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Scientific discipline: Economics and Finance

THE FACTORS INFLUENCING THE PERFORMANCE OF FAMILY BUSINESSES IN GERMANY - EMPIRICAL SURVEY

PhD dissertation prepared under supervision of
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Ochtrup, 2022

Table of Contents

STRESZCZENIE

CZYNNIKI KONDYCJI FINANSOWEJ PRZEDSIĘBIORSTW RODZINNYCH W NIEMCZECH - BADANIE EMPIRYCZNE

Przedsiębiorstwa rodzinne są jednymi z najbardziej efektywnych organizacji biznesowych i tworzą silną podstawę dobrobytu w wielu państwach. Problematyka przedsiębiorczości rodzinnej w badaniach naukowych jest podejmowana od stosunkowo niedawna. Przedsiębiorstwa rodzinne to szczególny typ podmiotów gospodarczych, przede wszystkim ze względu na rolę właściciela w procesie zarządzania przedsiębiorstwem. Cechą charakterystyczną przedsiębiorstw rodzinnych jest koncentracja na celach dlugoterminowych, wynikających z podstawy działania takiego przedsiębiorstwa, którym jest najczęściej trwałość i stabilność, a niekoniecznie maksymalizacja zysku czy też wartości dodanej. Ze względu na złożoność problematyki przedsiębiorstw rodzinnych, niewiele jest badań, w których zwrócono uwagę na wpływ zarządzania przez rodzinę na wyniki finansowe osiągane przez tę specyficzną kategorię podmiotów gospodarczych. Celem niniejszej rozprawy doktorskiej jest wypełnienie luki badawczej dotyczącej określenia czynników mających wpływ na wyniki finansowe osiągane przez przedsiębiorstwa rodzinne, w porównaniu do przedsiębiorstw, które nie są zarządzane przez rodzinę. Realizacji założonego celu służyła werfikacja postawionych hipotez badawczych. Przyjęto w nich, że przedsiębiorstwa rodzinne osiągają wyższe wyniki finansowe w porównaniu z przedsiębiorstwami, które nie są zarządzane przez rodzinę. Przemiotem badania objęte zostały przedsiębiorstwa rodzinne funkcjonujące w Niemczech. W ramach realizacji projektu badawczego przeprowadzono badanie ankietowe na reprezentatywnej próbie 296 niemieckich przedsiębiorstw o różnej strukturze własności. W badaniu uwzględniona została największą grupa małych i średnich przedsiębiorstw rodzinnych z całej Europy. W celu potwierdzenia poprawności zaproponowanego modelu oraz zbadania współzależności pomiędzy danymi pozyskanymi w kwestionariuszu przeprowadzono konfirmacyjną analizę czynnikową oraz eksploracyjną analizę czynnikową. W kolejnym kroku testowi poddane zostały hipotezy poprzez utworzenie modelu równań strukturalnych. W wyniku przeprowadzonych badań stwierdzono, że lepsze wyniki finansowe przedsiębiorstw rodzinnych w porównaniu z firmami nierodzinnymi są pośrednio zależne od ich cech związanych z ustalaniem celów. Podsumowaniem badań jest zaproponowanie zaleceń dla pozostałych grup przedsiębiorstw w oparciu o modelowe zachowania liedrów przedsiębiorstw rodzinnych, które mogą służyć realizacji założonych przez nie celów.

Słowa kluczowe: przedsiębiorstwa rodzinne, ustawienie celów, analiza mediacji, efektywność finansowa, małe i średnie przedsiębiorstwa

ABSTRACT

THE FACTORS INFLUENCING THE PERFORMANCE OF FAMILY BUSINESSES IN GERMANY - EMPIRICAL SURVEY

Daniel Böhlich

Due to the complexity of family businesses, empirical research only sees a small advantage for business performance if the business underlies family control.

The purpose of this thesis is to close the research gap of previous studies on the performance difference between family and non-family businesses by analyzing the underlying effects that family control has on the management of the business. A comprehensive literature review showed that family businesses do not only pursue financial business performance, but that non-financial performance is at least as important to them. To address this, two main hypotheses are stated that confirm that family businesses have a higher financial as well as non-financial business performance compared to non-family businesses. Subsequently, differences in goal setting and usage of key performance indicators between family and non-family businesses are identified by a deep literature review. It is posited that family businesses have different organizational goals and approach these goals in terms of persuasion and control quite differently from non-family businesses. Family businesses that focus strongly on their external perception and public image have a better financial performance than non-family businesses. Additionally, family businesses focus strongly on internal and external stakeholders to achieve goals and manage their employees more informally which complies with the finding that a strong focus of family businesses on financial key performance indicators is detrimental to their financial performance.

For the non-financial performance of family businesses, it is shown that the focus of non-financial key performance indicators is detrimental to their non-financial performance.

The study was conducted in Germany. The gathering of data and the analysis as well as the interpretation was completed until September 2022. In addition, small and medium sized businesses were taken into account for this study, with focal points on their ownership type (family or non-family), business age and business size. The goal of this study is reached by conducting desk and field research. Moreover, the empirical part of the study was carried out by an online survey. Consequently, the gathered data were analyzed by applying descriptive statistics and statistical significance tests. The hypotheses were tested by setting up a structural equation model which included independent, mediator and dependent variables.

Keywords: Family business, Goal setting, Mediation analysis, Business performance, Small and medium-sized enterprises

Introduction

Family businesses are one of the oldest and longest-lived forms of organization in the world. They not only dominate the German economy but also provide the basis for prosperity and development in other economies (Eddleston et al., 2020; Hennart et al., 2019). Particularly in times of economic crises, family businesses have become more long-term and conservative (Calabrò & Frank, 2021; Molly et al., 2019). Thus, it is not surprising that both academic and practical interest in family businesses have steadily increased over the past few years (Neckebrouck et al., 2018; Neubaum, 2018). According to McAdam et al. (2020), research on family businesses is still in its "infancy" which is ill-justified due to the great economic significance of this organizational form. This is particularly true for the design of the management of businesses under influenced by family ownership. In this context, one of the key issues provides the reasons for the successfulness of this form of organization.

Chua et al. (1999, p. 25) state: „The family business is a business governed and/or managed with the intention to shape and pursue the vision of the business held by a dominant coalition controlled by members of the same family." In this sense Tagiuri & Davis (1996, 1992) describe family businesses as organizational forms that evolve from the congruency of family and business. Following this train of thought, (Aiolfi, 2012) argues that the paradox of family businesses lies in the fact that it can be considered unprofessional to take family principles for business decisions, at the same time family matters cannot be decided according to business principles.

Lehrer & Schmid (2015, p. 303) state that "many German family firms have outgrown every traditional measure of medium size in past decades while remaining under family control." . They estimate that about 4,500 German family firms generate an annual revenue of EUR 50m or more, over 500 family firms have an annual revenue surpassing EUR 250m, and more than 150 exceed the EUR 1bn threshold (Lehrer & Schmid, 2015). About three-fifths of these 500 largest family businesses are concentrated in manufacturing, which is a far greater proportion than in the entire economy (Lehrer & Schmid, 2015). Lehrer & Schmid (2015) state that these numbers are an indicator for a globally unique economic structure, which they call family-based capitalism, while Anglo-Saxon capitalism is characterized more by professional management and dispersed ownership.

A family business is defined as a company that is significantly influenced by a family or a limited number of owners with family relationships. The size of the company does not matter. By contrast, family businesses are characterized by their ownership and management structures. The uniqueness of family businesses results from the merging of family and business interests within a family business (Chirico et al., 2020). In this respect, the influence of the entrepreneurial family on the enterprise is the primary discriminatory criterion between family and non-family enterprises (Basly & Saunier, 2020). As a result, a human - and emotionally-oriented element finds its way into the primarily rational corporate sphere in family businesses. This connection leads to the expression of the unique characteristics and behaviors of family businesses, which have been identified in a large number of studies, especially in the last 20 years.

An important field of family business research is the examination of the specifics of family businesses in the area of strategic management. An essential insight of previous conceptual and empirical work in this strand of research is that the general orientation of the leadership or the setting of corporate goals and the use of key performance indicators between family and non-family companies and within the group of family businesses differs. Lansberg (1999) shows that the corporate philosophy of family businesses, in contrast to non-family businesses, often includes a social component in addition to financial aspects. At the level of corporate goals, existing empirical research indicates that family businesses are more likely to pursue non-financial goals, such as the transfer of the company and the employment of family members and a sustainable firm performance, instead of high growth (M. C. Jensen, 2017). Chrisman et al. (2012) conclude that family businesses focus on family-focused, non-financial goals that may also affect their behavior.

The existence of non-financial corporate goals is the result on the fact that the reputation of the entrepreneurial family and the company is closely linked. The result is the aim of a family business to satisfy the interests of non-financial stakeholders both inside and outside the company (T. M. Zellweger et al., 2010). Zellweger et al. (2010, p.229) note that “a priority for nonfinancial goals is one of the fundamental premises in family business literature.”

However, few studies have so far addressed the characteristics of non-financial and financial goals of family businesses and their consequences for entrepreneurial behavior and firm performance (Debicki et al., 2009; Williams, Pieper, & Astrachan, 2018). In addition, the analysis of company focus tends to be limited to listing a comprehensive catalog of objectives. Debicki et al. (2009, p.159), after a comprehensive review of the literature, point to one of the largest research gaps in existing family business research: The “most striking feature is the lack of attention to the economic and non-economic goals of family firms.”

This raises the question of the effects of goal setting on the performance of a business. Especially with regards to rather non-financial goal orientations, both negative and positive implications for the business success are conceivable. Therefore, different goal orientations could become more pronounced and can influence the competitive position of a company and, consequently, have an impact on the company’s success (J. H. Astrachan et al., 2020; Williams, Pieper, Kellermanns, et al., 2018a).

Furthermore, it is likely that, for example, companies dominated by non-financial goals tend to invest more in social and human capital or build up resources and skills that are not resulting in financial business performance. As a result, focusing on non-financial resources neglects the build-up of financial capital (e.g. through a lower cost orientation). This could result in competitive disadvantages that could be detrimental to the financial performance of the business (S. B. Klein & Kellermanns, 2008).

For so far, there are very different empirical results on the direction and mode of action of the family influence in a business financial success. For example, some researchers find negative performance implications of family involvement, while others, such as, for example, Anderson & Reeb (2003) can demonstrate clear performance benefits of family businesses. However, according to Zellweger & Astrachan (2008, p.8), the available research is ambiguous concerning the effect of family business objectives and business performance.

The exact effect of the goal setting and key performance indicators on the business success has not yet been examined in an empirical study in the context of family businesses (Gomez-Mejia et al., 2018), although the further investigation of the implications of a company’s goal orientation could be of great importance (S. B. Klein & Kellermanns, 2008). Chrisman et al. (2012, p. 267-269) state: “The growing realization that family firms are heterogeneous (…) means that studies should focus more on the mediators and moderators of family involvement’s effects on behavior and performance.”

Goal setting and selection of key performance indicators define direction and guidelines of organizational activities. Consequently, it also determines the structure and allocation of organizational resources. This has an impact on the competitive advantage of the company and, therefore, on its ability to generate long-term profits. In this respect, Debicki et al. (2009, p. 161) state, with regard to further research needs: “More research on non-economic goals and performance seems necessary to develop a complete theory of the family firm.” Consequently, this study’s research questions are:

RQ 1: What is the relationship between family and non-family ownership in a business, its goal setting and selection of key performance indicators and the financial business success?

RQ 2: What is the relationship between family and non-family ownership in a business, its goal setting and selection of key performance indicators and the non-financial business success?

By exploring primary data, an important contribution to a deeper understanding of the specifics of family businesses should be made. On the basis of the findings of this study, an important influencing factor could be found on the hitherto unclear correlation between the degree of family ownership and management of a business and its organizational performance mediated by the goal and the use of specific key performance indicators (KPIs) by comparing family-owned and managed businesses as well as non-family businesses.

The present work is mainly based on the following research objectives:

1. The first objective of this study is to present the field of research of family businesses. In particular, the findings of previous research and the current problems of this field of research will be outlined.
2. Secondly, this study aims to generate further insights into the specifics of strategic management of business with alternating degrees of family influence. In this respect, this study is particular focused on the components of goal setting and the selection of KPIs.
3. Thirdly, the focus lies on the presentation and critique of existing performance studies. In this context, this study analyses in detail the relationship between goal setting and selection of KPIs and organizational performance. For this, it is first necessary to shed

light on the ongoing discussion surrounding the performance of family businesses. The conflicting results of previous performance studies has led to the need to identify further factors influencing this relationship.

In conclusion, this study aims to provide a better understanding of the relationship between the variables of family influence, goal setting and selection of key performance indicators and organizational performance and business success. That is how a contribution can be made to the ongoing discussion about the success of family businesses and its underlying factors. This objective will be achieved by an empirical analysis of German family and non-family businesses. The research question addressed in this study, is closely connected to the field of strategic management in family business research, which is of great importance for the further development of this field of research. This illustrates the scientific relevance as well as the currency of this study.

The thesis is structured in five chapters. The course of investigation of this thesis is shown in Figure 1.

Chapter 1 explains the concept of the family business. Firstly, literature research was performed on the working definitions of family businesses (chapter 1.1). In the subsequent subchapter differences between family and non-family businesses are explored (chapter 1.2).

Chapter 2 presents the current of the state of research on the performance of family businesses. The aim of this chapter is to provide an insight into the most important factors and the results of previous research on financial and non-financial performance studies. This chapter contains a critical refelction of previous studies and provides an outlook.

Chapter 3 serves to present the theoretical and practical foundations of family businesses. Subsequently, the importance of small and medium sized (SMEs) businesses is outlined. Management theories and the impact of financial and non-financial management of family businesses is outlined. Moreover, it provides detailed insight into crucial components of strategic management of businesses. Subsequently, the current state of conceptual and empirical work on the goal setting and the selection of key performance indicators of businesses is presented. Therefore, after the presentation of the theoretical basics of this chapter, a critical reflection of management practices among family and non-family businesses.

Based on these findings, chapter 4 is devoted to developing hypotheses by critically analysing indicators that can influence business performance. Therefore, the first section of this chapter deals with the relationship of business ownership and financial as well as non-financial performance. Subsequently, hypotheses were developed which can explain this relationship by recruiting components of goal setting and the selection of key performance indicators of businesses as mediators.

Chapter 5 addresses the methodology used to answer the hypotheses. In chapters 5.1, 5.2 and 5.3 the data basis is assessed in terms of quality and examined for possible biases. In this respect, the general design of the study, the data collection and statistical procedures are discussed. Chapter 5.4 explains the operationalization of the variables of this study. Thus, in section 5.5 the results of the empirical survey are first presented by means of descriptive statistics and continues with the results of the structural equation models to test the hypotheses.

The final review of the concepts and results of this thesis are presented in the subchapters 5.6, 5.7 and 5.8. Moreover, the subchapters include a summary of discussions and an explanation of the contribution of this research to science and practice.

Figure 1 Course of investigation

1 The Concept of Family Business

This chapter will illuminate the ideas, preconditions and concepts of the field of family businesses for the fierce reader. In the aftermath each subchapter provides a discussion on the previous presented perspectives and aspects of family businesses.

1.1 Definition and Essence of Family Businesses

The most popular definitional approaches are described in this chapter. Although there is no unificational definition most scholars use the definitions described in the next chapter. Most definitions are classified by differentiation between family and non-family businesses (J. Chrisman et al., 2003). In the editorial of the first edition of Family Business Review Lansberg (1988, p. 1) raised the question “What is a family business? “. Even, 31 years later literature still cannot provide an adequate answer for a unifying family business definition.

One of the reasons why no definition was developed in those early days, is that this area was regarded as a playground for practitioners working as financial advisors and family therapists (Alderfer, 1988; Brockhaus, 1994). In those days, these practitioners were the main editors of scientific articles. Their work experience had a deep impact on the definitions of family businesses in literature. This lack of interest in early days was compensated by a high number of publications in 1990s. P. Sharma et al. (1996) found in their analyses 226 articles with 34 different definitions of family businesses. Steiger et al. (2015) analyzed 238 articles for different definitions of family businesses from a time period of 2002 to 2011. The result was that there is no dominating definition. A possible reason is that this strand of research is quite young and the concepts behind definitions require further improvement and investigation.

The specific characteristics of family businesses result from their unique overlap of family, ownership and management within the business (Neubaum et al., 2019). This singularity fabricates a condition where the family does not exclusively work as a social but also as an economic unit (Diaz-Moriana et al., 2018). The family business is working as both which creates a number of advantages. The ‘family altruism’ establishes a cooperative behavior which leads to a maximization of business resources for the family collective and reduces agency costs (Blanco-Mazagatos et al., 2007). Additionally, family involvement helps to improve efficiency by monitoring and controlling costs by family members. This reduces costs because the degree of trust by family members is higher compared to non-family members (Schulze et al., 200; M. Smith, 2008). Especially in the long run and in terms of sustainability, these gains are very valuable (D. Miller et al., 2008; C. Wang, 2010). Positive economic effects are further catalyzed by the lack of leverage created by external stakeholders to generate positive results in short-term (Z. Zhang & Rowan, 2022). Wortman (1995, p.3) state that “Currently, there are more than twenty different definitions of family business. Indeed, every researcher seems to develop his or her own definition for his or her research“. The above statement about the state of research in the mid-nineties of the last century has lost none of its validity even after more than twenty-six years. Chrisman et al. (2005, p. 556) propose ‘ideally all researchers should start with a common definition and distinguish particular types of family businesses through a hierarchical system of classification consistent with that definition’. Only few researchers have taken this call into consideration so far (J. J. Daspit et al., 2021). Research results are significantly depending on how scholars define and conceptualize family businesses in their research.

Presently, research is lacking a broadly accepted definition which consequently hampers comparative and interdisciplinary research by scholars (Comino-Jurado, 2018; Harms, 2014).

Three-Circle Model

The Three-Circle Model was introduced by Tagiuri & Davis (1996). This model proposes that in order to define a family business and to differentiate them from non-family buinesses the overlap of three substantial elements is necessary. These elements are ownership, family, and business as shown in Figure 2. Ownership represents the heart of the economic life in a business. It allows researchers to distinct family and non-family business dichotomically as it defines the shareholders of the business (Vicente et al., 2019).

In alignment with this model, family is described as group of individuals descending from the same bloodlines in connection with similar values, goals, and communicative experience. The business circle is defined as a group of individuals which is responsible for management and strategic choices in family businesses. Through this definition of ownership, it is assumed that different subsystems in the family business exist. These subsystems include overlapping roles of family members (Tagiuri & Davis, 1996). Consequently, family members can have three roles at most in one of each area in ownership, family, and business. These commitments to the business may give rise to positive (e.g. efficient decision delivery) and negative effects (e.g. ongoing arguments) (Madison et al., 2016). Especially the overlapping areas are of scientific interest as these intersections between family and the business as well as the family and ownership distinguish family businesses from non-family companies (Steiger et al., 2015).

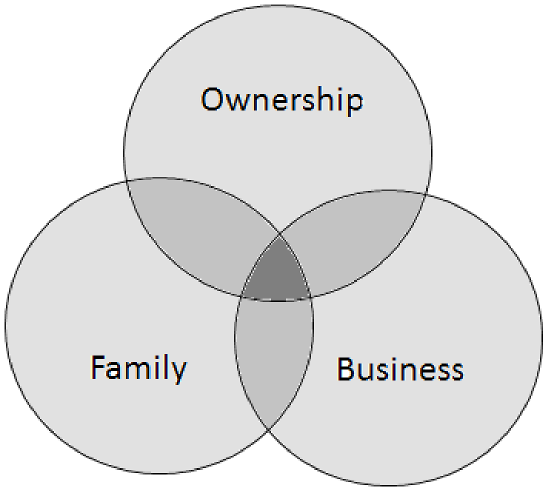

Figure 2 Illustration of Three-Circle Model (Source: *Tagiuri & Davis (1996)*)

The roles and subsystems of the model enhances the comprehension of the various leverages put on individuals and also depict the rivaling and divergent goals in a family business according to the Three-Circle Model.

The Three-Circle Model is valuable for the family business research because it outlines the baseline of conflicting aspects in family businesses. Nevertheless, due to its very basic structure it can only be used for explanatory reasons but not for definitional purposes in empirical studies.

Essence approach

This approach describes the family involvement in business operations resulting in changes of management and organizational behavior which further implicates changes in business performance (J. J. Chrisman et al., 2005). More specifically, the essence approach separates family businesses from non-family businesses through the impact of the owning family on corporate goal setting and the intention of the family to utilize control on the business. Unique business resources are generated by combining the involvement of the family and their interaction among each other (J. J. Chrisman et al., 2005; Habbershon et al., 2003; Litz, 1995; Mazzi, 2011).

J. J. Chrisman et al. (2005, p. 557) suggest that the essence approach is "based on the belief that family involvement is only a necessary condition, family involvement must be directed toward behaviors that produce certain distinctiveness before it can be considered a family firm". This is implying that the family in the family business is considered a resource although it is not a sufficient condition. Differences in organizational performances of family and non-family businesses can be explained by differing governance structures and dynamic core competencies. Chua et al. (1999, p. 24) emphasized the importance of the essence approach in research by claiming that "the components merely make the essence possible. The existence of the components may be necessary but not sufficient; they must have been used to create the essence that makes the business distinct from non-family firms." The main emphasis of essence approaches is to examine if the family business shows alignment with typical family business behavior like involvement of family members and family members want to keep the business a family business (Basco et al., 2022).

Condensing the previously described concepts, the essence of family managed companies contain the following traits (J. Chrisman et al., 2003):

1. The objective of the family to uphold control
2. Reciprocal effects and family involvement stemming from distinctive, inseparable, and synergistic resources
3. Pursuit of such a vision

A major problem lies in the fact that it has not yet been clearly specified how the "essence" of a family business can be defined and delimited (J. J. Chrisman et al., 2005). Therefore, the primary disadvantage of this approach is its difficulty to be operationalized. For example, the mission and behavior of a business is very difficult to quantify in contrast to the degree of family ownership. Additionally, the occurring bias of the self-assessment in questionnaires is criticized by some scholars (Basco, 2013; Mazzi, 2011).

Components of Involvement approach

By considering family's involvement in key elements such as ownership, management, governance and succession, the family business is defined according to the components of involvement approach (Arzubiaga et al., 2019).

The rudimentary premise for a family business is that the family shows a minimum threshold impact on the business (Mazzi, 2011; T. M. Zellweger et al., 2010). The key elements of this approach lead to a rather fragmented definition. Additionally, the theoretical background does not explain why the family involvement results in different outcomes in behavior and performance compared to non-family companies (Pearson et al., 2008; Steiger et al., 2015). It is used because it requires relatively little information and applies a high degree of objectivity.

The component of involvement (COI) approach is mostly criticized because it accepts the family's involvement solely as a definition and does not take into account any strategic planning done by the business. Additionally, the unique benefits by regarding family and non-family businesses are not considered (J. J. Chrisman et al., 2005; Pearson et al., 2008). Another problem of the COI definition, is that it implies no profound threshold for its operationalized parameters, meaning there is no room for interpretation (J. J. Chrisman et al., 2005; Chua et al., 1999). In literature alternating values with varying definition are used which reduces the comparableness of studies (Diaz-Moriana et al., 2018). In conclusion this approach has proven its worth by its easiness to be operationalized and facilitates the differentiation of family and non-family business, albeit at the same time the approaches theoretical validation is narrowed due to the exclusion of strategic businesses processes.

F-PEC Scale

The Family Power Experience Culture Scale (F-PEC) was established by Astrachan et al. (2002). It consists of various variables in a multidimensional scale. The F-PEC works as a combination of the Essence and Components of Involvement approach. Moreover, it quantifies the scope of the impact of the family on the business as a metric variable by focusing on the degree of family involvement and the effect of family behavior (Diaz-Moriana et al., 2018). Litz (1995) argued that in order to avoid subjective evaluation the gathered data is organized into three subscales and a total score. The three subscales are as follows (J. H. Astrachan et al., 2002):

1. Power, which includes:
    - Ownership
    - Governance
    - Management
2. Experience, which includes:
    - Generation of ownership
    - Generation active in management
    - Generation active on the governance board
    - Number of contributing family members

3. Culture, which includes:
    - Overlap between family values and business values
    - Family business commitment

The power subscale considers ownership as well as one-tier and two-tier board structures depending on the corresponding legislative system (J. J. Chrisman et al., 2005). The meaning of this subscale is to evaluate the family influence and not whether a CEO would serve the business better. That is why for this subscale ownership, governance and management are exchangeable or supplemental (Rau, 2014). The experience subscale stands for the expert knowledge of the family about the business (Klein et al., 2005). It is determined by active the generations of family members who are involved in supervisory bodies and the business. The cultural subscale is defined by the consistency of family values and business values. It takes also into account to what degree the family acknowledges its business (Klein, 2004).

This approach has mostly been criticized for determining mainly the 'actual' rather than the 'potential' family involvement (Rau et al., 2018). On the other hand, the model was validated and successfully applied by (Cliff & Jennings, 2005; Holt et al., 2010). The primary input provided by the F-PEC is not to conclude "at a precise or all-encompassing definition of family business" (Astrachan et al., 2002, pp. 51-52), but to present a measure that supports the merge of the essence and COI approach.

<u>The European definition</u>

The European definition was developed through the meta-analyses of over 90 definitions by a European expert group in 2009 by role models established by Spanish and Finnish ministries (European Commission, 2009b). This definition is differentiating family businesses from non-family businesses by ownership, management, strategic control and active interaction of family members in business daily activities. The European definition works dichotomically and therefore includes a sharp threshold to distinct family and non-family businesses. Businesses of all sizes are defined according to the European Commission (2009) as follows (Karlsson, 2018):

1. The majority of decision-making rights are in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs.

2. The majority of decision-making rights are indirect or direct.
3. At least one representative of the family or kin is formally involved in the governance of the firm.
4. Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or the families or descendants possess 25 percent as mandated by their share capital.

Expressed differently, the European Commission (2009b) defines a family business as non-listed business where a natural person or a family controls the majority of the decision-making rights. On the same page, listed family businesses are defined as businesses where a natural person or family members hold at least a quarter of its decision-making rights. In both cases it must be provided that at least one family member is involved in the business governance or management.

Although this definitional approach is mostly untested in research, it yields the advantage of being highly comprehensive and operational, thus it can lead to a higher comparability of studies.

The Three-Circle Model laid the groundwork for the definition approaches of this chapter. While the component approach emphasizes the dominant importance of family ownership and management involvement, many researchers reject this approach. They emphasize the essence of families, and thus their uniqueness in the interaction with the business and see ownership aspects merely as a necessary prerequisite. The F-PEC Scale is an improved component of involvement approach. Nevertheless, it is criticized for only measuring the potential family influence on the business and the actual influence remains unknown. However, it has not yet been possible to reach agreement on a universal definition model. This study uses the definition developed by the European Commission. The definition yields the advantage that it emerged from a wide array of definitions and therefore is it is easy to be operated, workable and has a solid theoretical background. Moreover, it is likely that this definition will lead to a higher comparibility of studies because first studies have already started to use this definition (Backman & Palmberg, 2015; Karlsson, 2018).

1.2 Differences between Family and Non-Family Businesses

All businesses usually evaluate their success in economic conditions. Therefore, one basic difference between these two organizations forms is that family businesses measure their success not only in financial terms, but also in terms of their human and social capital i.e., non-financially (Fuetsch, 2022).

Family business leaders are closely connected with their businesses and embrace their impact on the business, take care about their loyal employees, and stay alert to social issues and humanitarianism in their regional community. Therefore, family business leaders are better informed and more involved in their stakeholders compared to non-family businesses (Kaslow & Friedland, 2021).

Non-family business managers are under more pressure to gain financial success compared family business managers due to the short-term perspective of most non-family businesses. On the contrary, family business leaders' wish for the succession of their business to the next generation leads them to the implementation of long-term strategies and to keep risks as low as possible (Gomez-Mejia et al., 2010).

Family business leaders' decision-making process is strongly influenced by the goals, values, and priorities of their family business. On the contrary, non-family businesses are more strongly focused on maximizing profits and much less emphasis on social-emotional considerations (Kaslow & Friedland, 2021).

Family business leaders' have an average tenure of 20-25 years compared to non-family business leaders' tenure of 6 years (Stalk & Foley, 2012). The longer tenure of family business leaders is strongly connected to the long-term investments horizons of family businesses which provides stability to the business and increases its long-term performance (Hernández-Linares et al., 2020).

2 The State of Research on the Performance of Family Businesses

Previous studies have mainly relied on proven theories of strategic management to explain differences of organizational performance between family and non-family businesses as well as within the group of family businesses (J. J. Chrisman, 2019; Wall, 2021).

As a result, existing research on organizational performance in the area of family businesses is primarily characterized by three theoretical perspectives, namely: the agency theory, stewardship theory and resource-based view (Casprini et al., 2020). Following the logic of strategic management, the differences identified in the area of strategy, structure and processes between family and non-family businesses must lead to performance differences between these organizational forms. Therefore, a great deal of empirical work deals with the performance differences between family and non-family businesses (Azila-Gbettor et al., 2018, 2021).

As described in chapter 1.1, no uniform definition of the term "family business" has been developed yet. Therefore, in the first part of this chapter it will be shown which definitions are used by scholars of empirical performance studies. In the remaining chapter influential studies will be identified that address the differences in performance between family and non-family businesses. The results of these empirical studies will be discussed and presented in the order of performance advantages, no performance differences between family and non-family businesses and performance disadvantages for family businesses.

Family business definition in performance studies

The selection of definitional elements is connected to the limited possibilities of data acquisition. An extremely cleverly thought-out and theoretically sound definition is of little use in empirical research if it cannot be operationalized. In this context, Chua et al. (1999) coin the term operational definition as a distinction from theoretical definition. In chapter 1.1 different operational definitions are described, which give an impression of the handling of the definition problem in empirical studies. In practice, the component approach is often applied, although its definition is varying depending on the respective author. The essence or F-PEC scale is used less often presumably due to the difficulty to quantify the essence or "familiness" of a business, as can be seen in the in the culture subscale of the F-PEC scale (Rau et al., 2018).

The European family business definition has been used rarely in studies so far, although it results from meta-analysis of definitions which renders it especially robust and operational (Karlsson, 2018).

Many researchers apply a combination of ownership and management to investigate empirical differences between family and non-family businesses. According to Caputo et al. (2018), the founding family's presence is required to be defined as a family business. This requirement can translate to the share of ownership or membership on the business board of directors. Following this path, Zellweger et al. (2019) and Villalonga & Amit (2006) add the activity of the founder or family on the board of directors. de Massis et al. (2021) set their dummy variable equal to one, if one of three criteria of ownership and management is met. In contrast to studies conducted after the millennium, the papers of the early 1990s mostly examined small privately-owned businesses where the owner is also the manager. For example, the study of Daily & Dollinger (1992) uses a definition regards the owner as the same person as the leading manager. When the effects of ownership structures are researched the definition is soley based on the ownership of the business. In the study of Megaravalli & Sampagnaro (2019) family businesses are defined by ownership such as that family ownership exceeds 50% and no other shareholder holds more than 10% of the shares of the business because otherwise family control is not ensured. On the contrary, Anderson & Reeb (2003) refrain from using a specific threshold to avoid distortion of their data. However, it is important to note that especially for German businesses there are two classes of shares such as shares with and without voting rights. Therefore, depending on the nature of shares ownership significantly differs. Consequently, many authors additionally differentiate voting rights held by a family business as in Rau et al. (2018) and Sestu & Majocchi (2020). According to Franzoi & Mietzner (2021) and Nowak et al. (2011) the impact on business actions by the use of voting rights at the annual general meeting is more important in terms of control than management activity of family members. Some authors started to expand the definition to the components of ownership, management and control (Calabrò et al., 2019). Maury (2006) creates three variables for his calculations to reflect the aspect of family control in three levels. The first level is defined as a family, an individual or an unlisted business holding more than 10% of the voting rights. For the second level, those firms are separated out for which the family cannot be directly identified. For the third variable the management participation of at least one family member is assumed.

In addition to control and management participation, elements that provide information about family intentions are included. For example, Basly & Saunier (2020) considers family intentions by taking into account the owner's desire to secure the long-term existence of the business for succession. Moreover, Porfírio et al. (2020) applies a definition that does only include the family's intention to pass the business to the next generation.

Many empirical studies apply a definition that takes into account ownership, control and or participation in management, although almost all of these definitions shows a low operationability and therefore are not appliciable for empirical research (Garcia-Castro & Aguilera, 2014). For example, in the empirical performance study of Peltonen (2018) the European definition is applied which relies on ownership and participation of management in family businesses, but at the same time is comprehensive and operational. Therefore, this definition will also be used for this thesis.

Given the great economic importance of family businesses in the world, it would be very important for scholars to agree on a universal definition (Diaz-Moriana et al., 2018).

So far, almost all authors of empirical papers have been content to choose their own individually appropriate definition, with the exception of those authors who use the European definition of family business (Backman & Palmberg, 2015; Bornhäll et al., 2016). With the increasing acceptance of the European definition a foundation can be built to achieve a high comparability of studies and create a new chapter of family business research.

Performance advantage of family businesses

One of the most influential studies on the financial organizational performance of family businesses was conducted by (Anderson & Reeb, 2003) in the time period of 1992 until 1999. They gathered for their study a sample of 403 businesses in the S&P 500 stock market index. Their analyses focus on the effect of the variables "family share of equity" and "management of the business by family members" on financial performance based on return on assets and Tobin's q. Tobin's q is determined by dividing the market value of a business (stock market value plus liabilities) by the replacement cost all assets (Gehrke, 2013).

From a statistical point of view Anderson & Reeb (2003) find a non-linear correlation between the family share in the capital of the business and its financial performance. Consequently, the family business initially grows with the family's share in capital and then starts to decline again. The results are explained through the principal-agent theory by the authors. The authors explain this result on the basis of the principal-agent theory.

Accordingly, the concentration of ownership in the hands of a family leads to the reduction of agency conflicts between owners and managers due to more effective control. Moreover, family-specific goals can lead family managers to pursue goals that do not maximize the overall benefit of the business and thus have a negative impact on the financial performance of the business. On the same page Kowalewski et al. (2010) find that family ownership only has a positive effect up to about one third of the shares. The financial performance of the family business then starts to decline again. Thus, an increasing business performance can be seen with up to 40% family ownership. Lee (2006) extends the study of Anderson & Reeb (2003) by extending the periods time from 1999 to 2002. He finds that family businesses are more profitable and achieve higher rates of employee and sales growth. Alves & Gama (2020) find that the F-PEC dimensions family commitment and a culture of family values increase the financial performance of family businesses. Moreover, they conclude that the superior family business performance can be related to the alignment between the business and the non-financial goals. Leopizzi et al. (2021) provide evidence that family businesses with a high concentration of ownership have a better financial performance due to their better decision-making processes.

Anderson & Reeb (2003) and Neubaum et al. (2019) concluded that the positive financial performance of the business is related to the management structure. Accordingly, family businesses managed by a family CEO show a higher return on assets than non-family businesses. However, market performance measured as Tobin's q did only increase if the CEO is the founder or an external manager. They explain this result by the fact, that the that a family CEO knows the business longer, understands it better and, to that extent, acts as a steward of his business. Consequently, the authors emphasize the importance of the influence of the founding family in the management, but also provide a first insight into the importance of external managers for the performance of the business. Therefore, if members of the entrepreneurial family or external managers hold management positions has a significant positive impact on the business performance. A large number of studies are examining this very issue. Often, the studies show a fundamentally positive influence of the managing founder or a family member in the management (Casillas et al., 2019; Lude & Prügl, 2018; Stanley et al., 2019).

Villalonga & Amit (2006) are building their study on the findings of Anderson & Reeb (2003). They show that the ownership share of an entrepreneurial family has a positive effect on the market value of a business in combination with family management and control value of the business. In contrast to previous studies, Villalonga & Amit (2006) explicitly point to the necessary influence of the family in the area of control and management. Barontini & Caprio (2006) and Caprio et al. (2020) examine businesses from European markets and support the view that founder-managed, publicly traded companies are the most efficient family businesses. The significant positive impact by the founding family was also found in other studies (al Farooque et al., 2020). Accordingly, founders seem to have a unique influence on the growth and performance of family businesses (Koji et al., 2020; McConaughy et al., 2001; Srivastava & Bhatia, 2022). In their studies Craig & Dibrell (2006) and Koji et al. (2020) conclude that family businesses perform better than non-family businesses, due to the reason that non-family businesses tend to be more short-term oriented and family business have a stronger focus on long-term goals.

Thus, there is ample evidence that management influence by the entrepreneurial family can have an impact on the on the financial success of the business. Table 2-1 provides an overview of the key assumptions and findings of this and other studies which find a performance of family businesses.

Table 2-1 Studies of performance advantages of family businesses (Source: Own elaboration)

Number	Author	Country	Definition	Theory	Result
1	(C. A. Alves et al., 2020)	Portugal	F-PEC scale	Stewardship -Theory	Family influence enhances firm performance
2	(Barontini & Caprio, 2006)	Europe	The family controls through ownership more than 10% of the business.	-	Higher business market value for owner-managed businesses.
3	(J. J. Chrisman et al., 2002)	USA	Share of the family in the share capital and in management.	-	Businesses with a stronger family influence have a higher performance.

4	(Claessens et al., 2002)	East-Asia	The family is the largest shareholder with at least 10% ownership.	Principal-Agent-Theory	Positive relationship between family ownership and performance.
5	(J. Craig & Dibrell, 2006)	USA	Essence approach according to Chua et al. (1999).	Stewardship-Theory	Family businesses have a higher performance non-family business.
6	(Ehrhardt et al. 2006)	Germany	The founding family controls the business through more than 50% of the voting rights.	-	Family businesses outperform non-family businesses in operating performance
7	(Fang et al., 2022)	USA	The founding family holds shares or family members are active in the management board.	Principal-Agent and Stewardship-Theory	Businesses that rely on family members in management positions have worse performance.
8	(Koji et al., 2020)	Japan	(a) run by a founder; (b) run by family members who hold important positions inside the company (such as Chairman, Vice Chairman, Chief Executive Officer); (c) controlled by family members who are on the top 10	Principal-Agent-Theory	Positive influence of the entrepreneurial family on the organizational efficiency of the business.

			shareholder list; (d) controlled by family members who account for 50% of the number of board members; and (e) owned by a privately held company		
9	(Kowalewski et al., 2010)	Poland	Family holds at least 25 % of the voting rights	RBV and Principal-Agent-Theory	Businesses with family CEOs have better performance than Non-family businesses.
10	(Leopizzi et al., 2021)	Italy	The percentage of family members involved within the board and shares owned by the family.	Principal-Agent-Theory	Family businesses perform better than non-family businesses.
11	(Lohwasser et al., 2022)	USA	The founding family is present in the business by shareholdings or seats on the Director's board.	-	Family businesses a have better performance than Non-family businesses.
12	(Maury, 2006)	East Europe	A family, an individual or an unlisted business holds more than 10% of	Principal-Agent-Theory	Family membership of the CEO and chairman significantly increases

			the voting rights.		operational efficiency and market value.
13	(Musa et al., 2019)	Malysia	Share of the family on the capital of the business.	Principal-Agent-Theory	Family businesses are more valuable, more efficient and borrow less than non-family businesses.
14	(Sánchez-Marín et al., 2019)	Spain	F-PEC scale	Principal-Agent-Theory	HR practices in the family businesses has a positive effect on the long-term performance.
15	(E. Santos et al., 2022)	Portugal	Shareholders must hold more than 50% of the company's shares	Principal-Agent-Theory	Positive correlation between family ownership and performance
16	(Villalonga & Amit, 2006)	USA	The founder or a family member is a managing director or a shareholder.	Principal-Agent-Theory	Positive performance effect only if the founder is CEO, or member of the management

Equal performance of family and non-family businesses

Albeit most conceptual and empirical studies to date emphasize the competitive advantages of family businesses over non-family businesses. Some studies conclude that no performance differences exist between these two organizational forms. An overview is presented in Table 2-2.

In this context, the study of listed Canadian business by Ben-Amar & André (2006) comes to similar conclusions. They show that using a short-term change in market value in the context of the announcement of a merger or takeover as a measure of performance, family control rights lead to higher market values (Ben-Amar & André, 2006). However, even with high differences between ownership and control rights, they do not find significant negative changes in market value. Sacristán-Navarro et al. (2011) also see no relationship between ownership and profitability. However, they consider control rights more important which they define as the representation of family members in management and/or on the board of management and/or board of directors (Sacristán-Navarro et al., 2011). A study of Chrisman et al. (2009) provides mixed results in the relationship of family involvement in the business and sales growth. Although they show differences in resource accumulation between family and non-family businesses, this does not lead to significant differences in sales growth.

The study of Levie & Lerner (2009) is based on the resourced-based view. According to them, family businesses have advantages in the area of social capital, but these are offset by disadvantages in the area of human capital. Therefore, the recruitment and training of well-qualified employees neutralizes limited access to financial resources of family businesses.

Chrisman et al. (2004) explore the question of whether the family involvement in ownership and management of a business can mitigate or cause agency costs. They argue that family businesses have different agency costs than non-family businesses due to the integration of non-financial business perspectives. In this respect, the control mechanisms for the avoidance of agency costs between both organization forms differ. Additionally, Chrisman et al. (2004) argue that a methodologically sound comparison must ignore costs resulting from the different control mechanisms. Based on an empirical study that excludes the costs of control mechanisms, they conclude that there are no performance differences between family and non-family businesses. Based on this result, the authors conclude that agency problems are particularly important in non-family businesses.

Number	Author	Country	Definition	Theory	Result

1	Chrisman et al. (2004)	USA	F-PEC scale	Principal-Agent-Theory	Family businesses and non-family businesses show the same performance
2	Chrisman et al. (2009)	USA	F-PEC scale	RBV	No significant differences in turnover growth between family businesses and non-family businesses
3	Levie/Lerner (2009)	England	F-PEC scale	Principal-Agent-Theory	No significant performance differences between family and non-family businesses Advantages of family businesses in the area of social capital are compensated by disadvantages in the area of human and financial capital
4	Westhead /Howorth (2006)	England	F-PEC scale	Principal-Agent and Stewardship-Theory	Family businesses with a high family influence perform equally compared to non-family businesses The management of the business and not the degree of family ownership influences the performance

Table 2-2 Studies with equal performance of family and non-family businesses (Source: Own elaboration)

Performance disadvantages of family businesses

As underlined by Table 2-3, few studies have found a negative correlation so far between the involvement of an entrepreneurial family in a business and its performance. The literature research could identify two studies that found a negative influence on organizational performance due to family influence. One of the two empirical studies to reach this conclusion was conducted by (Lauterbach & Vaninsky, 1999). By analyzing a data set of 280 businesses, the authors find a negative correlation between ownership share of the owning family and business performance. The authors conclude that family businesses follow objectives that strongly differ from profit maximization which has negative impact on performance. Following this logic, the authors assume that family businesses with a low performance will transform over time into public-controlled non-majority owned corporations. Chahal & Sharma (2020) assumes non-linear effects on the relationship between family ownership as well as and corporate financial performance. The authors could not find a relationship between impact the shareholder structure and business performance, albeit they find a negative relationship between family participation in management and business performance. They explain their findings by arguing that in family businesses positive effects on performance are outweighed by adverse performance effects such as non-financial goals, human capital and family conflicts.

In summary, it can be stated that previous studies on performance differences between family and non-family businesses are heterogeneous and partly contradictory although the majority of studies finds a performance advantage of family businesses. Until now, it could not be clarified how the impact of the family on the business affects business performance. Accordingly, Dyer (2006, p.258) concludes "In summary, the research comparing the performance of family firms to nonfamily firms leaves us with many unanswered questions, the chief one being: How might a family affect the performance of a firm? ".

Number	Author	Country	Definition	Theory	Result
1	Cronqvist/Nilsson (2003)	Sweden	F-PEC scale	Principal-Agent-Theory	Negative correlation between the entrepreneurial family's

					share of voting rights and the value of the company
2	Lauterbach/Vaninsky (1999)	Israel	F-PEC scale	Principal-Agent-Theory	Family businesses show higher profits than non-family businesses
3	(Chahal & Sharma, 2020)	India	F-PEC scale	-	No relationship between family ownership and Performance Non-linear negative correlation between family management and performance

Table 2-3 Studies of performance disadvantages of family businesses (Source: Own elaboration)

Non-financial performance of family businesses

While family business research mostly progresses in the field of financial performance, there remains a need to investigate family business non-financial performance because especially the motivation of family business SMEs is probably not limited to profit maximization (P. Sharma, 2004). However, it might be a too narrow perspective if studies only rely on financial measures to evaluate performance in particular if differences between family and non-family businesses are examined in the sense of strategic management (Chakravarthy, 1986).

This is supported by scholar's notion of the possible contradiction of basing business strategy solely on financial performance. For example, a strategy based on customer service can result in a short-term decline in financial performance due to the higher costs of the customer service while in the long-term financial performance will increase due to the financial benefits of gaining more customers (Williams, 2018). Consequently, the increase in the number of customers is measurable by a non-financial performance measure.

In the study of Mani & Lakhal (2015) the resource-based view is used to explain the enhanced non-financial performance family business SMEs. Their sample consists of 114 Tunisian family businesses. The authors show that through the usage of social capital family businesses enhance their non-financial performance. Basco & Pérez Rodríguez (2011) conducted an empirical study on family business and on-family businesses located in Spain. They find that non-financial family goals enhance the overall organizational performance consisting of financial and non-financial performance measures. Moreover, Basco (2013) analyses inter alia in his study the relationship of family involvement in the management, family-oriented strategic decision making and non-financial business performance on a Spanish sample database of family businesses. Among his findings is that family involvement leads surprisingly to a decrease in non-financial performance. The author explains this result by the fact that when new generations are starting in the business conflicts increase and family congruity decreases.

Few studies use non-financial performance as an outcome variable to a draw a complete picture of the performance of family businesses, although many scholars are demanding the non-financial performance perspective in order to explain performance differences between family and non-family businesses under the lens of strategic management (Westhead & Cowling, 1998). Following this logic, Daspit et al. (2017) states "The relationship between economic and non-economic performance dimensions also needs more theoretical and empirical attention. However, these questions represent only a handful of the interesting possibilities to examine and understand how strategic evaluation and control affects family firms".

At first glance, the empirical results of the performance analyses of family businesses can be presented quite clearly. If the details of these studies, such as data selection and definition of variables are not considered, it is possible to make general statements to a certain extent about the impact of family influence. Nevertheless, when these studies are examined more closely it is obvious that their comparability is very limited. For example, Dyer (2006) emphasizes the strongly diverging methodological approaches of previous empirical performance studies. Therefore, the strengths and weaknesses of the previous publications will be discussed below.

Large and listed businesses

In view of the global dominance of small, private family-owned businesses, the question arises why most of the performance research is focused solely on large, publicly traded businesses. In Germany, SMEs account for over 85% of all businesses are almost entirely run and owned by families (Urmonov et al., 2021). Therefore, the impact of large businesses on the global economy might be overestimated and performance studies are not reflecting the reality that takes place in businesses.

Lee (2004) picks his sample cases from a list of the Family Business Review which represents the 150 largest U.S. family-owned businesses. Villalonga & Amit (2006) choose for their study a sample from the Fortune 500. Lee (2004) regards only businesses from the Standard & Poor's 500 Index. In terms of Europe, Panunzi et al. (2011) consider only listed Italian businesses. Nowak et al. (2011) select only German stock-companies with sales of more than EUR 50 million. Barontini & Caprio (2006) choose all businesses with limited liability and less than USD 300 million in assets. Moreover, the studies of Lauterbach & Vaninsky (1999), Maury (2006) and Sraer & Thesmar (2007) regard only listed family businesses. One reason why so few studies are conducted on family business SMEs is that this business form is not subject to publication requirement and therefore gathering data is much more difficult. Especially, family specific information such as, participation and shares of the family are not obliged to be published regardless of the legal form of the business. Consequently, the less information is available the harder it is to define a business as a family business or make statements about its performance. In the study of Morck et al. (2005) 500 Canadian businesses were selected by their sales number. In the further course of their study the authors reduce their sample size to 246 businesses. They argue that no ownership structures are known for the remaining privately ownership structures.

Firstly, the reluctancy of previous studies can be overcome by the usage of subjective performance measures in questionnaires. Empirical studies have shown a high correlation between objective and subjective performance measures (Love et al., 2002; Song et al., 2005; Vij & Bedi, 2016).

Inconsistent definition of family businesses

Chapter 1.1 concludes that no generally accepted definition of a family business does not exist. The authors of previous empirical performance studies apply individual working definitions stemming from factors of ownership, management, control over voting rights, and intentions regarding the preservation of the business. On the upside this approach is pragmatic, although on the downside it is overshadowed by the lack of comparability due to the restrictiveness of the definitions. Aspects such as corporate culture, family values, norms, or sustainability considerations are neglected in operational definitions. These rather qualitative factors are difficult to measure and quantify. Empirical performance studies often have an international background and work with large sample sizes. This poses a problem because two types of data collection would have to be combined, which differ significantly in their quality of information and objectives. For example, it can be criticized that even the variables of ownership and control in performance studies often lack depth (Dibrell & Memili, 2018). Consequently, Santos et al. (2022) maps family influence by a dichotomous dummy variable that takes the value of one as soon as family members hold a certain number of shares or voting rights. This suggestion paved the way for the definition of family business according to the European Union which is a compromise between depth and practicability.

Limited informative value of performance measures

The small number of studies that include key figures of non-financial performance measures has met criticism from some scholars. Nguyen et al. (2020) state that to assess the organizational performance of business completely, financial as well as non-financial performance must be regarded. The latter offers a statement about long-term success which is especially important when family businesses are regarded. Due to the natural inclination of family businesses towards long time horizons and long-term stakeholder relationships both types of performance should be considered. In view of the importance of non-financial performance, Daspit et al. (2017) raises the question why preferably financial performance measures are used to analysis the relationship between business ownership and performance. One reason could be the early international recognition of Tobin's q to increase comparability of organizational performance. Studies from European countries in which the market value can be neglected in balance sheet have been published more numerously in recent years. explain that market values have been used to greater extend in the reservation of scientists about accounting ratios such as return on assets, return on equity and return on investment. They discuss this reluctancy in detail why market value-based accounting measures should be used with caution. Finally, they conclude that researchers are overly concerned with the international acceptability and comparability of calculations of for example Tobin's q. However, in doing so, they suppress the inherent problems of this measure. Following this path, Panunzi et al. (2011) show that the choice of performance measures can strongly influence the results, as the market and accounting measures often underestimates family businesses and capital market-based figures reflect this attitude and do not consider the long-term success of family businesses.

To this day, family business research has been very much oriented towards neoclassical models that consider only financial objectives and exclude non-financial aspects from the analysis (Rojo-Ramírez, 2020; Saiz-Álvarez et al., 2020).

Consequently, family businesses are characterized by the concentration of ownership and the unification of ownership and management, whereas non-family businesses are distinguished by highly dispersed ownership and a separation of ownership and management. Nevertheless, both organizational forms have been viewed from the same theoretical perspective (J. H. Astrachan & Jaskiewicz, 2008). This very one-sided perspective carries the risk that essential aspects of a family business are excluded, such as the existence of non-financial objectives and non-financial performance dimensions.

This problem materializes when considering the focus of existing empirical performance studies. Already Chakravarthy (1986) concludes that financial performance measures are inadequate for evaluating the performance of any form of organization. The majority of current empirical studies assume that current empirical studies that family businesses are only pursue the maximization of financial profits. On the other hand, Giner & Ruiz (2022) state that profit maximization is erroneously considered to be the most important objective of a family business, but also non-financial considerations must be considered.

Among the first few studies that follow this path is Gómez-Mejía et al. (2007). The authors conclude that the longevity of family businesses can neither be explained by their efficiency nor profitability. The reason is that family businesses serve the socio-emotional needs of the owning family. The business success becomes a function of the impact the owning family has on strategic management. Especially for family SMEs, Danes et al. (2008, p.396) state: It would be important to view small firm success not just from a traditional, financial perspective but also from a nonfinancial perspective, which would take into consideration that the great majority of small businesses are family-owned"

Only very few empirical studies have so far considered this special feature of family businesses. Miller et al. (2009) consider, in addition to financial performance measures, also non-financial measures such as employee satisfaction and the business connection to selected stakeholders.

Despite these initial approaches, the non-financial performance of family businesses and thus one of the key differentiation criteria is neglected in almost all studies. The addition of non-financial performance measures to previous studies is an important and necessary extension in the consideration of the relationship between family influence in a business and its success. Therefore, the next chapter contains a detailed explanation of financial and non-financial performance measures.

Financial performance metrics

The evaluation of financial aspects of business performance is generally done by either accounting-based measures of profitability or stock market-based measures such as Tobin's Q and Market-to-Book Value (Barauskaite & Streimikiene, 2021). Accounting-based and stock market-based measures are accepted by most scholars to be applicable indicators for financial performances business (Ricca et al., 2022).

Public traded businesses provide stock market-based measures by stock price information (Flammer, 2013). These statements contain income statement, cash flow statement and balance sheet which provide information on the business performance (Gomulya & Boeker, 2014). Financial performance measured by stock returns is characterized by their highly dynamic background and fluctuation due to their dependency on daily capital market activities. The stock exchange price is the best metric from the point of view of the shareholders (Bacidore et al., 1997; Hoskisson et al., 1994). Albeit the stock exchange price has some distinct disadvantages as there are several factors which cannot be controlled by the business e.g. economic events (X. Q. Sun et al., 2016).

One of the biggest concerns of shareholders is the unexpected return on investments (Bacidore et al., 1997). If return on investments is positive, investors have earned more than they have expected with regards to risk assessment and capital costs. Concerning a negative return on investment, investors have misjudged capital costs and the degree of risk (X. Q. Sun et al., 2016). Consequently, financial indicators stemming from stock returns may include unexpected stock earnings due to their high volatility and therefore mislead the results of organizational performance (Lev, 2018).

One of the most often used stock market metrics to measure business performance is Tobin’s q (Leonardo et al., 2022).

Tobin’s q is defined as the proportion between its market value divided by its replacement value of the business assets (Tobin, 1969). The market value of the business equity is determined by the market value of the business stock and receivable debts. It represents the business future growth opportunities which are considered mainly exogenous to managerial decisions. The replacement costs can be measured by their book value. A ratio larger than one indicates that the business market value exceeds its recorded assets. In other words, the business has through “smart” investment enhanced the business value in terms of its market-value compared to its book-value (X. Lin et al., 2018).

Tobin’s q is generally acknowledged as a measure for long-term and forward-looking performance measurement (Bozec et al., 2010). It is mostly criticized for being endogenous with regards to managerial decisions. Therefore, Tobin’s q is inflating under underinvestment which decreases its correlation to the business performance (Gentry & Shen, 2010).

The Market-to-Book value is an often-used market-based metric because it shows the difference between net assets of the business and the financial rating of the market of the business. The ratio resembles the addition or the reduction the market gives to the business. A high addition of the market means that every additional dollar funded in the net assets yields significant returns for the investors. On the contrary, reduction shows unattractive returns for investors. The Market-to-Book value describes, if further capital investments to expand the business is necessary and attractive (Goranova et al., 2010; Lenox et al., 2006). Additionally, the Market-to-Book value shows the efficiency in asset utilization and future growth potential (Subagyo, 2021).

Cho et al. (2019) and Kyere & Ausloos (2021) consider accounting based indicators such as profit margins, most important for investors to evaluate business performance. The accounting-based measures are listed and publicly available in the business financial statements specifically, in their income statements and balance sheets (Keats & Hitt, 1988; Mohammadzadeh et al., 2013). Historically, accounting-based measures are criticized for being backward looking, neglecting cost of capital and their strong reliance on estimated values. There are various accounting-based metrics to measure financial performance such as return on investment (ROI), return on equity (ROE), return on assets (ROA) and return on sales (ROS) (Blasi et al., 2018; Pham et al., 2021).

ROI consists of the net profit after taxes divided by the invested capital. It determines the business utilization of the invested capital. Moreover, this metric shows if the business can generate the expected profits by the investments of its shareholders (Musallam et al., 2019).

ROE resembles the profitability of the business by assessing the shareholder's return. This variable is defined as the annually business earnings and divided by the average shareholder's equity for that year and finally expressed in percentage. ROE is among the most significant financial ratios and profitability metrics (Alexander, 2001). Commonly, the average ROE is from 10 percent to 12 percent. A ROE of 12 percent to 15 percent is rare and desirable (Mohammadzadeh et al., 2013). ROA is another important metric applied by many scholars to measure the financial performance of companies. More precisely, ROA measures the business profitability in relation to its assets (Rothchild, 2006). Therefore, ROA indicates how well the business is able to convert its resources into revenue. Some scholars also understand ROA also as return on investment because capital assets can also be considered as indicators of investments (Rababah et al., 2020).

ROA ratios can be criticized for ignoring the relation the effort and costs of the asses for example by financing (Papanastasopoulos G., 2018). Higher ROA ratios are favored by managers because they show that the business manages its assets efficiently to generate income (Nuryaman, 2013). According to Oh & Park (2015) ROA ratios should only be compared within similar industries to avoid misleading results. This argument can be supported by the fact that for example the financial industry uses less expensive equipment than manufacturing companies. The return on sales ratio indicates how efficient the business can generate profits from their sales activities. However, higher ratios indicate a good performance it must be kept in mind that ROS does not consider cash flows and therefore ignores profits and losses. Hence ROS is a useful albeit gives an incomplete impression on the organizational performance (Venanzi, 2012).

All in all, market-based metrics are generally acknowledged for their long-term and future-oriented aspects on business performance. Additionally, they show all incorporate all relevant information hence they are not limited to separate aspects of business performance but show the big picture (Bendle & Butt, 2018). Also, Market-based metrics are reflecting well the shareholders expectations on future business performance. Conclusively, account-based metrics provide an indication for the short-term business performance and therefore show the direct influence of managerial action on business outcomes. Hence, they are preferred over marked-based metrics when the examination of corporate governance and business performance is important. On the downside, marked-based metrics are criticized because they can be easily manipulated and are subject to distortions (Abdul Wahhab Aljawaheri et al., 2021; Khan et al., 2022). Additionally, they are disadvantageous because they are only available for public listed businesses.

There is an ongoing debate about the relationship between the past, short-term performance and future, long-term performance. Venkatraman & Ramanujam (1986) suggest that accounting and market-based metrics are not correlated because of the conflicts resulting from the achievement and creation of short term and long-term economic goals. Scholars who are assuming a relationship between accounting and market metrics are debating if the correlation of the metrics is sufficient to be assumed as equal and interchangeable to evaluate financial business performance (Combs et al., 2005; Richard et al., 2009).

To connect the business accounting information with its stock exchange performance, value-based performance measures, such as Economic Value Added (EVA) was developed by Bennett III (1991). The Economic Value Added consists of the product of the financial book value of the capital multiplied by the difference between the rate of return of capital and the cost of capital (Costin, 2017). The EVA is especially useful because it also considers the costs of capital. Traditional financial metrics businesses can disguise businesses in being lucrative although they are not. EVA remedies this problem by taking the costs of capital into account. The Economic value added is criticized for the practicability of the calculations due to the fact that some of the data such as cost of equity is hard to obtain.

Present literature notes that many scholars apply financial metrics like profitability and growth as performance components in both family and non-family businesses (Kotane & Kuzmina-Merlino, 2012; Moreno-Gené & Gallizo, 2021; Sreih et al., 2019).

It is common knowledge that business growth is main concern of many managers because it brings to them the most gains in reputation. For family business growth may be associated with the acceptation of taking more risky opportunities (Miroshnychenko et al., 2021; Penney et al., 2019).

At the same time the growth of businesses leads to the potential hiring of well qualified employees due to enhanced career prospects (Coad, 2009).

The main disadvantages of financial performance metrics are their disregard of strategically focal points, supporting short-term perspective, omitting information on quality, approachability and addressability (Abernethy et al., 2013; Marginson et al., 2014; O'Connell & O'Sullivan, 2014). Additionally, financial metrics can have a negative impact on manager's behavior through their persuasion on more short-term oriented goals instead focusing on critical long-term goals.

Non-financial performance metrics

Dobrovic et al. (2018) and Raucci & Tarquinio (2020) identified an increasing application of non-financial metrics for performance assessment in businesses. Non-financial performance metrics (NFPM) compensate the limitations of financial performance metrics by improving the transparency of environmental trends and traceability of the strategies of the business. Additionally, they improve the communication between the workforces in the organization (Martín & Palomo Zurdo, 2021; Omran et al., 2021).

They are more future oriented and therefore are more significant for planning purposes (Abdolvand et al., 2015; Pont & Shaw, 2003). Non-financial performance metrics are closely related to long-term business strategies. Hence, they focus less on annual or short-term performances or time frames set by accounting (Sánchez-Alegría et al., 2022).

Non-financial performance metrics (NFPM) enable executives to communicate, supervise and monitor the business activities of their inferiors efficiently (Aryani Paul, 2020). The definition of NFPM implicates the performance expectations on people. Neely et al. (2005) proved the ability of non-financial performance measures for strategy implantation. NFPMs are popular for their holistic perspective of a business operations and consideration of dynamic data (Alzufairi & Alenzi, 2020; Mjongwana & Kamala, 2018). Hence these metrics uncover operational weak spots and inefficiencies in order to enhance prioritization processes and illustrate objectives. Consequently, this improves the understanding of the business internal and external relations which advises enhanced strategies for its management processes (Nørreklit, 2000). Industry specific performance and non-financial metrics can be more accurately measured by NFPMs compared to financial metrics. They are capable of measuring aspects such as customer satisfaction, social perspectives, employee motivation and leadership ability. In the area of non-financial performance measures, the metrics which are related to customers have a greater adoption rate compared to other non-financial metrics (Shin et al., 2020).

Alves & Lourenço (2022) and Omran et al. (2021) investigated 260 British SMEs and found that the most important NFPMs are customer satisfaction, persuasion of social responsibility, delivery and supplier reliability. Furthermore Huang et al. (2021) revealed that non-financial measures main emphasis is in the area of customer satisfaction and customer recommendation rates, waiting period and staff turnover.

It is proposed by Kelly (2007) that solely accounting based metrics cannot report on the success of organizational missions and reflect its achievements. According to Alves & Lourenço (2022) and Kelly (2007), this can only be done by immaterial metrics like customer service ability, technical innovation, and consistency of quality policy. Consequently, the combination of financial and non-financial metrics is necessary to measure the holistic performance of the business and helps to evolve improvement processes under strategic long-term aspects. Gan et al. (2020) and Said et al. (2003) found a correlation between high market returns of businesses and the usage of financial and non-financial performance metrics. The conjunction of these two types of metrics supports the evaluation of progress and improvement processes for investments.

The disadvantages of non-financial performance metrics are mentioned scantly in literature. Disadvantageous is that they are measured in different units, carry a larger error measurement and are less comparable than financial performance metrics (Giacovelli & Goldkamp, 2009).

The existence of family businesses is mainly based on non-financial performance metrics as these metrics have much higher outcomes in family businesses compared to non-family businesses due to the SEW background of family businesses (Chukwujioke Agbimi, 2019; King et al., 2022).

Hitherto only a small quantity of literature has directed effort to the characteristics of financial and non-financial aspects of family businesses and their consequences for business behavior and business performance (Seaman et al., 2018) . In addition, the analysis of business focus tends to be limited to listing a comprehensive catalog of objectives. Debicki et al. (2009, p.

159) after a comprehensive review of the literature, point to one of the largest research gaps in existing family business research: The "most striking feature is the lack of attention to the economic and non-economic goals of family firms." Therefore, the next chapter engages with the striking differences in strategy formation and outcome from the perspective of goal and selection of key performance indictors to explain financial and non-financial performance differences between family and non-family businesses.

3 Theoretical and Practical Foundations of Family Businesses

In alignment with the focus scholars are showing scientific areas of family businesses the focal point of this chapter is to outline additional areas of interest for this thesis such as economic contribution, management and entrepreneurship of family businesses.

3.1 The Contribution of Small and Medium-sized Enterprises to the Economy

According to de Massis et al. (2018) depending on the family business definition about 90 percent of European companies are family businesses. Alternating definitions lead to varying results on the number and the part of family businesses in total in Europe (Surdej & Wach, 2011). For example, depending on the definition of family businesses 36 percent to almost 95 percent can be classified as family businesses in Denmark (Mandl, 2008). From the European perspective family businesses are responsible for 40 percent - 70 percent of employment (de Massis, Audretsch, et al., 2018; Hytti et al., 2008). Literature is inconclusive, whether there is a correlation between enterprise population and employment. Some studies indicate no correlation at all, others find a strong connection between total enterprise population and high employment share. Additionally, studies show that family businesses are on average smaller, than the average national business (Hytti et al., 2008; Skačkauskiene et al., 2019).

According to (Wolter & Sauer, 2017), approximately 60 percent of all companies, create 55 percent of GDP and 58 percent of private employment are family businesses in Germany. The IfM Bonn did even account over 90 percent of all German companies for family businesses (Wolter, 2017).

Therefore, family businesses are the foundation of the welfare in Germany as they create most of the jobs, investments and value (Hennerkes, 2004). The results of IfM Bonn show that family businesses are leading in almost all industrial sectors. The strongest area is business support services with 96.8 percent. In total of € 3.1 million value added-tax companies € 2.95 million or 95.3 percent are family businesses (Fels & Wolter, 2022).

Family businesses can be distinguished by turnover volume ranges. According to Fels & Wolter (2022) in Germany the share of family businesses below € 1 million was estimated 97.3 percent, below € 50 million the share was 60 percent and below € 50 million about. 30 percent of the companies can be categorized as family businesses. Therefore, the proportion of family businesses decreases with increasing turnover, although family businesses are represented in all turnover ranges. The total turnover of all family businesses was € 2 trillion. In relation to the turnover to all businesses in Germany the proportion of family business turnover is 41.1 percent. By comparison in the turnover range of € 50 million and more family businesses produce fewer turnovers than non-family businesses. The turnover range of € 50 million consist to one third of family businesses. In this range family businesses are smaller which is the reason why their turnover proportion is 18.7 percent. Likewise, family businesses employ 12.2 percent of workforce in this turnover range (Fels & Wolter, 2022).

In conclusion, family businesses are the backbone of the German economy due to their share of employment and turnover. Consequently, a further scientific examination of family businesses is of outmost interest.

SMEs (small and medium-sized enterprises) in this thesis are defined according to the European Commission. SMEs according to this definition employ fewer than 250 persons and their turnover does not exceed a turnover of € 50 million and their annual balance sheet total does not exceed € 43 million (EU Recommendation 2003/361, 2003). The data provided in the next section accounts for family as well as non-family businesses.

Table 3-1 shows that SMEs in developed countries in Europe have a similar distribution of economic data. Even from a global perspective SMEs dominate private sector businesses (Development, 2017; Sousa et al., 2006). Converted into numbers this means that more than 95 percent of all global businesses are SMEs and 66 percent of global workers are employed in SMEs (Development, 2017; D'imperio, 2015). Therefore, SMEs are responsible for the majority of economic growth and can be considered the backbone of the global economy (Development, 2017; D'imperio, 2015).

Table 3-1 Number of enterprises, turnover and persons employed and the share of enterprises with fewer than 250 persons employed

Region	Quantity of SMEs in absolute terms	Quantity of SMEs in relative terms	Quantity of employees in relative terms	Turnover in relative terms
EU-28	**23,500.341**	**99.8 percent**	**66.3 percent**	**55.8 percent**
Germany	2.408,352	99.5 percent	62.9 percent	47.5 percent
France	2.908,814	99.9 percent	61.4 percent	55.3 percent
Italy	3,683.127	99.9 percent	78.7	68.8
UK	1,940.947	99.7 percent	53.5	47

Source: (Development, 2017; D'imperio, 2015)

Environmental conditions for SMEs have drastically changed in the last two decades towards ever increasing competitiveness (Thrassou et al., 2020; Yacob et al., 2019). In general SME's competitiveness was weakened by the financial crisis in 2008 and the COVID-19 pandemic in 2020 (Kadocsa & Borbás, 2010; N. Lee et al., 2015; T. Sun et al., 2022; Zutshi et al., 2021). On the contrary, according to Burke & Hussels (2013) and Hagelaar et al. (2021) empirically proved that in the early years of SMEs their long-term survivability is braced by competitiveness. To develop a deeper understanding of SMEs and to mark out their characteristics compared to larger businesses the characteristics of SMEs will be outlined in the following section.

There is a vast body of research examining the differences between SMEs and larger businesses. According to Kishore & Sundaram (2018), SMEs cannot be considered as scaled-down versions of larger businesses because when growing they undergo an evolution process which leads to major changes in management structure and financing. The following characteristics are the main differentiators between SMEs and larger businesses according to research (Ates et al., 2013). These differentiators are first briefly outlined and then closer described by:

1. Limited resources regarding lack of human capital, finance, time and information (Ates et al., 2013; Falemo, 1989; Gay & Szostak, 2019)
2. Short-term priorities, decision-making processes are not formalized (Crovini et al., 2020)
3. Internal operational focal points and lack of external orientation (Crovini et al., 2020)
4. Tacit knowledge and emotional intelligence (Boohene et al., 2020; S. Y. Oh & Lee, 2022)
5. Lack of enterprising and managerial skills (Hussain et al., 2018)
6. Leadership skills of the owner (Achanga et al., 2006; Bolden, 2007)

SMEs have only limited resources available in terms of human capital, finance, time and information (e.g. data analysis, graphical depiction of data). They are often understaffed, less flexible and lack time and information resources to check the environment in terms of new markets and product opportunities. Additionally, financial resources are lacking to seize short-term opportunities (Ates et al., 2013; Falemo, 1989; Gay & Szostak, 2019).

In SMEs decision-making processes are not formalized and there is a lack of strategic planning. Furthermore, managers are dealing with numerous short-term and long-term priorities in parallel. SME owners are highly involved in operational businesses and customer contact reduces their capacity for long-term opportunities (Crovini et al., 2020).

Internal operational focal points are set in SMEs when forced by problems and are then solved by short-term solutions. This kind of problem-solving stems from the SME's lack of external orientation. SMEs tend to overestimate the importance of their technical capabilities and therefore do not choose management tools and techniques to solve their problems. With a higher external orientation SMEs would check market and business trends to improve their competitive situation with long-term solutions (Ates et al., 2013).

Tacit knowledge is an intangible resource generated by human experience and practical know-how. Emotional intelligence leads to higher job satisfaction and overall performance of SMEs. Tacit knowledge and emotional intelligence are prospering in SMEs due to short distances between employees and their internal orientations (Boohene et al., 2020; S. Y. Oh & Lee, 2022).

Especially in critical times survivability of SMEs is demolished by a lack of enterprising and managerial skills. This lack is triggered by an underinvestment in training of SME owners. Worsening the situation SMEs are depending on the management skills of the very small management level of SMEs. In addition, SMEs owners lack enterprising skills which means that they are averse to not expand the business to a degree when they are not able to manage all operational aspects by themselves (Gray, 2002; Hodgetts et al., 1998; Ropega, 2011).

The lack of funding of most SMEs can hinder SMEs to hire the optimal management composition which helps them to overcome their problems in planning and leadership. Moreover, the bad leadership skills continue to affect productivity initiatives such as workforce training negatively (Achanga et al., 2006; Amah & Oyetuunde, 2020).

The above listed characteristics are well intertwined and result in a network of advantages and disadvantages. Among these characteristics are positive outcomes like “short ways” and informalities which support stronger bonding between management, employees, stakeholders and the business (Soluk & Kammerlander, 2021). Although, this informality is related to a strong internal operational focus and low focus on SME’s business environment. Furthermore, it shall be emphasized informality is connected to lower usage of information sources and higher degree of tacit knowledge of the owner and employees. On the downside, SMEs owners have lower leadership and managerial skills. Moreover, SMEs are generally suffering from a lack of resources in many areas. These characteristics serve to determine possible fields to improve SME financial and non-financial performance.

Independently if family or non-family business, SMEs are a very interesting research area due to their numerical prevalence. Family business SMEs show a unique mix of characteristics especially in non-financial business perspectives and behavior. This particular area has been under investigated so far because most SMEs do not disclose data which makes it hard for scholars to apply research methods and measurements.

3.2 Management and Enterpreneurship of Family Businesses

The management runs the family business according to the values and goals of the owners. It determines the strategic positioning of the business in alignment with either the owners or the oversight body. Therefore, the impact of the management on the business is decisive.

The ownership of family and non-family businesses differs tremendously. According to theory the reason is that shareholders of non-family have and share only one common financial goal and that is to maximize the return of their investment (Williams, Pieper, & Astrachan, 2018). Contrary, shareholders of family businesses, which are usually family members, have a broader overlap of goals due to a similar conception of values and the mission of business. Owners of family businesses may be even more satisfied with low financial returns, as long as other outcomes like sustainability, longevity and business survival are fulfilled because they value non-financial goals at least as high as financial goals.

Depending mainly on size up to 93 percent of German companies and 80-90 percent of US companies are family-internal managed (Hibbler-Britt & Wheatley, 2018). Occurring at a much lower number family business are managed external or by a mixed management (Felden & Hack, 2014). With far-reaching consequences owners have to decide whether family members should be involved in the management or not. The installment of family members in the management level can be justified by their higher motivation compared to external leaders because poor job performances do not only result in monetary consequences. On the other hand, family businesses do not strictly separate between business and family, which may result in a transfer of conflicts from family to business and vice versa in family internal managed companies. Additionally, subjective evaluation of the business is harder to avoid when family and business are mixed because family owners usually emotionally strongly connected to their business (Fiegener, 2010). Consequently, the measures which are taken to save the business are coming in too late. The recognition of a business as a family business by suppliers and customers yields a competitive advantage as these are more intended to do business with a business with a family background (Anderson & Reeb, 2003; Basco & Suwala, 2020). The reason is that family businesses are related to long-term business relationships and are highly associated with quality and reliability (Hauswald et al., 2016; Hoffman et al., 2006; Silva & Majluf, 2008). Several studies underline the above correlations that family businesses have a higher market valuation and financial performance compared to family businesses with external management (Chaudhary & Batra, 2018). A likely explanation is that the financial and non-financial long-term perspective of family businesses leads to a higher financial performance of family businesses.

As an abnormality of family internal management, managers tend to stay longer in the office which exemplifies the effect of long-term and very reliable business relationships (C. C. Cruz et al., 2010). Although in dynamic markets this tends to be a disadvantage because innovation and a rapid adaption attitude are more important here. According to Gabriel & Bitsch (2019) and Tagiuri & Davis (1996) family business managers mainly communicate in family business language which makes their communication more efficient and increases privacy. Additionally, family business structure is less formal which improves their efficiency and decreases monitoring and control obligations (le Breton-Miller & Miller, 2018). In family business management decision processes are rather centralized because decision power resides in a few family members (le Breton-Miller & Miller, 2018).

Bennedsen et al. (2007) examined CEO succession decisions in Danish family businesses. The result was that external managed family businesses show a better financial performance than internal managed family businesses. They explain the performance difference by the lack of experience and qualification of managers acting as family members compared to external managers. They also suggest that the performance difference can be closed if internal and external managers are having comparable job-related backgrounds and the same level job experience. Many researchers believe in a natural connection between entrepreneurship and family business because family businesses may draw advantages from entrepreneurial practices (Basco et al., 2019; Habbershon & Pistrui, 2002).

The modern definition of an entrepreneur is less about owning a business, but it is about an entrepreneurial pattern of attitude, such as initiative taking, working independently, supervising resources, venturesome and inventive (Dana, 2021). Following the Austrian School of economic thought, the core of entrepreneurship lies in improving the market value of the business and create new business opportunities (Kirzner, 1997; Wright, 2001). Basco et al. (2019) and Porfírio et al. (2020) propose that entrepreneurship is one of the key driving forces of family businesses. Entrepreneurial attitudes are fundamentally necessary to generate competiveness independently of the business size. The skill of growing and exemplifying entrepreneurial mentality is a key aspect for family business long-term survival and of major importance for innovation and growth (Hnátek, 2015; Kellermanns et al., 2008).

Brigham (2013) reviewed in his study 212 family business articles for entrepreneurship content. He found the following dependent variables in regard to entrepreneurship: strategic persistence, corporate entrepreneurship, innovation, entrepreneurial risk-taking, family forces on entrepreneurship and the future leader’s perception of the business. Many articles were holding at least one of the variables and investigated the correlation between entrepreneurship and family business. The fundamental condition of the application of entrepreneurship to family businesses, is that every business must be entrepreneurial to a minimum level in order to survive in global competition. Globalization is increasing the fierceness and dynamic of competition (Liñán et al., 2020; S Zhang, 2021). It is suggested by Samara et al. (2021) that cultural dimensions have a more powerful impact on family than non-family businesses in terms of creating strategic advantages. Additionally, they found a correlation between cultural dimensions and customer orientation, decentralization and long-term view. To all of these variables, family businesses show affection.

Letonja & Duh (2020) conclude that entrepreneurship strives in family businesses which are embracing open cultures. Open culture provides family businesses with the necessary mindset to adapt fast to changes and remain flexible to dynamic markets. The factor of entrepreneurial activity and risk-taking in family businesses was explored by Zahra (2005). By measuring the application of alliances, entering of markets and investments technologies and innovation Zahra (2005) found that mediocre CEO terms and a better training of successor helps to enhance entrepreneurship. Moreover, competition causes family businesses to behave increasingly entrepreneurial to survive economically. Additionally, family businesses hold characteristics that at the same time exemplify and impede entrepreneurial attitudes. Nevertheless, literature is still inconclusive on whether family businesses are more entrepreneurial than non-family businesses or not (Brigham, 2013; Zahra, 2018).

Conclusion

What transpires from this subchapter is that firstly family businesses hold a tremendous share on economic growth and job growth which makes research on them so important. Secondly, most family businesses area managed family internally. Finally, a part of the family business literature considers entrepreneurial activities as the main driving forces of the success of family businesses. Therefore, family businesses can be clearly distinguished from non-family businesses by their economic importance, management and entrepreneurial which leads to the assumption that strategic management is able to fill the gap to explain the differences between family and non-family businesses.

3.3 The Concept of Socioemotional Wealth

In research non-financial goals of family businesses are mostly anticipated with socioemotional Wealth (SEW). The basis of SEW is the securement and increase of the activities of family members in the family business (Kammerlander, 2022).

SEW can incorporate the starting of a family dynasty which manages the business over many generations or to build and maintain a high family business reputation (Bammens & Hünermund, 2020). Additionally, this can also include individual behaviors such as exercising authority or altruism on family members. Most importantly, when there are opportunities for the improvement or the present SEW level is in danger, the SEW concept suggests that entrepreneurial decisions are not solely founded upon financial aspects. The SEW concept reaches so far, to suggest the management would risk the survival of the business to secure SEW (Gómez-mejía et al., 2007). The SEW is founded upon the Behavioral Agency Model. This model proposes that economic stakeholders do not solely take their decisions by pure rationality but are influenced by risk aversion and problem (Gomez-Mejia et al., 2021).

Risk aversion describes the behavior strain that individuals have a much stronger tendency to avoid risks compared to seeking benefits and profits. Problem framing describes the concept that profits and losses are not conceived in absolute terms but in relation to a central reference. These concepts apply to both, financial and non-financial aspects. An additional theoretical framework which impacts non-financial goal setting in family businesses is the Affect-Infusion-Theory (T. M. Zellweger & Dehlen, 2012). This framework suggests that property such as a business ownership, can lead to appreciation and commitment which exceeds the monetary value of the owned property by far. Furthermore, emotional experiences for owners of family businesses during active involvement in the management increase the emotional bonding of the owners to the business. It can also be assumed that the impact of SEW increases with increasing business shares. The impact of the SEW grows even stronger if the business owner identifies himself with the business. This is especially significant for business founders and succeeding generations if they are strongly rooted in the business.

Consequently, a negative business reputation decreases the social identity of the owning family. This is one of the reasons why family members put great emphasize on their business reputation which is demonstrated by the fact that generally family businesses tend to have higher corporate social responsibility and community citizenship values (P. Sharma & Manikutty, 2005; Westhead et al., 2001). Social values like trust, solidarity and sense of a common bond are commonly found in families. These values are likely to expand on stakeholders. That is why family businesses can maintain trustful long-term relationships with suppliers and customers (Randerson, 2022).

According to Gómez-Mejía & Herrero (2022), the SEW is structured by the FIBER Model into five dimensions which shall replicate the impact of family behavior and business decisions:

1. Family control and impact: Family members in family businesses are responsible for making strategic decisions. Family members can control these decisions directly by being a part of the management or indirectly by appointing external managers. Moreover, family members can fulfill several professional roles at the same time to increase their impact on the family business. The control and impact of family members on the family business are one of most important components of the SEW model (Chua et al., 1999; Kellermanns et al., 2012).
2. Identification of family members with their business: The identity of family members grows inseparable with their business. If the family name is a part of the business name, internal and external stakeholders relate the activities of the business with the owning family (Combs et al., 2020).
3. Long-term employment relationships are also commonly found in family businesses as well (D. Miller & le Breton-Miller, 2005).
4. Emotional attachment of family members to the business: Emotional attachment is found in many organization forms, still it grows strongest in in family businesses due to the long history of family relationships and the creation of collective know-how (Ng et al., 2019).
5. Renewal of family bonds to business by succession: One of the strongest aspects of SEW is the goal of family business owners to succeed the business to the next generation (Kellermanns et al., 2012; T. M. Zellweger et al., 2012). The succession wish has a major influence on the time frame of business decisions. From the family's point of view their business is a priceless asset which has become part of family tradition (Anna & Emmanuella, 2022).
6. Consequently, family business owners consider their business as an intergenerational investment.

Berrone et al. (2012) were among the first to suggest measuring the five dimensions on an operational level through a questionnaire. Hauck et al. (2016) tried to perform the measurement along the suggestions of Berrone et al. (2012). The result was that the five dimensions are hard to validate due to reasons such as small unidimensionality and reliability. Thus, the five dimensions were converted into the three-dimensional REI scale:

1. Renewal of family bonds to the business through dynastic succession.
2. Emotional attachment of family members.
3. Identification of family members with the business.

According to Hauck et al. (2016) the REI scale yields advantages like reliability, validity and most importantly measurability. The measurability is based on the fact, that only three questions per construct have to be surveyed compared to nine in the FIBER scale. Additionally, to overcome the practical application issues of the FIBER model the socioemotional wealth importance scale (SEWi) was developed (Prügl, 2018). This scale consists of the following dimensions (Prügl, 2018):

1. Family Prominence: It is concentrated on the reputation of the owning family, on securing the social relationships and on recognizing the family as an important component of society.
2. Family Continuity: Succession is the focal point here. Important is the continued existence of the family especially in terms of generational transfer, family unity and transmission of values.
3. Family Enrichment: This part of the scale takes into account the general life satisfaction of family members outside of the business, keeping the family peace and considering the interests of family members when business decisions have to be taken.

The SEWi scale enables the assessment on how important socioemotional wealth is to family business owners and managers. More precisely, Debicki et al. (2016, p. 48) argue that SEW can be defined as “the array of nonfinancial benefits specifically associated with the well-being and affective needs of family members that are derived from operating a business”. According to Prügl (2018), the connection of non-financial benefits with decision making and business behavior equals a reconceptualization of SEW.

The SEW approach is mainly criticized for only taking the present activities of family businesses into account but not the activities to preserve and increase SEW in the future

(Martin et al., 2016). The measurement and quantification of SEW remains a gap research which needs to be solved to (e.g. improve the understanding of researchers between individuals behavior and SEW, the setting of emotional reference points depending on individuals) (Brigham & Payne, 2019; Gómez-Mejía & Herrero, 2022; Smajić et al., 2022). Furthermore, scholars complain about low engagement of SEW researchers to improve SEW theoretically and methodically (Prügl, 2018). Nonetheless, SEW is a very important and frequently used component by researchers to explain family businesses affinity to non-financial goals. Therefore, the SEW serves crucial theoretical construct for this thesis.

In many studies, authors assume that SEW is equal to the concept of emotional value (EV) although they are different (J. H. Astrachan & Jaskiewicz, 2008; Martínez-Romero & Rojo-Ramírez, 2016; T. M. Zellweger & Astrachan, 2008). According to Moreno-Menéndez & Casillas (2021), SEW is a unique aspect of family businesses, albeit it can also be felt by non-family executives and managers by a weaker extend. For family members ‘‘the value of socioemotional wealth to the family is more intrinsic, its preservation becomes an end in itself, and it is anchored at a deep psychological level among family owners whose identity is inextricably tied to the organization’’ (Berrone et al., 2010, p. 87). Independently of family and non-family businesses emotional value can be experienced in both organization forms because emotions are generated by the emotional characteristics by the people who manage the business and by the people who carry the emotions (Martínez-Romero & Rojo-Ramírez, 2016). This emotional aspect is more distinctive in family businesses because of the family relationships in the family. Martínez-Romero & Rojo-Ramírez (2016) made the claim that these relationships make the difference between SEW and EV. According to Zimmermann (2008) EV is defined as an extrinsic value which is connected to emotional endowment generated by interpersonal relationships in both business forms.

If SEW aspects are discussed, these aspects solely refer to family businesses. In contrast, when EV is discussed family businesses as well as non-family businesses can be concerned. Hence SEW can include EV, but not vice versa. Moreover, it depicts the Socioemotional Wealth endowment of family businesses which contains the emotional value in addition to emotional components which are connected to the relationships of family members (e.g. family succession and family control on the business). That is why SEW is unique to family businesses and cannot affect non-family businesses. For example, non-family business owners cannot be worried about succeeding the business to the next generation because this is not possible.

3.4 Impact of Socioemotional Wealth on Financial Business Perfomance of Family Businesses

The effects of theories (e.g. SEW) have been divided by literature into effects on financial performance and non-financial performance. Most studies report a negative impact by SEW on financial business performance in order to maintain or increase SEW (Belda-Ruiz et al., 2021; Samuel Baixauli-Soler et al., 2021). According to C. Cruz et al. (2012) found a correlation between the employments of family members with an increase in sales but decreases profitability measured as return on assets. Schepers et al. (2014) argue that positive impacts on performance from entrepreneurial orientation are lowered by SEW. Naldi et al. (2013) reports that in industrial business areas SEW has a positive impact on business performance. In these areas the compliance with tacit knowledge and social standards are advantageous for SEW. Additionally, they revealed that stock market listing for family businesses can be a performance-wise disadvantageous because family businesses do not easily comply with formal regulations and transparency. Tsai et al. (2022) examined family businesses in a similar industrial area and found that family-controlled businesses pollute less in order to preserve a positive family reputation. The performance of businesses was not measured, however minding the environment in such a way, can lead to a competitive advantage (Bansal, 2005) and therefore increases financial performance in the long run (López-Pérez et al., 2018). The study carried out by Thomas M. Zellweger et al. (2013) attempts to proof a direct correlation between SEW and financial business performance. They related business ownership to socioemotional components and provide evidence that this relationship creates monetary value. More accurately, they show that the goal of family succession in the business increase sales prices of the businesses. Ferramosca & Allegrini (2018) and Pazzaglia et al. (2013) support the notion that the acquisition of family businesses by new family businesses results in lower earnings quality due to a decreased identification with the new business owners compared to the old ones. If family business are still owned by the founding family and are managed by family internal CEOs, they highly profit from high identification with the business. Moreover, Pazzaglia et al. (2013) argue that increased identification of the family with the business leads to greater earnings quality. All in all, most studies try to find a link between SEW dimensions, family ownership and financial performance but are neglecting the SEW measurement and the business attitude towards SEW.

3.5 Impact of Socioemotional Wealth on Non-Financial Business Perfomance of Family Businesses

Research does not only focus on financial performance but has lately started to regard non-financial performance as equally important for family businesses (Williams, Pieper, & Astrachan, 2018).

According to some scholars the performance of family businesses is critically linked to their goals (Chua et al., 2018a). Hence, studies which assess family business overall performance have to take into account financial as well as non-financial performance. Many scholars use parts to the SEW model to explain and measure non-financial performance (Berrone et al., 2012; Gómez-Mejía et al., 2007; Litz et al., 2012). Family business owners measure non-financial performance for example by the satisfaction level of family and non-family stakeholders, business succession to the next generation, family control, social recognition, long-term and sustainable business models (J. J. Ferreira et al., 2021; Kallmüenzer & Peters, 2014; Rodriguez Serna et al., 2022). Moreover, SEW can have a strong impact on non-financial performance such as stakeholder satisfaction and corporate governance. Additionally, these are affected by various dimensions and differ by family business, individual owner and change during the business life time (Richards, 2022). These alternating impacts on SEW can change the SEW priority and therefore the management composition (Le Breton-Miller & Miller, 2013). Kammerlander (2022) and Kellermanns et al. (2012) report about the disadvantages of SEW. They explain, if family businesses target high SEW, businesses may prioritize short-term goals at the expense of non-family stakeholders. The family enrichment dimension can be hold responsible for this kind of behavior as family members try to fulfill obligations, they have on behalf of the rest of the family (Debicki et al., 2016). Blanzo-Mazagatos et al. (2022) and Swab et al. (2020) argue in a similar manner that family businesses differ in the ways how they commit themselves to stakeholders and how they follow the SEW dimensions. Moreover, Cennamo et al. (2012) report that stakeholder management can have a positive effect on SEW because the family attempts to stronghold its control on the business by concentrating on stakeholders such as media and social groups. A different feature of SEW conservation can be associated with the identification of the owning with their business. Often the identification is very high when the family name is a component of the business name. Additionally, the identification is greater than the identification of non-family members with a family or a non-family background (Gómez-Mejía & Herrero, 2022).

Diéguez-Soto et al. (2021) and Gomez-Mejia et al. (2011) argue that the SEW conservation measures impact business decisions on management level albeit this relationship has not been tested empirically yet. In summary, literature is inconclusive if SEW has positive impact on non-financial performance.

The introduction of the concept of emotional value pinpoints that non-financial aspects is not only important for family businesses but also for non-family businesses. Therefore, the emotional endowment of employees to the business is independent of the organization form. Many scholars agree that SEW only concerns family businesses. The concept of SEW clarifies that family business are more inclined towards non-financial aspects of strategic management. The reason is family business risk aversion tendency is what distinguishes them from non-family businesses. Moreover, many studies provided interesting insights that non-financial strategic management perspective in family businesses has strong impact on their financial as well as non-financial performance. Consequently, to improve understanding of family businesses further not only their financial but as importantly their non-financial performance needs to be considered.

Conclusion

The results of different empirical studies were presented and the limitations they face explained. As a result of the literature research it became clear that there is disagreement about the influence the owning family has on the success of the business. In this sense Zellweger et al. (2008, p.3) concludes: “Because the available research is ambiguous as to whether family influence is beneficial or detrimental to firm performance, we need to further investigate in what ways family as an organizational variable affects firm performance”.

Numerous scholars have repeatedly called for greater consideration of moderating and mediating variables between family influence and business success (Allen et al., 2018; J. Daspit et al., 2017; Dayan et al., 2019). The very inconsistent results indicate that a key mediator between the influence of the family and its performance has been overlooked so far. Against this background Chrisman et al. (2012, p.267) note: “The growing realization that family firms are heterogeneous (…) means that studies should focus more on the mediators and moderators of family involvement's effects on behavior and performance" This call will be followed in the next chapter.

3.6 The Theories of Management Practices

According to Raduan et al. (2009) management is the process of choosing organization's objectives, growing policies and plans to achieve the set objectives and allocate resources to implement the policies and plans. Among the theories that form the foundation of management include agency theory, stewardship theory and the resource-based view (RBV). Due to the progress research has made in family businesses in the last decades a variety of tools to improve scholars understanding of strategic management of family businesses has been developed. Specifically, this has enhanced the conceptual knowledge of problems family businesses are facing and how individuals are interacting. Considering economic theory and the definitional approaches as a background, this chapter presents the most import theories in relation to strategic management dealing with family businesses. These theories are analyzing the decision-making process with regards to individual family members interoperating with and within the family business in a business environment.

The analytical assignment for economic theory is according to the three-circle model a sophisticated blend of the interaction and reciprocal impact among a heterogeneous set of individuals. Agents do not only hamper family members working for the business but also idle family members and non-family members. The premise for the microeconomic perspective is that individuals are part of the ownership and/or management circles (Giménez & Novo, 2013). The most important theoretical frameworks, the principal-agent theory, the stewardship theory and the resource-based view are discussed in detail in this chapter.

Principal-agent theory

The Principal-agent theory engages with the analyses of the characteristics of transactions. The relationship between the principal and the agent resembles a contract, in which the client (principal) orders the contractor (agent) to execute a task (Minola, Baù, et al., 2021). Additionally, the principal transfers a part of his authority to the agent. Practically, this can happen in non-family and family-managed businesses when the current managing partner recruits an outside manager in case family succession is not possible or the management should be improved by a manager from the outside (Pongelli, Calabrò, et al., 2021). In any case the owners of the business must meet the challenges of the recruiting process. Assuming reduced rationality and opportunism of the owner has only limited information on the quality, loyalty and motivation of the potential outside manager (agent). The principal can only suppose how well the agent will perform on the job. The goal of the principal is to increase business performance and the value of the business (Minola, Baù, et al., 2021).

. If the principal pursues his goals, also the social economic wealth of the business is protected (Hauck & Prügl, 2015). Agents may follow egoistic and opportunistic goals (Sieger et al., 2013). The relationship between principal and agent grows even more problematic once divergent goals and asymmetric distributed information are taking place (M. C. Jensen & Meckling, 1976). The asymmetries can be summarized as follows (Huynh et al., 2020):

1. Concealed activities of the agent that cannot be monitored supervised by the principal.
2. Concealed information that are not available to the principal about the agent.
3. Concealed characteristics of the agent which the principal is not aware of.

As a general argument the agent has more information, which allows him to take advantage of the contract and harm the principal. Problems stemming from asymmetric information can be divided by occurring before or afterwards signing of the contract. In other words, adverse selection can come into effect before contract completion (Dang et al., 2019). The principal is not capable of fully assessing the productivity and quality of the agents work before transaction. Problems occurring after the contract completion are called moral hazard. These problems may happen when the principal is not able to evaluate by what degree the agents work results is influenced by the environment.

All the principal’s activities are related to transaction costs, or in other words agency costs (M. C. Jensen & Meckling, 1976). The principal will never be able to avoid these costs, because he cannot avoid adverse actions by the agent. These costs resulting from the opportunistic actions of the agent are called residual costs. One of the basic assumptions is that agency costs only occur if ownership and management are divided (M. Jensen, 2019). In addition, no agency costs occur if all shareholders own equal shares and are equally managing the business (Ang et al., 2000). It could be further argued that family businesses generate lower agency costs than non-family businesses even with an outside manager installed (Chua et al., 2009; W. G. Dyer, 2018). In this case information asymmetry is kept low, because the outside manager is more closely monitored by the owning family than for example by publicly traded companies (Hiebl & Li, 2020; Kotlar & Sieger, 2019).

Moreover, the family owners are highly motivated to acquire high level information about the operational business and the competitive environment (García-Sánchez et al., 2021). Studies have also shown that in family businesses, agency costs may occur due to family relations. In parent-child relationships parents may turn to be too generous and children taking advantage of their parents' behavior (Eddleston et al., 2008; Madison et al., 2016). Moreover, family altruism and morale hazard may prevent a close monitoring of family members performance in the business (Eddleston et al., 2008; Madison et al., 2016). Equally, it is possible through asymmetric altruism that family members hire family members that are higher qualified than non-family members (Wright & Kellermanns, 2011). Summarizing these ideas, it can be argued that family businesses contain various kinds of agency costs, stemming mainly from deficiencies with regards to altruistic attitude and business management and shareholder dispossession. The main disadvantage of the principal-agent theory is its measurability. Especially, in family businesses individual preferences depending on individual relationships and altruistic intentions are hard to measure.

Stewardship theory

Family business researchers are steadily using the stewardship theory as a counter-reaction to principal agent theory and avoid its limitations, to explain family business outcomes. Since 2018, 31 articles have been published in stewardship theory with sub-areas in these articles include organizational impacts and strategic versatility.

Following stewardship theory, employees in an organization act in the organization's interests and place it above their own and act in good faith for their principals (J. J. Chrisman, 2019).

The behavior of the stewards is controlled by non-financial motivations. Motivation theories agree that financial motives are losing importance with increasing satisfaction of needs. This intrinsic responsibility is closely linked to altruism. Altruism is defined as willingness to do things that bring advantages to others, even if it results in a disadvantage for oneself (Chennells et al., 2022).

Thus, motivational factors change to taking responsibility, challenging activities and enhancement of commitment to the business (Corbetta & Salvato, 2004). By doing so, the organizational actors are compensated for behaving pro-social instead of opportunistic. The compensation is received in terms of an improvement on long term benefits (Hernandez, 2012; Schillemans & Bjurstrøm, 2020).

As Principal agent theory's counterpart Stewardship theory is averse to control mechanisms for management and risk assessment. It rather seeks involvement and trust combined with long term goals (le Bui, 2021). Stewardship theory requires governance structures, which promotes and strengthens the position of executives to behave as stewards rather than controlling their actions (Davis et al., 1997). J. H. Davis et al. (1997, p. 38) describe the primary differences between agency theory and stewardship theory as follows: "According to agency theory, people are individualistic, utility maximizers. According to stewardship theory, people are collective self-actualizers who achieve utility through organizational achievement". Stewardship theory is compatible with family and non-family managed businesses. It is expected that the basic principles of stewardship theory are exemplified by family businesses (Urban & Nonkwelo, 2022). The working environment in family businesses enhances business identification and intrinsic motivation (Löhde et al., 2021). Hence, family businesses improve confidence and commitment. Consequently, employees generate a competitive advantage (Davis et al., 2010). The time frame for strategies to be used by the business in stewardship theory and family businesses is in alignment as both are generally applying long-term strategies which make this microeconomic theory very valuable to understand the behavior of employees in family businesses.

Resource based view

The resource-based view (RBV) assumes that financial performance is created by businesses that are primary depending on their resources (Penrose, 1959). It uses therefore a completely different working principle compared to Principal-Agent-Theory and Stewardship-Theory, which argue that transaction costs are stemming from the governance and performance of a business.

Before the RBV theory was developed, it was generally acknowledged that competitive advantages are depending on the market the business is attending business to. The market point of view classifies companies of the same branch as approximately equal in terms of financial performance (G. S. Day, 2014). The aforementioned perspective is also called the outside-in approach and was first developed by (Penrose, 1959). According to the outside-in approach, the business long-term profitability and competitiveness only relies on the adaption to volatile markets (G. S. Day & Moorman, 2010; Mu et al., 2018). Conversely, the RBV theory explains performance differences of businesses, and their strategic advantage over competitors by combining tangible and intangible resources (Chaudhuri et al., 2022).

The RBV theory demands additionally from resources to comply with the cumulative attributes of being, scarce, incompletely imitable and unsubstitutable (Duarte Alonso et al., 2022). J. Barney (1991) and B. Barney (2018) introduced the following key concepts to classify resources. Business resources are fragmented to physical capital (e.g., assets), human capital (e.g., knowledge) and organizational capital (e.g., processes). The resources are owned by the business, and enable the business to implement strategies that increase efficiency and effectiveness of the management of the resources.

The basic resources can be characterized as follows:

1. Valuable: To implement strategies to increase high economic values.
2. Rare: Only available for a minimum of competitors.
3. Imperfectly imitable: Cannot be copied by competitors.
4. Non-substitutable: The considered resources cannot be substituted by other resources.

Furthermore, the resources can be classified into the type of asset they belong to (Maureen Robinson & Being, 2008):

1. Physical assets (for example property, physical technologies)
2. Human resources (for example expert knowledge and the professional experience of employees)
3. Organizational assets (for example organizational culture, intellectual rights, property rights and patents)

Many scholars agree that family businesses own a unique pair of resources, that are related to the interplay of business and family (Habbershon et al., 2003; Habbershon & Williams, 1999; T. Lee, 2019). These distinctive resources gained by family involvement can be compiled to the familiness of the business (Barros-Contreras et al., 2022).

The familiness component cannot be emulated by non-family businesses and therefore is only found in family businesses. Barros-Contreras et al. (2022) define familiness as the allocation of resources and competences of the business family, non-family employees that interact in the business unit and add to the business performance. Barros-Contreras & Palma-Ruiz (2020) argue that in the bigger picture family businesses are creating trans-generational wealth, which results in rent generation as a feature of resources and capabilities. Chirico et al. (2021) and Sirmon et al. (2003) propose when these resources are managed effectively and efficiently this result in superior financial performance of family businesses over non-family companies. Sirmon & Hitt (2003) show one of the most detailed applications of the RBV theory for family businesses in literature. They divide the RBV theory into four discrete resources of family business capital combined with one unique characteristic: human, social, patient and survivability capital, combined with governance structure characteristics. Among the most important resources is human capital. It is defined as acquired knowledge, skills and capabilities of a person to perform unique and novel actions (Collins, 2021). Some Scholars propose that family members have a positive influence on human capital (Sirmon & Hitt, 2003). They describe human capital in business and family dimensions as in-depth knowledge of the business, faithful attitude, powerful motivation and a strategic longstanding perspective. Social capital allocates information, technological knowledge, access to markets (Hitt et al., 2001). Financial capital which is not leveraged by the timing of investment over long periods is classified as patient capital (Ardito et al., 2019). Companies with the availability of patient capital are able to pursue more creative and innovative strategies (Kang, 2000). Especially in times of economic plight survivability capital is available to family businesses but not to non-family businesses. Survivability capital consists of free labor, loaned labor, additional equity investments, or monetary loans (Sirmon & Hitt, 2003). This kind of capital is generated by the personal wealth of the family. The governance structure strongly affects the business resource profiles. These profiles are shaped by agency costs, which are influenced by altruism in the management level and the life cycle of the business. Therefore, governance structures can see to a strong differentiation between high and low-performing businesses.

The RBV theory is also subject to certain limitations. Benzidia & Makaoui (2020) and Priem & Butler (2001) criticize in particular the low degree of formalization and the unflexible approach of previous studies on the RBV. They point out that after Barney's (1991) study, a high variance of definitions and interpretations of the RBV has been developed over the course of time due to the lack of clear formalization. Moreover, the inflexible approach of this study leads to the fact, that the process through which certain resources generate competitive advantages still represents a "black box" so far. Consequently, they identify a need for further research at this point.

Although, the RBV remains criticized it is recognized by literature as a well-founded empirically documented concept used in strategic management research (J. B. Barney, 2018).

Discussion

In family businesses, contrary to the classic conception according to Jensen & Meckling (1976), agency conflicts can arise in family businesses, even though there is largely a unity of ownership and control. The private ownership of a business can be accompanied by economic inefficiencies which resemble agency costs. Another cost is family altruism, which leads to unfavorable decisions to the detriment of firm value and can strongly shape the interests of the family. Both circumstances can reduce the business performance potential. If the family controls the business as a major shareholder, conflicts with external shareholders may arise. This is because the family owners can use their power to pursue their own goals and, for example, alienate business funds via control-reinforcing mechanisms. Last, the potentially opportunistic behavior of the family manager is the only one that reflects the well-known owner-manager conflict that underlies research on the strategic management of the business.

The principal agent theory is opposed by the more collectivistic approach of the stewardship theory. This theory regards family business owners as long-sighted stewards which are indulging in long-term business goals. It suggests that through steward behavior of family business owners, agency costs can be reduced and financial and non-financial performance may be improved. The applicability of stewardship theory to family businesses has already been highlighted in various works (J. J. Chrisman, 2019). However, there are only a few studies so far that can empirically support the aspects of stewardship theory (D. Miller et al., 2008; Verma & Viswanathan, 2019).

Knowledge of stewardship theory is important for this thesis as too strong control mechanisms as well as too scattered management responsibilities interfere with strategic management as well as have a negative impact on performance. Literature is inconclusive whether principal agent theory or stewardship theory better promote business performance of family businesses. In addition, the application of these two theoretical approaches is limited, because in particular the principal-agent theory is based on assumptions that can only be partly held in the field of family business research. It assumes that the maximization of business profit is the primary and only objective of an organization. However, it has been shown with respect for family businesses, that these do not only pursue financial objectives within strategic management. In terms of strategic management both theories provide a theoretical framework how behavior can be triggered and influenced by incentives. Moreover, steward's as well as agent's behavior is deeply influenced by the principal especially when it comes to strategy formulation and execution.

Last but not least, the resource-based theory delimits itself from the principal agent theory and stewardship theory by putting less emphasize on behavioral aspects and focusing on the internal capabilities of the business. It does so by examining the permanent premises which are necessary for resources and capabilities can thrive under the management's control to secure the survivability of the business.

In contrast to the so far presented theories to explain performance between businesses, it should be added in this sense to the theories of this studies. Nevertheless, the RBV theory is also subject to the assumption that the gaining of profits through competitive advantages is the primary objective of a business, although Chua et al. (2003) note that to strategic management can be extended by a non-financial perspective. With respect to the extension of the RBV to a non-financial perspective, they state, "[I]t is possible to have an RBV of the family firm as a partial theory dealing with how the firm might achieve wealth creation. "Accordingly, non-financial interests of the corporate management can lead to the creation of primarily non-financial resources such as human and social capital, which in turn can have a positive effect on the competitive advantage of the business.

3.7 Goal Setting and Key Performance Indicators as the Basic Indicators of Management Practices

It is often stated in literature that family businesses and non-family businesses differ in their financial and non-financial goals (King et al., 2022; Williams, Pieper, & Astrachan, 2018). Research in the family business area is mainly engaged in finding a connection between family involvement and family related goals (Williams, Pieper, Kellermanns, et al., 2018a). Many scholars agree that even family related goals are alternating among family businesses (Bettinelli et al., 2022; Rau et al., 2018). The consequences of differences of organizational behavior can only be assessed with an evaluation standard. The standard which is commonly used in the field of family businesses is business performance (Chua et al., 2018a; Sciascia & Mazzola, 2008). Consequently, this chapter is devoted to the process underneath the formation of objectives in both organization forms to expand the understanding of family businesses.

The remainder of this chapter is structured as follows: The first section of this chapter describes the various goals of family and non-family businesses. Next, the theories of goal setting and and key performance indicators are presented. In the final chapter the performance of family and non-family businesses is discussed with special regards to financial and non-financial performance metrics.

Goals and goal setting

To set goals is a central element of leadership in organizations independent of their ownership type. Leadership by goal setting is a well-established practice in German businesses especially with an industrial or manufacturing background (Istipliler & Ahrens, 2019).

The use of goals in organizations can serve many different purposes but furthermore depends on the respective perspective. Goals can for example either serve planning purposes to clarify which resources are scheduled for which task or reporting purposes, to provide measurability which contributions add to success (Kabeyi, 2019).

Whereas the process of goal setting is crucial for organizations to develop strategies for multidimensional growth in financial and non-financial aspects with regards to economic wealth for all organizations and in particular SEW for family businesses (Williams, Pieper, Kellermanns, et al., 2018b). The determination by what approach business goals shall be developed and accomplished is a valid part of the goal setting process. In addition, the gathering and usage of resources for goal setting needs to be decided.

One of the first works to investigate goal setting and many times cited, were published by Komorita & Chertkoff (1973) and Cyert & March (1963). They described goal setting as a process of organizational environmental interactions. The organization consists of individuals which assemble themselves in coalitions with similar goals. The size of the coalition groups is unlimited, whereas hypothetically negotiating power increases with their size. In the next phase the negotiated goals are set, fixed and commonly operationalized as budgets. In the future, organizational goals are finalized into organizational policies and actions. As a regularly procedure the goals are required to be checked and controlled. Depending on internal and external circumstances (e.g. stakeholders) the goals need to be adjusted (Carper, 2015). Consequently, Stevenson et al. (1985) suggest that the obstacles in defining organizational goals are similar to the obstacles of defining coalitions. Furthermore, they propose that coalitions are founded and shaped by inconstant organizational resources, conflicts by organizational members and to increase negotiating power. Presently many models are lacking attention for details and thoroughness which leads to insufficient explanations on how special goals are set and what are the impacts of environmental impacts on these goals (Carper, 2015). Although many researchers have investigated the process of goal setting no thorough conceptual model could be found to date.

Locke & Latham (1984) classified the goal setting process as a precondition to enable employees to deliver high level performance if they already have acquired the mindset to perform. Moreover, according to Locke & Latham (2019) goal setting is characterized by three key aspects: goal specificity, goal difficulty, and goal commitment. Goal specificity is defined as not ordering employees to perform in the best possible way which does not increase performance but to define the goal in the narrowest and accurate sense (Chang et al., 2019). The second key element, goal difficulty, can be described as a goal which is not unrealistic to achieve but challenging to the employee (Locke & Latham, 2019). Finally, a high level of commitment and a high-quality performance measurement system is necessary for managers to achieve difficult and challenging goals by being able to estimate which goals are feasible and which are not (Webb, 2004). According to van Assen (2021), participation of managers and employees during the goal setting process is very important as it provides in-depth knowledge to direct their efforts and to clarify their goals. Furthermore, participation during goal determination enables subordinates and managers to improve commitment and responsibility for their actions (Aunurrafiq et al., 2015).

Dou et al. (2020) and Lv et al. (2020) observed that goal setting in family businesses are closely connected to the concept of SEW. Hence, owning family’s decision processes relate to the SEW dimensions binding social ties, emotional attachment of family members to the business, and the renewal of family bonds through dynastic succession (Berrone et al., 2012). With regards to family businesses in goal setting many scholars often simplify goals connected with ownership into single goals (Williams, Pieper, Kellermanns, et al., 2018b). For example, goals are understood as business profits. Torchia et al. (2018) suggest distinguishing goals into their non-financial and financial nature. They conclude that when businesses are obliged to make strategic choices, they take financial as well as non-financial goals into account. A further differentiation of goals for family businesses can be done into internal and external business concerns which will be defined in this chapter as family and non-family related non-financial goals and family and non-family related financial goals (Kotlar, Signori, et al., 2018; Kotlar & De Massis, 2013). Further complications arise because not all organizational goals can be matched to a sole category (Murmann & Probst, 2018). As an example, serve family members in management positions. From a management position, family members can execute family control which is a family related financial goal. Additionally, this position helps to increase the family's identity and the family's relationship with external stakeholders which can be consecutively classified as a family related non-financial goal and a non-family related non-financial goal. It shall be taken into further consideration that goals are often linked to each other and influence themselves in positive and negative ways, independently on which classifications they belong to (Murmann & Probst, 2018). Therefore, goal diversity in family businesses can be considered higher compared to non-family businesses (Kotlar & De Massis, 2013). Family members are trying to achieve a great variety of goals and research suggests that goal alignment is almost not feasible (Villanueva & Sapienza, 2009). Furthermore, goal attainment probability increases with the numbers of members taking part and if they are pursuing a united strategy (Swab & Johnson, 2019).

Löhde et al. (2021) pointed out that from a family's perspective outsiders are inducing the self-serving behavior of the owning family and therefore increase the goal alignment of all shareholders. Some scholars suggest that asymmetric information inhibits goal alignment even when the members are willing to cooperate (J. J. Chrisman et al., 2014). Odom et al. (2018) suggest that the most important factor for goal attainment of family related goals is that members are aligned to a common goal.

To account for differences in goal setting behavior between family and non-family businesses research has started to utilize behavioral theory to close this gape. In particular, the processes of pervasive coalitions, with or without family members, have an impact on goal setting. J. J. Chrisman et al. (2012) used components of behavioral theory as well as stakeholder theory to argue that family and non-family businesses are setting themselves various goals. Additionally, they propose that family businesses tend to focus more on family related non-financial goals.

Murmann & Probst (2018) and Kotlar & De Massis (2013) examined the role of the goal assignment processes in family and non-family businesses applying the basics of behavioral theory of the business. They found two different kinds of alignment processes which work by either professional social interaction or familial social interaction. Both alignment processes have in common that after the first negotiating phase, a stabilization phase must follow in order to decrease goal diversity (Kotlar & De Massis, 2013). Additionally, they take as premise that individuals can only access a limited amount of cognition and information. Hence individuals can be considered adaptively rational (W. M. Cohen & Levinthal, 1990; Pierce et al., 2008). Professional social interactions take place solely in a business environment which includes management and board meetings and require well-structured schedules and well-defined and distinct roles to occur. The stabilization consists of the way organizational goals are formulated namely, by formal contracts and agreements. During the negotiating process rewards and sanctions can be expressed. On the contrary, familial social interactions can proceed in business as well as family environments such as formal meetings and private meetings. During these meetings roles are only weakly defined. Negotiating is done in familial social interactions by showing attachment and value abstraction. The stabilization is created by social control in terms of mutual trust, customs and moral concepts. Behavioral theory only partly explains how goal setting works due to its underlining of partial rationality of individuals and particularistic elements of family businesses (Dou & Wu, 2022). Furthermore, the behavioral framework the goal setting is undergoing has a deep impact on the outcome and the related business performance. In the literature review of Mazzelli (2015) and Rovelli et al. (2022) family business literature was analyzed with regards to the theoretical framework of behavioral theory of businesses. The conclusion was that there are few studies which empirically analyze the origins of goal setting processes through internal organizational factors and the characteristics of the dominant coalitions in family businesses. Therefore, there is a lack of analysis on the impact of non-financial goals in terms of strategic and organizational change behavior between family and non-family businesses. Additionally, Mazzelli (2015) suggests that the utilization of behavior of the business should be connected to non-financial performance parameters and taking organizational search and change into consideration at the same time. Yates et al. (2022) support the notion that the embeddedness of a dominant family coalition in small and medium companies leverages strategic innovation decisions and goal setting processes, through the quantity of external resources which companies utilize for acquiring resources which are mandatory for the innovative processes. Moreover, Yates et al. (2022) use the behavioral theory of the business to formulate that the aim of preserving SEW and the cognitive diversity of responsible family decision persons entices family coalitions to less diversified external partnerships to progress their innovation attempts. Finally, studies which have adopted the behavioral theory of the business approach have drawn the conclusion that the composition and characteristics of the family coalition have a dominant impact on goal setting interplay (J. J. Chrisman et al., 2012; Rau et al., 2019b; van Gils et al., 2019).

Shareholder perspective and stakeholder theory

Many studies provide ample evidence that a concentration of ownership or rather shareholders (i.e. family businesses) leads to performance edges when compared to businesses with dispersed ownership or rather shareholders (C. B. Astrachan et al., 2018; Soleimanof et al., 2018). These highly interesting results are in conflict with agency theory. According to agency theory the form of ownership should be irrelevant, if the precondition of achieving the corporate purpose is mostly given. Agency theory and shareholder perspective align in the fact that shareholders are only attempting to maximize their personal wealth. Hence, they demand to maximize the economic value and performance of the business (Heino et al., 2020; M. Jensen, 2019). On the contrary, the shareholders perspective fails to consider the financial and non-financial traits and persuasion of interests by other groups. The description of this group is covered by stakeholder theory.

Stakeholder theory helps to explain how the goal setting processes work under the stakeholder's impact. Its theory was originally developed by Freeman (2015) and has since then become a key element in management research and thinking. Stakeholder theory suggests perceiving organization as "a grouping of stakeholders" with the goal to comprise their interests, needs and viewpoints." (Friedman & Miles, 2006, p. 1). The result is an integrated management model which pursues the idea that businesses shall not only utilize resources on stakeholders but also consider the requirements of other business components such as suppliers, customers and employees (Freeman et al., 2010).

Harrison et al. (2019) and Heckert et al. (2022) concluded that there are 53 stakeholder definitions which are either of strategic or normative nature. Normative definitions are broader and are likely to be detached from the business organization as they are targeting to pay attention to classes of potential stakeholders that may be missed in day-to-day business of the organization (Friedman & Miles, 2006). Additionally, the normative aspect means that stakeholders are treated with morally and socially responsibility (Freeman et al., 2021). The strategic stakeholder's perspective argues that managers should focus on key stakeholders in order to maximize shareholder value. Companies regard their stakeholders as a constituent of their environment. The business relationship to stakeholders must be controlled in order to ensure their financial performance (Danso et al., 2020). According to Freeman et al. (2010, p. 46) stakeholders are defined as "any group or individual who can affect or is affected by the achievement of the organizations objectives". Shubham et al. (2018) improve on this definition by distinguishing further into primary and secondary stakeholders. Primary stakeholders are taking part in the business value-added chain by the manufacturing of products and providing services. They are providing resources like financial and human capital and are therefore responsible for the survival of the business. Hence primary stakeholders consist of constituents such as customers, employees, distributors and suppliers. Secondary stakeholders are classified as groups which have weaker impact on the business and vice versa. At the same time, they are financially involved in the business and only have a weak influence on its survivability chances. Secondary stakeholders can be defined as governments, media and special interest groups. From stakeholder theory results that the support and resources of stakeholders are strongly impacting the business performance (Jurgens et al., 2016; Su & Tsang, 2015). Stakeholder theory expands to stakeholder management when companies are aiming for strong and trustful relationships with stakeholders by closely orienting themselves to the stakeholder's goal (Hickman & Akdere, 2019). Stakeholder support is mandatory for long-term success of the business. Stakeholder support is nurtured by a positive financial and non-financial image (Motoc, 2019). Iaia et al. (2019) and Uhlaner et al. (2004) found evidence that family involvement in the business has a strong impact on family business relationship with stakeholders such as employees, customers and family members. Additionally, Sanchez-Ruiz et al. (2019) identified a positive correlation between family involvements in the management and business human and social capital. This correlation between family involvements and a stronger inclination towards non-financial goals can be explained to a certain extend by considering the family as a stakeholder and its influence on the business (J. J. Chrisman et al., 2012). That is why family businesses are able to maintain long-term relations with their stakeholders (Carney, 2005; Memili et al., 2018). Moreover, the maintaining of long-term stakeholder relationships is supported by the motivation of family businesses to protect their social capital (Gomez-Mejia et al., 2011). Campopiano et al. (2019) support the results of the former studies by showing that family engagement is strongly impact the philanthropic conduct of family businesses. Similarly, Dou1 & Su (2014) claim that family control and family ownership are positively related to the quantity of their donations. Furthermore, the non-financial goal of the owning family to maintain SEW inclines the owning family to take care of stakeholders as well (Belda-Ruiz et al., 2021). Sadkowska (2018) provided empirical evidence that increasing family control adds to the probability that businesses show benevolence to their stakeholders. Habbershon et al. (2003) conclude that strong stakeholder relationships lead to significant competitive advantages for family businesses. J. J. Chrisman et al. (2012) combine behavioral theory and stakeholder theory to argue that both family and non-family businesses are trying to achieve a diversity of goals, nevertheless the goals of family businesses are more probable to consider family-related non-financial goals. Moreover, they argue that the importance of family-related non-financial goals is linked to the cross-generational family control and family's engagement with the business. From the studies of Heino et al. (2019) and Le Breton-Miller & Miller (2009) assume that family businesses differ from the agency theory model to not only maximize shareholder value but to also follow stewardship theory in order to accomplish social responsibility, self-realization and legacy.

Organizational goals

Organizational goals reflect the final outcome of the goal setting process in alignment with top management level in a business. More importantly, they clarify the mission of the business, support planning, facilitate assessment and control of performance and motivate employees (Islami et al., 2018). For example, organizational goals provide employees with direction and guidance when they have to make decisions.

Commonly, organizational goals are defined as an outcome which is measurable as organizational performance (Josip Kotlar et al., 2017). A general assumption of economic research is the legitimacy and supremacy of shareholder value maximization which results in the setting of financial performance goals, although the impact of goals on business performance is less well analyzed (Battilana et al., 2022; Hart & Zingales, 2017).

Furthermore, it is argued that the dominance of financial performance aspects is based on their measurement by financial metrics. Factors such as the opinion that the management's most important task is to create financial value for the business owners Dang et al. (2019) and that financial performance is used many times as a measurement tool for management quality (Augustyn et al., 2021) ,support the observed dominance of financial goals. The reason why business goals are commonly based on financial metrics is due to the fact that they result from budget processes and management control (Pešalj et al., 2018). Frequently, it is required of managers to give an account on financial business performance to internal as well as external stakeholders (Agustia et al., 2020). In order to provide the reports on business performance easily understood by external stakeholders, the report language should be stemming from financial measures (Nilsson & Olve, 2001). Financial goals are often reported as budget or the desired result of financial metrics which is closely related to their definition.

Nevertheless, according to (Baum et al., 2005) businesses also often try to achieve other goals such as productivity, sales, market share, and reputation. Additionally, scholars are starting to explore and divide the heterogeneously character of organizational goals in financial and non-financial business aspects (Fiegenbaum et al., 1996; Kotlar, Signori, et al., 2018). Moreover, research has mainly focused on investigating the impact of organizational goals on business behavior and performance. Even more, various parallel goals may impact each other and if only single or small amount of performance measures are used. The result can be interacting goals where a single goal increases or decreases the outcome of another goal (Greve, 2008). Current studies appear to support the notion that business which for example differ by governance, ownership, industrial sector and size may try to achieve different goals. These differing goals can for example induce conflicts between majority and minority shareholders, family and non-family members (De Massis et al., 2019). Chua et al. (2018) and De Massis et al. (2020) stressed the importance of understanding the influence of the definition and specification of these goals on their variety and their influence on business performance. For example, family businesses literature indicates that financial performance goals are not the primary goals of family businesses (C. A. Alves & Gama, 2020; J. H. Astrachan et al., 2020; King et al., 2022).

In this chapter the variety of organizational goals which concern family and non-family businesses shall be discussed. Consequently, the process of how goals are set in businesses is investigated. Finally, it is described how the most important of financial and non-financial goals are transformed into selection of key performance indicators.

The goals described in this subchapter are directed at both organization forms. Financial goals are defined by literature as monetary perquisites of an organization which result from their future needs for funding. Family and non-family businesses alike are exposed to global competition which leads to increase cost pressure (Lenz, 2021; Mitter et al., 2021). Cost pressure increases the demand for the financial goal of management control. To enable tighter control of financial performance, metrics need to be closely monitored (Peljhan & Marc, 2018). Additionally, budget and financial goals need to be set accordingly and aligned with individuals (Otley et al., 1995). Albeit, management control should be seized in non-financial terms such as market share, employee engagement and customer satisfaction, financial metrics are mainly used still they might be inaccurate. From the financial metrics stakeholders might recognize the business as highly lucrative nonetheless this is only the short-term perspective therefore financial metrics do not reflect the holistic picture (Rowe & Morrow, 2009). Linder & Foss (2018) conclude that the business goal a business chooses also depends on the business competitive environment and strategic direction. At the beginning of the product life cycle a business may choose high ROI as a financial goal to compensate for risks taken. As soon as the product achieves the maturity stage, the business is obliged to diversify the product due to enhanced competition and a new strategic situation. This is when financial goals can change to sales growth and earnings per sales. Family businesses and non-family businesses can generate financial goals from multiple financial metrics such as return on assets, operating profit margin, asset turnover, return on equity, the ratio between net profit and the ratio between operating profit and the owner's investment in the business (Williams, 2018). Independently, if the business is classified as a family or non-family managed the survival of the business is the most important goal of any business. From a general organizational perspective literature mostly agrees that most important factors for business survival are: business size, industry area, export activity, and innovation activities (Forte & Salomé Moreira, 2018; Mas-Verdú et al., 2015; D. Zhang et al., 2018).

Admittedly, for a family business the business is inseparably connected to the family. Therefore, when the business survival is in danger the family is obliged to invest private property to save the business. Additionally, to prevent this from happening family businesses are much more prone to economic risk (Murmann & Probst, 2018). Current research seems to indicate that family businesses have a higher chance of survival than non-family businesses. Carney (2005) argues that the higher survivable rates of businesses stem from their enhanced efficiency. Family businesses can be considered more efficient because they are more careful in the utilization of their resources due to the fact that they are paying their activities with their own money. Additionally, family businesses depend on their internal financial resources and therefore have a higher risk aversion for avoiding business opportunities and inefficient diversification (Miroshnychenko et al., 2020). Nevertheless, family involvement can also decrease the chances of business survivability. Survivability can be negatively affected by the lower tendency of family businesses to diversify and to enter cooperatives (Alayo et al., 2021).

Especially, the entering of cooperatives increases the survival chances of family businesses greatly but at the same time lowers their SEW (Murmann & Probst, 2018). Moreover, the age of the business can have an impact on survivability. Businesses in their early years are most fragile to bankruptcy as resources are in short supply (Węcławski, 2018). In the founding age family businesses therefore counteract with an adjusted board composition which not only includes the founders but also appoints board members for legal advice and technical expertise (Le Breton-Miller & Miller, 2013). In later stages, when the business has already evoked to a more stable level, the share of family members is increased to enhance the grip of the family on the management. During the last stage, business ownership grows more diluted among different family branches therefore SEW and emotional attachment is decreased which can lead to the conversion of the family business to a non-family business.

Business growth can be considered as another crucial concept in the area of financial goals. Business growth is linked to the qualitative and quantitative development of improving services, products and internal business processes. Businesses can grow in two ways either voluntarily or involuntarily. Involuntary business growth especially occurs in family businesses when families provide a high-risk aversion and customers demand higher supply rates or product innovation (Hisrich & Drnovsek, 2002). In contrast, businesses can choose to evolve voluntarily to reach their goals and fulfill their plans. Especially, in small business growth can be regarded as the skill to seize opportunities and adjust the business accordingly to take them. For family businesses sustained growth is particularly important hence only long-term growth can meet transgenerational succession. According to Bodlaj et al. (2020), diversification sets the biggest difference between the seizing of growth opportunities in terms of product and market innovation. Rondi et al. (2022) acknowledge that family businesses tend to rather not develop new products to enter new markets but keep on improving already established products. Berrone et al. (2012) conclude this behavior stem from family member's identification with business and their products but not the market. Moreover, family businesses are more conservative with their business activities (Aloulou, 2018). The owning family has not in all cases a positive impact on the growth of the business. They can inhibit growth rates by lack of leadership, resistance to change, economic dogmatism, unsolvable family conflicts and limited financial resources (Diéguez-Soto et al., 2022; Kets de Vries et al., 2007)

Due to the occurrence of many risk factors family businesses must carefully outweigh growth opportunities against risk. In their study Stenholm et al. (2016) link business growth to entrepreneurial orientation. Entrepreneurial orientation is defined by the business strategic direction, practice of decision-making and it operates on shop-floor level (Al-Dhaafri & Alosani, 2020; Kiani et al., 2022). Murmann & Probst (2018) made the claim that entrepreneurial level of the business affects the seeking for new ventures, penetration of new markets and finally enhances business performance. On the other hand, a low entrepreneurial level hampers product innovation and damages long-term performance of the business (Nakku et al., 2020). J. Lee (2006) found evidence that family ownership affects family businesses with higher growth rates than non-family businesses. High growth rates in businesses positively affect the achieving of business goals and additionally ensure business survivability and wealth (Murmann & Probst, 2018).

Despite the advantages of business growth, small and medium sized family businesses tend to avoid business growth due to the chance of indebtedness and fear of control loss over the business. The fear of the consequences of growth is not limited to small or medium sized but also applies to large businesses. The distinct differences between small and large businesses stem from the scarcity of resources in small businesses which pave the way for business growth (Yusoff et al., 2022). During the growth process in family businesses growth is tied to shift of responsibility towards family relatives, family relationships and intangible capital

(Colli, 2011). That is why growth in family businesses is often considered more sustainable and long-term rather than profitable (López-Pérez et al., 2018). The transfer of responsibility to relatives, reproduction of family ties and the creation of immaterial capital are respectively very delicate, most delicate and extremely delicate. This happens during the process of expansion and growth of the family business (Chukwujioke Agbimi, 2019). This explains why growth is often more sustainable than profitable (Coad, 2009). Many studies have investigated the relationship of family and non-family businesses through profitability (Bojorquez Zapata et al., 2014). The opinion in literature on the correlation between the survival of a business and its profitability is unclear at the moment (Bojorquez Zapata et al., 2014; Maury, 2006).

Family related financial goals

One of the most important family related financial goals is to maintain control over the business by succession (Williams, Pieper, & Astrachan, 2018). Moreover, this kind of control serves as the main distinction between family and non-family businesses. Family control is not limited by a certain time frame but is passed on from generation to generation. Additionally, it is an important precondition for the existence of SEW (Shen, 2018). Gomez-Mejia et al. (2003) acknowledge the fact that control can also be associated with an emotional attachment to the business and therefore is covered by SEW (Swab et al., 2020). Family businesses can be controlled by setting values and the mission for the business (Habbershon et al., 2003). Another family-related financial goal is family wealth which relates to the property of family business. The wealth of the family business often inflicts conflicts on its members as a fair splitting and disbursing of the assets is difficult to manage (Caputo et al., 2018; T. Zellweger & Kammerlander, 2015). Additionally, further conflict potential is generated because the family property is hard to separate from the business. The situation of the disbursement of family members even complicates further when considering that depending on the family member different level of access and wealth extraction are possible. Therefore, to avoid conflicts family businesses are strictly separating the family and business assets (Kubíček & Machek, 2020). According to Williams et al. (2019) the family business capability of paying dividends can be limited by growth generated by funding. Olson et al. (2003) found evidence that cash flow issues are negatively correlated with the awareness of family business achievement and therefore paying dividends and cash flow are important financial goals for family businesses. According to Botero et al. (2018) the financial goals of family businesses or non-family businesses are mainly consisting of growth, dividends, ROA and debts. Astrachan (2010) suggested that family businesses are generally more in control of financial goals because it is assumed that family members are more aware of the effect financial goals have on one and another. In addition, Astrachan (2010) conclude if family businesses are aiming for low financial return goals compared to more market-based competitors, this can lead these businesses to follow more projects. Financially the outcome of projects is hard to assess that is why in the long-term a higher number of projects result in competitive advantages Asker et al. (2015). Their results indicate that publicly traded companies tend to invest less in new projects compared to privately held companies. They justify their results by the strong focus on short-termism in terms of financial performance.

Non-family related non-financial goals

This subchapter explores non-financial goals which are not solely characteristic for family businesses. Mostly non-family related non-financial goals are explained by stakeholder theory.

Freeman et al. (2010, p. 46) defines stakeholders as "any group or individual who can affect, or is affected by, the achievement of an organization's objectives". Stakeholders can be divided into internal and external stakeholders. Internal stakeholders can be described as those individuals that are participating in working activities which includes owners, if present family members and employees (Harrison et al., 2019). External stakeholders can be classified as stakeholders that are not connected to the business by employment, ownership or family membership namely customers, governments creditors and local community (P. Sharma, 2004).

Traditional economic theory suggests that when companies make decisions, they should take the interests of the most important stakeholders such as investors, employees, suppliers and customers into account (J. B. Barney, 2018; Freeman et al., 2021; Moon & Hyun, 2009). Healthy stakeholder relationships between the business and stakeholders help the business to achieve long-term survival and business success (Manzaneque-Lizano et al., 2019; Vitolla et al., 2019). This promotes stakeholder relationship to a valuable non-family related non-financial goal which can be divided further into internal and external business relationships. These relations will be investigated further.

Moreover, Murmann & Probst (2018) suggests that non-family related non-financial goals are skewed reflexions of family related non-financial goals. As an example, serve the goals family social status and external business relationships which classifies how the family or business is regarded by external parties. This relates to the relationship of emotional value and SEW. Although both models show an overlap, emotional value focuses on non-family and SEW on family businesses.

Internal stakeholder relationships

The goal of internal business relationships put the business relationship with internal stakeholders namely employees, governance and family into the focal point and try to achieve strong and sustainable internal stakeholder relationships (Lv et al., 2020; Mitchell et al., 2011). The reputation of a business largely relates to the stakeholder's perception how the business meets its financial and non-financial objectives (Motoc, 2019). Businesses which are negatively related due to their breach with certain stakeholders can spread distrust and disloyalty among internal stakeholders (Crane, 2020). Gözen & Ulgen (2018) investigated that internal stakeholders affect the financial business performance in family as well as non-family businesses because the demands of external stakeholders are conducted by internal stakeholders in the business. They argued further, that because of the unique organization of internal business processes in each business, the effect of family members creates a network in family businesses that cannot be replicated by non-family businesses. This family network pays special attention to internal stakeholders which helps financial performance. Moreover, family businesses regard internal stakeholders as an extended arm of the business due to the attempt to increase SEW in the Binding Social Ties dimension (Berrone et al., 2012; Neckebrouck et al., 2018). Moreover, Huang et al. (2009) investigated the stakeholder saliency in family businesses and found that family businesses put more emphasize on internal stakeholder satisfaction compared to external customer satisfaction. Razzak & Jassem (2019) noted that social ties are likely to spread also to internal non-family stakeholders such as employees. Furthermore, the relationship of these ties reflects well on the family's reputation as the reputation is positively linked to employee satisfaction. Almeida & Coelho (2019) continue this train of thought by arguing that to the business reputation positively impacts the employee's reputation and increases the employee's self-confidence. On another page, Fang et al. (2012) argue that family businesses enhance internal stakeholder management to increase social respectability and professionalism of the business. Block

(2012) notes that family businesses are reluctant to quit employees due to potential reputation losses. Shafeeq Nimr Al-Maliki et al. (2022) indicate that industry area and business size have a strong influence on affinity for enrolling non-family members to family business owners. In their literature review Tabor et al. (2018) confirmed that family business size is a major factor concerning the level and kind of involvement of non-family members in the business. From the internal stakeholder perspective family employees of family businesses are mainly forming strong bonds to the business because of the following reasons "sense of family ownership ", "the desire to improve upon family wealth " and "performance rewards "(Addae-Boateng et al., 2014, p. 243). Moreover, Addae-Boateng et al. (2014, p. 243) propose that good internal stakeholder relations in non-family businesses can be found when "performance rewards ", „satisfaction with and love for their jobs ", and "the fear of being sacked for poor performance ".Neubaum et al. (2012, p. 4) argue that due to the "unique fraternal, clan-like organizational system" of family businesses, harvesting the potential advantages by putting more weight on internal stakeholder relationships is facilitated compared to non-family businesses. Additionally, when meeting the demands of the significant internal stakeholders often the external stakeholders can be satisfied by the same means.

External stakeholder relationship

When comparing family and non-family businesses Schellong et al. (2019) note that family businesses are not shielded from external pressures by family ownership but are in fact more sensible to negative evaluation by external stakeholders and therefore put more emphasize on their relationship to external stakeholders due to moral motivation and to prevent SEW losses through socially irresponsible behavior that is why the identity of the owning family is very close to the business. Hence, external stakeholders regard the business as an extension of the family. Moreover, the family reputation is linked to the name and the image of product and services it sells (Sageder et al., 2018). On the same page, scholars have shown that family businesses look strongly after customers (C. B. Astrachan et al., 2018), environmental performance (Cordeiro et al., 2020) and are avoiding bad social practices (G. W. Dyer & Whetten, 2006). Therefore, family businesses avoid taking actions which may shed light on them as irrespective corporate citizens (de Massis, Frattini, et al., 2018). In addition, Beck & Pruegl (2015) and Yates et al. (2022) showed in their study that strong bonds between the business and external stakeholders are formed by trust and mainly depend on the reputation of the family business. According to Zellweger et al. (2019), family social status and external stakeholder relationships are strongly related. They argue that this relationship is characterized by the family's financial and non-financial contribution to the local community and by not rising concerns and conspicuities (G. W. Dyer & Whetten, 2006). The strong bonds to the local community do not only show benefits in terms of reputation but also in times crisis contributions by the community are possible (W. G. Dyer, 2018; le Breton-Miller & Miller, 2022). Especially businesses who are stemming from the community show enhance bonds to the community (López-Pérez et al., 2018). External stakeholder management of family businesses can also be operationalized by exceeding environmental goals (Dekker & Hasso, 2016). Family businesses show a generally higher environmental performance compared to non-family businesses, although literature remains inconclusive how this affects financial performance. The compensation most likely is provided by "expropriating wealth from nonfamily shareholders" rather than non-financial incentives (Dekker & Hasso, 2016, p. 28). Softening the assessment of the external stakeholder bonds importance at the beginning of this subchapter, Aparicio et al. (2017) classify external stakeholder relationship goals as "create and maintain ties with local community" and "assume commitments to society and the local networks" of mediocre importance.

Family-related non-financial goals

Family-related non-financial goals are defined as goals which only affect non-financial issues and family outcomes (Murmann & Probst, 2018). Consequently, there is supremacy of social and emotional goals which capture family identity, harmony and reputation (Pongelli, Valentino, et al., 2021). According to Kotlar & De Massis (2013), these goals are the most important ones. Dolz et al. (2019) made the claim that family ownership is positively related to the degree of family-related non-financial goal commitment.

A goal which especially serves the self-understanding of family business is family identity. The combination of the family and business social background leads to the inimitable identity of family businesses (Perret et al., 2017; A. Sharma & Dave, 2014). Family identity represents and emits the following aspects of SEW family members' identification with the business and emotional attachment (Ng et al., 2019). In particular, if the family name is part of the business name the differences in actions, responsibilities and accountabilities between family and business disappear and therefore increase the identification of the family with the business (R.

A. Baron, 2008; G. W. Dyer & Whetten, 2006). Transgenerational succession enables the family business to pass values and the business mission on from one generation to another and thereby transfer the family identity (Gomez-Mejia et al., 2010; Murmann & Probst, 2018). The family's emotional attachment to the business is shown according to Ma & Mattingly (2022) by satisfying the family's expectations for the future and serving as reliable basis in the past for the family.

The goal of family harmony serves the purpose to prevent conflicts and enhance family business unity (Murmann & Probst, 2018). Ruiz Jiménez et al. (2013, p. 269) provide empirical evidence which supports that family harmony and business performance are correlated. They associate family harmony to "higher levels of trust, participation and better work climates than non-family businesses". Family harmony is connected to SEW by the binding of social ties. Löhde et al. (2021) acknowledge the fact that these ties trigger reciprocal trustfulness, dedication to the business, team spirit and altruism. Randerson & Radu-Lefebvr (2021) proposed a mechanism which fosters family harmony. Family members are taking to higher degree the welfare and well-being of employees into account. At the same level, employees react with loyalty and dedication. If family members do not behave altruistic, they would inflict damage on the business. On the other hand, family members behaving altruistically can also give rise to problems and difficulties. Although, altruistic decisions are often aiming to maintain SEW and harmony, they may not be aligned with non-family stakeholders from the financial point of view leading to agency conflicts (Richards, 2022). Additionally, Murmann & Probst (2018) pointed out that also problems like dependence on and exploitation of the family's generosity. Moreover, if altruism is not shared equally in for examples branches of a family business, this can lead to jealousy and negatively impact overall altruism.

The reputation of the business perceived by the community is captured in the goal family social status. The family social status is defined by family identity and how the family business is regarded by the community. Families put emphasize in their social reputation as it provides them with feedback for their actions (Murmann & Probst, 2018). The social status consists of the family's financial and non-financial offerings to the community (Seaman et al., 2018). Besides the contribution of charity to clubs and associations, an important factor is the employment of members of the community to provide them with secure employment and a livelihood (Berrone et al., 2010). Family social status can act as a mediator between family control and SEW. As a precondition, only a family business with a high-level status can enable a high degree of family control which increases SEW. Families only would like to be associated with the business if the social status of the family business has a high level (Murmann & Probst, 2018). Schulze et al. (2003) made the claim that family business social status positively affects the confidence level of family and non-family members in the business. Additionally, it aids the creation of uniform goals among the staff in the business. Lastly, if engagement of the family with the business is understood by employees, the family social status can positively influence employee engagement. In other words, if the family social status decreases, also the engagement will decrease (Murmann & Probst, 2018).

Key performance indicators

Key performance indicators are derived indirectly from its business goals and directly from its targets. They serve the purpose to check whether the business is achieving its desired targets. Target achievement is directly correlated to business performance. Therefore, the selection of key performance indicators can also be regarded as a performance measurement system. Empirical studies note that key performance indicators are widely used in businesses and have a high reputation for strategy implementation (Bassen & Kovács, 2008; Hristov & Chirico, 2019). Additionally, many scholars suspect a positive impact of the application of key performance indicators on organizational business performance (Gleich, 2011; Pambreni et al., 2019). In research there are many different definitions of KPIs. In this chapter KPIs will be defined according to Brooks (2005, p. 46) "KPIs are quantifiable and strategic metrics that measure an organization's critical success factors" because this definition is accurate and comprehensive at the same time and frequently applied by scholars (Roxana-Ioana, 2016; Scheidt & Chung, 2019). Critical success factors are classified as elements of a business that strongly impact the present and future success of the business and are therefore quantified and measured as KPIs. Consequently, if a business does not react to unplanned changes of KPIs, it will probably not be able to achieve its goals (Pérez-Álvarez et al., 2018). Increasing competition, globalization and rapid technology advances forced the up-levelling of innovative work practices, organizational learning and knowledge management to significant competitive advantages (Abbas et al., 2020; J. Ferreira et al., 2021).

Hence, businesses have started to more closely examine the usage of key performance indicators in order to step away from traditional methods and to approach new methods to assess their performance. Many scholars consider financial reporting systems can only insufficiently clarify the additional wealth generated by internal financial assets, new relations, research and development (Lev, 2018). Additionally, in the past financial metrics like profit, revenue and earnings per share (EPS) were used to quantify business success by financial markets (B. J. Ali & Anwar, 2021; J. Smith, 2022). According to DiPiazza Jr & Eccles (2002) statements of financial position only explain by about 20 percent the market value of businesses. Moreover, they continue to argue that approximately 80 percent of the business wealth is based on immaterial assets such as non-financial drivers. The publication of KPIs enables markets to quantify business success by the point view of managers' goal achievements. These captures financial as well as non-financial metrics. Hence, non-financial metrics for performance measurement have come to interest of many practitioners and researchers (Fortuna et al., 2020; Zarzycka & Krasodomska, 2022).

KPIs are numerical metrics to relate on the financial and non-financial performances of the business. These correlations include either be business activities from the past and present but also future goals to check their attainability (Krasodomska & Zarzycka, 2020). KPIs yield the advantage that they reduce complexity and therefore capture correlations in their depth to swiftly perceive situations. In order to achieve goals a tight control is required. KPIs are very important to influence the organization's behavior in terms of operating control (Olve et al., 2010; M. J. E. Werner et al., 2021).

Financial control is applied by controlling the economic progress of the desired direction of the business. This financial control improves the understanding of the business environment that the business is facing and additionally to enhance adjustment processes to achieve goals depending on the circumstances. Indicators can aid if they are not simplified too far. To prevent KPIs from being too much diluted, it is necessary to keep some rudimental information (Parmenter, 2015).

Organizational goals are critical for the strategic alignment of organizations and their success (Ghobakhloo & Fathi, 2020). Basili et al. (2010) argue that these goals are often not clearly stated in the organization and do not derive from its mission. Furthermore, certain studies are suggesting that KPIs can support strategic alignment by making financial and non-financial metrics measurable (Basili et al., 2010; Zapata-Jaramillo & Castro-Rojas, 2017). According to Sanchez & Robert (2010) all embracing management can best be accomplished by gathering performance data and analyzing performance under the umbrella of KPIs. Therefore, the relation between organizational goals and KPIs is increasing in significance (Smriti & Das, 2018). Zapata-Jaramillo & Castro-Rojas (2017) and (Rehman et al., 2019) propose that in order to achieve a holistic vision on the organization communication on goals, targets and strategies need to be aligned. According to Yuan et al. (2009) there are five KPIs key perspectives: the physical characteristics of the project, financing and marketing, innovation and learning, stakeholders, and project processes. They conclude that a satisfactory performance measurement is only feasible after the most significant performance metrics are identified and monitored. Furthermore, KPIs are supporting the creation of benchmarks that advise management in decision-making processes and show general tendencies of the success of management practices (Hasibuan et al., 2018). Consequently, KPIs are very useful to compare the essential characteristics of organizations (Scheepmaker et al., 2020; Zarzycka & Krasodomska, 2022). The choice of KPIs depends on the selection of performance metrics which is further influenced by the industry area, dominating trends in the industry, the KPI's users (i.e., managers, executives and supervisors), evaluation objectives (economical, functional, or physical), private or public nature of the organization and customers and provider relationships (Pavelková et al., 2018; Rybin et al., 2020; Souifi et al., 2022).

Relying on the public or private background of organizations the selection of performance indicators can vary to a certain extent. Private sector organizations have a rather profit-seeking orientation when choosing KPIs. On the other hand, public entities have a stronger focus on public services and consignments of goods (Cable & Davis, 2005). Besides, users with different job roles may have to draw different conclusions from performance metrics and therefore seek different KPIs (Lebas, 1995). Raval et al. (2019) conclude that customers and providers choose performance metrics according to their monitoring obligations and goals. Moreover, customer related metrics tend to cover output metrics whereas providers mainly focus on process implementation metrics. They increase the efficiency and effectiveness of strategic, financial and no-financial decision-making of business leaders. More importantly, they enhance organizational performance of the businesses which use them (Zaborek & Mazur, 2019).

Financial administration has rarely been examined in family business studies (Wong & McGovern, 2020). Nevertheless, the respective studies conclude that family businesses differ in their financial administration compared to non-family businesses (Barbe et al., 2020;

Speckbacher & Wentges, 2012). Financial administration practices in family businesses are closely linked to survivability and transfer implicit knowledge during succession (Dello Sbarba & Marelli, 2018; Giovannini, 2010; Hiebl, 2013).

The usage of traditional based single-focus performance-metrics has been slowly replaced by the usage of multidimensional balanced performance indicators in target and performance management (Kamble et al., 2020). Additionally, this change has been accompanied by the demand to complete quantitative indicators with qualitative ones. The result is a well-balanced set of key performance indicators which reflects every perspective of the business to minimize the impact of "dead angles" and the dominance of overstated perspectives (Vladimir et al., 2020). This more balanced approach is also known as balanced scorecard and will be presented in the next subchapter.

Balanced scorecard

The Balanced Scorecard (BSC) was developed by Robert S. Kaplan & Norton (2005) to connect business strategy to the selection of financial and non-financial key performance indicators in businesses. Originally, the BSC was developed as a measurement but evolved over time into a strategic management system (Aryani Paul, 2020). The BSC argues that the sole application of financial indicator is unsatisfactory because they report on the results and outcomes of the past (Kaplan et al., 2001). The BSC is in widespread use in many industries (Fatima & Elbanna, 2020; Massingham et al., 2019). Indicators can be divided into financial and non-financial indicators. Financial indicators are also referred to as "lag indicators" because they measure the output of past activities. Common lag indicators are namely return ratios, turnover growth, customer retention costs, new product turnover, revenue per employee (H. Li & Fu, 2019). Therefore, the BSC introduces non-financial indicators, also called "lead indicators" which supplement financial indicators by measure factors influence a process and are the driving forces of performance to assess future financial performance of businesses. Commonly used lead indicators are sales mix, stakeholder management, customer satisfaction, new product development, diversification preparedness and contractual arrangements (Dobrovic et al., 2018). In other words, the BSC is used as performance tool to measure the "surplus" generated by tangible assets to draw conclusions about the total value of the intangible assets. Tangible assets are namely inventory, property, plant and equipment. Intangible assets can be referred to as ‘‘customer relationships, innovative products and services, high-quality and responsive operating processes, skills and knowledge of the workforce, the information technology that supports the workforce and links the business to its customers and suppliers, and the organizational climate that encourages innovative problem-solving and improvement'' (Kaplan & Norton, 2001, p. 88). The BSC differentiates between four strategic perspectives: financial, customer, internal processes, innovation and learning. These perspectives will be explained in the following sections.

The financial perspective covers the economic growth strategies by turnover growth or productivity enhancement. Turnover growth can be done by the opening of new or by increasing the sales of already existing products to customers and markets. Productivity is enhanced by more efficient usage of assets or cost reduction (M. Ali & Rabe, 2019).

The customer is the core of any business strategy because they purchase the products or services of the business. Therefore, the customer perspective takes into consideration all business aspects which have an overlap with the customer such as product, price, service, relationship, and reputation. The value created by the business aspects distinguishes the business from competitors and supports the business to optimize its internal processes for customer related results. This includes operational excellence, customer proximity and ownership of leading products in their category and sustainability models. Summarizing, this perspective allows the business which customer it shall target in terms of market share, account share, retention and profitability (M. Ali & Rabe, 2019).

The internal process perspective serves the purpose to achieve the business short-dated, intermediate and long-term financial objectives by the means of value proposition and productivity improvements. These means can be addressed by (M. Ali & Rabe, 2019):

1. Forcing innovation to develop new products and services to open new markets and customers.
2. Increasing customer value by creating in-depth relationships with existing customers.
3. Achieving operational excellence by enhancing cycle period of internal processes, supply-chain management, asset usage, resource-capacity management.
4. Evolving to be a good corporate citizen by establishing effective relationships with external stakeholders.

Almost every business strategy is based on the innovation and learning perspective. To make the strategy work on an optimal basis employee capabilities and skills, technology, and corporate climate are crucial. These means make it possible for the business to ‘‘align its human resources and information technology with the strategic requirements from its critical internal business processes, differentiated value proposition, and customer relationships’’ (Kaplan & Norton, 2001, p. 20). According to Albuhisi & Abdallah (2018) and Ali & Rabe (2019) when businesses start to research casual relationships between the four perspectives, they can relate their non-financial and financial perspectives with their financial performance. Additionally, they proofed a positive connection between the learning and growth perspective, customer perspective and financial perspective. As reported by C. H. Wang et al. (2010) the respective perspective measures are correlated by hierarchical and vertical relationships. Some scholars take into doubt the unidirectional causal relationships stated by Kaplan and Norton between the four perspectives. López-Ospina et al. (2022) found evidence that the perspectives have a bi-directional causal relation and are interdependent.

The four perspectives are adjusted to the respective businesses to enable executives to establish or achieve indicators, targets and goals. In the further course of action targets and goals are frequently compared to the present situation in the business. The BSC is acknowledged in literature by many researchers for its positive impact on overall business performance (Elkanayati & Shamah, 2019; Malagueño et al., 2018).

Conclusively, the BSC allows managers to draw a complete picture on the business performance related to its tangible and intangible assets. Hence, the BSC can also be regarded as a benchmark for choosing the optimal combination and selection of key performance indicators to maximize performance not only from a financial perspective.

The Balanced Scorecard is frequently applied in businesses, by numbers in 2001 26 percent of total businesses in Germany and Austria, 46 percent in the US and 57 percent in UK are using the BSC (Kureshi, 2014). According to (B. Hancock et al., 2018) 84 percent of global businesses have a performance management system installed.

In their empirical study Malagueño et al. (2018) show that the BSC positively influences organizational performance. This can be explained by the fact how the BSC converts strategy into operational directions. In the long-term strategy translates then into a continuous improvement process such as services, responsibilities and implementation of objectives.

According to Lucianetti et al. (2019) the usage of the BSC increases the financial performance of businesses. Their empirical study consists of a mix of business which have and have not implemented the BSC. Among their findings is that the BSC usage improves financial performance. Some scholars argue that the performance advantages induced by the BSC could be caused by certain business features. For example, (Z. Hoque & James, 2000) investigate the relationship between BSC and business size, market share and organizational performance. They find no relationship between BSC usage and market share. This result can be explained by the fact that businesses with a low market share, attempt to improve their market share through more adaptive BSC measurements. Nevertheless, a positive association relationship between organizational performance and BSC usage was observed. Although the BSC has been applied successfully applied in many industries and received praise by many scholars (Z. Hoque, 2014; Jossé, 2018; Preißner, 2021). It is frequently criticized for neglecting stakeholders such as suppliers and employees (Rašić-Jelavić & Pajdaković-Vulić, 2021). Since the 2018 years, family business research has started to test if family business performance can be enhanced by the usage of the BSC. Many family business owners prefer non-financial benefits over financial ones (N. Chen et al., 2020; Williams, 2018; Williams, Pieper, & Astrachan, 2018). The balanced scorecard uses multidimensional performance metrics to consider the holistic picture of family businesses which includes financial as well as non-financial aspects (Neff, 2015a; Williams, 2018). Few studies have researched the usage of the BSC in family businesses. The conceptual studies of (J. Craig & Moores, 2010; Williams, 2018; Williams, Pieper, & Astrachan, 2018) propose that the BSC is well applicable in family businesses to enforce strategy formulation and implementation processes which are crucial for the owning family. In his empirical study Neff (2015) identified several non-financial driving forces for financial family business performance. The study of Heinicke (2018) proposes that budgeting as part of goal setting and the balance scorecard supports family members to quantify implicit knowledge to facilitate knowledge transfer. In their case study Mamabolo & Myres (2020) conclude that the balanced scorecard is advantagouss for the management of internal as well as external stakeholders. This is done by the balanced scorecard by pinpointing the family business attention to choose and apply the best set of KPIs to develop business strategies, plans and forecast which are in the family's interest.

Scholars suggest the advantages of the balance scorecard for family businesses lying in a better preparation for succession, inclusion of non-family investors and a factually based decision-making (Heinicke, 2018; Hiebl, 2013; Kefe, 2019). They emphasize the importance of non-financial key performance indicators in addition to financial ones. In addition, Hiebl (2013) proposes that the balanced scorecard enables family businesses to carefully weigh financial and non-financial goals which can enhance performance. Barbe et al. (2020) is the only study which empirically investigates the usage of key performance indicators in family businesses. They conclude that family businesses tend to apply accounting based measured KPIs instead of value-based ones. Although, empirical evidence is scare family business research suggests that the introduction of the balanced scorecard to family businesses improves tacit knowledge transfer by increasing relevant to the case decision-making and creating suitable information channels. Due to the expressed advantages of the scorecard choosing of KPIs this study will expand the financial and non-financial management perspective by connecting ownership, performance and KPIs.

The BSC is a strategic management system that can help to fill the apparent gap in explaining performance differences between family and non-family businesses. The BSC creates a non-financial perspective that guides businesses to see beyond financial information in order to be successful in the long-term. This gives researchers the chance to apply a holistic approach to the strategic management of family businesses (Williams, 2018). Applied in a practical background it considers financial measures and non-financial measures as well as internal stakeholders, and external stakeholders.

Critical reflection

Several findings about the current state of research and possible research gaps can be derived from the explanations of the previous sections.

The characteristics of the goal setting process as well as the focus on financial and non-financial goals have been acknowledged as the main differentiator between family and non-family businesses (Chua et al., 2018a; Gagné, 2018; Seaman et al., 2018). Although a lot of research was done in qualitative studies, empirical evidence on the goal setting process, i.e. how goals are formulated, and goal outcome remains scarce. This is especially important to explain differences in performance for both organization forms. Following this logic, Kotlar et al. (2018, p.14) demand:” Much research has taken goals as given, yet we need to know more about where goals come from. Research is needed to explore the relationship between the nature of goals and outcomes to assess whether organizations are performing well. Such research is also important in assessing performance outcome differences between different types of firms."

Performance in family firms is multi-faceted therefore the respective measurement tool to assess performance should also cover multiple performance dimensions (Heinicke, 2018; Jardioui et al., 2020). The Balanced Scorecard and its specific key performance indicators can be used to cover the non-financial aspect of performance of family businesses that is outlined by many scholars. So far, the potential of the usage of Balanced Scorecard for family businesses has been overlooked by family business research. Therefore, the Balanced Scorecard can give researchers the chance to empirically measure the focus of family businesses on non-financial as well as financial dimensions and potentially explain performance differences between these two organization forms. Following this logic, although suggesting only the comparison of family businesses to each other, Williams et al. (2018, p.74) suggests the following research questions:" Do family businesses that employ the BSC perform better than family business that do not employ the BSC?".

Conclusion

This chapter provides an insight into the theoretical and empirical bases on several concepts of strategic management practice which proofed to be key components to distinguish family from non-family businesses. With regards to the research objectives of this work, three theoretical approaches were identified for this purpose.

It was started with the treatment of financial and non-financial organizational goals for family and non-family businesses. It concludes that, family businesses have a wider range of goals and goal combinations than non-family businesses. In order to develop a deeper understanding which processes are working in the background when goals are set, goal formulation was discussed for family and non-family businesses. Although empirical evidence of goal setting in family businesses is scare, it suggests that a dominant coalition of different stakeholders shapes the enmeshed relationships of goal formation. The essential components of goal orientation i.e. corporate goals and the importance of stakeholders were then explained and elicited about existing empirical research findings in the field of family and non-family businesses. The research on business goals showed that, contrary to the classically assumed singularity of goals, family businesses pursue a mix of financial and non-financial goals. Thus, research on goals has undergone a shift in recent years, moving from purely financial goals to a higher importance of non-financial goals. This observation seems to be confirmed in particular regarding the goals of family businesses. Thus, the owning family, as a powerful member of the dominant coalition of a family business, exerts a strong influence on the basic orientation and goals of the business. Therefore, it can be assumed that family businesses, due to the integration of family-specific objectives, have different and above all, pursue more strongly non-financially motivated objectives than non-family businesses.

The Balanced Scorecard was introduced as a theoretical model. It was shown that though the specific usage of the four perspectives of the Balanced Scorecard the business forms guiding principles and guard rails of its organizational strategy.

The Balanced Scorecard was designed to avoid myopic actions (e.g. reductions in product development, process improvements, human resources, information technology and customer development) by managers that improves financial performance in the short-term but actually damages the ability of the business to create future economic value (A. Müller, 2021). This observation falls in line with the long-term strategy perspective that has been observed for family businesses by many scholars (Calabrò et al., 2019; Kraus et al., 2020; Lude & Prügl, 2018). Despite its great potential to enhance the organizational performance of a business, the effects of the Balanced Scorecard on family businesses have hardly been empirically investigated so far. Moreover, it was pointed out that the application of Balanced Scorecard translated in family businesses is significantly shaped by the convictions of the owning family.

Another important aspect that has been neglected in studies on the strategic orientation of the business is the connection between the goal setting and Balanced Scorecard of a business and its success. Particularly in the context of family businesses, investigating the consequences of these strategic orientations will release further insights into the uniqueness and heterogeneity of family businesses, because it ultimately determines the structure and the use of the business resources and can therefore contribute an explanation to the potential differences in performance between family and non-family businesses. Under this condition, Chrisman et al. (2003, p.33) state: "In conclusion, it appears that we may be witnessing the early stages of the development of a dominant paradigm for the family firm. This paradigm is likely to result from the integration and adaptation of different mainstream theories of the firm that are applicable to the different facets of family business." This call for research will be followed in the remainder of this study.

4 Critical Analysis of the Indicators influencing Business Performance

The last chapters provide an overview on the current state of research and build the theoretical foundation for this study in the areas of organizational performance, goal setting and Balanced Scorecard for family and non-family businesses. In this chapter hypotheses are formulated with organizational performance as depended variable, ownership as independent variable and goal setting and the usage of business specific performance indicators as mediator variable. This thesis is following frequent calls by scholars.

Carney et al. (2015, p. 23) ask future studies for a stronger focus on "strategy and performance in institutional contexts for which competing and provocative theories suggest that family control can be either helpful or hurtful to firm performance". Additionally, de Massis & Foss (2018) and Williams et al. (2018) request that more research is necessary to test the linkage between goal formulation and financial performance of family businesses. For future research Sánchez-Marín & Peláez-León (2019) is demanding more investigation of incentive systems in family businesses. This study covers strategy and performance in institutional contexts by relating goal setting and selection of key performance indicators to organizational performance. Additionally, this study addresses the call of researchers to use mediators to explain the inconclusive of findings of organizational performance and business ownership (Didonet et al., 2020; Razzak & Jassem, 2019). The application of mediators meets the needs of the heterogeneity of businesses (J. J. Chrisman et al., 2012).

4.1 Relationship between business ownership and business performance

Performance is considered by many scholars as the ultimate success criteria. Through the ownership component of a business researchers are able to distinguish between family and non-family ownership. The well-proven numerical supremacy of family business SMEs in many countries raises the attention of scholars to research, if family businesses outperform non-family businesses (Audretsch et al., 2022; Berrone et al., 2022; Koji et al., 2020). The involvement and the role of family members in the management set are controlled by the ownership definition. The research of family businesses is lacking a unified definition approach. Rovelli et al. (2022) and Steiger et al. (2015) note that family business definition does less depend on scientific aspects but more on the publication magazine, the geographical area of data collection, the quantity of authors of the family business publication and the status of listing on the stock exchange. According to Combs et al. (2020) there are more than thirty definitions of family businesses used in the past to investigate performance differences. The most often used definitions namely the Essence Approach, Components of Involvement approach and the F-PEC Scale, they yield the advantage of a solid theoretical backbone but are hard to operationalize because the measurement of the family involvement is limited (Harms, 2014; Rutherford et al., 2008). Recently, Kushins & Behounek (2020) called for a unified family business definition which shall increase comparability, reliability and the reputation of family business studies. Most effort to find a unified definition was done from the American and Anglo-Saxon perspective so far (C. A. Alves & Gama, 2020; de Massis et al., 2012). In 2009 the EU Commission developed its own definition which is a compromise between theoretical depthness and operationality. Therefore, family and non-family ownership shall be classified according to the European definition in this study. The link between this definition and the performance of businesses shall be tested.

Performance differences between family and non-family businesses are widely discussed in family business literature. The impact of agency theory, stewardship theory and resource-based view can lead to performance differences between family and non-family businesses (Calabrò et al., 2019; Kim et al., 2020; Odom et al., 2018). There are arguments which suggest that non-family businesses outperform family businesses (Gonzalez et al., 2019). According to the SEW model family businesses have a stronger focus on nonfinancial goals than financial goals which positively influences their financial and non-financial performance. Agency conflicts can arise between family and non-family owners because non-family owners target high growth rates and risk affirmation because they benefit solely from the addition of shareholder value. In contrast, family business owners define business value not only by financial terms but also by family reputation, emotional attachment of family members to the business and to increase and maintain family control on the business. Agency costs are low in family businesses because ownership and management interests are aligned, thus a conflict of interest is avoided (le Breton-Miller & Miller, 2018; Schulze et al., 2003). Non-family businesses are more restricted by financial discipline and salvage to private benefits for managers less easily. Severe risk aversion can lead family businesses to not size financial attractive business opportunities. Family businesses are associated with weak corporate governance e.g. strictly classifying stakeholders by their financial background.

On the other hand, stewardship theory suggests that business managers are looking for higher purposes (e.g. show altruism, act for the collective, identify with the organization and its mission) in their job that is not satisfied by financial or power incentives. Especially these required attitudes are often found in family businesses which create long-term contributions such as distinctive resources and superior financial outcomes (Vazquez, 2018). According to the resource-based view families can be considered a competitive advantage because they are valuable, rare, inimitable, and non-substitutable resources (Belkhodja & Daghfous, 2021; Hillebrand et al., 2020; Kim et al., 2020). The family resource expands to investments in knowledge creation, preservation and in long-term relationships with internal and external stakeholders (D. Miller & Le Breton-Miller, 2006). In addition, managers of SMEs have profound operational and shop-floor knowledge because they are usually the business founders and the businesses close work environment which supports long-term based decisions and financial performance.

Overall, the balancing of positive and negative aspects, combined with the predominantly positive results of the studies were presented to show that the status of the family business can certainly have advantageous consequences for the success of the business. Therefore, the following main hypothesis will be stated:

Main Hypothesis 1: Family businesses have a superior financial performance compared to non-family businesses

Research on family business performance has mostly focused on financial performance (J. Daspit et al., 2017; Mahto et al., 2018; Santiago et al., 2019). To achieve a holistic picture of the strategic performance of a business non-financial performance must be considered as well. Maximization of financial performance may have been assumed inaccurately to be the sole driving force of family and non-family businesses. Non-financial performance is closely related to long term relationships with external as well as internal stakeholders. Naturally, family businesses are more affirmative towards non-financial performance due to their aim to increase SEW. Family business managers are more conservative about business reputation, customer satisfaction, employee satisfaction and family control of the business. They are prepared to sacrifice financial competitiveness to increase or maintain SEW. To certain degree non-family businesses also pursue non-financial performance in the emotional value dimension. Nevertheless, it is to be expected of family businesses to outperform non-family businesses in non-financial terms. Hence the second main hypothesis evolves as follows:

Main Hypothesis 2: Family businesses have a superior non-financial performance based on compared to non-family businesses.

4.2 Relationship between business ownership, goal setting and organizational performance

The positive link between family ownership and overall business performance can be clarified by goal setting. The goal setting procedure which determines how goals are formed in family businesses significantly differs in terms of behavior and stakeholder influence compared to non-family businesses (Dou & Wu, 2022; Kotlar & de Massis, 2013; van Aaken et al., 2018). On the behavioral level, the behavioral framework in family businesses is happening on a more informal level with basic characteristics such as mutual trust, customs and moral concepts (Rodríguez-Aceves et al., 2022; Uhlaner et al., 2004). Goals in family businesses are set as challenging as in non-family businesses but due to their informal structure which is especially pronounced in family SMEs, leave their employees more freedom of action to achieve their goals which adds positively to the financial performance of the family business (Garcés-Galdeano & García-Olaverri, 2020; Poppo & Zenger, 2002; Waldkirch, 2020). Family business owners tend to selflessly regard organizational goals as more important than their personal desires (Allen et al., 2018). Moreover, family business owners are more likely to be aligned during the goal formulation process which reduces agency costs and is consistent with stewardship theory (Pritchard-Wiart et al., 2019; Vazquez & Rocha, 2018). The reduction in agency costs leads to increase in business performance (López-González et al., 2019). The benefits that family businesses can gain from paying attention to their internal stakeholders due to the clan-like organizational systems (Trung & Hilmarsson, 2021) that can be found in family business SMEs, will exceed the benefits that non-family businesses can achieve from investing similar resources (Bingham et al., 2011; Neubaum et al., 2012). Clans and therefore family businesses produce long-term and highly stable relationships backed by high tacit knowledge and commitment through decentralized, high trust and low conflict communication processes (Calabrò et al., 2019; Lude & Prügl, 2018). On the basis of stewardship theory, it can be assumed that family businesses level up internal stakeholders to an intangible resource that provides a competitive advantage for family businesses over non-family businesses (C. A. Alves et al., 2020).

Risk aversion and avoidance of vulnerability triggered by the negative evaluation of external stakeholders, leads family business to focus stronger on the interest of external stakeholders compared to non-family businesses to maintain or increase their SEW (J. B. Craig & Newbert, 2020; Dayan et al., 2019). The increase of attention on external stakeholders is especially pronounced to purse actions to satisfy them to avoid the family business name and reputation (Berrone et al., 2010). This train of thought is continued by Miller & Breton Miller (2003, p.131) to describe the embodiment of family business "this personification of the business helps to establish a virtuous circle in which good deeds are ascribed to personal (family and non-family employees) intentions (…) so, much loyalty and commitment grows".

Hence, the influence of internal and external stakeholders adds positively to the organizational performance. Overall, it can be assumed that the behavioral framework i.e. the formulation of goals mediates the superior financial performance and non-financial performance of family businesses.

Subhypothesis 1.1: The superior financial performance of family businesses compared to non-family businesses is mediated by the framework of goal setting

Subhypothesis 2.1: The superior non-financial performance of family businesses compared to non-family businesses is mediated by the framework of goal setting

The main finding of previous conceptual and empirical studies in family business research is that organizational goals significantly differ between family and non-family businesses (Randolph et al., 2022; Williams, Pieper, Kellermanns, et al., 2018a). For example, (Memili et al. (2020) and Williams et al. (2018) show that the organizational goals of family businesses, in contrast to non-family businesses, often include a non-financial component in addition to financial aspects. In this respect, the outlined findings are contrary to one of the central premises of business research: the assumption that profit maximization is the primary goal of any form of organization (N. Hoque et al., 2018). Family businesses decide to employ family members to manifest family values and goals into the business. As a side effect the manifestation increases trust, operational cooperation and commitment to the business (Calabrò et al., 2019; Carr, 2017). Especially in SMEs these circumstances create an environment which nurtures family cohesion and let the family achieve convergent long-term goals (Debicki et al., 2016; Diaz-Moriana et al., 2022). Family cohesion improves long-term strategic development, decreases information asymmetries and agency costs and therefore increases organizational performance (Brenes et al., 2011). In family business capabilities and goals are often translated into practices that can enhance business performance albeit these are not understood to increase performance by the family business (Randolph et al., 2019). Hence, organizational goals can be regarded as businesses capabilities that are constrained in their flexibility to support organizational goals.

Organizational goals are therefore connected to these practices which scholars partly tried to explain by the means that SEW is reduced and therefore business performance increases (Anderson & Reeb, 2004; Gottardo & Moisello, 2015; Martínez et al., 2007). In family SMEs these practices were discovered by scholars to be the involvement of family members in the management and adherence to family values (Berrone et al., 2012; C. Cruz et al., 2012). Moreover, the practices depend on the motivation and authority of decision makers are strongly pronounced in the consolidated management structures in SMEs (Gorgievski et al., 2011). In addition, in SMEs in the family influence is not diluted by non-family employees in the management and shop floor level.

In this context, it can be assumed that organizational goals connected to these practices increase financial and non-financial performance of family SMEs.

Subhypothesis 1.2: The superior financial performance of family businesses compared to non-family businesses is mediated by the persuasion of the organizational goals

Subhypothesis 2.2: The superior non-financial performance of family businesses compared to non-family businesses is mediated by the persuasion of the organizational goals

External perception is the general level of favorability towards a business assessed by its stakeholders. It indicates the degree that stakeholders trust and marvel a business relative to their expectations and relative to other businesses (Bövers, 2021; Stutz & Schell, 2022). Additionally, it provides guidance to manager’s daily work, how they regard the organization and how they act as a collective unit in the business (Castillo et al., 2022; Nag et al., 2007). Therefore, external perception can be regarded as theoretical framework which influences how the business is depicted by managers to the public and influences the strategic behavior of the business. Following this train of thought, these factors map the image and reputation of the business from the perspective of internal and external stakeholders (Scott & Lane, 2000; K. Singh & Misra, 2021). A positive external perception is an intangible resource that increases organizational performance (Liu et al., 2021; K. Singh & Misra, 2021). The influence of the owning family is a crucial differentiator between family and non-family businesses when external perception is regarded. Moreover, many scholars especially underline the importance of external perception for family businesses when organizational goals are concerned (Cuevas Lizama et al., 2021; Sageder et al., 2018).

In family businesses, external perception can be regarded as especially fruitful because it can improve business identification, salience and attraction (Arzubiaga et al., 2022; Stutz & Schell, 2022). Studies have shown that family businesses are regarded as a brand which are connected by stakeholders with attributes such as trustworthy, socially responsible and customer-friendly (P. Miller, 2022). Moreover, family businesses that pursue a high level of external perception showed long-term and stable relations with customers (Basco, 2014; Y. G. Lee & Marshall, 2013). It is likely that family businesses put a lot of effort into establishing a positive external perception of their business due to their close identification with the business and preservation of SEW (Obasan, 2021). This is supported by the claim that a negative perception would be averse to the family name (Dolz et al., 2019). This perspective can be expanded to family shareholders that are not closely linked to the family business because even these members can take great pride by a positive external perception (Thomas, 2009). Moreover, the connection of the family name to a service or product can enhance quality (M. J. Cooper et al., 2005). Specifically, for family SMEs it was concluded that if reputation is prioritized, it can be regarded as “barometer” for their services or products (Cuevas Lizama et al., 2021). Following this logic, for family SMEs maintaining external perception is especially important. Positive external perception supports the expansion of their networks, obtain mutual trust, increases identification of various stakeholders (Kuttner et al., 2020). As such, higher levels of external perception are able to explain the higher financial and non-financial performance of family businesses.

Subhypothesis 1.3: The superior non-financial performance of family businesses compared to non-family businesses is mediated by external perception

Subhypothesis 2.3: The superior non-financial performance of family businesses compared to non-family businesses is mediated by the external perception

4.3 Relationship between business ownership, key performance indicators and organizational performance

Drawing on the Balanced Scorecard, it can be argued that the selection of key performance indicators increases organizational performance. In family and non-family SMEs managers are the focal points of strategic decisions. These managers are responsible for the implementation and prioritization of strategies. The BSC enables managers to distinguish the business into short-term financial and long-term non-financial perspectives into key performance indicators (Short, 2021). The overall organizational control is improved by making individuals owners to specific key performance indicators and holding them accountable for the indicators (Mikalef & Gupta, 2021). Moreover, it can be argued that the specific selection of key performance indicators supports the formalization of family SMEs which often lack formal control structures (Kotey, 2005). The formalization aligns the business strategically, so that strategies can be pursued more efficiently (Jiang et al., 2021). In addition, financial and non-financial perspective consisting of key performance indicators can be used as a feedforward control to assess short-term and long-term organizational performance. The control mechanism translates to periodic meetings to discuss actual performance between management and lower levels. These meetings have the goal to foresee outcomes based on the short-term financial and long-term non-financial key performance indicators and if necessary to adapt the course of action by gaining and institutionalizing integrative knowledge (Alsharari et al., 2019; Pavlov & Bourne, 2011). The management discussions triggered by the use of the BSC perspective over key performance metrics to legitimize courses of action improve the business aspects that require it (Ates et al., 2013). For example, the regular evaluation of actual financial and non-financial performance against specific targets following the customer perspective can support managers to better assess the actions and offerings of competitors to satisfy customers (Malagueño et al., 2018).

Research has shown that the non-financial dimensions (e.g. internal business processes, customer satisfaction) of the balanced scorecard enhance organizational performance through reduction of production costs, increase in productivity and improved quality (Albuhisi & Abdallah, 2018). Moreover, satisfied customers are less price sensitive so they are more likely to accept price increases which increases business revenues over time (Homburg et al., 2005). In the same context, higher profitability is mostly generated by satisfied customers (Eklof et al., 2020; Pooser & Browne, 2018). Many researchers have concluded that there is a positive relationship between the non-financial key performance indicator of the BSC customer as well as the process development dimension and organizational performance (Dossi & Patelli, 2010; Narkunienė & Ulbinaitė, 2018; Omran et al., 2021). Although the financial key performance indicators of the Balanced Scorecard are often criticized for being short-termism and not capable to reflect value creating activities (Malgwi & Dahiru, 2014; Taye, 2021) are still important because the financial perspective fund the remaining three perspective (Niven, 2006) and can also improve among the other dimensions the organizational performance.

The long-term perspective of family-owned businesses impacts their strategic decisions with regards to business planning, growth and investments which positively affects their organizational performance and should be related to the long-term non-financial key performance indicators family businesses use to measure the progress of the business (Al-Mamary et al., 2020; López-Pérez et al., 2018). In contrast, non-family managers are considering goals with a much narrower time-horizon which is likely to impact the measures they use for monitoring and controlling. Therefore, it is likely that non-family businesses making higher usage of short-term financial key performance indicators. The higher focus of family business owners on survivability and risk avoidance makes their usage of key performance indicators to predict the future existence of the business more probable (Hiebl, 2013). In terms of human resources family businesses are likely to choose family members for their management and new employments. It is expected that the chosen family members have lower management skills (Camfield & Franco, 2019) which can impede their appreciation of key performance indicators.

The components of SEW lead family businesses to a higher focus on the non-financial business perspectives (Richards, 2022; Samuel Baixauli-Soler et al., 2021). According to stewardship theory family businesses require less monitoring and controlling of their employees and probably therefore select different key performance indicators compared to non-family businesses which according to agency theory rely more heavily on control mechanisms for employees.

Therefore, the specific selection of financial and non-financial key performance indicators according to the dimensions of BSC is likely to improve the financial as well as non-financial performance of family businesses. Following the above arguments, the following hypotheses are proposed:

Subhypothesis 1.4: The superior financial performance of family businesses compared to non-family businesses is mediated by the usage of non-financial key performance indicators of the BSC as framework

Subhypothesis 2.4: The superior non-financial performance of family businesses compared to non-family businesses is mediated by the usage of non-financial key performance indicators of the BSC as framework

Subhypothesis 1.5: The superior financial performance of non-family businesses compared to family businesses is mediated by the usage of financial key performance indicators of the BSC as framework

Subhypothesis 2.5: The superior non-financial performance of non-family businesses compared to family businesses is mediated by the usage of financial key performance indicators of the BSC as framework

Conclusion

In this chapter, the hypotheses of this study were presented. On the bases of the literature research and the theoretical concepts that were presented in this study, two main hypotheses could be formulated on the complex causal relationships between the variables of family influence and goal setting, and the selection of key performance indicators and financial and non-financial success.

Due to the complexity of the considered relationships between family influence, strategic management and business success, the theoretical constructions of the hypotheses contribute to a deeper understanding of family businesses. Hence, the presumed linkages between these variables have not yet been empirically tested using German family and non-family businesses. The hypotheses proclaimed in this study do not only answer the call of various authors in the field of family business research but are also of importance in the area of business practice. Thus, the empirical confirmation of the hypotheses can provide interesting insights into the relationships between the family influence in a business, its emphasize on strategic management and the influence of these variables on the performance of the business.

5 Empirical Analysis of the Indicators influencing the Performance of German Family Businesses

5.1 The Foundation of the Empirical Study

To assure that the gathered data is fit for statistical analyses and that data quality is acceptable, several methods were applied. All statistical calculations involved in this chapter were performed by SPSS Statistics 26. SPSS is used in many scientific studies for quantitative analysis of complex data. SPSS is used in this study because it can investigate logical information for statistical surveying and information mining with simple instructions.

<u>Usability of gathered data</u>

To verify the high quality of the obtained data, all the participant's answers were examined. If a completed questionnaire did not present the required quality, it was excluded from this study. The first step included to eliminate all incompletely and irrelevant questionnaires. Thirty-four questionnaires were eliminated because they were filled incompletely. Ninety-five questionnaires were rejected because the questionnaire was not filled by people form the management level. Another 51 questionnaires were eliminated because employee size (≤6) and turnover (≤300,000 EUR) did not meet the required threshold.

In the second step, the data was checked for outliners and plausibility. The plausibility of the data sets was calculated using the minimum and maximum values, the mean and the variances of all item strings. Except for the exclusion of 3 questionnaires, no significant deviations could be found in the constructs of the research models. This circumstance is certainly the fact of the strict pre-selection for the data set.

<u>Representativeness of the sample</u>

In general, the term "representative", encounters the problem that this term eludes precise definition (Särndal et al., 2003). The largest common ground is the definition of sample representativeness by Gomm (2008). He defines representativeness as the overlap between theoretical representativeness of the actual population and the drawn sample. The sample provides a narrowed image of German businesses, although this does not necessarily mean that all characteristics are represented by the sample.

It is critical for surveys because it is the decisive factor to replicate the results to the whole population. Their representativeness depends on the sample size, characteristics of the respective population, non-responses and sampling procedure (Bryman, 2016). The sample size consists of compromise between exertion and representativeness (Lavrakas, 2012).

This study's sample is of family and non-family small and medium enterprises is planned to be representative considering ownership, business age and business size.

The sample was generated by a private database and is based on a non-random sampling method therefore the representativeness of the sample is of imminent importance. The representativeness of the sample is tested by comparing distinctive key parameters to reports which assume to have access to the whole population and to the representative sample of similar studies.

Figure 3 shows a comparison between the family business share of the sample and the population of the German foundation of family businesses in 2019 for manufacturing (Gottschalk et al., 2019). The group of 0 to 9 employees shows a slightly higher percentage of family businesses for the population with 91% compared to the sample's 88%. For the interval of employees 10 to 49 the population has a higher share of family businesses with 86% compared to the sample's 85%. For businesses with a number of employees from 50 to 249 the sample's composition of family businesses is higher with 59% compared to the population with 66%.

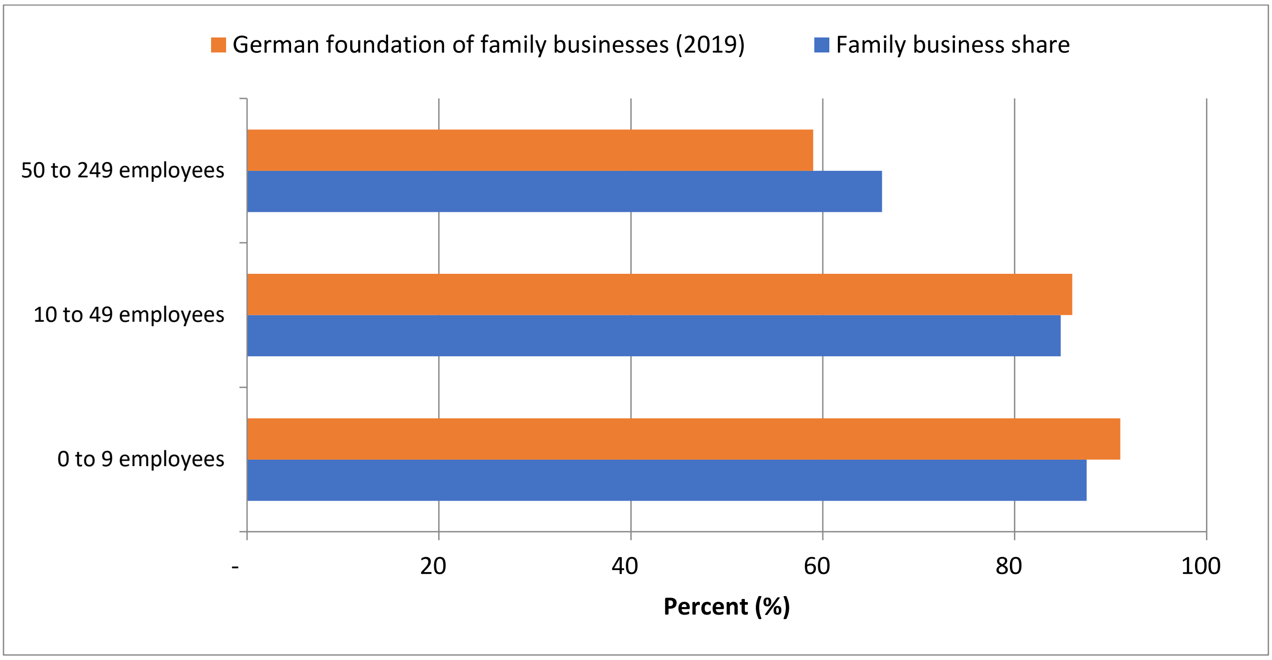

Figure 3 Comparison of family business share in number of employees (Source: Own elaboration)

Figure 4 depicts the comparison between the share of family businesses in the sample and the population according to the German foundation of family businesses in 2019 for manufacturing industry (Gottschalk et al., 2019). For businesses from 0 to below 10 Million Euros the share of family businesses of the sample is 94% compared to the population of 88%. For the class of businesses with a turnover of 10 to 50 Million Euros the sample shows a family business share 67% compared to the population with 64%.

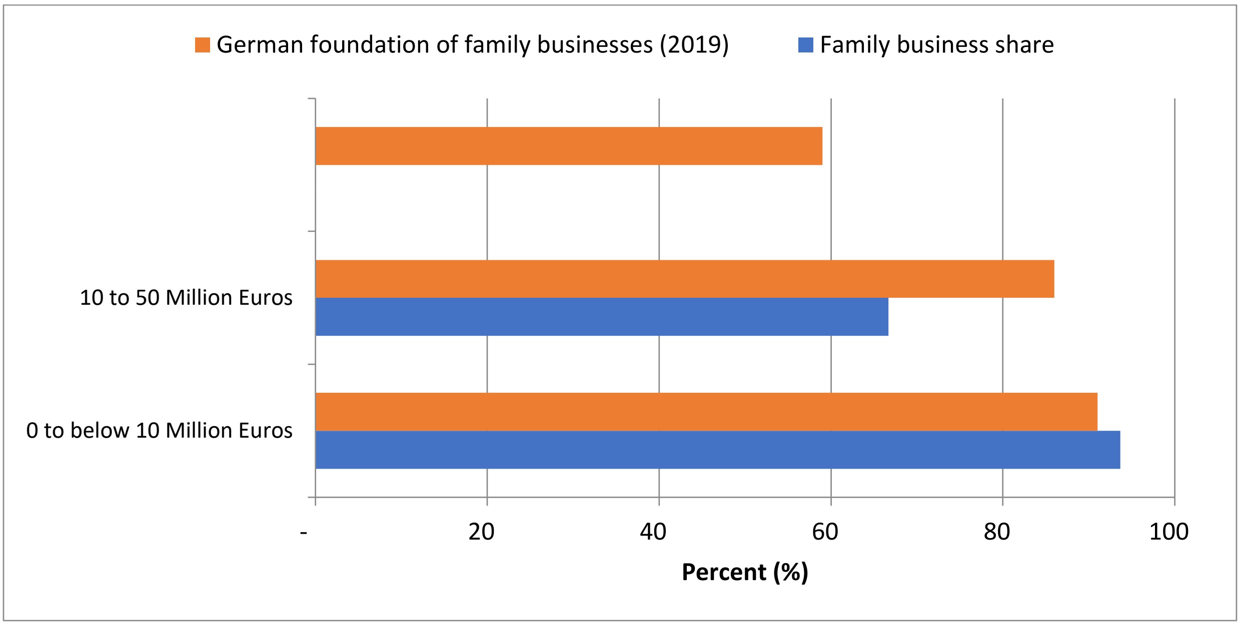

Figure 4 Comparison of family business share in turnover (Source: Own elaboration)

With regards to business age, in Table 5-1 the studies of Hoffmann et al. (2016) and Rosenkranz & Wolf (2019) can be used as a reference because they relate to family businesses from small and medium business enterprises. Hoffman's study shows similar values for minimum, maximum, mean and median. Additionally, this study shows a similar average value compared to Rosenkranz & Wulf (2019).

Table 5-1 Comparison of family business age of different studies

Source	Minimum	Maximum	Mean	Median
Hoffmann et al. (2016)	4	246	73	63
Rosenkranz & Wolf (2019)	-	-	83	-
Own study	3	191	71	57

The sample of this study shows slight deviations when compared to populations and similar studies albeit the collected sample can be considered representative because the differences in representativeness are neglectable. Therefore, the outcomes of this study can be generalized to the whole population.

Reliability

For the reliability analysis the construct measurements were validated by analyzing the correlation of the item which represent a scale to assess to their internal consistency (Nunnally & Bernstein, 1994). One of the most often used methods to measure reliability are Cronbach's alpha coefficients (Cronbach, 1951; Roldán & Sánchez-Franco, 2012). Literature suggests that coefficients of at least .70 can be considered sufficient (Hair et al., 2010; Nunnally & Bernstein, 1994). The Cronbach's alpha for all constructs in this study higher than .70 and therefore reliability is assumed as given for the scales in this study.

Exploratory factor analysis (EFA)

In this chapter EFAs were performed on the respective latent variables (goal setting and selection of key performance indicators, financial business performance and non-financial business performance) from the questionnaire consisting of 45 questions. The analyses were conducted to analyze the structure of the data set and to confirm the correct assignment of the operationalized items to the hypothesized constructs.

EFA on goal setting

Three variables (Value abstraction, formal agreement and promises of rewards) were removed from the analysis because they did not show a sufficient correlations and low differences in cross loadings which would reduce the quality of the goal setting data set. The sample was checked if it meets the criteria to apply factor analysis. The correlation matrix showed that all remaining variables had at least one correlation coefficient greater than .30. The Kaiser-Meyer-Olkin (KMO) value is .80 which is classified by Kaiser (1974) as meritorious. The Bartlett's test of sphericity resulted in a statistically significant value ($p < .001$) meaning that the data is fit to be factorized.

The factor analysis revealed three factors that showed eigenvalues greater than one and which explained 28.3%, 16.7% and 13.2% of the total variance, respectively. The scree plot of Figure 5 suggests that three factors should be retained (Cattell, 1966).

The three-factors explain 58.2% of the total variance. A Varimax rotation was performed to support interpretability. The rotated solution exhibits a simple structure (S. Day et al., 1994; Thurstone, 1947).

Table 5-2 shows three retained factors of EFA. According the items of the factors, the theoretical concept of goal setting can be categorized into : organizational goals, behavioral framework and external business perception.

Table 5-2 Rotated component matrix for goal setting (Source: Own elaboration)

	Factors		
	Organizational goals	Behavioral framework	External business perception
Internal stakeholders		.485	
External stakeholders		.612	
Schedules and defined roles		.698	
Irregularity and non-defined roles		.651	
Social control		.828	
Business growth	.557		
Business survival	.605		
Profit	.608		
Job satisfaction of employees	.612		
Employee development	.669		
Customer satisfaction			.782
Supplier satisfaction			.746
Business reputation			.701

Extraction Method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.
Major loadings for each item are loaded.

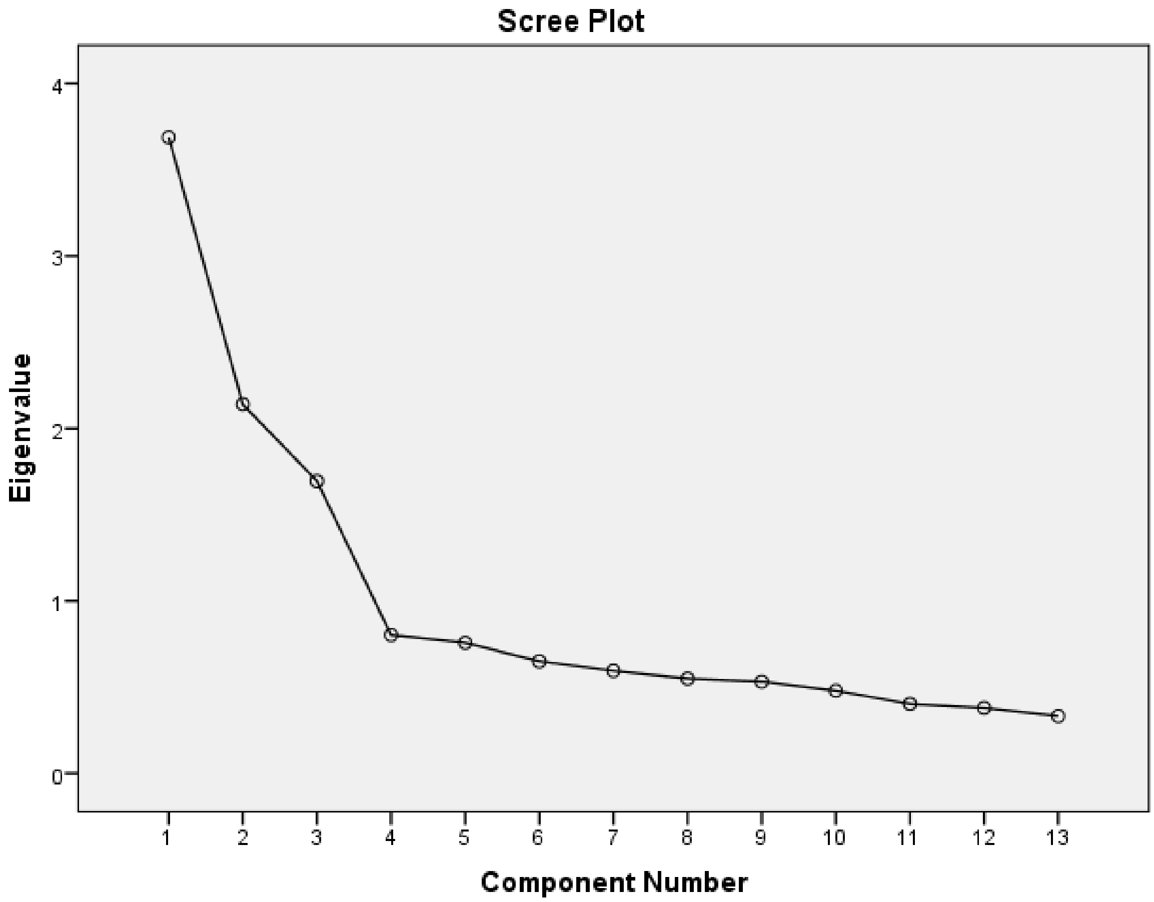

Figure 5 Scree plot of goal setting (Source: Own elaboration)

<u>EFA on selection of key performance indicators</u>

Three variables (Assess the development of new products and services, employee satisfaction, informal communication) were removed because they showed a low correlation with the remaining variables in the dataset. Consequently, the quality of the factor extraction was tested. The Bartlett-test showed a significant result. Additionally, the Kaiser-Meyer-Olkin (KMO) with a result of .83 is classified as meritorious according to Kaiser (1974). These analyses show that the dataset is fit to be factorized.

The factor analysis retained two factors with an eigenvalue greater than one. Moreover, the factors explain 41.4% and 13.2% of the total variance. The retained factors can be classified as KPI selection based on the focus on financial and non-financial indicators.

Table 5-3 Rotated component matrix for selection of key performance indicators (Source: Own elaboration)

	Factors	
	Financial KPIs	Non-financial KPIs
Profitability ratios	.743	
Investment ratios	.755	
Process efficiency	.695	
Customer satisfaction		.633
Customer loyalty		.811
Acquisition of new customers		.811
Customer profit contribution		.733
Quality optimization		.624
Employee productivity		.747
Development of core competencies		.667

Extraction Method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.
Major loadings for each item are loaded.

Figure 6 Scree plot of goal setting selection of key performance indicators

<u>EFA on business performance</u>

The item of employment turnover was disregarded for the EFA because it showed correlation coefficients of less than .30. The factor analysis concluded that all remaining correlation coefficients are above .30. The Kaiser-Meyer-Olkin (KMO) value is .697 which is classified as mediocre by Kaiser (1974). Due to the significance ($p \leq .0005$) of the Bartlett's test of sphericity, the factor analysis was continued.

The EFA found two factors with an eigenvalue greater than one and which explained 35.3% and 20.4% of the total variance, respectively. In alignment with the scree plot of Figure 7 these two components will remain (Cattell, 1966).

The two-factors explain 55.7% of the total variance. The performed Varimax rotation result in a simple structure.

Table 5-4 presents the dimension reduction of the EFA to two factors. The items of the financial ratios return on asset, relative sales and market value growth can be interpreted as a factor for financial performance. On the other hand, the items customer satisfaction, business reputation and persuasion of social responsibility have in common a non-financial background. Therefore, these factors shall be summarized as a factor interpreted as non-financial performance.

Table 5-4 Rotated component matrix for business performance of family businesses (Source: Own elaboration)

	Factors	
	Non-financial performance	Financial performance
Return on asset growth		.411
Relative sales growth		.840
Market value growth		.649
Customer satisfaction	.834	
Business reputation	.808	
Persuasion of social responsibility	.821	

Extraction Method: Principal axis factoring.
Rotation Method: Varimax with Kaiser Normalization.
Major loadings for each item are loaded.

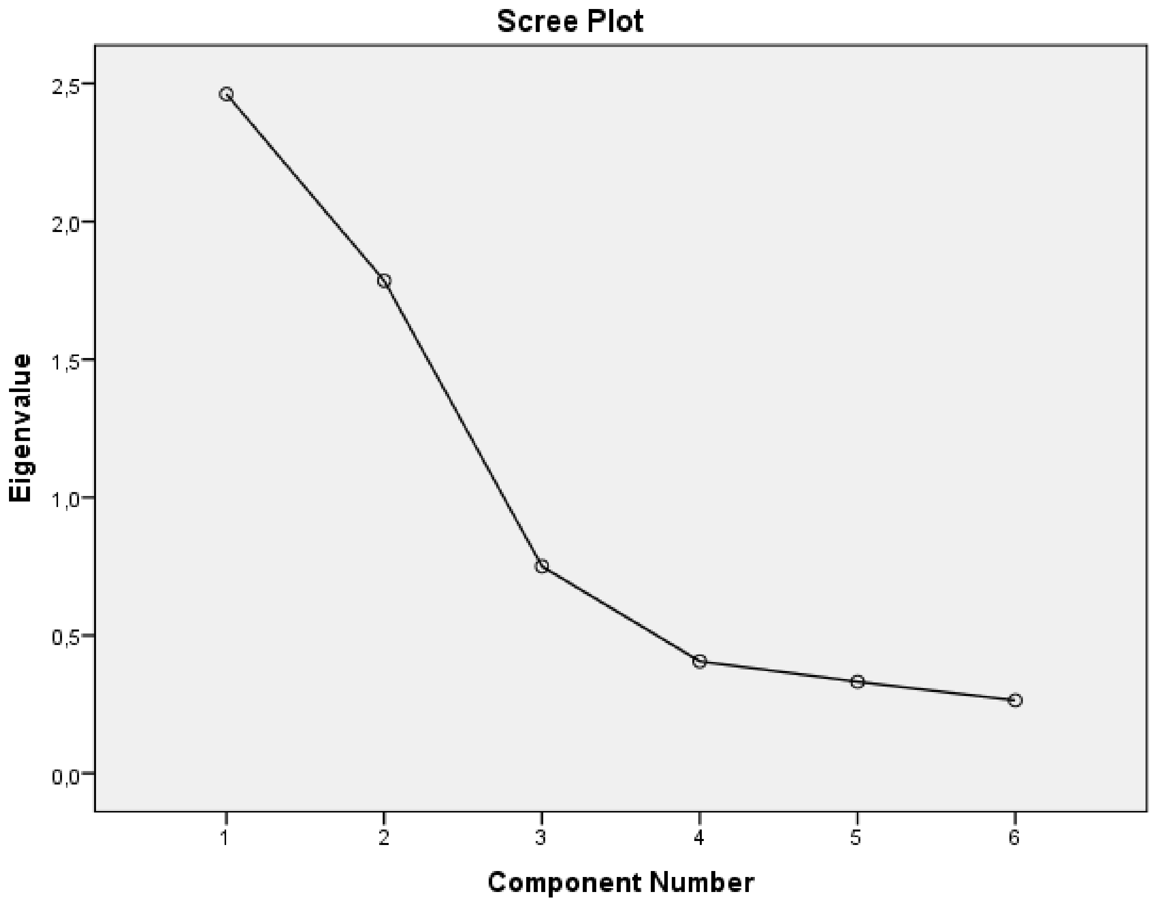

Figure 7 Scree plot of business performance of family businesses (Source: Own elaboration)

The EFA revealed that the structure of the survey data can be reduced to three factors in terms of goal setting, two in terms of selection of key performance indicators and two factors in terms business performance. Additionally, the EFA confirmed that these factors consist of reliable measured variables.

<u>Confirmatory factor analysis (CFA)</u>

<u>Model fit of independent variables</u>

The confirmatory factor analysis was performed to ensure the discriminant (distinguishability of the constructs) and construct validity (items represent the same construct) of the measurement model. The goodness of fit criteria were based according to the suggestions of numerous scholars (Abrahim et al., 2019; Hoofs et al., 2018; Marsh et al., 2020). The measurement model shown in Figure 8 has a ratio of the χ 2 and degrees of freedom, is 2.156. The ratio does not exceed the limit of 3 which suggests a good fit between the suggested model and the collected data. Additionally, the CFI exceeds the limit of .900 which underlines the good fit of the model. The GFI of .840 can be considered acceptable for research. The RMR is below .08 and is therefore at an acceptable level. The RMSEA is at .058 which is also acceptable. The results of this analysis indicate an acceptable goodness of fit of the measurement model.

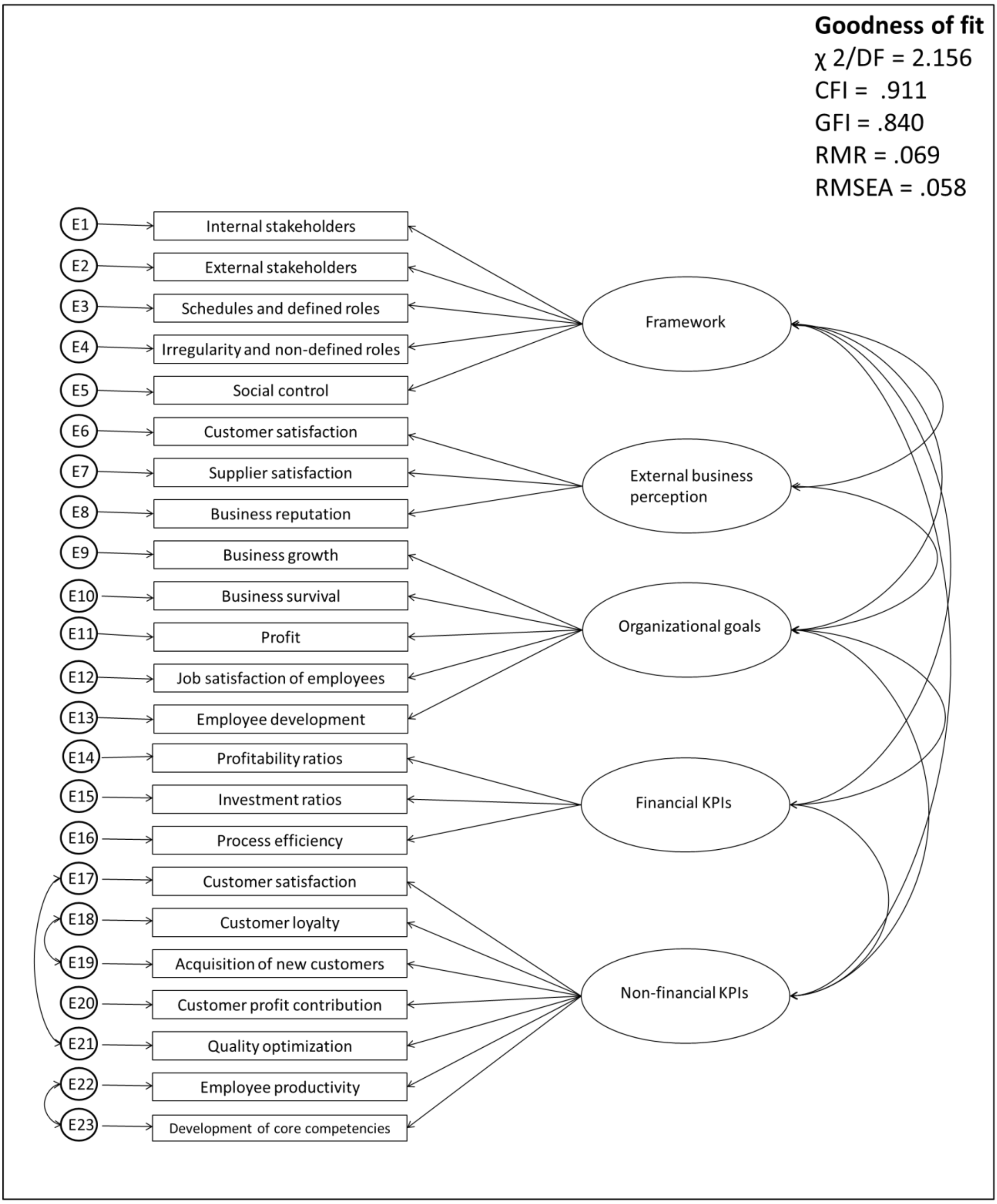

Figure 8 Measurement model of independent variables assessed by confirmatory factor analysis (Source: Own elaboration)

Organizational goals, framework and external perception

For the scales of organizational goals, behavioral framework and external perception the results of various studies from the field of family business research were used to develop the scales. Due to the fact that these scales have not been validated by other studies, 15 items were used in the first EFA from which three factors (Organizational goals, framework and external perception) were maintained and three items (Value abstraction, formal agreement and promises of rewards) were eliminated due to their low correlations and to enhance measurability. After the CFA an EFA was performed to underline the validity of the respective factors:

The first factor, namely organizational goals, loads unidimensional (Eigenvalue 2.50) on 5 items by explaining 50.0% of the variance and providing a Cronbach’s alpha of .75.

Moreover, the 5 items of the second factor, framework load unidimensional (Eigenvalue 2.83) with an explanatory variance of 56.56% with a Cronbach`s alpha of .808.

The third factor external perception charges on 3 items unidimensional (Eigenvalue 2.40) by explaining 79.84% of the variance and having a Cronsbach’s alpha .872.

Financial and non-financial key performance indicators

Resulting from the EFA performed on the selection of key performance indicators, two factors emerged, namely financial and non-financial key performance indicators.

Financial KPIs load unidimensional (Eigenvalue 1.69) on 3 items by explaining 70.73% of the variance and providing a Cronbach’s alpha of .79.

Additionally, the second factor, non-financial KPIs load with 7 items unidimensional (Eigenvalue 3.84) with an explanatory variance of 60.70% with a Cronbach`s alpha of .89.

Model fit of dependent variables

The goodness of fit indices (χ 2/DF, CFI, GFI, RMR, RMSEA) show a good fit of the model for the dependent variables.

The EFA of the business performance resulted in the extraction of two factors, namely financial and non-financial performance. In addition, an individual EFA on the two factors was performed. The first factor consists of three items related to financial performance and has an eigenvalue of 1.805 and an explanatory variance of 60.16%. The respective Cronbach's alpha amounts to .72. Moreover, the non-financial performance construct consisted of three items which have an eigenvalue 2.35 and an explained variance of 78.43%. For this factor the Cronbach's alpha is .86.

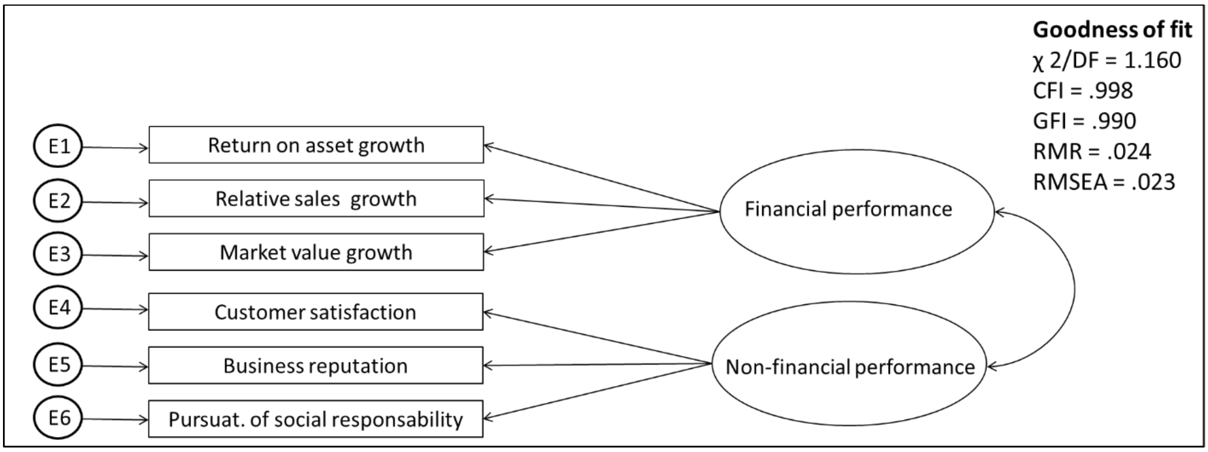

Figure 9 Measurement model of dependent variables assessed by confirmatory factor analysis (Source: Own elaboration)

From a statistical point of view the operationalization of all constructs shows a high quality level of reliability and unidimensionality. By performing the CFA, the discriminant validity and quality of the scales could be confirmed. The results of the CFA show a high level of adjustability of the hypothesized model. Overall, the combinations of internal consistency, unidimensionality and discriminant validity confirm the validity of the constructs.

5.2 Study Design and Data Collection

In this chapter the design and description of the empirical analysis will be discussed. The discussion will start with design of the empirical study. Subsequently, data quality tests will be presented.

<u>Nonprobability online panels as form of data collection</u>

Due to the fact that SMEs are not forced to disclose any data on for example business performance or business ownership, research in this area relies on private data bases with online panels. The advantages and disadvantages of nonprobability online panels are frequently discussed in research with special regards to their cost saving properties and potential lack of representativity (Stedman et al., 2019). Data collection in family business literature is commonly consists of randomly selected sample. Most studies in family business only consider large businesses because their data is available in databases. This leads to a bias in research for large family businesses (Muntean et al., 2008). The data collection is done by mailing or emailing the selected businesses the questionnaire directly but suffers from low response rates and frame under coverage (Stedman et al., 2019). Due to the General Data Protection Regulation it is at the moment not legally clear of this procedure can be continued (Haworth, 2019). Hence, this section will discuss if online panels are a valid alternative. Online panels yield the advantage compared to conventional methods that they facilitate the access to samples with a large number of participants. Potential interview effects are reduced and the independence of space and time are additional advantages of this kind of panel. Additionally, most SMEs are privately owned family businesses which do not disclose any data and therefore are almost invisible to family business research (Arosa et al., 2010; Mazzi, 2011). Subjective performance measurement in family and non-family businesses through non-probability online panels facilitates access of researchers to SMEs.

On the downside, online panels are criticized mainly for their vulnerability in terms representativity (Bethlehem, 2021). According to Cornesse & Blom (2020), online panels are especially vulnerable to self-recruitment due to the proactive decision of participants to attend the study compared non-participations which might decrease representativity. Moreover, as there is no traceability of the online panel participants, this renders a random sample based on a known, describable population of Internet users impossible (Peer et al., 2022). The reason why self-selection can be harmful is that the samples are chosen by the participant himself and not by the researcher. The voluntary taking of part of the panel takes effort that is why participants shall have a higher motivation and general interest in panels, which can lead to a biased sample (Lehdonvirta et al., 2021). They access a pool of test subjects that agree to participate in panels. These test subjects show in principle a willing to participate in different kind of surveys which can limit their representativity compared to the overall population (Lehdonvirta et al., 2021). According to Moniruzzaman Sarker & AL-Muaalemi (2022) differences between probability and non-probability are decreased by the fact that representativity of probability samples is also strongly reduced by their low response rates. These differences can even be reduced by the recruitment and weighting methods that online sample vendors employ. Moreover, self-recruitment includes professional participants who perform a large number of non-probability surveys compared to the participants of probability surveys who perform only limited number of surveys. In their studies Smith, R., & Brown (2006) and De Wulf, K., & Berteloot (2007) assessed the demographic and motivational differences triggered by self-recruitment between these two groups of participants. Moniruzzaman Sarker & AL-Muaalemi (2022) concluded that the application of control variables for professional and non-professional participants are crucial to align the results of probability and non-probability surveys. In his study Yang et al. (2020) conclude that there is inconclusiveness among scholars about the similarities of probability and non-probability samples, although there is a shift towards acknowledging non-probability sampling as a valid alternative to probability sampling. Furthermore, non-probability sampling is aligned with family business research (Pielsticker & Hiebl, 2019; Tengeh & Phikiso, 2021). In his literature review, Pielsticker & Hiebl (2019) note that the majority of family business studies relies on non-probability sampling (e.g. Bizri, 2022; Kallmuenzer et al., 2020; Singh et al., 2019). Moreover, many studies in family business literature are based on private databases (Ergün & Doruk, 2020; Fadil & St-Pierre, 2021; Hategan et al., 2019). In addition, explorative studies which aim for the researching of unknown correlations between variables are well suited for custom online panels (Barlatier et al., 2022; Zikmund & Babin, 2006).

The survey of this study is focused on family and non-family management-level employee's responses on performance, goal setting and selection of key performance indicators. Only variables were queried which could be accessed by people with the necessary competences and skills. Therefore, it is doubtful that participants of non-probability sample would rudimentary differently evaluate or have a different motivation than non-test subjects.

Conclusively, choosing a non-probability sample for this study is in line with family business research and in good fit with the quantitative research approach of this study. The next chapter deals with the conduction of the survey.

Survey design and procedure

For the data collection the German well-known private database of Splendid Research GmbH was chosen to approach businesses which meet the below mentioned control variables. The sample consists of family as well as non-family businesses to achieve a high level of heterogeneity. The participants are part of the management team to verify that they have a high-level knowledge of their business to avoid the limitations if only one informant per business would be available (Rong & Wilkinson, 2011; Woodside et al., 2015). The questionnaires were sent by an email. This email described the research aim, asked for the managers to participate and provided a contact email address for questions. In addition, the managers received e-mails to remind them to complete the questionnaire.

The sample consisted of German businesses of the manufacturing industry and is characteristic for SMEs (J. M. Müller, 2019; J. M. Müller et al., 2018). Strategic Planning and Performance in Small and Medium Enterprises: A Multiple Case Study in the German Manufacturing Industry

The family and non-family businesses were screened for the following criteria:

- Main commercial activity in Germany
- Main industrial activity in manufacturing
- Business fulfills European SME definition
    - Turnover of less than 50 million euro
    - Less than 250 employees

Moreover, businesses with a sample size of less 6 and a turnover of less than 300,000 Euro were excluded from this study to make sure that the business have access to a sufficient managerial experience pool of decision-making (J. J. Chrisman et al., 2012).

The questionnaire for this study was developed in 2020. The online questionnaire included 45 items.

Pre-test

Questionnaires are not perfect but can be become very close to well fledged instruments after a pre-test (Jahoda & Oppenheim, 1967). A pre-test serves the purpose to make sure that the questionnaire is a tool which is able to gather the information the author has planned to gather. Therefore, a pre-test was performed to verify that the questions and scales in the questionnaire are well understandable (Hair, Jr, 2015).

Firstly, the questionnaire was translated from English into German. Then, the pre-test was performed in July 2020 by 13 family and non-family business managers. In the pre-test the participants were encouraged to express their opinion on wording, structure and time usage either in interview form or to provide comments on the questionnaire.

Of 11 participants the feedbacks could be considered valid. Businesses with a too low number of employees and turnover provided invalid responses as they lack the necessary structures for goal setting and the selection of key performance indicators. Consequently, the minimum number of employees of businesses to participate in this study was raised to 6 and the minimum turnover threshold was increased to 250,000 Euros.

Three of the participants of the survey had problems to select an appropriate response category when assessing their non-financial performance in terms of employee turnover. Technical terms were already kept simple and rare in the questionnaire as possible. Therefore, to avoid data loose an example was introduced in which situation which rating shall be applied (Hair, Jr, 2015).

5.3 Methods and Data Analysis

The data analysis includes the following steps:

1. Assess data quality with exploratory and confirmatory factor analysis.
2. Descriptive statistics to examine the total sample of family-managed and non-family-managed businesses,
    a. Independent samples t-test is a test to examine differences between both groups concerning the variable groups goal setting and the selection of key performance indicators, and financial as well as non-financial business performance,
3. Path analysis for both groups to identify the determinants of the overall business performance as dependent variables.

Based on this research procedure, it should be possible to examine the influence of family ownership management on business performance resulting from differences in goal setting and the selection of key performance indicators.

It shall be noted that for the t-test and path analysis p-values will be reported in four intervals namely, *** for $p \leq .001$, ** for $p \leq .01$, * for $p \leq .05$ and † for $p \leq .10$. A threshold of $p \leq .10$ is well established practice in the area of family business research (J. J. Chrisman et al., 2009, 2012).

Exploratory factor analysis (EFA)

In exploratory factor analysis (EFA) a large set of variables is condensed into a smaller one to identify the underlying structures. According to Taherdoost et al. (2014) EFA has been used in multiple areas in over 1700 papers to analyze latent structures. In over 50% of the papers Varimax rotation is used as an interpretation support. After the rotation the resulting loadings can be categorized as minimal (.30), important (.40), and practical (.50) (Hair et al., 1995). Therefore, loadings equal or higher than .50 are bolded in the respective tables and are used for interpretation.

Many scholars regard a sample size of n=50 as the minimum sample size for factor analysis even if there are small strains in the data set depending on the loadings, number of factors and number of variables (Goretzko et al., 2021; Kyriazos, 2018; Shrestha, 2021).

EFA is applied to achieve the following goals (Goretzko et al., 2021):

- Analyze the structure of the data set to confirm the assignment of the indicators to the hypothetical constructs
- Test the constructs for unidimensionality
- Assess the construct validity e.g. part of a survey

Confirmatory factor analysis (CFA)

CFA enables the researcher to test models which rely on the observed variables and their relation to latent constructs. This is done by firstly postulating hypothesis and then testing statistically the empirical data against them. Moreover, CFA can test more complex models by considering numerous items for each factor and thereby achieving a higher reliability (Becerra et al., 2020; Graafland, 2020).

Independent sample t-test

By the independent sample t-test, mean differences between the groups family and non-family businesses are examined for significant statistical deviations in their means. Moreover, the t-test was extended to the Welch's t-test because the because it shows higher reliability when two samples have different variances and samples sizes which applies for this study (Derrick & White, 2016; Ruxton, 2006).

Mediation analysis

Mediation analysis is concerned with the question of how an independent variable exerts its effect on dependent variable, by considering which mediating processes are involved. There are three main approaches to test variables for mediation:

- According to Baron & Kenny (1986)
- According to the Sobel test (Sobel, 1982)
- According to Preacher & Hayes (2004)

To test the presence of mediation according to Baron & Kenny (1986) a total of four steps have to be conducted, which are shown graphically in Figure 10. Consequently, a variable qualifies as a full mediator if the following criteria are met:

1. Mediation according to Baron & Kenny (1986) requires statistical significance between the dependent and independent variables which is path c' and named total effect.
2. Moreover, for this mediation model statistical significance between the independent and the mediator variable is demanded (path a).
3. Next, it needs to be checked if there the relation between the mediator and dependent variable is significant (path b).
4. The coefficient of the independent variable of path c decreases under the impact of the mediator in the regression equation to zero (direct effect).

If the criteria of step 4 are not fulfilled it can be assumed that partial mediation applies to the model. Therefore, depending on the statistical strength of the direct effect and the product of the a and b path (indirect effect) mediation can be considered either full or partial.

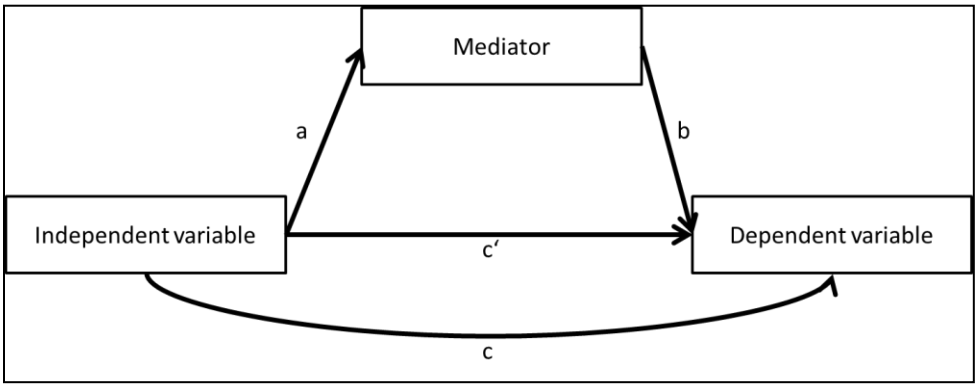

Figure 10 Depiction of mediation analysis (Source: Own illustration based on R. M. Baron & Kenny, 1986 and Preacher & Hayes, 2004)

Although still frequently used in modern literature, the above-described causal steps and the classification according to partial and total mediation according to Baron & Kenny (1986) is predominantly rejected (MacKinnon et al., 2002; Rucker et al., 2011; Zhao et al., 2010). Critics declare for mediation to occur, the total effect does not need to be significant. Hayes (2017) argues that path a and b must not be regarded separately for mediation in but only as a product of both paths, i.e. indirect effect. In addition, Hayes (2017) and Warner (2012) strictly advocates deciding on the mediation hypothesis in a significance test, arguing that the one-test procedure has a lower risk of error than the series of significance tests suggested by Baron & Kenny (1986). For this thesis the indirect effect will be regarded as the product of a and b and will not be estimated separately.

The Sobel test assesses the relevance of the mediator variable by calculating the significance of the indirect effect (Sobel, 1982). The Sobel test is criticized for its assumptions that normal distribution is a precondition for the indirect effect. However, if the two sub-paths of the indirect effect are normally distributed, usually the product of these two quantities is not. The Sobel test should be used with extreme caution, especially with small and medium-sized samples (MacKinnon et al., 2004; Preacher & Hayes, 2008).

Due to the shortcomings of the previous mediation approaches Preacher & Hayes (2008) developed a nonparametric distribution-free method that checks the significance of the indirect effect. It estimates an empirical sample distribution over the frequently (1000 or more) repeated sampling from the existing sample. In addition, bootstrapping does not require the sample to be normal distributed (Preacher & Hayes, 2008). Due to the observed advantages of the bootstrapping over other established mediations models it will be applied in this thesis.

Path analysis

Path analysis is a very specific kind of structural equation models (SEM). When SEMs uses unobserved (latent) variables measured by numerous observed variables, path analysis utilizes observed measures calculated by the sum of multiple factors. Therefore, path analysis yields the advantage that mediation is not required to be tested in separate regressions but can be tested simultaneously (Amankwaa et al., 2019). Consequently, researchers have started to apply the transmittal approach in mediation. This approach tests mediation by forming a single hypothesis which postulates two assumptions (Memon et al., 2018; Rahman et al., 2018; Rungtusanatham et al., 2014):

- The mediator connects the relationship between the independent and dependent variable.
- The dependent variable has an indirect effect on the dependent variable through the mediator.

The hypotheses in this thesis will be left according to the transmittal approach.

5.4 Design of the Empirical Study

The prior chapters conclude that goal setting and the selection of key performance indicators provide a missing link between family business ownership and their superior organizational performance.

The operationalization of the respective variables in the applied model in this thesis is discussed in this chapter. The chapter starts with dependent variables, followed by the mediator, independent variables and is ended by the control variables.

Quality criteria of measures

The quality of a scientific test can be determined by three criteria: objectivity, reliability and validity. These criteria follow a strict hierarchic order. Objectivity is a necessary but not sufficient premise for reliability. Additionally, reliability is a necessary but not sufficient condition for the validity of a scientific test. The means by which these three quality criteria can be determined will be explained in this chapter.

Objectivity is given when a test result is not influenced by the test director in its execution, evaluation and interpretation, or even in the best possible scenario when several independent experts achieve the same results. The core of implementation objectivity is that the test result is not influenced by the participants of the survey (Hofman, 2020).

Reliability of measurement means the degree of accuracy with which it measures empirical characteristics. In other words, reliability is defined that data is collected in such a way that a repeated measurement on the same constructs and items will produce equal results. Thus, perfect reliability of measurement results means that an instrument is able to repeatedly measure the true value of an observation without any measurement error (Hofman, 2020). There are numerous methods available to determine reliability. In this thesis reliability will be estimated by internal consistency measured by Cronbach’s alpha and confirmatory factor analyses. Cronbach’s alpha is frequently used to determine the reliability of a measurement instrument for cross-sectional data (Lubiano, 2022). The alpha coefficient can reach a maximum of +1 for perfect internal consistency and a minimum of -1 for severe inconsistent scales. The discussion on the acceptable Cronbach’s alpha coefficient is still proceeding. Some scholars claim that an alpha coefficient of greater than .7 can be considered as good. Others claim for newly developed scales a range of .5 to .6 to be acceptable (Lubiano, 2022). The quality criteria of objectivity and reliability enable a high degree of measurement accuracy, but only provide under favorable conditions validity, since a test with low reliability cannot have a high validity. If there is a high validity, the results of a test permit the generalization of the results observed in the test situation to the results to be measured outside the test situation. Therefore, validity of a survey can be defined as the correlation of the test results in the test situation with corresponding to the results outside of the test situation. It can be discriminated between validity of content, of criterion and of construct. Content validity refers to the extent to which an item is representative of the constructs that it measures (Lubiano, 2022).

A survey has criterion validity, if the results of latent constructs can be successfully related to variables from the outside of the test situation (Lubiano, 2022). The strength of this relationship is the extent of criterion validity. Construct validity is resembled by the fact that hypotheses can be derived from the chosen constructs that are based on test results (Lubiano, 2022). The above definitions underline that the confirmation of measurement validity is very complex. The validity of the measurement instruments in this thesis is ensured by means which have been used and are recommended for the field of family business research (Brigham & Payne, 2019; Hair et al., 2021):

- If possible, questions were adopted which validity has been proven in former studies. Therefore, the operationalization is based on a thorough analysis of relevant and previously published survey instruments.
- If well-established questions could not be used, the operationalization was based on the conditions and principles of the relevant research community.
- A pre-test was performed to ensure the validity of the measurement instruments.

After the quality criteria have been defined and it has been described how they will be achieved, the operationalization of the dependent, independent and control variables will now be discussed.

Measures

The theoretical chapters of this thesis provided the foundation for the subsequent empirical analyses of the hypotheses. Previous analysis suggests that family businesses show a strong adherence to non-financial factors inherited to their strategy, management and performance. Therefore, goal setting and selection of key performance indicators serve as mediators to connect family and non-family business ownership with their differences in performance. Following this path, there is a call in literature for the usage of mediators in order to develop a better understanding of the impact of family involvement on behavior and performance (Martínez-Alonso et al., 2022). Consequently, the research design accommodates three hypothesis complexes to test their validity in the context of family business research.

All items are quantified by using a 6-point Likert scale (anchored by 1 = not good/bad at all and 6 = excellent / very good or 1 = not applicable at all and 6 = fully applicable). By using the 6-point Likert scale a medium category is avoided which yields the advantage that a positioning of the test persons is forced (D. R. Cooper & Schindler, 2014). The complete questionnaire is enclosed to the appendix.

Organizational performance as dependent variable

Organizational performance will be measured in this thesis as resources which were allocated when trying to achieve financial and non-financial goals.

Theory suggests that non-family businesses are mainly trying to achieve financial goals, family businesses substitute their financial goals by non-financial goals to a degree which has not been examined in literature yet. Further concluding, if family businesses have the same resources available as non-family businesses, they will use theoretically a part of the resources to improve their non-financial performance at the expense of their financial performance (Chua et al., 2018a).

Further clarifying, family business theory suggests numerous reasons why family control improves or reduces financial performance. Arguments for the prevalence for the financial performance of family business are: lower agency costs (le Breton-Miller & Miller, 2018), long-term strategy in terms of general stakeholder management (Memili et al., 2018) and business survivability is of outmost important to the family business leaders (Hirigoyen & Basly, 2019). Factors which are negatively affect financial performance of family businesses are: family conflicts (Caputo et al., 2018), exploitation of private benefits by family members. Bennedsen et al. (2007) focus on non-financial goals and favoritism.

This thesis shall capture the overall performance of businesses due to the fact that literature suggests that family businesses put a stronger emphasize on non-financial performance and non-family businesses focus more on financial performance. Additionally, an holistic performance provides a better comparison of both organizational types (C. A. Alves & Gama, 2020; Chukwujioke Agbimi, 2019). So far only very few studies have measured the non-financial performance of family businesses (Chua et al., 2018b). Growth is very important for family as well as non-family businesses because it is closely linked to organizational performance (Moreno-Menéndez & Casillas, 2021). Additionally, growth in family businesses is characterized by long-term stakeholder relationships, risk aversion and trans generational contemplation (Berthold, 2010; May, 2008). Financial performance, as dependent variable, shall be measured by asking the respondents to compare performance constructs with their main competitors. From the accounting perspective return on net asset growth, sales growth and from the stock market perspective the market value growth was considered. As construct for internal and external stakeholder contentment, employee turnover, customer satisfaction and adapting to client needs relative to competition are frequently used non-financial measures in performance studies and will be used in this thesis as the non-financial performance dependent variables (Al-Mamary et al., 2020; Taouab & Issor, 2019).

Employee turnover can be harmful for organizational performance in the future. Additionally, employee turnover reflects on internal stakeholder management (Hansen et al., 2011). Whereas customer satisfaction refers to external stakeholder management, studies also suggest an empirical relationship to internal stakeholder management through job satisfaction (Taouab & Issor, 2019). The metric adapting to client needs is associated with external stakeholder management in terms of high market orientation (Masa'deh et al., 2018).

Employee turnover, customer satisfaction, business reputation and persuasion of social responsibility are performance measurements that substitute for the long-term and sustainable performance of businesses (Dyer & Whetten, 2006; Hancock et al., 2013; Hofmann, 2001; Pereira et al., 2016).

The advantages of using subjective performance measurements in terms performance comparisons with competitors will be discussed in this paragraph. The usage of objective performance measures is often hampered by being inaccessible and lowering response rates (C. Lee, 2021). Scholars have exemplified the good usage of subjective performance measures (Rousseau et al., 2018; Stanley et al., 2019). Furthermore, literature has verified the correlation of subjective performance measures with objective ones for application surveys (Omran et al., 2021). In addition, Zellweger et al. (2012) argue that performance comparisons with competitors are reliable information sources of the growth of businesses. Subjective financial performance is especially suitable for studies on small and medium businesses because they reflect a more holistic performance concept compared to the sole financial performance. Moreover, subjective performance measures are commonly used in family business research practice (Rousseau et al., 2018; Stanley et al., 2019) because family businesses are often prone to disclose financial information (Sciascia et al., 2014). To ensure explanatory power and to reduce industry-related influences the participants were asked to compare their business performance in comparison with their main competitors over the last three years.

<u>Ownership as independent variable</u>

In this study family and non-family ownership serves as the independent variable. Conventional studies on family businesses emphasized the negative impact of family ownership for being underperforming and profitless (Chu, 2011). More recently, literature has concluded a slight performance edge for family businesses, although inconclusiveness remains due to the heterogeneity of applied definitions in family business research (Hiebl & Li, 2020; Koji et al., 2020; M. J. E. Werner et al., 2021).

In this thesis a family business is defined as a family business if the family owns a minimum of 25% of shares and at least one family member is part of the management set. On the contrary, non-family businesses are operationalized as businesses with family ownership from 25% to 0% and without family members present in management circles (European Commission, 2009; Werner et al., 2018).

The complete European definition is listed below:

A firm, of any size, is a family business, if:

1. The majority of decision-making rights is in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs.
2. The majority of decision-making rights are indirect or direct.
3. At least one representative of the family or kin is formally involved in the management of the firm.
4. Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 percent of the decision-making rights mandated by their share capital.

The independent variable is treated as a dichotomous dummy variable that refers to the value of 1 if the business is a family business and 0 for a non-family business. In line with family business research, for the empirical section the ownership component was converted into a dichotomous variable which contains information about management participation of family members and the share families hold on the business.

Mediator variable

In this thesis two mediator variables are taken into consideration: goal setting and the selection of key performance indicators. According to J. Cohen et al. (2013) mediation is defined as a mechanism that explains the relationship between an independent and dependent variable through a third variable, namely a mediator. The mediator is responsible if the independent variable changes and therefore the dependent variable changes too (Hayes, 2017). On the contrary, a moderator would modify the relationship between the independent and dependent variable. Mediator analysis is not suitable for proving causalities but is able to check causal models based on empirical data which is done in this thesis (Hayes, 2017).

Goal setting as mediator variable

The process of goal setting and its outcome determines how business goals are formed in a business and what kind of organizational goals a business pursues (Kotlar, 2012; Williams, Pieper, & Astrachan, 2018).

This process progresses when the mission and actions of the business are transferred from an organizational to an individual level (Kotlar & De Massis, 2013). Goal setting is characterized by three steps (Cyert & March, 1963; Fang et al., 2013):

1. Coalitions are formed and goals are formulated in these coalitions by bargaining and side payments.
2. Goals are reaching a steady state and are then transformed into control procedures.
3. Based on experience goals are regularly updated and adjusted.

The impact of the family and its particular behavior increases the business persuasion of family related goals and therefore the goal diversity in family businesses (Rondi et al., 2019). Goal diversity commences social interaction process of employees and owners, when family related goals are weighted against non-family related goals are weighted. Kotlar & De Massis (2013) confirmed in their study the two stages of bargaining goals and the formulation of goals. Theory characterizes goal setting for non-family businesses by professional interaction and family social interactions by family businesses. The goal setting environment is characterized by internal and external stakeholders. Hence, it will also be operationalized by the perceived internal and external stakeholders. The behavioral framework will be operationalized by the status quo of goal setting theory below.

Financial and non-financial organizational goals are reflecting the mission and attitude of the goal forming coalition and the outcome of the goal setting process. In the context family businesses this coalition can also be called dominant family coalition (Istipliler & Ahrens, 2019). Moreover, goal setting ultimately shapes the goal formation of family related and non-family related goals for family and non-family businesses alike. Family related goals are characterized by the family's behavior. Hence, the family is capable of either rejecting or nurturing goals (Williams, Pieper, Kellermanns, et al., 2018a).

In this thesis organizational goal are divided into family related financial goals, family related non-financial goals, non-family financial goals and non-family related non-financial goals. Literature assumes that due to business heterogeneity all four goals relate to family business as well as non-family business (Murmann & Probst, 2018; Williams et al., 2019b). Due to the strong impact of goal setting on the motivation and behavior of employees, it is assumed that performance is linked to goal setting and the organizational goal outcome (Y. G. Lee & Marshall, 2013; Locke & Latham, 2002).

The area of family related financial goals includes goals which are aimed towards the wealth of the family (Murmann & Probst, 2018). In terms of family business wealth is not an aspect of maximizing financial performance but maintaining family control on the business. Family control is a precondition to differentiate between family and non-family businesses (T. M. Zellweger et al., 2012). Conversely, non-family related financial goals are solely directed at financial performance which includes aspects such as business growth, survival and profit. The operationalization of financial goals in order to enhance understanding of goal setting is therefore done by a rating of an employee in an executive position. For each organization types the following indicators are used: business growth, survival and profit. Business growth is often used in family business and management research to differentiate family businesses from non-family businesses (Greve, 2008; Moreno-Menéndez & Casillas, 2021). As a business goal, growth is crucial because it is as a resource a precondition for many other goals (Murmann & Probst, 2018). Business survival depends on the business simultaneous search for exploitation and exploration. Business survival as a goal is important for both organization forms as it is linked to risk aversion strategies and below-target performances. Financial performance is supported by many scholars as a significant organizational goal (Williams et al., 2019b).

Family related non-financial goals relate to aspects which are completely independent of financial goals. This independency is related to the family business behavior to rather lose financial wealth than reduce SEW (Gómez-Mejía et al., 2007). Therefore, family businesses are obliged to preserve or increase their SEW instead of maximizing their financial performance. For family businesses the most important non-financial goals are family identity, family harmony, and family social status (Kotlar & De Massis, 2013). Although less focused, non-family businesses pursue non-financial goals which shall be defined as non-family related financial goals. Non-family related financial goals mainly deal with the improvement of internal and external stakeholder relations (Murmann & Probst, 2018).

Due to the heterogeneity of family and non-family businesses it cannot be assumed that goals can be solely regarded to one organization form. Hence, all participants will be tested for non-family related goals to generate a significant overlap and comparison in specific goal orientation for both organizations. If only family related goals are regarded, no comparison of both business types would be possible (Rau et al., 2019a). Family related goals are only applicable when family businesses shall be compared. Consequently, the following non-financial goals shall be examined: internal and external stakeholder relationship. Internal relationships will be operationalized as employee development and job satisfaction of employees. Employee development is crucial for internal stakeholders and is frequently used by many scholars to note it as an important non-financial organizational goal and test its impact on organizational performance (Ju et al., 2021; Kotlar & de Massis, 2013).

Many scholars apply job satisfaction of employees in relation to goal setting and organizational performance (J. J. Chrisman et al., 2018; Rondi et al., 2022). Lastly, reputation is considered an important non-financial goal of family and non-family businesses because many studies show that reputation improves customer loyalty and enhances the acquisition of new customers which can improve the long-term performance of family as well as non-family businesses (D. Miller et al., 2009; Obermayer et al., 2022). Additionally, a high reputation increases the SEW of family businesses (Chaudhary et al., 2021).

<u>Selection of key performance indicators as mediator variable</u>

Key performance indicators (KPIs) gather mainly quantitative information of the business environment to reflect patterns and processes of the respective business. KPIs are providing priceless support for the decision-making process of the management level by incorporating information through planning, controlling and feedback (Gladen, 2014). The selection of the right set of KPIs is crucial and difficult to achieve at the same time for the managers. Additionally, the selection of the best fit of KPIs is mandatory because the risk of collecting and analyzing the incorrect set of data is high. Classical performance reporting systems claim to choose the best set of KPIs for organizations but are solely based on financial performance without considering indicators for long-term financial performance: such as customer satisfaction, process efficiency and employee capabilities (Hristov & Chirico, 2019; Iselin et al., 2008). This lack was remedied by the development of the balance score card (Aryani Paul, 2020). The balance scorecard is a performance reporting system which draws a holistic picture of the business by combining financial and non-financial indicators in four perspectives: finance, customer, internal business processes, learning and growth (Kaplan & Norton, 1992). Key performance indicators and the BSC are widely used in many industries.

In their study Iselin et al. (2008) found empirical proof between the usage of KPIs and organizational performance. This thesis shall expand Iselin et al.'s study to family business research by using the BSC items. The differences in the focal points of financial and non-financial aspects between family and non-family businesses can be supported by differences in the KPI selection between these organization forms. The financial perspective shall be operationalized by the focus of the respective organization form on accounting based or market based KPIs. Accounting based indicators calculate the profitability of a business of the foregone periods and transfer this information to estimate the profitability in the future (Masa'deh et al., 2015). That is why they are considered to provide only a short-term perspective on the financial situation of the business. Market based indicators compare the business market value to its profitability and growth. Due to the market value the market-based indicators can be considered to show a long-term performance of companies (Masa'deh et al., 2015).

Businesses are trying to hold customers instead of acquiring new ones (Alkitbi et al., 2021; Cheong et al., 2008). This can be considered the foundation for customer based KPIs. The customer-based perspective is operationalized by four dimensions, namely customer satisfaction, customer loyalty, acquisition of new customers. Customer satisfaction includes the post-decision assessment of the customer's purchase and the assessment of the total holistic customer experience (Gorgoglione & Panniello, 2018; Otto et al., 2020). Customer loyalty is regarded by theory as highly important because loyal customers have higher retention rates and spend higher budget shares at the respective business (S. C. Chen, 2020). The measurement of customer satisfaction and loyalty is crucial for long-term organizational performance (Gawankar et al., 2015; Otto et al., 2020). That is why they are included in this study as items. The previous items are linked to customer retention the next one is related to finding new customers. In the context of discovering new applications services or low switching costs for markets, customer acquisition is important for future and long-term performance (Nusair et al., 2021). Customer profit contribution has recently come to the attention of scholars. It uncovers the strategic opportunities of classifying customers by profits and costs.(Janković et al., 2012).

The analyses of customer profit contribution enhance competitiveness by putting more focus on customer management of highly profitable customers and cost control of less profitable costumers (Feng et al., 2019).

Internal processes consist of organizational activities which drive organizational performance (Hutahayan, 2020). These activities are transformed and operationalized into key performance indicators to assess the development of new products and services, process efficiency and quality optimization. Businesses focusing on the development of new products and services try to gain a competitive advantage by acquiring in-depth knowledge of the requirements and expectations of costumers (Zhu et al., 2019). Through the development of new products and services businesses are able to overcome their traditional product portfolio by reaching a higher level of service and product orientation to their costumers (Masa'deh et al., 2018). Process efficiency and quality optimization are linked to organizational performance by continuous technical improvements of their physical goods.

Among other internal resources which can lead to a competitive advantage, the human resource provides intangible characteristics: knowledge, skills and capabilities of employees (Bollinger & Smith, 2001; J. B. L. Craig & Moores, 2005). This aspect is captured by the innovation and employee perspective of the BSC. Innovation and learning enable individuals to align with the strategic necessities stemming from internal processes (Albuhisi & Abdallah, 2018). Additionally, the performance of individuals depends on their access to technology and working atmosphere. Therefore, this dimension is operationalized by KPI usage for employee satisfaction, employee productivity, the development of core competencies and informal communication. Employee satisfaction is defined as the individual's feelings regarding his jobs in various aspects such as the business policy, mission and working environment (Ispik et al., 2021). Employee productivity is included in his study because it strives with common objectives of employees and managers. Additionally, employee productivity is improved by employees taking part in establishing mission and policy statements (Bhatti & Qureshi, 2007). Core competencies are defined as the ability of a business to operate and encounter challenges competitively in its environment (Drozdowski et al., 2021). Many scholars suggest that in order to remain competitive executives must seek opportunities to generate preemptive and consistent capabilities that other businesses cannot duplicate (Mukherjee, 2022; Prahalad & Hamel, 2009). Informal communication is regarded as strength of SMEs because it strives under personal relationships and face to face meetings. Moreover, it reduces bureaucracy, market detachment and increases innovative capability (Baker, 2007; Ngah & Jusoff, 2009).

Several studies support the linkage between employee satisfaction, employee productivity and the development of core competencies and informal communication and organizational performance (Beuren et al., 2022; Chanda & Goyal, 2020; Panagiotakopoulos, 2020).

Finally, the BSC will operationalized in the emphasize the manager places when the respective indicators are used connected to business strategy.

Control variables

In this study several control variables were used to assess other potential influences on the dependent variable and to reduce the potential for misleading explanations. Several scholars propose that a broad spectrum of business features affects financial decision making and performance in family businesses (Greve, 2008; Koropp et al., 2014). Hence, business industry, size, age and location were determined as control variables which will be described further in this chapter. Moreover, all control variables will be transformed by taking their natural logarithms. This common practice is applied to avoid statistical distortions in numerical edge regions in multivariate analyses (Al-Okaily & Naueihed, 2020; Llanos-Contreras et al., 2021; Razzaque et al., 2020).

Business size

Business size is the first control variable in this study. It is acknowledged by scholars that most businesses start as family-controlled businesses and dilute the family component during their growth by external capital (Franks et al., 2008).

SMEs were chosen as control in this study because if they are family owned, the impact of the family is undiluted. Moreover, large businesses can have access to quantitative and qualitative better financial resources and market power which affect their internal settings and organizational performance (Blanco-Mazagatos et al., 2007; Fernández et al., 2019). Most family businesses in Germany are small and medium-sized enterprises (SMEs) (i.e., the companies have less than 250 employees and a turnover of less than 50 million euro (European Commission, 2009b). The main reason why research on family SMEs is rare is because these privately held businesses have no financial readily available data (Carney et al., 2015). Public businesses are easier accessible for gathering financial data and that is why most research focuses on them. Nevertheless, most family businesses are categorized as SMEs, therefore the expansion of public businesses analyses is ill-founded and contradicting to most family businesses. The manufacturing industry is especially important for Germany because it accounts for 57.9 percent of German SMEs (Hiebl et al., 2019; Wagner, 2013). Business size was measured by the number of employees of the business.

Business age

The second control variable of this study is business age. Like business size, age is considered to be a significant predicator of skills, competencies, resources and competitive advantages in family businesses (Barroso Martínez et al., 2019; Kidwell et al., 2020).

Age is measured as the number of years since the business was founded. Business age is commonly used as control variable in literature (Andres, 2008; Cabrera-Suárez & Martín-Santana, 2015). In this study business age was determined by the number of years since the business was founded.

Industry

This study specifically focuses on manufacturing businesses. The manufacturing sector plays a significant role for providing jobs and growth for the economy (Min et al., 2019). According to Li & Islam (2019) state that businesses from a specific industry are closely related in their capital and performance structure. Ngo et al. (2019) and van der Wijst (2012) note that manufacturing industry is capital-intensive and therefore requires large scale investments in long-term assets. In the German industry sector the prevailing organization form are family businesses. Manufacturing businesses are affected by sufficient degrees of performance and business risk (Kotlar et al., 2013).

Location

As location to collect the sample Germany is chosen. The German Mittelstand or SMEs are of crucial importance to the German economy (Steinhofel et al., 2019). The majority of SMEs in Germany are family owned (Rieg et al., 2021). For this study only businesses were selected that are located in Germany.

5.5 Empirical Findings

In this chapter the results of the empirical analysis will be discussed. Firstly, key descriptive statistics will be discussed. Secondly, the results of the t-test and thirdly, path analysis will be used to test hypotheses.

Descriptive statistics

In this chapter, the results of the descriptive analyses of the defined and explained variables of the data set are provided. The depiction is started with the business characteristics set in terms of business ownership. This is followed by a comprehensive comparison of the characteristics of control variables between the groups of family and non-family businesses.

A subdivision of family and non-family businesses was depicted by goal setting and selection of key performance indicators. Finally, these two business types are differentiated by their financial and non-financial performance.

The informative value of the descriptive chapter was further increased by mean comparisons performed by an independent sample t-test. The goal of the t-test is to underline statistically significant differences between family and non-family businesses with regard to the key components of goal setting and the selection of key performance indicators. For the descriptive results the t-test serves to better place the results obtained in this study in the context of present research.

Ownership component

Figure 11 shows the distribution of family and non-family businesses according to the European family business definition. It highlights that in this study family businesses have share of 72% and non-family businesses of 28%. The distribution of family and non-family businesses is consistent with other studies in family business literature (A. Werner et al., 2018).

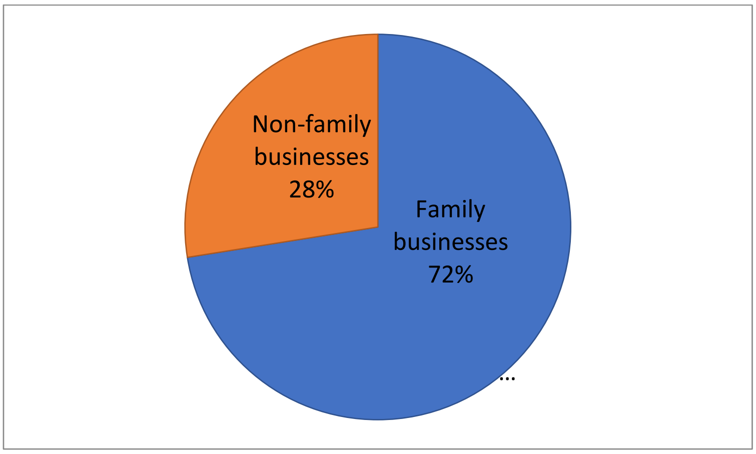

Figure 11 Share of family versus non-family businesses in this study (Source: Own elaboration)

Position of study participants

The study was focused on participants who can provide a valid assessment of the desired business aspects. These participants hold the position of managers of an organizational unit.

Business size

The survey was targeted at businesses with the size of small and medium enterprises. Businesses with an employee number of smaller than 6 and larger than 250 employees were excluded from this study. The businesses in the sample employed a minimum of 8 and a maximum of 250 employees. Family businesses show a slightly lower average employee number of 94 compared to the non-family business average of 121. Figure 12 highlights the employee structure of the participating businesses in 2019. It shows that for employee sizes from 25 to 50, from 50 to 99 and from 200 to 250 family and non-family business show an even distribution. For the class 6 to 24 employees, family and non-family businesses show a different distribution due to the fact that the majority of the small businesses is family owned. The size classes from 100 to 149 and 150 to 199 favor non-family businesses.

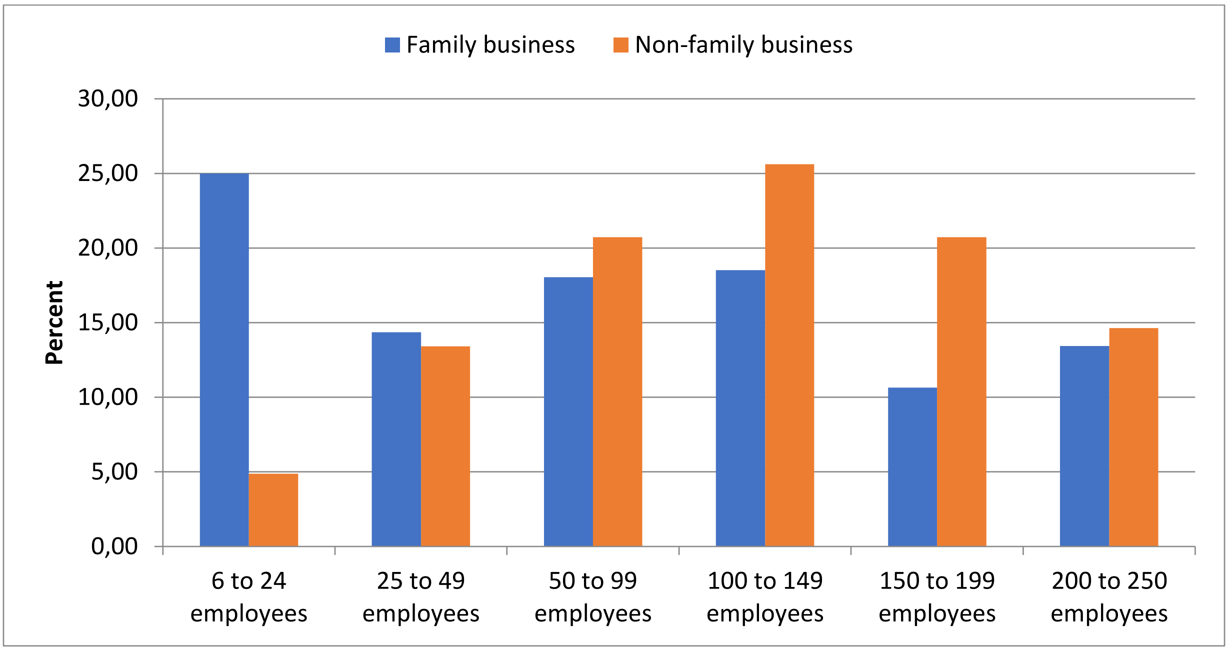

Figure 12 Number of employees of the participating businesses (Source: Own elaboration)

Figure 13 shows the business size of the sample with regards to the turnover of the respondent's businesses in 2019. Businesses with a turnover smaller than 250,000 Euros and larger than 50 million euros were ignored. The turnover shows a maximum of 49.9 million Euros and a minimum of 1.2 million Euros. The family business sample has a lower average turnover of 20.3 million Euros compared to the non-family business average of 28.2 million Euros. When comparing both samples, the turnover classes from 16 to 30 million Euros and 41 million Euros show a comparable distribution. Family businesses represent most businesses in the classes 250,000 Euros to 10 million Euros and 11 to 15 million Euros. The opposite holds for the class 31 to 40 million Euros. Most of the business are represented in this class by non-family businesses.

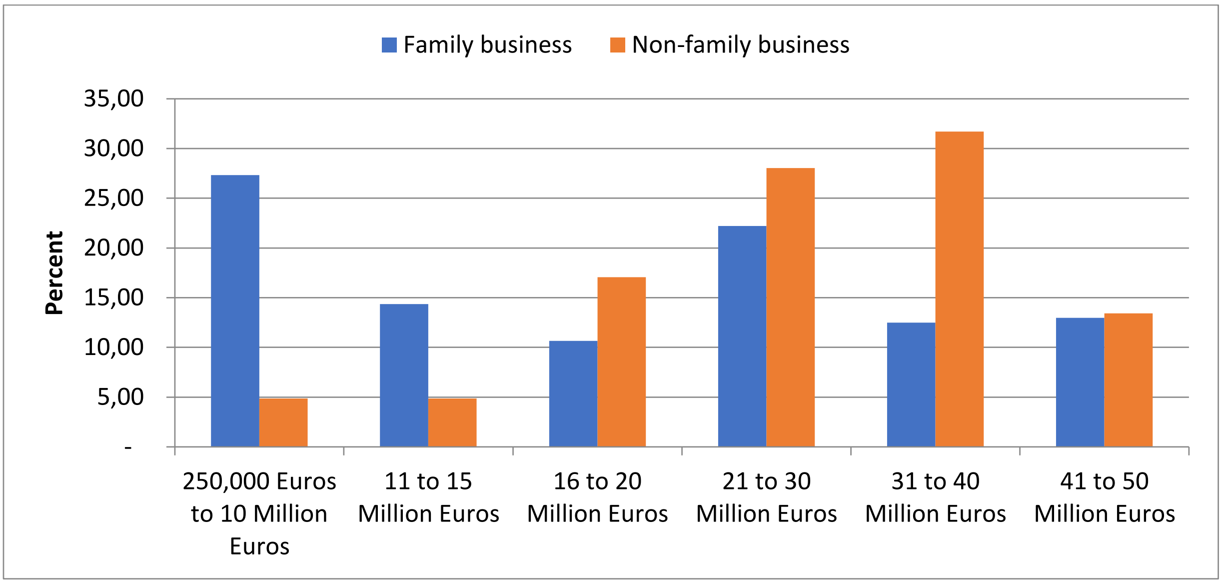

Figure 13 Turnover of the participating businesses (Source: Own elaboration)

<u>Business age</u>

Figure 14 outlines the age structure of the participating businesses as comparison between family and non-family businesses. The oldest business in the sample is 199 years old whereas the youngest business had an age of 3. The average age of the family business is 73 years and therefore higher compared to the average age 78 years of non-family businesses. Figure 14 shows that for the classes 0 to 20 years, 21 to 30 years and 31 to 50 years family and non-family businesses have a close to equal distribution, although in these classes non-family businesses are stronger represented. For the class 51 to 70 years, family businesses depict a larger share with 28% compared to non-family businesses with 17%. The family business sample shows a larger share of businesses compared to non-family businesses for the classes 71 to 100 years, 101 to 200 years, albeit these classes represent only a fraction of the businesses in the samples. This study aligns with the results of other scholars which also found that family businesses tend to be younger compared to non-family businesses (Debicki et al., 2020; Dou & Wu, 2022).

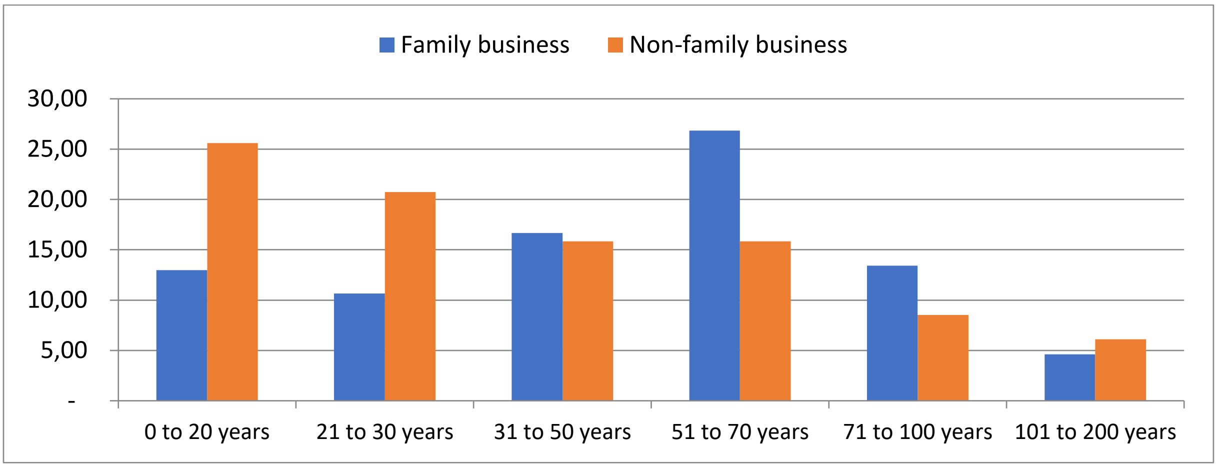

Figure 14 Age of the participating businesses (Source: Own elaboration)

<u>Goal setting</u>

In this section different elements of goal setting resulting from the exploratory factor analysis are described by descriptive statistics. To provide a complete depiction of the results the groups of family with non-family businesses are compared to assess statistically the differences between these groups.

<u>Behavioral framework</u>

For the framework of the goal setting process. Table 5-5, shows that non-family businesses have 6.7% higher tendency to apply schedules and defined roles during the goal setting process in conjunction with a significant p-value. The item of irregularity and non-defined roles draws an opposite picture. Family businesses exhibit an affinity towards non-defined roles which is quantified by a mean difference of 6.7%. The p-value highlights the statistical significance of this item. Furthermore, family businesses show an 8.3% greater average rating for internal and a 13.3% greater mean rating for external stakeholders. This is further underlined by the fact that the p-values are $\leq .01$.

Recent line of research has established that non-family businesses tend to follow agency theory and therefore apply stronger controlling structures e.g. defined roles. On the other hand, according to many scholars, family businesses tend to follow stewardship theory and therefore follow highly trustful relationships which are for example resembled by irregularity and non-defined roles. Family businesses are considered by literature to put great effort in the relationships with external stakeholders to prevent a reduction in SEW. For example, the family is regarded as an extension of the business that is why family businesses are very likely to prevent reputation losses. The risks of SEW and potential reputation losses is also the driving force for the emphasize of family businesses on internal stakeholder management. All the above described theories are well covered by the results in Table 5-5.

Table 5-5 Distribution of items of the behavioral framework of goal setting according to business ownership (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Internal stakeholders	FB	6.0	1.0	4.3	4.0	1.17	**	293
	NFB	6.0	2.0	3.8	4.0	1.05		
External stakeholders	FB	6.0	2.0	4.4	4.0	1.30	**	296
	NFB	6.0	2.0	3.6	4.0	1.16		
Schedules and defined roles	FB	6.0	1.0	4.2	4.0	1.22	*	298
	NFB	6.0	2.0	4.6	4.0	1.03		
Irregularity and non-defined Roles	FB	6.0	1.0	4.2	4.0	1.19	*	297
	NFB	6.0	2.0	3.8	4.0	1.12		
Social control	FB	6.0	1.0	4.3	4.0	1.28	ns	298
	NFB	6.0	2.0	4.2	4.0	1.19		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all)
Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

<u>Organizational goals</u>

In total, five goal outcomes of the goal setting process such as business growth, business survival, profit, job satisfaction of employees and employee development were discovered in this study as relevant items. In Table 5-6, the results of the descriptive analysis and the independent sample t-test mean that the objectives like of business survival, financial performance, job satisfaction of employees are higher rated for family businesses compared to non-family businesses and show statistically significant results. The remaining items business growth and employee development show an almost identical rating of family and nonfamily businesses. In addition, for these results the t-test shows insignificant p-values.

In this respect, business survival and job satisfaction of employees is rated averagely 5% higher by family businesses than by non-family businesses. Moreover, the objective of financial performance is rated 6.7% higher by family business compared to non-family businesses.

With regards to present theory it is surprising that financial performance is that highly rated by family businesses because family businesses are expected to focus monetary achievements. In contrast, family businesses are considered by most scholars as risk averse. Business survival is critical for family businesses as they otherwise risk the loss of the business therefore their high rating of business survival is conclusive.

Family businesses are expected by current theory to regard job satisfaction of employees highly because they are considered to have a stronger attachment to non-financial goals. The high focus on the financial performance objectives by family businesses is somewhat surprising as non-family businesses are considered by literature to have a higher focus on financial business aspects.

Table 5-6 Distribution of items of organizational goals according to business ownership

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Business growth	FB	6.0	1.0	4.4	4.0	1.08	ns	298
	NFB	6.0	1.0	4.3	4.0	1.09		
Business survival	FB	6.0	1.0	4.6	5.0	1.06	†	298
	NFB	6.0	1.0	4.4	4.0	1.12		
Profit	FB	6.0	1.0	4.6	5.0	1.10	*	297
	NFB	6.0	1.0	4.2	4.0	1.22		
Job satisfaction of employees	FB	6.0	1.0	4.7	5.0	1.08	*	298
	NFB	6.0	2.0	4.4	4.0	1.01		
Employee development	FB	6.0	1.0	4.6	5.0	1.10	ns	296
	NFB	6.0	2.0	4.5	5.0	1.11		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all)
Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

External perception

Three items result from the goal setting factor of external perception. Table 5-7 shows that customer satisfaction and business reputation are rated respectively 6.7% and 5% higher by family businesses compared to non-family businesses. The mean differences are statistically significant. The difference on the focus on customer satisfaction between family and non-family businesses is 3.3% higher favoring family businesses, although the result is not statistically significant.

According to present theory, family businesses are seeking a high level of reputation to maintain and increases SEW. Moreover, family businesses shall put a high focus on customer satisfaction due to their orientation towards non-financial goals and long-term business relationships.

Table 5-7 Distribution of items of the external perception according to business ownership (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	N
Customer satisfaction	FB	6.0	2.0	4.3	4.0	1.23	*	297
	NFB	6.0	1.0	3.9	4.0	.84		
Supplier satisfaction	FB	6.0	1.0	4.3	4.0	1.03	ns	294
	NFB	6.0	2.0	4.1	4.0	.89		
Business reputation	FB	6.0	1.0	4.2	4.0	1.18	*	295
	NFB	6.0	2.0	3.9	4.0	1.01		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all)
Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

<u>Selection of financial key performance indicators</u>

Table 5-8 compiles the descriptive statistics for the items of the construct selection of key performance indicators with focus on financial. The t-test results indicate a significantly by 9% higher focus of non-family businesses on profitability ratios. Many studies have concluded the higher focus of non-family businesses on financial goals and performance. Therefore, that the higher financial orientation is closely connected to the greater of focus of non-family business on the selection of profitability ratio KPIs. Moreover, non-family businesses focus by 5% more strongly on process indicators.

Table 5-8 Distribution of items of selection key performance indicators with focus on financial indicators according to business ownership (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Profitability ratios	FB			3.9		1.09	*	294
	NFB			4.3		1.02		
Investment ratios	FB			4.1		1.10	ns	293
	NFB			4.2		.99		
Process efficiency	FB			3.9		1.12	*	294
	NFB			4.1		.85		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all) Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

Selection of non-financial key performance indicators

In Table 5-9 the descriptive statistics of items of the construct selection of customer – employee KPIs are described. In terms of the selection on customer oriented non-family business show a higher focus than family businesses. Specifically, non-family businesses show a respectively, 11%, 7% and 11% higher rating on KPIs for customer satisfaction, loyalty and acquisition. In addition, for employee KPIs non-family businesses focus 9.9% higher than family businesses on quality optimization.

In general terms, the KPI selection shows that non-family businesses have a higher focus in many KPI related areas compared to family businesses. Literature indicates that the usage and selection of KPIs is connected to their size (Suárez, 2017). In this study non-family businesses have averagely a larger size than family businesses. Moreover, informality in governance mechanisms has been recognized by many scholars as a feature of family SMEs (Querbach et al., 2022; Wu, 2020). The approach of family business to govern themselves informally may lead them to put less focus on the selection and usage of KPIs.

Table 5-9 Distribution of items of selection key performance indicators with focus on non-financial indicators according to business ownership (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Customer satisfaction	FB			4.2		1.11	*	295
	NFB			4.7		1.23		
Customer loyalty	FB			4.0		1.10	ns	292
	NFB			4.3		1.41		
Acquisition of new customers	FB			4.0		1.06	*	295
	NFB			4.3		1.31		
Customer profit contribution	FB			4.0		1.06	**	296
	NFB			4.5		1.26		
Quality optimization	FB			4.0		1.10	*	295
	NFB			4.4		1.20		
Employee productivity	FB			4.1		1.16	ns	297
	NFB			4.4		1.17		
	FB			4.0		1.15	ns	295

Development of core competencies	NFB	4.2	1.17	
6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all) Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test				

To assess the business performance of the participating businesses they were asked to evaluate their performance against their main competitors in 2019.The EFA revealed that the business performance consists of two factors, namely financial and non-financial performance. In the following sections the descriptive statistics of these factors shall be presented.

Financial business performance

Resulting from the EFA three factors of financial performance were extracted from the business performance data set and are shown in Table 5-10. The item return on asset growth shows for non-family businesses a 1.7% higher ranking compared to family businesses although the result is statistically not significant. Moreover, for return on sales growth family businesses show 6.7% higher focus than non-family businesses. Market value growth is 6.7% higher rated by family businesses compared to non-family businesses. The differences in means for return on sales and market value growth can be considered statistically significant in terms of the t-test.

From the literature perspective, family businesses are considered to have a small performance edge over non-family businesses. This is confirmed by higher ratings of family businesses for the items return on sales and market value growth.

Table 5-10 Distribution of financial performance items (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Return on asset growth	FB	6.0	2.0	4.3	4.0	.89	ns	298
	NFB	6.0	2.0	4.4	4.0	.67		
Return on sales growth	FB	6.0	2.0	4.5	4.0	.87	*	298
	NFB	6.0	2.0	4.1	4.0	.73		
Market value growth	FB	6.0	2.0	4.4	4.0	.79	*	297
	NFB	6.0	2.0	4.0	4.0	.75		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all)

Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

Non-financial business performance

The three items shown in Table 5-11 were extracted from the EFA conducted on business performance. The item of customer satisfaction is 8.3% higher rated by family business than non-family businesses underlined by a statistically significant t-test. Family businesses rate their success in business reputation 3.3% higher compared to non-family businesses, although the result is not statistically significant. Moreover, non-family businesses rate themselves 6.7% more successful in terms of persuasion of social responsibility compared to family businesses.

Literature suggests that family businesses have a stronger focus on non-financial goals, therefore are also more successful in their non-financial performance compared to non-family businesses. Thus, the better performance of family businesses in the area of customer satisfaction is confirmed by theory. Contradictory, non-family businesses show a better performance compared to family businesses when social responsibility is persuaded.

Table 5-11 Distribution of non-financial performance items (Source: Own elaboration)

Item	Group	Maximum	Minimum	Mean	Median	SD	p-value	n
Customer satisfaction	FB	6.0	1.0	4.1	4.0	1.11	*	293
	NFB	6.0	2.0	3.6	4.0	.94		
Business reputation	FB	6.0	2.0	4.0	4.0	1.05	ns	295
	NFB	6.0	1.0	3.8	4.0	1.03		
Persuasion of social responsibility	FB	6.0	1.0	4.2	4.0	1.02	*	295
	NFB	6.0	2.0	3.8	4.0	1.07		

6-point Likert scale: 6 ("fully applicable "), 5 ("largely applicable "), 4 ("rather true "), 3 ("rather not applicable "), 2 ("largely not applicable), 1 ("not applicable at all)
Level of significance: *** for p <.001, ** for p <.01, * for p <.05 and † for p <.10 according to independent sample t-test

Interpretation of results

The data of the present study is sample data and not data of the whole population, the results of the hypothesis tests based on them, may be subject to fundamental errors. For example, it cannot be ruled out that, due to the selection of the sample, the test result confirms the alternative hypothesis (H1) by chance, although the null hypothesis (H0) applies in the population. This error is called α-error in the literature. Accordingly, the α-error would mean that a statistical test detects a significant correlation between two variables that does not exist in the population. Alternatively, it is also possible that a correct alternative hypothesis is rejected in favor of the null hypothesis. If the latter situation exists, it is referred to as a β-error. Therefore, an adequate or maximum acceptable level of these two potential errors must be determined prior to conducting the data analyses.

In this context, statistical hypothesis tests make use of the so-called error probability or α-error probability. This measures the probability of the α-error when conducting a hypothesis test. In scientific investigations, it is common practice to reject the null hypothesis only when the probability of error is less than or equal to 5 % or, depending on the study design and field of research less than or equal to 10 %. These limits or threshold values are referred to as the α-error level or significance level. In this study, a significance level of the path coefficients of $p \leq .10$ ($\alpha \leq 10\%$) is required otherwise the corresponding hypotheses are rejected (J. J. Chrisman et al., 2009, 2012). In this context, a significance level of $p \leq .001$ (***) is said to represent a highly significant result, while a significance level of $p \leq 0.1$ (†) represents mildly significant results. In addition to determining the applied significance levels, it is also necessary to explain and define the quality criteria of the path analysis. To assess the goodness fit of the path analysis will be assessed by model fit indices (χ 2/DF, CFI, GFI, RMR, RMSEA). They reflect, the goodness of fit of the path analysis to the empirically observed data. For each of the calculated models, the unstandardized coefficients (β-values) are reported. Standardization can be interpreted as an increase by one standard deviation on business ownership produces for example an increase of .077 standard deviations on financial performance through the indirect effect of external perception. Bearing in mind that the independent variable is dichotomous this is not a sensible interpretation of business ownership. Moreover, an increase in one standard deviation cannot be interpreted (Hayes, 2017; Kane & Ashbaugh, 2017). Therefore, unstandardized estimates are calculated for each path.

The correlations were calculated for all constructs with control variables.

<u>Mediation analyses</u>

To conduct the mediation analysis the independent variable of business ownership is converted into dummy variables following non-family businesses into zero and family businesses into one. For meditational purposes, the bootstrapping method for calculating indirect effects was applied (Preacher & Hayes, 2008). Meditational analysis was performed by IBM SPSS Amos

26 (James Gaskin et al., 2020; Revelle, 2020). Bootstrapping tests were performed with 2000 re-samples and bias corrected confidence interval (James Gaskin et al., 2020; Preacher & Hayes, 2008).

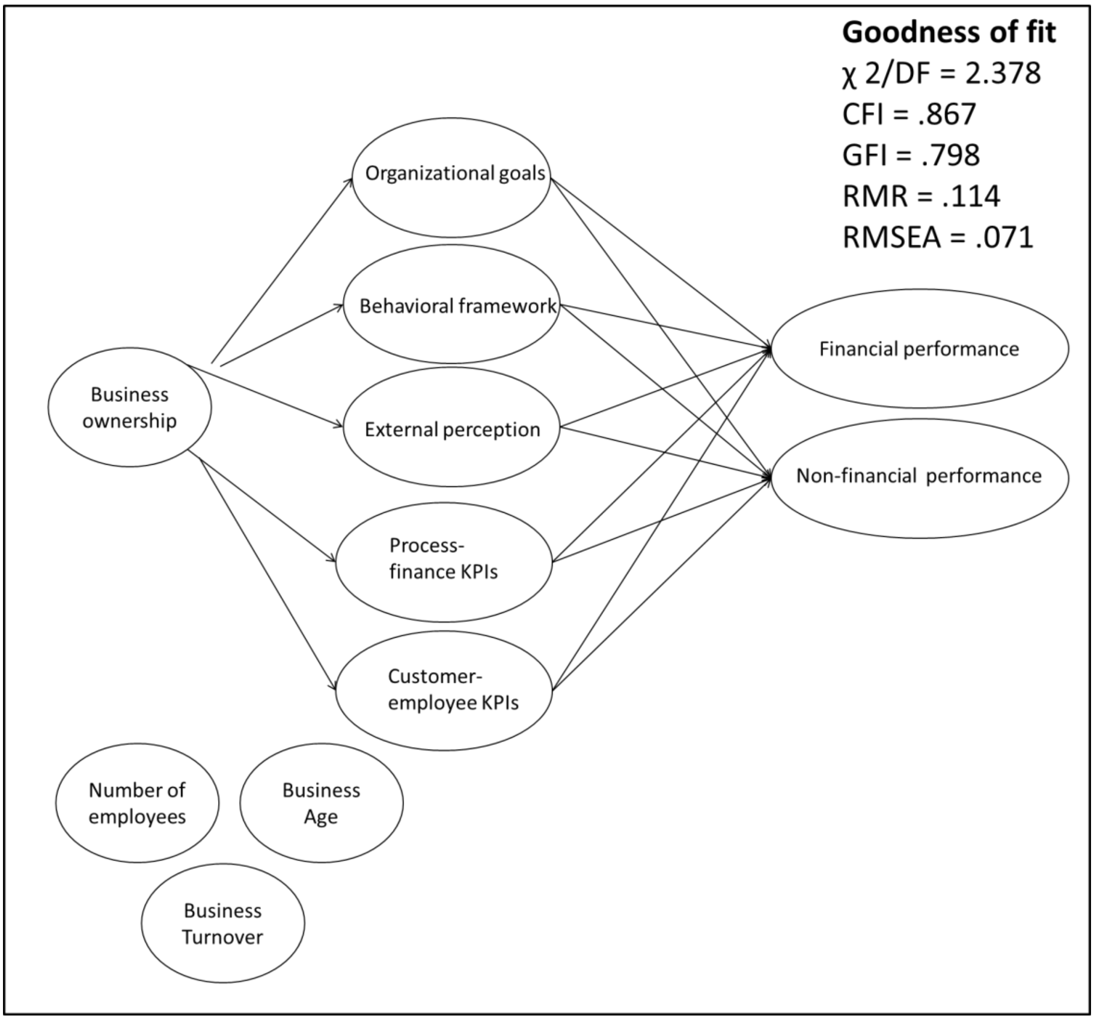

Figure 15 Research model (Source: Own elaboration)

Figure 15 summarizes the research model. It describes the total effect of business ownership on financial and non-financial performance which is formulated in the main hypotheses. Additionally, it represents the subhypotheses, which posit how family ownership affects financial business performance through the following mediators, application of behavioral framework, external perception, organizational goals and the selection of financial and non-financial KPIs, following a parallel mediation model (Demming et al., 2017; Hayes, 2017). The specific indirect effects are estimated by the product of the path coefficients of the specific mediational chain. The advantage of this approach is the ability to isolate the indirect effects of the mediator variables. The total and total direct effect shown in the tables below, summarize the effects of the complete structural equation model. To reduce the complexity in Figure 15 the control variables (Number of employees, business age and turnover) have not been connected to the variables, although for the calculation all control variables have been covariated with the independent variable and connected with the mediator and dependent variables.

Model fit indices are provided for the research model in Figure 15. The χ 2 and degrees of freedom ratio is below 3 which proposes a good fit of the research model with the data. The CFI and GFI with respective values of .867 and .798 are acceptable for research purposes. In addition, the values for RMR and RMSEA are at acceptable levels.

<u>Relationship between ownership, framework of goal setting, organizational goals, external perception and financial business performance</u>

The main hypothesis 1 assumes that family ownership and has a positive impact on financial performance. The results of the hypothesis test using path analysis are reported in Table 5-12. The c path (total effect) tests the direct link between ownership and financial performance including control variables. From the observation of the unstandardized regression coefficients, results that family business ownership exerts a highly significant ($p \leq .01$), and positive influence (β=.140) on financial business performance. The unstandardized total effect of business ownership on financial performance is .140, when business ownership goes up by 1, financial performance goes up by .140. This means that family business ownership has a significantly positive influence on the financial business performance. In this respect, main hypothesis 1 is confirmed by the empirical analyses. The control variables show no significant influence on the financial performance depending on business ownership.

For the financial performance the total effect (β=.140) is greater than the total direct effect (β=.172). Some scholars refer to this fact as “inconsistent mediation” (MacKinnon et al., 2000). The reason is that mediation model involves “suppression effects i.e. negative indirect effects” which reduce the total effect.

In alignment with subhypothesis 1.1, the indirect effect (a*b path) path examines the connection between ownership and financial performance through the behavioral framework. For the mediation effect there is a positive mildly significant connection (β=.014; $\leq$.10). Hence the positive impact of family business ownership on financial performance can be partially explained the behavioral framework. Consequently, the framework serves as a mediator in the relationship between business ownership and financial performance. Accordingly, subhypothesis 1.1 is confirmed.

Table 5-12 Path analysis of business ownership, behavioral framework and financial business performance (Source: Own elaboration)

Path	Financial performance c (Total effect)	Framework a*b (Specific indirect effect)	Financial performance c‘ (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.029	-.052	-.041
Numb. of employees	.035	-.103	.045
Business age	-.011	-.046	.060
Path outcome			
	.140**	.014†	.172*
*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10			
All coefficients (β) are unstandardized			

In addition, the specific mediation effect was calculated to test subhypothesis 1.2 which theorizes organizational goals as a mediator in the relationship between business ownership and financial performance. The results of the path analysis can be found in Table 5-13. The indirect effect of the organizational goals has a coefficient of .008 with a not significant p-value. Therefore, no mediation effect can be assumed and subhypothesis 1.2 must be rejected.

Table 5-13 Path analysis of business ownership, organizational goals and financial business performance (Source: Own elaboration)

Path	Financial performance c (Total effect)	Organizational goals a*b (Specific indirect effect)	Financial performance c‘ (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.029	.014	-.041
Numb. of employees	.035	.074	.045
Business age	-.011	.077†	.060
Path outcome			
	.140**	.010	.172*
*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10			
All coefficients (β) are unstandardized			

To test subhypothesis 1.3 which assumes the connection of ownership and financial performance is mediated by the external perception of the business. The results of the path analysis are presented in Table 5-14. The calculated specific indirect effect of external perception (β= .016; p ≤.05) is statistically significant. Consequently, the results can be interpreted that family business ownership has through external business perception a significant positive influence on financial performance. Therefore, mediation and subhypothesis 1.3 is confirmed. However, the control variable for business age has a significant (p≤.05) impact on the mediation effect of external business perception. The results show a positive connection (β=.134) between business age and external business perception. This inclines that the external perception of a business increases with its age. Confirmed by Sageder et al. (2018), the older a business is, the more sophisticated relations it has achieved with e.g., customers and suppliers which increases its external perception.

Table 5-14 Path analysis of business ownership, external perception and financial business performance (Source: Own elaboration)

Path	Financial performance c (Total effect) β with p-value	External perception a*b (Specific indirect effect) β with p-value	Financial performance c' (Total direct effect) β with p-value
Control variable			
Turnover	-.029	.034	-.041
Numb. of employees	.035	.075	.045
Business age	-.011	.134*	.060
Path outcome			
	.140**	.016†	.172*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

<u>Relationship between ownership, selection of key performance indicators and financial business performance</u>

Table 5-15 illustrates the results of the analysis of the mediating effect of the selection of financial KPIs on the financial performance. The indirect effect is negative and significant between business ownership and business performance through financial KPIs (β = -.042, p ≤.05). In other words, the financial performance of family businesses is suppressed by the usage of financial KPIs. Therefore, subhypothesis 1.4 must be rejected.

Table 5-15 Path analysis of business ownership, selection of financial KPIs and financial business performance (Source: Own elaboration)

Path	Financial performance c (Total effect)	Financial KPIs a*b (Specific indirect effect)	Financial performance c' (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.029	.022	-.041
Numb. of employees	.035	-.030	.045
Business age	-.011	.023	.060
Path outcome			
	.140**	-.043*	.172*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

In Table 5-16 the statistical effect of non-financial KPIs is shown. The indirect effect is statistical not significant. Therefore, subhypothesis 1.5 must be declined.

Table 5-16 Path analysis of business ownership, selection of non-financial KPIs and financial business performance (Source: Own elaboration)

Path	Financial performance c (Total effect)	Non-financial KPIs a*b (Specific indirect effect)	Financial performance c' (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.029	-.165*	-.041
Numb. of employees	.035	.019	.045
Business age	-.011	-.011	.060
Path outcome			
	.140**	-.010	.172*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

<u>Relationship between ownership, framework of goal setting, organizational goals, external perception and non-financial business performance</u>

Main hypothesis 2 assumes a positive relationship between family ownership and the non-financial business performance. The hypothesis reads as follows " Family businesses have a superior non-financial performance based on compared to non-family businesses ". The results of the path analysis are shown in Table 5-17. The positive unstandardized coefficient of family ownership ($p \leq .05$) is significant. Consequently, family ownership of a business leads to an increase in non-financial business performance (β=.152). Thus, main hypothesis 2 is confirmed. Moreover, the control variables business turnover and age show a significantly negative impact on the non-financial performance of family businesses. Consequently, when family businesses grow in turnover and age their non-financial performance declines. Moreover, according to Figure 13, family businesses have an averagely lower turnover than non-family businesses which can lead to a slight distortion in results.

Subhypothesis 2.1 suggests the behavioral framework as a mediator for the relationship of ownership and non-financial performance. The indirect effect between ownership and non-financial performance is insignificant with an insignificant unstandardized coefficient of .010. Therefore, subhypothesis 2.1 must be rejected.

Table 5-17 Path analysis of business ownership, framework and non-financial business performance (Source: Own elaboration)

Path	Non-financial performance c (Total effect) β with p-value	Framework a*b (Specific indirect effect) β with p-value	Non-financial performance c' (Total direct effect) β with p-value
Control variable			
Turnover	-.142*	-.080	-.049
Numb. of employees	.005	.091	.056
Business age	-.165*	.164*	.100*
Path outcome			
	.152*	.010	.110*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

In Table 5-18 the analysis of relationship between ownership and non-financial performance mediated by organizational goals is depicted. The indirect effect of the organizational goals shows a small estimator (β=.010) connected to statistical insignificance. The results conclude that there is no mediation and therefore subhypothesis 2.2 must be rejected.

Table 5-18 Path analysis of business ownership, organizational goals and non-financial business performance (Source: Own elaboration)

Path	Non-financial performance c (Total effect) β with p-value	Organizational goals a*b (Specific indirect effect) β with p-value	Non-financial performance c' (Total direct effect) β with p-value
Control variable			
Turnover	-.142*	.081	-.049
Numb. of employees	.005	.214*	.056
Business age	-.165*	.256*	.100*
Path outcome			
	.152*	.000-	.110*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

The data in Table 5-19 shows the results of the path analysis to test subhypothesis 2.3 which presumes that the external perception of the business mediates the link between ownership and non-financial performance. The indirect effect (β=.005) is small and statically not significant. Therefore, subhypothesis 2.3 needs to be rejected.

Table 5-19 Path analysis of business ownership, external perception and non-financial business performance (Source: Own elaboration)

Path	Non-financial performance c (Total effect) β with p-value	External perception a*b (Specific indirect effect) β with p-value	Non-financial performance c' (Total direct effect) β with p-value
Control variable			
Turnover	-.142*	-.002	-.049
Numb. of employees	.005	.095	.056
Business age	-.165*	.281*	.100*
Path outcome			
	.152*	.005	.110*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

Relationship between ownership, selection of key performance indicators and non-financial business performance

In Table 5-20 the results of the path analysis for the financial KPIs on non-financial business performance are shown. The indirect effect is not statistically significant. Therefore, subhypothesis 2.4 must be rejected.

Table 5-20 Path analysis of business ownership, selection of financial KPIs and non-financial business performance (Source: Own elaboration)

Path	Non-financial performance c (Total effect)	Financial KPIs a*b (Specific indirect effect)	Non-financial performance c' (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.142*	.023	-.049
Numb. of employees	.005	.020	.056
Business age	-.165*	-.011	.100*
Path outcome			
	.152*	.018	.110*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

In Table 5-21 a significant negative (β = -.044, p ≤.05) indirect effect of business ownership on the non-financial performance via selection of non-financial KPIs is observed. The results indicate that the non-financial performance is suppressed by the usage of non-financial KPIs, whereas for non-family businesses the non-financial performance is improved by the usage of non-financial KPIs. Due to the suppression effect of non-financial KPIs on family businesses non-financial performance subhypothesis 2.5 needs to be rejected.

Table 5-21 Path analysis of business ownership, selection of non-financial KPIs and non-financial business performance (Source: Own elaboration)

Path	Non-financial performance c (Total effect)	Non-financial KPIs a*b (Specific indirect effect)	Non-financial performance c' (Total direct effect)
	β with p-value	β with p-value	β with p-value
Control variable			
Turnover	-.142*	-.115	-.049

Numb. of employees	.005	.020	.056
Business age	-.165*	-.011	.100*
Path outcome			
	.152*	-.044*	.110*

*** for p ≤.001, ** for p ≤.01, * for p ≤ .05 and † for p ≤.10
All coefficients (β) are unstandardized

The goal of this chapter was to present and explain the results of the empirical data analyses. For this purpose, the results of the descriptive statistics were first described. On the basis of the general business data, it was possible to show that the present dataset contains a broad and representative spectrum of businesses in terms of size, age and position of the informant.

When looking at the descriptive data on ownership the participating businesses, it was evident that in particular family-owned businesses participated in this study. Thus, a total of 216 family businesses and 82 non-family businesses participated in this study.

Interesting results were also obtained from the descriptive data of the components of goal setting and selection of key performance indicators. It became clear that family businesses pursue different organizational policies, actions and focuses compared to non-family businesses. Overall, family businesses rated the organizational goals, behavioral framework, and external perception greater than non-family businesses. Differences also occurred in the area of most important key performance indicators. Non-family businesses showed a higher focus on financial and non-financial related indicators compared to family businesses.

These inclinations were largely confirmed in the subsequent multivariate analyses. It was found that family influence leads to an increase in emphasize in goal setting approaches. On the contrary, non-family businesses show a stronger focus on the usage of financial and non-financial KPIs compared to family businesses. The research model showed an acceptable fit with the observed data. Family businesses showed a significantly higher financial and non-financial performance compared to non-family businesses which confirms hypotheses one and two. In the further course of the analysis the relationship of business ownership and organizational performance was tested for mediation mechanisms. It was shown that the family businesses focus on behavioral framework and on external perception of the business. These constructs have a significant positive impact on the financial business performance which confirms subhypotheses 1.1 and 1.3. The focus of family businesses on financial KPIs suppresses their financial performance. Although a mediator effect could be found the relationship is negative therefore subhypothesis 2.1. was rejected. The focus of family businesses on non-financial KPIs inhibits their non-financial performance which lead to the rejection of subhypothesis 2.5.

Therefore, it can be noted that of the formulated two main hypotheses and 10 subhypotheses in total four hypotheses could be confirmed. Table 5-22 shows all empirically validated correlations between the variables relevant to the study in a structured form. In the following chapters, the results of this study will be summarized and assessed in terms of their implications for research and practice.

Table 5-22 Hypotheses tests (Source: Own elaboration)

Number.	Mediator variable	Dep. v.	Confirmed?
Main. Hypoth. 1	-	Finan. perf.	Yes
Subhypoth. 1.1	Behavioral framework	Finan. perf.	Yes
Subhypoth. 1.2	Organizational goals	Finan. perf.	No
Subhypoth. 1.3	External perception	Finan. perf.	Yes
Subhypoth. 1.4	Financial KPIs	Finan. perf.	No
Subhypoth. 1.5	Non-financial KPIs	Finan. perf.	No
Main. Hypoth. 1	-	Non-finan. perf.	Yes
Subhypoth. 2.1	Behavioral framework	Non-finan. perf.	No
Subhypoth. 2.2	Organizational goals	Non-finan. perf.	No
Subhypoth. 2.3	External perception	Non-finan. perf.	No
Subhypoth. 2.4	Financial KPIs	Non-finan. perf.	No
Subhypoth. 2.5	Non-financial KPIs	Non-finan. perf.	No

5.6 Critical Analysis of the Findings of the Study

This chapter will summarize and evaluate the main conceptual and empirical findings of this study. Consequently, conclusions are summarized and the most important results are evaluated with regards to their contribution to the academic debate and to entrepreneurial practice. Subsequently, possible limitations of the study and starting points for further research projects in the field of family business research will be pointed out. Lastly, an outlook is given.

Summary of conceptual and methodological details

To answer the research questions, the theoretical-conceptual framework of this thesis was established first. For this purpose, the development and status of research on family businesses was examined. It became clear that family businesses are a highly relevant economic sector but have been neglected in the academic debate. Especially problems in defining the organizational form of "family business" pose challenges for both practitioners and academics. In this respect, previous attempts to define family businesses range from dichotomous to continuous definition approaches, which measure the degree of family influence in a business by means of continuous scales.

Based on an extensive literature research, it was discovered that many studies are concerned with explaining family specific phenomena. Therefore, these phenomena were shifted into the area of strategic management and were further connected to the field of performance research on family businesses. The analysis of the results of empirical studies showed that up to now there has been a lack of research on the relationship between the family influence in a business, its performance and causal mechanisms in the form of strategic management.

This finding applies to studies on the diversity of family businesses, in which the effects of different degrees of family influence in a business on its performance are investigated. The mixed results on this question leaves open whether family influence in a business has a positive, neutral or negative effect on the financial and non-financial performance of the business. Therefore, it can be assumed that for this relationship a significant casual inference factor has not been considered yet in present studies.

One of the potential factors that could add explanatory value is the area of strategic management (Alonso et al., 2019; Chaudhary & Batra, 2018; D'Allura, 2019). Goal setting and selection of key performance indicators were identified as potential factors that can add explanatory value. In chapter 3.3 of this thesis, strategic management approaches were analyzed. Hypothetically, the goal setting approach was developed by a combination of behavior and stakeholder theory. Thus, and on the basis of the results of initial empirical studies, it was shown that the owning family is a powerful member of the dominant coalition that can exert strong influence on organizational goal formation and the goal outcome and therefore has a strong impact on organizational performance. In a further step, based on the conditions of how budget is adjusted, it was argued that the way individual targets are set drives individual and organizational performance. Lastly, based on the premises of the balanced scorecard, which consists of several KPI dimensions which serve to identify, improve, and control business's various functions. Therefore, it was assumed that business ownership has strong impact on the selection of KPIs and organizational performance. Subsequently, hypotheses were developed based on the carved out theoretical foundations. Therefore, these were based on the relationship between business ownership, strategic management and organizational performance.

The first set of hypotheses dealt with the superiority of businesses owned by family in terms of organizational (financial and non-financial) performance. The second set of hypotheses tested if goal setting mediates the relationship between business ownership and organizational performance. This argumentation was based on the behavioral and stakeholder theory. Consequently, it was argued that the entrepreneurial family, depending on its position of power in the business, can significantly influence its goal formation, goal outcome and goal orientation regarding financial and non-financial performance. Thirdly, hypotheses were developed based on the findings of stewardship theory approach to strategic management. Accordingly, it was argued that family businesses are favoring employment relationships based on shared values, trust and altruism. Consequently, this leads to a competitive advantage and increases financial and non-financial performance. The last hypotheses complex is founded upon the approach of the balanced scorecard. Following this approach it is argued that strategic ”considerations” can be taken more efficiently when they are accommodated with an optimal set of information. Following this path, the set of information which is provided depends on the key performance indicators which are selected by the business and therefore can have a significant impact on business performance.

To test the research hypotheses, a quantitative research approach based on primary data was chosen. Therefore, cross-sectional data on German business was collected by using a standardized questionnaire. To ensure optimum data quality, the final sample was reduced to a data set of 298 samples. Next, the data set was tested for possible distortions with the result that the data shows high quality and reliability. Representativeness tests indicate that the results of this study can be generalized to the respective business population.

Subsequently, descriptive statistics and t-tests were performed to provide a first impression of the distribution of variables relevant to this study. This already revealed initial differences within goal setting and selection of key performance indicators with varying business ownership. The comprehensive empirical testing of the derived hypotheses was carried out using structural equation models. For this purpose, a parallel mediation model was used.

Discussion of the study results

Numerous interesting insights were revealed by the result of the empirical analyses of the relationships between the variables "business ownership", "goal setting and the selection of key performance indicators" and financial and non-financial business performance. Both the descriptive and multivariate analyses of this study show clear differences in the importance of certain dimensions of strategic management between businesses with distinctive discrepancies in ownership. The main results of the descriptive and multivariate analyses are presented below and discussed in the context of previous research findings.

Dimensions and components of goal setting

The first essential realizations of this empirical investigation could be won regarding the composition of goal setting. Organizational goal setting was defined in this thesis as a function which includes goal formation, goal stabilization, goal outcome and goal alignment. It includes with the business principles, norms, goals and stakeholders both elements of normative and strategic management and thus provides the guidelines for organizational action.

Following this idea, it was found that goal setting can have different focuses, namely behavioral framework, organizational goals and external perception of the business. The validity of these dimensions was empirically confirmed by means of confirmatory factor analyses and further statistical tests. Successive statistical tests also made it clear that an organizational goal setting has an influence on organizational business performance. Although regression analysis does not allow any conclusions to be drawn about the causality of a relationship, it can be concluded from this that goal setting of a business is relevant to its actions. This result is also supported by the results of comparable studies which show that goal setting of a business offers significant added explanatory value for performance differences between businesses (al Kayid et al., 2022; Chua et al., 2018b; Williams et al., 2019a, 2019b). Accordingly, this study extends existing findings on the relationship between business ownership and organizational performance. It expands the relationship to include the important dimensions of behavioral framework, organizational goals and external perception.

However, it is not only the holistic consideration of goal setting that has yielded interesting findings on the leadership of businesses with different ownership. Additionally, the individual components of goal setting, like corporate philosophy, corporate goals and most important business standards, also make a significant contribution to a better understanding of the special characteristics of family businesses.

Behavioral framework

With regards to behavioral framework of goal setting, the primarily descriptive analyses showed that family businesses were attributing internal stakeholders, external stakeholders and irregular norms. On the contrary, the norms of non-family businesses are characterized by schedules and defined roles. In the light of previous studies particularly in the area of normative management, the striving of family business for non-regular norms and less defined roles, is plausible (J. J. Chrisman et al., 2016; Marler et al., 2018; Sievinen et al., 2020).

For example, by the studies of Danso et al. (2020) and Sheth (2020) a further insight was gained into the area of the orientation of businesses to the interests of stakeholders. The impact of customers and employees during the formation of goals is emphasized. Hypothetically, Pantano et al. (2020) presume the high importance of internal stakeholders for family businesses. Moreover, Neubaum et al. (2012) empirically proofed the high relevance of stakeholders to family businesses. The supremacy of family businesses can be affected by the fact that they prioritize the claims of stakeholders and are able to react more swiftly to the demands of stakeholders due to their less defined roles and irregular norms

Organizational goals

In terms of organizational goals, descriptive analyses pronounced supported by the t-test results that family businesses rate the achievement of goals like “profit” and “business survival”. The study of Aparicio et al. (2017) support the notion that family businesses following profit as a highly relevant goal. In addition, many studies conclude that “business survival” is highly significant for this organization type because the business is a vital function to the family not only in financial terms (Murmann & Probst, 2018; Tagiuri & Davis, 1992).

As a third goal, “job satisfaction of employees” emerged to be more important for family businesses than non-family businesses supported by a significant t-test result. It appears that family-owned businesses are more interested in promoting the satisfaction of their employees in the long term. This circumstance could be due to a generally higher commitment of the family to the employees and the stronger social interaction between the entrepreneurial family and the employees.

External perception

A further insight into existing studies, e.g. Krappe et al. (2011), C. B. Astrachan et al. (2018) and Kuttner et al. (2020), was gained in the area of external business perception. In this study, the great importance of customers and business reputation for family businesses is underlined. As theoretically assumed and empirically proven by Chaudhary et al. (2021) and Zhang et al. (2020) business reputation and customer satisfaction are closely linked in family businesses. Thus, in the range of the enterprise goals the high meaning of customers and reputation is stressed with the management. Furthermore, t-tests also showed that the importance of the corporate goal "business reputation" and “customer satisfaction” differs significantly between businesses with family and non-family ownership. This could be due to the generally more long-term orientation of the corporate management of family businesses (Chaudhary et al., 2021; Motoc, 2019). Consequently, businesses with a high degree of family influence seem to be more strongly aware of the great importance of customers for the long-term organizational business performance. This finding is supported by the studies of le Breton-Miller & Miller (2022) and Sageder et al. (2018). It is claimed that family businesses are more sensitive to customer requirements and are more advantageous in the area of customer services.

Although, it has not been analyzed yet from which management process this link is stemming. This supports the notion that the focus of family businesses on reputation and customers derives from their goal setting characteristics. Therefore, the high relevance of external perception is initiated directly from the family coalition and its influence on the business. This could be due to the generally more long-term orientation of the corporate management of family businesses. Thus, businesses with a high degree of family influence appear to be more aware of the great importance of customers for the long-term success of the business.

Dimensions and components of the selection of key performance indicators

Further interesting insights were won by analyzing the construct of selection of key performance indicators. The selection of key performance indicators was linked to the rational construction of the balanced scorecard. The balanced scorecard is a strategically oriented control system that represents a powerful instrument for the implementation of corporate strategies. In addition to financial indicators which primarily only show the results of entrepreneurial activity, the balanced scorecard contains leading indicators describing the competitive position (customer perspective, e.g. market share, customer loyalty, customer satisfaction). The selection of indicators could be classified into two constructs: financial and non-financial KPIs.

Consequently, the descriptive part of the analyses showed that non-family businesses tend to strongly focus on profitability ratios and process efficiency compared to family businesses. Further analyses indicated that non-family business also focus more strongly on customer satisfaction, acquisition of new customers, customer profit contribution and quality optimization. These results underline that business ownership has a significant impact on the selection of key performance indicators. Former studies have already indicated that the selection of indicators is depending on ownership, although ownership was discriminated by governance, local and foreign capital in these studies (Kowala & Šebestová, 2021; Lesáková & Dubcová, 2016). A possible explanation is that family-owned SMEs represent due to their size the purest form of family influence and therefore rather drive strategical direction by informal processes and tacit knowledge than by key performance indicators.

Components of financial performance

The results of the descriptive statistics show that family businesses have a higher return on sales growth as well as a higher market value growth. For example, family businesses achieve higher sales growth by enhancing the participative strategy process and therefore levelling interests and lowering information asymmetries (W. T. Lin & Wang, 2021; Patel & Guedes, 2022). The studies of Aldamen et al. (2020) and Koji et al. (2020) provided empirical evidence that family businesses have a higher market value growth (Tobin's q) than non-family businesses in a well-regulated economy which is confirmed in this study. The result is justified by the fact that family control reduces the classical agency problem between owners and managers.

Components of non-financial performance

The analysis revealed that family businesses have a higher non-financial performance in terms of customer satisfaction and persuasion of social responsibility compared to non-family businesses. Some scholars argue that the higher level of customer satisfaction achieved by family businesses is a consequence that family businesses are perceived more trustworthy than non-family businesses (Stutz & Schell, 2022; Tipu, 2018). Congruent with the results in this study, the empirical studies of Campopiano & De Massis (2015) and Yu et al. (2015) confirm the high priority of social responsibility in family businesses.

In summary, for the first part of the results, the descriptive analyses were able to provide very relevant insights into the composition and main components of the goal setting and selection of key performance indicators constructs. In addition to the empirical confirmation of the constructs, it became particularly clear with regards to the effects of family influence that this influence leads to the different characteristics in strategic management. In the following, the results of the multivariate hypothesis tests are presented.

Relationship between business ownership, strategic management and organizational performance

To illuminate the relationship between business ownership and strategic management fourteen hypotheses were derived and tested using a structural equation model. Five of the hypotheses could confirm the significant influence of the involvement of an entrepreneurial family in the business on organizational performance and strategic management on the grounds of empirical data. The main findings of the hypothesis tests will now be briefly discussed.

Business ownership and organizational performance

To illuminate the relationship between business ownership and organizational performance in two hypotheses were derived and tested using a structural equation model. For all paths a significant influence of business ownership on organizational performance could be found. The findings of the hypothesis tests will now be discussed.

Business ownership and financial performance

It was shown that there is a strong positive and highly significant relationship between business ownership and financial business performance. From this it can be concluded, that with family business ownership, financial performance increases. Accordingly, family specific business outcomes are a crucial way to better understand the relationship between family characteristics and financial performance (Bratnicka-Myśliwiec et al., 2019).

Business ownership and non-financial performance

According to the results of the multivariate analyses, the non-financial business performance increases significantly when the business is family owned. With the increasing influence of the entrepreneurial family, non-financial organizational performance becomes more prevalent in the business. According to prior studies, agency and stewardship theories theorized a significant positive connection between the family ownership, their involvement in management and non-financial business performance (Ekanayake & Hewa Kuruppuge, 2017; Srivastava & Bhatia, 2022).

Relationship between business ownership, strategic management and organizational performance of the business

In view of the very different and partly contradictory results to date on the relationship between family business ownership and organizational performance, strategic management was suspected to be a possible mediator of this relationship. The set of hypotheses examines the relationship between business ownership, mediator variables of goal setting and the selection of key performance indicators and organizational performance. The empirical analyses result in important and interesting findings on the interrelationships between the above-mentioned variables which are briefly presented and discussed in the light of previous findings in this area.

Business ownership, goal setting and financial performance

In the multivariate analyses, the mediator property of the behavioral framework and external perception could be confirmed whereas the organizational goals did not offer any added value for the explanation of this relationship. Thus, it could be statistically proven that family ownership of a business influences the financial performance of the business via the behavioral framework and external perception set by family influence. Contrary to the assumptions of classical economic theory, which postulates profit maximization as the primary and only valid criterion for increasing the profitability of a business, the empirical results presented here indicate that already the process of the formulation of goals, defined in this study as “behavioral framework”, has significant influence on the financial business performance. Moreover, if a business focus on its external perception this also has a strong positive impact on the financial performance of the family business.

This confirms the theoretically derived assumption that the external perception of a business can lead to the build-up of valuable and scarce resources. In the sense of the resource-based view, it can be assumed that businesses with a behavioral framework can build up relational resources such as reputational capital. The use of these resources results in short- or long-term competitive advantages of the business (Deephouse & Jaskiewicz, 2013; Edgar, 2020). This also has a positive effect on the performance of the business. Furthermore, it could be confirmed that the behavioral framework supports the SEW model which leads family businesses to follow a proactive stakeholder engagement and social behavior (Labelle et al., 2018). Consequently, the theoretical approach of the resource-based view converts these aspects into human capital which enhances short-term and long-term financial performance.

Thus, this study confirms, the theory-based conclusions of Kotlar & De Massis (2013) on the influence of the behavioral framework on the financial success of a business. This study supports first empirical findings of Rosina (2018) in family business research that propose a positive external perception of family business and extends these studies by connecting a positive external perception to enhance their financial performance.

<u>Business ownership, selection of key performance indicators and organizational performance</u>

Existing literature is inconclusive about the connection between business ownership and organizational performance because it assumes, that this connection is direct. From an alternative perspective, that it has been given too little attention in the literature, that this relationship can be mediated by a strategic management variable such as selection of key performance indicators. However, despite the high relevance for family businesses, evidence on the selection of key performance indicators business performance relationship is ambiguous in empirical field studies, although experimental work suggests that the selection of indicators can increase organizational performance (Bubenik et al., 2022; Rehman et al., 2019; Rodrigues et al., 2021). By applying a structural equation model, it was analyzed how the selection of key performance indicators according to the balanced scorecard mediates the relationship between business ownership and organizational performance (Zahoor & Sahaf, 2018). The analyses showed that the non-financial performance of family businesses is negatively affected by the selection of non-financial KPIs. Moreover, the analyses concluded that family businesses financial performance is negatively impacted by the selection of financial KPIs. Thus, empirical evidence was found that family influence influences organizational performance via the selection of key performance indicators. Consequently, the empirically established correlation by other studies between the selection of indicators and organizational performance was confirmed and extended by the business ownership component.

The outcome of the analyses confirms previous research with focus on the manufacturing industry which concluded the statistical relationship between the selection of performance measures and organizational performance (Nanda & Panda, 2019; Swarnakar et al., 2021). This study's results demonstrate the function of the applied variables. The focus on key performance indicators by family businesses reflects their characteristics when converting strategy into action and supporting strategy development. Proposed by existing studies family's govern their business by informal structures, relational norms and. Based on these factors, family businesses gain a competitive advantage (Cobben et al., 2022; Yates et al., 2022). The controlling function linked to the selection of indicators increases agency costs in family businesses which reduces resources and the organizational performance.

In summary, it can be said that goal setting and selection of key performance indicators are important building blocks for further explaining the organizational performance of a business. Additionally, the mediation analyses demonstrated, that family ownership has an impact on the financial and non-financial success of a business by influencing certain components of strategic management. These findings have a wide array of implications, in general for organizational and strategic research as well as for family business research.

5.7 Implications for Research and Practice

After summarizing and discussing the main findings of this work in the previous section, the implications of this work will now be outlined. First, the implications for scientific research, then the implications of this study for practice are discussed.

This study provides further insights into an area of research that has hardly produced any comprehensive studies in recent years and has only come back into focus in recent years, namely research on family businesses (J. Daspit et al., 2017). The results of this work are theoretical-conceptual as well as from an empirical point of view, make an important contribution to the further understanding of the special features of normative and strategic management (i.e. goal setting and selection of key performance indicators) and performance of family businesses. In addition, the present study answers many unanswered research questions in family business research and opens new paths for further research projects. The most important findings for research are briefly presented below.

Theoretical basis

A major contribution of the present work is the expansion of the theoretical basis of research on family businesses. Thus, with the behavior-oriented approach, stakeholder theory, target composition and the balanced scorecard approach a valid basis for the explanation of distinctive strategic management components could be created. It also contributes to initiate the debate of Schellong et al. (2019) on the integration of the behavior-oriented approach and stakeholder theory into family business research. Moreover, the resource-based view was extended by the integration of non-financial considerations in the business as suggested by Zellweger et al. (2013). By explicitly considering non-financial strategic management components, the theoretical horizon of classical business management research is expanded by the fact that it is not only guided by profit maximization. This broadening of the theoretical base contributes to a better theory-based explanation of economic reality. For it is considered certain in practice that family businesses actively pursue non-financial objectives (King et al., 2022). In this respect, the application of the combination of the behavior-oriented approach, stakeholder theory, target composition, balanced scorecard and the resource-based view can gain additional insights into the special features of the strategic management of family businesses.

Dataset

This study is based on data collected by means of a survey of small and medium German businesses with varying family or non-family ownership. Thus, the results more realistically reflect the heterogeneity of German businesses, contrary to existing work that focuses mainly on large family businesses. In addition, with close to 300 participating businesses, a high number of cases was achieved. As a result, the knowledge on strategic management characteristics and business performance could be substantially increased, beyond the previous level of selected case studies and international datasets, which only contain a small proportion of family businesses.

Components of strategic management

Daspit et al. (2017, p.9) state "[A]a strategic management perspective offers a framework for understanding the interrelatedness of various components of the strategic management process: goal formulation, strategy formulation, strategy implementation, strategic evaluation and control, environmental factors, and outcomes relevant to the family and the firm."

In this context, the findings on the relationship between family influence and goal setting and selection of key performance indicators as well as the results on the individual constructs generate an important added value for the further development of this strand of research. In this study, the constructs of goal setting such as behavioral framework and external perception were used as an important instrument for a deeper understanding of the management of family business and non-family businesses. This extends the work of Calabrò et al. (2019) and Daspit et al. (2017) on the dimensions of strategic orientation by further dimensions, such as different aspects of goal orientation as well as the preference of specific dimensions of key performance indicators. This allows for the first time a deeper insight into the effect of family influence on the normative and strategic management of a business (J. Daspit et al., 2017). In terms of normative management family businesses have so far only been examined by the means of theoretical-conceptual studies. The findings on the relationships between family influence in a business and strategic management is one of the most intriguing questions in family business research, namely how the involvement of an entrepreneurial family leads to the pursuit of strategy formulation and implementation and whether such features affect competitive advantages (Pfarrer et al., 2019; Sindakis et al., 2022). Accordingly, a contribution is made here to the further exploration of one of the most important and so far neglected strands of research on family businesses, the consideration of strategic motives in the management of family businesses. In this context, given the research gaps in family business research, J. Chrisman et al. (2003, p.28) state: "Research on the corporate, business, and functional strategies and structures of family businesses will contribute to the development of a theory of the family firm and, not incidentally, have immense practical and pedagogical value."

The present study is also one of the first empirical investigation of certain management strategies as a function of the importance of the entrepreneurial family in the business. In addition, new insights were generated with regards to the goal formation process and the importance of external perception of the business for the management. The empirical findings of this work based on the differentiated analysis of the business goal setting depending on business ownership supplement the existing knowledge about the objective formation and outcome of family and non-family businesses (Chua et al., 2018b; Dou et al., 2020; Williams, Pieper, Kellermanns, et al., 2018a). These results do not only contribute to the family business debate but can also be of importance in the literature on strategic management of businesses because in this strand of research few studies explicitly investigate goal formulation and goal outcome.

The sophisticated analyses of strategy formulation with different business ownership follows the call Chrisman et al. (2012) for more intense examination of organizational activity and behavior of family businesses. Consequently, the empirical analyses of this study provides further insights for family business research at both the overall and individual level of strategy formulation through key performance indicators.

Business performance

The research findings also shed light on the widely conflicting results on the family influence on organizational performance. It was shown that behavioral framework, external perception and the selection of key performance indicators serve as a mediator in the relationship between family influence and corporate organizational performance. In this respect, different components of strategic management could be responsible for the mixed empirical results in the relationship between the family business ownership and as well as its financial and non-financial success. This finding thus contributes to the scientific debate initiated by Daspit et al. (2018) and Donkor et al. (2018) for further research on the relationship between strategic management and corporate success. Additionally, the integration of several strategic management components as mediators answers the call of Barros-Contreras et al. (2022) and Minola et al. (2021) for a unified strategic management approach to reveal further insights of family business performance.

In addition to the contribution of knowledge to the research community, scientific studies are obliged to provide added value to business practice. Consequently, Sharma et al. (1997, p. 338) extend this obligation to family businesses: “For practically oriented fields like family business studies, it would be useful to identify research questions that are simultaneously important for the practitioner and interesting for the researcher.” Following this path, the practical implications of this study will be considered in the next chapter.

Practical implications

The findings of this empirical study are not only important for business research but also for business practice. The study is primary addressed to the top management of family and non-family businesses. Moreover, potential investors, banks and consultants could benefit from the results of this study.

For the leadership of organizations, the results of the present study should help top management of family and non-family businesses to engage critically with strategic management and its components. In addition, the findings on specific key performance indicators as well as the attention paid to goal setting could be used to scrutinize and, if necessary, optimize the orientation of organizational activities. Thus, for example the external perception and behavioral framework pursued by family businesses and the associated better organizational performance shall be used as a model for non-family business leaders. Finally, the further understanding of the interrelationships between the investigated variables offers businesses the opportunity to optimize their performance in the long term. For example, businesses with poor performance compared to their competitors could align to this study and become more successful businesses.

The practical implication for potential investors and banks lies in the possibility to better understand the decision-making processes of the management in businesses with different ownership structures. This provides investors with insights and very valuable information that could be highly useful in selecting suitable shares and identifying potential acquisition candidates. For banks the opportunity arises that they can use this knowledge about the effect of strategic management on business performance to identify risks in bank loans. On this page, prior to financing decisions by banks, it would be conceivable for discussions to be held with the management on the strategy orientation and execution of the business. Lastly, consultants can also use the knowledge about the characteristics of managing family businesses. This opens the opportunity that successful concepts from the area of strategic management could be transferred to less successful businesses.

To improve the functioning of family and non-family businesses, it is essential that the knowledge gained in scientific studies is tested for its practical implications. Nevertheless, the process of knowledge transfer is a challenging task that can often take years until it is completed. In conjunction with the human unwillingness to change, this often means that scientifically based approaches do not prevail in practice.

5.8 Limitation and Recommendation for Further Research

Although extreme care was taken in the design and implementation of this study, the applied research design, survey method, and operationalization of the variables could lead to certain limitations of the present work. These could result in a reduction of the reliability and validity of the obtained findings. However, these limitations also offer starting points for further research of the characteristics and the performance of family businesses.

The tested data set is generated from a sample of businesses from the manufacturing sector, albeit this sector of the German economy is of great importance, the results can only be transferred to businesses in other sectors to a limited extent. The effects of family-specific characteristics such as increased risk aversion and long-term planning could, for example, have different effects on businesses in the service or retail trade sector. Therefore, carrying out a study in other sectors of the German economy would lead to interesting comparisons. Especially, in a changed environment, unconfirmed hypotheses could be interpreted in more detail.

This study only takes German businesses into account. For example, the special features of German corporate governance such as the employee participation regulated by law or the dualistic model of separation of the management and the supervisory board do not allow the results to be directly transferred to other countries.

The results of this study refer to German businesses. Therefore, cultural influences on the results of this study cannot be ruled out. In this respect, cultural aspects can have an influence on strategic management supported by results of the studies of Allison (2019) and Schühly (2022) on the differences of strategic management in different countries. Consequently, performance comparisons at the continental European level should be aimed at, to show precisely the influences of different strategic management structures. Efforts in this direction, such as those of Chaudhary & Batra, (2018) and D'Allura (2019) indicate the likely development of this research field.

This study is founded on a cross-sectional design for data collection. Thus, the findings obtained only provide an insight into the strategic management and performance of a business at a specific point in time. However, it can be assumed that these business specifics change over time which could limit the meaningfulness of the results (J. Daspit et al., 2017). However, in the case of businesses which are owned by family businesses, a relatively high constancy of management can be assumed. because ownership and management structures in family businesses often change only slightly over time (Andres, 2008).

A further limitation of the cross-sectional design arises with regards to the unambiguousness of the causal relationship between the considered variables. There could be the problem of reverse causality, according to that the causal relationship between two variables is different than assumed (Leszczensky & Wolbring, 2022). Therefore, it would be possible that, contrary to the study results, better organizational performance leads to higher or lower outcomes in strategic management. To avoid these potential problems, it would be useful to further investigate these correlations by panel data. Consequently, panel data enables the researcher to draw conclusions about the causal structure of the variables under investigation by looking at changes in the correlations over time. In addition, panel data could also provide deeper insights into changes of strategic management over time.

Conclusion

Finally, it can be said that the present study generates reliable and generalizable findings on family businesses, despite the limitations explained in the previous chapter. It was possible to gain further insights into the strategic management orientation of family businesses based on the behavior-oriented approach, stakeholder theory, goal composition, balanced scorecard and the resource-based view. Additionally, deeper insights into the relationship between family ownership, its strategic management, and business success could be gained. This has made it possible to achieve relevant results for management and family business research as well as for entrepreneurial practice. The findings of this study break new ground both theoretically and empirically. Thus, the findings open many points for future studies in the still young field of family business research.

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LIST OF FIGURES

LIST OF TABLES

APPENDIX

QUESTIONNAIRE

Dear sir or madam,

Thank you for participating in this study on objective settings and organizational performance. This study serves only research purposes. The data will be collected anonymously and treated confidentially. It will take approximately 15 minutes to complete the questionnaire. It is important that you completely answer all questions even if you are not sure about the exact answer. An approximate indication is more important than an incomplete answer. At some points in the questionnaire there are several similar questions for methodological reasons. There are no correct or wrong answers.

In the first part I would like to get some general information about **you** and your **function** in the business as well as some **basic data about your business**.

	Basic data of your business	
1.1	How many employees did your business have in 2019?	....
1.2	What was the revenue of your business in 2019?	....
1.3	How many years does your business have since it has been founded in 2019?	....
1.4	Did <u>all</u> of the following criteria apply to your business in 2019?	◯ Yes

		◯ No

A business, of any size, is a family business, if: 1. The majority of decision-making rights is in the possession of the natural person(s) who established the firm, or in the possession of the natural person(s) who has/have acquired the share capital of the firm, or in the possession of their spouses, parents, child or children's direct heirs. 2. The majority of decision-making rights are indirect or direct. 3. At least one representative of the family or kin is formally involved in the management of the firm. 4. Listed companies meet the definition of family enterprise if the person who established or acquired the firm (share capital) or their families or descendants possess 25 percent of the decision-making rights mandated by their share capital.

In the following section we would like to know how you assess the following statements. Please indicate to what extent you think **the statements are correct**. It is about **general aspects of goal setting in your business**.

2.	For each statement, please indicate to what degree it applies to your business.	Explanation of the scale: 6 = fully applicable 5 = largely applicable 4 = rather true 3 = rather not applicable 2 = largely not applicable 1 = not applicable at all

			applicable inapplicable
During the goal setting process the environment is characterized by			
2.1		Internal stakeholders (e.g. employees, investors)	6 - 5 - 4 - 3 - 2 – 1
2.2		External stakeholders (e.g. customers, suppliers, creditors)	6 - 5 - 4 - 3 - 2 – 1
During the goal setting process the norms are characterized by...			
2.4		Schedules and defined roles	6 - 5 - 4 - 3 - 2 – 1
2.5		Irregularity and only partly or non-defined roles	6 - 5 - 4 - 3 - 2 – 1
During the goal setting process the bargaining is characterized by...			
2.6		Promises of rewards, threats of sanctions	6 - 5 - 4 - 3 - 2 – 1
2.7		Value abstraction, expressions of affect (no monetary rewards are used)	6 - 5 - 4 - 3 - 2 – 1
During the goal setting process the stabilization is characterized by...			
2.8		Formal agreement (e.g. form of budgets or contracts, binding agreements approved with a formal handshake)	6 - 5 - 4 - 3 - 2 – 1

2.9		Social control (Control seized by the informal rules set by the behavior of the management group)	6 - 5 - 4 - 3 - 2 - 1

2.	For each statement, please indicate to what degree it applies to your business.		Explanation of the scale: 6 = excellent / very good 5 = largely good 4 = rather good 3 = rather not good 2 = largely not good 1 = not good/bad at all excellent bad
Please rate the focus of your business to pursue the following financial goals...			
2.10		Business growth	6 - 5 - 4 - 3 - 2 – 1
2.11		Business survival	6 - 5 - 4 - 3 - 2 – 1
2.12		Profit	6 - 5 - 4 - 3 - 2 – 1
Please rate the focus of your business to pursue the following non-financial goals...			
2.13		Job satisfaction of employees	6 - 5 - 4 - 3 - 2 – 1

2.14		Employee development	6 - 5 - 4 - 3 - 2 – 1
2.16		Customer satisfaction	6 - 5 - 4 - 3 - 2 – 1
2.17		Supplier satisfaction	6 - 5 - 4 - 3 - 2 – 1
2.18		Business reputation	6 - 5 - 4 - 3 - 2 – 1

In the following part I would like to know from you how you assess the following statements. Please indicate to what extent you think the **statements are correct**. It is about general aspects of **selection of key performance indicators in your business**.

4.	Please indicate to what degree your business applies following facts and criteria.	Explanation of the scale: 6 = fully applicable 5 = largely applicable 4 = rather true 3 = rather not applicable 2 = largely not applicable 1 = not applicable at all applicable inapplicable 
Please indicate the degree of focus you place on the below measures when evaluating the effectiveness related to the product-market or service-market strategy.		

4.1		Profitability (accounting) ratios (e.g. return on assets, equity, sales, investment…)	6 - 5 - 4 - 3 - 2 – 1
4.2		Investment (market) ratios (e.g. price-to-Earnings, Market-to-Book, Cash Flow per Share)	6 - 5 - 4 - 3 - 2 – 1
Please indicate the degree of focus you place on the below measures when evaluating the effectiveness related to the product-market or service-market strategy.			
4.4		Customer satisfaction	6 - 5 - 4 - 3 - 2 – 1
4.5		Customer loyalty	6 - 5 - 4 - 3 - 2 – 1
4.6		Acquisition of new customers	6 - 5 - 4 - 3 - 2 – 1
4.7		Customer profit contribution	6 - 5 - 4 - 3 - 2 – 1
Please indicate the degree of focus you place on the below measures when evaluating the effectiveness related to the product-market or service-market strategy.			
4.9		Assess the development of new products and services	6 - 5 - 4 - 3 - 2 – 1
4.10		Process efficiency	6 - 5 - 4 - 3 - 2 – 1
4.11		Quality optimization	6 - 5 - 4 - 3 - 2 – 1
Please indicate the degree of focus you place on the below measures when evaluating the effectiveness related to the product-market or service-market strategy.			

4.12		Employee satisfaction	6 - 5 - 4 - 3 - 2 – 1
4.13		Employee productivity	6 - 5 - 4 - 3 - 2 – 1
4.14		Development of core competencies	6 - 5 - 4 - 3 - 2 – 1
4.15		Informal communication	6 - 5 - 4 - 3 - 2 – 1

5.	Please rate your business regarding the following facts and criteria.		Explanation of the scale: 6 = excellent / very good 5 = largely good 4 = rather good 3 = rather not good 2 = largely not good 1 = not good/bad at all excellent bad
The financial performance of your business in relation to the main competitors in the primary sales market from 2017 to 2019 in terms of...			
5.1		Return on asset growth	6 - 5 - 4 - 3 - 2 – 1
5.2		Relative sales growth	6 - 5 - 4 - 3 - 2 – 1
5.3		Market value growth	6 - 5 - 4 - 3 - 2 – 1

The non-financial performance of your business in relation to the main competitors from 2017 to 2019 in terms of...			
5.4		Employee turnover	6 - 5 - 4 - 3 - 2 – 1
5.5		Customer satisfaction	6 - 5 - 4 - 3 - 2 – 1
5.6		Business reputation	6 - 5 - 4 - 3 - 2 – 1
5.7		Persuasion of social responsability	6 - 5 - 4 - 3 - 2 – 1

Many thanks for your participation!