges the association between family antecedents (i.e., family resources) and CSR activities?

Research Question 1b: Which conflicts can arise during the resource transaction between family and firm subsystem and how does this affect CSR activities?

Although family firm research for a long time only focused on the examination of antecedent angle of CSR, more and more studies emerged examining the outcome side of CSR in family firms over the last years. As shown, those findings explicitly deal with financial and non-financial firm outcomes and only theorize about family outcomes without empirically studying them. We explain the empirical focus on firm level outcomes due the fact that CSR is a firm level construct and that it is therefore a natural thing to first address the firm outcomes of CSR in family firms.

It is, however, an assumption of the SFBT that while family and firm share their resources to some extent, the family and the firm pursue their specific goals separately. Thus, Campopiano and De Massis (2015) state that owning families can profit by the image enhancing effect of CSR themselves by an increased family image. Furthermore, Aragón-Amonarriz et al. (2019) conclude that family honorableness is one of the outcomes of family firm's CSR activities, therefore already hinting towards to the fact that CSR also generates family outcomes. However, the question of which family outcomes can be generated or how they are achieved through CSR has not yet examined. Since this stream of research in family firm CSR has not yet been developed, we recommend exploratory (i.e., qualitative) work in this area to determine which family outcomes an owning family is trying to achieve through CSR. Jaskiewicz and Dyer (2017) recommend drawing on the various disciplines of family science. A more sophisticated analysis of what moves a family independently of its firm goals could help to determine what an owning family might hope to achieve through CSR.

Taking a closer look at the implicit assumptions made by the reviewed studies on family outcomes (e.g., family harmony, family well-being), we find indications that a family firm's CSR could also have an impact on the owning family itself (Niehm et al., 2008). We assume that if the owning family would not receive family outcomes through CSR activities, they would

not provide more resources to the firm in order to conduct more CSR and would rather use them elsewhere. As the family and the firm are overlapping subsystems mutually affecting each other, the question remains which family outcomes (e.g., family harmony, family well-being) are actually achieved. Following Jaskiewicz and Dyer (2017), the question arises to what extent these family outcomes act in subsequent periods as family antecedents. Thus, positive family outcomes can lead to the prevention of negative family events (e.g., divorce), which enables the owning family to provide more family resources to the family firm in subsequent periods.

***Research Question 2:** Which family outcomes (i.e., family resources) can an owning family generate through the CSR activities of its firm and how do those affect the family firm's CSR activities in subsequent periods?*

Although family outcomes were only implicitly examined, research only implicitly indicate that CSR-related family outcomes are generated through the utilization of firm outcomes (e.g., Aragón-Amonarriz et al., 2019; Campopiano and De Massis, 2015; Déniz Déniz and Carbrera Suárez, 2005; Niehm et al., 2008; Zientara, 2017). It is a fundamental assumption of SFBT that resources can be exchanged between family and firm as soon as the overlap of both subsystems is large enough. This means that the family firm has a larger resource base than a non-family firm, since it can additionally draw from the family resources of the owning family. Since the resource transaction between the two subsystems can also be performed from firm to family, this implies that the owning family can also benefit from the firm's financial and non-financial outcomes of CSR.

However, as in the case of the antecedents it is also important to consider on the outcomes side that boundary permeability of the subsystems can hinder the effectiveness of the resource transaction. For example, there are studies that examine the extent to which majority shareholders withdraw resources from a company at the expense of minority shareholders (Welford, 2007). This so-called tunneling disadvantages minority shareholders, which, due to their limited influence, are not able to protect themselves against the majority shareholders (Dal

Maso et al., 2020; Sahasranamam et al., 2020). Therefore, the transfer of firm resources (especially financial or social capital) could lead to the firm subsystem decreasing its permeability in order to hamper the flow of resources to the family subsystem.

Although we propose to put a higher emphasize on firm outcomes, we propose that outcomes-related CSR research should also include how family outcomes are affected by CSR. For example, it could be examined whether an increase in the firm's performance through CSR also leads to an increase in the family's well-being. Another idea would be to examine whether a through CSR improved firm image leads to more social capital for the owning family. In this regard, we also propose to examine to what extent conflicts occur between both family and firm and to what extent this process influences the generation of family outcomes.

***Research Question 3a:** Which firm outcomes (i.e., firm resources) link/forge the association between CSR activities and family outcomes (i.e., family resources)?*

***Research Question 3b:** Which conflicts can arise during the resource transaction between family and firm subsystem and how does this the family firm's CSR outcomes?*

According to the SFBT, family and firm resources are used to overcome not only internal but also external disruptions. In this regard, research has found that family firms are more sensitive to external contextual factors (Uhlener et al., 2004) and are also more adaptive to them due to their unique set of resources. As for the antecedents of CSR, research has shown that institutional pressure and community embeddedness increase the likelihood that family firms engaging in CSR (Ge and Micelotta, 2019). The greater the pressure from contextual factors to engage in CSR, the more likely family firms are to mobilize their family resources for the firm (e.g., Maggioni and Santangelo, 2017; Berrone et al., 2010; Zamir and Saeed, 2020).

Research shows that this pressure varies greatly from region to region (Ertuna et al., 2019; Labelle et al., 2018). While it tends to be high in the USA and Europe, it tends to be low in Asian countries (Welford, 2007). However, since the economic relevance of the Asian continent

increased over the last years and the economic relationships between Asian countries and the Western world became more relevant as well. Muttakin and Khan (2014) found that many Asian firms by now use CSR as a signal to foreign investors that they do have more pronounced governance structures compared to their region competitors (Cordeiro et al., 2018). In this regard, Asian family firms can use their family resources to conduct more CSR and use it as a strategic tool in order to signal Western investors that they are trustworthy business partners (Du et al., 2018).

Our analysis shows that research regarding contextual factors is still at its beginnings and we assume that those could also affect the relationship between CSR activities and its outcomes. For example, different countries and communities may have different expectations of owning family with regard to CSR. Family firms could respond more effectively towards those expectations when expanding or even internationalize than non-family firms, since they have a greater resource base due to family resources. We therefore encourage future research to look for and examine contextual factors affecting the outcomes of CSR in family firms.

Research Question 4: Which contextual factors affect the relationship between CSR activities and outcomes (i.e., family and firm outcomes) of family firms?

A central connection that has not yet been addressed is which CSR antecedents lead to which outcomes. Related to this, the question arises which CSR activities actually link those antecedents and outcomes. Do the firm antecedents also lead to firm outcomes or are there also crossover connections due to the overlap of family and firm, so that, for example, firm antecedents generate family outcomes. Another question is if there is a difference between family and firm antecedents in regard to their effectiveness.

In this regard, it is necessary to consider how and why CSR activities link antecedents and outcomes. Labelle et al. (2018) theorize that family firms are driven by both economic and non-economic goals. They argue that the higher the proportion of family ownership, the more likely it is that firm's business activities will be aligned with the achievement of economic goals.

Since they attribute a rather non-economic effect to CSR, they argue and also empirically find that more CSR is conducted at firms with low family ownership, and fewer CSR activities are conducted at firms with higher family ownership. Interestingly, Terlaak et al. (2018) theorize and empirically find exactly the opposite by arguing that family firms place a higher emphasis on non-economic goals when family ownership within the firm increases.

Thus, since many family firms have scarce resources and therefore must use them efficiently in order to survive (Ward, 1997) it is particularly important to understand which CSR activities have to be used. Following Stafford et al.'s (1999) SFBT, a division of family and firm could help clarify these issues. Case studies could be used as a method to identify relationships or disagreements between antecedents and outcomes. Their results could be checked quantitatively afterwards using panel surveys to analyze the long-term effect of the measures. In future research, this black box must be opened up in order to prove which CSR activities help to achieve which goals and whether family resources can help to achieve those or not.

***Research Question 5a:** Which CSR activities (e.g., environmental, economic, or society-related) link which antecedents (i.e., family and firm antecedents) and outcomes (i.e., family and firm outcomes)?*

***Research Question 5b:** How and why do CSR activities link antecedents and outcomes of family firms?*

A central goal of family firms is to ensure that the firm can continue to provide a basis for the family's existence even in later generations. While a handful of family firms achieve this goal, many others do not (Koiranen, 2002). In line with the SFBT, we found that higher family influence leads to a higher propensity of CSR in family firms, which we trace back to family resources integrated within the family firm's resource base. Those help the family firm to respond more effectively to internal and external disruptions and thus also to generate better outcomes out of CSR. Among the outcome-related studies, Antheaume et al. (2013) found that

CSR is indeed a factor that positively influences the longevity of family firms, indicating that CSR helps family firms to succeed over generations.

In this context, the study of Pan et al. (2018) is particularly noteworthy, since they find a positive effect of CSR on the post-succession performance of family firms. They theorize that in order to take over successfully, successors of the owning family need to win the support of internal and external stakeholders, which they can do by conducting CSR (Bammens and Hünemann, 2020; Pan et al., 2018). By signaling good intentions to their stakeholders, CSR increases the motivation of the firm's stakeholders to interact (Bingham et al., 2011), helping to facilitate the transfer of the social network from the predecessor to the successor (Aragón-Amonarriz et al., 2019; Pan et al., 2018; Schell et al., 2020). Thus, CSR is a strategic instrument to increase the firm's legitimacy (Chiu and Sharfman, 2011), consequently increasing the probability of a family firm to handover the firm from one generation to another successfully (Pan et al., 2018).

Accordingly, CSR could actually help a family firm to preserve its resource base during the handover of the firm, thus contributing to the longevity of the firm. As this is one of the most crucial issues of family firm research, research proving this assumption empirically would actually create a business case for CSR in family firms. Therefore, it is essential that this assumption will be addressed in future research.

***Research Question 6:** How and why do CSR activities increase the longevity of family firms?*

6. Synthesis

6.1 Discussion

This systematic literature review has revealed that CSR is still a relatively young phenomenon in family firm research, but has been becoming increasingly relevant over the last years. Three research questions focusing on family firm's CSR antecedents and outcomes, but also on the

interaction between both, guided this review. Using Stafford et al.'s (1999) SFBT as a theoretical framework, we examined the CSR antecedents and outcomes of a family firm not only from a family, but also out of a firm perspective. We contribute to the literature through summarizing and integrating our findings in an overarching framework, emphasizing family and firm antecedents and outcomes, as well contextual factors. Thus, we have been able to reveal the current focus of research areas regarding family firm's CSR antecedents and outcomes (see Figure 1), and at the same time have shown which research questions need to be addressed in the future. In this regard, our review does contribute to the further develop the research field.

First, our study shows that the strategic decision making in regard to CSR is not exclusively tied to the actual family CEO, but also to his/her family and the family resources they provide (Jang and Danes, 2013; Dimov, 2017). The latter depends on the influence the family exerts on the firm. In this regard, the use of family resources (i.e., familiness) is much more pronounced in smaller firms since it is more likely that an owning family exert its influence on smaller firms than on larger ones (Danes and Brewton, 2012). Thus, our results show that more CSR is implemented when the owning family has a greater influence on the family firm. From a SFBT point of view, we utilized a resource-based view explaining that family resources increase the probability of conducting CSR, which could be suitable for revealing further heterogeneity of family firms. Thus, the different CSR strategies chosen by family firms can be explained by the different levels of family resources provided by the family subsystem.

Second, according to SFBT, as family influence increases, family firms engage in CSR to cultivate their relationships with their stakeholders (Fitzgerald et al., 2010; Stafford et al. 1999) and thereby generate positive firm outcomes and longevity for the family firm by leveraging resources (Kuttner and Feldbauer-Durstmüller, 2018). As in the case of the antecedents-related studies, we consequently also examined the outcomes-related studies from a family and firm perspective. Concerning studies examining the firm outcomes of CSR in family firms, we have

found a strong focus on non-financial outcomes, whereas financial outcomes have rarely been researched. In regard to firm outcomes, we therefore recommend future research to assign a higher priority to CSR's financial firm outcomes. Family outcomes that relate to the needs and goals of the owning family (Jaskiewicz et al., 2017; Jaskiewicz and Dyer, 2017; Gómez-Mejía et al., 2007) have not yet been analyzed at all. This is surprising, as the subsystems family and firm form a unit and the outcomes therefore should have a reciprocal influence (Stafford et al., 1999). Further research in this area could pinpoint which family-related goals (Chrisman et al., 2012; Kotlar and De Massis, 2013) family firms can achieve through CSR.

Third, while our literature review has shown that family influence increases the likelihood of CSR activities within family firms, which consequently increase the probability of achieving higher firm outcomes, we could not answer how CSR links those both categories. Thus, the question about the catalytic role of CSR remains a black box. Since family firms need to know which antecedents can help them to achieve their goals (i.e., family and firm outcomes) by which CSR activities, this is a crucial question to answer. If this is not clarified, family firms might not invest the optimum set of family and firm resources into CSR activities, since they do not know if those investments actually lead to the strategic advantage they wanted to generate. This is especially important for family-owned SMEs, which have considerably fewer resources available than their larger competitors. As the field of CSR research continues to advance, family firm researcher, but also those studying non-family firms should remember that research questions require more than an antecedent and an outcome.

Next to contributions regarding family firms, there are also contributions for non-family firms. Since we understand CSR as a strategic management tool to achieve outcomes (Kuttner and Feldbauer-Durstmüller, 2018; Kuttner et al., 2021), non-family firms should also reflect upon their CSR antecedents from a resource-based view. However, the general management literature also lacks in-depth analyses of how desired outcomes are achieved by conducting CSR (Kong et al., 2020). Also in non-family firms, different motivations can lead to different

business activities being taken and it is worthwhile to look more deeply at the human element, e.g. of managers. Thus, especially in non-family-owned SMEs, managing partners can have a high psychological ownership acting as an antecedent for the firm's CSR activities (Pierce et al., 2001).

In general, to better integrate the family as an organizational actor into management research, Jaskiewicz et al. (2017) called for a stronger integration of family science into this research. Family science uses knowledge coming "from various disciplines such as psychology, sociology, and education" (Jaskiewicz et al., 2017, p. 309) and, therefore, could provide new theoretical and empirical insights for the explanation of CSR's family outcomes. Since it can be assumed that family firms do not conduct CSR purely out of charity, but also to achieve specific outcomes (Zientara, 2017), this area of research offers many opportunities for future family firm-related studies. Furthermore, a holistic theoretical framework such as Stafford et al.'s (1999) SFBT that takes into account the unity of family and firm as well as a permanent exchange of resources could help. This theory assumes that the resource are transferred between the family and the firm subsystem depending on how much those subsystems overlap (Danes et al., 2008; Fitzgerald et al., 2010). By identifying the reasons for a stronger or weaker resource transaction, it might be possible to explain some of the heterogeneity with respect to family firms CSR behavior.

There is a lot of research about CSR in family firms. However, in current research quantitative empirical approaches dominate research activities on CSR in family firms. In order to develop family firm-specific explanatory approaches for the influence of the family on firm antecedents and the function of translation from drivers to outcomes and the emerge dynamics, we encourage subsequent research to draw more on qualitative empirical research, for example, in the form of case studies and experiments (De Massis and Kotlar, 2014; Lude and Prügl, 2021). In particular, as research in family-owned SMEs is still underrepresented (Miller and Le Breton-Miller, 2007), this approach should be conducted within this type of company. Research

in the field of large companies cannot be transferred one-to-one to SMEs (Faller and zu Knyphausen-Aufseß, 2018; Uhlaner et al., 2012), as the involvement and integration of the family is different (Miller and Le Breton-Miller, 2007), which leads to a different use of resources as well as goals (Block and Wagner, 2014b; Niehm et al., 2008). Qualitative empirical research could help to fathom the underlying motivations of family firms in relation to CSR outcomes. We also propose that such research should focus more on the role of the owning family and its individual members. Research considering this could break down the current barriers of the research field and develop it further.

6.2 Practical Implications

Such findings are also important for practice since family firm's managers can learn that family influence and CSR activities can be beneficial for the firm. First, our study shows that through an owning family's influence on the firm subsystem, family resources (e.g., financial, human, and social capital) are integrated into the firm helping to conduct CSR activities. It is therefore advantageous for the manager of a family firm to allow the owning family to be involved. Nevertheless, we assume that there may be friction between the family and firm subsystem (see research question 1b) and that the integrated family firm resources may therefore not reach their full potential. Although they should allow family resource to be integrated, we recommend that family firm managers monitor the interactions family and firm closely and establish boundary management in the case of tensions between the two. It is also useful to seek outside advice and bring in an independent consultant if the problems are too severe. Our results can be of great relevance not just for the family firms, but also for the economic policy-makers, and consequently the economies of their respective countries. The higher inclination for CSR activities can generate positive financial and non-financial outcomes that help a company to become profitable. In particular, CSR activities that are directly related to business (i.e., economic-related CSR) can be beneficial for the firm. Regardless of the positive effect of family

influence, our study shows that it makes sense to conduct CSR if a company wants to be successful in the long run.

6.3 Limitations

Following Tranfield et al.'s (2003) systematic literature review approach has helped us to expand the field of research, even if also accompanied by certain limitations. When using a selection of databases, there is the possibility that not all relevant papers have been considered. However, this limitation is counterbalanced in part by the clear description of the databases, which also makes the analysis more comprehensible. Despite our systematic approach for searching and analyzing relevant publications, subjectivity cannot be fully excluded. Nonetheless, this subjectivity has also helped us to identify lacuna, and proffer important questions, which we hope will open up future research of CSR in family firms. Second, we limited our literature search to family firms. It could be that there is some research in the field of family science that could further explore the effects between family and firm as well as CSR activities that has not been considered by this review. Third, our chosen theoretical framework may have an impact on the analysis and evaluation of the articles consulted. Therefore, we have clarified our basis of interpretation by explaining the theory and the underlying mechanism in detail.

6.4 Conclusion

We postulate that research on CSR outcomes is necessary to be able to evaluate the effectiveness of family and firm antecedents. It can also provide further insight into the unity of the family and the firm, especially its use of resources to achieve certain goals. These results lead to a better understanding of the heterogeneity of family firms. Likewise, in future research, these approaches can also be applied to non-family firms, since here, too, managers have a connection to the firms and can help determine the success of the firm through their use of resources such as social and human capital, which in turn enhances their reputation. With this

literature review, we would like to motivate you to continue looking at the topic of CSR from different perspectives.

C. Absorptive Capacity in Family Firms: A Systematic Literature Review

1. Introduction

The assimilation and processing of knowledge and information lies at the core of a company's competitiveness (Chen et al., 2009; Hassani and Mosconi, 2021). Globalization, intensifying competition, changing environmental conditions, and rapid technological development underpin the need for companies to adapt so as to survive in the marketplace (Teece et al., 1997; Zahra and George, 2002). Absorptive capacity (AC) refers to "the ability of a firm to recognize the value of new, external information, assimilate it, and apply it to commercial ends" (Cohen and Levinthal, 1990, p. 128). AC is a precondition for a firm's survival (Cohen and Levinthal, 1989, 1990; Zahra and, George 2002), especially in dynamic markets (David and Foray, 2003; Teece et al., 1997).

Since the publication of Cohen and Levinthal's (1990) pioneering article, the concept of AC has come to dominate organizational studies on technological innovation, organizational adaptation, and competitive advantage, as well as business performance and survival (Cohen and Levinthal, 1989; Dzhengiz, 2020; Volberda et al., 2010; Lane et al., 2001, 2006; Marabelli and Newell, 2014; Roberts et al., 2012; Zou et al., 2018). Specifically, by engaging with their stakeholders, companies can rapidly discover and integrate new trends and market changes (Chen et al., 2009; Nagati and Rebolledo, 2012). They can thus develop new products and services quickly, based on relevant information (Lane et al., 2006).

The most important types of business, worldwide, are family firms (De Massis et al., 2018a). Hence, the implications of the AC literature should be particularly important in family business research. Family firms are characterized by the unity of ownership and management (Chua et al., 1999). Accordingly, the family's influence in management decisions and the inclusion of family goals differentiate the actions and outcomes of family firms compared to non-family firms. These features constitute family firm heterogeneity (Berrone et al., 2012; Chrisman et

al., 2012). This heterogeneity is, indeed, based on specific characteristics of the company regarding its values, vision, actions, and resources, which are shaped by the family (Chrisman et al., 2012; Chua et al., 2012; Habbershon and Williams, 1999; Gómez-Mejía et al., 2007).

Differences in family business outcomes can arise from short- versus long-term management perspectives or through pursuing non-economic as well as economic goals (Daspit et al., 2021; Chua et al., 2012; Gómez-Mejía et al., 2007). Moreover, family firm heterogeneity – or “familiness” – is reflected in the unique resource base created by the involvement of family members in the business. Accordingly, family-specific resources are formed through experiences, skills, and the history and culture of the business. These attributes vary from one family business to another and cannot be easily imitated, thus leading to competitive market advantages (Habbershon and Williams, 1999). Regarding familiness, the family also exerts a strong influence by deciding how resources and tacit knowledge should be passed on and used.

In line with these arguments, we propose that the existing knowledge base of a family firm is a prerequisite for the development and integration of AC into the firm (Cohen and Levinthal, 1990, Frank et al., 2017; Daspit et al., 2019; Kotlar et al., 2020). Several existing literature reviews on AC indicate the extensive research that has been done on this topic (Duchek, 2013; Dzhengiz, 2020; Roberts et al., 2012; Zahra and George, 2002). However, family business research has only recently begun to recognize AC as a research object, and to date, no systematic literature review has analyzed AC in family firms. To fill this gap in the research literature, we present a systematic literature review based on 23 articles. Our work addresses the following research question: *To what extent do the characteristics of family firms influence absorptive capacity outcomes?*

We based our analysis on the assumption that strategic decisions in a family firm are strongly shaped by the influence of the family. In addition, the family’s influence may lead to irrational and inefficient actions (Berrone et al., 2012; Gómez-Mejía et al., 2007). Specific family

influences can therefore lead to divergent and ambivalent outcomes regarding AC (Andersén, 2015, Daspit et al., 2019). Given the relevance of AC to competitiveness in a knowledge-based economy (Chen et al., 2009; Lane et al., 2006; Nagati and Rebolledo, 2012; Volberda et al., 2010), we posit that ignoring these family firm characteristics could incur a disadvantage for the family firm.

Our study contributes to family business research by providing the first systematic literature review in this growing field. We employed the involvement, behavioral, and identity approaches to analyze 23 articles. We found that research to date has largely covered 1) the influence of environmental influences, social capital, and entrepreneurial orientation regarding AC; and 2) how AC can be fostered in a family business to increase performance and innovation. While some articles focus on specific influences of the family, this area has not been well researched.

Interestingly, our results also revealed ambivalent effects of the influence of the family on the business with regard to implementing AC. Specifically, we found that family firm heterogeneity can lead to divergent outcomes in the dimensions of potential AC (consisting of acquisition and assimilation capabilities) and realized AC (consisting of transformation and exploitation capabilities). Our analysis indicated a negative effect on potential AC when familiness is strongly pronounced. This situation results from the family business insulating itself against the external world because of the fear of losing power. By contrast, for realized AC, a high degree of familiness showed a positive effect regarding AC. This result is based on social integration mechanisms and the efficient use of knowledge, and these processes in turn were related to the strong social capital of the family (Andersén, 2015; Belkhodja and Daghfous, 2020; Daspit et al., 2019). We conclude that the manifestation specific familiness dimension will show opposite effects on potential versus realized AC. This mixed finding indicates the complexity of the ambivalence between potential and realized AC and the family influence.

Given the ambivalent influences of the family on AC, we propose that future research should examine the specific characteristics of the family more closely. We recommend using a behavioral approach to study features such as socioemotional wealth (SEW) and familiness in the context of AC; such work would enable to interpreting the family firm outcomes and heterogeneity and any ambivalence in the findings. In such research, it is crucial to distinguish between the various dimensions and their characteristics because they have differing impacts on AC. The family's long- and short-term orientations, for example, will affect these dimensions and AC, as such orientation is linked to the formation of stakeholder relationships and the building and sharing of knowledge, among other things (Chua et al., 2012). Additionally, future research should focus on the various internal – exercise, implementation, non-family members, internal tacit knowledge transfer – and external – access to external knowledge by stakeholders, reputation – family-specific factors that influence AC. Our findings are important for managing family businesses. As negative influences on AC can threaten the existence of family firm in a dynamic and knowledge-based economy, family member managers can try to design these factors to mitigate their negative effects.

The rest of the paper is structured as follows. First, we explain the theoretical framework on which our literature review was based; then, we describe the method used to select the data. The identified articles are then analyzed based on the AC process and the involvement, behavioral, and identity approaches. We then present ideas for future research, based on eight propositions. Finally, the results are discussed, and the theoretical and practical implications are explained.

2. Theoretical Framework

2.1 Absorptive Capacity

The term “absorptive capacity” was introduced by Cohen and Levinthal (1989, 1990, 1994). AC is defined as “the ability of a firm to recognize the value of new, external information,

assimilate it, and apply it to commercial ends” (Cohen and Levinthal, 1990, 128). This ability is based on existing knowledge, which develops cumulatively. The knowledge base exists at the level of the company as well as the employee level, and employees’ ability to share their knowledge internally is crucial (Cohen and Levinthal, 1990, 1994).

Zahra and George (2002) reconceptualized the AC construct and added the dimension of knowledge transformation. They defined AC as “a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic capability” (Zahra and George, 2002, 186). The process of AC starts with the “acquisition” capability of a firm to identify and acquire relevant external knowledge. The “assimilation” capability includes processes and routines needed to analyze, interpret, and understand the new knowledge (p. 189). The next process step is the “transformation” capability, which involves developing and refining routines to combine the new external knowledge with existing knowledge. The “exploitation” capability is necessary to integrate the external knowledge into existing processes to generate commercial output (p. 190).

These processes are categorized into potential AC, which consists of acquisition and assimilation capabilities, and realized AC, consisting of transformation and exploitation capabilities. Within potential AC, knowledge is identified and acquired as well as analyzed and interpreted. For knowledge to be integrated and utilized within the company, it must first be transformed as realized AC. Crucial to this transformation is the development and refinement of routines to facilitate the combination with new knowledge. The transition from potential AC to realized AC is enhanced by social integration mechanisms, which consist of networks or coordinators within the organization for knowledge sharing (Zahra and George, 2002). Potential and realized AC can be exhibited to different degrees within a firm. For example, strong potential AC and weak realized AC means that knowledge is acquired successfully but is not used efficiently, leading to little competitive advantage (Zahra and George, 2002).

AC is a specific manifestation of dynamic capabilities, namely “the firm’s ability to integrate, build, and reconfigure internal and external competencies to rapidly changing environments” (Teece et al., 1997). The subdivision of AC into the potential and realized forms enables a detailed examination to explain why some companies have better dynamic capabilities than others and thus have a competitive advantage (Zahra and George, 2002).

2.2 Family Influence

The analysis of why certain firms have strong dynamic capability and therefore generate a competitive advantage is particularly interesting in the case of family firms. These firms have strong heterogeneity resulting from family integration (Chua et al., 1999; Handler, 1989). However, a mere comparison between family and non-family businesses provides a too simplistic black-and-white view that is not useful for analyzing family businesses in depth. This point includes the homogeneous analysis of family businesses, which does not capture differences between family businesses. Hence, the influence of the family and the resulting heterogeneity must be included in an analysis of family businesses.

Consideration of the influence of the family has gained strong relevance in recent years, and such research is constantly being developed further. The initial “involvement approach” included ownership, management, and control, which are used for the general differentiation of family and non-family businesses (Handler, 1989). This perspective was extended by the behavioral approach, owed to the fact that not only ownership but also the behavior of family members can define the specific characteristics of a family business (Chrisman et al., 2005; Chua et al., 1999).

Following the behavioral approach, the influence of the family on the business is measured in recent literature by various multidimensional constructs. Examples are the F-PEC scale, which encompasses the family’s influence on power, experience, and culture (Astrachan et al., 2002, Klein et al., 2005); the FIFS scale (Frank et al., 2017), which both measures the familiness

approach introduced by Habbershon and Williams (1999); and the FIBER scale (Berrone et al., 2012), which captures the concept of SEW conceptually described by Gómez-Mejía et al. (2007, 2011). These approaches can be extended by the concept of organizational identity, known as the “identity approach,” which examines the identification of family members and stakeholders with the company (Albert and Whetten, 1985; Zellweger et al., 2010, 2013).

Due to their multidimensionality, the concepts of familiness and SEW are often used to analyze the influence of family members and the associated heterogeneity (Berrone et al., 2012; Frank et al., 2017). Familiness can be described as the unique resources of a family firm that are created through the interaction of the family, the individual members, and the organization (Habbershon and Williams, 1999, 11). Family members’ interactions with non-family members in the firm and the sharing of tacit knowledge create new resources (Habbershon and Williams, 1999); in turn, these resources provide a sustainable competitive advantage across generations (Irava and Moores, 2010).

Socioemotional wealth includes the “non-financial aspects of the firm that fulfill the affective needs of the family, such as identity, the ability to exert influence over the family, and the perpetuation of the family dynasty” (Gómez-Mejía et al., 2007, 106). Due to the unity of the family with the company and the resulting influence of the family, not only the company’s goals and resources but also those of the family influence the firm’s decisions and strategies (Chrisman et al., 2012, 2013; Zellweger et al., 2013). This scenario can lead to economically irrational decisions within the family firm. For example, protecting SEW can lead to financial losses (Gómez-Mejía et al., 2007; Martin and Gómez-Mejía, 2016). However, because the family identifies so strongly with the company, a failure of the company would equate with a failure of the family, and efforts are made to prevent such failure (Chrisman and Patel, 2012; Gómez-Mejía et al., 2007). In a related vein, the size of the company also has a decisive influence. It can be assumed that the family exerts a strong influence in a small company and

somewhat less influence in a large company (Danes and Brewton, 2012). Moreover, the manifestations of these constructs develop dynamically and they are influenced by external and internal factors, such as disasters, crises, the succession process, and family conflicts (Berrone et al., 2012; Frank et al., 2010). Therefore, researchers should consider both the overall constructs and the individual dimensions and should investigate the heterogeneity of family businesses dynamically (Daspit et al., 2021; Irava and Moores, 2010; Martínez-Romero and Rojo-Ramírez, 2017).

3. Methodology

A literature review was chosen as the best methodology to gain an overview of existing research on AC in family firms. According to Tranfield et al. (2003), a systematic literature review summarizes the main scientific contributions in a specific research area. For this purpose, key findings are condensed to identify any research gaps and to investigate possible future research directions. The results presented here are the outcomes of the following steps: 1) planning the review, 2) conducting the review, and 3) evaluating the articles regarding their recommendations for future research.

We searched six databases: EBSCO, SSCI (ISI Web of Science), JSTOR, Springer Link, Emerald, and Wiles online. We used the following search terms: (absorptive capacity) AND (family firm* OR family business* OR family enterprise* OR family sme* OR family-owned OR family control* OR family led OR family owned*). The search was conducted without other synonyms and was limited to “absorptive capacity” so that we could analyze current research in this specific research field. Other theories related to AC, such as dynamic capability or (open) innovation, were not considered.

For the analysis, only articles in English published peer-reviewed journals were used. These journals meet a scientific standard, with validated knowledge, and have a proven influence on the research field (Kubíček and Machek 2019). For this reason, no other types of sources – such

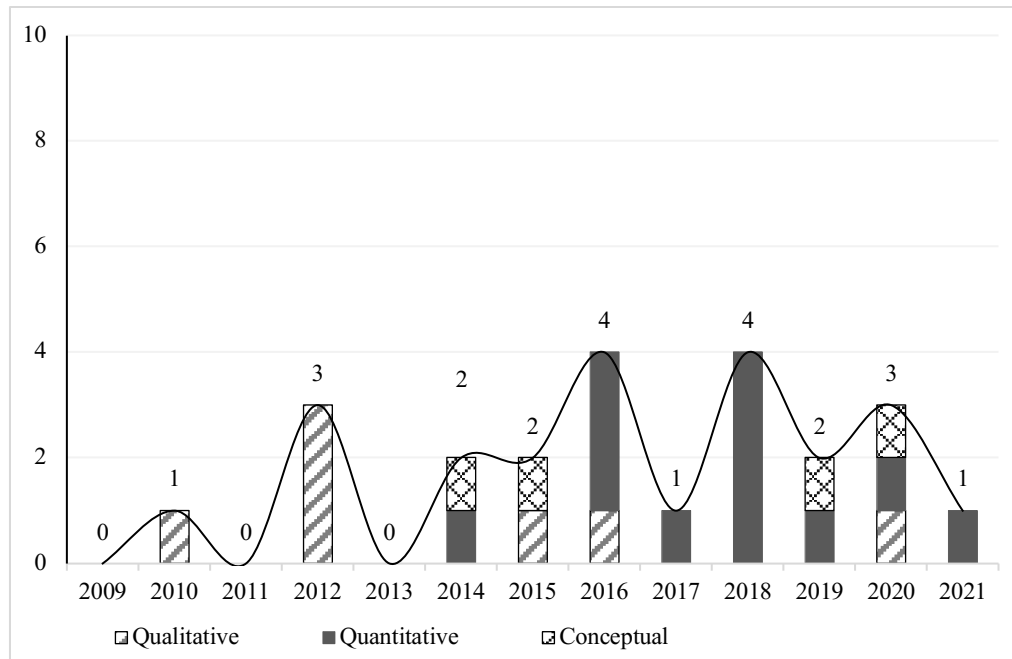
as books or conference papers – were included in the analysis. Through reading the titles and abstracts, we found 161 articles published between 1990 and the end of 2021. Only international journals listed in the Academic Journal Guide 2021 of the Chartered Association of Business Schools, or those ranked with at least a C rating in VHB-Jourqual 3 (2015) of the German Academic Association for Business Research, were used for further analysis.

The articles were required to be directly related to AC and family firms. Articles that did not explicitly consider AC in their analysis were excluded. Similarly, articles that lacked a clear reference to family businesses were excluded; that is, if “family business” was not mentioned in the data description or their characteristics were not explicitly mentioned in the article. After applying these exclusions, 22 articles remained for consideration. Last, but not least, to reduce the chance of overlooking a relevant paper, we then screened the reference lists of the 22 articles and found one additional relevant article. Our final sample of papers for analysis therefore included in sum 23 articles.

4. Article Characteristics

An initial review of the articles showed that research related to AC and family firms is still young, but the topic has gained increasing research attention since 2010 (see Figure 1). Given the increasingly knowledge-based economy and the growing relevance of knowledge management, it is surprising that there is no clear upward trend in publications despite continuous research.

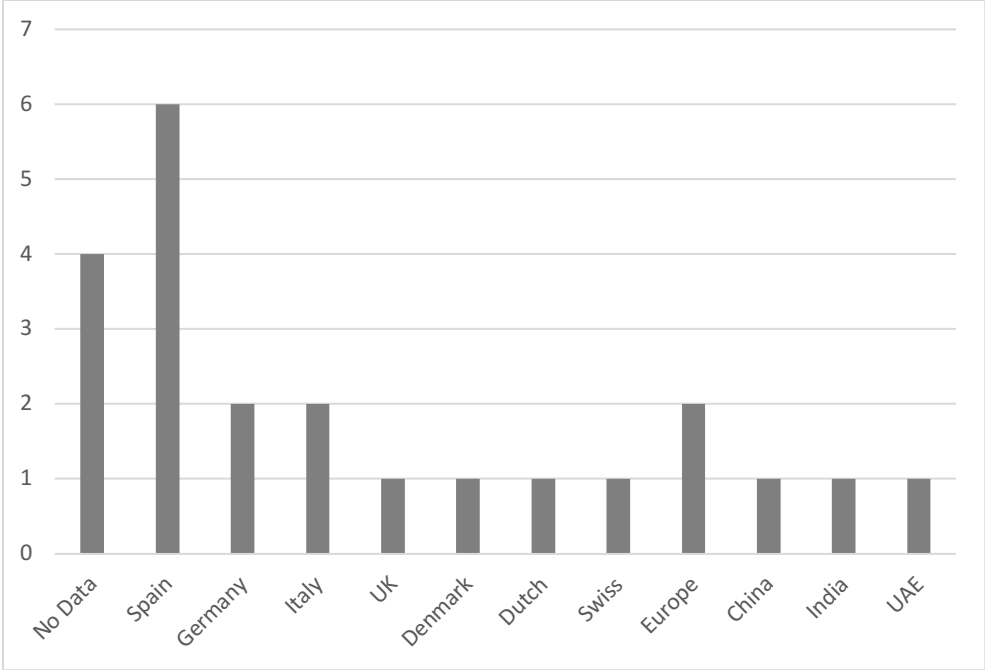
Figure C-1: Distribution of publications and methodology used in years



A closer look at the articles indicated that a quantitative approach was the predominant method used in AC and family firm research. This method was used by 12 articles, representing more than half of the collected sample. A qualitative approach was used in seven articles and a conceptual approach was used in four articles. In 16 articles, the empirical work was geographically focused on the European region. The earliest study was conducted in 2010 with British data, and we found that no other British dataset has been analyzed to date. Spanish data was used most frequently and formed the basis for six articles, four of which were published between 2017 and 2020. Just under a third of the studies used a theoretical approach, although only two papers (Daspit et al., 2019; Hernández-Perlines, 2018) employed the same theory (dynamic capability).

Additionally, there was no discernible trend in the number of published journals. Three journals had published the most articles (Entrepreneurship Theory and Practice, Journal of Family Business Management, Journal of Family Business Strategy) – two papers in each case. Of these, “Entrepreneurship Theory and Practice” is a highly renowned journal and once again points to the relevance of the topic.

Figure C-2: Countries from which the research emanated



Given that not many papers have been written on the topic, we assumed that the articles in our sample would cite each other. However, this point was not confirmed by an analysis of the citations. Only three articles were cited more than twice, and only six articles in total. The most frequently cited articles were Brinkerink (2018), which followed a quantitative approach (five citations); and Kotlar et al. (2020), with a conceptual approach (three citations); (see Table 2-4).

Figure C-3: Citation analysis between articles from the sample

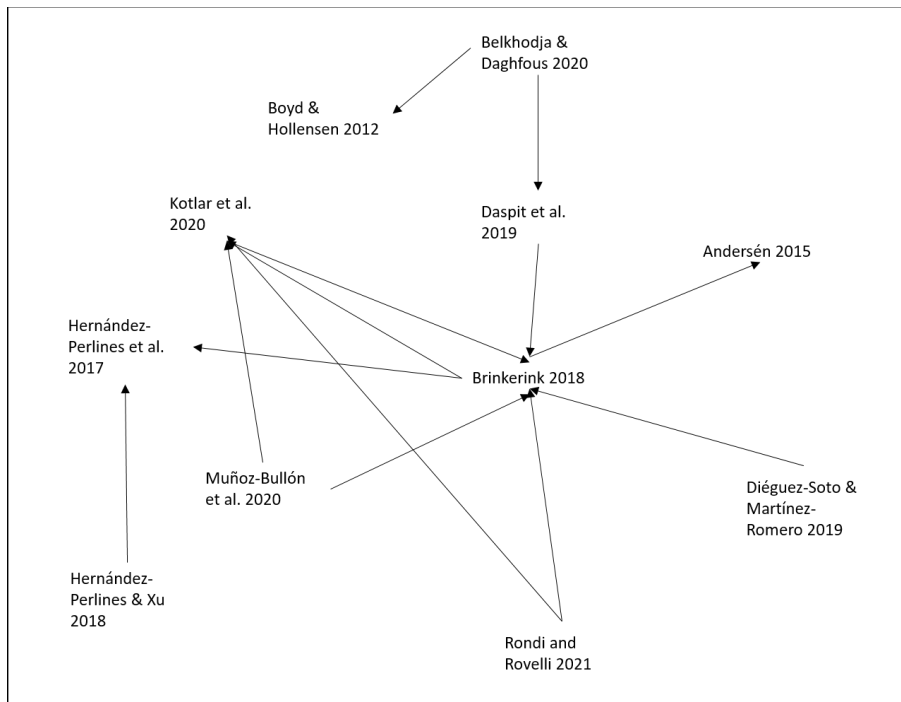


Table 1 shows different conceptualizations and operationalization of family business and family influence. As noted above, we expect that the operationalization will have an impact on the analysis and subsequent findings related to AC. Therefore, the operationalization of family business or family influence was divided into three categories: “involvement approach,” “behavior approach,” and “identity approach.” We then examined possible correlations between the methodological approach and the operationalization.

The identity approach was not found in any of the papers analyzed, whereas most of the papers used the involvement approach. All of the conceptual papers used the behavioral approach. Two papers employed the concept of familiness (Andersén, 2015; Daspit et al., 2019) and two considered the general influence of family members (Duh, 2014; Rondi and Rovelli, 2021).

Kotlar et al. (2020) criticize “a lack of theoretical consensus around existing “umbrella” constructs capturing the family owners’ influence on the business”. Based on this, they present a theoretical framework focusing on two specific dimensions, which are triggered by family ownership: emotional attachment of family owners with the firm and power concentration.

In the articles that included familiness, the inclusion of the concept could always be traced back to the definition by Pearson et al. (2008). Pearson et al. considered familiness from the social capital perspective, with three dimensions: structural, cognitive, and relational.

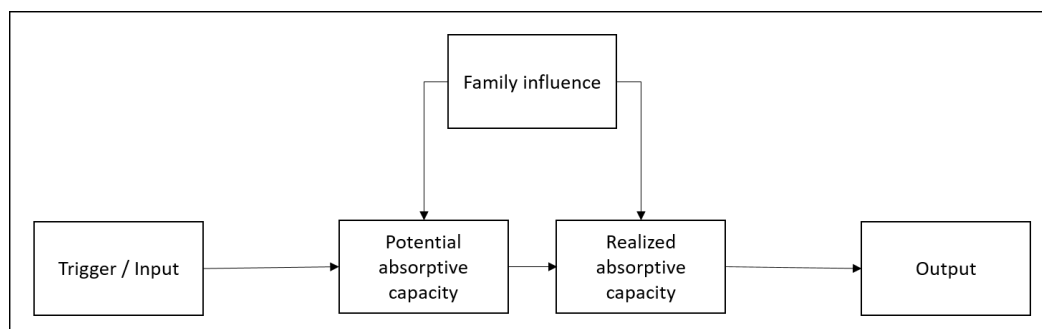
Table C-1: Used operationalization's of family business and family influence

Author (Year)	Theory	Method	Operationalization of family business/influence	Approach
Andersén (2015)	-	Conceptual	Familiness (dimensions of social capital) (Pearson et al. 2008)	Behavior approach
Belkhdja and Daghfous (2020)	Grounded theory	Qualitative/ Case study	Firms where one or more families have an effective controlling ownership interest/ familiness (Pearson et al. 2008)	Behavior approach
Boyd and Hollensen (2012)	-	Qualitative/ Case study	Family-owned, based on the 50 percent control definition	Involvement approach
Brinkerink (2018)	-	Quantitative	Self-perception/ family owns more than 50% of the company's shares	Involvement approach
Chaudhary and Batra (2018)	-	Quantitative	Family members (first- or second-generation) who was involved in the operations of the firm for a significant period as these people are most likely to be aware of the strategy of the firm	Involvement approach
Chirico and Salvato (2016)	-	Quantitative	Family-owned (majority of equity), multiple family members involved in their operations, recognition as a family business by the family CEO	Behavior approach
Daspit et al. (2019)	Dynamic capability perspective	Conceptual	Involvement of the family: (dimensions of social capital) (Pearson et al. 2008)	Behavior approach
Diéguez-Soto and Martínez-Romero (2019)	SEW approach	Quantitative	Family Management/ number of family members involved in top management	Behavioral approach
Duchek (2015)	-	Qualitative/ Case study	Family-owned businesses	Involvement approach
Duh (2014)	Knowledge creating theory Succession theory	Conceptual	Involvement of the next generation of family members	Behavior approach
Filippini et al. (2012)	-	Qualitative/ Case study	Top management in family hands	Involvement approach
Gancarczyk and Gancarczyk (2016)	-	Qualitative/ Case study	Family-owned firms	Involvement approach
Hernández-Perlins (2018)	Dynamic capability theory	Quantitative	Not specified Data from the "Spanish Institution for Family Business"	Involvement approach
Hernández-Perlins and Xu (2018)	-	Quantitative	Not specified Data from the "Spanish Institution for Family Business"	Involvement approach
Hernández-Perlins et al. (2017)	-	Quantitative	Not specified Data from the "Spanish Institution for Family Business"	Involvement approach
Klewitz, Zeyen and Hansen (2012)	-	Qualitative	Family owned	Involvement approach
Kotlar et al. (2020)	-	Conceptual	Multiple dimensions of family ownership (emotional attachment/ power concentration)	Behavior approach
McAdam et al. (2010)	-	Qualitative/ Case study	Family-run	Involvement approach
Muñoz-Bullón et al. (2020)	Behavioral theory Resource-based view	Quantitative	Family involvement (members actively involved in management)	Behavior approach
Rondi and Rovelli (2021)	-	Quantitative	Self-perception/ members of the same family control more than 50% of the shares	Behavior approach
Sánchez-Sellero et al. (2014)	-	Quantitative	Family active in control or management/ management affects behavior of the firm	Involvement approach

Wang (2016a)	Stewardship theory	Quantitative	more than 50 per cent of the voting shares are controlled by one family, and/or a single family group effectively controls the business, and/or a significant proportion of the senior management is members from the same family	Involvement approach
Wang (2016b)	Social capital theory	Quantitative	family group participates actively in the control or management of the enterprise	Involvement approach

In the following section, the contents of the articles are presented according to our analysis of the AC process. First, activation triggers and input for the creation of AC are elaborated. By this we mean important events for the company that initiate the use of AC (trigger) and knowledge sources for the exercise of AC (input). Then, family and firm influences on potential AC and realized AC are discussed. Finally, the outcomes of AC in family firms are presented.

Figure C-4: Graphical illustration of the analysis of the AC process



5. Current Research Status

5.1 Trigger and Input of Potential and Realized Absorptive Capacity

The drivers for learning new knowledge are referred to as activation triggers. These drivers can be corporate crises, a new corporate strategy, rapidly changing environmental conditions, technological change, or competitive pressure (Duchek, 2013; Zahra and George, 2002). Boyd and Hollensen (2012) divided the drivers into situational triggers – such as environmental disasters; and structural triggers – which include changes in the industry, such as the acquisition or consolidation of competitors (McAdam et al., 2010).

Learning new knowledge requires the integration and input of internal and external knowledge sources. Family businesses should remain receptive and should constantly refresh their knowledge and adapt it to new trends and technologies on the market, so that their knowledge base does not stagnate and can be used profitably (Andersén, 2015; Filippini et al., 2012; Wang, 2016a). The presence of dynamic change means that no solutions for developments or routines can be long-term, as that would lead to mental rigidity and obstacles in business development (Wang, 2016a). Information for renewing the existing knowledge base can be obtained from suppliers, customers, employees, and intermediaries and their networks (Boyd and Hollensen, 2012; Klewitz et al., 2012; McAdam et al., 2010). These sources are crucial for (small) family businesses with few available resources and a weak AC (Klewitz et al., 2012; McAdam et al., 2010). Entering into collaborations allows scarce resources to be conserved. Knowledge bottlenecks in a family business, and the associated poor AC performance, can be avoided through knowledge sharing, and new networks for exchange can be established (Filippini et al., 2012; Klewitz et al., 2012). Existing collaborations should be maintained. Family firms are skilled at delivering cohesive innovation services and leveraging established and familiar knowledge sources and linking them to existing knowledge (Brinkerink, 2018). In addition, employees represent an important source of knowledge. In their case, the process of knowledge acquisition starts at the recruitment stage (Boyd and Hollensen, 2012). Qualified employees can add specialized knowledge from various areas, years of market experience, and a strong network to the family business (Boyd and Hollensen, 2012). Collaborations with universities can increase the recruitment of qualified employees who have graduate knowledge; such collaboration broadens the knowledge base and allows direct recruitment to take place (McAdam et al., 2010).

Diversity of educational attainment among employees who are recruited increases the number of gatekeepers – who filter and transfer knowledge – available to scan the environment. In addition, strong internal communication and collaboration can promote knowledge sharing

(McAdam et al., 2010). In difficult situations and crises, such communication enables the possibility of drawing on the different skills and broad potential of employees, leading to effective crisis management (Boyd and Hollensen, 2012). Similarly, innovation facilitators can introduce new processes, routines, and procedures into the family business. This effort can strengthen various areas of the business and improve AC while increasing the capacity for innovation (Klewitz et al., 2012). However, employees should always be integrated into these processes, especially in the implementation of AC. Their work can introduce goal-oriented processes and maintain the freedom and flexibility required for AC (Duchek, 2015).

Besides the education of employees, education of the family members – and especially the successor – has a strong impact on the basis and practice of AC in the business. The level of education and professional training of the successor forms the basis for the development of analytical skills and decision making. It also serves as a basis for new ideas and the recognition of management and of economic trends. Finally, education influences the firm's performance after the transfer of the family business (Duh, 2014).

Early socialization of the successor into the family business should occur during the succession process. A mentor from the management level can ensure the early transfer of values, behaviors, skills, and tacit knowledge. These transfers expand the knowledge base and promote assimilation during the succession process and its chance of success (Duh, 2014). Similarly, family members can promote AC through their behavior by sharing their tacit knowledge with non-family members (Daspit et al., 2019). In addition, the expression of entrepreneurial orientation can affect the formation of AC by allowing new opportunities to be identified and evaluated. The resulting innovativeness, proactivity, and risk-taking within the firm can determine – among other things – the ability to exercise AC (Hernández-Perlines et al., 2017).

In summary, there are various triggers that initiate AC. Several internal and external input factors have been identified that can promote, but can also hinder, the formation of AC.

5.2 Family and Firm Influences on Potential and Realised Absorptive Capacity

In addition to the above determinants, various factors can influence the implementation of AC. The results of our analysis of the influence of family and firm on the potential and realized AC revealed differences depending on whether the involvement approach or the behavioral approach was employed. The involvement approach showed simple influences, whereas the behavioral approach revealed strong complexities and ambivalences for potential and realized AC. In this section, the results related to the involvement approach are presented first, followed by the results for the behavioral approach.

5.2.1 Involvement Approach

The involvement approach can be employed to highlight differences between family and non-family businesses. One such difference is that compared to non-family businesses, family businesses invest less in research and development (R&D), which nevertheless forms a basis of AC. However, family businesses often have the advantage of being able to transform generated knowledge into innovations more efficiently than non-family businesses (Brinkerink, 2018). By rejuvenating and combining new knowledge, family businesses can improve their products and production processes and achieve economies of scale (Brinkerink, 2018). Furthermore, family businesses have the advantage of good integration and combination of internally developed knowledge. Because of their strong employee ties, internal social capital – which refers to social networks consisting of structural, cognitive, and relational capital – and relatively long time horizons, they can act creatively (Brinkerink, 2018; Wang, 2016b). Overall, however, AC performance regarding exploratory R&D innovation is lower in family firms than in non-family firms. This is related to the lower potential in family firms through SEW. For example, family firms hire less external management talent than do non-family firms. New technologies are less likely to be integrated into a family firm, to avoid loss of control (Brinkerink, 2018). Mismanagement of resources and nepotism can also negatively affect AC

(Sánchez-Sellero et al., 2014). In contrast, family firms have an advantage in terms of exploitative innovation. They are confident about their long-standing (external) sources of knowledge, which are familial due to intensive exchange and can thus be well integrated (Brinkerink, 2018). Diéguez-Soto and Martínez-Romero (2019) analyzed the effect of family management on intramural and extramural R&D. Their results showed a positive effect associated with having a higher number of family members in management; this scenario eliminates the concentration of power, reduces risk aversion, and emphasizes the long-term orientation of the family business.

In summary, family businesses tend to engage in less R&D than non-family businesses, but this disadvantage is outweighed by better knowledge integration. R&D in turn is influenced by the family's heterogeneity, such as the SEW or the number of family members in management.

5.2.2 Behavioral Approach

The behavioral approach was analyzed in most of the studied papers using the familiness construct. Andersén (2015), Belkhodja and Daghfous (2020), and Daspit et al. (2019) employed the familiness approach of Pearson et al. (2008), which defines familiness across the three dimensions of social capital – namely, structural, cognitive, and relational. Kotlar et al. (2020) analyzed only partial dimensions of familiness by examining the influence of multiple dimensions of family ownership. The authors aimed to reconcile contradictory theories of the “umbrella” constructs of familiness and SEW.

Our analysis of the articles revealed strong ambivalence that contradicts previous research. Family business research has repeatedly shown that family businesses have a special (external) social capital and unique tacit knowledge, through which they achieve their competitive advantage (Frank et al., 2010; Pearson et al., 2008). Family businesses are also characterized by good relationships with their stakeholders, which are often maintained for many years (Bingham et al., 2011; De Massis et al., 2018b; Miller and Le Breton-Miller, 2005). Likewise,

with familiness, a good relationship exists between the family members and employees, which results in building a reliable permanent staff. A permanent exchange takes place in which knowledge is transferred (Frank et al., 2017). Furthermore, familiness creates an organizational identity and trust between the company and its stakeholders, which leads to collective action (Zellweger et al., 2010).

The properties above are not consistently demonstrated in the context of familiness and AC. Andersén (2015) and Daspit et al. (2019) derive different effects for potential and realized AC. For the analysis we will first consider potential AC and then realized AC. The authors reported a negative effect of familiness on potential AC, which was triggered by the drive to preserve power and avoid collaborations; there was also low R&D performance and a limited external orientation (Andersén, 2015). This attitude leads to insularity, with family firms relying on their existing knowledge (Belkhdja and Daghfous, 2020; Daspit et al., 2019). The insularity is reinforced by a concentration of family members in the business (Daspit et al., 2019). Family members share a common language and experience that lead to connectedness and good communication, which cannot be achieved by non-family members. Building trust with employees and developing a shared vision can reduce the insularity. With regard to external partners, family members perceive a high risk in misaligned goals and incongruent actions (Daspit et al., 2019).

Again, integrating non-family members can reduce the negative effects of family members on potential AC. Such integration creates a broad network with the family business, opens it to external knowledge resources, and supports change (Daspit et al., 2019). Hence, although familiness is considered a competitive advantage because of unique resources and knowledge, specific knowledge can have a negative effect on potential AC (Andersén, 2015). The basis for knowledge assimilation between two actors is their congruence and similar interpretations of the relevant knowledge. Also essential is the willingness of the family business to renew itself,

which runs counter to familiness and its stable orientation. Therefore, an increase in familiness exerts a negative effect on potential AC (Andersén, 2015). However, this disadvantage is relatively low for family companies that operate in a stable environment, as they have sufficient time to recognize and absorb knowledge (Andersén, 2015).

In contrast, for realized AC, familiness operates as a positive influence (Andersén, 2015; Daspit et al., 2019). Family firms are characterized by a more efficient use of knowledge compared to non-family firms (Andersén, 2015). Familiness also generates social integration mechanisms, reducing the gap between potential and realized AC (Andersén, 2015; Boyd and Hollensen, 2012). Strong social capital is an important factor in knowledge transformation and implementation (Andersén, 2015) as it enables communication and knowledge sharing (Wang, 2016b). Similarly, the characteristics of stability, established routines, and tacit knowledge have a positive influence (Andersén, 2015). Overall, high familiness promotes the combination and use of new knowledge and reduces costs through effective implementation and a long-term orientation (Andersén, 2015).

Differences between family members and non-family members are apparent (Daspit et al., 2019). Family members can build a complex knowledge construct among themselves, through which they can effectively implement realized AC at low cost, leading to innovative outcomes (Daspit et al., 2019). This innovativeness is reduced by the integration of non-family members, because the efficiency of exchange is reduced due to incongruent goals and higher costs (Daspit et al., 2019). However, the family may also exert a negative influence if the flow of knowledge is hindered by family conflicts and rivalries (Andersén, 2015).

Belkhodja and Daghfous (2020) reported that the chosen approach to knowledge management affected familiness and thus also indirectly affected AC. Familiness positively affected potential AC when an explicit approach – observable or written knowledge – was chosen, whereas for realized AC, a tacit approach – knowledge through experiences, values, and

context – yielded a positive effect. Both approaches focus on either potential or realized AC, thereby either promoting the insularity of the family firm or neglecting the unique tacit knowledge. The results of Belkhodja and Daghfous (2020) are consistent with those of Andersén (2015) and Daspit et al. (2019).

The strategic knowledge management approach considers both potential and realized AC as the social capital of family and non-family members. This approach also considers both the current and future competitive advantages. Familiness is viewed as human and social capital – a view that promotes the diversification of knowledge sources (Belkhodja and Daghfous, 2020). In general, strong social capital is regarded as positively affecting AC (Wang, 2016b).

Kotlar et al. (2020) examined on the basis of multiple dimensions of family ownership, which represent an aspect of familiness. Different influences led to distinctions between potential and realized AC. Emotional commitment had a negative impact on potential AC, whereas internal knowledge was valued more highly than external knowledge, with relatively low willingness to acquire external knowledge. This scenario was reinforced by the fear of losing power through becoming dependent on external partners. In addition, the emotional bond and its effect were reinforced by employees' identification with the family business; other reinforcing factors were a strong intention to control and the length of family ownership. In contrast, succession had a positive effect because the integration of a new family member reduced the emotional attachment (Kotlar et al., 2020). Similarly, an increased concentration of power had a positive effect on potential AC. If knowledge expansion is prioritized, such expansion can be promoted by, for example, reduced bureaucracy. Finally, there were positive effects associated with underperformance or the expected loss of control in the future, because R&D and rational decisions increased under such circumstances to save the family business.

In contrast, these aforementioned effects on potential AC have an opposite effect on realized AC. Emotional attachment positively affects the realized AC. The reason for this is that the

investment in potential AC focuses on efficient knowledge utilization to develop and strengthen products, services, and processes. Similarly, a long period of family ownership had a positive effect on AC, as older family owner relinquish more trust and thus more decision-making power to non-family members. In contrast, succession by a new family member and the associated ownership transfer reduced management's familiarity with internal knowledge and thus the ability to implement knowledge in the family business (Kotlar et al., 2020). Concentration of power had a negative effect on realized AC. Decisions regarding knowledge application were made by authoritarian family members, and experienced employees were excluded from the process, which reduced the employees' commitment (Kotlar et al., 2020). Concentration of power is reinforced by the presence of a family CEO and family members in top management. By contrast, a high degree of diversification of family ownership and institutional investments led to a positive effect on realized AC (Kotlar et al., 2020).

Rondi and Rovelli (2021) analyzed the influence of that family firms' top management team (TMT) on knowledge transfer and the realization of innovation opportunities. Their results showed that a positive influence was not associated with the diversity of TMT alone (i.e. family members and non-family members) but that the depth of the CEO's search for external knowledge was also important. The diversity of the TMT only affected knowledge transfer positively if the CEO refrained from conducting an external knowledge search. If the CEO prioritized the search for external knowledge, the effect of diversity could become negative rather than positive. In this scenario, the CEO does not seek an exchange with the TMT but decides independently which knowledge is needed to realize innovations (Rondi and Rovelli, 2021). Hence, both the TMT and the CEO influenced the transfer of knowledge and the resulting innovations. In addition, the transfer of knowledge between family members influenced new developments. It is crucial that the family members can absorb and internalize each other's specific knowledge (Chirico and Salvato, 2016).

Previous studies using the behavioral approach have shown that various influencing factors of families can affect AC. These factors lead to different outcomes regarding potential AC and realized AC and provide insight regarding the heterogeneity of family firms.

5.3 Outcomes of Potential and Realized Absorptive Capacity

The willingness to change and the successful implementation of AC leads to heterogeneous results in family businesses. For example, small family businesses can increase their ability to operate competitively through cooperation (Boyd and Hollensen, 2012). Family firms that transform internal and external knowledge into products and services exhibit high performance (Hernández-Perlines et al., 2017). In particular, combine (internal and external) R&D leads to superior performance compared to non-family firms (Muñoz-Bullón et al., 2020). This pattern is reinforced when the family business starts off below par in its performance. To reach a normal state, the family business must take a risk by conducting more internal and external R&D to generate innovation and protect their SEW (Muñoz-Bullón et al., 2020).

An entrepreneurial and technological orientation similarly leads to high performance. Chaudhary and Batra (2018) reported that the increase of AC, especially realized AC, resulted in an increase of entrepreneurial and technological orientation. An entrepreneurial orientation enables the identification and evaluation of new opportunities and, in turn, the formation of AC. It leads to proactive action and a sustainable competitive advantage under changing environmental conditions; it is also associated with innovative solutions and accurate calculation of risks (Chaudhary and Batra, 2018; Hernández-Perlines et al., 2017).

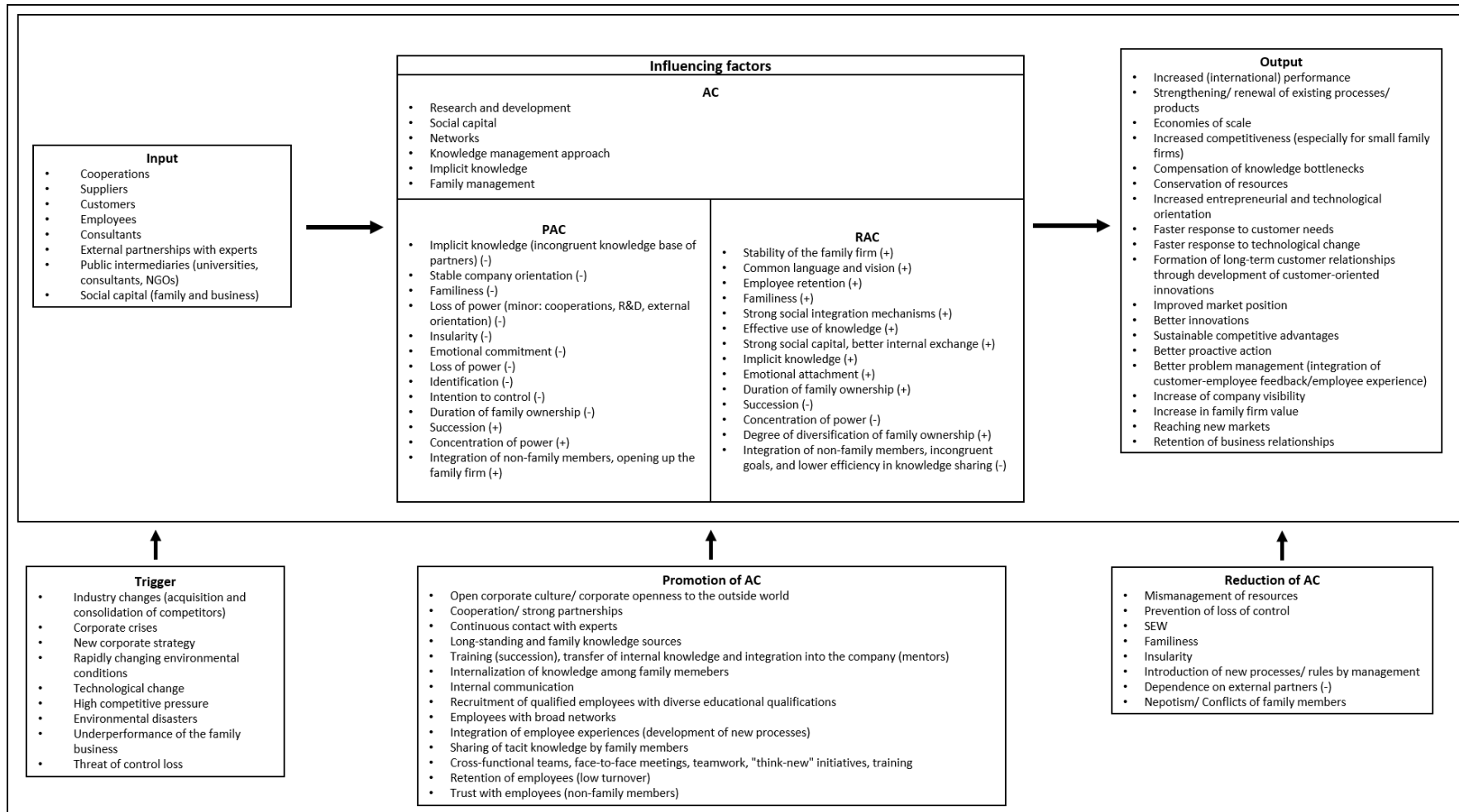
A technological orientation leads to the ability to quickly build new technologies from existing knowledge. This enables faster response to changing customer needs and technologies and also results in increased performance (Chaudhary and Batra, 2018). Similarly, AC positively moderates the impact of entrepreneurial orientation on international performance. AC counteracts external pressure on the family business because knowledge is recognized; hence,

AC enables the discovery of new resource applications (Hernández-Perlines, 2018). This positive effect can be reinforced by environmental conditions (Hernández-Perlines and Xu, 2018).

Furthermore, by absorbing and integrating customer and employee feedback as well as employee experiences, family businesses can react rapidly and flexibly to critical situations and problems (Boyd and Hollensen, 2012). In addition, AC can add value for customers through changes to existing processes and products or an expansion of offerings (Gancarczyk and Gancarczyk, 2016). Through AC, customer-driven innovations can be developed. In turn, these innovations can lead to added value, such as reaching new markets (Gancarczyk and Gancarczyk, 2016). The dynamic ability to respond to customer needs is especially important for small and medium-sized enterprises to maintain their business relationships and obtain external information and knowledge (Gancarczyk and Gancarczyk, 2016). Furthermore, the aforementioned points can improve customer and employee satisfaction, which in turn boosts the company's visibility and (international) competitiveness (Boyd and Hollensen, 2012).

In summary, previous research of AC in family businesses has shown positive outcomes.

Figure C-5: Schematic summary of the core results of the analyzed articles



6. Directions for Future Research

Our analysis shows that the utilization of the behavior approach and involvement approach lead to different views and results with regard to AC in family businesses. Few studies have applied the behavior approach, even though this approach was developed to analyze the heterogeneity of family firms (Chrisman et al., 2005; Chua et al., 1999). The studies we analyzed mainly used the involvement approach, which has limited ability to account for the specificities of family firms (Anglin et al., 2017; Handler, 1989). To gain further insights, we propose eight propositions for future exploration. Their examination will lead to clarify important aspects of potential and realized AC in family firms and the influence of family members.

The influence of family members can be captured by drawing on familiness and SEW (Berrone et al., 2012; Frank et al., 2017). In the studies we analyzed, the inclusion of familiness was always based on the definition by Pearson et al. (2008), who described familiness in terms of family social capital. This point reflects an important aspect in the context of AC, since social capital is needed for the availability and transfer of knowledge. However, other aspects can also strongly influence the process of AC, such as ties to the region, qualifications of family members, and employee satisfaction (Basco, 2015; Diéguez-Soto and Martínez-Romero, 2019). These aspects are, for example, evident in the multidimensional family influence constructs of Klein et al. (2005) and Frank et al. (2017). Future research should therefore not only refer to Pearson et al. (2008) in the context of familiness but also to definitions by Habbershon and Williams (1999), Sirmon and Hitt (2003), Irava and Moores (2010), and Naldi et al. (2008). Moreover, the operationalizations provided by Frank et al. (2017), Rutherford et al. (2008), and Klein et al. (2005) should also be examined in this context. However, the issues raised by Kotlar et al. (2020) are important to keep in mind, and the constructs should be viewed from a dynamic perspective. For example, a strong expression of familiness can result in relatively poor AC; but can also turn in the opposite direction and result in relatively strong AC.

Proposition 1: Various operationalizations of familiness need to be explored, as the different dimensions can lead to different results in the context of AC.

The individual dimensions of the constructs should not be neglected. Their absence or presence can strongly influence the integration of AC and the associated outcomes (Andersén, 2015; Belkhdja and Daghfous, 2020; Daspit et al., 2019). For example, Kotlar et al. (2020) concluded that identification with the family business led to a negative effect on potential AC and a positive effect on realized AC. Similarly, Jovic et al. (2021) investigated the influence of familiness on innovations and found that power had a negative effect on innovations, whereas experience and culture had positive effects. Other factors that might positively affect AC include the qualifications of family members in the company, social activities in the region, and the presence of permanent staff (De Massis et al., 2018b; Diéguez-Soto and Martínez-Romero, 2019; Frank et al., 2017). Hence, it is important to consider not only a familiness construct as a whole but also its sub-dimensions.

Proposition 2: The various dimensions of familiness, and their manifestations can have differing effects on AC and should therefore be considered individually.

The above discussion is especially relevant to SEW, whose consideration in the context of AC has been marginal (Brinkerink, 2018; Kotlar et al., 2020; Muñoz-Bullón et al., 2020). The affective needs of the family should be included in a study to examine the main family influences and decisions regarding the family business (Daspit et al., 2021; Gómez-Mejía et al., 2007). These aspects can strongly influence the use of AC in the family business. Often associated with SEW is the protection of the reputation of the business and the family, which is generally accompanied by a strong stakeholder orientation and socially responsible behavior (Gómez-Mejía et al., 2011). The aforementioned aspects may allow the family business to access external knowledge, because the business is trusted by its stakeholders, who are therefore likely to share their knowledge (De Massis et al., 2018b; Wang, 2016a). By contrast, a focus

on maintaining reputation can block other processes in the company; for example, funds for innovation and development might be cut, which in turn would reduce AC (Gómez-Mejía et al., 2007). Previous research on SEW and innovation has indicated that the goals of the family and the salience of each dimension matter. Li and Daspit (2016) inferred that a negative effect arose through strong intentions to exert control. With increasing control intent, family members try to maintain their control and act in risk-averse ways. A similar pattern is evident in the context of R&D. When the family holds a high financial stake in the firm, they act risk-averse to protect their SEW. However, if the financial stakes are relatively low, their SEW is not at risk and the family may invest in R&D to promote the longevity of the business (Sciascia et al., 2015). These examples illustrate how SEW can affect family business decisions. The same effects and others can occur in the context of AC. However, both SEW and the strength of the various dimensions should not be seen simplistically. All these elements can play important roles in the formation and exercise of AC. For this reason, it is important to include the SEW construct in the study of family influence and not to limit the investigation to the construct as a whole but also to consider its dimensions.

Preposition 3: The affective needs of the family can influence the performance of AC in the family business; the influence can be positive or negative depending on the degree of the dimensions.

Preposition 4: The individual dimensions of SEW can have different effects on AC and must therefore be considered individually.

The behavioral approach – including familiness and SEW – has to date been heavily involved in theoretical work. Further empirical research is needed in this context in the future, using quantitative methodology. This could help to verify the previous theoretical results and uncover possible dynamics.

Preposition 5: The behavioral approach in the context of AC needs to be applied quantitatively to examine inferred relationships and test for generality.

Another approach that was not considered in the articles we reviewed is the identity approach. Its explicit consideration is worthwhile as this theory addresses the identity of family members and internal and external stakeholders in a family business (Zellweger et al., 2013). Identification with the business is formed through its history and lived values, which in turn are formed through family involvement (Zellweger et al., 2010, 2013). Members of the company feel as a part of it and view the company's success or failure as their own (Zellweger et al., 2010). Such identification leads to a positive attitude toward the company and positively influences work practices; employees go above and beyond the normal scope of their work and actively use their knowledge to accomplish new tasks (Ashforth et al., 2011; Zellweger et al., 2010). This positive effect can extend to external stakeholders, who have an interest in the company's success; they identify with the company and thus (for example) share their knowledge to promote the company's performance (Ashforth et al., 2011; Zellweger et al., 2010). These characteristics – both internal and external – may have a positive effect on AC in family firms because external knowledge can be accessed and internal knowledge can be processed. Although there has been little analysis in this regard, initial research indicates a positive effect of organizational identity on AC (Anand et al., 2013; Lee et al., 2014). Given that a family business builds a distinctive identity through its history and values, strong expression of that identity and its living out by family members should build AC within the business. Research is needed to determine the impact of a family business's identity on AC and how such an identity can be built among members or focused on enhancing AC.

Preposition 6: The formation of identity among internal and external stakeholders regarding the family business, and its deployment, can foster AC.

In addition to the various influences of the family on the business, contextual factors may play a decisive role. These factors can affect the family and its decisions and actions (Zellweger et al., 2013). For example, family values are influenced by external factors – such as local circumstances, local affiliations, or country-specific values, among others. In turn, those values can impact the exercise of AC (De Massis et al., 2013; Zellweger et al., 2013). This can affect the building of social capital, collaborations, engagement with employees and stakeholders, and the evaluation of innovations (Chua et al., 2012). These aspects are important in relation to AC because they are needed for access to external knowledge and its integration in the company (Cohen and Levinthal, 1990; Gómez-Mejía et al., 2007). The influences of external contextual factors on the family business and its members require analysis in the future.

Proposition 7: External or contextual factors that influence family members and the family business can affect the implementation of AC.

In addition to external factors, internal factors may have an impact on the family and the company. Knowledge is acquired with age and size; hence, the founding generation is expected to have less AC than subsequent generations (Chirico and Salvato, 2016). However, it is not certain that a younger generation will experience more AC. If that generation has many networks, partnerships, and stakeholders, as well as vast knowledge, it might actually incur a negative effect due to high costs and effort. In addition, relevant or trivial information must be filtered out from these comprehensive resources (Pillai et al., 2017). Furthermore, previous research has indicated that younger generations differ from the first generations in their relationship to the family business. If attachment is high in the first generation, it decreases over time, which has been shown to have a positive and negative effect on AC (Kotlar et al., 2020). Also, the number of generations represented in the family business can influence AC. For example, a younger generation is often overruled by the older generation, making it difficult to implement new ideas and concepts (Chua et al., 2012). This tendency can affect the new

generation's use of social capital or new thinking within the combination of knowledge. However, the older generation has more tacit knowledge, which has a positive impact on AC (Duh, 2014). Similarly, the number of individual family members can have an impact. People's different affective needs create the potential for conflict, which can influence strategic decisions, such as knowledge transfer (Chirico and Salvato, 2016). Finally, AC in a family business can be viewed from a "not-invented-here" perspective. Antons and Piller (2015) describe it as "a negative attitude toward knowledge (ideas, technologies) derived from an external source" (p.193). This viewpoint can provide insight into why successful family businesses close themselves off from the outside world and exhibit limited potential AC (Antons and Piller, 2015). Therefore, internal factors should also be considered in future research.

Proposition 8: Internal factors that influence family members and the family business can have an impact on the implementation of AC.

7. Discussion and Conclusion

This literature review is the first study to summarize the research on AC in family firms. Although family firms are one of the most common types of firms (De Massis et al., 2018a; Wolter and Sauer, 2017), our analysis has shown that they have been rather neglected in AC research. Only a few studies are available that include characteristics of family firms in their analysis – a finding that we did not expect. However, the differences between non-family and family firms, and the heterogeneity between family firms, have been well established in research. Various studies have shown that the two forms of businesses differ widely in their behavior due to the influence of the family on the firm (Berrone et al., 2012; Chrisman et al., 2012; Daspit et al., 2021).

Previous research has identified both advantages and disadvantages of family firms regarding the implementation of AC through family members' involvement. Regarding the family's

influence and resource integration, an ambivalent situation seems to evolve in the family firm context. That is, the specific characteristics of the family and the firm exert a strong influence on AC, whether positive or negative. Several researchers have emphasized that family businesses are characterized by their good relationships with stakeholders and that employee ties and alliances are built across generations (Bingham et al., 2011; De Massis et al., 2018b; Miller and Le Breton-Miller, 2005). Similarly, the social capital of the family is emphasized, especially in the context of familiness (Pearson et al., 2008; Zellweger et al., 2010). However, our literature analysis regarding family businesses and AC yielded different results. For example, familiness and multiple dimensions of family ownership were associated with both positive and negative results in this context. Family members may isolate themselves externally and internally so as not to relinquish their power (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020). This view is primarily a theoretical conclusion (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020) and consequently, a first important preliminary result of our study is that these assumptions need to be tested empirically.

We have shown that this research field is still in its infancy and that further research is needed to understand the heterogeneity of family influence on AC. Furthermore, our results show that only selected dimensions and operationalizations of what constitutes family influence have been analyzed regarding their influence on AC. There has been no comprehensive and integrating analysis of all dimensions as reflected in the FIFS construct (Frank et al., 2017; Habbershon and Williams, 1999). In addition, researchers should focus on the influencing factors related to SEW and the relationships among family members. This focus could shed light on why some family firms are more successful than others.

Our study also provides important practical implications. When AC is successfully implemented, the family business can react quickly and flexibly to changing environmental conditions – such as evolving industry structures, new technologies, or business crises (Boyd

and Hollensen, 2012; Eisenhardt and Martin, 2000; Zahra and George, 2002). However, family characteristics such as control intention or power preservation can influence this process either positively or negatively (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020). Family businesses should understand these effects because AC constitutes an important capability of the business to face dynamic environmental changes (Eisenhardt and Martin, 2000).

Although this study was conducted systematically, it has certain limitations. First, only articles found in the screened databases were analyzed, or relevant articles that they cited. Second, only English articles were considered; papers written in other languages – as well as working papers, conference papers, and books – were not included in the analysis. Third, our selection was limited to listed international journals in the Academic Journal Guide 2020 or by VHB ranking to ensure quality of the articles.

In sum, we encourage future research to focus on the influences of family members on AC. Researchers should also examine the external and internal factors that influence family members and their actions. External factors such as stakeholder pressure and regional-specific values and behavior and internal factors such as generations, nepotism, and conflicts between family members. In an increasingly knowledge-based society, there is growing relevance of knowledge creation and the particular qualities of family businesses.

D. Openness to Knowledge – The Mediating Role of Corporate Social Responsibility on Absorptive Capacity in Family Firms

1. Introduction

The Organizations today are part of “knowledge-based economy” (Melnikas, 2010). Knowledge and information have become the heart of economic growth, and companies must be able to dynamically absorb and use this knowledge (David and Foray, 2003; Malerba and McKelvey, 2020). Teece et al.’s (1997) dynamic capabilities theory provides a framework that addresses how collective learning patterns enable firms to change their resource base, using absorptive capacity (AC) to deal with knowledge (Barreto, 2010; Teece et al., 1997; Zollo and Winter, 2002). Absorptive capacity is defined as a set of organizational routines and processes, by which firms acquire, assimilate, transform, and exploit new external knowledge, adding it to the firm’s knowledge base to produce dynamic capabilities. By doing so, firms can gain and sustain competitive advantages, especially in very dynamic environments (Cohen and Levinthal, 1990; Lewin et al., 2011; Volberda et al., 2010; Zahra and George, 2002). However, to absorb external knowledge, companies must not only be open to their environment (Lane et al., 2001), but they must also ensure that external and internal stakeholders share knowledge with them, for example by being perceived as trustworthy organizations (Jansen et al., 2005; Lane et al., 2006). In an organizational context, stakeholders assess the trustworthiness of the focal organization (Mayer et al., 1995). Accordingly, for a company to be considered trustworthy (Abrams et al., 2003; Chowdhury, 2005; Gausdal, 2015), information must be available.

The majority of companies in Germany are small and medium sized family businesses, which are economically very successful (De Massis et al., 2018a). Because AC is an important prerequisite for remaining innovative and competitive in a globalized world (Chen et al., 2009; Lane et al., 2006; Nagati and Rebolledo, 2012; Volberda et al., 2010), the study at hand analyses

if and how the influence of the family members on the family firm affect AC. This research question has not yet been sufficiently studied either theoretically or empirically in family businesses research. Moreover, the few studies analyzing the antecedents of AC in a family business context have mostly ignored the heterogeneity of family businesses mostly (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020). Exceptions are the studies of Andersén (2015), Daspit et al. (2019) and Kotlar et al. (2020) who analyze the relationship between familiness and AC in a conceptual level. Our article intends to fill an important gap in research literature by incorporating familiness in an empirical analysis as a unique impact factor reflecting the heterogeneous influence of the family members on the family business, which – according to our theoretical and empirical model – will have an effect on AC via CSR. Accordingly, the companies in our study are all family-owned SMEs – however they differ in their degree of familiness.

Drawing on signaling theory, we propose that family businesses must send credible signals that they are ready to absorb information and convert them into knowledge (Connelly et al., 2011; Spence, 1973). In this context, appearing trustworthy as a firm can be an advantage. This trustworthiness can stem from family businesses characteristics relating to their long-term orientation, their understanding of values, or the responsibility that comes with matching the family's name with the business. Specifically, we follow Frank et al. (2017) and their understanding of familiness. Frank and colleagues focused their analysis on the question, how the family members can influence the firm. Family expectations not only guide the relationship between the family members, they also function as manageable “rules of the game” and create guidance by reducing complexity, that can make the organization run more efficiently. Picking up the discussion at this point, we argue that such decision premises “have the potential to become resource and capabilities in the sense of the RBV [resource-based view] if they meet the VRIN [valuable, rare, inimitable, and non-substitutable] criteria” (Frank et al., 2017, p. 714). However, we also argue that family firms have to use observable signals

reflecting their family specific intentions to build trust and long-term relationships with internal and external stakeholders, incentivizing these groups to share their knowledge with the family firm.

At the same time, family firms have a greater need for control and are reluctant to open up (De Kok and Uhlaner, 2001; Feranita et al., 2017; Memili et al., 2015). They show less cooperation in order to avoid incongruent actions and a dependence on external partners (Brinkerink, 2018; Daspit et al., 2019; Kotlar et al., 2020). Because of this, family firms create an insularity in which they primarily use their existing knowledge (Belkhdja and Daghfous, 2020; Daspit et al., 2019) and only supplement this with long-standing (external) knowledge sources that they trust (Brinkerink, 2018). Family businesses therefore need to execute observable measures with which they convey their openness as well as their trustworthiness, which recipients and potential stakeholders who want to share knowledge perceive and interpret. These measures can lie in the area of corporate social responsibility (Kim, 2019; Martínez and Rodríguez del Bosque, 2013) and, as we will argue, reflect the bundle of family expectations which manifest themselves in the different dimensions of familiness. The dynamic ability to respond to stakeholder needs is particularly important for SMEs to maintain business relationships and reach new markets (Gancarczyk and Gancarczyk, 2016). In this context, we posit that if family businesses with these specific characteristics do not succeed in signaling them to internal and external stakeholders, they will be unable to open the boundaries of the family firm to overcome their lack of knowledge resources (e.g., through communicating and building shared values and knowledge sharing with external stakeholders) (Brinkerink et al., 2017; Zerbini, 2017). Moreover, according to signaling theory, especially the signal observability is important (Connelly et al., 2011). Consequently, concrete, perceptible and, if necessary, costly signals are needed that can be perceived by potential stakeholders and evaluated as credible to establish trustworthy relationships with their internal and external stakeholders gain and sustain

competitive advantages by building dynamic capabilities pertaining to new knowledge creation (Bangerter et al., 2012; Chowdhury, 2005).

While CSR activities are sometimes argued to be an important influencing factor that may also enable the acquisition of external knowledge (Belyaeva et al., 2020; Forcadell et al., 2021; Zahra and George, 2002), little is known about the extent to which family firms employ CSR to increase trust-based communication and their visibility to support knowledge transfer activities like (open) innovation (De Massis et al., 2018a; Kim, 2019). While current research on CSR in family business literature is focused on image, reputation, and financial performance (Faller and zu Knyphausen-Aufseß, 2018; Van Gils et al., 2014; Vazquez, 2018), we posit that CSR activities are not only directed outwards, but can also have internal effects within companies as well. These can be closely related to the “long-run mindset” (p. 132) and “superior employee relations” (p. 133) described by De Massis and colleagues (2018a). Similarly, De Massis and colleagues indicate that “the values and culture of families that own a Mittelstand firm often translate into a higher sense of community involvement [...] and greater social responsibility toward the community, resulting in increased visibility and a better reputation in the surrounding community” (also see Cruz et al., 2014; De Massis et al., 2018a, p. 136).

Thus, this study also builds on a growing body of research that has recently begun to recognize that family firms’ CSR activities may be an important way to emphasize, for example, the unique value orientation and long-term orientation of the family firm (Zientara, 2017). Essentially, we argue that the specific dimensions of CSR, with the focus on external stakeholders (customers and suppliers) and internal stakeholders (employees) (El Akremi et al., 2018), function as credible quality signals to open up the company to and for stakeholders, bridging the gap between family-specific resources and the family firm’s capability to absorb external knowledge. While AC is acknowledged as an essential ability to generate competitive advantages by creating new knowledge (Jansen et al., 2005; Lewin et al., 2011; Volberda et al.,

2010), it is still under-researched in the context of family businesses (De Massis et al., 2013; Kotlar et al., 2020). Recent literature argues that family-specific characteristics can influence AC in different ways (Andersén, 2015). For example, family involvement seems to be significant and can close or widen the gap between potential and realized AC, depending on the innovation process and the external search strategy (Brinkerink, 2018). Moreover, Kotlar and colleagues present a conceptual model, in which family ownership has both positive and negative influences on AC (Kotlar et al., 2020). Emotional attachment and fear of losing power causes a lower external view, but promotes a focus on tacit knowledge and internal sharing (Kotlar et al., 2020). However, research on AC and family-specific resources in family firms is still in its infancy, especially concerning overcoming the negative effect of family-specific resources to efficiently use them in relation to AC (Andersén, 2015; Brinkerink, 2018; Daspit et al., 2019; Kotlar et al., 2020).

We propose that specific CSR activities utilize and open up the family firm's resources (i.e. familiness) to successfully use AC. In sum, the paper considers the following research question: *How (and to what extent) does CSR mediate the relationship between family-specific resources (i.e. familiness) and AC in small and medium-sized family businesses?*

Based on in-depth mediation analysis with data from 327 German family SMEs, we show that CSR is the key feature linking family firms to the willingness and capability to explore, assimilate, and exploit new external knowledge. Specifically, we find that the relationship between familiness and potential AC is partially mediated by customer-oriented CSR. Realized AC is fully mediated by employee- and customer-oriented CSR. Interestingly, although hypothesized, we find no empirical support for a mediated relationship through community-oriented CSR. We conclude that family businesses practicing CSR gain and sustain dynamic capabilities and competitive advantages because CSR also enhances their family firm's ability

to recognize the value of new, external knowledge, assimilate it and apply it to commercial ends (Zahra and George, 2002).

Our study can contribute to the literature in several ways:

Firstly, the results of the analysis show that the relationship between familiness and AC is mediated by CSR activities. This suggests that familiness combined with the practice of CSR can create a competitive advantage – the transfer of knowledge is easier for this type of firm if familiness is pronounced and used to activate CSR. This leads to a faster reaction to market changes, which enhances the capability to survive (Eisenhardt and Martin, 2000; Ramachandran, 2011; Zahra and George, 2002). In other words, we contribute to familiness literature by showing that a high degree of familiness alone may not be enough: measures such as CSR activities must be taken to actively utilize the family-specific resource base (Andersén, 2015; Daspit et al., 2019).

Secondly, we contribute to the discussion on the extent of the capability and willingness paradox in family firms (Chrisman et al., 2015; Debellis et al., 2020; Veider and Matzler, 2016) in the context of AC. We demonstrate that through CSR activities, family-owned companies can make their ability visible by sending out external signals or by promoting superior employee relations (Uhlener et al., 2004). Corporate social responsibility activities can help to open the boundaries of the family business; to enhance the dynamic capabilities of the family business; and, above all, to make the company more permeable for information and knowledge without having to relinquish too much control (Luo and Du, 2015; Turker, 2009). However, this requires active investment in CSR as a strategic instrument, which in turn creates new intangible resources like social capital and networks (Memili et al., 2015; Price et al., 2013).

Thirdly, we contribute to the AC literature by enhancing the limited knowledge available to date about family businesses. We also show that CSR improves the boundary conditions for successful AC and can thus function as a precursor to AC in the family business context.

Thereby, a high level of familiness has a positive effect on this relationship. In addition to direct management decisions, shaping the boundary conditions and firm culture creates an environment fruitful for knowledge absorption. Existing barriers in the implementation of AC can be bridged through CSR. Since specific CSR activities are internally and externally oriented (Farooq et al., 2017; Lewin et al., 2011), they can promote both potential and realized AC. This suggests that a high degree of familiness combined with the practice of CSR can create a competitive advantage – the transfer of knowledge is easier for these family firms if familiness is pronounced and used to activate CSR, which is observable to the stakeholders and incentivizes these groups to share their knowledge with the family firm.

The remainder of the paper is structured as follows: In the next two chapters, the theoretical framework and hypotheses are introduced. Chapters four and five discuss the empirical design and the results. The final section discusses key findings, limitations, and potential future research opportunities.

2. Theoretical Framework

2.1 Familiness

While the majority of all companies in the world are family firms (Gersick et al., 1997; Schulze and Gedajlovic, 2010), the definitions of family firms differ in their components. But they all show that the role of the family and the specific family culture are relevant to differentiate family businesses from non-family businesses, or the differences between different family firms. Therefore, the role of the family and the family members influence on the family firm is strongly reflected in the concept of *familiness* introduced by Habbershon and Williams (1999). Familiness is embedded in the framework of the resource-based view and can be defined as “the unique bundle of resources a particular firm has because of the system interaction between the family, its individual members, and the business.” (Habbershon and Williams, 1999, p. 11). Consequently, the concept of familiness – widely recognized in the context of family business

research – considers both the family and its influence over ownership and management (Chrisman et al., 2003; Pearson et al., 2008; Santos et al., 2020; Zellweger et al., 2010). Frank et al. (2017) introduced the “family influence familiness scale” (FIFS), which measures family member’s influence in its heterogeneity. Defined from a resource-based perspective, familiness is a bundle of capabilities and valuable, rare, inimitable, and non-substitutable resources specific to a family business, which result from family involvement. Through the system interaction of the family, its individual members, and the business, family members can influence the firm through their decision premises. This in turn, guide the relationship between the family members and can therefore function as manageable “rules of the game”, and can create guidance by reducing complexity, which makes the organization run more efficiently. Moreover, Daspit and colleagues (2019) argue that familiness can affect innovation outcomes via AC. In their conceptual model, they propose that familiness both enhances and constricts the components of AC.

2.2 Absorptive Capacity

Family firms must continuously adapt to changing conditions to stay in business for the long-term and to be able to hand the business over to the next generation (Chrisman et al., 2005a; Eisenhardt and Martin, 2000; Zahra and George, 2002). The dynamic capability perspective developed by Teece et al. (1997) addresses the process of adaptation to a dynamic environment. It consists of two components: “dynamic,” which is based on the fact that companies need to renew and develop their competencies to survive in a dynamic environment; and “capability,” the use of internal and external skills and resources to respond to changing environmental conditions (Eisenhardt and Martin, 2000; Teece et al., 1997), to generate competitive advantages (Eisenhardt and Martin, 2000; Teece et al., 1997). We define dynamic capability according to Teece et al. (1997) “as the firm’s ability to integrate, build, and reconfigure internal and external competences to rapidly changing environments” (p. 516). Dynamic capabilities

include various characteristics that usually influence different routines (organizational and strategic). These can be external resource acquisition and integration, learning mechanisms, or local abilities; AC unites these mechanisms (Barros et al., 2016; Eisenhardt and Martin, 2000; Zahra and George, 2002; Zollo and Winter, 2002).

Nowadays, because of the changes in the economy to a knowledge-based society, AC is especially important for companies as a dimension of dynamic capabilities (Belitski et al., 2019; Malerba and McKelvey, 2020; Siegel and Renko, 2012). Cohen and Levinthal (1990) introduced AC to research literature as the ability of firms to explore external knowledge. Zahra and George (2002) modify the construct, and defined AC as “a set of organizational routines and processes by which firms acquire, assimilate, transform, and exploit knowledge to produce a dynamic capability” (Zahra and George, 2002, p. 186). Thus, they differentiate between potential AC (i.e. acquisition and assimilation abilities) and realized AC (transformation and exploitation capabilities). Together, the model can be used to map the complete process of knowledge transfer, from the identification of the relevant knowledge to its use in the company (Zahra and George, 2002). In this paper, we follow Zahra and George (2002, p. 185) and define AC “as a dynamic capability pertaining to knowledge creation and utilization that enhances a firm’s ability to gain and sustain a competitive advantage.” In line with these arguments and the dynamic capability perspective, we emphasize that there are both internal and external dimensions of AC. Both orientations – internal and external – are designed to make the firm open to exploring new ideas and willing to back the most promising of them with resources and talents (Denning, 2005).

2.3 Corporate Social Responsibility and Signaling Theory

Due Businesses must be open to remain competitive and also build the dynamic capability to adapt to the needs of their stakeholders (Fang et al., 2010; Ramachandran, 2011). Due to globalization, climate change, and risk management, stakeholders such as investors, banks,

insurance companies, and customers are increasingly paying attention to whether companies are implementing CSR strategies and measures (Ali et al., 2017; Haack et al., 2020; Haski-Leventhal et al., 2017; Matten and Moon, 2020). In this paper, we follow the World Business Council for Sustainable Development (2000) and define CSR as “the commitment of business to contribute to sustainable economic development, working with employees, their families, the local community and society at large to improve their quality of life” (World Business Council for Sustainable Development, 2000, p. 10). In the last two decades, CSR has developed from being defensive to being opportunity oriented; the current focus is on generating competitive advantages in a dynamic environment through intangible, CSR-related assets (Davies and Crane, 2010; Stoian and Gilman, 2017). Family firms use internal and external CSR to build trust, trustworthiness, and long-term relationships with external and internal stakeholders, incentivizing these groups to share their knowledge and build new resources to develop dynamic capability.

Based on this, it can be seen that companies use CSR as a positive signal, a fact that can be explained by the findings of the signaling theory. Therefore, the theoretical basis of dynamic capability is supplemented by the signaling theory in connection with CSR. Signaling theory attempts to solve the problem of principal agent theory and serves to reduce information asymmetries (Connelly et al., 2011; Spence, 1973). Signals must be observable. However, beyond mere observability, the fit of signals plays an important role. Connelly et al. (2011) describe the signal fit as “the extent to which the signal is correlated with unobservable quality” (p. 53). Scholars differentiate between costly signals and hard-to-fake signals (Bangerter et al., 2012). Hard-to-fake signals are beyond conscious control. Costly signals require to invest in resources to acquire and display (Bergh et al., 2014). To ensure that these signals are credibly perceived by the receiver, such signals should be costly and difficult to obtain to show that only highly qualified firms can perform them in the long run (Connelly et al., 2011; Spence, 1973). The sender tries to send a signal with a certain intention (here CSR) to generate a corresponding

intension of the receiver (here building trustworthiness). These signals are sent out to create a relationship between the company and its stakeholders, to open up the boundaries of the company and to encourage its stakeholders to transfer information. However, these signals must be credible. These measures can be of various kinds, such as high product quality, equal employment, safe working conditions or certificates for sustainable corporate governance (Zhang et al., 2020). It is also crucial that the company is at a disadvantage if these measures are not communicated properly. These negative effects are more severe for family businesses, especially SMEs with a high level of familiness. Through the integration of the family, the negative image also falls back on them, especially if the company and the family bear the same name, from which both can only recover with difficulty due to the lower resources (Astrachan et al., 2018; Du, 2015b; Kim et al., 2017). However, family businesses with a high level of familiness can also obtain the CSR signals more cost-effectively than family businesses with a lower level of familiness. A high level of familiness reflects a strong family bond and a strong identification of the family members with the company, whereby family and company become “one” (Frank et al., 2017). This results in strong values and a moral focus that are lived out by the family members in the company (O’Boyle et al., 2010). Thus, high degrees of familiness constituting the basic structure of the organization and the way decisions are made by the family members conveys a higher level of trust towards stakeholders, as negative events have a negative impact on long-term orientation and also affect the family through the organizational identity (Astrachan et al., 2018; Frank et al., 2017). Thus, CSR signals reflecting otherwise unobservable family decision premises are more cost-effective to produce through family businesses with high familiness, as they have better resource allocation through family cohesion (Frank et al., 2017; McGrath and O’Toole, 2018). Since especially family-owned SMEs often have few resources, costly investments in CSR only pay off through long-term orientation and are only then sustainably integrated into the company’s strategy (Lee et al., 1999; Stoian and Gilman, 2017). This sustained implementation is also accomplished more cost-effectively

because family members are heavily involved in the events and strategies of the family business and, because of the family's better interaction with stakeholders, more targeted CSR measures can be deployed (McGrath and O'Toole, 2018). If signals are honestly signaled, CSR is a popular instrument for companies to build trust and be viewed positively by stakeholders (Forcadell et al., 2021; Zerbini, 2017). Furthermore, the family firms' long-term commitment to its community, channeled by CSR, can lead to a stronger commitment to the company and the willingness to reciprocate behavior among stakeholders, consequently leading to possible economic advantages (Leoni, 2017; Niehm et al., 2008). Ergo, permanent social and environmental CSR activities have a positive impact on the value of the firm, leading to a consistently positive evaluation by an additional stakeholder group potential investors (Noor et al., 2020).

2.4 The Relationship Between Familiness and Corporate Social Responsibility

Corporate social responsibility activities are conducted by family-specific resources to show market partners (e.g., customers, employees and community partners) that the family business is acting sustainably and fairly (Chung et al., 2015; De Massis et al., 2018a; Forcadell et al., 2021; Ismail, 2009; Pérez and Rodríguez del Bosque, 2015; Vlachos et al., 2013). Stock et al. (2020) provide a theoretical framework and empirical evidence that increased integration of the family and its values into the family firm results in the execution of more CSR activities toward employees, customers, and the community. We take their results and arguments as a starting point.

Employee-oriented CSR activities, which focus on the well-being of the employees, increase the motivation of employees to work for the company and their overall well-being (Farooq et al., 2014, 2017; Lee et al., 2013). This, in turn, reduces staff turnover (Farooq et al., 2014), leads to a higher job satisfaction (Luo and Du, 2015), and binds employees to the company by building trust and loyalty among the workforce (De Massis et al., 2018a; Luo and Du, 2015;

Turker, 2009). In family firms, the owner family is closely connected to the family business through management and ownership, and often also by the fact that the family business bears the name of the family (Astrachan et al., 2018). The more the family is integrated into the company and the family (name) is reflected in the business, the more the owner family wants to maintain its company and family reputation. As a result, such owning families have higher motivation to invest in employee-oriented CSR measures (Binz et al., 2017; Sageder et al., 2018; Zellweger et al., 2013).

Customer-oriented CSR activities can have a positive impact, binding customers to the company and making them more loyal, which leads to better interaction (Luo and Du, 2015). Small and medium-sized family firms in particular depend on close customer relationships and strong customer loyalty as they often operate in niche markets (De Massis et al., 2018a). Moreover, family firms want to keep their businesses competitive to pass them on to the next generation (Chrisman et al., 2005a; Churchill and Hatten, 1997). Through this long-term orientation, a stronger bond with the customer can be built (De Massis et al., 2018a), which can lead the customers to engage in (open) innovation, for example through active involvement in the innovation process (Lichtenthaler and Lichtenthaler, 2009). The family is also inclined to conduct more customer-oriented CSR to present the family well to the outside world (Astrachan et al., 2018; Stock et al., 2020).

As family firms are often strongly embedded in the region and rarely relocate (Basco, 2015; Uhlaner et al., 2012), community-oriented CSR activities are important to them. Family firms use community-oriented CSR measures to be recognized as trustworthy business partners (El Ghoul et al., 2016), which also increases the reputation of the firm and the reciprocity between the company and the community (Luo and Du, 2015; Sacconi, 2006). For small and medium-sized family businesses, reputation is especially important. The family often lives in the area where the company is located (Astrachan et al., 2018; Botero et al., 2019). Thus, a strong sense

of familiness and the use of the family-firm-specific resources leads to more CSR being exercised in order to strengthen the reputation of the company and the family in the region (Basco, 2015; De Massis et al., 2018a). In the next section, we extend the model by focusing on the question of how CSR mediates the relationship between familiness and AC.

3. Hypotheses Development

3.1 The Relationship between Familiness and Absorptive Capacity

Family firms are characterized by unique resources that result from the interaction between the family and the business (Daspit et al., 2019; Kellermanns et al., 2012; Minichilli et al., 2010; Weismeier-Sammer et al., 2013). Strong family and generational thinking, which reflects the long-term orientation of the company, is characteristic of familiness (Frank et al., 2017). Consequently, the resources of the family and the company are also used to be able to pass the company on to the next generation. This also includes a good will of the company, or a positive corporate image. Especially if the name of the company matches that of the family (Astrachan et al., 2018). To reach this goal a strong interaction with the environment and important stakeholder can be a success factor. Small and medium-sized family businesses often have longstanding ties to the region and can exhibit a strong interaction with their environment and stakeholders (De Massis et al., 2018a). As a result, family firms are characterized by long-term relationships with external stakeholders (Brinkerink, 2018) and a distinctive and unique external social capital (Pearson et al., 2008). This can positively influence knowledge transfer from outside the company to the inside by building a common language – based on common knowledge base or background characteristics – which is a key factor for knowledge transfer (Lane and Lubatkin, 1998; Volberda et al., 2010) and can thus enhance the potential AC.

Strong involvement of family members also leads to better knowledge integration (Zahra et al., 2007), as the family members can share deep tacit knowledge with the employees to develop new competencies with new external knowledge (Patel and Fiet, 2011). Family firms in

particular take great care to have “a reliable permanent staff” (Frank et al., 2017, p. 728) and “that the family members working in the company have a lively exchange with nonfamily employees” (Frank et al., 2017, p. 728). This lively exchange making knowledge exchange and integration easier (Hotho et al., 2012; Sirmon and Hitt, 2003; Zahra and George, 2002). A pronounced familiness based on family-specific decision premises should therefore positively influence realized AC, which could result in a positive realized AC.

We therefore propose the following hypotheses:

Hypothesis 1: An increase in familiness is positively related to a) potential and b) realized AC.

3.2 The Relationship Between Corporate Social Responsibility and Absorptive Capacity

Corporate social responsibility can have different effects, which are reflected both in the different orientations (customer, community, employees) (Block and Wagner, 2014b; El Akremi et al., 2018; Farooq et al., 2017), and also in the different objectives for which CSR can be used as a strategic management tool. For example, communicating CSR can improve the visibility of the company in the community and for potential customers (Vallaster et al., 2012). The family business invests in and sends (costly) signals in the form of CSR measures, e.g. to underline its value orientation and thus to be a trustworthy partner. Thus, it can increase trustworthiness of the company in the eyes of external stakeholders, such as customers and suppliers (Luo and Du, 2015). Consequently, external stakeholders could be more willing to network and exchange information with companies that conduct CSR measures (Luo and Du, 2015). This exchange of information is an important source for potential AC. Internal, employee-oriented CSR activities in particular lead to a strong bond between employees and the company, resulting in lower employee turnover, increased retention of knowledge in the company, and reciprocal behavior (Luo and Du, 2015; Sacconi, 2006) result in dynamic capabilities and especially realized AC.

3.2.1 Employee-Oriented Corporate Social Responsibility Activity and Absorptive Capacity

Employees connect the company with external stakeholders, especially when they work in sales (Cepeda-Carrion et al., 2012; Hotho et al., 2012). Employees are needed to open up the company, identify relevant knowledge, collect information, and establish and maintain networks and contacts. New knowledge can also be identified through continuous knowledge-building and a corresponding human and social capital structure in the family firm (Pennings et al., 1998). Such structures are promoted and expanded due to the long-term orientation of family firms, as well as through employee-oriented CSR activities (Cabrera-Suárez et al., 2001; Del Giudice, 2011; Turker, 2009).

Employees in SMEs often work across functions and are therefore a central factor in the exchange of knowledge (De Massis et al., 2018a). Employee-oriented CSR strengthens the relationship between the company and its employees, which facilitates access to external knowledge and ideas (Luo and Du, 2015). Furthermore, employees are needed to analyze and process the new knowledge and decide what knowledge is relevant for the family firm. To do this, company-specific human capital is required, which is usually provided by employees with many years of experience (Becker et al., 1990; Lehmann et al., 2019). We propose that employees are an important source of potential AC and that CSR measures with the focus of employees as a stakeholder group therefore have a positive impact.

Moreover, it can be argued that employee-oriented CSR activities positively influence realized AC. The transformation of knowledge requires employees who build and establish routines (Jensen et al., 2010; King, 2009). Therefore, low staff turnover, which can be supported by employee-oriented CSR activities, has a positive effect (Ali et al., 2017; De Massis et al., 2018a; Werner et al., 2018). Family firms in particular have a special working environment that positively affects employees and builds loyalty to the company (Combs et al., 2018; Habbershon and Williams, 1999). Furthermore, exploitation of knowledge is achieved through

the implementation of new routines and processes, that can also be actively exploited through interdepartmental cooperation (Chassang, 2010). To achieve exploitation, employees must exchange information and actively share knowledge, which can be supported by flat hierarchies, particularly in small and medium-sized family businesses (De Massis et al., 2018a). Superior employee relationships can also positively affect knowledge exchange (De Massis et al., 2018a). In addition, employee-oriented CSR activities can promote the wellbeing and the work-life balance of employees (El Akremi et al., 2018). This subsequently leading to a stronger combination of existing knowledge and the newly acquired and assimilated knowledge (Zahra and George, 2002). This in turn positively enhances dynamic capability.

Overall, through employee-oriented CSR activities, employees are better networked, share knowledge better, and can therefore be better integrated into the company. Accordingly, we derive the following hypotheses:

H2: An increase in employee-oriented CSR activities is positively related to (a) potential and (b) realized AC.

3.2.2 Customer-Oriented Corporate Social Responsibility Activity and Absorptive Capacity

Likewise, customer-oriented CSR activities, such as checking the quality of products or providing help and advice to customers (El Akremi et al., 2018), also expand and develop networks. Through customer-oriented CSR measures trustworthiness is signaled (Martínez and Rodríguez del Bosque, 2013), and the relationship with the customer is strengthened. Customers can reciprocate a firm's CSR through the exchange of knowledge, for example, which the firm needs to build capabilities (Barros et al., 2016). Family firms' long-term orientation can facilitate the development of long-term trust-based relationships with external stakeholders; these relationships increase the transfer of knowledge (Brinkerink, 2018). Through customer-oriented CSR activities, more trust in the company can be built, which in

turn promotes the exchange of knowledge between the customer and the company and thus potential AC.

Realized AC – or more specifically, transformation of knowledge – is facilitated by the flow of information, which can also improve the implementation of new products within the company (Moilanen et al., 2014). Increased trust in the company through customer-oriented CSR activities leads customers to be willing to make the company aware that market requirements have changed, for example. The input of customers can be recorded and taken into account by the firm, which can also lead to (open) innovations, for example (Lichtenthaler and Lichtenthaler, 2009). Thus, customers can be involved in the innovation process (Casprini et al., 2017). Exploitation of knowledge can also be promoted through better and more confidential dealings with customers, which is encouraged by CSR activities. (Open) innovations are promoted, for example, through collaboration or with a clear focus on customer benefit, so that both social and economic benefits are included, optimizing the value proposition (Casprini et al., 2017; El Akremi et al., 2018; Feranita et al., 2017). The resulting strengthened relationship with customers can change how customer complaints are evaluated and used to implement and exploit knowledge (Piller et al., 2011) to create new products and competitive advantages. Therefore, we posit that customer-oriented CSR activities positively influence potential and realized AC:

H3: An increase in customer-oriented CSR activities is positively related to (a) potential and (b) realized AC.

3.2.3 Community-Oriented Corporate Social Responsibility and Absorptive Capacity

In general, CSR can increase the visibility of the company in the community, for example, by promoting agencies like UNICEF, non-governmental organizations, or the well-being of the regional community through support in schools or sports events (El Akremi et al., 2018). In this context, corporate donations to charities can be seen as a dynamic capability – competitive

advantages arise from important stakeholder relationships within the community (Cantrell et al., 2015). The community embeddedness of family firms can help them to overcome their resource constraints (De Massis et al., 2018a) and respond to changing environmental conditions (Cantrell et al., 2015). Therefore, network activities and network maintenance are particularly noteworthy. Expanding and strengthening the relationship between the family firm and the region (Basco, 2015), including relationships with universities and local government, can have a positive impact (De Massis et al., 2018a). These relationships can be promoted through CSR activities aimed at the community that address potentially relevant stakeholders (Cruz et al., 2014). Thus, embeddedness is strengthened, the company can be more open, information can flow, and knowledge can be exchanged and absorbed. This positively influences the acquisition of external knowledge and potential AC. However, while customers can be actively involved in the innovation process and thus influence realized AC, there seems to be less potential for community-oriented CSR activities to result in realized AC. Therefore, we derive the following hypothesis:

H4: An increase in community-oriented CSR activities is positively related potential AC.

3.3 The Mediating Role of Corporate Social Responsibility on the Relationship between Familiness and Absorptive Capacity

Family Family firms have the advantage of possessing idiosyncratic and potentially valuable resources that are inimitable by other companies (Habbershon et al., 2003; Habbershon and Williams, 1999). These resources arise from a manageable set of family-specific decision premises determining family member influence on the family business and can be sources of competitive advantage (Frank et al., 2017). Consequently, these potential resources of family businesses, namely familiness, must be utilized in a way that positively affects the firm's dynamic capability to explore external knowledge (Barros et al., 2016). By building long-term commitment, companies can create strong internal and external networks. This social capital,

which is usually built and transferred over generations, can encourage knowledge transfer (Nooteboom, 2000; Sirmon and Hitt, 2003). However, trust from and to the company is an important factor that influences the transfer of knowledge (Abrams et al., 2003; Chowdhury, 2005; Gausdal, 2015). Therefore, the stakeholders involved in the established network and long-term relationships must be made aware that the family firm is still trustworthy and that it is worthwhile to interact and exchange knowledge with it (Gausdal, 2015; Memili and Dibrell, 2019). Corporate social responsibility activities may help to activate and use familiness through increasing reputation and thereby signaling trustworthiness (Forcadell et al., 2021; Sageder et al., 2018) – such activities can uniformly communicate the company values inside and outside the organization (Vallaster et al., 2012; Zerbini, 2017) and open up the company to knowledge transfer. This can result in (open) innovation activities (Feranita et al., 2017; MacGregor and Fontrodona, 2008). We propose that firms invest in CSR to signal their (otherwise for the stakeholders unobservable) decision premises, which are manifested in the different dimensions of familiness to incentivize external and internal stakeholders to share their knowledge with the company. There are benefits of CSR activities in areas that overlap with the distinctive features of family firms, such as image and reputation, networks, stakeholders, and employees (Sageder et al., 2018; Zellweger et al., 2013). Corporate social responsibility activities in the different fields legitimize firms in the marketplace and build their reputation as responsible companies (El Ghoul et al., 2016; Khan et al., 2013; Zamir and Saeed, 2020).

One aspect of familiness is the family-employee bond decision premises, which is characterized by “lively exchange,” “reliable permanent staff,” “secure jobs,” or “that family members working in the company are confidants for the employees” (Frank et al., 2017, p. 728). Family-employee bond decision premises can promote employee trust and commitment to the company, which can also positively affect knowledge transfer and the development of capabilities and learning processes (Abrams et al., 2003; Barros et al., 2016; Habbershon and Williams, 1999; Pearson et al., 2008). As a matter of course, the factors influencing family

member's decision-making is no active signal and employees may not be able to perceive them as such. Through CSR activities, however, the intentions resulting from familiness will become more visible. Thus, we propose that employee-oriented CSR activities transmit positive signals both internally and indirectly to the outside world, leading to greater corporate visibility (Smidts et al., 2001; Zerbini, 2017). The activities convey family values to employees, which can better be absorbed by them, building trust and identity with the company (Marques et al., 2014; Smidts et al., 2001).

However, the implementation of CSR measures requires an active management decision and resources. The resources of the family business, which are reflected in the family-employee bond, can be harnessed by CSR, which can be used as a strategic management tool, which positively influences AC. In order for these signals to be credible, they must be costly and difficult to obtain (Connelly et al., 2011; Spence, 1973). Family businesses with high familiness can achieve them more cost-effectively. Familiness involves a high level of integration of the family in the company and a high level of interaction with its employees, which builds a family-like mutual trust, also through mostly long-term interaction (Frank et al., 2017). Through this, CSR conveys signals to employees in a more credible way than when family businesses have low familiness and less interaction with employees (Frank et al., 2017). For example, in firms with very low familiness important family and non-financial objectives, which imply a long-term temporal approach, play a minor role. In times of crisis, the fluctuation rates of the workforce in these firms will be higher, whereas family firms tend to reduce their new hires instead of increasing the number of layoffs (Bassanini et al., 2013; Werner et al., 2018). Consequently, firms with very low familiness that try to signal a special family-employee bond via employee CSR schemes have a higher risk of losing their reputation in times of crisis than their counterparts characterized by high levels of familiness. Employee-oriented CSR activities, which use resources from the owner family and the family business, improve the work-life balance and strengthen the bond and motivation of employees (Laguir et al., 2016),

strengthening the employee relationship (De Massis et al., 2018a) and promoting innovative behavior (Laguir et al., 2016). In addition, CSR activities build trust (Forcadell et al., 2021) and strengthen the employee commitment to the company (Turker, 2009). This can result in better interaction between the family and employees, which can lead to a spread of tacit knowledge, whereby relevant knowledge can be better recognized and assimilated, leading to an improved potential AC. Equally, the improvement of internal communication leads to a better integration of external and internal knowledge (Zahra et al., 2007), which also can improve innovative behavior and hence dynamic capability (Cohen and Levinthal, 1990; Dasgupta et al., 2019; Zahra and George, 2002). The values and goals of the company (and the owner family) are communicated and are thus more transparent, which means that these values and goals can be better followed and realized when transforming and using knowledge (Nooteboom, 2000). This can increase realized AC.

As a result, employee-oriented CSR activities bring the family and non-family members closer, which positively affects the external and internal flow of knowledge. We therefore assume that the effect between familiness and potential and realized AC is mediated by employee-oriented CSR activities:

H5: Employee-oriented CSR activities positively mediate the relationship between familiness and the a) potential and b) realized AC of family firms.

Family businesses have a strong social capital and long-term relationships with external stakeholders (Brinkerink, 2018; Pearson et al., 2008), which have usually been built and transferred over several generations (Sirmon and Hitt, 2003). These networks need to be continually reestablished, strengthened and expanded so that the company remains visible and a basis of trust is maintained, facilitating interactions, knowledge transfer, and the development of dynamic capabilities (Abrams et al., 2003; Cohen and Levinthal, 1990; Zahra and George, 2002). Resources must be invested to increase this visibility. Customer-oriented CSR activities, which use the resources of the family and the family business, act as a positive signal and

increase the company's external visibility (Zerbini, 2017). Being a "family firm," reflected through the overlap of the family name with the company name or through "the family [giving] the face to the company" (Frank et al., 2017), can be perceived by consumers as a positive and unique attribute, which contributes to a positive perception (Zellweger et al., 2010). This signal is harder to achieve for family businesses with lower familiness, as they have to spend more on this due to the family's lower integration and attachment to the business (Bergh et al., 2014; Frank et al., 2017). These attributes promote the trustworthiness and identity of the company in the eyes of customers; these factors are basic requirements and drivers for the exchange of knowledge (Abrams et al., 2003; Botero et al., 2019; Gausdal, 2015; Turker, 2009; Zellweger et al., 2012a). As a result, consumers behave reciprocally and positively toward the company (Martínez and Rodríguez del Bosque, 2013), which opens up the company to them. Customer-oriented CSR measures can also make the customer feel valued as their needs are met, for example through good product quality, good advice, or the development of innovations for the customer (El Akremi et al., 2018). This may also lead to customers being willing to open up to the company and share their ideas and knowledge with the company (Bhupendra and Sangle, 2017; Casprini et al., 2017), which positively affects potential AC. It may also lead customers to participate in product development (e.g., through open innovation) through more precise and recurring information (Casprini et al., 2017), which positively affects realized AC.

Based on these arguments, we assume that stronger familiness and customer-oriented CSR activities increase the trustworthiness of the company and consequently the willingness of customers to act reciprocally and share knowledge with the company. Therefore, we propose the following hypothesis:

H6: Customer-oriented CSR activities positively mediate the relationship between familiness and the a) potential and b) realized AC of family firms.

Familiness also means that the family is the face of the company and is actively involved in the community and region (Frank et al., 2017). Active involvement can positively influence the

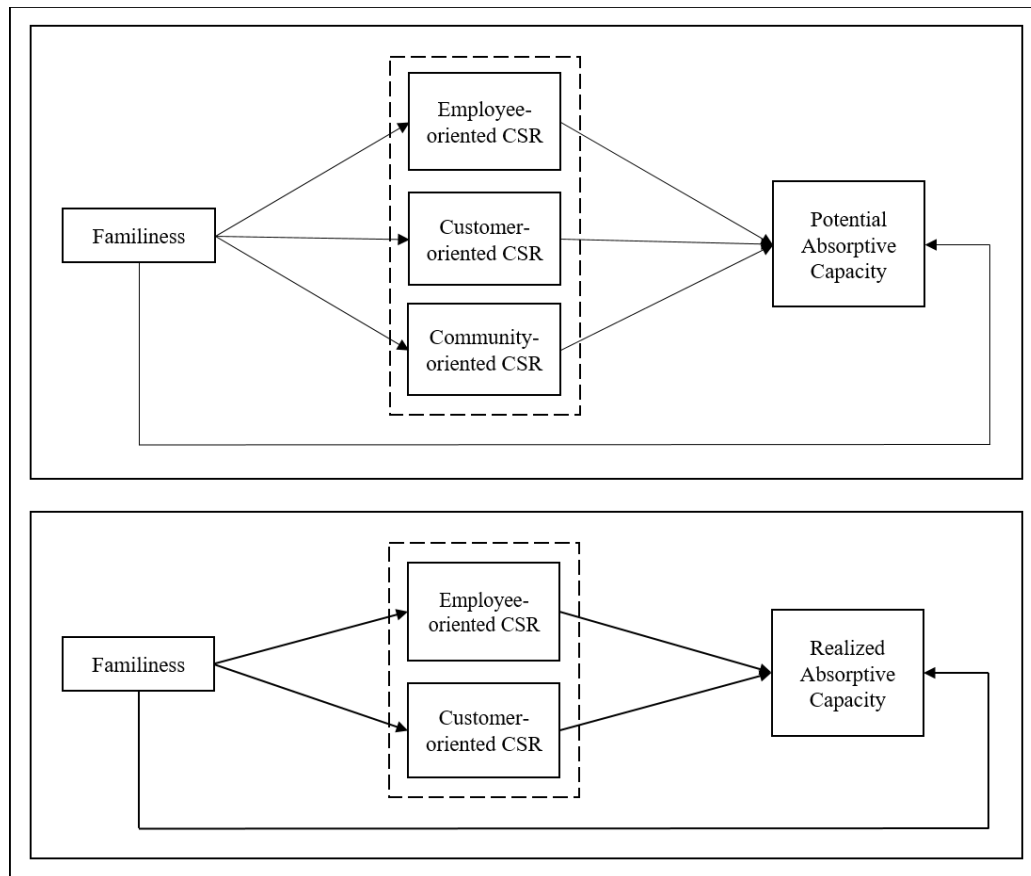
transfer of knowledge by demonstrating the company's trustworthiness, and activities can strengthen and the existing organizational and family social capital, for example. However, for that, these measures must be actively visible to the stakeholders. The altruistic behavior of the family significantly overlaps with CSR activities that relate to the community (Cantrell et al., 2015; El Akremi et al., 2018). For example, the resources of the family and the family business are actively used to engage in social activities and support social projects in the community. If community-oriented CSR measures are understood as a strategic management tool, they can contribute to the region or regions in which the company is active and thereby increase the company's visibility (Cantrell et al., 2015; De Massis et al., 2018a). Family businesses with a weak familiness need more resources to achieve these signals, because the connection with the region and the natural exchange anchored in familiness must first be formed. Due to the higher costs, these signals cannot be maintained in the long term and thus achieve only low credibility (Connelly et al., 2011; Frank et al., 2017; Spence, 1973). Through visibility and increased trust and embeddedness, it can be assumed that information and knowledge also flow better, facilitating the development of new competencies to respond to changing environmental conditions. So, if family resources are to be used to contribute to society, CSR measures as a strategic management tool are particularly suitable for making the company externally visible and recognizable, creating added value for AC.

Thus, we assume that community-oriented CSR activities act as a mediator between familiness and potential AC. We therefore propose the following hypotheses:

H7: Community-oriented CSR activities positively mediate the relationship between familiness and potential AC of family firms.

In general, we argue that the relationship between familiness and AC is mediated by CSR. To use family-firm-specific resources (i.e. familiness) and develop competitiveness through AC, CSR is used to signal among other things trustworthiness and open up the boundaries of the family firm (Zerbini, 2017). The theorized relationships are summarized in Figure 1.

Figure D-1: Conceptual model



4. Methods

4.1 Data Collection and Sample

Our empirical analysis is based on data that was collected by an online survey, surveying 73,168 German SMEs (with a 1–500 staff headcount according to the EU commission) between January 2019 and March 2019, of which 2,310 companies replied (3.16% response rate). All firms were randomly selected using the German database AIDA-Bureau van Dijk (full version). Of the 2,309 responses that were returned, several responses were eliminated from consideration in the present study: 1,782 surveys were incomplete and consequently eliminated; as we focus on SMEs, 22 cases were excluded from consideration due to having more than 500 employees; since the present study examines family firms, responses from 177 non-family firms

were excluded. All exclusions resulted in 327 usable responses from targeted owners and managers of SME family firms. Before data collection, we ensured the suitability of the questionnaire by employing well-tested scales and consulting independent experts in survey design and methodology. As a result, the questionnaire comprised wide-ranging questions about the company's current situation and its structure, family involvement, and employees. Since the survey was conducted in Germany, questions were first translated into German and then back into English for this article.

4.2 Measures

4.2.1 Dependent Variables

Absorptive capacity is defined as a set of organizational routines and processes, by which firms acquire, assimilate, transform, and exploit external knowledge to produce a dynamic capability (Zahra and George, 2002). Based on this definition, we build on an established scale (Jansen et al., 2005) that was adapted by Fernhaber and Patel (2012). This measure consists of two sub-scales capturing potential AC (nine items) and realized AC (12 items). All elements of the sub-scales were measured on a five-point Likert-type response scale ranked from 1 – “disagree strongly” to 5 – “agree strongly.” The standardized loadings for the overall AC measure (i.e., potential and realized AC) ranged from 0.26 to 0.70, Cronbach's alpha was 0.87, and the scale reliability was $p = 0.87$. To obtain the score for the two sub-scales of potential and realized AC, the respective items were averaged. Principal-component factor analysis showed that the nine items of potential AC loaded on one component, with factor loadings of 0.36 or higher – clearly above the suggested 0.30 as the minimum criterion for an item (Costello and Osborne, 2005); Cronbach's alpha was 0.75. The 12 items of realized AC also loaded on one component, with factor loadings of 0.35 or higher; Cronbach's alpha was 0.81. Moreover, confirmatory factor analysis showed that all items loaded significantly and strongly on each of the two sub-dimensions and were associated with reasonable to good measures model fit (potential AC: CFI

= 0.87, RMSEA = 0.086, p-reliability = 0.87; realized AC: CFI = 0.85, RMSEA = 0.088, p-reliability = 0.81.) Although the standardized loading on the overall AC measure was slightly below the minimum criterion of 0.30 in one item (0.26), the scale has been extensively tested and applied in quantitative business research. Moreover, confirmatory factor analysis (CFI = 0.79, RMSEA = 0.08, p-reliability = 0.87) suggested a good reliability and fit for this study's purpose.

4.2.2 Independent Variable

One of the central variables in our model is familiness. We measured familiness using the established FIFS scale developed by Frank et al. (2017). This construct encompasses dimensions of ownership, management and control, performance level of active family members, the exchange of information between active family members, transgenerational orientation, family-employee bonding, and the identity of the family business. The scale consists of 20 items. These were also measured on a five-point Likert-type response scale ranked from 1 – “disagree strongly” to 5 – “agree strongly.” To obtain the score, the respective items were averaged. All indicators of familiness had a substantial loading that was significant at the 0.001 level. The standardized loadings ranged from 0.39 to 0.69. Cronbach's alpha was 0.89. The scale reliability was $p = 0.88$.

4.2.3 Mediator Variables

The mediator variables of the models encompass three specific dimensions of CSR. These were measured by drawing on an established scale developed by El Akremi et al. (2018). Specifically, we drew on community-oriented CSR (seven items), employee-oriented CSR (seven items), and customer-oriented CSR (five items) to generate our three mediator variables (see also Farooq et al., 2017). The seven items of community-oriented CSR include financial measures related to humanitarian projects (e.g., in developing countries), causes and charities, and support for the population and residents in the event of natural disasters or accidents. The

seven items of employee-oriented CSR examine the well-being, working conditions, health and safety, and aspects of discrimination and support of the company for its employees. The five elements of customer-oriented CSR focus on the company's responsibility concerning the quality of its products and the company's customer relations. All items were measured on a five-point Likert-type response scale ranked from 1 – “disagree strongly” to 5 – “agree strongly.” To obtain a score for each of the three measures, the items of the three scales were averaged.

Principal-component factor analysis showed that the seven items of employee-oriented CSR loaded on one component only, with factor loadings of 0.629 or higher. Cronbach's alpha was 0.82. The five items of customer-oriented CSR loaded also on one component only, with factor loadings of 0.519 or higher; Cronbach's alpha was 0.72. Last, but not least, the seven items of community-oriented CSR also loaded on one component only, with factor loadings of 0.665 or higher; Cronbach's alpha was 0.86. Moreover, confirmatory factor analysis showed that all items loaded significantly and strongly on each of the sub-dimensions and were also associated with reasonable to good measures of model fit (community-oriented CSR: CFI = 0.89, RMSEA = 0.15, p-reliability = 0.86; employee-oriented CSR: CFI = 0.93, RMSEA = 0.11, p-reliability = 0.82; customer-oriented CSR: CFI = 0.99, RMSEA = 0.03, p-reliability = 0.69).

A description of the items of the latent constructs used in this study is reported in Appendix 2-4.

4.2.4 Control Variables

To rule out alternative explanations and to test the stated hypotheses, the present study included a set of control variables which may affect our dependent, independent and mediator variables: These are industry sector (manufacturing (ref.), construction, trade services, crafts, other), firm's size (number of employees), firm's age (years), past innovation output (i.e. if the company had introduced new or significantly improved products to the market (i.e. product

innovations) and/ or has implemented process innovations in the past three years), venture performance, generation (first generation firm (ref.), second generation firm, third and more generation firm) and a dummy variable for ownership (with 0 meaning that the share of equity capital owned by the family is less than 50% and 1 meaning 50% and more). Please note that we included two variables to measure current and past performance: First, we measured current venture performance by asking the respondents to assess the current business situation of the company based on the following characteristics: sales, profit, cash flows on a scale from “very bad = 1” to “very good = 5”. Based on the answers, we generated a variable capturing these performance dimensions in one variable. Second, we added employment growth in the last three years (number of employees at the interview time point divided by number of employees three years before) to control for the effect of past performance. Moreover, we added two control variables capturing the effect of co-operation with universities and other firms with respect to innovation project as proxies for innovation activities and two controls reflect the education and training levels of employees. Here, we expect that those companies that are not able to fill their vacancies for specialists because the applicants had no suitable training or the applicants had too little relevant work experience are those companies that rely on high levels of experience and training of their staff. Based on prior literature, we also expect formalization and bureaucratization to affect the company’s ability to coordinate. Based on these considerations, we added the variables bureaucratization (two items) and cross-functional interfaces in decision-making (one item) on the organizational level, which the respondents are asked to assess on a scale from “agree less =1” to “agree fully =5”. Specifically, the variables hierarchy (“This company is strongly hierarchically organized”), regulations (“This company has bureaucratic structures with extensive formal regulations”), and participation (“In this company, the employees are fully involved in decisions”) are included. Since it can be assumed that “work-force development” can have an influence on AC, we also included this control variable in the analysis of the robustness check (for details, see appendix 2). Please note that

we do not include this item in the base models as the family-employee bond subscale already contains this measure, which we removed to test for endogeneity issues.

5. Results

Table 1 and Appendix 1 show the descriptive statistics of the variables used in the empirical analysis and the correlation matrix, respectively. The responding family firms are on average 54.4 years old and have hired around 70 employees. In addition, the majority of the firms are still in their first (i.e. founding) generation (36%) and established in the service sector (32%). Moreover, we conducted a Harman's one-factor analysis and calculated loading of all variables used in the regression analysis. In our study, six factors emerged with eigenvalue greater than 1, explaining 64% of variance with the largest factor accounting for 23%, which is less than the suggested 50% threshold.

VIF supports the rejection of collinearity issues among the variables. In fact, VIF range from 1.03 to 2.71, well below the threshold (3) accepted in the literature (Hair et al., 1998). The regression results are described in Table 2. For each of the two measures of absorptive capacity (i.e. potential and realized AC) and for each of our three measures of CSR (i.e. employee-oriented CSR, customer-oriented CSR and community-oriented CSR) we used OLS regression models with robust standard errors as the principal method to test our hypotheses. We find that the effect of familiness is significant on both measures of AC (Model 1: $\beta = 0.1852$; p -value = 0.000, Model 2: $\beta = 0.1566$; p -value = 0.000). This seems to support - at the first sight - H1a and H1b. Moreover, these zero-order effects of our independent variable on the dependent variables can be considered as a first indication that there is an "effect to be mediated" (Collins et al., 1998; Judd and Kenny, 1981; Kenny et al., 1998; Preacher and Hayes, 2004). In Models 5–7 we run regressions on the three measures of CSR – our mediator variables. In detail, the

Table D-1: Correlation matrix

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
Potential AC	1.00																												
Realized AC	0.66	1.00																											
Familiness	0.29	0.29	1.00																										
Employee CSR	0.34	0.40	0.34	1.00																									
Customer CSR	0.43	0.50	0.30	0.34	1.00																								
Community CSR	0.27	0.25	0.29	0.88	0.25	1.00																							
Firm's Size	0.20	0.11	0.07	0.18	0.14	0.16	1.00																						
Manufacturing	-0.02	0.05	0.02	0.09	0.15	0.07	0.10	1.00																					
Construction	-0.05	-0.07	0.03	0.01	-0.11	-0.00	0.15	-0.22	1.00																				
Trade	0.06	0.07	0.04	-0.02	0.05	-0.05	-0.12	-0.21	-0.15	1.00																			
Services	0.13	0.05	-0.03	0.05	0.01	0.08	-0.02	-0.39	-0.27	-0.26	1.00																		
Crafts	-0.06	-0.13	-0.02	-0.07	-0.02	-0.06	-0.13	-0.21	-0.14	-0.14	-0.25	1.00																	
Other	-0.14	-0.01	-0.05	-0.15	-0.18	-0.13	-0.02	-0.14	-0.10	-0.10	-0.18	-0.09	1.00																
Firm's Age	0.02	0.05	0.16	0.04	0.05	0.03	0.32	0.16	0.16	0.06	-0.27	-0.02	-0.05	1.00															
Innovation	0.27	0.30	0.12	0.29	0.27	0.28	0.18	0.19	-0.20	-0.01	0.00	-0.04	0.00	0.10	1.00														
Performance	0.27	0.29	0.21	0.21	0.09	0.18	0.17	0.02	0.16	-0.12	-0.02	-0.01	-0.03	0.07	0.12	1.00													
1st Generation	-0.00	0.03	-0.15	-0.04	-0.04	-0.05	-0.23	-0.14	-0.12	-0.02	0.25	-0.06	0.05	-0.53	-0.03	-0.03	1.00												
2nd Generation	-0.00	-0.02	-0.02	0.01	0.07	0.02	-0.02	0.03	-0.03	-0.10	-0.01	0.11	-0.02	-0.09	0.02	0.01	-0.54	1.00											
3rd+ Gen.	0.01	-0.02	0.18	0.04	-0.03	0.03	0.25	0.11	0.16	0.12	-0.25	-0.06	-0.03	0.66	0.01	0.03	-0.49	-0.47	1.00										
Ownership	0.11	0.08	0.15	-0.03	0.07	-0.03	0.02	-0.02	0.06	-0.01	0.08	-0.08	-0.06	0.07	0.02	0.04	-0.08	0.02	0.06	1.00									
Univ. coop	0.13	0.23	0.04	0.17	0.19	0.15	0.34	0.15	-0.00	-0.10	-0.04	-0.03	-0.02	0.15	0.20	0.11	-0.08	-0.07	0.16	0.00	1.00								
Firm coop	0.22	0.27	0.14	0.26	0.29	0.22	0.18	0.11	-0.09	0.01	0.05	-0.10	-0.04	0.08	0.38	0.07	-0.03	-0.01	0.04	0.11	0.39	1.00							
Training	0.08	0.03	0.03	0.06	0.06	-0.02	0.04	-0.10	0.01	-0.11	0.15	0.07	-0.09	-0.08	0.03	-0.00	-0.04	0.10	-0.06	-0.05	-0.07	0.07	1.00						
Education	0.05	0.02	0.09	0.05	-0.00	0.02	-0.02	-0.09	-0.03	-0.04	0.15	0.04	-0.06	-0.06	0.04	0.00	-0.08	0.12	-0.05	0.02	-0.07	0.07	0.64	1.00					
Employment gr.	-0.02	0.06	0.06	0.00	0.11	-0.01	-0.00	0.03	0.08	-0.04	-0.05	-0.05	0.05	0.00	0.06	-0.03	-0.00	0.01	-0.01	-0.05	-0.02	0.12	0.11	0.07	1.00				
Hierarchy	-0.06	-0.10	0.09	-0.10	-0.07	-0.06	-0.05	-0.01	0.13	-0.04	-0.09	0.08	-0.05	0.05	-0.10	-0.08	-0.04	-0.00	0.05	0.07	-0.07	-0.06	-0.02	-0.02	-0.07	1.00			
Regulations	0.01	0.03	0.03	0.12	0.01	0.07	-0.09	-0.06	0.06	0.07	0.02	-0.02	-0.08	-0.03	-0.09	0.03	0.02	0.03	-0.05	-0.08	-0.05	0.04	0.01	0.00	-0.05	0.21	1.00		
Participation	0.25	0.39	0.17	0.24	0.18	0.17	0.11	0.05	-0.02	-0.01	0.02	-0.09	0.04	0.03	0.23	0.17	0.01	-0.05	0.05	0.06	0.14	0.18	0.03	0.02	0.07	-0.23	0.11	1.00	
Work-force dev.	0.28	0.35	0.26	0.26	0.24	0.17	0.10	-0.01	0.06	-0.06	0.08	-0.04	-0.10	0.02	0.11	0.26	0.03	0.01	-0.04	0.11	0.10	0.15	0.05	0.09	0.05	-0.01	-0.01	0.15	1.00

results provide empirical evidence that familiness is positive and significant on all three CSR measures (Model 5: $\beta = 0.3442$; p -value = 0.000, Model 6: $\beta = 0.1885$; p -value = 0.000, Model 7: $\beta = 0.3957$; p -value = 0.000). Thus, we can confirm the results documented in Stock et al. (2020) who based their empirical analysis on data of privately held companies located in North Rhine-Westphalia collected between November 2017 and February 2018 with our data set and analysis. In Models 3 we find that customer-orientated CSR ($\beta = 0.3854$; p -value = 0.000) significantly positively effects potential AC, thus confirming H3a, while community CSR ($\beta = -0.037$; p -value = 0.535) and employee-orientated CSR ($\beta = 0.1396$; p -value = 0.101) has no significant impact on potential AC, thus rejecting H2a and H4. In Models 4 we find that employee-orientated CSR ($\beta = 0.1276$; p -value = 0.001) and customer-orientated CSR ($\beta = 0.4446$; p -value = 0.000) significantly positively effects realized AC, thus confirming H2b and H3b.

Following the four-step procedure to assess the potential mediation by these three CSR sub-dimensions (Baron and Kenny, 1986; MacKinnon et al., 2007), the results from Model 8 illustrate that customer-orientated CSR partially mediates the relationship between familiness and potential AC: First, as mentioned above, a significant relationship between familiness and customer-orientated CSR is evident from the results in Model 6. Second, the results for Model 1 show a significant relationship between familiness and potential AC. Third, a significant relationship exists between customer-orientated CSR and potential AC while controlling for familiness as shown in the results of Model 8 ($\beta = 0.3570$; p -value = 0.000) which supports H6a. Fourth, the familiness coefficient in Model 8 is significant ($\beta = 0.0908$; p -value = 0.082), indicating a partial mediation. This also result leads us to ultimately confirm H1a. Regarding the mediation effects, the results from the bootstrap test (MacKinnon et al., 2002) show that the mediation effect is significantly different from zero (Table 3). The statistical significance was tested with 5,000 bootstrap samples on a 95% bias-corrected confidence interval level.

Table D-2: Regression results

	1	2	3	4	5	6	7	8	9
	Potential AC	Realized AC	Potential AC	Realized AC	Employee CSR	Customer CSR	Community CSR	Potential AC	Realized AC
<i>Independent variable:</i>									
Familiness	0.1852*** (0.0526)	0.1566*** (0.0467)			0.3482*** (0.0725)	0.1885*** (0.0388)	0.3957*** (0.0904)	0.0908* (0.0520)	0.0328 (0.0431)
<i>Mediator variables:</i>									
Employee CSR			0.1396 (0.0848)	0.1276*** (0.0387)				0.1216 (0.0862)	0.1205*** (0.0395)
Customer CSR			0.3854*** (0.0659)	0.4446*** (0.0599)				0.3570*** (0.0686)	0.4344*** (0.0622)
Community CSR			-0.0370 (0.0597)					-0.0385 (0.0602)	
<i>Controls:</i>									
Firm's size	0.0008** (0.0003)	-0.0002 (0.0003)	0.0006* (0.0003)	-0.0004* (0.0002)	0.0007 (0.0004)	0.0004* (0.0002)	0.0009 (0.0007)	0.0007* (0.0003)	-0.0004* (0.0002)
Firm's age	-0.0006 (0.0009)	-0.0006 (0.0009)	-0.0006 (0.0009)	0.0012 (0.0008)	-0.0014 (0.0014)	0.0003 (0.0007)	-0.0024 (0.0020)	-0.0006 (0.0009)	0.0012 (0.0008)
Innovation	0.1735** (0.0690)	0.1419** (0.0624)	0.1144* (0.0647)	0.0625 (0.0559)	0.2792*** (0.0881)	0.1025* (0.0561)	0.3870*** (0.1161)	0.1179* (0.0644)	0.0637 (0.0559)
Performance	0.1304*** (0.0393)	0.1425*** (0.0341)	0.1362*** (0.0376)	0.1387*** (0.0307)	0.0754 (0.0505)	-0.0031 (0.0328)	0.0791 (0.0674)	0.1253*** (0.0380)	0.1348*** (0.0308)
2nd Generation ²	-0.0096 (0.0681)	-0.0511 (0.0648)	-0.0108 (0.0642)	-0.0605 (0.0607)	0.0237 (0.0936)	0.0193 (0.0565)	0.0902 (0.1263)	-0.0159 (0.0638)	-0.0624 (0.0602)
3rd+ Generation ²	-0.0512 (0.0913)	-0.1929** (0.0843)	0.0200 (0.0915)	-0.1302 (0.0839)	0.0173 (0.1407)	-0.1305 (0.0833)	0.1128 (0.1855)	-0.0023 (0.0901)	-0.1383* (0.0819)
Ownership	0.0915 (0.1046)	0.0504 (0.1042)	0.1135 (0.0918)	0.0683 (0.0936)	-0.2354** (0.1135)	0.0412 (0.1029)	-0.3239* (0.1750)	0.0929 (0.0950)	0.0609 (0.0948)
University cooperation	0.0422 (0.1167)	0.3088*** (0.0987)	-0.0308 (0.1174)	0.2312*** (0.0888)	0.0998 (0.1600)	0.1401* (0.0754)	0.0581 (0.2468)	-0.0177 (0.1133)	0.2359*** (0.0880)
Firm cooperation	0.0792 (0.0705)	0.0710 (0.0674)	0.0234 (0.0710)	-0.0039 (0.0646)	0.1811* (0.1039)	0.1240** (0.0545)	0.2181 (0.1494)	0.0213 (0.0699)	-0.0047 (0.0644)
Training	0.1068 (0.0987)	0.0721 (0.0859)	0.0462 (0.0952)	0.0171 (0.0774)	0.0405 (0.1166)	0.1079 (0.0813)	-0.2129 (0.1645)	0.0552 (0.0933)	0.0204 (0.0773)
Education	-0.0584 (0.0888)	-0.0376 (0.0787)	0.0048 (0.0850)	0.0233 (0.0715)	-0.0253 (0.1156)	-0.1200 (0.0804)	0.0360 (0.1675)	-0.0111 (0.0845)	0.0176 (0.0723)
Employment growth	-0.0102 (0.0092)	0.0055 (0.0122)	-0.0133 (0.0099)	0.0010 (0.0112)	-0.0154 (0.0100)	0.0156*** (0.0060)	-0.0186 (0.0207)	-0.0146* (0.0088)	0.0006 (0.0107)
Hierarchy	0.0145 (0.0694)	0.0105 (0.0623)	0.0633 (0.0658)	0.0546 (0.0563)	-0.1560* (0.0915)	-0.0421 (0.0535)	-0.1186 (0.1204)	0.0440 (0.0652)	0.0476 (0.0563)
Regulations	-0.0268 (0.1009)	-0.0143 (0.0930)	-0.0681 (0.0930)	-0.0613 (0.0820)	0.2849*** (0.1075)	0.0231 (0.0697)	0.2277 (0.1538)	-0.0609 (0.0955)	-0.0587 (0.0821)
Participation	0.1565** (0.0606)	0.2906*** (0.0557)	0.1359** (0.0582)	0.2576*** (0.0498)	0.1212 (0.0817)	0.0498 (0.0468)	0.0739 (0.1077)	0.1268** (0.0587)	0.2543*** (0.0501)
_cons	2.1167*** (0.2414)	2.2955*** (0.2552)	0.7271** (0.3222)	0.5304* (0.3130)	1.7429*** (0.3377)	3.6593*** (0.2416)	0.8353** (0.4047)	0.6307* (0.3311)	0.4960 (0.3160)
Obs.	327	327	327	327	327	327	327	327	327
R-squared	0.2681	0.3334	0.3344	0.4574	0.2852	0.2554	0.2186	0.3416	0.4584

Robust standard errors are in parenthesis; ¹reference: manufacturing; ²reference: 1st (founder) Generation. For simplicity, we excluded the display of industry dummies.
 *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

A mediation effect is classified as significant in the bootstrap test if zero is not within the respective range of the bootstrapping confidence intervals. The bootstrap estimation results given in Table 3 show that customer-orientated CSR mediates the relationship between familiness and potential AC as zero is not within the respective range of the bootstrapping confidence intervals (LL = 0.033; UL = 0.103), which further supports hypothesis H6a. However, we find no empirical support that community- and employee-orientated CSR mediates the relationship between familiness and potential AC. As the results in Model 8 show, both mediators are not significant while controlling for familiness ($\beta = -0.0385$; p-value = 0.523, $\beta = 0.1216$; p-value = 0.159). In line with these results, the results from the bootstrap test also shows that zero is within the respective range of the bootstrapping confidence interval in both cases, thus rejecting hypotheses H5a and H7.

Table D-3: Bootstrap estimation for mediation effect

Potential Absorptive Capacity	Effect	Bootstrap SE	Lower-level Bootstrap CI	Upper-level Bootstrap CI
CSR_Employee	.042	.032	-.016	.110
CSR_Customer	.067	.018	.033	.103
CSR_Community	-.015	.025	-.068	.033
TOTAL indirect	.116	.027	.063	.170
Realized Absorptive Capacity	Effect	Bootstrap SE	Lower-level Bootstrap CI	Upper-level Bootstrap CI
CSR_Employee	.042	.017	.014	.081
CSR_Customer	.082	.020	.043	.124
TOTAL indirect	.124	.028	.072	.181

The results from Model 9 illustrate that employee-orientated CSR and customer-orientated CSR fully mediate the relationship between familiness and realized AC. First, again, a significant relationship between familiness and employee-orientated CSR and customer-orientated CSR is evident from the results in Model 5 and 6. Second, the results for Model 2 show a significant relationship between familiness and realized AC. Third, a significant relationship exists between employee-orientated and customer-orientated CSR and realized AC, while controlling

for familiness (Model 9: $\beta = 0.1205$; $p\text{-value} = 0.002$, $\beta = 0.4344$; $p\text{-value} = 0.000$) supporting H5b and H6b. Fourth, the familiness coefficient in Model 9 is not significant anymore ($\beta = 0.0328$; $p\text{-value} = 0.447$), indicating a full mediation. This result leads us to reject H1b, ultimately. Moreover, results from the bootstrap test in Table 3 show that all mediation coefficients are all significantly different from zero – strengthening the empirical support for H5b and H6b.

To check the robustness of the results, we conducted several tests: First, to rule out if endogeneity is an issue, we tested if the main results stay robust if we exclude the familiness sub-scale “family-employee bond”. Indeed, it can be argued that the “family-employee bond” subscale and “employee-oriented CSR” subscale may measure the same thing. Empirically, we first checked if both subsets correlate very strongly. Hence, we estimated a Pearson’s correlation coefficient equal to .4048, which indicates a rather moderate correlation. Second, we ran all regression models excluding the “family-employee bond” subscale from the family scale. The results remained mostly robust (for details see appendix 2). However, we did not find proof anymore for a direct relationship between familiness and potential AC so that we conclude that H1a is ultimately only partly confirmed. Also, and based on our theoretical arguments, we are confident that the sub-dimension “family-employee bond” reflects a specific decision premise, which causes specific CSR-activities (here: employee-orientated CSR activities).

Table 4 provides an overview of the hypotheses and their empirical support.

Table D-4: Results of the hypotheses testing

H1a:	<i>An increase in familiness is positively related to potential AC.</i>	(✓)
H1b:	<i>An increase in familiness is positively related to realized AC.</i>	×
H2a:	<i>An increase in employee-oriented CSR activities is positively related to potential AC.</i>	×
H2b:	<i>An increase in employee-oriented CSR activities is positively related to realized AC.</i>	✓
H3a:	<i>An increase in customer-oriented CSR activities is positively related to potential AC.</i>	✓
H3b:	<i>An increase in customer-oriented CSR activities is positively related to realized AC.</i>	✓
H4:	<i>An increase in community-oriented CSR activities is positively related potential AC.</i>	×
H5a:	<i>Employee-oriented CSR activities positively mediate the relationship between familiness and potential AC.</i>	×
H5b:	<i>Employee-oriented CSR activities positively mediate the relationship between familiness and realized AC.</i>	✓
H6a:	<i>Customer-oriented CSR activities positively mediate the relationship between familiness and potential AC.</i>	✓
H6b:	<i>Customer-oriented CSR activities positively mediate the relationship between familiness and realized AC.</i>	✓
H7:	<i>Community-oriented CSR activities positively mediate the relationship between familiness and potential AC.</i>	×

6. Theoretical and Practical Implications

In a “knowledge-based economy” (Melnikas, 2010), factors influencing the exchange and transfer of knowledge are becoming increasingly important for developing dynamic capability and competitiveness (Teece, 2010). In this context, our study provides some interesting findings by concentrating on the antecedents of AC in the family business context. For potential AC, we find that the influence of the family via familiness on potential AC is mediated by the family firm’s customer-orientated CSR actions. Although hypothesized, we do not find any mediation effect with regard to employee- and community-orientated CSR on potential AC. For realized AC, our results show a mediation effect for customer- and employee-oriented CSR. Although hypothesized, we did not find a direct effect for realized AC and our empirical results indicate that the direct effect of familiness on potential AC is only partially confirmed. These findings may be explained by the fact that family businesses benefit strongly from their general positive image among customers and employees. This image emanates from a family business and is expressed through a high level of familiness (Zellweger et al., 2012b). Through CSR, this familiness can be actively signaled and effect customers in particular (Zhang et al., 2020). As employee- and community-oriented CSR do not show the expected mediation effects, we assume that especially for potential AC these CSR measures are not specific enough and too

fuzzy to signal the family specific characteristics. Therefore, we assume that this finding can be attributed to the fact that these two family-induced CSR measures are the key link fully translating and signaling family expectations via decision premises to the stakeholders. CSR activities, which underline the positive and value oriented orientation of family firms, signal trustworthiness and allow stakeholders to receive and understand the decision premises of the family based on familiness. Consequently, we emphasize that investments especially in customer-oriented CSR, but also party in employee-oriented CSR positively affects AC, especially in family businesses, through the activation and use of family-business-specific resources.

Our results also support the assumption that CSR activities in family businesses are also economically worthwhile (Campopiano and De Massis, 2015). Absorptive capacity is an important dynamic capability for innovation (Lichtenthaler and Lichtenthaler, 2009). Through its external and internal orientation, CSR creates trustworthiness and the opportunity to signal and utilize of the unique resources of family businesses (Zerbini, 2017) and following make family firms more attractive for example for collaborative innovation projects.

Our study contributes to the literature on familiness in family businesses (Habbershon and Williams, 1999). Family businesses are heterogeneous, so a mere distinction between family businesses and non-family businesses is insufficient to study family businesses (Chua et al., 2012; Marques et al., 2014). Rather, the heterogeneity must be better understood, which can be achieved through deeper insights into the concept of familiness (Andersén, 2015; Kotlar et al., 2020). Moreover, there are only a few studies that have empirically examined the effect of familiness (measured with the FIFS scale) on family firm outcomes (Weismeier-Sammer et al., 2013). Our results indicate that the unique resources of the family can be leveraged in the context of AC if CSR measures are executed. We therefore assume that CSR is an instrument that conveys harmony with the culture and the values of the family business (Marques et al.,

2014), thereby increasing the trustworthiness needed to generate competitive advantages, for example, through AC.

Our analysis also shows that the relationship between familiness and potential AC is mediated by customer-oriented CSR. With regard to realized AC, we show that customer- and employee-oriented CSR are significant mediators. Thus, our analysis can also make several important contributions to the AC literature. We show that it is important to differentiate between potential and realized AC. Moreover, in a dynamic environment, AC is an important dynamic capability and a basis for companies to act ambidextrously (Rothaermel and Alexandre, 2009). Researchers have identified numerous factors that can influence AC. A conceptual paper by Kotlar and colleagues (2020) has shown that ownership and emotional concerns can influence AC and distinguish between the capability and willingness to absorb external knowledge. With this study, we contribute to the discussions on capability, as well as to those on the ability and willingness paradox in family firms (e.g., Chrisman et al., 2015; Debellis et al., 2020). The capability to utilize and signal family resources by undertaking CSR activities contributes to a firm's capability. Corporate social responsibility can signal trustworthiness and openness for the exchange of knowledge and creates an environment that covers both potential and realized AC (Martínez and Rodríguez del Bosque, 2013). This enables family businesses to be open to the environment and to actively manage this openness while maintaining control.

Our findings extend the current literature on CSR in family businesses. Corporate social responsibility is often considered primarily because of its social, ethical, or environmental dimensions (Faller and zu Knyphausen-Aufseß, 2018; Van Gils et al., 2014; Vazquez, 2018). We add to the emerging body of literature that explores how CSR in specific contexts (i.e., family businesses) can also generate economic benefits as it incentivizes customers and employees to share and provide valuable knowledge resources (Bingham et al., 2011; Cantrell et al., 2015; Farooq et al., 2014). Moreover, we also show that CSR activities are not always

beneficial. While community-oriented CSR has no impact on AC, CSR activities directed at customers and employees are beneficial to the firm's knowledge base. The literature on family businesses and the familiness scale emphasizes the importance of the embeddedness and local engagement of family businesses (Basco, 2015; Frank et al., 2017; Habbershon et al., 2003; Pearson et al., 2008). However, we cannot prove any effect, at least concerning AC. Nevertheless, it could be that community-oriented CSR has an indirect effect, since engagement in the community would also indirectly affect customers or employees. In addition, CSR activities in the community can positively affect the congruence of the values of family businesses. We assume that value congruence has another effect. In this study, we argue the signaling effect of CSR measures. Trustworthy signals are sent if they are measures that are integrated into the corporate strategy, are thus implemented in the long term, and also serve the purpose of the company (Panwar et al., 2014). The corporate strategy is often also linked to the family strategy (Williams et al., 2018). If these measures fail, or if partners interpret these measures as greenwashing, this would have a strong negative impact on the family firm and the family members. In particular, in family businesses, in which the name of the business and the family are the same, the detection of greenwashing negatively affects the business and reputation of the family (Astrachan et al., 2018). In other words, the loss of image and reputation, particularly in the case of family-owned SMEs, increases the pressure not to be suspected of greenwashing, as there would be a lack of resources to compensate for this loss of image (Astrachan et al., 2018; Du, 2015b; Kim et al., 2017).

Finally, our study also has important practical implications. Our results show that investments in CSR measures can be worthwhile for family businesses, for example, to promote the AC of external knowledge. This offers a new perspective on CSR as a strategic management tool for family firms. Corporate social responsibility is not only a measure of ethical and sustainable behavior, but also fruitful for the company's business activities. If CSR is undertaken because

it corresponds to the values and economic and non-economic goals of the family business, the use of specific resources following business and family objectives can create added value.

7. Limitation and Future Research

Of course, this study is not without its limitations. The study is based on cross-sectional data collected in Germany at a single point in time. Our results therefore only represent a snapshot and are not necessarily transferable to other contexts. No cause-and-effect relationships can ultimately be determined. That is, even though we are confident that a mediation analysis is the appropriate model to test our research question, we are aware that, from an empirical viewpoint, we have to refer to this model as a causal model in a highly restricted sense. For example, we do not use panel data, nor do we randomize participants to groups. We also did not have any experimenter control over exposure of the independent variables. Thus, many alternative explanations could probably be offered with the empirical model we propose (including reverse causality) probably getting equally good results using strictly statistical criteria. However, we believe that this is a problem coming with almost any statistical analysis. Consequently, this means that the causal arguments must be strongly grounded in a set of strong theoretical predictions. By drawing on signaling theory to explain our findings, we strongly believe that this is the case. Moreover, there may be some issues with regard to the control variables in our regression models. Specifically, we have to take into consideration that we may have not been able to control sufficiently for internal R&D investments and the level of the work-force human capital. Even though we did include a set of measures reflecting innovation activities, past innovation outputs and training, but we call for future research to maybe include more suitable controls variables.

The data may also be susceptible to bias due to low response or misclassification due to bias in recalls. Please also note that we have not considered the complete CSR construct of El Akremi et al. (2018) – we have only included community, employee, and customer-oriented CSR. We

tested the mediation effect of these three dimensions only for potential and realized AC. Other dimensions of CSR could be considered that we have not included for this study. Moreover, the three CSR dimensions we focused on in our study could be analyzed, for example, for all four dimensions of AC (acquisition, assimilation, transformation, and exploitation). Furthermore, we only had one respondent per company. In the employee dimension of CSR in particular, it would be interesting in future research to analyze a second respondent from the workforce. Moreover, we did not investigate whether an investment in one CSR dimension influences another CSR dimension, for example, whether a family business that pays closer attention to the family-employee bond is more likely to invest in customer-oriented CSR. This could be another exciting field of research and raises potential further research questions. Moreover, a comparison between family firms and non-family firms could provide further insights into the specific use of CSR measures. Focusing on the current lively discussion of the heterogeneity of family businesses, we have considered our research question within family businesses, but we have not compared these with non-family businesses. Last but not least, we support the call of Kotlar and colleagues (2020) that it might be worthwhile to more deeply examine ownership shares, individual dimensions of family life, and how these factors influence AC. In summary, our study shows important antecedents and mechanisms for the AC of external knowledge in family businesses.

E. The Moderating Role of Socioemotional Wealth on Post-Succession Performance in Small- and Medium-Sized Family Firms

1. Introduction

Family firms regularly face the important challenges of designating and organizing their business dynastic succession. To successfully hand over the firm, strategic decisions have to be made (Cabrera-Suárez et al., 2001; Motwani et al., 2006), successors have to be found (Basco and Calabrò, 2017; Chrisman et al., 1998) and the succession has to be organized operationally (Bruce and Picard, 2006; Sharma et al., 2003). Because the succession process is complex and requires additional resources, which could be otherwise utilized to enhance the firm's performance (Bennedsen et al., 2007), complications during the succession process can quickly threaten the existence of a firm.

This is especially true for small and medium-sized enterprises (SMEs), which are mostly controlled by owning family (Motwani et al., 2006). For example, to preserve control over the firm, the owning families of SMEs tend to appoint less qualified family members as successors rather than more competent nonfamily candidates (Basco and Calabrò, 2017; Gómez-Mejía et al., 2011), often resulting in performance decline, which may be a temporary setback until balance is restored—or also definite (Werner et al., 2021). Although family firm succession often leads to changes affecting the firm's performance (Ahrens et al., 2019; Bennedsen et al., 2007; Chang and Shim, 2015; Pérez-González, 2006; Smith and Amoako-Adu, 1999; Wennberg et al., 2011), this does not mean that family SMEs will always fail after succession, as there are still family firms that have been successfully operating for more than a century (Koiranen, 2002; Martínez-Sanchis et al., 2020).

Succession-related family firm research traditionally focuses on the main actors (i.e., incumbents, successors, and the owning family) to determine which of their traits positively affect the transition process (Le Breton-Miller et al., 2004). Recent research has broadened the

field by emphasizing the effect that family dynamics have on succession events (Amore et al., 2021; Chang and Shim, 2015). This scope of research has also encompassed the effects that family conflicts (Ghee et al., 2015; Jayantilal et al., 2016), communications (Daspit et al., 2016; Schell et al., 2020), and intrafamily planning (Calabrò et al., 2018) may have on the post-succession performance of a family firm. In an entrepreneurial context, Werner et al. (2021) examined the succession process and found that after succession, the performance of family-SMEs can actually be enhanced. The authors argued that a successor, in seeing new growth opportunities, will consequently readjust the firm's strategy accordingly, thereby increasing the performance of the family firm in the long run.

For explaining a poorer financial performance of family firms than nonfamily firms, researchers have often drawn from socioemotional wealth (SEW) (Martin and Gómez-Mejía, 2016). Socioemotional wealth describes the “nonfinancial 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” (Gómez-Mejía et al., 2007, p. 106). This implies that controlling the firm is beneficial to the owning family to fulfill the family members' affective and emotional needs. To preserve the firm's SEW, the owning family may make entrepreneurial decisions that are not always economically rational, as they may be based on the noneconomic motives of family members (Gómez-Mejía et al., 2011).

Interestingly, however, recent research has provided strong empirical evidence that SEW positively affects family firms' performance (Debicki et al., 2017; Ng et al., 2019; Razzak and Jassem, 2019). The study at hand intends to resolve these ambiguities by arguing that SEW increases the longevity of a family firm by helping to overcome family specific tensions emerging in a succession period. Specifically, we argue that SEW positively affects (i.e., moderates) the relationship between the succession event and post-succession performance (i.e., financial performance in the years after the succession event has taken place) because

SEW has a mitigating effect on the intrafamily conflicts related to dynastic succession, which in turn helps the successor initiate new growth impulses. Since this relationship has not yet been examined empirically, this study poses the following overall research question: *What influence does SEW have on post-succession performance in small and medium-sized family businesses?*

Drawing on Hauck et al.'s (2016) multidimensional SEW measure, we examine the impact of SEW on post-succession performance through the following three dimensions to verify whether their relevance is upheld: *renewal of family bonds through dynastic succession*, *emotional attachment of family members*, and *identification of family members with the firm*. Based on data collected from 344 German family SMEs, we provide empirical evidence that those firms that manage to keep their level of SEW high after the succession event also generate higher post-succession performance in the long run. Thus, we conclude that SEW is a key driver of the positive relationship between the length of time elapsed since the last succession event and post-succession performance results. Focusing then on the individual SEW dimensions, our results show that the *renewal of family bonds through dynastic succession* and the *identification of family members with the firm* are the key drivers that positively moderate post-succession performance. Although hypothesized, we do not find a significant effect between the *emotional attachment of family members* and post-succession performance.

This study thus provides empirical evidence that SEW can potentially be used as a strategic tool by owning families (Strike, 2012; Swab et al., 2020) to manage a transition event successfully (Le Breton-Miller et al., 2004) and achieve longevity. However, the literature thus far has neglected SEW as an instrument to maintain viability and enhance performance in the context of the often-difficult succession transition phases of family firms. Furthermore, this study provides a new theoretical perspective by showing that the effect of SEW is related to the specific life cycle stage of a family SME. While it is argued that SEW may theoretically have a negative effect on family firm performance (e.g., Martin and Gómez-Mejía, 2016), SEW

might partially compensate for this negative effect during a transition phase by lowering the potential for intrafamily conflict.

The paper is structured as follows: First, an overview of the applied literature and theories is given. Then, our derived hypotheses are tested and analyzed in seven models by regression analysis. This is followed by a discussion of our results as well as the possible limitations and outlook for future research.

2. Theory and Hypotheses

2.1 Post-Succession Performance in Family SMEs

It is imperative that family firms going through a succession event continue to maintain and show enhanced performance to remain viable within the market (De Massis et al., 2008; Wennberg et al., 2011). However, the emphasis on both organizational and family goals during the succession process can create tensions within the firm (Minichilli et al., 2014; Zellweger and Astrachan, 2008). For example, Kotlar and De Massis (2013) pointed out that these possibly contradictory goals may also influence the behavior of firm-involved family members in the post-succession phase. Ownership composition changes, and especially in a cousin consortium, ownership can be fragmented (Salvato, 2004; Schulze et al., 2003). The different visions that family members may have about a firm's future can create conflicts during the transition process (Davis and Harveston, 1998; Jayantilal et al., 2016). These conflicts can negatively affect the company and subsequently may have a negative effect on the future development of the family firm's performance after a succession.

Consequently, recent research has begun to focus on factors helping family firms to increase post-succession performance. In this regard, Werner et al. (2021) showed that firm growth rates increase in the post-succession phase as information discrepancies between incumbents and successors inevitably dissolve. However, if the entrepreneurial abilities of a successor are underdeveloped, previous owner involvement may shield the firm from deficits and can help

train the successor accordingly (Ahrens et al., 2018). Calabrò et al. (2018) argued that family firms should choose their successors based not on primogeniture but rather on the offspring's actual competence and ability to run the firm. For example, the ability of the successor to take over and expand the incumbent's social capital (i.e., professional network) is a key driver of post-succession performance (Bouguerra et al., 2016).

Nevertheless, many family firms do not survive the third generation (Koiranen, 2002). Therefore, it can be postulated that although the succession event represents a caesura in the life cycle and is crucial factor for longevity, research has not yet been identified why some family SMEs succeed in this phase and why others do not.

2.2 The Concept of Socioemotional Wealth and its Relationship to Post-Succession Performance in Family SME's

Taking into account that the owning family profits not only financially but also affectively by operating a business, Gómez-Mejía et al. (2007) built on behavioral agency theory, which assumes that executives are primarily loss averse and only secondarily risk averse (Wiseman and Gómez-Mejía, 1998), and created the concept of SEW. Socioemotional wealth is defined as the owning family's affective endowment within the firm, indicating "that personal pride and self-concept of family members tend to be intimately tied to the business" (Gómez-Mejía et al., 2011, p. 654), which the owning family is eager to preserve. It is theorized that to preserve SEW, family members may even neglect financially advantageous projects if they entail the risk of a loss of SEW (Gómez-Mejía et al., 2011).

To better examine the effects of SEW as well as the different SEW tendencies among family firms, a multidimensional measure of SEW was developed by Berrone et al. (2012) using five different dimensions: *family control and influence* (F), *identification of family members with the firm* (I), *binding social ties* (B), *emotional attachment of family members* (E), and *renewal of family bonds to the firm through dynastic succession* (R).

When aggregated, those dimensions result in the so-called FIBER scale. *The family control and influence* dimension refers to the conventional way of separating family firms from nonfamily firms through family ownership and/or management and identifies the strength of the family's involvement in the business. *Identification of family members with the firm* expresses the identifying power that the family members have toward the firm. The stronger this dimension is, the greater the individual family members feel attached to their firm and thus the more allegiance they will be prepared to give. Since family members often see the firm as an extension of their own family, they also place a higher value on good, reciprocal stakeholder relations, which are described by the *binding social ties* dimension of FIBER. The *emotional attachment of family members* among family members influences managerial decisions within the family business, for example, by securing the life's work of the predecessor, also due to the emotional connection and therefore changes in the company. Furthermore, with the help of the *renewal of family bonds through dynastic succession* dimension, the transgenerational orientation of family companies, particularly when a successful succession has taken place, is also taken into account (Berrone et al., 2012).

Criticism of the still relatively new FIBER scale is frequently based on the argument that it does not fully meet the theoretical definition and therefore needs to be further improved (e.g., Chua et al., 2015; Miller and Le Breton-Miller, 2014; Schulze and Kellermanns, 2015). In their attempt to validate the FIBER scale, Hauck et al. (2016) provided empirical evidence that the operationalization of both *family control and influence* and *binding social ties* does not properly reflect the SEW concept. In their explanation of this finding, they argued that the dimension *family control and influence* mainly refers to actual control that the business family has over the firm and does not reflect the affective endowment of the owning family. In a related vein, the dimension *binding social ties* is argued to solely refer to the existence of social relationships while neglecting the affective endowment associated with these relationships. Based on their findings, Hauck et al. (2016) suggested the exclusion of both dimensions and introduced the

empirically validated shortened REI scale. Taking this into consideration, the theoretical and empirical analysis of our study relies on the shortened REI scale.

With respect to post-succession performance, family firm research has concentrated on the traits of the corresponding successor (Ahrens et al., 2018, 2019; Calabrò et al., 2018; Schepker et al., 2017). Studies analyzing the impact and effect of contextual factors such as SEW on financial performance are still scarce and the few empirical studies focusing on this relationship have yielded mixed results.

While Schepers et al. (2014) found that SEW negatively moderates the positive relationship between entrepreneurial orientation and performance, recent empirical research showed that SEW is positively related to the family firm's performance (Debicki et al., 2017; Ng et al., 2019). For example, SEW can foster the ability of family owners to make resources available to achieve the company's goals (Razzak and Jassem, 2019). Thus, whether SEW relates positively or negatively to performance depends on the strategic goals of the firm (Martin and Gómez-Mejía, 2016). Relying on the SEW dimensions, which are slightly different from those of the FIBER and REI scales, Debicki et al. (2017) provided empirical evidence that SEW goals emphasizing the importance and continuity of family within the firm can have a strategic impact on the family business and thus lead to positive performance.

Based on the knowledge that when experiencing business succession, family owners provide additional resources to achieve the firm's goals (Ahrens et al., 2019), this is especially true for SEW-driven family firms (Razzak and Jassem, 2019). We therefore argue that SEW can be a stabilizing and strategic element in a period of change such as dynastic succession, and can positively affect post-succession performance. Especially in the long term (i.e. with a greater distance to the succession event), these effects can become apparent benefiting family businesses that manage to maintain SEW through succession. Consequently, we derive the following baseline hypothesis:

Hypothesis 1 (baseline): SEW moderates post-succession performance positively. With an increasing number of years since the last succession took place, performance increases for family firms with high SEW and decreases for family firms with low SEW.

2.3 The Moderating Role of Renewal of Family Bonds through Dynastic Succession

Since family entrepreneurs have a strong desire to preserve their own entrepreneurial achievements by building an entrepreneurial legacy (Jaskiewicz et al., 2015), it can be assumed that high levels of affective commitment by family members (Sharma and Irving, 2005) are an inherent attribute of an owning family's transgenerational orientation (Casson, 1999; Zellweger et al., 2012). Consequently, family entrepreneurs often wish for their family descendants to take over the business after their death to continue the legacy. Accordingly, the family business becomes part of the family heritage and tradition (Minichilli et al., 2014; Williams Jr et al., 2018). Based on this, Gómez-Mejía et al. (2007) posited the survival of the family dynasty as a central element of SEW. This family-related goal has a high priority in family-influenced firms and a major effect on all corporate activities (Lee and Rogoff, 1996; Zellweger et al., 2012). Taking those insights into consideration, as well as Gómez-Mejía et al.'s (2007) conceptual work, Berrone et al. (2012) further refined the transgenerational orientation of family firms through the *renewal of family bonds to the firm through dynastic succession* as a dimension with which to measure SEW.

The family's desire to build a dynasty can therefore be a crucial element in handing over the family firm successfully. The greater the family's dynastic orientation, the more prone the members will be to support the succession process (Zellweger et al., 2012). Specifically, a successful handover requires family business knowledge (Cabrera-Suárez et al., 2001) and business-specific social capital (Arregle et al., 2007; Schell et al., 2018). Since a strong tendency for the renewal of family bonds motivates and generates intrafamily support even after the succession has formally taken place, a positive association between higher degrees of

SEW and post-succession performance can be expected. A strong desire for the renewal of family bonds through dynastic succession can therefore generate the intrafamily support required for a successful handover and subsequently affect the family firm's performance (Daspit et al., 2016).

In sum, we therefore argue that the performance levels that a family business will achieve after a handover depends strongly on the SEW dimension *renewal of family bonds through dynastic succession*. The higher the transgenerational orientation of the family members, the more motivated family members will be to support the succeeding generation to cope with the challenge of the firm's short- and long-term performance during and after succession, which, for example, can be realized by the willingness of owners to invest resources within the company (Razzak and Jassem, 2019). The succession process can be viewed as an entrepreneurial process by both generations (Nordqvist et al., 2013; Werner et al., 2021), which is a long-term and intergenerational investment (Gómez-Mejía et al., 2011). We therefore consider that the transgenerational orientation of the business family, reflected in the renewal of family bonds dimension, positively affects the relationship between the time since the last succession and post-succession firm performance. Consequently, we hypothesize the following:

Hypothesis 2a: Renewal of family bonds through dynastic succession positively moderates post-succession performance. With an increasing number of years since the last succession took place, performance increases for family firms with high renewal of family bonds through dynastic succession and decreases for family firms with low renewal of family bonds through dynastic succession.

2.4 The Moderating Role of Emotional Attachment of Family Members

Given that members of the entrepreneurial family are often involved in the family firm as managers, there is an overlap of the family and the firm, which results in the emotions of family

members influencing corporate management (Berrone et al., 2010; Craig et al., 2014; Eddleston and Kellermanns, 2007). Such emotions develop dynamically and can include happiness, warmth, tenderness, fear and resentment, insecurity, disappointment or anger (Allen and Meyer, 1990; Carlock and Ward, 2001; Eddleston and Kellermanns, 2007; O'Reilly and Chatman, 1986).

A strong emotional attachment of the family members can facilitate altruism, leading to family members caring for each other, as well as being committed and loyal to the family and to the firm (O'Reilly and Chatman, 1986; Schulze et al., 2003). High emotional attachment within the family can lead to family support, which can be a key success factor in the transition process and beyond (Eddleston and Kellermanns, 2007; Friedman, 1991). However, Eddleston and Kellermanns (2007) found that the succession process can also expose profound emotional problems within the family and can become a field of tension when family members prioritize their personal interests over a successful handover. Subsequently, strong emotional attachment among family members can therefore be helpful to successfully navigate the handing over of the firm (Daspit et al., 2016; Kotlar and De Massis, 2013), influencing family satisfaction and long-term success (Le Breton-Miller et al. (2004). Therefore, the emotional state of the family affects not only the success of the transfer but also ultimately the performance of the company (Eddleston and Kellermanns, 2007).

Hence, we propose that the post-succession performance of a family business after the handover is affected by the SEW dimension *emotional attachment of family members*. The stronger the emotional bonds, the more likely it is that family members will be willing to put aside their own personal goals for the greater good of the family firm (Le Breton-Miller et al., 2004; Meier and Schier, 2016) and will most likely support the successor in maintaining, or even improving, the firm's performance (Debicki et al., 2017; Strike et al., 2015). Again, the extent to which the family was a support or a burden to the successor during the pre- and posttransition phases only

becomes apparent further down the line after the handover. This leads us to consider that emotional attachment positively affects the relationship between the time since the last succession and post-succession firm performance. Accordingly, we hypothesize the following:

Hypothesis 2b: Emotional attachment of family members positively moderates post-succession performance. With an increasing number of years since the last succession took place, performance increases for family firms with high emotional attachment of family members and decreases for family firms with low emotional attachment of family members.

2.5 The Moderating Role of Identification of Family Members with the Firm

The need for family members to be part of a group is fulfilled through identification. Considering that a great part of a business family's life is naturally centered on the family business, the majority of family members tend to identify themselves strongly with their company (Allen and Meyer, 1990; Kepner, 1983). The family-influenced corporate identity of the family business is usually also shared by nonfamily members of the firm (Miller and Le Breton-Miller, 2005), which consequently shapes collaboration among organization members (Kepner, 1983). As a result, internal and external stakeholders associate the corporate image with the image of the family, and vice versa (Astrachan and Botero, 2018). Therefore, Gómez-Mejía et al. (2007) concluded that identification with the family firm makes up for a large part of a family's affective needs. Berrone et al. (2012) considered these aspects in the dimension *identification of family members with the family firm*, with a scale they adapted from O'Reilly and Chatman (1986), Allen and Meyer (1990), Carlock and Ward (2001), and Klein et al. (2005).

Since family members identify themselves with their business, identification with the family business can be a stabilizing factor for the success of the family firm's transition (Astrachan et al., 2018; Botero et al., 2019), especially if succession plans exist (Werner et al., 2021). Succession plans enable all parties involved to understand the succession process as an

entrepreneurial process and thus take advantage of the opportunity to shape the succession positively through entrepreneurial activities (Ahrens et al., 2019; Nordqvist et al., 2013). In terms of strong identification with the family firm, family members will be supportive of the new successor to protect the future viability of the firm, entrepreneurial activities, and consequently their own identity. Accordingly, high levels in this dimension make it easier for family members to put their personal interests on hold (Allen and Meyer, 1990; O'Reilly and Chatman, 1986). Thus, the profound sense of belonging can activate family resources needed for a successful handover and can subsequently result in greater motivation to support the successor to improve the performance of the firm in general (Friedman, 1991; Kidwell et al., 2012; Villalonga and Amit, 2006).

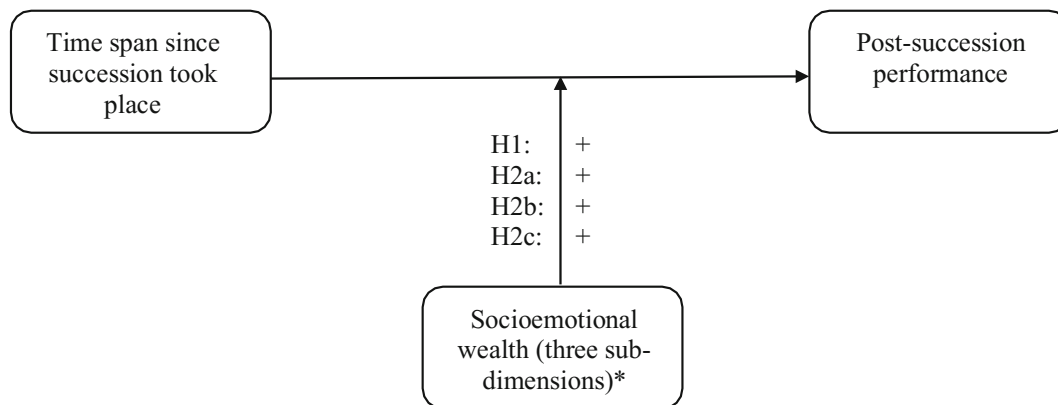
We therefore propose that the post-succession performance of family firms is affected by strong levels of the SEW dimension *identification of family members with the firm*. Potential successors change their role during the succession process (Cater and Justis, 2009), gaining more access to information (Schell et al., 2018; Wolff et al., 2020), more responsibility (Cabrera-Suárez et al., 2001) and thus more room for maneuvers. This can lead to a renewal in enthusiasm and engagement in the family business, which can also have a positive impact on (nonfamily) employees (Chrisman et al., 2015; De Massis et al., 2008). To protect their own identity, family members will offer more support for successors and will therefore indirectly affect a firm's performance in a positive way (Gallucci et al., 2015). However, this support only becomes apparent over time and after the new generation has taken over, following in the long run of the family firm development. Hence, we consider that identification with the family firm positively affects the relationship between the last succession and the firm's post-succession performance. As a result, we hypothesize the following:

Hypothesis 2c: Identification of family members with the firm moderates post-succession performance positively. With an increasing number of years since the last succession took

place, performance increases for family firms with high identification of family members with the firm and decreases for family firms with low identification of family members with the firm.

Figure 1 outlines our research framework illustrating that SEW in family SMEs can be divided into different dimensions. The business family and the family business are particularly prone to conflict and crisis during a dynastic succession, which can affect the performance of the business. Through its moderating influence, SEW can have a lasting positive effect on this succession event and therefore positively affect the business as a whole.

Figure E-1: Derived hypotheses



* i.e. (i) renewal of family bonds through dynastic succession, (ii) emotional attachment of family member, (iii) identification of family members with the firm

3. Method

3.1 Data Collection and Sample

Our data are based on a survey of 73,023 privately owned German firms that was conducted between January 2019 and March 2019. All firms were randomly selected using the German database AIDA-Bureau van Dijk (full version). Out of the 73,023 companies we addressed via email, 70,714 did not participate. In total, we received responses from 2,309 firms, corresponding to a response rate of 3.16%. Of the 2,309 firms that participated in the survey, 1,697 with incomplete responses were eliminated. Furthermore, the EU Commission's

definition of an SME, which states that an SME must employ fewer than 500 people and have an annual turnover of under 50 million Euros, led us to exclude 22 firms not complying with this definition. In addition, as the present study examines family firms, responses from 268 nonfamily firms were not considered in this study. After these exclusions, a final dataset of 344 responses of family firms could be used for the empirical analysis. Prior to data collection, the suitability of our questionnaire was ensured by using well-tested scales and by consulting independent experts on the design and methodology of the survey. As a result, the questionnaire include far-reaching questions on the current situation of the company and its structure, performance and family ownership. As the survey was conducted in Germany, the questions were first translated into German and then back-translated into English for the article.

3.2 Measure

3.2.1 Dependent Variable

Performance (in our case, *post-succession performance*) can be measured in different ways. Following Covin et al. (1990), we asked the companies to rate their current business situation based on the following three subscales: sales, profit and cash flow. These three subscales were measured on a 5-point Likert-type response scale from 1 (“Very poor”) to 3 (“Neutral”) to 5 (“Very good”). To obtain a score for each of the three subscales, the respective items were averaged. Principal component factor analysis showed that the three performance items loaded on one component only, with factor loadings of 0.683 or higher – clearly above the suggested 0.30 as the minimum criterion for an item (Costello and Osborne, 2005). The scale reliability was $\alpha=0.83$. Cronbach’s alpha was 0.83.

3.2.2 Independent Variable

To examine the effect of time after succession on the post-succession performance, we composed the independent variable *time span since succession*, which was measured in years after the last formal succession event has taken place. Based on the question “In which year did

the last succession of the family business to the next generation took place?”, we calculated the year of the succession, i.e., the year of the last succession event (e.g., 2016) minus 2019 (the year of the survey). The mean value of the *time span since succession* is 9.36, its standard deviation is 0.78 and its range is 0 (i.e., first generational (founder) firms) to 69 years.

3.2.3 Moderating Variable

One of the central variables in our models is SEW, which represents the moderation variable. As explained above, we drew on the established and validated shortened REI-SEW scale of Hauck et al. (2016) with the three subdimensions: “renewal of family bonds through dynastic succession”, “emotional attachment of family member” and “identification of family members with the firm”. Each of these dimensions was based on three items and was measured on a 5-point Likert-type response scale ranked from 1 (“Doesn’t apply at all to”) to 3 (“Neutral”) to 5 (“Entirely true”). To obtain a score for each of the three measures, the items of the three scales were averaged. Notably, for the regression analysis, all SEW measures were standardized and centralized. Principal component factor analysis showed that the three items of renewal of family bonds through dynastic succession loaded on one component only, with factor loadings of 0.475 or higher. The scale reliability was $p=0.84$. The Cronbach’s alpha was 0.77. The three items of emotional attachment of family members also loaded on one component only, with factor loadings of 0.789 or higher. The scale reliability was $p=0.89$, and the Cronbach’s alpha was 0.90. Finally, the three items of identification of family members with the firm also loaded on one component only, with factor loadings of 0.715 or higher. Here, the scale reliability was $p=0.83$, and the Cronbach’s alpha was 0.84.

3.2.4 Controll Variable

The present study included a set of control variables that may affect SEW and the post-succession performance of family SMEs simultaneously. These variables include industry sector (manufacturing, construction, trade services, crafts, other), firm size (number of

employees), firm age (years), firm generational stage (first generation firm, second generation firm, third and more generation firm) and a dummy variable for ownership (with 0 meaning that the share of equity capital owned by the family is less than 50% and 1 meaning 50% or more) and innovation (with 0 meaning that the firm has made no product or process innovations in the last three years and 1 meaning they have).

A description of the variables we used for our regression analysis is shown in Table 1.

4. Results

The correlations between the variables are shown in Table 2. Notably, there are only weak correlations between the independent variables, and there seems to be no problem concerning multicollinearity.

Table E-1: Descriptive statistics and descriptions of variables

Variable	Description	Mean/ Pct	SD	Range	Cronbach's Alpha
Performance	Constructed scale, 3 items measured on a 5-point Likert Scale (1=very poor to 5=very good): Please assess the current business situation of your company based on the following characteristics: (a) Turnover (b) Profits (c) Cash flow	3.58	.78	1-5	.83
Time distance	Measured in years; i.e., the year of the last succession event (e.g., 2016) minus 2019 (the respondents were asked in which year the last succession of the family business to the next generation took place)	9.36	11.83	0-69	
<i>SEW-Dimensions:</i>					
i. Renewal of family bonds through dynastic succession	Constructed Scale, 3 items, measured on a 5-point Likert Scale (1= doesn't apply at all to 5=entirely true)	3.86	.98	1-5	.77
ii. Emotional attachment of family member	Constructed Scale, 3 items, measured on a 5-point Likert Scale (1= doesn't apply at all to 5=entirely true)	3.94	.98	1-5	.90
iii. Identification of family members with the firm	Constructed Scale, 3 items, measured on a 5-point Likert Scale (1= doesn't apply at all to 5=entirely true)	4.2	.86	1-5	.84
iv. Overall SEW construct	Constructed Scale, 9 items, measured on a 5-point Likert Scale (1= doesn't apply at all to 5=entirely true)	3.99	.81	1-5	.91
Firm size	How many employees are currently employed in your company? (metric)	63.08	81.94	1-450	
Firm age	How old is your company? (metric)	54.18	40.43	2-219	
Innovation	Has your company introduced new or significantly improved products to the market (i.e., product innovations) and/or has implemented process innovations in the last three years? (1=yes, 0=no)	.65	.48	0-1	
Ownership share	What percentage of the equity capital is owned by the family? (1=50% and more, 0=less than 50%)	.91	.29	0-1	
First (founder) generation (ref.)	How many generations has your company been in family ownership? (1=1st generation, 0=else)	.38	.49	0-1	
Second generation	How many generations has your company been in family ownership? (1=2nd generation, 0=else)	.32	.47	0-1	
Third+ generation	How many generations has your company been in family ownership? (1=3rd or more generations, 0=else)	.3	.46	0-1	
Manufacturing (ref.)	Which industry does your company belong to? (1=manufacturing, 0=else)	.26	.44	0-1	
Construction	Which industry does your company belong to? (1= construction, 0=else)	.12	.32	0-1	
Trade	Which industry does your company belong to? (1= trade, 0=else)	.13	.34	0-1	
Services	Which industry does your company belong to? (1= services, 0=else)	.31	.46	0-1	
Crafts	Which industry does your company belong to? (1= crafts, 0=else)	.12	.32	0-1	
Other	Which industry does your company belong to? (1= other, 0=else)	.06	.24	0-1	

Table E-2: Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)
(1) Performance	1.00																		
(2) Time span	-0.02	1.00																	
(3) SEW_All	0.25	-0.01	1.00																
(4) SEW_R	0.25	0.01	0.83	1.00															
(5) SEW_E	0.18	-0.03	0.88	0.53	1.00														
(6) SEW_I	0.21	0.02	0.89	0.60	0.73	1.00													
(7) Firm size	0.18	0.12	0.09	0.19	-0.00	0.05	1.00												
(8) Firm age	0.07	0.47	0.11	0.16	0.01	0.13	0.29	1.00											
(9) Innovation	0.17	-0.02	0.13	0.12	0.09	0.14	0.23	0.11	1.00										
(10) Ownership	0.05	0.07	0.15	0.14	0.13	0.13	0.06	0.05	0.04	1.00									
(11) First gen.	-0.02	-0.63	-0.14	-0.15	-0.07	-0.17	-0.22	-0.55	-0.06	-0.06	1.00								
(12) Second gen.	0.01	0.29	0.00	0.01	-0.02	0.03	-0.01	-0.09	0.04	-0.02	-0.54	1.00							
(13) Third+ gen.	0.00	0.37	0.15	0.15	0.09	0.14	0.25	0.67	0.03	0.08	-0.52	-0.45	1.00						
(14) Manufacturing	0.03	0.08	0.01	0.09	-0.09	0.03	0.13	0.21	0.15	-0.06	-0.17	0.05	0.12	1.00					
(15) Construction	0.14	0.05	0.11	0.11	0.08	0.09	0.12	0.14	-0.15	0.05	-0.10	-0.03	0.14	-0.21	1.00				
(16) Trade	-0.11	0.01	-0.01	-0.11	0.02	0.06	-0.11	0.05	-0.04	0.01	-0.01	-0.08	0.10	-0.23	-0.14	1.00			
(17) Services	-0.03	-0.18	-0.07	-0.05	0.01	-0.15	-0.04	-0.31	0.01	0.07	0.28	-0.06	-0.24	-0.40	-0.25	-0.27	1.00		
(18) Crafts	0.02	0.10	-0.01	-0.06	0.01	0.03	-0.13	0.00	-0.04	-0.04	-0.10	0.14	-0.04	-0.21	-0.13	-0.14	-0.25	1.00	
(19) Others	-0.03	-0.02	0.00	0.03	-0.02	-0.00	-0.01	-0.05	0.01	-0.04	0.05	-0.02	-0.03	-0.15	-0.09	-0.10	-0.17	-0.09	1.00

To empirically test our hypotheses regarding the moderating effect of the different SEW dimensions on the relationship between the time span since succession and post-succession performance in family SMEs, we used linear multiple regression. Based on the described control variables, we analyzed the effect of the dimensions on post-succession performance (model 1) and then added the time span since succession and SEW_R (model 2), SEW_E (model 4), and SEW_I (model 6) to one different model each. Second, the moderating effects of SEW_R, SEW_E and SEW_I proposed in H2a, H2b, and H2c were tested by the interaction terms time span x SEW_R (model 3), time span x SEW_E (model 5), and time span x SEW_I (model 7), respectively. Our baseline hypothesis was tested in models 8 and 9. The results of our regression models are presented in Table 3 (see next page).

Models 2, 4 and 6 fail to show a significant effect of the time span since succession and the post-succession performance of family SMEs. On the other hand, they show significant positive effects of SEW_R (model 2: $\beta = 0.1585$; $p < 0.01$), SEW_E (model 4: $\beta = 0.1263$; $p < 0.01$), and SEW_I (model 6: $\beta = 0.1476$; $p < 0.01$) on the performance measure. This finding indicates that with high levels of these different SEW dimensions, the post-succession performance is also high. These results are consistent with prior findings of Ng et al. (2019) that SEW positively affects firm performance. Furthermore, we also find significant positive effects of firm size and innovation in all seven models. However, firm age, family ownership share and generational stage seem to have no effect on the firm's post-succession performance – all things equal.

For H2a, H2b and H2c, we proposed that SEW_R, SEW_E, and SEW_I would positively moderate the relationship between the time span since succession and post-succession performance. In model 3, we find a significant positive moderating effect of SEW_R on the relationship between time span and post-succession performance (model 3: $\beta = 0.0066$; $p < 0.05$), providing support for H2a.

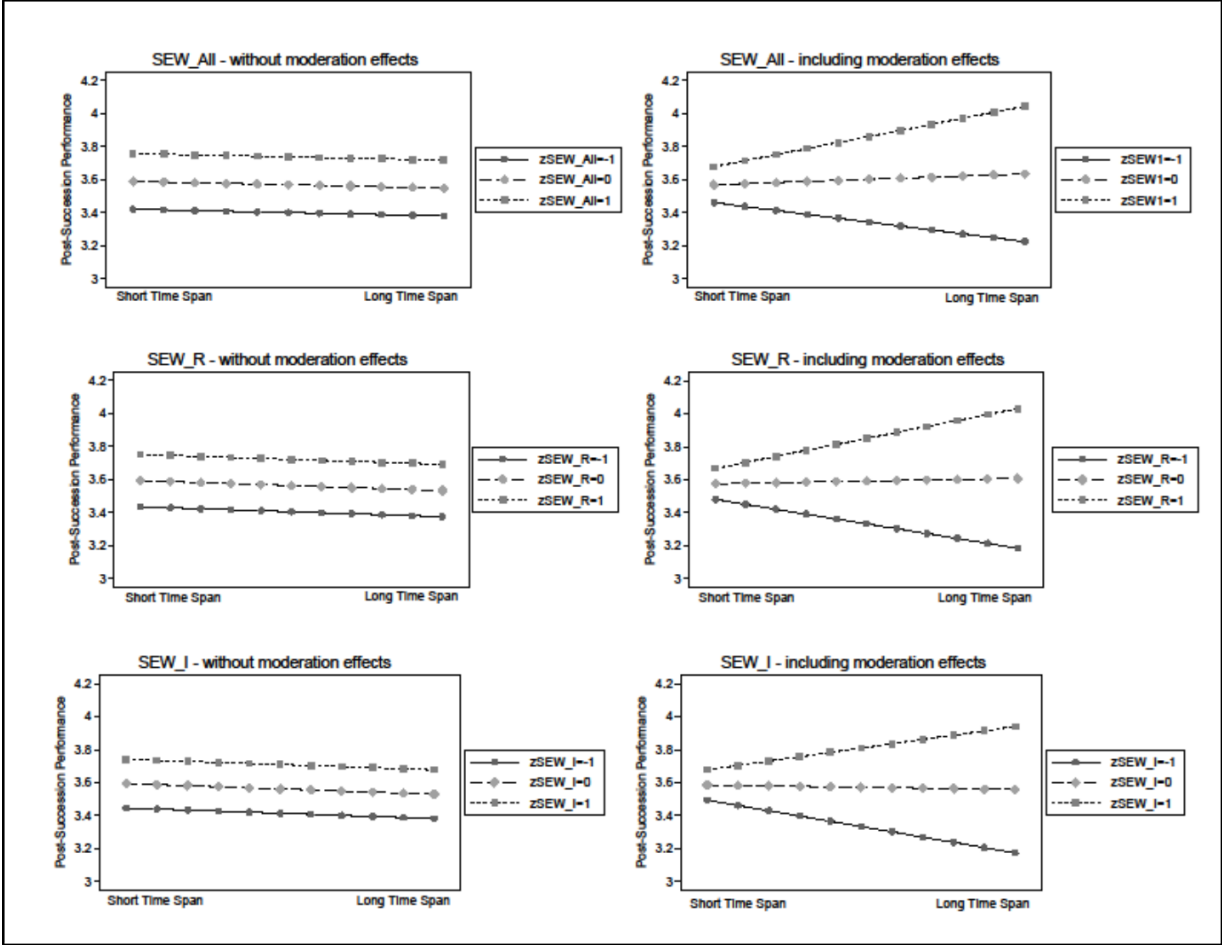
Table E-3: Regressions results

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8	Model 9
<i>Controls</i>									
Firm size	0.0012** (0.0005)	0.0010** (0.0005)	0.0010** (0.0005)	0.0013*** (0.0005)	0.0013** (0.0005)	0.0012** (0.0005)	0.0013*** (0.0005)	0.0012** (0.0005)	0.0013*** (0.0005)
Firm age	0.0013 (0.0013)	0.0013 (0.0013)	0.0010 (0.0013)	0.0018 (0.0013)	0.0017 (0.0013)	0.0015 (0.0013)	0.0012 (0.0013)	0.0015 (0.0013)	0.0012 (0.0013)
Innovation	0.2538*** (0.0970)	0.2245** (0.0960)	0.2258** (0.0945)	0.2176** (0.0969)	0.2243** (0.0967)	0.2043** (0.0971)	0.2202** (0.0967)	0.2026** (0.0967)	0.2202** (0.0967)
Ownership share	0.1055 (0.1499)	0.0427 (0.1488)	0.0106 (0.1460)	0.0624 (0.1486)	0.0471 (0.1478)	0.0471 (0.1419)	0.0162 (0.1412)	-0.0895 (0.1220)	-0.0764 (0.1223)
Second generation ¹	-0.0723 (0.1061)	-0.0759 (0.1229)	-0.0778 (0.1227)	-0.0640 (0.1206)	-0.0722 (0.1217)	-0.0861 (0.1227)	-0.0764 (0.1223)	-0.2496* (0.1511)	-0.2128 (0.1571)
Third+ generation ¹	-0.1935 (0.1436)	-0.2183 (0.1479)	-0.2166 (0.1473)	-0.2247 (0.1541)	-0.2334 (0.1553)	-0.2292 (0.1551)	-0.2128 (0.1571)	0.0319 (0.1462)	0.0162 (0.1412)
Construction ²	0.3283** (0.1387)	0.3053** (0.1379)	0.3032** (0.1361)	0.2741** (0.1388)	0.2787** (0.1387)	0.2888** (0.1391)	0.2879** (0.1380)	0.2728** (0.1378)	0.2879** (0.1380)
Trade ²	-0.1651 (0.1458)	-0.1093 (0.1466)	-0.1005 (0.1467)	-0.1901 (0.1481)	-0.1855 (0.1480)	-0.1867 (0.1463)	-0.1782 (0.1457)	-0.1623 (0.1458)	-0.1782 (0.1457)
Services ²	-0.0324 (0.1113)	-0.0125 (0.1082)	-0.0181 (0.1076)	-0.0542 (0.1100)	-0.0619 (0.1101)	-0.0026 (0.1111)	-0.0122 (0.1101)	-0.0255 (0.1085)	-0.0122 (0.1101)
Crafts ²	0.1015 (0.1485)	0.1368 (0.1422)	0.1532 (0.1411)	0.0796 (0.1403)	0.0847 (0.1396)	0.0922 (0.1390)	0.1051 (0.1375)	0.0983 (0.1379)	0.1051 (0.1375)
Other ²	-0.0858 (0.2240)	-0.0945 (0.2305)	-0.0973 (0.2235)	-0.0993 (0.2291)	-0.0927 (0.2293)	-0.0877 (0.2279)	-0.0847 (0.2283)	-0.0994 (0.2306)	-0.0847 (0.2283)
<i>Independent variable</i>									
Time span since last succession		-0.0012 (0.0039)	0.0007 (0.0044)	-0.0018 (0.0039)	-0.0007 (0.0042)	-0.0013 (0.0039)	-0.0006 (0.0043)	-0.0008 (0.0038)	-0.0006 (0.0043)
<i>Main term moderator variables</i>									
SEW_R		0.1585*** (0.0477)	0.0943* (0.0552)						
SEW_E				0.1263*** (0.0465)	0.0919* (0.0533)				
SEW_I						0.1476*** (0.0479)	0.0922* (0.0521)		
SEW_All								0.1688*** (0.0476)	0.1085** (0.0540)
<i>Interaction terms</i>									
Time span x SEW_R			0.0066** (0.0029)						
Time span x SEW_E					0.0033 (0.0026)				
Time span x SEW_I							0.0058* (0.0035)		
Time span x SEW_All									0.0060** (0.0030)
R ²	0.0835	0.1221	0.1348	0.1095	0.1125	0.1174	0.1268	0.1278	0.1384
F value	3.36***	3.81***	4.14***	3.32***	3.22***	3.45***	3.38***	3.76***	3.81***

N=344. Robust standard errors are in parentheses. ¹Reference: First (founder) generation. ²Reference: manufacturing
*** p<0.01, ** p<0.05, * p<0.1

However, the results of model 5 do not show significant results regarding time span x SEW_E, which leads us to reject H2b. Furthermore, the results of model 7 show a weak significant positive moderating effect of SEW_I on the relationship between the time span since succession and post-succession performance (model 7: $\beta = 0.0058$; $p < 0.1$). Because the interaction term time span x SEW_I is weak, we conclude that model 7 provides only partial support for H2c. Last but not least, we find empirical support for our baseline hypothesis (H 1) that the time span after the last intra-family business succession event is positively moderated by overall SEW (model 9: $\beta = 0.006$; $p < 0.05$). Figure 2 presents the results of our significant moderation hypotheses (H1, H2a, and H2c).

Figure E-2: Moderation effects



The curves of the slopes of the moderation models (right side of figure 2) clearly show that when compared to family firms with an average SEW (i.e., total SEW and SEW in the dimensions (a) renewal of family bonds to the firm through dynastic succession and (b) identification of family members with the company), those with an above average SEW have a higher post-succession performance and those with below average SEW have a lower post-succession performance with increasing time after the last succession event.

In summary, we find some support for our hypotheses., which confirms our theoretical considerations regarding the moderating effect of SEW on the relationship between the time span since succession and post-succession performance in family SMEs. We conclude that the heterogeneous results regarding the post-succession performance in family SMEs can be partly explained by examining them through the lens of SEW – especially in its specific dimensions.

5. Discussion and Conclusions

The aim of this study was to understand why some family firms have better post-succession performance than others, especially with an increasing number of years after the succession event. We examined this relationship in the context of different SEW dimensions, namely, *renewal of family bonds to the firm through dynastic succession*, *emotional attachment of family members*, and the *identification of family members with the company* (Berrone et al., 2012; Hauck et al., 2016). While our results provide support for a positive moderating effect for the SEW dimensions *renewal of family bonds and identification of family members*, we did not find evidence for a moderating role of *emotional attachment of family members*.

Our study makes several contributions. First, it contributes to the current debate on the heterogeneity of family businesses (Chua et al., 2012; Prüggl, 2019). Family businesses perform differently after business succession, and many family businesses still fail after this important stage in their life cycle (Cucculelli and Micucci, 2008; Hauck and Prüggl, 2015; Jaskiewicz et al., 2016). The study contributes by examining the moderating role of different SEW

dimensions and their role in family business succession, especially in the long run. Family businesses that succeed in the handover process and, above all, in managing this renewal successfully can achieve sustainable performance (Berrone et al., 2012; Gómez-Mejía et al., 2018; Ng et al., 2019). In the context of the debate on heterogeneity in family businesses, the topic of the entrepreneurial family and its particularities has recently been placed in the focus of research (Jaskiewicz and Dyer, 2017). Here, socialization in family businesses and emotional attachment were emphasized (Rau et al., 2019). We found in our study that emotional attachment has no significant influence on post-succession performance with an increasing number of years since the last succession had taken place. We suggest that there could be a counteracting negative effect within emotional attachment between family members on post-succession performance. This can arise, for example, from nepotism and the accompanying preference for family members regardless of their competencies, which nevertheless play a significant role in the succession process (Cabreba-Suárez et al., 2001; Handler, 1994; Le Breton-Miller et al., 2004).

Second, this study contributes to research on business succession (Le Breton-Miller et al., 2004). To date, success factors are still being sought that enable family businesses to make a successful succession and be successful after business succession (Le Breton-Miller et al., 2004; Umans et al., 2020; Zybura et al., 2020). Our study shows that the “renewal of family bonds” during and after business succession can be a key success factor (Berrone et al., 2012). Renewal ensures the long-term orientation of the entrepreneurial family and the family business and can therefore function as a stabilizing factor (Cennamo et al., 2012). However, family firms also have to be able to make decisions in the short term to ensure performance (Allison et al., 2014; Debicki et al., 2017; Stubner et al., 2012; Zellweger, 2007). A particularly high level of emotional attachment does not seem to have any influence. These findings may also contribute to practitioners, especially advisors (Michel and Kammerlander, 2015; Strike, 2013). The preservation of the family legacy and the emphasis on this legacy as well as the goal to

successfully hand over a business form the basis for a business succession and can unite the family and influence their decisions (Hammond et al., 2016; Lumpkin et al., 2010).

Third, this study is one of the first to empirically differentiate between the different SEW dimensions, especially R, E and I (Hauck et al., 2016). While in the past, SEW was partly mapped via other proxies, e.g., via F-PEC (Klein et al., 2005) or ownership, the currently developed scales offer a differentiated view. However, the differentiation of the individual dimensions also shows that the different dimensions work in different ways, and it can be worthwhile to differentiate between them to obtain a finer-grained picture (Prügl, 2019). We provide evidence that the R dimension (“renewal of family bonds through dynastic succession”) has an influence on post-succession performance, which is not surprising. Interestingly, no significant influence of emotional bonds and only a limited influence of the identification of family members with the family business was found. This provides initial indications that SEW cannot and need not necessarily be an explanatory instrument in its entirety but that differentiation is definitely worthwhile (Prügl, 2019). This can be a starting point for future research on SEW in other contexts, such as strategic decision-making processes.

6. Limitations

As with any empirical work, our study comes with a number of limitations, most of which indicate fruitful avenues for further research. The analyzed sample was collected in Germany. The results can vary in other countries due to different cultural conditions as well as different values and attitudes of the family toward the company (Gelfand et al., 2006). Additionally, we only requested data from 2019 (cross-sectional data), so our sample only refers to this point in time. Consequently, our results are not necessarily transferable to other contexts. The results do not show any cause-and-effect relationships. Furthermore, such data are susceptible to bias due to low response or misclassifications due to bias in recalls. In addition, we have only one response per company. For future research, it would be interesting to show the development of

the SEW dimensions in the individual years in terms of post-succession performance using a panel dataset. In summary, our study shows important influences on post-succession performance as a result of the nonfinancial goals of the entrepreneurial family. A long-term and stable orientation of SEW can be seen by family businesses as a strategic tool to increase the performance of the company in the long term and to successfully overcome disruptions, such as those in the succession and post-succession process.

F. Discussion

1. Summary of the Findings and Concluding Remarks

Longevity is one of the main goals of family businesses; a goal confirmed to be one of the most difficult (Chua et al., 1999; Miller et al., 2003; Nordqvist et al., 2013; Sharma et al., 2001). Numerous internal factors, including conflicts, family and business goals, resources, capabilities, knowledge, and organizational learning (Cohen and Levinthal, 1990; Davis and Harveston, 1998; Schell et al., 2018; Sirmon and Hitt, 2003; Teece et al., 1997), as well as external factors, including stakeholder relationships and demands, and environmental and market changes (Bingham et al., 2011; Martínez-Ferrero et al., 2016; Teece et al., 1997; Zerbini, 2017), influence family business outcomes. The primary focus of this dissertation is on internal factors, more precisely, the influence of family characteristics on CSR, AC, and post-succession performance. These characteristics can be found in familiness and SEW, which refer to the relationship of the family with the business as well as the behavior and influence of the family on the business (Gómez-Mejía et al., 2018; Habbershon and Williams, 1999). Research regarding family characteristics in family businesses emerged over the past decades, when the debate about the heterogeneity of family businesses became more popular (e.g. Chua et al., 2012; Daspit et al., 2021). However, due to the complexity of family businesses, including family and business subsystems, more and deeper investigations of family influence – through familiness and behavior due to SEW – are needed.

Therefore, the aim of this dissertation is to provide further insights into the influence of family impact factors on business outcomes and derive from these the fostering of its longevity. First, current and relevant issues that can have an effect on the longevity of family businesses were identified (Bowen, 1953; Handler, 1994; Frank et al., 2017; Gómez-Mejía et al., 2018; Martynov and Shafti, 2016; Zahra and George, 2002). In this manner, the various mechanisms behind family characteristics can be shown for different topics.

Chapter B focusses on CSR in family businesses. Using Stafford et al.'s (1999) SFBT as a theoretical framework, the antecedents and outcomes of CSR in family businesses were examined and divided into the family and business subsystems. The results show that CSR strategic decision-making is influenced not only by the family CEO's resource exchange and use but also that of the family and the resources it provides (Jang and Danes, 2013; Dimov, 2017). The extent of this influence of the family and its characteristics within the integration of CSR depends on the influence the family can exert on the business. For example, the family presumably exerts a greater influence in small companies (Danes and Brewton, 2012). By using SFBT and a resource-based view, it could be demonstrated that family resources can increase the implementation of CSR activities, and this practice can explain the heterogeneous CSR integration in family businesses. Family businesses engage significant parts of their resources – e.g., financial, human, or social capital – in CSR to maintain their relationships with stakeholders (Fitzgerald et al., 2010; Stafford et al., 1999). This approach is adopted to ensure positive business outcomes and the longevity of the family business (Kuttner and Feldbauer-Durstmüller, 2018). The analysis of the results indicates a strong research focus on non-financial outcomes and less consideration of financial outcomes. Family outcomes are similarly not considered; this is surprising as family and business are constantly interacting subsystems. Further research should therefore investigate these areas, that is, business financial outcomes and general family outcomes. Additionally, in the context of antecedents and outcomes, the analysis could not confirm how CSR links the two categories; hence, the question of the catalytic role of CSR remains unanswered. This question also needs to be addressed in future research because it is highly relevant for family businesses. The inefficient use of family and business resources can, in case of doubt, endanger the longevity of the family business.

The focus of Chapter C is on AC in family businesses through a systematic literature review. First, it is demonstrated that the basis (e.g., activation triggers and knowledge sources) for the formation of AC strongly depends on the contextual factors of the family business, such as

industry, size, and country-specific influences (Boyd and Hollensen, 2012; Duchek, 2015; McAdam et al., 2010). The analysis also shows through the involvement and behavior approach that family characteristics, especially family ownership and familiness, have a strong influence on the AC process. The systematic literature review illustrates that the idea that, for example, familiness has a positive or negative effect on family business outcomes, cannot be stated *per se*. Rather, AC reveals that the same actions have a negative (potential AC) as well as a positive effect (realized AC) on the processes (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020). For example, familiness within AC leads to insularity because family members are afraid of losing power by opening up the business (Daspit et al., 2019). Tacit knowledge similarly complicates the exchange with external partners, as both partners must have similar knowledge bases for the exchange (Andersén, 2015). By contrast, familiness and tacit knowledge enhance the realized AC (Andersén, 2015; Daspit et al., 2019). Knowledge exchange and implementation within the business can be improved through the use of family resources via better social integration mechanisms (Boyd and Hollensen, 2012; Brinkerink, 2018; Zahra and George, 2002). Thus, on the one hand, family businesses must “reduce” familiness to open up to the outside world and allow collaborations to bring external knowledge into the business; on the other hand, family businesses must internally “maintain” their familiness to be able to efficiently continue the implementation of (new) knowledge (Andersén, 2015). Through the successful exercise of AC, the family business can achieve sustainable competitive advantages (Chaudhary and Batra, 2018; Hernández-Perlines et al., 2017), an increase in performance (Hernández-Perlines and Xu, 2018; Muñoz-Bullón et al., 2020), and innovation (Belkhdja and Daghfous, 2020; Gancarczyk and Gancarczyk, 2016; Klewitz et al., 2012), as well as better respond to changing environmental conditions (Boyd and Hollensen, 2012; Chaudhary and Batra, 2018). In particular, small businesses can compensate for their lack of resources and low R&D (Chaudhary and Batra, 2018; Klewitz et al., 2012; McAdam et al., 2010), remain

competitive (Boyd and Hollensen, 2012; Chaudhary and Batra, 2018; Gancarczyk and Gancarczyk, 2016), and thus increase their longevity.

Chapter D focusses on the influence of family characteristics and resources (familiness) on AC and the mediation of the effect through CSR. In this study, the findings from Chapters B and C are combined to provide further insights into the gaps found. The analysis was performed on the basis of family-owned SMEs and via the theoretical foundations of signaling theory and dynamic capability theory. Family businesses – like every other business – need to constantly adapt to changing environmental conditions to survive in the long run and to be able to achieve their primary goal: to hand over the business to the next generation (Chrisman et al., 2005a; Eisenhardt and Martin, 2000; Zahra and George, 2002). Family businesses often rely on the experience and knowledge accumulated over generations (Belkhdja and Daghfous, 2020; Brinkerink, 2018; Daspit et al., 2019). However, to achieve longevity, family businesses must continually renew their knowledge and competencies by leveraging internal and external resources (Eisenhardt and Martin, 2000; Teece et al., 1997). Therefore, it is proposed that CSR is the key for family-owned SMEs to leverage family-specific resources (familiness) and open the business to the outside world for AC. In doing so, family-owned SMEs use CSR as a signal for building trust and long-term relationships with internal and external stakeholders to create an incentive among these groups to share their knowledge (Brinkerink, 2018; Martínez and Rodríguez del Bosque, 2013; Luo and Du, 2015; Zerbini, 2017). To show internal and external effects, CSR was divided into employee-, customer-, and community-oriented CSR and AC into potential and realized AC. The analysis indicates the positive mediation of customer-oriented CSR on potential AC. For realized AC, a partial effect of customer- and employee-oriented CSR can be found, resulting in a partial effect through familiness as well. The findings illustrate that CSR can be used as a strategic tool for leveraging resources and specific characteristics of the family to obtain economic benefits (Bingham et al., 2011; Cantrell et

al., 2015; Farooq et al., 2014). Family businesses can thus better respond to evolving environmental conditions and thus increase their longevity.

The focus of Chapter E is on the influence of SEW on post-succession performance. Through the consideration of SEW, additional family characteristics are tested for a crucial event in the preservation of longevity. In this study, it is proposed that an increase in SEW in family-owned SMEs, especially in the areas of “renewal of family bonds through dynastic succession,” “emotional attachment of family members,” and “identification of family members with the firm,” can increase post-succession performance. It is hypothesized that by strengthening these areas, and thus the attachment of family members to the business and to each other, they will continue to support the successor in the post-succession process by providing their resources (Razzak and Jassem, 2019). The study found that family-owned SMEs can use “renewal of family bonds through dynastic succession” and “identification of family members with the firm” as a strategic tool for increasing post-succession performance (Strike, 2012). Family characteristics emerge as a key factor in determining whether financial performance improves or deteriorates after the succession process. Family-owned SMEs can strategically leverage their family characteristics (SEW) and their resources to ensure the longevity of the business.

Table F-1: Main results of the four articles

Paper	Key findings
<p>Paper 1 (Chapter B): Corporate social responsibility in family firms: current status and future directions of a research field</p>	<p>The use of family resources can increase the implementation of CSR activities. This practice can explain the heterogeneous CSR integration in family businesses. In this context, not only the family CEO but also the family members influence family business decisions, with more CSR being implemented when the owning family has a greater influence on the family business. Research on the impact of CSR on the business has focused heavily on non-financial outcomes, while financial outcomes have rarely been studied. Family outcomes, which relate to the needs and goals of the owning family, have not been analyzed. Moreover, the analysis shows a black box; research does not answer the question of which (family) business antecedents are linked to which (family) business outcomes by which CSR activities. The answer to this question is essential to know which antecedents can contribute achieving of a certain goal through which CSR activities. In general, the results are also relevant and transferable for non-family businesses.</p>
<p>Paper 2 (Chapter C): Absorptive Capacity in Family Firms: A Systematic Literature Review</p>	<p>Family businesses have been relatively neglected in AC research so far. In this context, general AC research cannot simply be transferred to family businesses, as these lack the consideration of the heterogeneity of family businesses. The divergent results of AC in family businesses depend on the inclusion and operationalization of family business and family influence and the approach utilized – involvement, behavioral, or organizational identity approach. The behavioral approach and the use of multidimensional constructs – for example, familiness and SEW – can reveal the complexity and heterogeneity of AC in family businesses. These need to be explored in future research, particularly empirical research, as the consideration of constructs has only been partially used in theoretical research to date. It is also important to distinguish between the different dimensions and their characteristics as they affect AC differently.</p>
<p>Paper 3 (Chapter D): Openness to Knowledge – The Mediating Role of Corporate Social Responsibility on Absorptive Capacity in Family Firms</p>	<p>For family businesses, knowledge transfer is easier when their familiness is pronounced and used to activate and signal CSR. For the potential AC, the family’s influence on the potential AC via familiness is mediated by the family business’s customer-oriented CSR measures. However, the results show no mediation effect concerning employee- and community-oriented CSR. For the realized AC, the results show a mediation effect for customer- and employee-oriented CSR. The analysis revealed no direct effect for the realized AC, and our empirical results suggest that the direct effect of familiness on the potential AC is only partially confirmed. In summary, the results show that CSR activities are the key link that transmits and signals family expectations about decision-making premises to stakeholders. CSR activities that emphasize the positive and value-based orientation of family businesses signal trustworthiness and enable stakeholders to understand and assimilate the family’s decision-making premises based on familiness.</p>
<p>Paper 4 (Chapter E): The moderating role of socioemotional wealth on post-succession performance in small-and medium-sized family firms</p>	<p>Family businesses that keep their SEW high after the succession event also achieve higher post-succession performance in the long run. SEW is a key driver of the positive relationship between the length of time elapsed since the last succession event and post-succession performance results. The individual SEW dimension results show that “renewal of family ties through dynastic succession” and “family members’ identification with the firm” are the most important factors positively influencing post-succession performance. However, “emotional attachment of family members” and post-succession performance show no significant influence. This study shows that the effect of SEW is related to the specific life cycle stage of a family-owned SMEs.</p>

2. Theoretical Implications

The listed studies are focused on the family characteristics – familiness and SEW. Based on the studies in the areas of CSR, AC, and post-succession performance, this work extends the

existing knowledge in these fields. Further, based on these studies, this dissertation derives and illustrates how they can enhance the longevity of family businesses.

This work also contributes to the previous research on family characteristics and provides further insights into how family members influence corporate decisions through their actions, characteristics, and resources (Gómez-Mejía et al., 2007; Habbershon and Williams, 1999; Frank et al., 2017). These effects turn out to be both positive and negative (Andersén, 2015; Daspit et al., 2019; Dayan et al., 2019; Kotlar et al., 2020; Zientara, 2017). Due to this outcome and the large scope of action and influence of the family on the family business, the longevity of family businesses can be affected (Frank et al., 2017; Habbershon and Williams, 1999; Lumpkin and Brigham, 2011).

First, this thesis expands the understanding of previous research regarding CSR in family businesses. It shows that the family business needs to be examined in its sub-dimensions of family and business to uncover the heterogeneity of family businesses. Through the conducted systematic literature review, research on CSR in family businesses is evidently still in its infancy. Further studies are needed to identify the unique characteristics of family businesses in the context of CSR, including family influence, family-specific characteristics, and resource utilization (Arena and Michelon, 2018; Bingham et al., 2011; Dayan et al., 2019; Fitzgerald et al., 2010; Kuttner and Feldbauer-Durstmüller, 2018; Stafford et al., 1999). This would enable a better understanding of the actions and goals to be attained by the family business through CSR activities. Four overarching findings can be highlighted. Research is primarily focused on family antecedents and business outcomes; however, business antecedents and family outcomes are largely ignored in research. The focus therefore needs to be broadened, as this can have an impact on CSR strategy as well as the effective use of family and business resources. In this context, research that compares if the antecedents also generate the intended outcomes remains lacking. A focus should be explicitly placed on this topic, as incongruence would indicate the

ineffective use of resources; furthermore, the CSR activities used must be fundamentally reconsidered (Ward, 1997). The findings also underscore the need for research into other contextual factors, such as the size effects of the family business, as well as country- and culture-specific factors. In summary, the review provides a new focus on the subsystems and resource exchanges of the family and business, which reveals its complexity and whose further exploration may shed light on the heterogeneity of CSR in family businesses. It also opens the perspective that characteristics of familiness or SEW can also occur in non-family companies, for example through strong identification, and the effects found should therefore also be considered in non-family businesses.

Second, the understanding of AC in family businesses, also a relatively new field of research, is expanded. The theoretical analysis, which is the first work summarizing the research of AC in family businesses, shows that no general statements can be made about family influence and its effects. The analysis shows that the conditions of AC are strongly dependent on environmental events and industry affiliation, for example (Boyd und Hollensen, 2012; Duchek, 2015; McAdam et al., 2010). In addition, outcome factors are considered in a very one-sided manner, focusing on performance (Hernández-Perlines et al., 2017; Hernández-Perlines, 2018; Hernández-Perlines and Xu, 2018; Muñoz-Bullón et al., 2020). The formulation of more precise statements in these areas requires an in-depth analysis of the underlying and influencing factors on AC in addition to outcome factors such as regional or country effects, as well as business-specific effects such as industry affiliation, business size, and family behavior (Volberda et al., 2010). Concerning the family influence and resource integration, the ambivalence that the family and family characteristics have a strong influence on AC – positive as well as negative – is primarily shown by theoretical analyses (Andersén, 2015; Daspit et al., 2019; Kotlar et al., 2020); thus, these assumptions need to be empirically tested. Furthermore, many studies have used the involvement approach, which does not include the influence of family. The previous results of the behavioral approach also reflect only a part of

the influence, as either the influence of familiness as a whole or only parts of familiness are analyzed, but not the individual dimensions as demonstrated within the FIFS (Frank et al., 2017; Habbershon and Williams, 1999). The above conclusions also apply for SEW (Gómez-Mejía et al., 2007; 2011). This review opens a previously neglected focus of research on AC in family businesses. It also illustrates that due to the complexity of family businesses, including the subsystems of family and business, more and deeper research is needed, especially taking into account the multidimensional constructs that have been neglected so far. Only through these can the heterogeneity of family businesses be analyzed, and the mechanisms behind AC outcomes in family businesses be understood.

The third study of this thesis focuses on this point; it also analyzes, as the first empirical paper, the influence of familiness by using a multidimensional construct on AC by a mediation through customer-, employee-, and community-oriented CSR. In this case, the differences between the theoretical and empirical approaches are identified, which may be due to the operationalization of familiness (Frank et al., 2017; Habbershon and Williams, 1999) and reveal that the operationalization of familiness may influence the empirical outcome (Andersén, 2015; Kotlar et al., 2020). Further, it is the first study to show that sustainable practices (CSR) can be strategically deployed and signaled to promote external knowledge transfer as well as its integration into the organization. The analysis indicates that the relationship between familiness and potential AC is only partially mediated by customer-oriented CSR (i.e., the positive direct effect of familiness on potential AC is also found). Theoretically, a predominantly negative effect was derived for the direct relationship (Andersén, 2015; Daspit et al., 2019). A full mediation for customer- and employee-oriented CSR is likewise demonstrated for realized AC. The confirmation of (partial) mediation suggests that CSR is effective in signaling and revealing the characteristics associated with familiness (El Akremi et al., 2018; Frank et al., 2017; Weismeyer-Sammer et al., 2013). The analysis shows that family businesses can use their resources for certain CSR activities to signal and reveal their familiness characteristics to

stakeholders to effectively use these resources and ensure their alignment with the longevity of the business. The study also provides added value by empirically demonstrating that not all CSR activities can be beneficial, and it is important to know which measures work and which do not to ensure the longevity of the family business. The financial aspect is particularly important for family-owned SMEs, as they can only implement limited CSR activities due to resource restrictions (Lee et al., 1999; Stoian and Gilman, 2017). If the business chooses the correct CSR activities, they can generate an economic advantage. The study also suggests looking at constructs not only as a whole, but also analyzing their sub-dimensions – as in the case of CSR and AC – to uncover complexities. Consequently, it is important to analyze these more closely in the future.

The fourth study is focused on post-succession performance and is the first to show how the different dimensions of SEW influence post-succession performance. It could be demonstrated that family businesses with a strong bond (renewal of family bonds through dynastic succession) and identification of family members (identification of family members with the firm) perform better after a successful succession than family businesses where these characteristics are less pronounced. These family businesses achieve a positive effect on performance due to the use of family resources. The “emotional attachment of family members” dimension reveals no effect on post-succession performance. Thus, family businesses that exhibit good family cohesion and identification with the business show better longevity (Berrone et al., 2012; Gómez-Mejía et al., 2018; Ng et al., 2019). The current study contributes to the research in the field of business transfer (Le Breton-Miller et al., 2004), which to this day searches for success factors through which family businesses can successfully manage their succession (Le Breton-Miller et al., 2004; Umans et al., 2020; Zybura et al., 2020). The analysis shows that the influence of family members needs to be further developed in previous research and that constructs such as SEW in particular should be considered for this purpose. Here, too, a distinction must be made between the dimensions, as they can have different effects. Thus,

relationships can be better understood. Further, the study opens the view that non-financial goals (SEW) should be considered as a strategic tool or strategic decision process that can support the longevity of the business. In this context, it is crucial to consider the life cycle phase of the family business.

Overall, the studies in this thesis indicate that the characteristics of the family have different influences on decisions and behaviors and, consequently, the business and its outcomes. Therefore, it is essential to analyze the level of family influence with multidimensional constructs, as this is an essential way to reveal the complexity of the family. As a result of the complexity, different characteristics of the family can promote as well as impair longevity. Therefore, it is crucial to look at the whole level of constructs like familiness and SEW as well as the subdimensions, as they show different modes of action. This is necessary to analyze in detail how the family characteristics influence strategic decisions of the family business and thus the longevity of the family business.

3. Managerial Implications

The results and conclusions of the paper also offer managerial implications. First, family businesses should be aware of the influence of family members and the impact they can have, as they can foster the longevity of the business.

Family businesses have to realize that strategic decisions are made not only by the family CEO but also by the family (Jang and Danes, 2013; Dimov, 2017). First, family businesses should allow the family to be integrated into the business. Along with this process, more family resources are incorporated, which are subsequently also available to the business to achieve longevity (Chrisman et al., 2013; Eddleston et al., 2008; Stafford et al., 1999). The provision and use of family resources is particularly relevant for small companies, as on the one hand they have fewer resources, and on the other hand, the owning family can exert more influence on them and therefore also provides more resources (Danes and Brewton, 2012). As shown,

family characteristics can have a strong influence on the use of resources in the family business. In this regard, the results achieved by the family business can be positive as well as negative and must be considered (Andersén, 2015; Cruz et al., 2014; Habbershon and Williams, 1999; Swab et al., 2020; Ng et al., 2019; Zellweger et al., 2010; Zientara, 2017).

Additionally, investments in CSR are worthwhile for companies. Such investments not only represent costs for the business, but they can also achieve financial and non-financial results if strategically implemented (Campopiano and De Massis, 2015; Niehm et al., 2008; Samara and Arenas, 2017; Wagner, 2010). This goal is attained through increased stakeholder engagement, trustworthiness, and loyalty, among other factors (Bingham et al., 2011; Du et al., 2018; Iglesias et al., 2020; Rahman, 2011; Zerbini, 2017). The business can also use CSR as an effective signal for communicating its sustainability to the outside world (Zerbini, 2017). Through the long-term orientation of CSR activities and the use of family resources, family businesses can achieve long-term and sustainable success (Antheaume et al., 2013; Jain and Jamali, 2016; Le Breton-Miller and Miller, 2016; Samara and Arenas, 2017). However, when using CSR, attention should be paid to the actions that are implemented to reach the corresponding goals, as not all activities equally lead to success (Block and Wagner, 2014b).

In addition, the results suggest that AC is also strongly influenced by the family and its resources (Kotlar et al., 2020; Andersén, 2015), and the resources have a positive and negative effect on potential and realized AC. Family businesses should be aware of these effects. Absorptive capacity constitutes an important capability of the business to face dynamic environmental changes (Rothaermel and Alexandre, 2009). Family businesses have internal advantages in implementing AC because they can more effectively use new knowledge due to better social interactions and tacit knowledge (Andersén, 2015; Belkhdja and Daghfous, 2020; Brinkerink, 2018; Wang, 2016b). Stakeholders also associate a stronger trust with family businesses than with non-family businesses. Therefore, family businesses have an advantage,

as trust forms an essential basis for the (external) exchange of knowledge. Companies should become aware of this factor and adopt measures for maintaining and strengthening the trust placed in them and thus build long-term relationships with external partners (Gancarczyk and Gancarczyk, 2016; Kim, 2019; Martínez and Rodríguez del Bosque, 2013). These findings are especially crucial for small companies because they depend on external knowledge to compensate for the lack of resources and lower R&D capabilities through AC (Chaudhary and Batra, 2018). By successfully leveraging AC, the business can achieve better performance and competitive advantage (Chaudhary and Batra, 2018; Lane et al., 2001; Volberda et al., 2010; Zou et al., 2018) through, among other approaches, the development of product and process innovations (Brinkerink, 2018; Lane et al., 2006), a faster response to customer needs (Chaudhary and Batra, 2018), or the compensation of knowledge shortages (Filippini et al., 2012; Klewitz et al., 2012). This strategy strengthens the market position (Gancarczyk and Gancarczyk, 2016; Teece et al., 1997), which promotes the longevity of the family business.

In the area of succession, the recognition that the family can make a key contribution to post-succession performance is imperative for family businesses. The results suggest that family members should also be involved after the succession process to successfully perform within the post-succession. For this purpose, the family leader should ensure that family members exhibit a strong renewal of family bonds and identification of family members (Berrone et al., 2012; Hauck et al., 2016). These findings are critical for family businesses, as many family businesses fail even after a successful handover to the next generation (Cucculelli and Micucci, 2008; Hauck and Prüggl, 2015; Jaskiewicz et al., 2016). Successful family involvement and resource exchange can result in the sustainable performance of the business and thus directly increase the longevity of the family business (Berrone et al., 2012; Gómez-Mejía et al., 2018; Ng et al., 2019).

Overall, family managers and family members need to be aware of their influence on the business through their characteristics, actions, and use of resources. Decisions being made should be examined to determine if they have a family or an entrepreneurial background to question their intent. When used strategically, the family characteristics can help with successfully shaping the management and sustainability of the family business and ensuring the longevity of the business.

4. Limitations and Future Research

This dissertation is not free of various limitations due to the two methods used (i.e., systematic literature review and quantitative evaluation), even when the literature reviews were systematically conducted according to Tranfield et al. (2003). However, the availability of further relevant literature on the topics of CSR and AC in family businesses cannot be discounted. Several issues may have influenced this limitation. First, the results were limited by the selected databases and the chosen quality criteria, such as the use of the Association of Business School ranking (2021), the VHB ranking, and the restriction to scientific journals in English. The choice of keywords can similarly result in a bias and limitation of the search results, as many synonyms are often used for one term. In addition, the subjective selection of articles cannot be excluded. To compensate for these limitations, a detailed description of the data selection in the articles was made. The quantitative articles are also characterized by some limitations. The studies are based on cross-sectional data collected by the chair in Germany at a single point in 2019. Therefore, the results merely represent a snapshot and cannot be generalized to other contexts. The results may be influenced by spatial and temporal circumstances (i.e., laws) or country-specific contexts (i.e., culture), which may influence the actions of the family business or the family. Such data are likewise susceptible to bias due to low response or misclassification caused by recall bias. The selection and narrowing of the

constructs analyzed may also have an impact on the results, as well as the selection of the theoretical lenses being used.

This dissertation focused on the influence of the family through family characteristics (familiness and SEW) on business outcomes and the ensuing longevity of the family business. Future research should investigate the influence of family characteristics on business outcomes. As an example, entrepreneurship theories assume that the entrepreneur alone has an influence on business decisions (Jang and Danes, 2013), thereby disregarding the strong influence of the family. Therefore, further research should identify the specific family characteristics and resources that have a positive or a negative influence on different areas of the business and thus affect business outcomes. In this context, emphasis should be given to researching methods to reduce these negative effects, as in the case of AC (Daspit et al., 2019; Kotlar et al., 2020). These results have the potential to increase the longevity of family businesses. Furthermore, examining the impact of family characteristics on the business has high practical relevance, as the family is often unaware of its influence and its impact on the family business and therefore is unconsciously managing these outcomes. However, if these family characteristics and the resources behind them are purposefully used, then the longevity of the family business can be improved. Further research should also determine whether the existing concepts of familiness and SEW cover all of the family's influences or if any additional factors can have an impact on the business. Moreover, in further research, family and business should not be considered separately; instead, they should be treated as a system that exchanges resources, exhibits shared interests and goals, and therefore engages in a constant exchange. One approach is through SFBT (Stafford et al., 1999). In this regard, the focus should also be on exploring the goals of the family. The influence of the family on the outcomes or goals of the business is frequently investigated, and the intention of the family behind the actions and their achievement through such intent is often only hinted at, but rather rarely empirically tested, as the analysis of CSR in family businesses shows. Through the interacting system, the success and longevity of the

business influence the well-being of the family; at the same time, the health of the family affects the longevity of the business (Ward, 1987).

5. Conclusions

Four papers were presented in this dissertation, which illustrated the influence of family characteristics on CSR, AC, and post-succession performance. Two methodological approaches were used for the analysis: a systematic literature review and an empirical analysis of a self-collected survey. Based on these papers, the impact of family characteristics and resources on CSR, knowledge transfer, and post-succession performance was discussed. Further, based on these studies, this dissertation inferred how these can influence the longevity of family businesses.

This work advances our understanding of family characteristics and (i) their influence on business antecedents and outcomes, (ii) their use in successful business management, and (iii) their potential to favor family business longevity. Therefore, the research has contributed to expanding the knowledge of family businesses and their heterogeneity and offered theoretical and practical implications.

Perhaps the added value of this work is that it shows, through a variety of topics, that family members can guide the fortunes of the family business through their (indirect) behaviors, resources, and characteristics. However, an important factor to consider is how the characteristics are used, as their actions can have both positive and negative effects on the results of the family business and thus on the longevity of family businesses.

G. References

- Abeysekera, A. P. and Fernando, C. S. (2020). Corporate social responsibility versus corporate shareholder responsibility: A family firm perspective. *Journal of Corporate Finance*, 61(C), 101370.
- Abrams, L. C., Cross, R., Lesser, E. and Levin, D. Z. (2003). Nurturing interpersonal trust in knowledge-sharing networks. *Academy of Management Executive*, 17(4), 64–77.
- Adams, J. S., Taschian, A. and Shore, T. H. (1996). Ethics in family and non-family owned firms: an exploratory study. *Family Business Review*, 9(2), 157–170.
- Adomako, S., Amankwah-Amoah, J., Danso, A., Konadu, R. and Owusu-Agyei, S. (2019). Environmental sustainability orientation and performance of family and nonfamily firms. *Business Strategy and the Environment*, 28(6), 1250–1259.
- Ahmad, S., Siddiqui, K. A. and AboAlsamh, H. M. (2020a). Family SMEs' survival: the role of owner family and corporate social responsibility. *Journal of Small Business and Enterprise Development*, 27(2), 281–297.
- Ahmad, S., Omar, R. and Quoquab, F. (2020b). Family firms' sustainable longevity: the role of family involvement in business and innovation capability. *Journal of Family Business Management*, 11(1), 86–106.
- Ahrens, J.-P., Calabrò, A., Huybrechts, J. and Woywode, M. (2019). The Enigma of the Family Successor-Firm Performance Relationship: A Methodological Reflection and Reconciliation Attempt. *Entrepreneurship Theory and Practice*, 43(3), 437–474.
- Ahrens, J.-P., Uhlaner, L., Woywode, M. and Zybura, J. (2018). “Shadow emperor” or “loyal paladin”? – The Janus face of previous owner involvement in family firm successions. *Journal of Family Business Strategy*, 9(1), 73–90.
- Albert, S. and Whetten, D. A. (1985). Organizational identity. In L. L. Cummings & B. M. Staw (eds.), *Research in organizational behavior*, 1st edition, (pp. 263–295). JAI Press, Greenwich CT.
- Albertini, E. (2013). Does environmental management improve financial performance? A meta-analytical review. *Organization & Environment*, 26(4), 431–457.
- Ali, W., Frynas, J. G. and Mahmood, Z. (2017). Determinants of Corporate Social Responsibility (CSR) Disclosure in Developed and Developing Countries: A Literature Review. *Corporate Social Responsibility and Environmental Management*, 24(4), 273–294.
- Allen, N. J. and Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology*, 63(1), 1–18.
- Allison, T. H., McKenny, A. F. and Short, J. C. (2014). Integrating Time Into Family Business Research: Using Random Coefficient Modeling to Examine Temporal Influences on Family Firm Ambidexterity. *Family Business Review*, 27(1), 20–34.
- Amann, B., Jaussaud, J. and Martinez, I. (2012). Corporate social responsibility in Japan: Family and non-family business differences and determinants. *Asian Business & Management*, 11(3), 329–345.

- Amidjaya, P. G. and Widagdo, A. K. (2020). Sustainability reporting in Indonesian listed banks: Do corporate governance, ownership structure and digital banking matter? *Journal of Applied Accounting Research*, 21(2), 231–247.
- Amore, M. D., Bennesen, M., Le Breton-Miller, I. and Miller, D. (2021). Back to the future: The effect of returning family successions on firm performance. *Strategic Management Journal*, 42(8), 1432–1458.
- Anand, V., Joshi, M. and O'Leary-Kelly, A. M. (2013). An organizational identity approach to strategic groups. *Organization Science*, 24(2), 571–590.
- Andersén, J. (2015). The absorptive capacity of family firms: How familiness affects potential and realized absorptive capacity. *Journal of Family Business Management*, 5(1), 73–89.
- Andersson, F. W., Johansson, D., Karlsson, J., Lodefalk, M. and Poldahl, A. (2018). The characteristics of family firms: exploiting information on ownership, kinship, and governance using total population data. *Small Business Economics*, 51(3), 539–556.
- Anglin, A. H., Reid, S. W., Short, J. C., Zachary, M. A. and Rutherford, M. W. (2017). An archival approach to measuring family influence: An organizational identity perspective. *Family Business Review*, 30(1), 19–36.
- Antheaume, N., Robic, P. and Barbelivien, D. (2013). French family business and longevity: Have they been conducting sustainable development policies before it became a fashion? *Business History*, 55(6), 942–962.
- Antons, D. and Piller, F. T. (2015). Opening the black box of “not invented here”: Attitudes, decision biases, and behavioral consequences. *Academy of Management Perspectives*, 29(2), 193–217.
- Aragón-Amonarriz, C., Arredondo, A. M. and Iturrioz-Landart, C. (2019). How can responsible family ownership be sustained across generations? A family social capital approach. *Journal of Business Ethics*, 159(1), 161–185.
- Arena, C. and Michelon, G. (2018). A matter of control or identity? Family firms' environmental reporting decisions along the corporate life cycle. *Business Strategy and the Environment*, 27(8), 1596–1608.
- Arregle, J., Hitt, M. A., Sirmon, D. G. and Very, P. (2007). The development of organizational social capital: Attributes of family firms. *Journal of Management Studies*, 44(1), 73–95.
- Ashforth, B. E., Rogers, K. M. and Corley, K. G. (2011). Identity in Organizations: Exploring Cross-Level Dynamics. *Organization Science*, 22(5), 1144–1156.
- Association of Business Schools (2021). Academic Journal Guide. London, Chartered Association of Business Schools. <https://charteredabs.org/academic-journal-guide-2021-view/> Accessed 13 August 2021
- Astrachan, J. H., Klein, S. B. and Smyrnios, K. X. (2002). The F-PEC scale of family influence: A proposal for solving the family business definition problem. *Family Business Review*, 15(1), 45–58.
- Astrachan, C. B., Botero, I., Astrachan, J. H. and Prügl, R. (2018). Branding the family firm: A review, integrative framework proposal, and research agenda. *Journal of Family Business Strategy*, 9(1), 3–15.

- Astrachan, C. B. and Botero, I. C. (2018). We are a family firm. *Journal of Family Business Management*, 8(1), 2–21.
- Astrachan, J. H., Astrachan, C. B., Campopiano, G. and Baù, M. (2020). Values, spirituality and religion: Family business and the roots of sustainable ethical behavior. *Journal of Business Ethics*, 163(4), 637–645.
- Bammens, Y. and Hünermund, P. (2020). Nonfinancial considerations in eco-innovation decisions: The role of family ownership and reputation concerns. *Journal of Product Innovation Management*, 37(5), 431–453.
- Bangerter, A., Roulin, N. and König, C. (2012). Personnel Selection as a Signaling Game. *The Journal of applied psychology*, 97, 719–38.
- Barnes, L. B. and Hershon, S. A. (1976). Transferring power in the family business. *Harvard Business Review*, 54(4), 105–114.
- Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
- Baron, R. M. and Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6), 1173–82.
- Barreto, I. (2010). Dynamic Capabilities: A Review of Past Research and an Agenda for the Future. *Journal of Management*, 36(1), 256–280.
- Barros, I., Hernangómez, J. and Martin-Cruz, N. (2016). A theoretical model of strategic management of family firms. A dynamic capabilities approach. *Journal of Family Business Strategy*, 7(3), 149–159.
- Basco, R. (2015). Family business and regional development – A theoretical model of regional familiness. *Journal of Family Business Strategy*, 6(4), 259–271.
- Basco, R. and Calabrò, A. (2017). “Whom do I want to be the next CEO?” Desirable successor attributes in family firms. *Journal of Business Economics*, 87(4), 487–509.
- Bassanini, A., Breda, T., Caroli, E. and Reberieux, A. (2013). Working in family firms: paid less but more secure? Evidence from French matched employer-employee data. *ILR Review*, 66(2), 433–466.
- Becker, G. S., Murphy, K. M. and Tamura, R. (1990). Human capital, fertility, and economic growth. *Journal of political economy*, 98(5, Part 2), 12–37.
- Beech, N., Devins, D., Gold, J. and Beech, S. (2020). In the family way: an exploration of family business resilience. *International Journal of Organizational Analysis*, 28(1), 160–182.
- Belitski, M., Caiazza, R. and Lehmann, E. E. (2019). Knowledge frontiers and boundaries in entrepreneurship research. *Small Business Economics*, 56(2), 521–531.
- Belkhdja, O. and Daghfous, A. (2020). Exploring the double-edged sword of familiness from a knowledge-based perspective. *Baltic Journal of Management*, 16(1), 71–96.
- Belyaeva, Z., Shams, S. M. R., Santoro, G. and Grandhi, B. (2020). Unpacking stakeholder relationship management in the public and private sectors: the comparative insights. *EuroMed Journal of Business*, 15(3), 269–281.

- Bennedsen, M., Nielsen, K. M., Pérez-González, F. and Wolfenzon, D. (2007). Inside the family firm: The role of families in succession decisions and performance. *The Quarterly Journal of Economics*, 122(2), 647–691.
- Bennedsen, M., Tsoutsoura, M. and Wolfenzon, D. (2019). Drivers of effort: Evidence from employee absenteeism. *Journal of Financial Economics*, 133(3), 658–684.
- Bergamaschi, M. and Randerson, K. (2016). The futures of family businesses and the development of corporate social responsibility. *Futures*, 75, 54–65.
- Bergh, D. D., Connelly, B. L., Ketchen, D. J. and Shannon, L. M. (2014). Signalling Theory and Equilibrium in Strategic Management Research: An Assessment and a Research Agenda. *Journal of Management Studies*, 51(8), 1334–1360.
- Berrone, P., Cruz, C., Gómez-Mejía, L. R. and 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.
- Berrone, P., Cruz, C. and Gómez-Mejía, L. R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279.
- Bhatnagar, N., Sharma, P. and Ramachandran, K. (2020). Spirituality and corporate philanthropy in Indian family firms: An exploratory study. *Journal of Business Ethics*, 163(4), 715–728.
- Bhupendra, K. V. and Sangle, S. (2017). What Drives Successful Implementation of Product Stewardship Strategy? The Role of Absorptive Capability. *Corporate Social Responsibility and Environmental Management*, 24(3), 186–198.
- Bingham, J. B., Gibb Dyer, W., Smith, I. and Adams, G. L. (2011). A Stakeholder Identity Orientation Approach to Corporate Social Performance in Family Firms. *Journal of Business Ethics*, 99(4), 565–585.
- Binz, C. A., Ferguson, K. E., Pieper, T. M. and Astrachan, J. H. (2017). Family business goals, corporate citizenship behaviour and firm performance: disentangling the connections. *International Journal of Management and Enterprise Development*, 16(1/2), 34–56.
- Biscotti, A.M., D’Amico, E. and Monge, F. (2018). Do environmental management systems affect the knowledge management process? The impact on the learning evolution and the relevance of organisational context. *Journal of Knowledge Management*, 22(3), 603–620.
- Biswas, P., Roberts, H. and Whiting, R. (2019). The impact of family vs non-family governance contingencies on CSR reporting in Bangladesh. *Management Decision*, 57(10), 2758–2781.
- Block, J. (2010). Family management, family ownership, and downsizing: Evidence from S&P 500 firms. *Family Business Review*, 23(2), 109–130.
- Block, J. and Wagner, M. (2014a). Ownership versus management effects on corporate social responsibility concerns in large family and founder firms. *Journal of Family Business Strategy*, 5(4), 339–346.
- Block, J. H. and Wagner, M. (2014b). The Effect of Family Ownership on Different Dimensions of Corporate Social Responsibility: Evidence from Large US Firms. *Business Strategy and the Environment*, 23(7), 475–492.

- Blodgett, M. S., Dumas, C. and Zanzi, A. (2011). Emerging trends in global ethics: A comparative study of U.S. and international family business values. *Journal of Business Ethics*, 99(1), 29–38.
- Botero, I. C., Spitzley, D., Lude, M. and Prügl, R. (2019). Exploring the Role of Family Firm Identity and Market Focus on the Heterogeneity of Family Business Branding Strategies. In E. Memili & C. Dibrell (eds.), *The Palgrave Handbook of Heterogeneity among Family Firms*, 1st edition, (pp. 909–932). Palgrave Macmillan, Cham.
- Bouguerra, A., Yezza, H. and Mzoughi, M. N. (2016). Post-Successions Performance of Family Firms: The Role of Social Skills and Demographic Characteristics of the Successor. *Strategic Management Quarterly*, 4, 75–86
- Bowen, H. R. (1953). *Social responsibilities of the businessman*. Hamper & Row, New York.
- Boyd, B. and Hollensen, S. (2012). Strategic Management of a Family-Owned Airline: Analysing the Absorptive Capacity of Cimber Sterling Group A/S. *Journal of Family Business Strategy*, 3(2), 70–78.
- Branco, M. C. and Rodrigues, L. L. (2006). Corporate social responsibility and resource-based perspectives. *Journal of Business Ethics*, 69(2), 111–132.
- Brinkerink, J., Gils, A., Bammens, Y. and Carree, M. (2017). Open Innovation: A Literature Review and Recommendations for Family Business Research. In F. Kellermanns & F. Hoy (eds.), *The Routledge Companion to Family Business*, 1st edition, (pp. 241–266). Routledge, New York.
- Brinkerink, J. (2018). Broad Search, Deep Search, and the Absorptive Capacity Performance of Family and Nonfamily Firm R&D. *Family Business Review*, 31(3), 295–317.
- Brown, J. A. and Forster, W. R. (2013). CSR and stakeholder theory: A tale of Adam Smith. *Journal of Business Ethics*, 112(2), 301–312.
- Bruce, D. and Picard, D. (2006). Making Succession a Success: Perspectives from Canadian Small and Medium-Sized Enterprises. *Journal of Small Business Management*, 44(2), 306–309.
- Cabeza-García, L., Sacristán-Navarro, M. and Gómez-Ansón, S. (2017). Family involvement and corporate social responsibility disclosure. *Journal of Family Business Strategy*, 8(2), 109–122.
- Cabrera-Suárez, K., Saá-Pérez, P. D. and García-Almeida, D. (2001). The Succession Process from a Resource- and Knowledge-Based View of the Family Firm. *Family Business Review*, 14(1), 37–48.
- Cabrera-Suárez, M. K., de la Cruz Déniz-Déniz, M. and Martín-Santana, J. D. (2011). Familiness and market orientation: A stakeholder approach. *Journal of Family Business Strategy*, 2(1), 34–42.
- Calabrò, A., Minichilli, A., Amore, M. D. and Brogi, M. (2018). The courage to choose! Primogeniture and leadership succession in family firms. *Strategic Management Journal*, 39(7), 2014–2035
- Campopiano, G., De Massis, A. and Chirico, F. (2014). Firm philanthropy in small-and medium-sized family firms: The effects of family involvement in ownership and management. *Family Business Review*, 27(3), 244–258.
- Campopiano, G. and De Massis, A. (2015). Corporate Social Responsibility Reporting: A Content Analysis in Family and Non-family Firms. *Journal of Business Ethics*, 129(3), 511–534.
- Cantrell, J. E., Kyriazis, E. and Noble, G. (2015). Developing CSR Giving as a Dynamic Capability for Salient Stakeholder Management. *Journal of Business Ethics*, 130(2), 403–421.

- Carlock, R. S. and Ward, J. L. (2001). *Strategic planning for the family business: Parallel planning to unify the family and business*, 1st edition. Palgrave, New York.
- Carnes, C. M. and Ireland, R. D. (2013). Familiness and innovation: Resource bundling as the missing link. *Entrepreneurship Theory and Practice*, 37(6), 1399–1419.
- Carroll, A. B. (1991). The pyramid of corporate social responsibility: Toward the moral management of organizational stakeholders. *Business Horizons*, 34(4), 39–48.
- Casprini, E., De Massis, A., Di Minin, A., Frattini, F. and Piccaluga, A. (2017). How family firms execute open innovation strategies: the Loccioni case. *Journal of Knowledge Management*, 21(6), 1459–1485.
- Casson, M. (1999). The economics of the family firm. *Scandinavian Economic History Review*, 47(1), 10–23.
- Cater, J. J. and Justis, R. T. (2009). The Development of Successors From Followers to Leaders in Small Family Firms: An Exploratory Study. *Family Business Review*, 22(2), 109–124.
- Cennamo, C., Berrone, P., Cruz, C. and Gómez-Mejía, 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.
- Cepeda-Carrion, G., Cegarra-Navarro, J. G. and Jimenez-Jimenez, D. (2012). The Effect of Absorptive Capacity on Innovativeness: Context and Information Systems Capability as Catalysts. *British Journal of Management*, 23(1), 110–129.
- Cha, W. and Rajadhyaksha, U. (2021). What do we know about corporate philanthropy? A review and research directions. *Business Ethics: A European Review*, 30(3), 262–286.
- Chadwick, I. C. and Dawson, A. (2018). Women leaders and firm performance in family businesses: An examination of financial and nonfinancial outcomes. *Journal of Family Business Strategy*, 9(4), 238–249.
- Chang, S.-J. and Shim, J. (2015). When does transitioning from family to professional management improve firm performance? *Strategic Management Journal*, 36(9), 1297–1316.
- Chassang, S. (2010). Building Routines: Learning, Cooperation, and the Dynamics of Incomplete Relational Contracts. *The American Economic Review*, 100(1), 448–465.
- Chaudhary, S. and Batra, S. (2018). Absorptive Capacity and Small Family Firm Performance: Exploring the Mediation Processes. *Journal of Knowledge Management*, 22(6), 1201–16.
- Chen, Y.-S., Lin, M.-J. J. and Chang, C.-H. (2009). The positive effects of relationship learning and absorptive capacity on innovation performance and competitive advantage in industrial markets. *Industrial Marketing Management*, 38(2), 152–158.
- Chen, Y. L. and Cheng, H. Y. (2020). Public family businesses and corporate social responsibility assurance: The role of mimetic pressures. *Journal of Accounting and Public Policy*, 39(3), 106734.
- Cheng, B., Ioannou, I. and Serafeim, G. (2014). Corporate social responsibility and access to finance. *Strategic Management Journal*, 35(1), 1–23.

- Chirico, F. and 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.
- Chiu, S. C. and Sharfman, M. (2011). Legitimacy, visibility, and the antecedents of corporate social performance: An investigation of the instrumental perspective. *Journal of Management*, 37(6), 1558–1585.
- Choi, Y. K., Han, S. H. and Kwon, Y. (2019). CSR activities and internal capital markets: Evidence from Korean business groups. *Pacific-Basin Finance Journal*, 55, 283–298.
- Chowdhury, S. (2005). The Role of Affect- and Cognition-based Trust in Complex Knowledge Sharing. *Journal of Managerial Issues*, 17(3), 310–326.
- Chrisman, J. J., Chua, J. H. and Sharma, P. (1998). Important Attributes of Successors in Family Businesses: An Exploratory Study. *Family Business Review*, 11(1), 19–34.
- Chrisman, J. J., Chua, J. H. and Steier, L. P. (2003). An introduction to theories of family business. *Journal of Business Venturing*, 18(4), 441–448.
- Chrisman, J. J., Chua, J. H. and Steier, L. (2005a). Sources and Consequences of Distinctive Familiness: An Introduction. *Entrepreneurship Theory and Practice*, 29(3), 237–247.
- Chrisman, J. J., Chua, J. H. and Sharma, P. (2005b). Trends and directions in the development of a strategic management theory of the family firm. *Entrepreneurship Theory and Practice*, 29(5), 555–575.
- Chrisman, J. J., Chua, J. H., Pearson, A. W. and 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. and 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., Sharma, P., Steier, L. P. and Chua, J. H. (2013). The Influence of Family Goals, Governance, and Resources on Firm Outcomes. *Entrepreneurship Theory and Practice*, 37(6), 1249–1261.
- Chrisman, J. J., Chua, J. H., Massis, A. D., Frattini, F. and Wright, M. (2015). The Ability and Willingness Paradox in Family Firm Innovation. *Journal of Product Innovation Management*, 32(3), 310–318.
- Chua, J. H., Chrisman, J. J. and 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. and Rau, S. B. (2012). Sources of Heterogeneity in Family Firms: An Introduction. *Entrepreneurship Theory and Practice*, 36(6), 1103–1113.
- Chua, J. H., Chrisman, J. J. and De Massis, A. (2015). A closer look at socioemotional wealth: Its flows, stocks, and prospects for moving forward. *Entrepreneurship Theory and Practice*, 39(2), 173–182
- Chua, J. H., Chrisman, J. J., De Massis, A. and Wang, H. (2018). Reflections on family firm goals and the assessment of performance. *Journal of Family Business Strategy*, 9(2), 107–113.

- Chung, K.-H., Yu, J.-E., Choi, M.-G. and Shin, J.-I. (2015). The Effects of CSR on Customer Satisfaction and Loyalty in China: The Moderating Role of Corporate Image. *Journal of Economics, Business and Management*, 3(5), 542–547.
- Churchill, N. C. and Hatten, K. J. (1997). Non-Market-Based Transfers of Wealth and Power: A Research Framework for Family Business. *Family Business Review*, 10(1), 53–67.
- Ciravegna, L., Kano, L., Rattalino, F. and Verbeke, A. (2020). Corporate diplomacy and family firm longevity. *Entrepreneurship Theory and Practice*, 44(1), 109–133.
- Cohen, W. M. and Levinthal, D. A. (1989). Innovation and Learning: The Two Faces of R & D. *The Economic Journal*, 99(397), 569–596.
- Cohen, W. M. and Levinthal, D. A. (1990). Absorptive Capacity: A New Perspective on Learning and Innovation. *Administrative Science Quarterly*, 35(1), 128–152.
- Cohen, W. M. and Levinthal, D. A. (1994). Fortune Favors the Prepared Firm. *Management Science*, 40(2), 227–151.
- Collins, L. M., Graham, J. J. and Flaherty, B. P. (1998). An Alternative Framework for Defining Mediation. *Multivariate Behavioral Research*, 33(2), 295–312.
- Combs, J. G., Jaskiewicz, P., Shanine, K. K. and Balkin, D. B. (2018). Making sense of HR in family firms: Antecedents, moderators, and outcomes. *Human Resource Management Review*, 28(1), 1–4.
- Commission of the European Communities (2001). Green Paper: Promoting a European framework for corporate social responsibility, COM (2001) 366 final, Brussels.
- Connelly, B. L., Certo, S. T., Ireland, R. D. and Reutzel, C. R. (2011). Signaling Theory: A Review and Assessment. *Journal of Management*, 37(1), 39–67.
- Cordeiro, J. J., Galeazzo, A., Shaw, T. S., Veliyath, R. and Nandakumar, M. K. (2018). Ownership influences on corporate social responsibility in the Indian context. *Asia Pacific Journal of Management*, 35(4), 1107–1136.
- Cordeiro, J. J., Profumo, G. and Tutore, I. (2020). Board gender diversity and corporate environmental performance: The moderating role of family and dual-class majority ownership structures. *Business Strategy and the Environment*, 29(3), 1127–1144.
- Cordero, L. and Ferreira, J. J. (2019). Absorptive capacity and organizational mechanisms: A systematic review and future directions. *Review of International Business and Strategy*, 29(1), 61–82.
- Costello, A. B. and Osborne, J. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10(7), 1–9.
- Covin, J. G., Slevin, D. P. and Covin, T. J. (1990). Content and performance of growth-seeking strategies: A comparison of small firms in high- and low technology industries. *Journal of Business Venturing*, 5(6), 391–412.
- Craig, J. and Dibrell, C. (2006). The natural environment, innovation, and firm performance: A comparative study. *Family Business Review*, 19(4), 275–288.

- Craig, J. B., Dibrell, C. and Garrett, R. (2014). Examining relationships among family influence, family culture, flexible planning systems, innovativeness and firm performance. *Journal of Family Business Strategy*, 5(3), 229–238.
- Craig, J. and Newbert, S. L. (2020). Reconsidering socioemotional wealth: A Smithian-inspired socio-economic theory of decision-making in the family firm. *Family Business Strategy*, 11(4), 100353.
- Crane, A., Matten, D. and Spence, L. J. (2014). Corporate social responsibility in a global context. In: A. Crane, D. Matten & L. J. Spence (eds.), *Corporate Social Responsibility: Readings and Cases in a Global Context*, 2nd edition, (pp. 3–26). Routledge, New York.
- Cruz, C., Larraza-Kintana, M., Garcés-Galdeano, L. and Berrone, P. (2014). Are Family Firms Really More Socially Responsible? *Entrepreneurship Theory and Practice*, 38(6), 1295–1316.
- Cruz, C., Justo, R., Larraza-Kintana, M. and Garcés-Galdeano, L. (2019). When do women make a better table? Examining the influence of women directors on family firm's corporate social performance. *Entrepreneurship Theory and Practice*, 43(2), 282–301.
- Cuadrado-Ballesteros, B., Rodríguez-Ariza, L. and García-Sánchez, I.-M. (2015). The role of independent directors at family firms in relation to corporate social responsibility disclosures. *International Business Review*, 24(5), 890–901.
- Cuadrado-Ballesteros, B., Rodríguez-Ariza, L., García-Sánchez, I.-M. and Martínez-Ferrero, J. (2017). The mediating effect of ethical codes on the link between family firms and their social performance. *Innovation and Sustainability*, 50(6), 756–765.
- Cucculelli, M. and Micucci, G. (2008). Family succession and firm performance: Evidence from Italian family firms. *Journal of Corporate Finance*, 14(1), 17–31.
- Cui, V., Ding, S., Liu, M. and Wu, Z. (2018). Revisiting the effect of family involvement on corporate social responsibility: A behavioral agency perspective. *Journal of Business Ethics*, 152(1), 291–309.
- Dahlsrud, A. (2008). How corporate social responsibility is defined: An analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1–13.
- Dal Maso, L., Basco, R., Bassetti, T. and Lattanzi, N. (2020). Family ownership and environmental performance: The mediation effect of human resource practices. *Business Strategy and the Environment*, 29(3), 1548–1562.
- Danes, S. M., Lee, J., Stafford, K. and Heck, R. K. Z. (2008). The effects of ethnicity, families and culture on entrepreneurial experience: An extension of sustainable family business theory. *Journal of Developmental Entrepreneurship*, 13(03), 229–268.
- Danes, S. M. and Brewton, K. E. (2012). Follow the capital: Benefits of tracking family capital across family and business systems. In A. Carsrud & M. Brännback (eds.), *Understanding family businesses*, 1st edition, (pp. 227–250). Springer, New York, NY.
- Dangelico, R. M. (2017). What drives green product development and how do different antecedents affect market performance? A survey of Italian companies with eco-labels. *Business Strategy and the Environment*, 26(8), 1144–1161.
- Daspit, J. J., Holt, D. T., Chrisman, J. J. and Long, R. G. (2016). Examining family firm succession from a social exchange perspective: A multiphase, multistakeholder review. *Family Business Review*, 29(1), 44–64.

- Daspit, J. J., Long, R. G. and Pearson, A. W. (2019). How familiness affects innovation outcomes via absorptive capacity: A dynamic capability perspective of the family firm. *Journal of Family Business Strategy*, 10(2), 133–143.
- Daspit, J. J., Chrisman, J. J. and Ashton, T. (2021). Family Firm Heterogeneity: A Definition, Common Themes, Scholarly Progress, and Directions Forward. *Family Business Review*, 34(3), 296–322.
- David, P. A. and Foray, D. (2003). Economic Fundamentals of the Knowledge Society. *Policy Futures in Education*, 1(1), 20–49.
- Davies, I. A. and Crane, A. (2010). Corporate social responsibility in small-and medium-size enterprises: investigating employee engagement in fair trade companies. *Business Ethics: A European Review*, 19(2), 126–139.
- Davis, K. (1973). The case for and against business assumption of social responsibilities. *Academy of Management Journal*, 16(2), 312–322.
- Davis, P. S. and Harveston, P. D. (1998). The influence of family on the family business succession process: A multi-generational perspective. *Entrepreneurship Theory and Practice*, 22(3), 31–53.
- Dawson, A., Ginesti, G. and Sciascia, S. (2020). Family-related antecedents of business legality: An empirical investigation among Italian family owned SMEs. *Journal of Family Business Strategy*, 11(1), 100284.
- Dayan, M., Ng, P. Y. and Ndubisi, N. O. (2019). Mindfulness, socioemotional wealth, and environmental strategy of family businesses. *Business Strategy and the Environment*, 28(3), 466–481.
- Debellis, F., De Massis, A., Messeni Petruzzelli, A., Frattini, F. and Del Giudice, M. (2020). Strategic agility and international joint ventures: The willingness-ability paradox of family firms. *Journal of International Management*, 27(1), 100739.
- Debicki, B. J., Van de Graaff Randolph, R. and Sobczak, M. (2017). Socioemotional Wealth and Family Firm Performance: A Stakeholder Approach. *Journal of Managerial Issues*, 29(1), 82–111.
- Dekker, J. and Hasso, T. (2016). Environmental performance focus in private family firms: The role of social embeddedness. *Journal of Business Ethics*, 136(2), 293–309.
- De Kok, J. and Uhlaner, L. M. (2001). Organization Context and Human Resource Management in the Small Firm. *Small Business Economics*, 17(4), 273–291.
- Del Giudice, M. (2011). Knowledge Management and Family Business. In M. Del Giudice, M. R. D. Peruta & E. G. Carayannis (eds.) *Knowledge and the Family Business*, 1th edition (pp. 11–46). Springer, New York, NY.
- Delmas, M. A. and Gergaud, O. (2014). Sustainable certification for future generations: The case of family business. *Family Business Review*, 27(3), 228–243.
- De Massis, A., Chua, J. H. and Chrisman, J. J. (2008). Factors preventing intra-family succession. *Family Business Review*, 21(2), 183–199.
- De Massis, A., Frattini, F. and Lichtenthaler, U. (2013). Research on Technological Innovation in Family Firms: Present Debates and Future Directions. *Family Business Review*, 26(1), 10–31.

- De Massis, A. and Kotlar, J. (2014). The case study method in family business research: Guidelines for qualitative scholarship. *Journal of Family Business Strategy*, 5(1), 15–29.
- De Massis, A., Audretsch, D., Uhlaner, L. and Kammerlander, N. (2018a). Innovation with Limited Resources: Management Lessons from the German Mittelstand. *Journal of Product Innovation Management*, 35(1), 125–146.
- De Massis, A., Frattini, F., Majocchi, A. and Piscitello, L. (2018b). Family firms in the global economy: Toward a deeper understanding of internationalization determinants, processes and outcomes. *Global Strategy Journal*, 8(1), 3–21.
- De Massis, A., Wang, H. and Chua, J. H. (2019). Counterpoint: How heterogeneity among family firms influences organizational change. *Journal of Change Management*, 19(1), 37–44.
- Déniz, M. and Suárez, M. K. C. (2005). Corporate social responsibility and family business in Spain. *Journal of Business Ethics*, 56(1), 27–41.
- Denning, S. (2005). Why the best and brightest approaches don't solve the innovation dilemma. *Strategic and Leadership*, 33(1), 4–11.
- Dick, M., Wagner, E. and Pernsteiner, H. (2021). Founder-controlled family firms, overconfidence, and corporate social responsibility engagement: Evidence from survey data. *Family Business Review*, 34(1), 71–92.
- Diéguez-Soto, J. and Martínez-Romero, M. J. (2019). Family involvement in management and product innovation: the mediating role of R&D strategies. *Sustainability*, 11(7), 2162.
- Dimov, D. (2017). Towards a qualitative understanding of human capital in entrepreneurship research. *International Journal of Entrepreneurial Behavior & Research*, 23(2), 210–227.
- Discua Cruz, A. (2020). There is no need to shout to be heard! The paradoxical nature of corporate social responsibility (CSR) reporting in a Latin American family small and medium-sized enterprise (SME). *International Small Business Journal*, 38(3), 243–267.
- Doluca, H., Wagner, M. and Block, J. (2018). Sustainability and environmental behaviour in family firms: A longitudinal analysis of environment-related activities, innovation and performance. *Business Strategy and the Environment*, 27(1), 152–172.
- Dou, J., Su, E. and Wang, S. (2019). When does family ownership promote proactive environmental strategy? The role of the firm's long-term orientation. *Journal of Business Ethics*, 158(1), 81–95.
- Du, X. (2015a). Is corporate philanthropy used as environmental misconduct dressing? Evidence from Chinese family-owned firms. *Journal of Business Ethics*, 129(2), 341–361.
- Du, X. (2015b). How the Market Values Greenwashing? Evidence from China. *Journal of Business Ethics*, 128(3), 547–574.
- Du, X., Pei, H., Du, Y. and Zeng, Q. (2016). Media coverage, family ownership, and corporate philanthropic giving: Evidence from China. *Journal of Management & Organization*, 22(2), 224–253.
- Du, X., Zeng, Q. and Chang, Y. (2018). To be philanthropic when being international: Evidence from Chinese family firms. *Journal of Management & Organization*, 24(3), 424–449.

- Duchek, S. (2013). Capturing Absorptive Capacity: A Critical Review and Future Prospects. *Schmalenbach Business Review*, 65(3), 312–29.
- Duchek, S. (2015). Designing Absorptive Capacity? An Analysis of Knowledge Absorption Practices in German High-Tech Firms. *International Journal of Innovation Management*, 19(4), 1550044.
- Duh, M. (2014). Family business succession as knowledge creation process. *Kybernetes*, 43(5), 699–714.
- Dyer Jr, W. G. and Whetten, D. A. (2006). Family firms and social responsibility: Preliminary evidence from the S&P 500. *Entrepreneurship Theory and Practice*, 30(6), 785–802.
- Dzhengiz, T. (2020). Competences for Environmental Sustainability: A Systematic Review on the Impact of Absorptive Capacity and Capabilities. *Journal of Business Ethics*, 162(4), 881–906.
- Eddleston, K. A. and Kellermanns, F. W. (2007). Destructive and productive family relationships: A stewardship theory perspective. *Journal of Business Venturing*, 22(4), 545–565.
- Eddleston, K. A., Kellermanns, F. W. and Sarathy, R. (2008). Resource Configuration in Family Firms: Linking Resources, Strategic Planning and Technological Opportunities to Performance. *Journal of Management Studies*, 45(1), 26–50.
- Eisenhardt, K. M. (1989). Agency theory: An assessment and review. *Academy of Management Review*, 14(1), 57–74.
- Eisenhardt, K. M. and Martin, J. A. (2000). Dynamic capabilities: what are they? *Strategic Management Journal*, 21(10–11), 1105–1121.
- El Akremi, A., Gond, J.-P., Swaen, V., De Roeck, K. and Igalens, J. (2018). How Do Employees Perceive Corporate Responsibility? Development and Validation of a Multidimensional Corporate Stakeholder Responsibility Scale. *Journal of Management*, 44(2), 619–657.
- El Ghouli, S., Guedhami, O., Wang, H. and Kwok, C. C. Y. (2016). Family control and corporate social responsibility. *Journal of Banking & Finance*, 73, 131–146.
- El-Kassar, A.-N., ElGammal, W. and Fahed-Sreih, J. (2018). Engagement of family members, corporate governance and social responsibility in family-owned enterprises. *Journal of Organizational Change Management*, 31(1), 215–229.
- Elkington, J. (1998). Partnerships from cannibals with forks: The triple bottom line of 21st-century business. *Environmental Quality Management*, 8(1), 37–51.
- Ertuna, B., Karatas-Ozkan, M. and Yamak, S. (2019), "Diffusion of sustainability and CSR discourse in hospitality industry: Dynamics of local context", *International Journal of Contemporary Hospitality Management*, 31(6), 2564–2581.
- Faller, C. M. and zu Knyphausen-Aufseß, D. (2018). Does Equity Ownership Matter for Corporate Social Responsibility? A Literature Review of Theories and Recent Empirical Findings. *Journal of Business Ethics*, 150(1), 15–40.
- Fang, S.-R., Huang, C.-Y. and Huang, S. W.-L. (2010). Corporate social responsibility strategies, dynamic capability and organizational performance: Cases of top Taiwan-selected benchmark enterprises. *African Journal of Business Management*, 4(1), 120–132.

- Farooq, O., Payaud, M., Merunka, D. and Valette-Florence, P. (2014). The Impact of Corporate Social Responsibility on Organizational Commitment: Exploring Multiple Mediation Mechanisms. *Journal of Business Ethics*, 125, 563–580.
- Farooq, O., Rupp, D. E. and Farooq, M. (2017). The Multiple Pathways Through Which Internal and External Corporate Social Responsibility Influence Organizational Identification and Multifoci Outcomes: The Moderating Role of Cultural and Social Orientations. *Academy of Management Journal*, 60(3), 954–985.
- Fehre, K. and Weber, F. (2019). Why some are more equal: Family firm heterogeneity and the effect on management's attention to CSR. *Business Ethics: A European Review*, 28(2), 321–334.
- Feranita, F., Kotlar, J. and De Massis, A. (2017). Collaborative innovation in family firms: Past research, current debates and agenda for future research. *Journal of Family Business Strategy*, 8(3), 137–156.
- Fernhaber, S. A. and Patel, P. C. (2012). How do young firms manage product portfolio complexity? The role of absorptive capacity and ambidexterity. *Strategic Management Journal*, 33(13), 1516–1539.
- Filippini, R., Güttel, W. H., Neirotti, P. and Nosella, A. (2012). The Different Modes for Absorbing Knowledge: An Analytic Lens on Absorptive Capacity from a Process Perspective. *International Journal of Knowledge Management Studies*, 5(1/2), 45–56.
- Firfiray, S., Cruz, C., Neacsu, I. and Gómez-Mejía, L. R. (2018). Is nepotism so bad for family firms? A socioemotional wealth approach. *Human Resource Management Review*, 28(1), 83–97.
- Fitzgerald, M. A., Haynes, G. W., Schrank, H. L. and Danes, S. M. (2010). Socially responsible processes of small family business owners: Exploratory evidence from the National Family Business Survey. *Journal of Small Business Management*, 48(4), 524–551.
- Flatten, T. C., Greve, G. I. and Brettel, M. (2011). Absorptive capacity and firm performance in SMEs: The mediating influence of strategic alliances. *European Management Review*, 8(3), 137–152.
- Forcadell, F. J., Úbeda, F. and Zúñiga-Vicente, J. Á. (2018). Initial resource heterogeneity differences between family and non-family firms: Implications for resource acquisition and resource generation. *Long Range Planning*, 51(5), 693–719.
- Forcadell, F. J., Úbeda, F. and Aracil, E. (2021). Effects of environmental corporate social responsibility on innovativeness of spanish industrial SMEs. *Technological Forecasting and Social Change*, 162, 120355.
- Fox, M., Nilakant, V. and Hamilton, R. T. (1996). Managing succession in family-owned businesses. *International Small Business Journal*, 15(1), 15–25.
- Frank, H., Lueger, M., Rusch, T., Nosé, L. and Suchy, D. (2010). The concept of “Familianness”: Literature review and systems theory-based reflections. *Journal of Family Business Strategy*, 1(3), 119–130.
- Frank, H., Kessler, A., Rusch, T., Suess-Reyes, J. and Weismeier-Sammer, D. (2017). Capturing the Familianness of Family Businesses: Development of the Family Influence Familianness Scale (FIFS). *Entrepreneurship Theory and Practice*, 41(5), 709–742.
- Freeman, R. E. and McVea, J. (2001). A Stakeholder Approach to Strategic Management. In M. A. Hitt, R. E. Freeman, & J. S. Harrison (Eds.), *The Blackwell handbook of strategic management*, 1st edition, (pp. 189–207). Blackwell, Oxford.

- Friedman, S. D. (1991). Sibling Relationships and Intergenerational Succession in Family Firms. *Family Business Review*, 4(1), 3–20.
- Gallo, M. A. (2004). The family business and its social responsibilities. *Family Business Review*, 17(2), 135–148.
- Gallucci, C., Santulli, R. and Calabrò, A. (2015). Does family involvement foster or hinder firm performance? The missing role of family-based branding strategies. *Journal of Family Business Strategy*, 6(3), 155–165.
- Gancarczyk, M. and Gancarczyk, J. (2016). SME supplier upgrading during the cooperation life cycle – Evidence from Central and Eastern Europe. *Journal of East European Management Studies*, 21, 318–351.
- Gausdal, A. H. (2015). Methods for Developing Innovative SME Networks. *Journal of the Knowledge Economy*, 6(4), 978–1000.
- Ge, J. and Micelotta, E. (2019). When does the family matter? Institutional pressures and corporate philanthropy in China. *Organization Studies*, 40(6), 833–857.
- Gelfand, M. J., Nishii, L. H. and Raver, J. L. (2006). On the nature and importance of cultural tightness-looseness. *Journal of Applied Psychology*, 91(6), 1225–1244.
- Gersick, K. E., Davis, J. A., Hampton, M. M. and Lansberg, I. (1997). *Generation to Generation: Life Cycles of the Family Business*, 1st edition. Harvard Business School Press, Boston, MA.
- Ghee, W. Y., Ibrahim, M. D. and Abdul-Halim, H. (2015). Family business succession planning: Unleashing the key factors of business performance. *Asian Academy of Management Journal*, 20(2), 103–126.
- Giner, B. and Ruiz, A. (2020). Family entrepreneurial orientation as a driver of longevity in family firms: a historic analysis of the ennobled Trenor family and Trenor y Cía. *Business History*, 1–32.
- Gómez-Mejía, L. R., Haynes, K. T., Núñez-Nickel, M., Jacobson, K. J. L. and 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.
- Gómez-Mejía, L. R., Cruz, C., Berrone, P. and De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653–707.
- Gómez-Mejía, L. R., Patel, P. C. and Zellweger, T. M. (2018). In the Horns of the Dilemma: Socioemotional Wealth, Financial Wealth, and Acquisitions in Family Firms. *Journal of Management*, 44(4), 1369–1397.
- Graafland, J., van de Ven, B. and Stoffele, N. (2003). Strategies and instruments for organising CSR by small and large businesses in the Netherlands. *Journal of Business Ethics*, 47(1), 45–60.
- Graafland, J. (2020). Family business ownership and cleaner production: Moderation by company size and family management. *Journal of Cleaner Production*, 255, 120120.
- Haack, P., Martignoni, D. and Schoeneborn, D. (2020). A bait-and-switch model of corporate social responsibility. *Academy of Management Review*, 46(3), 440–464

- Habbershon, T. G. and Williams, M. L. (1999). A Resource-Based Framework for Assessing the Strategic Advantages of Family Firms. *Family Business Review*, 12(1), 1–25.
- Habbershon, T. G., Williams, M. and MacMillan, I. C. (2003). A unified systems perspective of family firm performance. *Journal of Business Venturing*, 18(4), 451–465.
- Hair, J. F., Anderson, R. E., Tatham, R. L. and Black, W. C. (1998) *Multivariate data analysis*, 5th edition. Prentice Hall, Upper Saddle River, NJ.
- Hammond, N. L., Pearson, A. W. and Holt, D. T. (2016). The Quagmire of Legacy in Family Firms: Definition and Implications of Family and Family Firm Legacy Orientations. *Entrepreneurship Theory and Practice*, 40(6), 1209–1231.
- Handler, W. C. (1989). Methodological issues and considerations in studying family businesses. *Family Business Review*, 2(3), 257–276.
- Handler, W. C. (1994). Succession in family business: A review of the research. *Family Business Review*, 7(2), 133–157.
- Harrison, J. S., Bosse, D. A. and Phillips, R. A. (2010). Managing for stakeholders, stakeholder utility functions, and competitive advantage. *Strategic Management Journal*, 31(1), 58–74.
- Haski-Leventhal, D., Roza, L. and Meijs, L. (2017). Congruence in Corporate Social Responsibility: Connecting the Identity and Behavior of Employers and Employees. *Journal of Business Ethics*, 143(1), 35–51.
- Hassani, A. and Mosconi, E. (2021). Competitive intelligence and absorptive capacity for enhancing innovation performance of SMEs. *Journal of Intelligence Studies in Business*, 11(1), 19–32.
- Hauck, J. and Prügl, R. (2015). Innovation activities during intra-family leadership succession in family firms: An empirical study from a socioemotional wealth perspective. *Journal of Family Business Strategy*, 6(2), 104–118.
- Hauck, J., Suess-Reyes, J., Beck, S., Prügl, R. and Frank, H. (2016). Measuring socioemotional wealth in family-owned and-managed firms: A validation and short form of the FIBER Scale. *Journal of Family Business Strategy*, 7(3), 133–148.
- Hernández-Perlines, F., Moreno-García, J. and Yáñez-Araque, B. (2017). Family Firm Performance: The Influence of Entrepreneurial Orientation and Absorptive Capacity. *Psychology & Marketing*, 34(11), 1057–68.
- Hernández-Perlines, F. (2018). Moderating Effect of Absorptive Capacity on the Entrepreneurial Orientation of International Performance of Family Businesses. *Journal of Family Business Management*, 8(1), 58–74.
- Hernández-Perlines, F. and Xu, W. (2018). Conditional Mediation of Absorptive Capacity and Environment in International Entrepreneurial Orientation of Family Businesses. *Frontiers in Psychology*, 9, 102.
- Hernes, T. and Bakken, T. (2003). Implications of self-reference: Niklas Luhmann's autopoiesis and organization theory. *Organization Studies*, 24(9), 1511–1535.

- Holt, D. T., Pearson, A. W., Carr, J. C. and Barnett, T. (2017). Family firm (s) outcomes model: Structuring financial and nonfinancial outcomes across the family and firm. *Family Business Review*, 30(2), 182–202.
- Hotho, J. J., Becker-Ritterspach, F. and Saka-Helmhout, A. (2012). Enriching Absorptive Capacity through Social Interaction. *British Journal of Management*, 23(3), 383–401.
- Hsueh, J. W. J. (2018). Governance structure and the credibility gap: Experimental evidence on family businesses' sustainability reporting. *Journal of Business Ethics*, 153(2), 547–568.
- Huang, Y. C., Ding, H. B. and Kao, M. R. (2009). Salient stakeholder voices: Family business and green innovation adoption. *Journal of Management & Organization*, 15(3), 309–326.
- Hur, W.-M., Kim, H. and Woo, J. (2014). How CSR leads to corporate brand equity: Mediating mechanisms of corporate brand credibility and reputation. *Journal of Business Ethics*, 125(1), 75–86.
- Iglesias, O., Markovic, S., Bagherzadeh, M. and Singh, J. J. (2020). Co-creation: A key link between corporate social responsibility, customer trust, and customer loyalty. *Journal of Business Ethics*, 163(1), 151–166.
- Irava, W. J. and Moores, K. (2010). Clarifying the strategic advantage of familiness: Unbundling its dimensions and highlighting its paradoxes. *Journal of Family Business Strategy*, 1(3), 131–144.
- Ismail, M. (2009). Corporate Social Responsibility and its role in community development: An international perspective. *Journal of International Social Research*, 2(9), 199–209.
- Iyer, V. and Lulseged, A. (2013). Does family status impact US firms' sustainability reporting? *Sustainability Accounting, Management and Policy Journal*, 4(2), 163–189.
- Izzo, M. F. and Ciaburri, M. (2018). Why do they do that? Motives and dimensions of family firms' CSR engagement. *Social Responsibility Journal*, 14(3), 633–650.
- Jain, T. and Jamali, D. (2016). Looking inside the black box: The effect of corporate governance on corporate social responsibility. *Corporate Governance: An International Review*, 24(3), 253–273.
- Jang, J. and Danes, S. M. (2013). Role interference in family businesses. *Entrepreneurship Research Journal*, 3(3), 367–390.
- Jansen, J. J. P., Van Den Bosch, F. A. J. and Volberda, H. W. (2005). Managing Potential and Realized Absorptive Capacity: How Do Organizational Antecedents Matter? *The Academy of Management Journal*, 48(6), 999–1015.
- Jaskiewicz, P., Combs, J. G. and Rau, S. B. (2015). Entrepreneurial legacy: Toward a theory of how some family firms nurture transgenerational entrepreneurship. *Journal of Business Venturing*, 30(1), 29–49.
- Jaskiewicz, P., Heinrichs, K., Rau, S. B. and Reay, T. (2016). To Be or Not to Be: How Family Firms Manage Family and Commercial Logics in Succession. *Entrepreneurship Theory and Practice*, 40(4), 781–813.
- Jaskiewicz, P., Combs, J. G., Shanine, K. K. and Kacmar, K. M. (2017). Introducing the family: A review of family science with implications for management research. *Academy of Management Annals*, 11(1), 309–341.

- Jaskiewicz, P. and Dyer, W. G. (2017). Addressing the elephant in the room: Disentangling family heterogeneity to advance family business research. *Family Business Review*, 30(2), 111–118.
- Jayantilal, S., Jorge, S. F. and Palacios, T. M. B. (2016). Effects of sibling competition on family firm succession: A game theory approach. *Journal of Family Business Strategy*, 7(4), 260–268.
- Jensen, M. C. and Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs and ownership structure. *Journal of Financial Economics*, 3(4), 305–360.
- Jensen, S. H., Poulfelt, F. and Kraus, S. (2010). Managerial routines in professional service firms: transforming knowledge into competitive advantages. *The Service Industries Journal*, 30(12), 2045–2062.
- Jiang, F., Shi, W. and Zheng, X. (2020). Board chairs and R&D investment: Evidence from Chinese family-controlled firms. *Journal of Business Research*, 112, 109–118.
- Jocic, M. R., Morris, M. H. and Kuratko, D. F. (2021). Familiness and innovation outcomes in family firms: The mediating role of entrepreneurial orientation. *Journal of Small Business Management*, 1–33 <https://doi.org/10.1080/00472778.2020.1861284>
- Jones, D. A., Willness, C. R. and Madey, S. (2013). Why are job seekers attracted by corporate social performance? Experimental and field tests of three signal-based mechanisms. *Academy of Management Journal*, 57(2), 383–404.
- Judd, C. M. and Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review*, 5(5), 602–619.
- Kallmuenzer, A., Nikolakis, W., Peters, M. and Zanon, J. (2018). Trade-offs between dimensions of sustainability: Exploratory evidence from family firms in rural tourism regions. *Journal of Sustainable Tourism*, 26(7), 1204–1221.
- Kashmiri, S. and Mahajan, V. (2010). What's in a name?: An analysis of the strategic behavior of family firms. *International Journal of Research in Marketing*, 27(3), 271–280.
- Kashmiri, S. and Mahajan, V. (2014a). A rose by any other name: Are family firms named after their founding families rewarded more for their new product introductions?. *Journal of Business Ethics*, 124(1), 81–99.
- Kashmiri, S. and Mahajan, V. (2014b). Beating the recession blues: Exploring the link between family ownership, strategic marketing behavior and firm performance during recessions. *International Journal of Research in Marketing*, 31(1), 78–93.
- Kellermanns, F. W., Eddleston, K. A., Sarathy, R. and Murphy, F. (2012). Innovativeness in family firms: a family influence perspective. *Small Business Economics*, 38(1), 85–101.
- Kenny, D. A., Kashy, D. A. and Bolger, N. (1998). Data analysis in social psychology. In D. Gilbert, S. Fiske & G. Lindzey (eds.), *Handbook of social psychology*, 4th edition, (pp. 233–265). McGraw-Hill, New York.
- Kepner, E. (1983). The Family and the Firm: A Coevolutionary Perspective. *Organizational Dynamics*, 12(1), 57–70.

- Khan, A., Muttakin, M. B. and Siddiqui, J. (2013). Corporate Governance and Corporate Social Responsibility Disclosures: Evidence from an Emerging Economy. *Journal of Business Ethics*, 114(2), 207–223.
- Kidwell, R. E., Kellermanns, F. W. and Eddleston, K. A. (2012). Harmony, justice, confusion, and conflict in family firms: Implications for ethical climate and the “fredo effect.” *Journal of Business Ethics*, 106(4), 503–517.
- Kim, J., Fairclough, S. and Dibrell, C. (2017). Attention, Action, and Greenwash in Family-Influenced Firms? Evidence From Polluting Industries. *Organization & Environment*, 30(4), 304–323.
- Kim, A. and Lee, Y. (2018). Family firms and corporate social performance: Evidence from Korean firms. *Asia Pacific Business Review*, 24(5), 693–713.
- Kim, S. (2019). The Process Model of Corporate Social Responsibility (CSR) Communication: CSR Communication and its Relationship with Consumers’ CSR Knowledge, Trust, and Corporate Reputation Perception. *Journal of Business Ethics*, 154(4), 1143–1159.
- Kim, K., Haider, Z. A., Wu, Z. and Dou, J. (2020). Corporate social performance of family firms: A place-based perspective in the context of layoffs. *Journal of Business Ethics*, 167(2), 235–252.
- King, W. R. (2009). *Knowledge management and organizational learning*, 4th edition. Springer, Boston, MA.
- Klein, S. B. (2000). Family businesses in Germany: Significance and structure. *Family Business Review*, 13(3), 157–182.
- Klein, S. B., Astrachan, J. H. and 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.
- Klein, J., Cruz, C. and Milanov, H. (2018). Is social responsibility really “corporate”? The impact of family foundations on CSR. *Academy of Management Proceedings*, 2018(1), p. 17136.
- Klewitz, J., Zeyen, A. and Hansen, E. G. (2012). Intermediaries driving eco-innovation in SMEs: a qualitative investigation. *European Journal of Innovation Management*, 15(4), 442–67.
- Koiranen, M. (2002). Over 100 years of age but still entrepreneurially active in business: Exploring the values and family characteristics of old Finnish family firms. *Family Business Review*, 15(3), 175–187.
- Kong, Y., Antwi-Adjei, A. and Bawuah, J. (2020). A systematic review of the business case for corporate social responsibility and firm performance. *Corporate Social Responsibility and Environmental Management*, 27(2), 444–454.
- Kosmidou, V. (2020). A meta-analytic examination of the relationship between family firm generational involvement and performance. *Management Research Review*, 43(8), 971–987.
- Kostopoulos, K., Papalexandris, A., Papachroni, M. and Ioannou, G. (2011). Absorptive capacity, innovation, and financial performance. *Journal of Business Research*, 64(12), 1335–1343.
- Kotlar, J. and 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.

- Kotlar, J., De Massis, A., Frattini, F. and Kammerlander, N. (2020). Motivation Gaps and Implementation Traps: The Paradoxical and Time-Varying Effects of Family Ownership on Firm Absorptive Capacity. *Journal of Product Innovation Management*, 37(1), 2–25.
- Kubiček, A. and Machek, O. (2019). Gender-related factors in family business succession: a systematic literature review. *Review of Managerial Science*, 13(5), 963–1002.
- Kuttner, M. and Feldbauer-Durstmüller, B. (2018). Corporate social responsibility in family firms—Status quo and future directions. *International Journal of Business Strategy*, 18(1), 47–68.
- Kuttner, M., Feldbauer-Durstmüller, B. and Mitter, C. (2021). Corporate social responsibility in Austrian family firms: socioemotional wealth and stewardship insights from a qualitative approach. *Journal of Family Business Management*, 11(2), 238–253.
- Labelle, R., Hafsi, T., Francoeur, C. and Ben Amar, W. (2018). Family firms’ corporate social performance: A calculated quest for socioemotional wealth. *Journal of Business Ethics*, 148(3), 511–525.
- Laguir, I., Laguir, L. and Elbaz, J. (2016). Are Family Small- and Medium-Sized Enterprises More Socially Responsible Than Nonfamily Small- and Medium-Sized Enterprises? *Corporate Social Responsibility and Environmental Management*, 23(6), 386–398.
- Lai, C.-S., Chiu, C.-J., Yang, C.-F. and Pai, D.-C. (2010). The effects of corporate social responsibility on brand performance: The mediating effect of industrial brand equity and corporate reputation. *Journal of Business Ethics*, 95(3), 457–469.
- Lamb, N. H., Butler, F. C. and Roundy, P. (2017). Family firms and corporate social responsibility: Exploring “concerns.” *Journal of Strategy and Management*, 10(4), 469–487.
- Lamb, N. H. and Butler, F. C. (2018). The influence of family firms and institutional owners on corporate social responsibility performance. *Business & Society*, 57(7), 1374–1406.
- Lane, P. J. and Lubatkin, M. (1998). Relative absorptive capacity and interorganizational learning. *Strategic Management Journal*, 19(5), 461–477.
- Lane, P. J., Salk, J. E. and Lyles, M. A. (2001). Absorptive capacity, learning, and performance in international joint ventures. *Strategic Management Journal*, 22(12), 1139–1161.
- Lane, P. J., Koka, B. R. and Pathak, S. (2006). The Reification of Absorptive Capacity: A Critical Review and Rejuvenation of the Construct. *Academy of Management Review*, 31(4), 833–863.
- Latapí Agudelo, M. A., Jóhannsdóttir, L. and Davídsdóttir, B. (2019). A literature review of the history and evolution of corporate social responsibility. *International Journal of Corporate Social Responsibility*, 4(1), 1–23.
- Leach, P., Kenway-Smith, W., Hart, A., Ainsworth, J., Beterlsen, E., Iraqi, S. and Pasari, V. (1990). *Managing the family business in the U.K.: A Stoy Hayward survey in conjunction with the London Business School*, 1th edition. Stoy Hayward, London.
- Le Breton-Miller, I., Miller, D. and Steier, L. P. (2004). Toward an Integrative Model of Effective FOB Succession. *Entrepreneurship Theory and Practice*, 28(4), 305–328.
- Le Breton-Miller, I. and Miller, D. (2016). Family firms and practices of sustainability: A contingency view. *Journal of Family Business Strategy*, 7(1), 26–33.

- Lee, M.-S. and Rogoff, E. G. (1996). Research Note: Comparison of Small Businesses with Family Participation versus Small Businesses Without Family Participation: An Investigation of Differences in Goals, Attitudes, and Family/Business Conflict. *Family Business Review*, 9(4), 423–437.
- Lee, K. S., Lim, G. H. and Tan, S. J. (1999). Dealing with Resource Disadvantage: Generic Strategies for SMEs. *Small Business Economics*, 12(4), 299–311.
- Lee, K. S., Lim, G. H. and Lim, W. S. (2003). Family business succession: Appropriation risk and choice of successor. *Academy of Management Review*, 28(4), 657–666.
- Lee, E. M., Park, S.-Y. and Lee, H. J. (2013). Employee perception of CSR activities: Its antecedents and consequences. *Journal of Business Research*, 66(10), 1716–1724.
- Lee, J., Park, N. K. and Kim, H. (2014). The effect of change in organizational identity on knowledge creation by mobile R&D workers in M&As. *Journal of Organizational Change Management*, 27(1), 41–58.
- Lehmann, E. E., Schenkenhofer, J. and Wirsching, K. (2019). Hidden champions and unicorns: a question of the context of human capital investment. *Small Business Economics*, 52(2), 359–374.
- Leoni, G. (2017). Social responsibility in practice: an Italian case from the early 20th century. *Journal of Management History*, 23(2), 133–151.
- Lewin, A. Y., Massini, S. and Peeters, C. (2011). Microfoundations of Internal and External Absorptive Capacity Routines. *Organization Science*, 22(1), 81–98.
- Li, Z. and Daspit, J. J. (2016). Understanding family firm innovation heterogeneity: A typology of family governance and socioemotional wealth intentions. *Journal of Family Business Management*, 6(2), 103–121.
- Liang, Y., Chai, C. and Huang, Y. (2011). The Effect of Corporate Social Responsibility on Productivity: Firm-Level Evidence from Chinese Listed Companies. *Emerging Markets Finance and Trade*, <https://doi.org/10.1080/1540496X.2020.1788537>.
- Lichtenthaler, U. and Lichtenthaler, E. (2009). A Capability-Based Framework for Open Innovation: Complementing Absorptive Capacity. *Journal of Management Studies*, 46(8), 1315–1338.
- Lin, C. M., Chen, C. C. S., Yang, S. Y. and Wang, W. R. (2020). The Effects of Corporate Governance on Credit Ratings: The Role of Corporate Social Responsibility. *Emerging Markets Finance and Trade*, 56(5), 1093–1112.
- Liu, M., Shi, Y., Wilson, C. and Wu, Z. (2017). Does family involvement explain why corporate social responsibility affects earnings management? *Journal of Business Research*, 75, 8–16.
- López-González, E., Martínez-Ferrero, J. and García-Meca, E. (2019). Corporate social responsibility in family firms: A contingency approach. *Journal of Cleaner Production*, 211, 1044–1064.
- Lorandini, C. (2015). Looking beyond the Buddenbrooks syndrome: the Salvadori Firm of Trento, 1660s–1880s. *Business History*, 57(7), 1005–1019.
- Lude, M. and Prügl, R. (2021). Experimental studies in family business research. *Journal of Family Business Strategy*, 12(1), 100361.

- Lumpkin, G. T., Brigham, K. H. and Moss, T. W. (2010). Long-term orientation: Implications for the entrepreneurial orientation and performance of family businesses. *Entrepreneurship & Regional Development*, 22(3–4), 241–264.
- Lumpkin, G. T. and Brigham, K. H. (2011). Long-term orientation and intertemporal choice in family firms. *Entrepreneurship Theory and Practice*, 35(6), 1149–1169.
- Luo, X. and Du, S. (2015). Exploring the relationship between corporate social responsibility and firm innovation. *Marketing Letters*, 26(4), 703–714.
- MacGregor, S. P. and Fontrodona, J. (2008). Exploring the Fit between CSR and Innovation. IESE Business School Working Paper No. 759, <http://dx.doi.org/10.2139/ssrn.1269334>.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G. and Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7(1), 83–104.
- MacKinnon, D. P., Fairchild, A. J. and Fritz, M. S. (2007). Mediation Analysis. *Annual Review of Psychology*, 58(1), 593–614.
- Madden, L., McMillan, A. and Harris, O. (2020). Drivers of selectivity in family firms: Understanding the impact of age and ownership on CSR. *Journal of Family Business Strategy*, 11(2), 100335.
- Maggioni, D. and Santangelo, G. D. (2017). Local environmental non-profit organizations and the green investment strategies of family firms. *Ecological Economics*, 138, 126–138.
- Malerba, F. and McKelvey, M. (2020). Knowledge-intensive innovative entrepreneurship integrating Schumpeter, evolutionary economics, and innovation systems. *Small Business Economics*, 54(2), 503–522.
- Marabelli, M. and Newell, S. (2014). Knowing, power and materiality: A critical review and reconceptualization of absorptive capacity. *International Journal of Management Reviews*, 16(4), 479–499.
- Marques, P., Presas, P. and Simon, A. (2014). The Heterogeneity of Family Firms in CSR Engagement: The Role of Values. *Family Business Review*, 27(3), 206–227.
- Martin, G. and Gómez-Mejía, L. (2016). The relationship between socioemotional and financial wealth: Re-visiting family firm decision making. *Management Research*, 14(3), 215–233.
- Martínez, P. and Rodríguez del Bosque, I. (2013). CSR and customer loyalty: The roles of trust, customer identification with the company and satisfaction. *International Journal of Hospitality Management*, 35(1), 89–99.
- Martínez-Ferrero, J., Rodríguez-Ariza, L. and García-Sánchez, I. M. (2016). Corporate social responsibility as an entrenchment strategy, with a focus on the implications of family ownership. *Journal of Cleaner Production*, 135(1), 760–770.
- Martínez-Ferrero, J., Rodríguez-Ariza, L. and Garcia-Sanchez, I. (2017). The strength of the board on sustainability assurance decisions. *Journal of Small Business and Enterprise Development*, 24(4), 863–886.

- Martínez-Ferrero, J., Rodríguez-Ariza, L., García-Sánchez, I.-M. and Cuadrado-Ballesteros, B. (2018). Corporate social responsibility disclosure and information asymmetry: The role of family ownership. *Review of Managerial Science*, 12(4), 885–916.
- Martínez-Romero, M. J. and Rojo-Ramírez, A. A. (2017). Socioemotional wealth's implications in the calculus of the minimum rate of return required by family businesses' owners. *Review of Managerial Science*, 11(1), 95–118.
- Martínez-Sanchis, P., Aragón-Amonarriz, C. and Iturrioz-Landart, C. (2020). How the Pygmalion Effect operates in intra-family succession: Shared expectations in family SMEs. *European Management Journal*, 38(6), 914–926.
- Martynov, A. and Shafti, N. (2016). Long-term performance of firms: a review and research agenda. *Journal of Strategy and Management*, 9(4), 429–448.
- Matten, D. and Moon, J. (2008). “Implicit” and “explicit” CSR: A conceptual framework for a comparative understanding of corporate social responsibility. *Academy of Management Review*, 33(2), 404–424.
- Matten, D. and Moon, J. (2020). Reflections on the 2018 Decade Award: The Meaning and Dynamics of Corporate Social Responsibility. *Academy of Management Review*, 45(1), 7–28.
- Maung, M., Miller, D., Tang, Z. and Xu, X. (2020). Value-enhancing social responsibility: Market reaction to donations by family vs. non-family firms with religious CEOs. *Journal of Business Ethics*, 163(4), 745–758.
- Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995). An Integrative Model of Organizational Trust. *The Academy of Management Review*, 20(3), 709–734.
- McAdam, R., Miller, K., McMacken, N. and Davies, J. (2010). The Development of Absorptive Capacity-Based Innovation in a Construction SME. *The International Journal of Entrepreneurship and Innovation*, 11(3), 231–244.
- McGrath, H. and O'Toole, T. (2018). Extending the concept of familiness to relational capability: A Belgian micro-brewery study. *International Small Business Journal*, 36(2), 194–219.
- McGuire, J., Dow, S. and Ibrahim, B. (2012). All in the family? Social performance and corporate governance in the family firm. *Journal of Business Research*, 65(11), 1643–1650.
- Meier, O. and Schier, G. (2016). The early succession stage of a family firm: Exploring the role of agency rationales and stewardship attitudes. *Family Business Review*, 29(3), 256–277.
- Meier, O. and Schier, G. (2020). CSR and family CEO: The moderating role of CEO's age. *Journal of Business Ethics*, 48(1), 1–18. <https://doi.org/10.1007/s10551-020-04624-z>
- Melnikas, B. (2010). Sustainable development and creation of the knowledge economy: the new theoretical approach. *Technological and Economic Development of Economy*, 16(3), 516–540.
- Memili, E., Fang, H., Chrisman, J. J. and De Massis, A. (2015). The impact of small- and medium-sized family firms on economic growth. *Small Business Economics*, 45(4), 771–785.

- Memili, E. and Dibrell, C. (2019). *The Palgrave Handbook of Heterogeneity among Family Firms*, 1st edition. Palgrave Macmillan, Cham.
- Memili, E., Patel, P. C., Koç, B. and Yazıcıoğlu, İ. (2020). The interplay between socioemotional wealth and family firm psychological capital in influencing firm performance in hospitality and tourism. *Tourism Management Perspectives*, 34, 100651.
- Michel, A. and Kammerlander, N. (2015). Trusted advisors in a family business's succession-planning process—An agency perspective. *Journal of Family Business Strategy*, 6(1), 45–57.
- Mihic, M. M., Arsic, S. M. and Arsic, M. Z. (2015). Impacts of entrepreneurs' stress and family members on SMEs' business success in Serbian family-owned firms. *Journal of East European Management Studies*, 20(4), 452–483.
- Miller, D., Steier, L. and Le Breton-Miller, I. (2003). Lost in time: Intergenerational succession, change, and failure in family business. *Journal of Business Venturing*, 18(4), 513–531.
- Miller, D. and Le Breton-Miller, I. (2005). Management Insights from Great and Struggling Family Businesses. *Long Range Planning*, 38(6), 517–530.
- Miller, D. and Le Breton-Miller, I. (2007). Kicking the habit: Broadening our horizons by studying family businesses. *Journal of Management Inquiry*, 16(1), 27–30.
- Miller, D. and Le Breton-Miller, I. (2014). Deconstructing socioemotional wealth. *Entrepreneurship Theory and Practice*, 38(4), 713–720.
- Minichilli, A., Corbetta, G. and MacMillan, I. C. (2010). Top Management Teams in Family-Controlled Companies: 'Familianness', 'Faultlines', and Their Impact on Financial Performance. *Journal of Management Studies*, 47(2), 205–222.
- Minichilli, A., Nordqvist, M., Corbetta, G. and Amore, M. D. (2014). CEO succession mechanisms, organizational context, and performance: A socio-emotional wealth perspective on family-controlled firms. *Journal of Management Studies*, 51(7), 1153–1179.
- Moilanen, M., Østbye, S. and Woll, K. (2014). Non-R&D SMEs: external knowledge, absorptive capacity and product innovation. *Small Business Economics*, 43(2), 447–462.
- Motwani, J., Levenburg, N. M., Schwarz, T. V. and Blankson, C. (2006). Succession planning in SMEs: An empirical analysis. *International Small Business Journal*, 24(5), 471–495.
- Muñoz-Bullón, F., Sanchez-Bueno, M. J. and De Massis, A. (2020). Combining internal and external R&D: The effects on innovation performance in family and nonfamily firms. *Entrepreneurship Theory and Practice*, 44(5), 996–1031.
- Muttakin, M. B. and Khan, A. (2014). Determinants of corporate social disclosure: Empirical evidence from Bangladesh. *Advances in Accounting*, 30(1), 168–175.
- Mzid, I., Khachlouf, N. and Soparnot, R. (2019). How does family capital influence the resilience of family firms? *Journal of International Entrepreneurship*, 17(2), 249–277.
- Nadeem, M., Gyapong, E. and Ahmed, A. (2020). Board gender diversity and environmental, social, and economic value creation: Does family ownership matter? *Business Strategy and the Environment*, 29(3), 1268–1284.

- Nagati, H. and Rebolledo, C. (2012). The role of relative absorptive capacity in improving suppliers' operational performance. *International Journal of Operations & Production Management*, 32(5), 611–630.
- Naldi, L., Nordqvist, M. and Zellweger, T. (2008). Intangible resources and the performance in family firms: The moderating role of familiness. *Frontiers of Entrepreneurship Research*, 28(14), 1–15.
- Napolitano, M. R., Marino, V. and Ojala, J. (2015). In search of an integrated framework of business longevity. *Business History*, 57(7), 955–969.
- Nekhili, M., Nagati, H., Chtioui, T. and Rebolledo, C. (2017). Corporate social responsibility disclosure and market value: Family versus nonfamily firms. *Journal of Business Research*, 77, 41–52.
- Ng, P. Y., Dayan, M. and Di Benedetto, A. (2019). Performance in family firm: Influences of socioemotional wealth and managerial capabilities. *Journal of Business Research*, 102, 178–190.
- Niehm, L. S., Swinney, J. and Miller, N. J. (2008). Community Social Responsibility and Its Consequences for Family Business Performance. *Journal of Small Business Management*, 46(3), 331–350.
- Noor, S., Saeed, A., Baloch, M. S. and Awais, M. (2020). CSR permanency, family ownership, and firm value: Evidence from emerging economies. *Corporate Social Responsibility and Environmental Management*, 27(5), 2135–2149.
- Nooteboom, B. (2000). Learning by Interaction: Absorptive Capacity, Cognitive Distance and Governance. *Journal of Management and Governance*, 4(1–2), 69–92.
- Nordqvist, M., Habbershon, T. G. and Melin, L. (2008). Transgenerational entrepreneurship: Exploring entrepreneurship orientation in family firms. In H. Landstrom, D. Smallbonde, H. Criins & E. Laveren (eds.), *Entrepreneurship, sustainable growth and performance. Fronteirs in European entrepreneurship research*, 1st edition, (pp. 93–116). Edward Elgar, London.
- Nordqvist, M., Wennberg, K., Bau, M. and Hellerstedt, K. (2013). An entrepreneurial process perspective on succession in family firms. *Small Business Economics*, 40(4), 1087–1122.
- Nordqvist, M., Sharma, P. and Chirico, F. (2014). Family firm heterogeneity and governance: A configuration approach. *Journal of Small Business Management*, 52(2), 192–209.
- O'Boyle, E. H., Rutherford, M. W. and Pollack, J. M. (2010). Examining the Relation Between Ethical Focus and Financial Performance in Family Firms: An Exploratory Study. *Family Business Review*, 23(4), 310–326.
- O'Boyle, E. H., Pollack, J. M. and Rutherford, M. W. (2012). Exploring the relation between family involvement and firms' financial performance: A meta-analysis of main and moderator effects. *Journal of Business Venturing*, 27(1), 1–18.
- Oh, W.-Y., Chang, Y. K. and Jung, R. (2019). Board characteristics and corporate social responsibility: Does family involvement in management matter? *Journal of Business Research*, 103, 23–33.
- O'Reilly, C. A. and Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71(3), 492–499.

- Orlitzky, M., Schmidt, F. L. and Rynes, S. L. (2003). Corporate social and financial performance: A meta-analysis. *Organization Studies*, 24(3), 403–441.
- Pan, Y., Weng, R., Xu, N. and Chan, K. C. (2018). The role of corporate philanthropy in family firm succession: A social outreach perspective. *Journal of Banking & Finance*, 88, 423–441.
- Panwar, R., Paul, K., Nybakk, E., Hansen, E. and Thompson, D. (2014). The Legitimacy of CSR Actions of Publicly Traded Companies Versus Family-Owned Companies. *Journal of Business Ethics*, 125(3), 481–496.
- Patel, P. C. and Fiet, J. O. (2011). Knowledge Combination and the Potential Advantages of Family Firms in Searching for Opportunities. *Entrepreneurship Theory and Practice*, 35(6), 1179–1197.
- Peake, W., Cooper, D., Fitzgerald, M. and Muske, G. (2017). Family business participation in community social responsibility: The moderating effect of gender. *Journal of Business Ethics*, 142(2), 325–343.
- Pearson, A. W., Carr, J. C. and Shaw, J. C. (2008). Toward a Theory of Familiness: A Social Capital Perspective. *Entrepreneurship Theory and Practice*, 32(6), 949–969.
- Peloza, J. and Shang, J. (2011). How can corporate social responsibility activities create value for stakeholders? A systematic review. *Journal of the Academy of Marketing Science*, 39(1), 117–135.
- Pennings, J. M., Lee, K. and van Witteloostuijn, A. (1998). Human Capital, Social Capital, and Firm Dissolution. *Academy of Management Journal*, 41(4), 425–440.
- Pérez, A. and Rodríguez del Bosque, I. (2015). An Integrative Framework to Understand How CSR Affects Customer Loyalty through Identification, Emotions and Satisfaction. *Journal of Business Ethics*, 129(3), 571–584.
- Pérez-González, F. (2006). Inherited control and firm performance. *American Economic Review*, 96(5), 1559–1588.
- Pierce, J. L., Kostova, T. and Dirks, K. T. (2001). Toward a theory of psychological ownership in organizations. *Academy of Management Review*, 26(2), 298–310.
- Pillai, K. G., Hodgkinson, G. P., Kalyanaram, G. and Nair, S.R. (2017). The negative effects of social capital in organizations: A review and extension. *International Journal of Management Reviews*, 19(1), 97–124.
- Piller, F., Ihl, C. and Vossen, A. (2011). Customer Co-Creation: Open Innovation with Customers. In V. Wittke & H. Hanekop (eds.), *New forms of collaboration Innovation and Production on the Internet: An Interdisciplinary Perspective*, 1st edition, (pp. 31–63). Universitätsverlag Göttingen, Göttingen.
- Porter, M. E. and Kramer, M. R. (2006). Strategy and society: the link between corporate social responsibility and competitive advantage. *Harvard Business Review*, 84(12), 78–92.
- Preacher, K. J. and Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers*, 36(4), 717–731.
- Preslmayer, C., Kuttner, M. and Feldbauer-Durstmüller, B. (2018). Uncovering the research field of corporate social responsibility in family firms: a citation analysis. *Journal of Family Business Management*, 8(2), 169–195.

- Price, D. P., Stoica, M. and Boncella, R. J. (2013). The relationship between innovation, knowledge, and performance in family and non-family firms: an analysis of SMEs. *Journal of Innovation and Entrepreneurship*, 2(1), 1–20.
- Prügl, R. (2019). Capturing the Heterogeneity of Family Firms: Reviewing Scales to Directly Measure Socioemotional Wealth. In E. Memili & C. Dibrell (eds.), *The Palgrave Handbook of Heterogeneity among Family Firms*, 1st edition, (pp. 461–484). Palgrave Macmillan, Cham.
- Rahman, S. (2011). Evaluation of definitions: Ten dimensions of corporate social responsibility. *World Review of Business Research*, 1(1), 166–176.
- Ramachandran, V. (2011). Strategic corporate social responsibility: a ‘dynamic capabilities’ perspective. *Corporate Social Responsibility and Environmental Management*, 18(5), 285–293.
- Rau, S. B., Schneider-Siebke, V. and Günther, C. (2019a). Family firm values explaining family firm heterogeneity. *Family Business Review*, 32(2), 195–215.
- Rau, S. B., Werner, A. and Schell, S. (2019b). Psychological ownership as a driving factor of innovation in older family firms. *Journal of Family Business Strategy*, 10(4), 100246.
- Razzak, M. R. and Jassem, S. (2019). Socioemotional wealth and performance in private family firms: The mediation effect of family commitment. *Journal of Family Business Management*, 9(4), 468–496.
- Rees, W. and Rodionova, T. (2015). The influence of family ownership on corporate social responsibility: An international analysis of publicly listed companies. *Corporate Governance: An International Review*, 23(3), 184–202.
- Richards, M., Zellweger, T. and Gond, J. P. (2017). Maintaining moral legitimacy through worlds and words: an explanation of firms' investment in sustainability certification. *Journal of Management Studies*, 54(5), 676–710.
- Roberts, N., Galluch, P. S., Dinger, M. and Grover, V. (2012). Absorptive Capacity and Information Systems Research: Review, Synthesis, and Directions for Future Research. *MIS Quarterly*, 36(2), 625–648.
- Rondi, E. and Rovelli, P. (2021). Exchanging knowledge in the TMT to realize more innovation opportunities: what can family firms do?. *Journal of Knowledge Management*, <http://doi/10.1108/JKM-08-2020-0645>.
- Rothaermel, F. T. and Alexandre, M. T. (2009). Ambidexterity in Technology Sourcing: The Moderating Role of Absorptive Capacity. *Organization Science*, 20(4), 759–780.
- Rutherford, M. W., Kuratko, D. F. and 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.
- Sacconi, L. (2006). A Social Contract Account for CSR as an Extended Model of Corporate Governance (I): Rational Bargaining and Justification. *Journal of Business Ethics*, 68(3), 259–281.
- Sageder, M., Mitter, C. and Feldbauer-Durstmüller, B. (2018). Image and reputation of family firms: a systematic literature review of the state of research. *Review of Managerial Science*, 12(1), 335–377.
- Sahasranamam, S., Arya, B. and Sud, M. (2020). Ownership structure and corporate social responsibility in an emerging market. *Asia Pacific Journal of Management*, 37(4), 1165–1192.

- Salvato, C. (2004). Predictors of entrepreneurship in family firms. *The Journal of Private Equity*, 7(3), 68–76.
- Samara, G. and Arenas, D. (2017). Practicing fairness in the family business workplace. *Business Horizons*, 60(5), 647–655.
- Samara, G., Jamali, D., Sierra, V. and Parada, M. J. (2018). Who are the best performers? The environmental social performance of family firms. *Journal of Family Business Strategy*, 9(1), 33–43.
- Sánchez-Sellero, P., Rosell-Martínez, J. and García-Vázquez, J. M. (2014). Absorptive Capacity from Foreign Direct Investment in Spanish Manufacturing Firms. *International Business Review*, 23(2), 429–439.
- Sánchez-Medina, P. S. and Díaz-Pichardo, R. (2017). Environmental pressure and quality practices in artisanal family businesses: The mediator role of environmental values. *Journal of Cleaner Production*, 143, 145–158.
- Sancho, M. P. L., Martínez-Martínez, D., Jorge, M. L. and Madueño, J. H. (2018). Understanding the link between socially responsible human resource management and competitive performance in SMEs. *Personnel Review*, 47(6), 1211–1243.
- Santos, I. L. d., Vieira Marinho, S. and Santos, R. C. d. (2020). The systematization knowledge of articles adherent to familiness, entrepreneurial orientation and absorptive capacity. *Journal of Family Business Management*, 11(4), 512–537.
- Schell, S., Hiepler, M. and Moog, P. (2018). It's all about who you know: The role of social networks in intra-family succession in small and medium-sized firms. *Journal of Family Business Strategy*, 9(4), 311–325.
- Schell, S., Wolff, S. and Moog, P. (2020). Contracts and communication among family members: Business succession from a contractual view. *Journal of Small Business Management*, 1–34.
- Schepers, J., Voordeckers, W., Steijvers, T. and 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.
- Schepker, D. J., Kim, Y., Patel, P. C., Thatcher, S. M. B. and Campion, M. C. (2017). CEO succession, strategic change, and post-succession performance: A meta-analysis. *The Leadership Quarterly*, 28(6), 701–720.
- Schulze, W. S., Lubatkin, M. H. and Dino, R. N. (2003). Toward a theory of agency and altruism in family firms. *Journal of Business Venturing*, 18(4), 473–490.
- Schulze, W. S. and Gedajlovic, E. R. (2010). Whither Family Business? *Journal of Management Studies*, 47(2), 191–204.
- Schulze, W. S. and Kellermanns, F. W. (2015). Reifying socioemotional wealth. *Entrepreneurship Theory and Practice*, 39(3), 447–459.
- Sciascia, S. and Mazzola, P. (2008). Family involvement in ownership and management: Exploring nonlinear effects on performance. *Family Business Review*, 21(4), 331–345.
- Sciascia, S., Nordqvist, M., Mazzola, P. and 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.

- Servera-Francés, D. and Piqueras-Tomás, L. (2019). The effects of corporate social responsibility on consumer loyalty through consumer perceived value. *Economic research-Ekonomska istraživanja*, 32(1), 66–84.
- Shanker, M. C. and Astrachan, J. H. (1996). Myths and realities: Family businesses' contribution to the US economy – A framework for assessing family business statistics. *Family Business Review*, 9(2), 107–123.
- Sharma, P., Chrisman, J.J., Pablo, A. L. and Chua, J. H. (2001). Determinants of initial satisfaction with the succession process in family firms: A conceptual model. *Entrepreneurship Theory and Practice*, 25(3), 17–36.
- Sharma, P., Chrisman, J. J. and Chua, J. H. (2003). Predictors of satisfaction with the succession process in family firms. *Journal of Business Venturing*, 18(5), 667–687.
- 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. and Irving, P. G. (2005). Four Bases of Family Business Successor Commitment: Antecedents and Consequences. *Entrepreneurship Theory and Practice*, 29(1), 13–33.
- Sharma, P. and Sharma, S. (2011). Drivers of proactive environmental strategy in family firms. *Business Ethics Quarterly*, 21(2), 309–334.
- Sharma, P. and Salvato, C. (2013). A balancing act between continuity and change. In P. Fernández Pérez & A. Colli, *The endurance of family businesses: A global overview*, 1st edition (pp. 34–56). Cambridge University Press, New York.
- Siegel, D. S. and Renko, M. (2012). The role of market and technological knowledge in recognizing entrepreneurial opportunities. *Management Decision*, 50(5), 797–816.
- Singal, M. (2014). Corporate social responsibility in the hospitality and tourism industry: Do family control and financial condition matter? *International Journal of Hospitality Management*, 36, 81–89.
- Singh, S. and Mittal, S. (2019). Analysis of drivers of CSR practices' implementation among family firms in India. *International Journal of Organizational Analysis*, 27(4), 947–971.
- Sirmon, D. G. and Hitt, M. A. (2003). Managing Resources: Linking Unique Resources, Management, and Wealth Creation in Family Firms. *Entrepreneurship Theory and Practice*, 27(4), 339–358.
- Smidts, A., Pruyn, A. T. H. and Van Riel, C. B. M. (2001). The impact of employee communication and perceived external prestige on organizational identification. *Academy of Management Journal*, 44(5), 1051–1062.
- Smith, B. F. and Amoako-Adu, B. (1999). Management succession and financial performance of family controlled firms. *Journal of Corporate Finance*, 5(4), 341–368.
- Spence, M. (1973). Job Market Signaling. *The Quarterly Journal of Economics*, 87(3), 355–374.
- Stafford, K., Duncan, K. A., Dane, S. and Winter, M. (1999). A research model of sustainable family businesses. *Family Business Review*, 12(3), 197–208.

- Stock, C., Hossinger, S. and Werner, A. (2020). The Familiness Effect on CSR of Privately Owned SMEs: Empirical Evidence from German Mittelstand Firms. <https://papers.ssrn.com/abstract=3565095>. Accessed 31 March 2020.
- Stoian, C. and Gilman, M. (2017). Corporate Social Responsibility That “Pays”: A Strategic Approach to CSR for SMEs. *Journal of Small Business Management*, 55(1), 5–31.
- Strike, V. M. (2012). Advising the Family Firm: Reviewing the Past to Build the Future. *Family Business Review*, 25(2), 156–177.
- Strike, V. M. (2013). The Most Trusted Advisor and the Subtle Advice Process in Family Firms. *Family Business Review*, 26(3), 293–313.
- Strike, V. M., Berrone, P., Sapp, S. G. and Congiu, L. (2015). A Socioemotional Wealth Approach to CEO Career Horizons in Family Firms. *Journal of Management Studies*, 52(4), 555–583.
- Stubner, S., Blarr, W. H., Brands, C. and Wulf, T. (2012). Organizational Ambidexterity and Family Firm Performance. *Journal of Small Business & Entrepreneurship*, 25(2), 217–229.
- Sundarasan, S. D., Je-Yen, T. and Rajangam, N. (2016). Board composition and corporate social responsibility in an emerging market. *Corporate Governance: The International Journal of Effective Board Performance*, 16(1), 35–53.
- Swab, R. G., Sherlock, C., Markin, E. and Dibrell, C. (2020). “SEW” what do we know and where do we go? A review of socioemotional wealth and a way forward. *Family Business Review*, 33(4), 424–445.
- Tagiuri, R. and Davis, J. (1996). Bivalent attributes of the family firm. *Family Business Review*, 9(2), 199–208.
- Teece, D. J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533.
- Teece, D. J. (2010). Technological Innovation and the Theory of the Firm: The Role of Enterprise-Level Knowledge, Complementaries, and (Dynamic) Capabilities. In B. H. Hall & N. Rosenberg (eds.), *Handbook of the Economics of Innovation*, 1st edition, volume 1 (pp. 679–730). Elsevier, North-Holland.
- Terlaak, A., Kim, S. and Roh, T. (2018). Not good, not bad: The effect of family control on environmental performance disclosure by business group firms. *Journal of Business Ethics*, 153(4), 977–996.
- Tokarczyk, J., Hansen, E., Green, M. and Down, J. (2007). A resource-based view and market orientation theory examination of the role of “familiness” in family business success. *Family Business Review*, 20(1), 17–31.
- Tranfield, D., Denyer, D. and Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, 14(3), 207–222.
- Turker, D. (2009). How Corporate Social Responsibility Influences Organizational Commitment. *Journal of Business Ethics*, 89(2), 189–204.

- Uhlaner, L. M., van Goor-Balk, H. J. M. and Masurel, E. (2004). Family business and corporate social responsibility in a sample of Dutch firms. *Journal of Small Business and Enterprise Development*, 11(2), 186–194.
- Uhlaner, L. M., Berent-Braun, M. M., Jeurissen, R. J. M. and de Wit, G. (2012). Beyond Size: Predicting Engagement in Environmental Management Practices of Dutch SMEs. *Journal of Business Ethics*, 109(4), 411–429.
- Umans, I., Lybaert, N., Steijvers, T. and Voordeckers, W. (2020). Succession planning in family firms: Family governance practices, board of directors, and emotions. *Small Business Economics*, 54(1), 189–207.
- Vallaster, C., Lindgreen, A. and Maon, F. (2012). Strategically Leveraging Corporate Social Responsibility: A Corporate Branding Perspective. *California Management Review*, 54(3), 34–60.
- Van Auken, H. and Werbel, J. (2006). Family dynamic and family business financial performance: Spousal commitment. *Family Business Review*, 19(1), 49–63.
- Van Gils, A., Dibrell, C., Neubaum, D. O. and Craig, J. B. (2014). Social Issues in the Family Enterprise. *Family Business Review*, 27(3), 193–205.
- Van Marrewijk, M. (2013). Concepts and definitions of CSR and corporate sustainability: Between agency and communion. *Journal of Business Ethics*, 44(1–2), 95–105.
- Vazquez, P. (2018). Family Business Ethics: At the Crossroads of Business Ethics and Family Business. *Journal of Business Ethics*, 150(3), 691–709.
- Veider, V. and Matzler, K. (2016). The ability and willingness of family-controlled firms to arrive at organizational ambidexterity. *Journal of Family Business Strategy*, 7(2), 105–116.
- Villalonga, B. and Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385–417.
- Vlachos, P. A., Panagopoulos, N. G. and Rapp, A. A. (2013). Feeling Good by Doing Good: Employee CSR-Induced Attributions, Job Satisfaction, and the Role of Charismatic Leadership. *Journal of Business Ethics*, 118(3), 577–588.
- Volberda, H. W., Foss, N. J. and Lyles, M. A. (2010). Perspective—Absorbing the Concept of Absorptive Capacity: How to Realize Its Potential in the Organization Field. *Organization Science*, 21(4), 931–951.
- Wagner, M. (2010). Corporate social performance and innovation with high social benefits: A quantitative analysis. *Journal of Business Ethics*, 94(4), 581–594.
- Wang, Y. (2016a). Environmental dynamism, trust and dynamic capabilities of family businesses. *International Journal of Entrepreneurial Behavior & Research*, 22(5), 643–670.
- Wang, Y. (2016b). Investigating dynamic capabilities of family businesses in China: a social capital perspective. *Journal of Small Business and Enterprise Development*, 23(4), 1057–1080.
- Ward, J. L. (1987). *Keeping the Family Business Healthy: How to Plan for Continuous Growth, Profitability, and Family Leadership*, 1st edition. CA: Jossey-Bass, San Francisco.

- Ward, J. L. (1997). Growing the family business: Special challenges and best practices. *Family Business Review*, 10(4), 323–337
- Weismeier-Sammer, D., Frank, H. and von Schlippe, A. (2013). Untangling ‘Familianness’: A Literature Review and Directions for Future Research. *The International Journal of Entrepreneurship and Innovation*, 14(3), 165–177.
- Welford, R. (2007). Corporate governance and corporate social responsibility: Issues for Asia. *Corporate Social Responsibility and Environmental Management*, 14(1), 42–51.
- Wennberg, K., Wiklund, J., Hellerstedt, K. and Nordqvist, M. (2011). Implications of intra-family and external ownership transfer of family firms: Short-term and long-term performance differences. *Strategic Entrepreneurship Journal*, 5(4), 352–372.
- Werner, A., Schröder, C. and Chlosta, S. (2018). Driving factors of innovation in family and non-family SMEs. *Small Business Economics*, 50(1), 201–218.
- Werner, A., Schell, S. and Haunschild, L. (2021). How does a succession influence investment decisions, credit financing and business performance in small and medium-sized family firms? *International Entrepreneurship and Management Journal*, 17(1), 423–446.
- Werther Jr, W. B. and Chandler, D. (2005). Strategic corporate social responsibility as global brand insurance. *Business Horizons*, 48(4), 317–324.
- Werther Jr, W. B. and Chandler, D. (2010). *Strategic corporate social responsibility: Stakeholders in a global environment*, 2nd edition. Sage Publication, USA.
- Wiklund, J. (2006). Commentary: “Family firms and social responsibility: Preliminary evidence from the S&P 500.” *Entrepreneurship Theory and Practice*, 30(6), 803–808.
- Wiklund, J., Nordqvist, M., Hellerstedt, K. and Bird, M. (2013). Internal versus external ownership transition in family firms: An embeddedness perspective. *Entrepreneurship Theory and Practice*, 37(6), 1319–1340.
- Williams, R. I., Pieper, T. M., Kellermanns, F. W. and Astrachan, J. H. (2018). Family Firm Goals and their Effects on Strategy, Family and Organization Behavior: A Review and Research Agenda. *International Journal of Management Reviews*, 20(S1), 63–82.
- Williams, R. I. and Mullane, J. (2019). Family leadership succession and firm performance: The moderating effect of tacit idiosyncratic firm knowledge. *Knowledge and Process Management*, 26(1), 32–40.
- Wiseman, R. M. and Gómez-Mejía, L. R. (1998). A Behavioral Agency Model of Managerial Risk Taking. *The Academy of Management Review*, 23(1), 133–153.
- Wolff, S., Schell, S. and Moog, P. (2020). Information asymmetries in intrafamily business succession. *BRQ Business Research Quarterly*, doi:10.1177/2340944420942525.
- Wolter, H.-J. and Sauer, I. (2017). Die Bedeutung der eigentümer- und familiengeführten Unternehmen in Deutschland. Bonn: Institut für Mittelstandsforschung (IfM) Bonn. Research Report. <https://www.econstor.eu/bitstream/10419/167597/1/895007959.pdf> (14. April 2021).
- Wood, D. J. (2010). Measuring corporate social performance: A review. *International Journal of Management Reviews*, 12(1), 50–84.

- World Business Council for Sustainable Development. (2000). *Corporate Social Responsibility. Making good business sense*. Geneva: World Business Council for Sustainable Development.
- Wu, S., Lin, F. and Wu, C. (2014). International diversification of family-dominant firms: Integrating socioemotional wealth and behavioral theory of the firm. *Journal of World Business*, 55(3), 101071.
- Xu, K., Hitt, M. A. and Dai, L. (2020). Corporate social responsibility and cost of capital: An empirical study of the Taiwan stock market. *Emerging Markets Finance & Trade*, 50, 107–120.
- Yu, A., Ding, H. B. and Chuang, H. M. (2015). Corporate social responsibility performance in family and non-family firms: The perspective of socio-emotional wealth. *Asian Business & Management*, 14(5), 383–412.
- Zaefarian, R., Eng, T.-Y. and Tasavori, M. (2016). An exploratory study of international opportunity identification among family firms. *International Business Review*, 25(1), 333–345.
- Zahra, S. A. and George, G. (2002). Absorptive Capacity: A Review, Reconceptualization, and Extension. *The Academy of Management Review*, 27(2), 185–203.
- Zahra, S. A., Neubaum, D. O. and Larrañeta, B. (2007). Knowledge sharing and technological capabilities: The moderating role of family involvement. *Journal of Business Research*, 60(10), 1070–1079.
- Zamir, F. and Saeed, A. (2020). Location matters: Impact of geographical proximity to financial centers on corporate social responsibility (CSR) disclosure in emerging economies. *Asia Pacific Journal of Management*, 37(1), 263–295.
- Zellweger, T. M. (2007). Time Horizon, Costs of Equity Capital, and Generic Investment Strategies of Firms. *Family Business Review*, 20(1), 1–15.
- Zellweger, T. M. and Astrachan, J. H. (2008). On the emotional value of owning a firm. *Family Business Review*, 21(4), 347–363.
- Zellweger, T. M., Eddleston, K. A. and Kellermanns, F. W. (2010). Exploring the concept of familiness: Introducing family firm identity. *Journal of Family Business Strategy*, 1(1), 54–63.
- Zellweger, T. M., Kellermanns, F. W., Eddleston, K. A. and Memili, E. (2012a). Building a family firm image: How family firms capitalize on their family ties. *Journal of Family Business Strategy*, 3(4), 239–250.
- Zellweger, T. M., Nason, R. S., Nordqvist, M. and Brush, C. G. (2012b). From Longevity of Firms to Transgenerational Entrepreneurship of Families: Introducing Family Entrepreneurial Orientation. *Family Business Review*, 25(2), 136–155.
- Zellweger, T. M., Nason, R. S., Nordqvist, M. and Brush, C. G. (2013). Why Do Family Firms Strive for Nonfinancial Goals? An Organizational Identity Perspective. *Entrepreneurship Theory and Practice*, 37(2), 229–248.
- Zerbini, F. (2017). CSR Initiatives as Market Signals: A Review and Research Agenda. *Journal of Business Ethics*, 146(1), 1–23.
- Zhang, Q., Cao, M., Zhang, F., Liu, J. and Li, X. (2020). Effects of corporate social responsibility on customer satisfaction and organizational attractiveness: A signaling perspective. *Business Ethics: A European Review*, 29(1), 20–34.

Zheng, W., Wu, Y. C. J., Chen, X. C. and Lin, S. J. (2017). Why do employees have counterproductive work behavior? The role of founder's Machiavellianism and the corporate culture in China. *Management Decision*, 55(3), 563–578.

Zientara, P. (2017). Socioemotional Wealth and Corporate Social Responsibility: A Critical Analysis. *Journal of Business Ethics*, 144(1), 185–199.

Zollo, M. and Winter, S. G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities. *Organization Science*, 13(3), 339–351.

Zou, T., Ertug, G. and George, G. (2018). The Capacity to Innovate: A Meta-Analysis of Absorptive Capacity. *Innovation*, 20(2), 87–121.

Zybura, J., Zybura, N., Ahrens, J.-P. and Woywode, M. (2020). Innovation in the post-succession phase of family firms: Family CEO successors and leadership constellations as resources. *Journal of Family Business Strategy*, 12(2), 100336.

H. Appendix

1. Appendix to Chapter B

Table G-1: Content analysis of family firm specific antecedents of CSR

Authors (year)	Antecedents	Outcomes	Theory	Method	Sample size	Sample firm size	Country of research	Key findings
Abeysekera and Fernando (2020)	Family ownership; family management; founder name	-	Agency theory	Quantitative	232 firms (9-year panel)	L	USA	Family ownership and management are negatively related to CSR strength. If the family firm is named after the founder, this positively moderates the effect between family ownership and CSR concerns. During the financial crisis, family firms were associated with a lower CSR strength than non-family firms.
Adams et al. (1996)	Family firm status	-	-	Qualitative	444 firms (cross-sectional)	N/A	USA	There exist few differences in ethics-related behavior between family firms and non-family firms. Non-family firms, unlike family firms, have formal codes of ethics. Family firms pass on their ethical views informally through the corporate culture. Differences in ethical behavior arise from the company type.
Amann et al. (2012)	Family ownership and management (combined)	-	-	Quantitative	200 firms (cross-sectional)	N/A	Japan	CSR ratings in terms of human resource management and environmental protection are higher for non-family firms than for family firms and that there is no significant relationship between family firms/non-family firms regarding of CSR ratings of governance and social contribution.
Amidjaya and Widagdo 2020	Family ownership (also moderator), foreign ownership (also moderator) and corporate governance	-	Agency theory Institutional theory	Quantitative	31 firms (5-year panel)	N/A	Indonesia	Family ownership, foreign ownership and corporate governance have a positive effect on sustainability reporting. Family ownership weakens the effect of corporate governance, foreign ownership has no moderating effect on corporate governance.
Aragón-Amonarriz et al. (2019)	Family social capital, family commitment, family values	-	-	Qualitative	3 firms (13 interviews)	S M	Mexico	In order to maintain responsible family ownership across generations, family firms must preserve their family social capital, consisting of a cognitive, structural, and relational dimension.

continued

Arena and Michelon (2018)	Family values, family control, family identity, firm age	-	SEW	Quantitative	167 firms	N/A	Italy	High expression of the family control and influence dimension leads to lower environmental disclosure compared to non-family firms, with the effect weakening over the life cycle. Middle-aged family firms with high family identity provide more environmental disclosure, for example to protect and enhance the reputation and image of the business, whereas old family firms with high family identity provide less environmental disclosure.
Bammens and Hünermund (2020)	Family ownership (mediated by company reputation motive), family values and transgenerational intention (moderator family ownership-reputation)	-	Institutional theory	Quantitative	4,009 firms (cross-sectional)	S M L	Germany	Family ownership has a positive effect on the introduction of eco-innovations, partly due to the focus on the company reputation (mediator). This effect is highest when the family has transgenerational intentions.
Bennedsen et al. (2019)	Family management	-	-	Quantitative	2600 firms (5-year panel)	S M L	Denmark	Company characteristics, such as its policy/environment and incentives and corporate culture have a strong influence on employee absenteeism. Likewise, employee selection has a small influence on absenteeism. Overall, family firms have lower employee absenteeism.
Bergamaschi and Randerson (2016)	Family ownership	-	-	Theoretical	-	-	-	A family firm can be divided into the three subsystems family; ownership; and business. Depending on which subsystem is the dominant one, the family firm will follow a different CSR pattern.
Berrone et al. (2010)	Family ownership, family control	-	-	Quantitative	194 firms (4-year panel)	N/A	USA	Family firms have a better environmental performance to protect their SEW compared to non-family firms. This is particularly the case at the local level. This effect is independent of whether the family member serves as CEO or CEO and board chair.
Bhatnagar et al. (2020)	Family values, family religion	-	SEW Agency theory	Qualitative	14 firms (24 interviews)	N/A	India	The Hindu beliefs of Dharma (duty to society) and Karma (right to act without expecting rewards) influence CSR-related philanthropy of family firms. Depending on the intensity of the belief regarding dharma and karma, different CSR patterns dominate in the family firms.
Bingham et al. (2011)	Family involvement; founder involvement	-	Stakeholder theory Organizational identity theory	Quantitative	706 firms (15-year panel)	L	USA	Family firms demonstrate more CSP social initiatives than non-family firms. This effect becomes even greater with increasing family and/or founder involvement.

continued

Biswas et al. (2019)	Family ownership; corporate governance (mediator)	-	-	Quantitative	N/A (16-year panel)	N/A	Bangladesh	The relationship between corporate governance guidelines and CSR reporting is mediated by the quality of corporate governance. Since family firms have a lower quality of corporate governance, they also have a lower level of CSR reporting.
Block (2010)	Family ownership, family management	-	Social identity theory Agency theory	Quantitative	414 firms (9-year panel)	L	USA	Family firms downsize less than non-family firms. The decisive factor here is whether the company is family-owned or family-managed, as the positive effect can only be demonstrated in family-owned companies. Compared to non-family firms, family firms only downsize when this is necessary to protect their employees, and thus act more socially responsibly than non-family firms
Block and Wagner (2014a)	Family ownership; family management	-	SEW	Quantitative	399 firms (9-year panel)	L	USA	Family ownership as well as founder ownership reduces CSR concerns, whereby founder ownership has a stronger influence. Family management, as well as founder management, increases CSR concerns. In this case, family management has the stronger effect.
Block and Wagner (2014b)	Family ownership	-	-	Quantitative	286 firms (11-year panel)	L	USA	Family ownership has a positive effect on diversity-, employee-, environmental-, and product-related aspects of CSR performance and a negative impact on community-related CSR. The latter is a consequence of the owner family supporting the community through private rather than business channels.
Blodgett et al. (2011)	Family values, ethical values	-	-	Quantitative	172 firms (cross-sectional)	N/A	International (intercontinental)	Comparing mission statements, U.S. family firms have more ethical values than international family firms and non-family firms in the U.S. U.S. family firms focus on "integrity" and "honesty", while international family firms focus on "environmentalism", "globalism", and "CSR". An increase in the ethical values of family firms around the world has occurred over time.
Cabeza-García et al. (2017)	Family ownership, governance, foreign ownership (moderator)	-	SEW	Quantitative	105 firms (7-year panel)	L	Spain	Family firms have a lower commitment to CSR reporting than non-family firms. With regard to the second-largest shareholder, foreign ownership moderates this effect negatively, while the presence of a second family even increases this effect.
Campopiano et al. (2014)	Family ownership, family management	-	Stewardship theory	Quantitative	130 firms (cross-sectional)	S M	Italy	Family ownership has a positive effect on the company's philanthropic involvement, while family involvement in management has a negative effect. Family owners invest more in their business to build reputation and be a better steward in the community to support the longevity of the business.

continued

Campopiano and De Massis (2015)	Family ownership and family management, institutional setting, community embeddedness		Institutional theory Grounded theory	Qualitative	98 firms (cross-sectional)	M L	Italy	Through CSR, family firms try to positively enhance their reputation. For this reason, they are less influenced by institutional settings and focus more on the expected social outcomes of CSR. Since they focus their CSR less on institutional requirements and more on the interests of the stakeholders to be influenced, the variance of their CSR reports is higher.
Campopiano et al. (2019)	Family management	-	Self-construal theory	Quantitative	63 family firms (cross-sectional)	L	International (intercontinental)	Female members on the board of family businesses exert a positive influence on CSR if they are not family members of the controlling family. In contrast, they only have a positive influence on philanthropic engagement if they are family members of the controlling family
Chen and Cheng (2020)	Family ownership and/or management (combined); mimetic pressure from industry (moderator)	-	Agency theory Neo-institutional theory	Quantitative	N/A (4-year panel)	L	Taiwan	Public family firms acquire CSR assurances less frequently than non-family firms. This relationship is positively moderated by mimetic pressure from industry peers
Cordeiro et al. (2018)	Family ownership	-	Neo-Institutional Theory	Quantitative	500 firms (4-year panel)	L	India	Family ownership and multinational ownership have a positive impact on a firm's CSR rating. State ownership, on the other hand, leads to a decline in CSR ratings.
Cordeiro et al. (2020)	Board gender diversity; family ownership (moderator)	-	SEW Agency theory Resource dependency theory	Quantitative	751 firms (6-year panel)	L	USA	Board gender diversity is positively associated with corporate environmental performance. This relationship is positively moderated by family ownership, but also by being a dual-class firm.
Cruz et al. (2014)	Family ownership and management (combined); national CSR standards (moderation); industry CSR standards (moderation); declining performance (moderation)	-	Organizational identity theory SEW approach Stakeholder theory	Quantitative	598 firms (4-year panel)	L	International (Europe)	Family firms conduct more CSR towards external stakeholders, less CSR towards internal stakeholders, and are at the same time less sensitive to national CSR standards or those of their industry (moderation). Family firms place their corporate survival above their SEW and their CSR activities are therefore more sensitive to declining performance than those of non-family firms (moderation).
Cruz et al. (2019)	Family management, non-family/family female directors	-	-	Quantitative	152 firms (5-year panel)	L	USA	Women in boards of family firms affect CSP positively. This effect can be observed for outsider non-family and insider family women directors.

continued

Cuadrado-Ballesteros et al. (2015)	Independent directors; family ownership (moderator)	-	-	Quantitative	575 firms (7-year panel)	N/A	International (intercontinental)	Due to a higher proportion of independent directors in a firm's board, a firm discloses more CSR. Owning families, on the other hand, use their position to influence independent directors to make fewer CSR disclosures. Thus, family ownership negatively moderates this relationship.
Cuadrado-Ballesteros et al. (2017)	Family ownership; formal code of ethics	-	-	Quantitative	547 firms (9-year panel)	N/A	International (intercontinental)	Due to less formalization, family firms tend to use less formal codes of ethics than non-family firms, which mediates the negative relationship between family ownership and CSP.
Cui et al. (2018)	Family ownership; family management (moderator); long-term incentive compensation (moderator)	-	Behavioral agency theory	Quantitative	177 firms (8-year panel)	L	USA	Family management positively moderates the positive effect of family ownership on the CSR performance. Family and non-family CEOs are incentivized to increase CSR through long-term incentive compensation (moderation), although the effect is lower for family CEOs than for non-family CEOs.
Dal Maso et al. (2020)	Family ownership, human resource practices (mediator)	-	Agency theory	Quantitative	4,932 firms (14-year panel)	N/A	International (intercontinental)	Listed family firms have lower environmental performance than non-family firms. The study shows that this negative effect is mediated by a lower investment in employee training and development practices. This is due to a stronger bargaining power of the dominant coalition and a lower firm performance. due to less investment in training and development.
Dawson et al. (2020)	Family management, family generation	-	Signaling theory	Quantitative	161 family firms (2-year panel)	S M	Italy	Business legality increases with the level of family involvement in management. Likewise, the level of generation has a positive influence.
Dayan et al. (2019)	Family values, firms capabilities (mediator)	-	Ability perspective Willingness perspective Mindfulness theory	Quantitative	150 (cross-sectional)	N/A	United Arab Emirates	Mindfulness in protection the SEW dimensions "identification of family members with the firm" and "binding social ties" influences the environmental strategy of family firms. They have a positive effect on production of sustainable products and processes. This effect is positively mediated by the capabilities of the company.

continued

Dekker and Hasso (2016)	Family firm status, social embeddedness (moderator)	-	-	Quantitative	1452 firms (longitudinal)	S M	Australia	Private family firms have a lower environmental orientation than non-family firms. By contrast, when family firms are strongly embedded in the social community, they exhibit a higher level of environmental orientation.
Delmas and Gergaud (2014)	Family values (heir succession intention; moderator of quality motivation, market motivation, and eco-certification)	-	Stakeholder theory	Quantitative	281 (cross-sectional)	N/A	USA	Using wineries as examples, it is shown that the intention to pass on the family business to the next generation has a positive effect on the adoption of eco-certificates. In this context, passing on the business moderates the effect of market motivation and quality motivation on eco-certification positives.
Déniz and Suárez (2005)	Family value	-	-	Quantitative	112 firms (2-year panel)	S M	Spain	Depending on the owning family' value, family firms tend to adopt a classic, socio-economic, or philanthropic approach to CSR. Most family firms in the sample followed a philanthropic approach, through which they tried to maintain broad relationships with society.
Dou et al. (2019)	Family ownership, family commitment (moderator), long term orientation (mediator)	-	Strategic reference point theory Organizational identity theory Socioemotional wealth preservation perspective	Quantitative	454 family firms (cross-section)	N/A	China	In family owned businesses, commitment and long term orientation is needed to implement a proactive environmental strategy. In family owned businesses, commitment and long term orientation is needed to implement a proactive environmental strategy. The mediation effect of long-term orientation is only significant if the level of family commitment is high.
Discua Cruz (2020)	Family values; family religion	-	Stewardship theory Paradox theory	Qualitative	1 firm (interviews)	M	Honduras	In line with their family values and religion, the owning family of Honduran firm AsphaCo frequently engaged in CSR activities towards the community and employees. Since they did not engage in CSR to better represent their firm, they preferred to keep it anonym and not report it publically.
Du (2015)	Corporate environmental misconduct; CEO's political network (moderator)	-	-	Quantitative	3,008 FFs (cross-sectional)	N/A	China	Family-owned firms use corporate philanthropic giving to distract from their corporate environmental misconduct. Since politically well-connected CEOs can avoid high personal penalties due to their political contacts, this effect is negatively moderated by the CEO's political network..

continued

Du et al. (2016)	Media coverage; family ownership (moderator)	-	Institutional theory Instrumental stakeholder theory	Quantitative	733 FFs (7-year panel)	N/A	China	Due to the higher visibility that comes with more media coverage, managers of family firms conduct more philanthropic giving. As the dependency on stakeholders decreases with family ownership, there is a negatively moderating effect of family ownership between media coverage and corporate philanthropic giving.
Dyer and Whetten (2006)	Family ownership and management (combined)	-	Self-interest theory Social identity theory	Quantitative	261 firms (10-year panel)	L	USA	In terms of social initiatives there are no differences between family firms and non-family firms. Family firms are more likely to avoid social concerns than non-family firms.
El Ghoul et al. (2016)	Family ownership	-	Agency theory	Quantitative	335 firms (10-year panel)	N/A	International (Asia)	In order to achieve personal benefits, increasing family ownership allows family owners to divert the firm resources to activities that bring them financial benefits. Furthermore, this is particularly true for family firms with greater agency problems and from countries with weak institutions.
El-Kassar et al. (2018)	Audit committee; family management (moderator)	-	Stakeholder theory Agency theory	Quantitative	203 employees of FFs (cross-sectional)	Employees	Lebanon	Audit committees have a positive impact on CSR practices in the areas of health, refugees, community, and environment. In addition, family management has a positive moderating effect on the impact of CSR towards community, the environment, and health.
Ertuna et al. (2019)	Family values, state regulations	-	Institutional logics theory	Qualitative	2 firms (case study)	N/A	Turkey	This study compares the CSR logics of a local hotel and a hotel chain. The local hotel adapts its CSR logic to local conditions and embeds it in the organization. The CSR logic of the hotel chain, which is specified by the headquarters, is only partially adopted and varies in its interpretation and implementation. Local needs and priorities are only implemented to a limited extent. The sustainability strategies in both companies are shaped by the family or the family headquarters.
Fitzgerald et al. (2010)	Attitude towards community; community vulnerability; family firm resources	-	Sustainable family business theory	Quantitative	334 family-firm households (2-year panel)	S M	USA	Members of the owning family with a very positive attitude towards their local communities were more willing to support their local community. Those with higher education were more likely to do so by taking leadership positions in the community, while individuals with more household assets and profit companies were more likely to provide financial assistance to their communities.

continued

Gallo (2004)	Family firm status	-	-	Quantitative	44 academics (cross-sectional)	People working on university institutions	International (intercontinental)	Family firms fulfill their responsibility to create wealth and provide products for society to a high degree. But there must be a greater focus on sustainable and long-term execution, otherwise they will only be generated for one generation.
Ge and Micelotta (2019)	Firm visibility; political linkages; family ownership and management (moderator)	-	-	Quantitative	3,075 firms (cross-sectional)	N/A	China	Firms that are more sensitive to institutional pressure due to firm visibility and political linkages are more likely to engage in philanthropy and further donate larger amounts. While family ownership has no effect on the giving behavior, it does moderate the relationship between institutional pressure and the amount of philanthropic giving positively.
Graafland et al. (2003)	Family firm status; firm size	-	-	Quantitative	111 firms (cross-sectional)	S L	Netherlands	Family firms and non-family firms show very similar patterns regarding to the use of instruments such as codes of conduct, ISO certification, social reporting, social handbooks, and confidential. These instruments are influenced by the size of the company.
Graafland (2020)	Family ownership, family management, firm size (moderator)	-	SEW	Quantitative		S M L	International	The relationship between ownership of a family firm and environmentally friendly production is stronger for small than for large firms and is moderated by the involvement of family members in the management of the firm in a non-linear way. Differences between family and non-family firms is greater in small firms with family and non-family managers. Likewise, the best environmental performance is achieved in family firms managed by families and non-family members.
Huang et al. (2009)	Family ownership and management (moderator: negative (regulatory stakeholder pressure; market shareholder pressure); positive (pressure from internal stakeholders)	green technical innovation / green administrative innovation	-	Quantitative	235 firms (cross-sectional)	N/A	Taiwan	Using the chemical, electronics and information technology industries, it is shown that there is a positive correlation between the degree of natural environmental pressure from stakeholders and the introduction of green innovations. The moderating effect of family firms leads to a negative effect of regulatory stakeholder pressure and market shareholder pressure on green innovations and a positive one of pressure from internal stakeholders. These differences are explained by organizational culture and core values.
Iyer and Lulseged (2013)	Family ownership and management (combined)	-	Agency theory Legitimacy theory Stakeholder theory	Quantitative	397 firms (cross-sectional)	L	USA	There is no statistically significant difference in the probability of CSR disclosure (sustainability reporting) between family firms and non-family firms.

continued

Kallmuenzer et al. (2018)	Family values, community embeddedness/ stakeholder pressure	-	Random utility theory	Quantitative	152	S M	Austria	Family firms in rural tourism are motivated by environmental and social considerations after a financial security, which give a greater benefit than a greater financial profit, through the family conditional SEW dynamics and the resulting CSR increase.
Kim and Lee (2018)	Family ownership and management (combined); family CEO; family firm type	-	Agency theory	Quantitative	200 firms (3-year panel)	S M L	South Korea	Family firms have a lower CSP than non-family firms, which is even lower when a family firm is managed by a family CEO. Chaebols (family-run or controlled conglomerate) have a higher CSP than non-cheabol firms.
Kim et al. (2017)	Top management attention to the natural environment; family ownership and management (combined) (moderator)	-	Behavioral theory Institutional theory	Quantitative	97 firms (10-year panel)	N/A	USA	Family influence has a positive moderating effect on the relationship between top management's attention to the natural environment and proactive environmental action.
Kim et al. (2020)	Family ownership; population size (moderator)	-	Place theory	Quantitative	2,000 firms (14-year panel)	L	USA	Family ownership reduces the probability of layoffs. The size of the population of the location in which the company operates has a negative moderating effect on this relationship.
Labelle et al. (2018)	Family ownership; family control; stakeholder/ shareholder-oriented economy	-	SEW Agency theory	Quantitative	1,264 firms (cross-sectional)	N/A	International (intercontinental)	Family firms have a lower CSP than non-family firms. In family firms, family control (voting rights) up to 36% increases the CSP in family firms, whereas family control more than 37% decreases their CSP. Family firms operating in stakeholder-oriented countries pay more attention to social issues than those operating in more shareholder-oriented countries.
Lamb and Butler (2018)	Family ownership; family management; founding family presence	-	Stewardship theory SEW Multiple agency theory	Quantitative	153 firms (13-year panel)	N/A (Fortune 500)	USA	Family ownership and the presence of a family CEO increase CSR strength. In terms of CSR concerns, the presence of a family CEO and a founding family has a negative effect.

continued

Le Breton-Miller and Miller (2016)	Being a family firm	-	-	Conceptual	-	-	-	There is no single answer as to whether family businesses operate more sustainably than non-family businesses. Characteristics that positively influence sustainability are: long-term orientation, reputation and agency costs. A negative effect can result from the following factors: family conflicts, SEW, and exploitation of smaller shareholders at the expense of sustainability. Important mediating roles (both positive and negative) could be family values, educational background, organizational factors, governance arrangements and environmental forces.
López-González, et al. (2019)	Family ownership; family management (moderator); market munificence (moderator)	-	SEW Agency theory Stakeholder theory Institutional theory	Quantitative	956 firms (9-year panel)	L	International (intercontinental)	Family ownership has a positive effect on CSR performance. This relationship is positively moderated by family management and family directors on the board of directors, but negatively moderated by high market munificent.
Madden et al. (2020)	Family Ownership; Family firm age (moderator)	-	Socioemotional selectivity theory	Quantitative	1,436 firms (8-year panel)	L	USA	Family ownership positively affects investments in CSR activities. As family firms age, they become more selective and invest less heavily in CSR activities. Family firms age therefore acts as a moderator of the relationship between family ownership and CSR.
Maggioni and Santangelo (2017)	Environmental non-profit organizations (substitutes for environmental regulations)	-	Stakeholder theory Organization science	Quantitative	2,275 firms (cross-sectional)	S M L	Italy	Environmental non-profit organizations operating in the same local context influence family businesses more than non-family businesses to implement more green investment strategies. This is due to their scarcity of resources, risk aversion and local roots, which makes family businesses more sensitive to their pressure. Environmental non-profit organizations can serve as a substitute for sustainability compliance in sectors with low regulation.
Marques et al. (2014)	Family involvement; family values	-	Stewardship theory SEW	Qualitative	12 firms (interviews)	-	Spain	In family firms with family CEOs, but more frequently in family firms with a high family ownership, the values of identification and commitment are particularly evident. These have a strong impact on workplace- and community-related CSR.
Martínez-Ferrero et al. (2016)	Family ownership, managerial discretion	-	Agency theory	Quantitative	1,275 firms (8-year panel)	N/A	International (intercontinental)	Family firms are taking more CSR measures to meet stakeholder demands and thereby gain greater discretionary power, for example to compensate for the manipulation of profits.

continued

Martínez-Ferrero et al. (2017)	Board size; board independency; family ownership (moderator)	-	Agency theory Institutional theory	Quantitative	536 firms (8-year panel)	N/A	International (intercontinental)	In stakeholder-oriented countries, board size and board independence have a positive effect on sustainability assurance, which is further positively moderated by family ownership. Board size and board independence also have a positive effect on sustainability reports provided by professional accountants, which are not influenced by family ownership.
McGuire et al. (2012)	Family ownership and family management, corporate governance (moderator)	-	-	Quantitative	473 firms	L	USA	Family firms are less likely than non-family businesses to engage in negative or socially harmful activities. In general, corporate governance is not related to the social performance of the company. However, it has a moderating effect on the relationship between family control and social performance.
Memili et al. (2020)	Family ownership, long term orientation (moderator)	-	Psychological capital theory	Quantitative	192 family firms (cross-sectional)	S M	Turkey	Using data of the hospitality and tourism industry, it is shown that SEW has a negative effect on firm performance (sales) and that family firm psychological capital mitigates this effect. Likewise, this effect can be mitigated by a long-term orientation, if non-financial strengths (family firm psychological capital) are used and the effects of financially focused goals are minimized.
Muttakin and Khan (2014)	Family ownership	-	Legitimacy theory	Quantitative	135 firms (5-year panel)	L	Bangladesh	Family ownership has a negative effect on CSR disclosures. Export oriented sectors, firm size and industry sectors also have a positive effect on CSR disclosures.
Nadeem et al. (2020)	Family ownership, board gender diversity	-	Stakeholder theory Gender socialization theory	Quantitative	399 firms (10-year panel)	L	UK	Board gender diversity has a positive effect on stakeholder value creation. This effect can be observed for economic, social and environmental performance. Even though female directors of family firms are associated with environmental value creation, they have no impact on economic and social value creation.
Oh et al. (2019)	Family management; outside directors' ownership (moderator); board educational diversity (moderator)	-	-	Quantitative	290 firms (5-year panel)	L	South Korea	Outside directors' ownership, as well as board educational diversity, have a positive moderating effect on CSR in firms with low family management but a negative moderating effect on CSR in firms with high family management.

continued

Peake et al. (2017)	Owning family's duration in a community; owning family's community satisfaction; female management (moderator)	-	Social capital theory	Quantitative	279 family-firm households (2-year panel)	S	USA	The owning family's duration in a community is positively associated with their participation in community development activities. The greater the level of dissatisfaction with the community, the greater the willingness to participate in the work of supporting community development. Female management moderates the relationship between community satisfaction and participation in community development.
Rees and Rodionova (2015)	Family ownership; liberal/coordinated market economy	-	-	Quantitative	3,893 firms (11-year panel)	N/A	International (intercontinental)	Closely held equity and family ownership have a negative impact on environmental, social, and governance (ESG) performance. In terms of governance control, closely held equity shows no impact on environmental and social rankings, whereas family ownership continues to have a negative impact. These results are found in liberal market economies and coordinated market economies, whereas the latter generally reflects weaker performance and considerable diversity.
Richards et al. (2017)	Family influence, domestic world or civic-green world rhetoric, multi-generation control (whether one family had been the firm's main blockholder for at least two generations)	-	-	Quantitative	86 firms (cross sectional)	N/A	International (intercontinental)	Using the coffee, tea, and chocolate industry as an example, the study shows that investment in sustainability certificates depends on the chosen legitimacy principles and the reflection of identity orientation, the "civic and green" world and the "domestic" world. The domestic dependency of the companies has a negative impact on investments for sustainability certifications, because the legitimacy communication takes place in a different way. The methods of legitimacy depend on the generational integration of the family firm. Multi-generational family firms can better integrate socially responsible attributes through its long-term stakeholder relationships and therefore do not need sustainability certifications.
Sahasranamam et al. (2019)	Family ownership; business group owned (moderator)	-	Agency theory Institutional theory	Quantitative	N/A (8-year panel)	L	India	Family ownership is positively related to community-related CSR. There is no significant moderating effect of business group ownership in this relationship.

continued

Samara et al. (2018)	Family ownership, family management, family commitment, generation of management, outside directors	-	SEW	Qualitative	146 family firms (cross-sectional)	N/A	International (intercontinental)	<p>Family firms show positive SEW and higher environmental social performance when 100% of the business is in family hands, when the first generation is still involved in management, when the board is dominated by family members, and when family involvement in management is low. When many family members are involved in management, the negative effects of SEW become visible and less social performance is performed.</p> <p>Non-Anglo-Saxon countries focus more on long-term stakeholder welfare and less on managerial compensation to firm profitability. Therefore, they achieve high social performance (a) when family-dominated management is complemented by a board of family and non-family members, (b) when business ownership is shared with external parties and non-family board members mediate conflicts between them, and (c) when there is shared business ownership and the top management team is dominated by the first generation.</p>
Sánchez-Medina and Díaz-Pichardo (2017)	Family values, environmental values (mediator), environmental pressure	-	Sustainable family business theory	Quantitative	72 family firms (cross-sectional)	S	Mexico	<p>Environmental pressure leads to the introduction of quality practices in artisanal family firms through the formation of environmental values. This effect is completely mediated by the environmental values of the owner family.</p>
Sharma and Sharma (2011)	Family influence, family values, relationship conflict (negative moderator)	-	Theory of planned behavior	Conceptual	-	-	-	<p>High family involvement has a positive effect on the exercise of the proactive environmental strategy. This intention is increased if there are low relationship conflicts within the controlling family in the family business, as resources for implementation can then be better provided.</p>
Terlaak et al. (2018)	Family ownership; family management	-	SEW	Quantitative	259 firms (7-year panel)	L	South Korea	<p>Family ownership and the propensity of a business group to disclose environmental performance information have a U-shape relationship. This U-shape is moderated and strengthened by the presence of a family CEO.</p>

continued

Uhlaner et al. (2004)	Family firm status; family generation; community embeddedness; firm size; FF name includes family's surname	-	Stakeholder theory	Quantitative	42 family firms (cross-sectional)	S M	Netherlands	The family character of the business most frequently impacts employee, client, and supplier relationships. Statistically significant interaction effects are reported for the following moderator variables: generation of the owner; company tenure in the community; community size; company size; and inclusion of the family surname in the business name.
Uhlaner et al. (2012)	Family influence (power, experience, culture); number of owners (moderator)	-	Theory of planned behavior	Quantitative	689 firms (2-year panel)	S M	Netherlands	SMEs with a greater family influence are more likely to engage in environmental management practices. This increases in family firms with larger business-owning families (moderation).
Wiklund (2006)	Family ownership	-	Agency theory	Conceptual	-	-	-	Family firms show more positive CSR behavior, due to the bond between the family and the company.
Yu, et al. (2015)	Family ownership, majority ownership, independent directors	-	SEW	Quantitative	229 firms (5-year panel)	N/A	Taiwan	Family firms have a better CSR performance than non-family firms. SEW, measured by the majority shareholding and the proportion of independent directors on the board, has a positive effect on CSR.
Zamir and Saeed (2020)	Closeness to financial markets; family ownership (moderator), family commitment	-	Legitimacy theory Institutional theory	Quantitative	649 firms (6-year panel)	N/A	International (intercontinental)	Firms located closer to the financial centers have a higher CSR disclosure rates compared to their more distant counterparts. This effect is positively moderated by family ownership and being a listed company. The negative effect of distance on CSR disclosure is stronger in countries with higher income inequality.
Zheng et al. (2017)	Family values, Machiavellian corporate culture (low organisational justice, psychological contract violation, low trust)	-	Social information processing theory Grounded theory	Qualitative	Single case study	L	China	The study examines why employees exhibit counterproductive work behavior. This is caused, among other things, by Machiavellian corporate culture, which is characterized by low trust and strong control, as well as psychological contract violations, as these factors leads to the idea of mutual exploitation.

Notes: N/A = Not available; S = Small; M = Medium; L = Large (listed)

Table G-2: Content analysis of family firm specific outcomes of CSR

Authors (year)	Antecedents	Outcomes	Theory	Method	Sample size	Sample firm size	Country of research	Key findings
Adomako et al. (2019)	-	Firm performance (insignificant)	Resource-based view theory	Quantitative	253 firms (cross-sectional)	S M	Ghana	Environmental sustainability orientation shows no significant impact on performance in family businesses, but is enhanced in non-family businesses.
Hsueh (2018)	-	External non-financial outcomes	Source credibility theory	Quantitative	Study 1: 167 NGO's (cross-sectional) Study 2: 335 stakeholder	N/A	International (intercontinental)	Family firms have a larger credibility gap in publishing sustainability reporting than non-family businesses. This gap can be reduced by an independent assurance service. Family businesses derive greater value with reasonable assurance than non-family firms.
Lin et al. (2020)	-	Credit rating (moderated by family ownership)	Agency theory	Quantitative	1,475 firms (9-year panel)	L	Taiwan	CSR has a moderating and partial mediation effect between corporate governance and credit rating. However, this connection could not be established for family firms.
Martínez-Ferrero et al. (2018)	-	Information asymmetry (moderated by family ownership)	Agency theory	Quantitative	548 firms (7-year panel)	N/A	International (intercontinental)	CSR disclosures reduce information asymmetry, which in turn also positively effects the level of CSR disclosures. Family ownership has a negative moderating effect on the relationship between CSR and information asymmetry, reversing the original negative effect. The effect between information asymmetry and CSR is negatively moderated by family ownership, reversing the original effect in family firms.
Maung et al. (2020)	-	Financial market reaction (moderated by family management)	Signaling theory	Quantitative	N/A (10-year panel)	N/A	USA	The financial markets react positively to the donations of religious CEOs and are further positively moderated by is the presence of a founder or family CEO.
Pan et al. (2018)	-	Financial outcomes, post-succession performance	-	Quantitative	885 firms (9-year panel)	-	China	Family firms exhibit more corporate philanthropy when the handover to the second generation is imminent. In the process, better market and accounting performance is achieved in addition to generally poor performance, indicating a strategic deployment.
Panwar et al. (2014)	-	External non-financial outcomes	-	Quantitative	278 US residents (cross-sectional)	-	USA	Firm outsiders perceive the legitimacy of CSR measures of family-owned firms as higher than those of publicly listed firms.
Samara and Arenas (2017)	-	Internal non-financial outcomes, long-term family firm survival and success, firm reputation	-	Conceptual	-	-	-	Family firms that promote fairness in the workplace can benefit by preserving their reputation and enhancing the long-term survival of the business.
Wagner (2010)	-	Innovation with high social benefits (moderated by family ownership)	-	Quantitative	252 firms (11-year panel)	L	USA	There is a positive link between CSP and innovation with high social benefits. This relationship is positively moderated by family ownership.

Notes: N/A = Not available; S = Small; M = Medium; L = Large (listed)

Table G-3: Content analysis of family firm specific antecedents and outcomes of CSR

Authors (year)	Antecedents	Outcomes	Theory	Method	Sample size	Sample firm size	Country of research	Key findings
Ahmad et al. (2020a)	Family involvement, (family commitment; family continuity; family control; family enrichment)	Financial outcomes (financial strength), internal non-financial outcomes (internal capabilities; strategic perspective; learning & growth), external non-financial outcomes (customer orientation)	Stakeholder theory Transaction cost economics theory	Quantitative	489 owner & executives (150 family firms) (cross-sectional)	S M	Pakistan	Family involvement in the company (through family commitment, continuity, control, enrichment) has a positive influence on the sustainable survival of the company (financial strength, customer orientation, internal capabilities, strategic perspective, learning & growth). This effect is partially mediated by CSR.
Antheaume et al. (2013)	Family values, community embeddedness	Internal non-financial outcomes (longevity)	Grounded theory	Qualitative	17 family firms (6 interviews)	M L	France	Longevity of family firms is promoted by interdependencies and the networking of different areas, the embedding of the family in the business as well as the embedding of the business in society and the passing on of capital to the next generation. Sustainable development is preferred to short-term profits.
Biscotti et al. (2018)	Family ownership, environmental management systems (knowledge management)	Internal non-financial outcomes (environmental product innovation)	Social identity theory Institutional theory	Qualitative	262 firms (10-year panel)		International	The EMAS-certified environmental management system has a moderating effect in family businesses on the knowledge management practices of employee training and development and, through this, on green product innovation. The ISO 14001 certified environmental management system does not lead to proactive behavior in family and non-family businesses.
Choi et al. (2019)	Family ownership; being a chaebol firm (moderator)	Firm performance	-	Quantitative	198 (6-year panel)	L	South Korea	Family ownership has a negative effect on corporate social performance (CSP). This effect is lower (moderation) in chaebol (family-run or controlled conglomerate) firms than in non-chaebol firms.
Craig and Dibrell (2006)	Family ownership and management	Financial performance (firm performance), internal non-financial outcomes (firm innovation)	Stewardship theory	Quantitative	396 firms (cross-sectional)	S M	USA	Family firms are better able to promote environmentally friendly policies than non-family firms, although non-family businesses place more emphasis on this. In family businesses, this leads to improved business innovation and higher financial performance.

continued

Dangelico (2017)	Family ownership and management	Green product development (differentiation), radicalness or market performance of green products (not significant)	-	Quantitative	188 firms (cross-sectional)	S M L	Italy	Family firms show a positive effect on the differentiation of green product developments. They show no significance in the radicality or market performance of green product.
Doluca et al. (2018)	Family ownership and management (no significant difference (but stabilizing effect over time))	Financial outcomes (stabilizing, economic performance), internal non-financial outcomes (stabilizing; environmental product/process innovation)	Stakeholder theory Institutional theory	Quantitative	633 firm observations (longitudinal 2001, 2006, 2011, 2016)	S M L	Germany	Compared to non-family firms, family firm show fewer environment-related activities and fewer beneficial product, process and organizational innovations and services at the beginning of the study. In the process of the study, a convergence process can be identified, as family businesses are catching up with non-family firms. Family firms also show less volatility in their environmental behavior.
Kashmiri and Mahajan (2010)	Family name	Financial outcomes, Return on assets (performance)	-	Quantitative	130 family firms (5-year panel)	L	USA	Family firms that carry the family name compared to family businesses without the family name have higher corporate citizenship, representation of their customers' voice on the top management team, higher strategic focus (resource allocation to advertising), and better performance (higher return on investment). Performance is mediated by higher corporate citizenship and stronger strategic focus.
Kashmiri and Mahajan (2014a)	Family management, family name, ethical product-related behavior (mediator)	External non-financial outcomes, financial outcomes (increasing of the abnormal stock returns)	-	Quantitative	107 family firms (3-year panel) (1294 product introduction announcements)	L	USA	Family firms that bear the founder's name have higher abnormal stock returns surrounding the firm's new product introductions compared to family firms without the founder's name. This effect is mediated by the ethical behavior of the firms, including the fact that they are less involved in product-related controversies.
Kashmiri and Mahajan (2014b)	Family ownership and management (combined)	Firm performance	-	Quantitative	275 firms (10-year panel)	L	USA	CSR mediates the relationship between family ownership/management and firm performance. In contrast to non-family firms, family firms do not reduce their CSR during a recession, which results in higher firm performance.
Liu et al. (2017)	Family ownership and family management (combined)	Accrual-based earnings management; real earnings management	-	Quantitative	N/A (8-year panel)	L	USA	Family firms tend to have a higher CSR performance than non-family firms and have less accrual-based earnings management and real earnings management. Furthermore, the positive effect of CSR on earnings management described in the research is attributable to family involvement.

continued

Niehm et al. (2008)	Family firm size	Subjective business performance; objective financial performance	-	Quantitative	221 family-firm households (2-year panel)	S	USA	The size of a family firm has a positive impact on the CSR dimension “community support,” which in turn has a positive effect on the objective (financial) performance of the firm. In contrast, the CSR dimension “commitment to the community” is positively linked to firms’ subjective performance.
O’Boyle et al. (2010)	Family involvement	Financial outcomes (financial performance)	-	Quantitative	526 family firms (cross-sectional)	S M	USA	The ethical focus of a company mediates the relationship between family involvement and financial results. The factors value congruence and participative continuance have a positive effect on ethical focus, while ownership and control and professionalism show a negative effect.
Singal (2014)	Family ownership and management (combined)	Financial performance	Instrumental theory	Quantitative	534 firms (11-year panel)	N/A	USA	Family firms have a better financial and CSR performance than non-family firms, whereby the higher CSR performance in family firms is triggered by their better financial performance. Family firms continue to invest more in mitigating concerns than in positive initiatives to build strengths in CSR performance. Family firms’ higher CSR inclination further has a positive impact on their future financial performance.
Wu et al. (2014)	Family ownership	Costs of capital	-	Quantitative	482 firms (4-year panel)	N/A	Taiwan	Firms with CSR awards have lower cost of capital. Family firms with CSR have lower cost of capital than do non-family firms with CSR.
Zientara (2017)	SEW	Family firm reputation	SEW	Theoretical	-	-	-	Due to SEW orientation, family firms use an instrumental and selective CSR approach rather than a holistic or normative one. This often leads to socially responsible behavior towards external stakeholders, but irresponsible behavior towards internal stakeholders. Family firms pick those CSR initiatives that serve their own interests, like improving the firm’s image and reputation.

Notes: N/A = Not available; S = Small; M = Medium; L = Large (listed)

2. Appendix to Chapter C

Table G-4: Content analysis of antecedents of absorptive capacity in family firms

Author (Year)	Theory	Method	Sample size	Company size	Country of study	Key findings
Boyd and Hollensen (2012)	-	Qualitative/ Case study	1 family firm	L	Denmark	Situational and structural triggers initiate AC. Family businesses must break away from the old way of doing things and act flexibly. Use personal competencies and their knowledge (potential AC) for the development of corporate competencies (realized AC) to build up (international) competitiveness. Cooperation can help small family businesses, in particular, act competitively.
Duchek (2015)	-	Qualitative/ Case study	2 family firm engineering industry	L	Germany	An increase in AC cannot be brought about by introducing new rules or processes imposed by management. Employees introduce these and decide which processes are helpful and implemented.
Duh (2014)	Knowledge creating theory Succession theory	Conceptual	-	S, M	-	Succession must be seen and used as a process for building AC. Early involvement of the successor in the family business through mentors, for example, passes on tacit knowledge as well as skills, values, and behavior, which increases the knowledge base of the successor, thus building AC in the area of assimilation. Likewise, general education has an impact on AC as it provides a basis for new ideas and integrates new management and business trends into the family business.
Filippini et al. (2012)	-	Qualitative/ Case study	2 firms	S, M,	Europe (Italy & Swiss)	In the family business, the balance between tradition and innovation of viticulture is paramount. The long-time horizon of the family business and its stable environment allowed the owner to build strong external partnerships to absorb knowledge. These long-term partnerships led to a strong relationship, building a common language and values and improving knowledge sharing. Continuous training and contact between experts and employees strengthen the partnership and knowledge sharing.
Klewitz et al. (2012)	-	Qualitative	7 firms	S, M	Germany	Family businesses with a weak AC can be helped by public intermediaries (e.g., NGOs, universities, consultants). These provide access to knowledge and help to use it.
McAdam et al. (2010)	-	Qualitative/ Case study	1 family firm	S, M	United Kingdom (UK)	Family businesses can increase realized AC through the targeted promotion and development of potential AC among employees. Permanent environmental can be promoted by a diversity in the selection of employees since different abilities and networks are available to the family enterprise. Likewise, good communication must be established in the family business, e.g., through open-plan offices, cross-functional teams, or team meetings.
Wang (2016a)	Stewardship theory	Quantitative	137 family firms	S, M	United Kingdom (UK)	It could not be proven that environmental dynamics have a positive influence on AC. Likewise, it could not be proven that trust moderates this relationship. Only a positive effect of trust on AC could be demonstrated.

*S=small, M=medium, L=large firms

Table G-5: Content analysis of family and firm influence on absorptive capacity in family firms

Author (Year)	Theory	Method	Sample size	Company size	Country of study	Key findings
Andersén (2015)		Conceptual	-	-	-	Familiness has a negative effect on potential AC, as family businesses have specialized knowledge and are inward-looking so as not to cede power. Familiness has a positive effect on realized AC, as family businesses have more pronounced social integration mechanisms and stability that enable more effective implementation. Family businesses in a stable environment can compensate for lower potential AC because they do not rely on rapid innovation and have more time to exercise potential AC and implement it successfully.
Belkhdja and Daghfous (2020)	Grounded theory	Qualitative/ Case study	3 family firms	S, M, L	United Arab Emirates (UAE)	Within the three knowledge management approaches, implicit, explicit, and strategic, the strategic approach is best suited to foster the social capital of non-family members and AC. It considers internal as well as external knowledge. Familiness reduces insularity, promotes diversification of knowledge sources, and leads to a shared vision and better social integration mechanisms. Through increased engagement of non-family members, family members have more trust and therefore promote social capital.
Brinkerink (2018)	-	Quantitative	346 manufacturing enterprises	S, M	Dutch	Comparing family businesses and non-family businesses, family businesses have a lower potential AC. However, they have more pronounced social integration mechanisms and can perform realized AC more effectively. The moderation of R&D intensity on exploitative innovation is more positive in family firms than in non-family firms due to better use of tacit knowledge and long-standing external knowledge sources.
Chirico and Salvato (2016)	-	Quantitative	967 firms	-	Swiss	Product development depends on how the family members can absorb and thus internalize their specific knowledge among each other. This is positively influenced by social capital and affective commitment and negatively by relationship conflicts. This effect is influenced by the controlling generation, which increases the effect of social capital and reduces the negative effect of conflicts.
Daspit, Long and Pearson (2019)	Dynamic capability perspective	Conceptual	-	S, M	-	Among themselves, family members exhibit poorer potential AC as a result of increased insularity. Within realized AC, they can achieve better innovation results, since they can build complex knowledge structures through a common language and vision, which leads to effective implementation. The integration of non-family members has a positive effect on insularity and potential AC, as they open up the family business. They have a negative effect on realized AC due to incongruent goals and lower efficiency of knowledge sharing.
Diéguez-Soto and Martínez-Romero (2019)	SEW approach	Quantitative	454 firms	S, M, L	Spain	Family involvement in management has a positive effect on intramural (proxy for AC) and extramural R&D. This is because a higher number of family members in the company reduces the risk aversion. The long-term orientation comes to the fore, and congruence of economic and family-centered goals can be achieved. Likewise, intramural R&D and the combination of intramural and extramural R&D have a positive partial mediating effect on product innovations. The direct effect of family management on product innovations is negative, which can be triggered by the dark side of SEW (nepotism, intensified conflicts).
Kotlar et al. (2020)	-	Conceptual	-	-	-	Family ownership has an impact on potential AC and realized AC through emotional attachment and power bundling. These each have opposite effects on potential AC and realized AC, resulting in a motivation or implementation gap. This can be influenced by events such as the duration of family ownership, handover of the family business, identification, family member involvement, control intention, underperformance, or threat of power loss.
Rondi and Rovelli (2021)	-	Quantitative	237 firms	S, M, L	Italy	Family businesses show a lower realization of innovation opportunities than non-family businesses. This is related to the TMT (top management team) and its knowledge transfer, as well as the CEO's search for external knowledge. When a low CEO search is present, non-family members and their search have a positive effect on knowledge transfer. A strong CEO search prevents knowledge transfer in the TMT, because the CEO independently decides what should be implemented in the family business.

Sánchez-Sellero et al. (2014)	-		Quantitative	20 manufacturing sectors	S, M, L	Spain	Family management has a negative effect on AC.
Wang (2016b)	Social theory	capital	Quantitative		S, M	China	Social capital in the forms of structural, cognitive and relational capital has a positive effect on AC, and the ability of family businesses to adapt and innovate.

*S=small, M=medium, L=large firms

Table G-6: Content analysis of outcomes of absorptive capacity in family firms

Author (Year)	Theory	Method	Sample size	Company size	Country of study	Key findings
Chaudhary and Batra (2018)	-	Quantitative	272 family firms	S (5-250 employees)	India	AC leads to an increase in entrepreneurial and technological orientation. By combining internal and external knowledge, family firms can respond more quickly to changing customer needs and technological changes, which leads to an increase in performance.
Gancarczyk and Gancarczyk (2016)	-	Qualitative/ Case Study	1 family firm	M	Europe	SMEs must adapt to customer needs through AC and develop customer-oriented innovations. This allows them to respond dynamically and maintain long-term relationships and a better market position. For example, through upgrading, transport companies can expand their services to include shipping and logistics and increase their value and competitiveness through different solutions for the customer.
Hernández-Perlines (2018)	Dynamic capacity theory	Quantitative	218 family firms	-	Spain	AC has a positive moderating effect on entrepreneurial orientation and international performance. Companies can counteract external pressure with AC.
Hernández-Perlines et al. (2017)	-	Quantitative	218 family firms	-	Spain	AC mediates the relationship between entrepreneurial orientation and family business performance. Entrepreneurial orientation enables family businesses to build AC by identifying and evaluating new opportunities.
Hernández-Perlines and Xu (2018)	-	Quantitative	218 family firms	-	Spain	AC mediates the relationship between international entrepreneurial orientation and international performance in family businesses. The “international entrepreneurial orientation” serves as a background for AC. In turn, the (turbulent) environment has a mediating influence on AC.
Muñoz-Bullón et al. (2020)	Behavioral theory Resource-based view	Quantitative	3547 manufacturing firms	S, M, L	Spain	Family businesses show higher innovation performance with the combination of external and internal R&D than non-family businesses. This effect increases when the performance of the family business is when performance is below performance. Family members are less concerned about using external knowledge if it can protect the family business.

*S=small, M=medium, L=large firms

3. Appendix to Chapter D

Table G-7: Descriptive Statistics and Descriptions for Variables in Models of Absorptive Capacity in Family Firms

Variable	Description	Mean/ Pct	SD	Range	Cronbachs Alpha
<i>Dependent variables:</i>					
Acquisition	Constructed Scale, 6 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	3.67	.63	1.67-5	.68
Assimilation	Constructed Scale, 3 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	3.83	.71	1-5	.62
Transformation	Constructed Scale, 6 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	3.69	.6	1.67-5	.69
Exploitation	Constructed Scale, 6 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	3.9	.56	1.83-5	.67
<i>Independent variable:</i>					
Familiness	Constructed Scale, 20 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	4.09	.63	1.05-5	.89
<i>Mediator variables</i>					
Community orient.	Constructed Scale, 7 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	2.71	.97	1-5	.86
Employee orient.	Constructed Scale, 7 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	4.09	.66	1-5	.82
Customer orient.	Constructed Scale, 5 items, measured on a 5er Likert Scale (1= doesn't apply at all to 5=entirely true)	4.53	.47	1-5	.72
<i>Controls:</i>					
Firm's Size	How many employees are currently employed in your company? (metric)	68.93	89.39	1-500	
Manufacturing (ref.)	Which industry does your company belong to? (1=manufacturing, 0=else)	.23	.43	0-1	
Construction	Which industry does your company belong to? (1= Construction, 0=else)	.13	.33	0-1	
Trade	Which industry does your company belong to? (1= Trade, 0=else)	.13	.33	0-1	
Services	Which industry does your company belong to? (1= Services, 0=else)	.33	.47	0-1	
Crafts	Which industry does your company belong to? (1= Crafts, 0=else)	.11	.32	0-1	
Other	Which industry does your company belong to? (1= Other, 0=else)	.07	.25	0-1	
Firm's Age	How old is your company? (metric)	53.74	38.95	1-219	
Innovation	Has your company introduced new or significantly improved products to the market (i.e. product innovations) and/ or has implemented process innovations in the last three years? (1=yes, 0=no)	.64	.48	0-1	
Performance	Please compare your company with your most important competitor regarding the economic success of your company: (Likert scale: 1=much worse to 5=much better)	3.38	.79	1-5	
1st generation (ref.)	How many generations has your company been in family ownership? (1=1st generation, 0=else)	.37	.48	0-1	
2nd generation	How many generations has your company been in family ownership? (1=2nd generation, 0=else)	.33	.47	0-1	
3rd+ generation	How many generations has your company been in family ownership? (1=3 rd or more generations, 0=else)	.3	.46	0-1	
Ownership	What percentage of the equity capital is owned by the family? (1=50% and more, 0=less than 50%)	.91	.29	0-1	

Table G-8: Corporate social responsibility scale

Community-oriented CSR

- Our company invests in humanitarian projects in poor countries.
 - Our company provides financial support for humanitarian causes and charities.
 - Our company contributes to improving the well-being of populations in the areas where it operates by providing help for schools, sporting events, etc.
 - Our company invests in the health of populations of developing countries (e.g., vaccination, fight against AIDS).
 - Our company helps NGOs and similar associations such as UNICEF, the Red Cross, and emergency medical services for the poor.
 - Our company gives financial assistance to the poor and deprived in the areas where it operates.
 - Our company assists populations and local residents in case of natural disasters and/or accidents.
-

Customer-oriented CSR

- Our company checks the quality of goods and/or services provided to customers.
 - Our company is helpful to customers and advises them about its products and/or services.
 - Our company respects its commitments to customers.
 - Our company invests in innovations which are to the advantage of customers.
 - Our company ensures that its products and/or services are accessible for all its customers.
-

Employee-oriented CSR

- Our company implements policies that improve the well-being of its employees at work.
- Our company promotes the safety and health of its employees.
- Our company avoids all forms of discrimination (age, sex, handicap, ethnic or religious origin) in its recruitment and promotion policies.
- Our company supports equal opportunities at work (e.g., gender equality policies).
- Our company encourages employees' diversity in the workplace.
- Our company helps its employees in case of hardship (e.g., medical care, social assistance).
- Our company supports its employees' work and life balance (e.g., flextime, part-time work, flexible working arrangements).

Source El Akremi et al. (2018)

Table G-9: Absorptive capacity scale

Acquisition

We have frequent interactions with other in the industry to acquire new knowledge related to product development.

Employees are engaged in cross-functional work

We collect information through informal means (e.g. lunch or social gatherings with customers and suppliers, trade partners and other stakeholders).

We are hardly in touch with other firms and stakeholders in the industry (reverse-coded)

We organize special meetings with customers, suppliers, or third parties to acquire new knowledge on process, product, logistics and distribution related innovation.

We operations regularly approach third parties outside the industry (such as professional organizations) to gather information.

Assimilation

We are slow to recognize shifts in the environment (e.g. competition, regulation and demography). (reverse-coded)

We are able to quickly identify new opportunities to meet our customer needs

We quickly analyze and interpret changing market demands.

Transformation

We regularly consider the consequences of changing market demands in terms of new products.

Employees record and store newly acquired knowledge for future reference.

We quickly recognize the usefulness of new external knowledge to existing knowledge.

Our employees hardly share practical experiences with each other. (reverse coded)

We laboriously grasp the opportunities from new external knowledge. (reverse-coded)

Departments periodically meet to discuss consequences of new product development and other process or organization innovation

Exploitation

It is clearly known how activities within and between departments should be performed.

We are less responsive to customer complaints (reverse coded)

We have a clear division of roles and responsibilities.

We constantly consider how to better exploit knowledge.

We have difficulty implementing new products and new processes (reverse-coded)

Our employees speak a common language regarding our innovation practices

Source Fernhaber and Patel (2012)

Table G-10: Family Influence Familiness Scale (FIFS)

Subscale ownership, management and control (OMC)

In our family business we take great care

- . . . that only family members are owners of the firm.
 - . . . that the firm's management consists exclusively of family members.
 - . . . that several family members are involved in the firm's management.
 - . . . that family control and independence are maintained.
-

Subscale proficiency level of active family members (PAF):

In our family business we take great care

- . . . that family members working in the company have at least the same qualifications as nonfamily employees.
 - . . . that family members working in the company show at least the same performance as nonfamily employees.
-

Subscale sharing of information between active family members (SOI):

In our family business we take great care

- . . . that family members working in the company know about important events in the company.
 - . . . that all family members working in the company are also able to make use of informal communication.
-

Subscale transgenerational orientation (TGO):

In our family business we take great care

- . . . to think in generations.
 - . . . to avoid selling the company to nonfamily members.
 - . . . that the company can be passed on to the next generation.
-

Subscale family-employee bond (FEB):

In our family business we take great care

- . . . that family members working in the company are confidants for the employees.
 - . . . to have a reliable permanent staff.
 - . . . to secure our employees' jobs also in times of crisis.
 - . . . to safeguard furthering and developing our employees.
 - . . . that the family members working in the company have a lively exchange with nonfamily employees.
-

Subscale family business identity (FBI):

In our family business we take great care

- . . . that the family gives a face to the company.
- . . . that our family business is socially active in the community/region.
- . . . to always market our family business as such.
- . . . to convey the history of our company to our employees.

Source Hermann et al. (2017)

4. Appendix to Chapter E

Table G-11: Socioemotional wealth scale (REI scale)

(R) Renewal of family bonds through dynamic succession

Continuing the family legacy and tradition is an important goal for my family business.

Family owners are less likely to evaluate their investment on a short-term basis.

Successful business transfer to the next generation is an important goal for family members.

(E) Emotional attachment of family members

In my family business, the emotional bonds between family members are very strong.

Strong emotional ties between family members help us maintain a positive self-concept.

In my family business, family members feel warmth for each other.

(I) Identification of family members with the firm

Family members have a strong sense of belonging to my family business.

My family business has a great deal of personal meaning for family members.

Family members are proud to tell others that we are part of the family business.

Source Hauck et al. (2016)