# Social Capital in Rural Family Businesses

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#### i. Statements

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#### iii. Abstract

The phenomenon of family business has received increasing attention during the past three decades. Theoretical knowledge suggests the family system influences the business so much that it becomes a recourse. The resource is an intense form of social capital known as family social capital (FSC). Despite this progress, theoretical clarification is needed to strengthen the premise of the phenomenon.

An exploration of family business by using a grounded theory (GT) technique provided theoretical clarity. The GT began with a pilot study followed by a series of intensive interview with 25 rural family businesses and the relevant stakeholders from the agricultural industry. This led to an integrated theory, tying together systems theory, social capital, and the resource-based view (RBV). The integrated theory is an extension of the bathtub-resource analogy. The analogy illustrates that resources are not instantaneous but gradually emerge from specific inputs, like the level of water in a bathtub gradually increases from the inflow of water.

The resource of FSC experiences phases of cultivation, preservation, or decay. Cultivation is the inflow tap, preservation occurs when a sufficient level of FSC occurs, and decay is the outflow of FSC. The temporality of FSC helps understand how the phenomenon requires time for certain factors to occur. The research proposes for FSC to generate a sustainable competitive advantage (SCA), a family business must be, at least, in a state of preservation.

Furthermore, the temperature of the water in the bathtub is important. This research proposes internal FSC (iFSC) and external FSC (eFSC) as the hot and cold water taps of the bathtub. Like a good bath the temperature must be right, for FSC to achieve SCA a balance of iFSC and eFSC is required. The iFSC considers through the number of family members, the generation number, and the number of active generations. The use of shared language and values helps understand how iFSC generates knowledge contributing to SCA.

The eFSC considers employee relations, customer relations, and the outside experience of family members. This disentangles the cluster of relations surrounding the family connected to the business. The cluster of relations represents the industry, the habitat for structural holes. This perspective recognises how structural holes fill or form over time through technological advances. The implications of theoretical clarification for theory, practice, and policy are included.

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#### Abbreviations

- BEIS = Department for Business, Energy, & Industrial Strategy
- CABS = Chartered Association for Business Schools
- ED = Empirical Definition
- EFB = European Institute for Family Business
- eFSC = External family social capital
- EU = European Union
- FBR = Family Business Research
- F-PEC = Family influence scale (power, experience, and culture)
- FSC = Family social capital
- G7 = Group of seven industrialised nations
- IFB = Institute for Family Business
- iFSC = Internal family social capital
- LSBS = Longitudinal small business survey
- NFU = National Farming Union
- ONS = Office for National Statistics
- SC = Social capital
- SEW = Socio emotional wealth
- SME = Small and medium sized enterprises
- UK = United Kingdom
- YAS = Yorkshire Agricultural Society

#### Chapter 1. Introduction

This thesis presents research on rural family businesses. Rural family businesses have experienced change over time. For example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant R1*).

This quote from a research participant epitomises the change experienced by family businesses included in this study. This research explored and superseded family business theory during the analysis of rural family businesses. It found out how they adapted to or resisted change affecting their family and business. This chapter introduces why this was done, how it was done, the implications of this, and structures the rest of the thesis.

#### 1.1. The rationale for the research

The research rationale was phenomenologically and methodologically driven.

1.1.1. The rationale for the research phenomenology

Within the field of entrepreneurship and small business management, the phenomenon of family business is a topic of study of the focus of family business research (FBR). Progression of the topic is called for by outlining the impact of the family on the business (Payne 2020), and consequently providing theoretical clarification of the phenomenon.

Theoretical clarification is not an individual effort but achieved through progressive coherence, it is a theoretical consensus in the rhetoric among scholars (Locke and Golden-Biddle 1997). A diversity of studies (empirical and conceptual) is required for theoretical clarification, without sufficient diversity of studies it is unlikely and progressive coherence cannot be achieved.

Theoretical clarification strengthens the argument for the research on the phenomenon, that claims family businesses are different from non-family business. A way to strengthen this argument is to offer empirical evidence that extend and combine existing conceptual frameworks. Theoretical frameworks are used to explain a reality beyond everyday explanations (Benton and Craib 2010). For the progression of the phenomenon of family business, frameworks are required to explain how the family affects the business.

The phenomenon of family business has impact on policy and practice of the business world. Specifically, recent debate in policy addresses the productivity crisis in the

United Kingdom's (UK) economy. This is relevant to the context of this research for two reasons.

This first is its focus on rural family businesses, not just family businesses. This fills an intertextuality gap bridging the rural business literature and FBR (Stough, et al. 2015). The rural business literature introduced a dichotomy between rural and urban businesses. More recent thinking has introduced the idea of a spectrum rather than a dichotomy (Backman and Palmberg 2015; Bhuiyan and Ivlevs 2019; Brewton, et al. 2010; Finke and Bosworth 2016; Moyes, et al. 2015; Newbery and Bosworth 2010; Newbery, et al. 2013; Phillipson, et al. 2017; Phillipson, et al. 2019; Ring, et al. 2010). The research has produced mixed results for the argument of the difference between rural businesses and urban businesses.

Thus, this research is sensitive to differentiate between rural and urban, not just family and non-family. Table 1.1. presents a typology of businesses and identifies the research participants included in this project.

Ownership and	Place	
management	Urban	Rural
Non-family		
Family		This research

Table 1.1. A typology of family/non-family and urban/rural businesses.

Secondly, the context of this research is relevant because almost half of the UK SMEs are family owned. For family SMEs, without theoretical clarification the practice and policy guidelines are non-existent. Clarity theoretically is a prerequisite to the existence of practice and policy guidelines. This is important because it appeals to the productivity policies that aim to improve the economy.

More specifically, researching this phenomenon contributes to solving the productivity crisis in the UK economy. The Chartered Association for Business Schools (CABS) allege business studies aim to solve the grand challenges facing our economies and societies by helping Government with several initiatives (CABS 2018: 1). The research phenomenon appeals to two of the initiatives.

The first initiative is 'identifying relevant education, training, and skill needs [of businesses]' (CABS 2018) and thus addressing the overgeneralisation of business. Overgeneralisation is associated with the simplification of theory. Simplifications risks omitting the unexplained aspects of reality that may be fundamental to the reality (Locke and Golden-Biddle 1997). The productivity crisis signals a lack of understanding of the reality. This research contributes to further understand

businesses and help identify their needs to develop and improve their performance. SMEs are important to the UK economy for their contributions to employment and economic growth (BEIS 2020). Improved SME performance aggregately improves the productivity of the economy.

This connects to the phenomenon of family business because a recent count identified 75% of micro businesses, 58% of small businesses, and 49% of medium sized businesses as family businesses (IFB 2019b). Family businesses are defined as a business that self-identifies and is majority or wholly owned by one or more members of the same family (IFB 2019b: 6). The Department for Business, Energy, & Industrial Strategy (BEIS) calls for the specific social and emotional dimensions of UK family businesses to be identified (Braidford, et al. 2014).

Academically, there are many competing theories that have attempted to explain the differences between family and non-family SMEs. Traditional management theory assumes the separation of management and ownership (Jensen 1986). Whereas, in smaller businesses the separation of management and ownership is unlikely and unclear, according to organisation life cycle theory (OCL) (Greiner 1989; Lewis and Churchill 1983). Family businesses tend to perpetuate owner/management by passing it onto the next generation. This creates relatively different situations relating to succession and ownership (Garcia, et al. 2019; Sharma, et al. 2003; Ward 1987).

Family ownership can last for multiple generations, depending on several factors. The existence and successful management of these factors create different education, skill, and development needs. For example, balancing economic and non-economic goals of family businesses (Gómez-Mejía, et al. 2007a).

The identification and management of these factors are still relatively unknown in the UK. The question of how the family's relationships impact the business requires theoretical clarification. Understanding family relationships in more detail helps explain why the learning, training needs and skill development of family businesses differ from non-family businesses.

The productivity crisis is based on multiple measures, one measure is in comparison to others. The Office for National Statistics (ONS) data shows the UK as one of the worse performing compared to the group of seven industrialised nations countries (G7) (ONS 2018). The UK SMEs introduced fewer new products and services compared to their European counterparts (BEIS 2017). Therefore, understanding the phenomenon of family SMEs helps identify the factors that contribute towards becoming more innovative.

This relates to the second initiative 'identifying the intra and organisational processes and systems to support innovation' (CABS 2018). Innovation is defined as:

"... A product or service with a bundle of features that is (as a whole) new in the market, or that is commercialised in some new way that opens up new uses and consumer groups for it" (Westland 2008: 6).

Innovation depends on several factors such as knowledge push, watching others, recombinant innovation, and regulation (Tidd and Bessant 2014: 234). Multiple studies focused on the application of developments from the fields of science, technology, engineering, and maths in the business world (CABS 2018).

The phenomenon of family business influences innovation in businesses. Mixed evidence in FBR suggests family businesses differentiate from non-family business when it comes to innovation (Chrisman, et al. 2012; De Massis, et al. 2015; Kammerlander, et al. 2015). Previous studies question how the family relationships influence this process and whether tradition is a paradox to innovation (Erdogan, et al. 2019). This research extends this discussion in the identification of some of the processes that influence innovation.

The context of the research enabled an illustration of how the phenomenon of rural family businesses have innovated. Acknowledging, the adoption of new technologies related to robotics, software for staff/stock management, and clean energy. Documenting the behaviours of rural family businesses helps achieve the initiatives and clarifies the theory of the phenomenon.

This research contributes to the knowledge of family business by filling a phenomenological gap identified due to a lack of intertextuality, complexity, and clarification of competing explanations. Firstly, the lack of intertextuality is addressed in the synthesis of the rural business and FBR. Despite, the calls for more research in this space (Stough, et al. 2015), the two literatures are seldom considered together and the empirical data signals the lack of intertextuality (Locke and Golden-Biddle 1997).

The complexity gap exists in the attempt to understand business and what is meant by the term business. A re-examination of the term business generates the typology presented in table 1.1 and is elaborated in Chapter 2 and Chapter 3. A complexity gap exists when the theoretical perspective of the phenomenon does not quite of capture the full reality (Alvesson and Sandberg 2011). This is signalled in Chapter 4 by evaluating multiple existing theoretical perspectives on the phenomenon of family business.

A competing explanation gap occurs when several theories attempt to explain the same phenomenon (Locke and Golden-Biddle 1997). This exists due to the abundance of theories applied in FBR overlap and a close examination reveals the overlap and contradictions. Like a child in the acquisition of language, overextensions are common until the meaning of the concepts is fully understood. Concepts have been packaged into different theories that overlap. Synthesise is required for a coherent representation of the phenomenon of family business. An integrative theory of family business fills this gap and answers the following question:

#### How does the family affect rural family businesses?

This question becomes more focused throughout the document.

#### 1.1.2. The rationale for the research methodology

The diversity of studies found during the literature review revealed a lack of qualitative research. Thus, a qualitative inductive approach, was used because of its ability to synthesise a collection of efforts and combine them with a collection of views provided by participants. This creates a thick description of reality attending to the complexity and competing explanations gap surrounding the phenomenon of family business (Dawson and Hjorth 2011). The findings intend to provoke vivid impressions of the reality of rural family SMEs and were crafted through a grounded theory (GT) method.

GT is an inductive qualitative research process (Glaser and Strauss 1965), suited to exploratory research. Exploratory research aims to seek insights into phenomena (Saunders, et al. 2012: 670) addressing the need for theoretical clarification in the phenomenon of family business. GT,

# *'refers to the systematic "ground-up" analysis of data with the aim of generating theory that explains some context or phenomenon' (Tracy 2019: 62).*

The systematic element is introduced in the next section and explained fully in Chapters 5 and 6. Previous studies on the phenomenon identified data scarcity and recommended a GT study to fill this gap (Zahra 2016). Simultaneously, while providing more in-depth evidence-based research on UK family businesses (Braidford, et al. 2014). Therefore, a GT study contributes methodologically towards the progressive coherence of FBR. At the same time, it answers the calls from the rural business literature for more in-depth qualitative studies (Newbery, et al. 2013). The iterative process between data collection, data analysis and interpreting (critically evaluating) the literature is illustrated in figure 1.1. One of the distinctive aspects of GT is the data driven approach.





Arguably, the data driven approach starts during the experience of the phenomenon of interest. In the pioneering study of GT, Glaser and Strauss (1965) both experienced death of a close one prior to and during their study. Star (2007) asserts that this relational connection to the phenomenon of interests drives the researcher through a GT method. Charmaz (2014b) claims the desire to understand our experiences and relate them to others through research is a justification for a GT study. In this case, the idea to research family business emerged from the researcher's experience within a family business.

The researcher questioned the common theories of management and their relevance in comparison to a lived experience in a family business. The lived experience was acquired during stints of working in a family business between semesters during academic programmes of study. This generated an open research question of how family businesses are different from non-family businesses, attempting to understand business beyond a profit maximising entity. This experience and drive induced the idea of studying family business on a PhD programme, a contributing factor to the development of FBR (Stewart and Miner 2011).

This open approach led to a problematisation of the business literature based on conceptual knowledge claims (Habbershon and Williams 1999b; Ward 1987). GT was

a method that appealed because it involved generating knowledge claims based on evidence. It involved dealing with uncertainty and ambiguity. Ambiguity became apparent because FBR does not provide convincing empirical evidence that family businesses require special attention. The existing theoretical clarifications relied heavily on conceptual claims and lacked credibility due to the absence of high-quality empirical research.

Uncertainty became apparent given the temporal nature of a GT method. The word temporal in this research is defined as:

'A process consisting of unfolding temporal sequences that may have identifiable markers with clear beginnings, endings and benchmarks in between' (Charmaz 2014b: 16)

The temporality of GT is fully described in Chapter 6. The process started with an initial review of the literature and was followed by pilot interviews with family businesses. The pilot interviews were undertaken in the pursuit of serendipity (Charmaz 2014b; Clarke 2005; Tracy 2019). This was the "aha moment" that helped focus the remainder of the study, directing the literature and scoping the interview questions. The second period of data collection and analysis continued to use interviews and various coding techniques. This was followed by a re-interpretation of the literature, focusing the study around FSC, to finalise the studies contribution.

The temporal nature of this research influenced the structure of the literature review in this document. The literature review is structured in an open manner, gradually becoming more focused. This helps portray the gap via a "blank slate". The "blank slate" metaphor explains the unimpressionable researcher entering the field to seek ideas on the phenomenon of interest from the experts who have lived experience (Charmaz 2014a). The "blank slate" starts very large representing an ambiguous state of the phenomenon of interest, gradually becoming more focused.

The experts with the lived experience in this situation were SME family business owners. They were accessed through a purposeful sample with a two specific criteria (Patton 2002). The first was in-group homogeneity and this ensured informants were from family farms. This was pragmatic because 96% of agricultural businesses are family owned (IFB 2019a).

The second criterion was in-group heterogeneity and ensured informants were from at least second generational family businesses. This ensured participants possessed enough lived experience to enable a maximal variation within the group. Maximal variation allowed detailed nuances of the phenomenon to occur.

This variation was captured during data collection and used an intensive interviewing technique. Intensive interviewing actively positions and values the view of the participant as the expert, resulting in rich data. The rich data was analysed through coding. Coding the data led to the identification of the variations between informants that became categories. Categories were developed during the iterative process between data collection and data analysis, illustrated in figure 1.2.

Data analysis	Data collection
	Pilot interviews
Category creation	
2 8	Exploratory phase
30 categories	
	Progressive phase
30 categories	
	Optimal phase
5 categories	
Conceptual links	The analytical pull
	Category creation Category creation 30 categories 30 categories 5 categories

Figure 1.2. The temporal sequence of the research

Figure 1.2. shows the sequence of the iterations between the data collection and analysis, bounded into five phases: the pilot, the exploratory, the progressive, the optimal, and the analytical pull. Each phase created several categories, the categories were carried over into the next stage to acquire more detail during the interviews. Further detail on emergent themes were acquired retrospectively by recoding earlier interviews. In the final stage of data collection and analysis, the analytical pull, the categories were conceptually linked to form the integrated theory and the contributions of the research became clear.

The data collection and data analysis techniques were rigorous and intensive. It involved extensive fieldwork travelling to rural areas in England (Ross-on-Wye, Cambridgeshire, Lincolnshire, Worcestershire, Lancashire, Merseyside, County of Durham, Tyneside, Humberside, etc.). Unsurprisingly, this type of research is relatively rare and is probably due to the uncertainty and intensity of the process.

#### 1.2. The research questions and contributions

This research makes a theoretical contribution, contributing an integrated theory of FSC. This is integrated into existing theory by using the bathtub analogy of strategic resources (Dierickx and Cool 1989). The bathtub analogy originally referred to assets and the idea of stocks not being instantaneous and instead represented by levels of stock, i.e., the level of water in a bathtub. Stock levels can be increased by inflows and lost through outflows (Dierickx and Cool 1989).

This research adopts the analogy to FSC and extends it with the presentation of the temporal FSC, internal FSC (iFSC), and external FSC (eFSC) perspectives. This helps explain the appropriately package the concepts related to FBR. The temporal perspective explains FSC is not instantaneous, it requires an inflow, a period of cultivation until it reaches a sufficient level to be used as an asset. It also outflows through decay, which lowers FSC below the sufficient level.

The analogy is extended by considering the temperature of water in the bathtub. The inflows are the iFSC and the eFSC. The iFSC represents the hot water tap and the eFSC represents the cold water tap. The two combined create the temperature of the water in the bathtub, if the water is too hot or too cold, it is unusable. Thus, FSC not only requires the right level of water but also the right temperature to become effective and provide sustainable competitive advantage (SCA).

Within business theory, social capital is defined as 'an asset that inheres social relations and networks' (Leana, et al. 1999: 538). It explains how one person thinks, feels, and interacts with connected others. It can be used to explain how the family affects the business, FSC is the asset inhered from the family's social relations and networks. The word asset is important because a decrease in social capital implies a decrease in the assets of the business. Complementing this is its intangibility suggesting it is unaccounted for, unlike economic and financial capital (Bourdieu 1986). Therefore, a loss of it would not be shown on a balance sheet and remain unrecognised in financial analysis. This research addresses the invisibility of FSC and offers theoretical clarification through the presentation of three perspectives.

The first perspective seeks to understand the temporality of FSC. It answers the question how does the temporality of FSC affect rural family business? Temporality is important because it shows how a family business experiences different stages of FSC. The three stages are cultivation, preservation, and decay. The cultivation is the initial stage of becoming a family business and receives an inflow of support based on the surrounding family network. The next stage is FSC preservation, where FSC is at a sufficient level to support the conditions for knowledge creation.

On the contrary, when preservation is not possible, the decay of FSC occurs. The decay recognises an outflow of FSC due to the deterioration of the surrounding family network that previously cultivated FSC. The decay may be caused by life events of family members, exclusion of family members, or the next generation family members taking a different path, opting out of the business.

The second perspective seeks to understand internal family social capital (iFSC) and represents the family system. It answers the second research question how does the iFSC affect rural family businesses? The iFSC is the hot water tap inflows into the bathtub. It explains the heterogeneity of family business addressing the recent debates surrounding the homogeneity of family business definitions (Jaskiewicz and Dyer 2017).

The iFSC considers the number of family members, the generation number, and the number of active generations and represents the family system. This is presented in three dimensions comprising a temperature of iFSC: volume, density, and diameter. The rationale is the higher the temperature, the stronger they feel about each other (the relational dimension), and the more they think about each other (the cognitive dimension). Stronger dimensions strengthen the conditions for knowledge development and thus lead to SCA (Barney 1991).

The iFSC perspective recognises what the family has already experienced stored as "in-situ" knowledge. "In-situ" knowledge is tacit knowledge family members transmit over generations (Giovannoni, et al. 2011). This study found a higher iFSC temperature occurred in the presence of growth paths, previous business practices, and by listening to the previous generation. In addition, it shows what skills may be available to develop in the succession practices and by coaching the next generation. Thus, retaining FSC and detailing how the transfer of skills between family members occurs. The third perspective seeks to understand external family social capital (eFSC) and represents the business system. It answers the third research question how does the external FSC affect rural family businesses? The eFSC represents the cold water tap inflow through the non-family aspects. The eFSC is made up of employee relations, customer relations, and outside experience. This disentangles the cluster of relations surrounding the business, specifically the industry. This is the habitat for structural holes, and this perspective recognises the filling of naturally occurring holes due to innovations.

Employee and customer relations change over time, they may increasingly become personal, become impersonal, or shift to different customers and employees. This changes the exposure to non-redundant information, the basis of structural holes. Exposure to non-redundant information is a key process in innovation (Burt 1992).

In addition, technological innovations have altered the social relations with employees and customers. This challenges the assumption that family businesses have an overlap with stakeholders that increases their survivability (Arregle, et al. 2007). The research found an intra organisational process that contradicted the expected. It was expected that rural areas were close knit, technological averse, and counterproductive communities (Banfield 1958; Putnam 1993). In contrast, the evidence challenged this assumption recognising technological changes have altered the preconceived notions of a rural area, supporting recent literature (Phillipson, et al. 2018).

This is important because it can inform theory and future policy, that aim to unlock the latest developments of the UK's scientific institutions (BEIS 2017). This is especially important as technological change seems to be exponential (Shiller 2009). Consequently, so should the recognition of the importance of social capital as an organisational process to support innovation. Failure to acknowledge the value of social relations as well as their effect on innovations, and vice versa, is inhumane.

All three theoretical perspectives support both initiatives informing practice and policy. Multiple policies to support the difference in learning, education needs, and skill development are recommended by this research in Chapter 10. A variety of policy recommendations specifically for family businesses, rural businesses, sustainability, and innovation are included. In a time when support for farmers is changing, clarity of the best strategic options is needed to inform better strategic decision making. Aggregately over an economy it can help improve the performance and resolve the productivity crisis. By doing this, the research achieved the following research objectives:

- Contribute to the CABS (2018) initiatives.
- Critically evaluate FBR.
- Re-examine the term business to consider rural business.
- Contribute an integrated theory of family business to FBR.
- Produce policy and practice recommendations for rural SME family businesses.

In fulfilling these objectives this research recognises the importance of social capital in rural businesses. Questions surrounding the role of policy for technological development remain unanswered and make an interesting topic for future research projects.

#### 1.3. The structure of the thesis

The next chapter reviews the rural business literature. The idea of rural business is linked to family business as an interesting context for FBR. It identifies the lack of intertextuality between the two despite their common interests. This argument is strengthened from a large majority of the empirical FBR studies failing to acknowledge whether it is a rural or urban context. The chapter concludes with the rationale that a study in rural family business is of mutual benefit for both literatures.

Chapter 3 reviews FBR, describing the progressive coherence of the topic. This disentangles some analysis of existing studies. Analysis of existing studies reveals a variety of definitions have been used and this is a potential issue. It shows another potential issue, a lack of consideration for the generation number in empirical studies. It presents analysis of the theoretical frameworks used to explain the phenomenon. The chapter concludes with a need to further understand the phenomenon.

Chapter 4 unpacks the theoretical framework of family business. This is done through explaining the three main theoretical perspectives: agency-systems theory, the resource-based view (RBV), and social capital theory. Each theory's application to FBR is discussed following an explanation of the theory's background and origin. This informs the overextensions, overlaps, and contradictions between the theories. Thus, FBR is likened to a child acquiring new language and sets the scene for a GT study in the acquisition of new language.

Chapter 5 explains the methodology of the research. The first part of the chapter presents an analysis of the methodologies used in management research. It then introduces the inductive subjective qualitative research design used. The chapter

details the sampling strategy, data collection technique, and the data analysis used for the research. Chapter 6 presents the temporality of GT in practice. The purpose of this chapter is to clarify how the method was used. This is important for the reader to understand the reality of the research process as a human endeavour.

Chapter 7 presents the findings related to the temporality of FSC. Chapter 8 and 9 are structured in the same way focusing on iFSC and eFSC. The presentation of findings follows a narrowing of the blank slate with a review of the respective literatures the findings contribute too. The final part of the chapter discusses the contributions of the findings to the literature and discusses the implications of this.

Chapter 10 summarises the contributions to the literature, policy, and practice. It presents the theoretical, methodological, and empirical contributions. It introduces the integrative theory of family business. This is followed by the limitations and ideas for future work. The final chapter concludes the thesis.

#### Chapter 2. Rural business literature

Family business research (FBR) occupies the space inside the overlap of family and business (Gersick, et al. 1997). The overlap is the premise of the argument that family businesses differentiate from non-family businesses. The overlap is the basis for the education, learning, and skills needed to develop a family business differentiate from a non-family business. This creates the need for new theory to explain this substantive area (Locke 2000).

However, this is unsuspectingly a simplification of the word "business" and what is meant by the term. A complexity gap in knowledge occurs when the literature does not fully explain all the relevant aspects of the phenomenon (Locke and Golden-Biddle 1997). An important factor to consider is the context and the importance of this relates to the research on rural business.

This chapter presents analysis of the rural business literature to address this gap. The first part of this chapter explains rural business. A rural business differentiates from an urban business due to spatial, institutional, and social differences (Welter 2011). Consequently, some contexts of business suit the rural business definition rather than the urban business definition. The background characterises the most important and recent debates in the literature. Specifically, the various definitions and the different units of analysis used.

Different units of analysis have been applied in rural business and the definitions have been contested. One of the units of analysis is a farmer that sits inside the agriculture industry. The agricultural industry as a context fits the rural definition and FBR rationale. This is because in the United Kingdom (UK) 96% of agricultural businesses are family owned (IFB 2019b). Providing a suitable context for the phenomenon of family business.

Thus, the second part of this chapter describes the characteristics of the agriculture industry. It outlines recent reports claiming the industry is less productive than other industries and receives subsidies to support it, unpacking the productivity crisis identified in the introduction. In doing so, it outlines the industry's consistent negative balance of payments between imports and exports. Importing goods increases the competitive pressure on domestic businesses to perform. In this situation buyers can substitute UK businesses with non-UK businesses.

The final part of the chapter presents the intertextual research gap between rural business and family business. Synthesised coherence bridges the intertextual gap

because it makes connections and presents coherence between existing literature (Locke and Golden-Biddle 1997). Thus, in this case the phenomenon of rural family business as distinct from urban family business. It identifies that theoretical development of this new substantive area contributes to both the rural business literature and FBR.

The case is strengthened by presenting some analysis of the empirical data used in FBR. FBR studies seldom consider the surrounding context and rarely distinguish between rural and urban. This neglect is because the attention of the research is given to other areas (Alvesson and Sandberg 2011). However, this research differentiates from previous efforts by investigating the phenomenon of rural family business openly and empirically.

#### 2.1. Definition and background

Rural businesses are often dichotomised with urban business, further development of this propose further heterogeneities exist within rural areas (Laurin, et al. 2020). In fact, recent claims suggest the urban-rural business dichotomy are becoming more interdependent due to technological change (Strijker, et al. 2020).

Rural business is an extension of entrepreneurship. Blackburn and Smallbone (2008) chronologically described the emergence of entrepreneurship and small business management. The subject has been studied since the 1970's for the purpose of helping economic growth by generating small businesses. The contribution to the economy is reflected in the number of jobs small businesses generate.

Over the following decades entrepreneurship and small business management grew into its own field. This was evident through the increased number of topics, journals, methodologies, and researchers (Blackburn and Smallbone 2008). Entrepreneurship and small business management emerged as an independent field among other fields in business studies such as strategy, marketing, and human resource management.

Rural entrepreneurship differs from entrepreneurship by considering the spatial, social, and institutional aspects of entrepreneurship (Welter 2011). 'Without defining rural areas, it is clear that they tend to have fewer people, fewer firms, and fewer interactions than average' (Strijker, et al. 2020: 264). Rural areas tend to be spatial compared to urban which tend to be resource concentrated areas (Baù, et al. 2019).

Rural businesses differ due to their location, ties to their local communities, and whether their product serves their local area (Bosworth and Bat Finke 2019). The

extent of this determines the extent of the barriers or advantages they possess, empirical evidence on this topic is mixed (Lyee and Cowling 2015; Newbery and Bosworth 2010).

One type of study generating empirical evidence is comparative cases between urban businesses. For example, Cumming and Johan (2010) found the adaption to internet services was slower in rural businesses, which had a negative impact on the economy. Then, once connected to the internet the businesses in the area experienced more competition.

In contrast, Phillipson, et al. (2019) found little difference when the expected obstacles of rural businesses were analysed. The expected obstacles were exporting, innovation, turnover, opportunities, differences in population densities, public transport, limited connections to customers (physically and online connection), access to associations and the development of business networks. The study used the longitudinal small business survey (LSBS) to analyse for statistically significant differences and generated several findings. It reported rural businesses have a lower turnover, lower wages, less competition, and different aspirations. This is not necessarily bad for profitability, but rural businesses were expected to invest more in machinery, had less potential new staff, and were more likely to export.

However, within the debate of the differences between rural and urban entrepreneurship, an important factor to consider is the type of organisation. The type varies and shows the breadth of the topic. For example, it can be the individual entrepreneur (McKeever, et al. 2015), small and medium sized enterprises (SMEs) (Perkins, et al. 2017), home based organisations (Newbery and Bosworth 2010), or it can be defined by the type of industry, for example farming.

McElwee (2008) identified four types of farmers: farmer as farmer, farmer as entrepreneur, farmer as a contractor, and rural entrepreneur not farmer. McElwee (2008) identified the following areas for further exploration: farming heterogeneity, opportunity clusters "collective entrepreneurship", the extent of non-farm businesses, and constrains on farmer's experience. This research is particularly concerned with farmers as rural businesses.

#### 2.2. Agriculture in the United Kingdom

The agriculture industry is associated with rural business studies (Strijker, et al. 2020). This is due to the fact that rural businesses are likely to be resource extraction and primary processing activities (Laurin, et al. 2020). An opportunity to bridge this literature through empirical research emerges due to a specific characteristic that makes the UK context unique. Most agricultural businesses are family businesses, it is one of the most concentrated industries for family businesses in the UK. Family businesses within the agriculture sector formed 96% of the industry in 2018 (IFB 2019b). This context is interesting for three reasons, firstly the performance variations are unexplained. Secondly, the change in subsidies is likely to affect the situation that is contributing to the UK's trade deficit. Thirdly, there seems to be a lack of consideration for the spatial differences.

Rural areas underperform in comparison to urban areas (BEIS 2017). But as previously mentioned, rural areas are thought to have a lower number of businesses, people, and employees. Thus, the disparities in performance compared to urban businesses are likely due to the different circumstances. However, their different circumstances imply different education, learning, and skill needs are required to improve their performance.

From a practical point of view, categorising rural businesses and urban businesses is not enough to solve low productivity for three reasons. The first reason is the categorisation of businesses into rural or urban based on external characteristics does not sufficiently explain performance variations in SMEs (Laurin, et al. 2020). Internal factors have a huge influence, such as the organisation's technical level of production, product sophistication, level of export, employment characteristics, capacity to network, industry diversity, relative regional productivity and the potential labour market's education level (Laurin, et al. 2020). This makes heterogeneities in rural businesses more complex than previously identified in farming studies.

Secondly, farmers in the UK are likely to differentiate from non-farming rural businesses due to their support in the form of subsidies. In the UK, farmers receive the common agricultural policy basic payment scheme (CAP) (Gove 2018), insulating agribusinesses from market forces. The subsidies serve as an example of the different institutional aspects between urban and rural businesses. However, this context is interesting because the rules of the game are set to change as the CAP scheme is being replaced with public money for public goods. Changing regulation can be a source of innovation (Tidd and Bessant 2014: 234). Whether changing the CAP policy will help innovation in this situation is a question worth answering.

Thirdly, the rural and urban dichotomy does not consider the limitations of the land and this links to the spatial aspects of rural businesses, the proximity to urban areas is an important factor (Laurin, et al. 2020). The further a business is from an urban area, the harder it is to achieve productivity. This is due to inefficiencies such as the time lost in transporting goods. Especially since, rural businesses are likely to be focused on resource extraction and primary processing activities. Both activities include transportation as a critical activity. This could be another potential explanation for why rural businesses underperform. Rural businesses contribute to the broader productivity crisis in the UK, this is evident when London (the biggest urban area) is excluded from the calculations (ONS 2018).

Furthermore, this context is interesting because the agriculture industry contributes to the other problem of the UK economy, the negative balance of payments. In 2019, one of the worst performing product industries for a negative balance of payments is the "SITC 0 Food & live animals" standing at £24 bn. This negative balance of payments has been consistent since 1998. This identifies the wider problem; the UK has been working at a negative balance of payments for the past 20 years. In 2019, the trade deficit for products was £129 billion (bn). The total deficit for products during the years 1998-2019 is an estimated £1.9 trillion (Tn) (ONS 2021). Therefore, research in this context helps understand what is happening as well as exploring the phenomenon of rural family business.

#### 2.3. The connections to family business research

Rural business has several links to FBR (Fitz-Koch, et al. 2017; Pyysiäinen, et al. 2006). Therefore, synthesising the literatures and exploring rural family business creates the common endeavour that generates synthesised coherence (Alvesson and Sandberg 2011). There are three reasons for the link between the rural business and family business: the embeddedness of the business in the community, the overlap between the home and the business, and the common language used in business typologies.

The first reason is close communities; family businesses have been linked to rural development (Basco 2015). Rural businesses are thought to provide a high level of network closure and informal relationships. This is thought to be the case for family businesses, who consequently have a superior capacity to leverage local resources (Baù, et al. 2019). Family businesses are thought to have an overlap with stakeholders that increase the survivability of the business (Arregle, et al. 2007).

In Addition, the embeddedness in the community relates to the role of vision from the history of the organisation (Perkins, et al. 2017). This is similar for family businesses

that possess a shared history, purpose, or vision of the business (Pearson, et al. 2008). Furthermore, Baù, et al. (2019) found family businesses in the rural context may be more motivated to grow due to their commitment to communities and stakeholders, and they may be more capable of transforming local resources. McKeever, et al. (2015) found trust, values, and loyalty are important for embedded rural entrepreneurs.

In contrast, other evidence suggest rural areas may not be associated with closed networks and multiplex relations. Rooks, et al. (2016) found more multiplex relationships in urban rather than rural areas, 57% compared to 31% respectively. The inconclusive evidence generates to understand what is happening. Thus, the embeddedness of the business in the community tends to be a shared characteristic of FBR and rural business with mixed knowledge claims.

The second reason connecting rural business and FBR is the overlap between the home and the business. Carter and Ram (2003) recognised the importance of the resources of the family/household on strategies within the rural enterprise. The study claimed the problem with home strategies is they fail to address issues beyond the family domain. Similarly, family businesses often share stocks and flows of resources (Sharma 2008). This similarity may explain why family embeddedness is more likely in rural areas (Baù, et al. 2019). Rural areas are often linked to limited opportunity from a human capital perspective (Kimmitt, et al. 2020). However, previous studies of rural family businesses found family members tend to develop skills outside of the business and then come back into the business (Bloemen-Bekx, et al. 2019; Jaskiewicz, et al. 2015).

The third reason is due to the similarity in business characteristics. Perkins, et al. (2017) found SME rural businesses need structure, guidance, and autonomy to generate ideas. This relates to inspiring the next generation of family businesses, FBR claim the next generation require processes such as structure, guidance, and autonomy for succession (Bloemen-Bekx, et al. 2019; De Massis, et al. 2014; Jaskiewicz, et al. 2015). Interestingly, Jaskiewicz, et al. (2015) used rural businesses as participants in their study. The similarities are evident when comparing the language used for the typologies of family farms within each literature. Table 2.1. presents the two typologies.

McElwee (2008) created a typology positioned in the rural business literature. Similarly, Glover and Reay (2013) created a typology based on the same phenomenon positioned in FBR. Farmers as diversifiers relates to farmers as entrepreneurs in the former research. The debt maximiser relates to the farmer as contractor and the sacrificers relate to the farmers as farmers. This confirms a lack of mutual acknowledgement in the literatures despite sharing the same phenomenon of interest.

	Label attached to type of farmer	
	Glover and Reay	
Business strategy	(2013)	McElwee (2008)
		Farmers as rural
Diversify from traditional		entrepreneurs, rural
activities	Business diversifiers	entrepreneur not farmer
Huge investments in		
machinery	Debt maximiser	Farmer as contractor
Lack of business skills to	Sacrificers,	
expand	compromises	Farmers as farmers

Table 2.1. A comparison of the family farmers typologies from the two literatures.

#### 2.4. Empirical analysis of family business research

Strengthening the rationale for agriculture as a suitable context is the lack of acknowledgement of whether a business is rural or urban in the FBR empirical data. Table 2.2. shows analysis of existing FBR describing the context of the samples. The table shows that most articles used multiple industries and did not distinguish between urban and rural businesses.

This means previous research was not lack rigor because it did not include sufficient attention to detail to separate rural businesses from urban businesses and indicates a gap of complexity. A complexity gap occurs when the literature fails to explain the full reality (Locke and Golden-Biddle 1997). This reality cannot be explained if it is not acknowledged in the research design (Clarke 2005).

Industry	Number of articles	%
Mixed (5 or more)	120	83%
Manufacturing	10	7%
Not specified	8	6%
Industrial and services	2	1%
High technology	2	1%
Wineries	1	1%
Tourism	1	1%
Brewery	1	1%
Total	145	100%

Table 2.2. The industry of the organisations included in the samples.
A lack of rigor has not generated deeper insights to achieve progressive coherence of FBR. Thus, to address this gap, a single industry permits a coherent narrative and deeper analysis (Clarke 2005: 46). A singular narrative has an advantage over multiple narratives. The latter occurs when participants are found from multiple industries because each industry has its own norms, characteristics, and state.

The aim of in-depth studies means multiple discourses in qualitative studies take valuable space in the data, primary and secondary, to discuss in sufficient detail. Space in the data is used by when participants explain their surrounding (industries), consequently, the data collected requires resources to analyse each industry rather than one industry. Thus, the more structures in a study the more resource is used in the collection and analysis of data for each situation. Furthermore, space is taken contextualising each industry.

This creates the expected convergences in the data, making the research broad and this makes patterns difficult to identify. Therefore, to avoid this, this research looked at rural businesses from a single industry. This allows the creation of a single narrative that has already been outlined in this chapter. Previous efforts have identified agriculture as a good industry for FBR (Fitz-Koch, et al. 2017; Fletcher, et al. 2016; Jaskiewicz, et al. 2015). Also, it is pragmatic due to the high proportion of family businesses found in the agriculture industry.

### 2.5. Chapter 2 summary

This chapter re-considered the meaning of the term business, when studying FBR as a new substantive theoretical area (Locke 2000). This chapter acknowledged the context of business in the form of urban or rural. The rural business literature was introduced and provided an explanation of how rural businesses differentiated from urban by the spatial, social, and institutional characteristics. This presents different types of rural businesses, one being agriculture.

The UK agriculture industry was described as an appropriate setting for the research due to its high proportion of family businesses (IFB 2019b). The analysis of the agriculture industry was presented and identified a productivity problem, assisted by subsidies, the anticipated change in subsidy policy, and consequently the consistent negative balance of payments. These issues provide a good context for the phenomenon of family business.

In addition, the links between rural business and FBR means the lack intertextuality is addressed through synthesised coherence. The link is based on embeddedness,

the overlap between the home and business, and the similarity in business typologies. Therefore, rural business and FBR is interested in the same phenomenon and thus should be considered together in the same study, this study.

Furthermore, the evaluation of the FBR empirical data identified a lack of consideration of context, particularly whether the businesses inhabited a rural or urban setting. Therefore, considering rural family businesses in the agriculture industry is a suitable context and is likely to produce rigorous research.

## Chapter 3. Family business research

Family business occupies the space in the overlap of family and business (Davis, et al. 1997). The previous chapter introduced the importance of context for business and the idea of rural business. This chapter examines the research on family business.

The word "business" is not associated with family and the related connotations. Nelson (2006) studied the semantic prosody of the word business. The study found people in business were generally classified as a customer, manager, supplier, distributor, shareholder, employee, staff, partner, boss, or management. It did not find any mention of family, which is surprising given a large amount of businesses being family owned, some studies claim 90% of the world's businesses are family owned (Carney, et al. 2015). This could be due to one of two things; the first thing is to mix family and business it is not good for business and therefore not be connotated with business and the study of business. The second thing is that a large gap in knowledge exists in the study of family and business. This research is concerned with the latter and evaluates work focused on understanding the phenomenon of family business.

The next section illustrates the growth of family business research (FBR). It shows that FBR has grown in the number of articles, received citations, the number of journals publishing FBR articles, and the type of articles conducted.

Another factor is whether the studies adopt the same definition and thus the presentation of the analysis of the definitions used in FBR. The definition of family businesses used in samples has become more rigorous over the three periods. It presents the definitions used in the first, second, and the latest period. It finds a large variation of definitions persists and therefore more rigor is required to deliver insightful findings. Thus, a principle of this research is to use a robust definition of family business.

Following this is a section that presents an analysis of the empirical data used in FBR. The analysis found that FBR articles tend not to consider the generation number of the family business. This limits the FBR quality because the generation number is a point of variation to explain heterogeneity. Therefore, considering the generational number is another principle used in this research.

The penultimate part of the chapter introduces the range of theoretical frameworks to explain the phenomenon. It shows theory was seldom used in early studies but is more relevant in recent studies. An evaluation of the theories used in the literature recognised the competing explanations gap. This circumstance occurs when several theories are focused on the same phenomenon of interest, each providing similar explanations (Locke and Golden-Biddle 1997). The theories are disjointed and do not wholly represent family business. This is unsurprising given the different theoretical origins. The rationale for the use of grounded theory (GT) because FBR is a new substantive area (Locke 2000). This argument is further developed in the next chapter.

## 3.1 The growth of the phenomenon of family business

This section presents the growth of the phenomenon of family business. It identifies three periods of FBR bounded by the publications of relevant bibliographies (De Massis, et al. 2012; Sharma, et al. 1996). The two bibliographies show that the compilation of FBR has been undertaken twice before. The analysis compares the latest period to the previous periods in terms of the number of journals, articles, and citations. Table 3.1. shows the articles related to FBR compiled over the three periods. The search term "family business" in each journal identified 1108 articles from the third period (2010-2020). The journals were identified on the Chartered Association for Business Schools (CABS) journal index. The analysis shows a first signal of growth in FBR is the increased number of articles increasing in each period.

Table J.	Table 5.1. The periods of farming business research.							
Period	Time bracket	Journals	Number of articles	Annotated articles	Reference			
1	>1996	32	866	226	Sharma, et al. (1996)			
2	1996-2010	51	915	223	De Massis, et al. (2012)			
3	2010-2020	54	1108	259	This research.			

Table 3.1. The periods of family business research.

The growth in the number of articles is positive and is the first indication of growth/ The second indication of growth is the increased number of journals publishing FBR. Figure 3.1. displays a bar chart showing the distribution of articles published within each field according to the classification from the CABS index within each period. The bar chart shows the main area of growth is within the field of entrepreneurship and small business management.

Further analysis shows most of the growth is within non-family business specific journals. Table 3.2. shows the number of articles published in family business journals and nonfamily business journals across the last two periods. The table shows an increase in the publications during this period from non-family business journals.

The growing number of articles in non-family business journals indicates increased recognition from peers. This indication is strengthened by Stewart (2018) who

produced a bibliometric analysis illustrating the FBR journal's relationships with other journals. This was achieved by counting the citations of articles within the business discipline as well as more broadly. The study found FBR journals have a positive balance with studies from other journals within entrepreneurship, finance, accounting, and economics. However, this was not the case with journals from disciplines such as anthropology, family studies, geography, history, law, political science, psychology, and sociology. Despite research claiming the phenomenon's relevance to other disciplines (Jaskiewicz, et al. 2020), this analysis shows other disciplines are not acknowledging FBR research in comparison to fields found within business studies.

Figure 3.1. Bar chart showing the number of articles published in each field of business studies.



Table 3.2. Identified articles published in family and non-family business journals.

Journal type	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	Growth
	Period	period	period	
Family business journals	203	393	398	1%
Nonfamily business	905	454	622	37%
journals				

The third signal of growth is the aggregate increase in citations. The top 223 articles based on the number of citations from the second period received more than five citations per year (De Massis, et al. 2012). The top 260 articles collected from the latest period received at least 20 citations per year. Showing a growth of interest in the phenomenon.

Citations were counted during the compilation of the second annotated bibliography of FBR (De Massis, et al. 2012). The first count is compared to a recent second count. The increase of citations based on the difference between the counts is a third signal of growth for FBR. Table 3.3. shows the growth of citations during the second and third period.

The analysis counted and compared the citations on google scholar of all the articles produced in both periods. The growth between the first count and the second count of the articles included in the second bibliography was 752%, signalling a huge growth. However, the pyramid effect of citations, the original articles being acknowledged by newly published articles must be considered. The pyramid effect inflates growth.

Period	Cumulative Citation	Growth	%	
	1 <sup>st</sup> count based	1 <sup>st</sup> count based 2 <sup>nd</sup> count in 2020		
	on De Massis, et			
	al. (2012)			
2 <sup>nd</sup>	45914	163851	117937	752%
3 <sup>rd</sup>		74536	74536	
Total	45914	238387	192,293	519%

Table 3.3. Citations counted for family business research.

Furthermore, a comparison of the latest absolute count of the existing articles from the different periods shows a citation growth of 519% in the last decade. Thus, exponential growth of recent publications is a further signal of growth. However, the growth of electronic journals, in accessibility and volume may explain contribute to this (Sharma, et al. 2007), as well as the previously discussed pyramid effect. Nevertheless, it can be said that interest in the phenomenon is recognised through the increased number of articles, number of citations, and peer recognition.

However, the barriers of producing research was investigated by Litz, et al. (2011). The study analysed where researchers invested their energies. The study found researchers had an equal ratio between their publications in FBR to non-FBR articles in a five-year period. The reason being researchers publishing FBR spent half of their energies publishing FBR and not all their energy to mitigate risk. Risk occurred because it was perceived as a risky topic that did not always lead to credible publications due to the limited interest on the phenomenon. To mitigate the risk, it is important that FBR is rigorous.

<sup>&</sup>lt;sup>1</sup> Based on search results from google scholar on the 29/07/2020.

Furthermore, diversity of research is important to develop any phenomenon (McGrath 1981) and the same principle applies to FBR. Table 3.4. shows the growth of article types across the periods. The only area that has not grown in the recent period is qualitative studies, this may link to the limited resources invested by FBR researchers due to their publication strategies (Litz, et al. 2011). Thus, the need for qualitative work to increase the diversity of RBR supports the rationale for GT in this research.

Table 3.4. The types of articles found in family business research.

Article types	Period		
	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Computer modelling			1
Critiques and responses		4	2
Editorial		5	4
Empirical (qualitative analysis)		20	14
Empirical (quantitative analysis)	100	123	153
Experiential	41	2	
Literature Review		17	36
Method discussion			3
Mixed method			5
Theoretical/Conceptual	85	46	41
Total	226	223	259

## 3.2 Empirical definitions of family business

The previous section illustrated increased interest in the phenomenon of FBR. This section shows the empirical definition's (ED) progression. The ED has progressed during each period, the empirical definition was a work in progress during the first period. The first period acknowledged a range of EDs and aimed to find a universally accepted definition (Sharma, et al. 1996: 8). Table 3.5. shows the different types of EDs used during the first period and the number of articles that had adopted each ED.

Table 3.5. Data from Sharma, et al. (1996) on the definition types during the first period.

Definition of a family business	Number of articles
Ownership management focus	22
Generational transfer ownership	2
Independent subsystems	2
Multiple conditions	6

The second period analysed the EDs based on a criterion. The criteria included: ownership, management, governance membership, intention for succession, perception, and multiple generations. Figure 3.2. shows a bar chart of the ED criteria. The Y-axis shows the number of articles. The X-axis lists the criteria used. The most frequent characteristic of a definition was ownership, followed by management.

Figure 3.2. Data from De Massis, et al. (2012) the criteria used for the definitions used during the  $2^{nd}$  period.



The EDs used during the third period were analysed based on the criterion used for the definition of family businesses in the 1996-2010 period (De Massis, et al. 2012), while naturally evolving and adding new ones. The criteria included: ownership, family CEO, family management, self-identification, and the intent for succession.

Table 3.6. counts the number of criteria used for the definition. The data shows ownership and management are the most popular criteria.

	Proportion of family ownership				,		
Additional criteria	5%	10%	20%	25%	50%	Majority	Total
Ownership only	6	3	6	1	8	8	32
CEO is a family member	3	4	0	0	5	2	14
Management (at least one)	8	3	4	4	19	22	60
Self-identification and							
management	0	0	0	0	1	8	9
Intent for succession	0	0	0	0	1	1	2
Total	17	10	10	5	34	41	117
Most popular criterion			Popul	ar crite	rion		

Table 3.6. The definitions of family business during the latest period (2010-2020).

The most popular kind of ownership criteria is 50% or majority, indicating a more precise definition of family businesses. The precision of the definition to the family business is important to ensure rigor. Rigor ensures the research is accurate and

yields quality findings. For example, 5% ownership criteria may yield findings that are unrelated to businesses with 50% or 100% ownership.

Furthermore, the definition has progressed beyond the dichotomy of family and nonfamily. Recently, the idea of family heterogeneity has been re-introduced to move away from the homogeneity of family business (Jaskiewicz and Dyer 2017; Strike, et al. 2018; Strohmeyer, et al. 2017). Family heterogeneity recognises the variations of family businesses within the categorisation of family or non-family. However, if inappropriate EDs are used this work will remain primarily conceptual. Thus, the rationale for GT is to use a rigorous ED of family business applying all the criteria included in table 3.6.

# 3.3 Empirical data analysis

This section presents the analysis of the empirical data used in the latest period concentrating on the generation number (if specified), the average age of the organisations included in the sample, and the industry the organisation inhabits (if specified). Including the generation number as part of the inquiry is important (Jaskiewicz, et al. 2020) because it provides a point of variation to explain the heterogeneities of family businesses.

Table 3.7. shows the generation number of the sample (if specified) alongside the number of articles.

Generation specified	Number of articles	%
Not specified	101	71%
1 <sup>st</sup>	7	5%
1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup>	6	4%
Majority in the 2 <sup>nd</sup>	6	4%
3 <sup>rd</sup>	4	3%
At least in the 2 <sup>nd</sup>	3	2%
1 <sup>st</sup> , 2 <sup>nd,</sup> 3 <sup>rd,</sup> 4 <sup>th</sup> <	3	2%
Multiple	2	<2%
Mixed	2	<2%
Lone and family	2	<2%
2 <sup>nd</sup>	2	<2%
1 <sup>st</sup> and 2 <sup>nd</sup>	2	<2%
Majority in the 1 <sup>st</sup>	1	<1%
11th	1	<1%
Total	142	100%

Table 3.7. The average generation number specified in the samples.

The table shows 71% have not included this information, limiting the insight generated. The generation number is important to find out whether a third-generation

family business operates differently in comparison to a third-generation family business. The analysis shows some studies have specified the generation number.

Furthermore, an estimate can be made, if the generation number is not specified, through the age of the organisation (if included). Most articles do not specify the age of the organisations. However, under the assumption of the average CEO tenure being an estimated 30 years in family businesses (Leach and Bogod 1999); an estimation of the generation number was made. The final column of the table shows the estimated generation number. This somewhat helped estimate the generation number. However, if this is not acknowledged in the studies then comparisons of the generation number cannot be made. Table 3.8. shows the average age and the number of articles.

Average age	Number of articles	%	Estimated
			generation
Not specified	54	38%	NA
10-30	33	23%	1 <sup>st</sup> -2 <sup>nd</sup>
30-60	27	19%	2 <sup>nd</sup> -3 <sup>rd</sup>
60-90	13	9%	3 <sup>rd</sup> +
0-10	4	<3%	1 <sup>st</sup>
90+	3	2%	4 <sup>th</sup>
Other	10	7%	NA
Total	144	100%	NA

Table 3.8. The average age of the organisations included in the samples.

Furthermore, the analysis shows a lack of FBR studies researching later generations. Researching family businesses with a higher generation number is useful because they have more experience in developing the next generation (Jaskiewicz, et al. 2020). In addition, from an ED perspective, older family businesses have existed longer and have more lived experience, making them more of a family business. Like scholarly experience, the more experience a scholar has, the more definitely it can be said they are in fact a scholar.

## 3.4 Theoretical frameworks

Theoretical frameworks provide a credible rhetoric for research (Alvesson and Sandberg 2011; Locke and Golden-Biddle 1997). Theory

"...is the attempt to explain phenomena by going beyond our common-sense, everyday explanations, and beyond our immediate sense experience" (Benton and Craib 2010: 238).

The use of theory is discussed in FBR with the purpose of articulating difference from non-family businesses (Chrisman, et al. 2010; Jaskiewicz, et al. 2019; Wortman 1994;

Yu, et al. 2012). This helps generate consensus amongst FBR scholars signalling progressive coherence. The periods of FBR can be compared by considering the theoretical frameworks. The first period of FBR did not analyse theoretical frameworks because not much theory was being used (Sharma, et al. 1996). Jaskiewicz, et al. (2020) expected this at the early stages of a subject's development.

During the second period, scholars criticised the lack of theory and called for the use of theory to develop the rhetoric (Habbershon and Williams 1999c; Zahra and Sharma 2004). The second period recorded more use of theoretical frameworks compared to the first. A criticism of this is the borrowing of theory from other fields (Jaskiewicz, et al. 2020) and this has continued during the third period. Table 3.9. shows the increased use of theoretical frameworks over the three periods.

Table 3.9. Theoretical frameworks used during the periods of family business research.

Theoretical framework	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>
Non	NA	183	67
One of more	NA	40	192

In the latest period, theoretical frameworks were used by 192 articles of the 259 articles annotated. Using one theoretical framework is ideal to avoid reification of research (Jiang, et al. 2017). Reification occurs when theoretical explanations become too complex. Complexity is helpful insofar to explain the reality of the phenomenon that are important and this must be balanced with overcomplexity, which is too much detail (Berger and Pullberg 1965: 198). Good theory offers an effective simplification of phenomenon covering the key characteristics to give deeper insights. It is important to remember the point of theory in FBR is to explain the key characteristics are unclear, a barrier to theoretical clarification. Unpacking the existing theories that have been applied in FBR is a first step to identifying the key characteristics.

The theories identified in the analysis were agency theory, agency-stewardship theory, socio-emotional wealth (SEW), entrepreneurial orientation (EO), social capital theory, institutional theory, resource-based view (RBV), and social identity theory. The quality of the identified theoretical framework depends on the quality of the rhetoric. The quality of the rhetoric is somewhat judged by measuring its use (citation count).

Table 3.10 shows the theoretical frameworks used in FBR during the second and third period, it includes the cumulative number of citations produced by FBR studies that have used the respective theory. This was calculated by counting the citations of each FBR article that had used the theory. It is acknowledged that citations are not a complete measure of the total size of the rhetoric, but it is useful because it offers comparative data to see which theory is being cited more regularly.

Theoretical framework 2 <sup>nd</sup> period		Citations count of the top five articles counted in 2020 <sup>2</sup> .		Total size of citations	< 0
	•	2 <sup>nd</sup> period	3 <sup>rd</sup> period		Gro wth
	1 <sup>st</sup> count	2 <sup>nd</sup> count	-		
Agency theory	2571	8727	2445	11,172	+
Agency and stewardship	303	2836	1278	4,114	-
Socio-emotional wealth	27	2892	3744	6,636	+
Stewardship theory	649	2763	1092	3,855	-
Entrepreneurial orientation	277	2207	1805	4,012	-
Social capital theory	235	6966	893	7,859	-
Institutional theory	149	343	837	1,180	+
Resource based view	1530	6232	177	6,409	-
Social identity theory	36	332	1250		+

Table 3.10. The range of theoretical frameworks used in family business research.

The second, third, and fourth column of the table shows the citation count for each theory used in FBR. The second column and third column identify the citations generated from the first and second count of the articles published during the second FBR period. The difference between the two counts illustrates the growth of the specific theory in FBR studies. For example, SEW has grown the most during the third period.

The fourth column shows the citations generated from articles produced in the third period. This is compared to the second FBR period and based on this comparison, the final column in the table indicates whether the rhetoric has developed using a positive symbol (+) or whether it has stagnated using a negative symbol (-). The analysis shows agency theory, SEW, institutional theory, and social identity theory have developed. However, RBV, social capital theory, stewardship theory, and EO have stagnated.

<sup>&</sup>lt;sup>2</sup> Based on search results from google scholar on the 29/07/2020.

Agency theory explains the consequences of separating ownership and management (Jensen 1986) and is the largest rhetoric in FBR. It is appealing to FBR because a defining feature of family business is the link between ownership and management (De Massis, et al. 2018). Agency theory provides a basis to differentiate family from non-family business and explains how some agents in the structure may behave differently because they are family members.

The suitability of theory can be assessed by its epistemological orientations and methodological approaches (Locke and Golden-Biddle 1997). Methodologically, the theory is based on quantitative studies looking at large businesses (Block 2010; Chrisman and Patel 2012), this may relate to the large number of quantitative articles in FBR. This type of research is quite accessible because numerical data on large businesses is publicly available and consequently popular in management research (section 5.1.), a low-risk investment for FBR researchers. Furthermore, even surveys are more efficient than interviews in terms of time consumption, and therefore are pragmatic for business owners.

SEW is an extension of agency theory. It extends the rhetoric theorising that family businesses differentiate from non-family businesses because they pursue non-economic goals (Berrone, et al. 2012). Similar to agency theory, it appears to be quantitatively orientated, categorising family and non-family ownership (Gómez-Mejía, et al. 2007a). The theory's philosophical roots are based in prospect theory, behavioural theory, and agency theory (Gómez-Mejía, et al. 2007a). The latest articles follow the foundation articles in the use of quantitative approaches (Cruz, et al. 2012; Gómez-Mejía, et al. 2007a; Hauck, et al. 2016b; Labelle, et al. 2015; Samara, et al. 2018). Jiang, et al. (2017) identified 74 empirical articles related to SEW, 65 of these were quantitative studies. The literature has a high number of studies referring to or using SEW, Jiang, et al. (2017) identified 421 studies from 25 literature reviews, this is expected given the large number of citations.

Stewardship theory is a similar rhetoric, orientated around ownership and management, originating as an extension of agency theory. It extends agency theory by claiming managers will act in the best interest of the owners, instead of being self-interested agents (Neubaum, et al. 2016). Articles from the last decade are quantitative without a recommendation for qualitative studies (Arosa, et al. 2010; Basco 2013; Chu 2011; Miller, et al. 2013b; Morgan and Gomez-Mejia 2014). Agency, SEW, and stewardship theory explain that family businesses behave differently from non-family businesses.

Social identity theory concentrates on whether the identity of the family impacts the business (Miller and Le Breton-Miller 2011). Social identity theory is a growing area, however the articles related to social identity theory are categorical and compare family with non-family. They used quantitative methods to categorise family or non-family combined with the analysis of the quantitatively measurable aspects of the business such as performances (Brannon, et al. 2013; Cannella, et al. 2015; Le Breton-Miller and Miller 2017; Vandekerkhof, et al. 2014). Therefore, using social identity may suit a more quantitative orientated approach.

Furthermore, institutional theory concentrates on the impact family businesses have on institutions and vice versa (Peng, et al. 2018). Studies using institutional theory adopted quantitative approaches (Berrone, et al. 2010b; Campopiano, et al. 2014; Miller, et al. 2013a) and tended to focus on the impact of external influences. Mazzelli, et al. (2018) outlined the differences between agency and institutional theory, the latter focuses more on the environment and misaligning with the call for more research focused on family relations. Studies that have used institutional theory have shown that family businesses can have a positive impact on their institutions (Berrone, et al. 2010a; Lingo and Elmes 2019) as well as a negative impact (Luo and Chung 2013; Su and Lee 2012).

Whereas EO concentrates on the internal entrepreneurial behaviour of family businesses. The theory observes the risk taking, proactiveness, and innovativeness behaviours of family businesses (Lumpkin and Brigham 2011). Many previous studies compared family to non-family differences using EO as the measurement tool (levels of EO) (Arzubiaga, et al. 2018; Brigham, et al. 2013; Hernández-Linares and López-Fernández 2018). This begins to unpack how family businesses behave differently.

Habbershon and Williams (1999b) used the RBV and proposed the relationships of the family within the business that leads to sustainable competitive advantage (SCA). Systems theory was applied to create a unified system perspective of family business (Habbershon, et al. 2003). Since then, the RBV has not been developed in the third period of FBR. The RBV articles reviewed in the latest period adopted quantitative methods (Bloom, et al. 2011; McDowell, et al. 2018) or were conceptual (Carnes and Ireland 2013; Irava and Moores 2010; König, et al. 2013).

In relation to this, social capital theory has been used to explain how the resource of family relations transforms into SCA (Sirmon and Hitt 2003). Social capital theory is used to concentrate on the social relations of the family and their impact on the

business (Arregle, et al. 2007). From this, it is known that the uniqueness of family business is based on the family relations within the business. Further exploration of the theories used in FBR form the content of the next chapter.

### 3.5. Chapter 3 summary

This chapter has critically evaluated FBR. It has described the growth of interest in the phenomenon of family business, showing the growth during three periods of FBR. It analysed the number of articles, journals, and citations. The analysis found a growth in the phenomenon and a need for a qualitative study to diversify the articles published in FBR. This may not have been done previously due to the limited resources and risk management of FBR researchers. The need for a qualitative study aligns with the GT rationale.

The analysis revealed that the EDs included in FBR is important to produce quality findings. Especially, more consideration for the generation number of family businesses as a point of heterogeneity to further discussions in FBR. This will help understand the family's effect on the business (Payne 2020).

The analysis found exploration of theories used in FBR. It showed an increased use of theory, but the key characteristics of family businesses still have not coherently been theorised due to a lack of theoretical clarification. This is unsurprising given the EDs were not rigorous and the generation were not considered in most previous studies. Therefore, the question of how does the family affect the business? Still remains.

In the context of the UK productivity crisis and the agriculture industry as a prominent place to find family businesses, the need for a GT method in FBR, and the analysis from the chapter combined to strengthen research rationale. The blank slate thus far focuses on rural family business. The GT methodology is explained, after an exploration of the key aspects of the major FBR theories.

## Chapter 4. Family business theory

This chapter introduces the theory for family business research (FBR). Chapter 2 introduced the context of rural business and the lack of intertextuality between rural business literature and FBR. Chapter 3 analysed the articles produced during the three periods of FBR. It identified quantitative growth of the research in the phenomenon. It found quality issues with the research, that the empirical definitions were not rigorous, and empirically the generation number was seldom considered. Therefore, it is not surprising the question of how the family affects the business remains unclarified.

Thus, this chapter introduces the three main theories looking at the internal characteristics of family business: agency theory, resource-based view (RBV) and social capital theory. Previous research identified the theories as the most influential strands of logic in FBR (Chrisman, et al. 2010; Evert, et al. 2015). Analysis of the previous chapter concludes that outlining FBR theory will narrow the focus of this research. This chapter will outline each theory's application in FBR following the origin and background of each theory. The identified three theories are popular in management studies and referred to as grand theories (Saunders, et al. 2012).

The final section of the chapter, cross analyses the three grand theories and likens FBR to a child in the acquisition of language (Aitchinson 1987), identifying the overlaps and contradictions of existing work. The chapter concludes with the research question how does the family affect the business?

### 4.1. Systems and agency theory

Systems-agency theory is the first theory, and the position of this research argues that systems and agency are synonymous in FBR. The similarity is based on the idea that agents exist in a structure which is likened to a system. It is assumed that a structure and a system is essentially the same thing.

#### 4.1.1. Origin and background

Churchman (1968) introduced a perspective of organisations (industrial firms, hospitals, educational institutions, and nations) that thinks about them in a set of systems defined by their objectives. To achieve the objective of the system it needs to perform to a sufficient level, known as a standard. This standard is met by several sub-systems performing to their required standards. The sub-systems standards are met by several subordinate sub-systems performing to their required standards to their required standards, and so on and so forth. Management through this perspective is the task of ensuring each

system is performing to the required standard. If it is not, asking why and resolving the identified problems in the related subsystems.

A systems approach to management is useful because it considers the whole as a series of components that work together for the overall whole system's (organisation's) objective (Churchman 1968). The agency theory has a similar view of the organisation as the whole system made up of subsystems. It specifically concentrates on a mechanism that connects the sub-systems. This mechanism is the contracts between the principle (ownership system) and the employee, suppliers, or buyers (agent systems). The standard of the system is set by the terms defined in the contracts. A functioning system is one in which every contract is being honoured by the principle and agents (Jensen 1986).

Thus, agency theory is the same as the systems approach in the perception of the organisation and its relative components known as employed agents. Jensen (1986) primarily focused on the owner-manager relationship, as the most important sub-system.

The two sub-systems of the owner-manager antagonise one another and decrease the performance of the whole system. This is because the manager is programmed to act in their own best interests (Jensen 1986). This does not maximise the welfare of the owner and consequently the system standards need to be monitored. This is to ensure managers are acting in the best interest of the organisation. Monitoring ensures managers achieve the maximum return for principle shareholders (Jensen 1986). Deviations will not occur if managers are monitored correctly and thus emphasis should be placed on monitoring the manager.

A factor considered in agency theory is the cost that accrues through the bonding between the owner and the manager (Jensen 1986). The benefit of bonding is that the managers begin to act in a way to maximise the owner's welfare. This ensures the overall system is functioning. A further residual cost is associated in changing this relationship.

When an owner-manager subsystem reaches the standard, the overall organisation system will operate at the required standard. When it operates at an insufficient standard, the situation can be resolved by replacing the manager with a new manager. This create a new principle-agent relationship and accrues the residual cost (Jensen 1986). The residual cost is conditional because it is viewed as a debt of the new owner-manager system. The new system must exist long enough to repay the

debt accrued from the residual cost, at this point the organisation is performing to the required standard.

Agency theory acknowledges the cost of contractual relationships across managers, buyers, suppliers, and employees (Jensen 1986). Equally, in systems theory the relationships between subsystems are required to operate at a sufficient level (Churchman 1968). Both theories acknowledge the importance of the functioning of each component of the organisation. If too much debt is accrued in forming new relationships through continuous recreation, the organisation will eventually fail. An organisation operating with each subsystem performing to the required standard will generate a profit. This kind of thinking has been used in FBR because family members, due to their long tenure and existing bonds, save the cost accrued from bonding the owner-managers (Schulze, et al. 2003).

#### 4.1.2. Application in family business research

Gersick, et al. (1997) asserted the phenomenon of family business could be described with a systems perspective. The organisation system was formed of three subsystems: family, ownership, and business.

Gersick, et al. (1997) created the developmental model of family business based on the premise that the three systems experience different states. Each state is described as the system moves through different stages. Firstly, the family system is described in four stages: young family management, entering the business, working together, and passing the baton. Secondly, the ownership system is formed of three stages: the controlling founder, sibling partnership, and cousin consortium. Thirdly, the business system is formed of three stages, start-up, expansion, and maturity. This first attempt remained descriptive.

Whereas, Habbershon, et al. (2003) applied systems theory to the study of family business and produced the idea of a unified systems model as a source of high performance. They proposed the unified system is to align the three systems and this achieves the required standard for a positive influence on performance. The study detailed subsystems as the actions and outcomes of the individual, family, and business. Non-alignment leads to substandard performance and consequently a negative influence on performance. Habbershon, et al. (2003) proposed family businesses were motivated by the objective to secure transgenerational wealth, differentiating from a non-family business.

The unified system differentiaties slightly from Gersick, et al. (1997) and replaces the ownership system for the individual system. One condition being the business and its individual members engage in certain behaviours to achieve an advantage in economic performance. These certain behaviours were not specified, leaving the ambiguity of the concept unresolved and deviating from agency theory by disregarding ownership.

Developing the system-agency perspective, SEW was first introduced by Gómez-Mejía, et al. (2007b). The study proposed family businesses pursue affective objectives, sometimes to the detriment of economic performance. Like previous studies, the family's objective is to maintain control of the business and secure transgenerational wealth. However, Gómez-Mejía, et al. (2007b) claimed the motivation to retain control of the business deviated the business from traditional ownership systems to maximise profit. This dysfunction eventually leads to a state of survival and permanent failure by pursuing affective objectives rather than economic objectives.

Interestingly, Berrone, et al. (2010a) claimed family businesses engage in more environmentally friendly behaviours compared to non-family businesses. Environmentally friendly behaviours are driven by the preservation of SEW. Family businesses want to associate with environmental initiatives to preserve their social worthiness as good businesses. This need to be perceived as a good business occurs at the expense of economic performance, as well known paradox in sustainability studies (Rogers, et al. 2012). Focusing on family business, Cruz, et al. (2011) emphasised the differentiator between family and non-family businesses is SEW. This differentiator is evident in five themes management processes, business strategies, corporate governance, stakeholder relations, and business venturing.

Furthermore, Berrone, et al. (2010a) claimed identity, prestige in the community, and social support are the affective goals family businesses pursue instead of profit maximisation. The study proposed families aspire to accumulate high levels of family social capital (FSC) rather than financial capital. Despite acknowledging FSC, the premise of SEW contradicts the RBV and social capital theoretical positions. RBV and social capital theoretical propositions assert the involvement of family is a non-appropriable resource that serves to improve the economic performance of the organisation.

### 4.2. Resource based view

The system-agency theory introduced the first perspective on the phenomenon of family business. This comprised of the subsystems containing individuals, the family, and the business with the objective of transgenerational wealth. It highlighted the presence of SEW, that can have a detrimental impact on the business. In contrast, the RBV perspective claims family involvement to be a resource that generates sustainable competitive advantage (SCA). This is explained in more detail following the origin and background of the RBV.

#### 4.2.1. Origin and background

The origin of the RBV is based on the Penrose and Penrose (1958) theory of firm growth (this research positions the word firm from the original work as a synonym for organisation and business) originally published in 1958. The study asserted the condition for firm growth is based on the internal characteristics, instead of being determined purely from market conditions, such as consumer demand. The study supported the thoughts of Schumpeter and Backhaus (1934) that favoured the entrepreneur as the driver behind economic growth.

Penrose and Penrose (1958) acknowledged that a single framework, when thinking about firm growth, is usually avoided because the concepts involved are difficult to quantify and others are difficult to acquire comprehensive information on. As well as the issue of finding comprehensive information, it is also an issue of finding enough comprehensive information for sensible knowledge claims in a representative sample that makes this task difficult (Penrose and Penrose 1958: 4). Unreservedly, the study proposed that a firm grows initially through the productive entrepreneur, who identifies an opportunity to produce goods or services for a profit. Once the initial growth period is experienced the firm plateaus, acknowledged in other studies (Greiner 1989; Lewis and Churchill 1983).

At this point, the organisation can grow through a variety of individual or combinable techniques: scale, diversification, acquisition, or merger. However, the growth depends on tacit knowledge and shared experience. Firstly, tacit knowledge is the level of knowledge possessed by the management team (Penrose and Penrose 1958). Within this view, knowledge is tacit rather than explicit, not easily transferred, and only gained through experience. Therefore, the knowledge possessed by management is subject to their individual experience. Secondly, the concept of shared experience is the combined individual experience within the firm and with one another in a team. The theory proposes, regardless of the firm strategy and market

conditions, it will only grow if a resource, based on a sufficient level of tacit knowledge and shared experience, is possessed by the top management team.

The RBV was further developed during the 1980's when Wernerfelt (1984) separated resources into product and market related resources. Resources were defined by their general effects, it is itself or one of several critical inputs, controlled by a monopolistic group. A resource creates products to be sold in monopolistic markets, and its value is determined by the availability of substitutes.

Wernerfelt (1984) detailed tacit knowledge and shared experience and introduced the ideas of the immobility of resources and first mover advantage. This was based on the barriers to acquiring resources and the idea of merging to buy and trade resources in bundles. Wernerfelt (1984) proposed strategies can be created to develop relevant attractive resources for growth. Using the word relevant extended the thinking of Ansoff (1965).

Ansoff (1965) explained the organisation in two perspectives product dynamics and market dynamics. Characterising the two in their difference, linking product dynamics with new technologies, increased R&D, and shorter life cycles. Then, linking market dynamics with new products such as refrigeration, automobiles, and television, internationalisation, and the role of business in society.

The perspectives use relevance in their rationale to encompass external changes, and an awareness of this is a valuable resource. Being aware of relevant changes is divided into two components: the perception of opportunities and the anticipation of threats. The organisation is thought to defend itself from threats in a series of strategies i.e., patent protection of capital investments or/and timing of product introduction.

Wernerfelt (1984) recognised the importance of the experience curve, developing tacit knowledge and shared experience. Consequently, the first mover advantage was introduced by an analogy of a tall tree within a forest. The tallest tree receives more sunlight and consequently grows taller than the other trees, perpetuating the benefits of its advantage, and continuing to grow. The sunlight represents tacit knowledge and shared experience. The tree's superior height relative to the surrounding trees represents the organisation's competitive position in comparison to less experienced organisations. Thus, self-perpetuation, an organisation with resources to execute an effective strategy, subsequently grows it's resources, holding the superior position and reaping the benefits in the form of high economic performance (Wernerfelt 1984).

Dierickx and Cool (1989) widened the framework of the RBV and positioned the bundle of assets (resources) at the heart of any competitive position. Their study introduced the idea of the accumulation of stock assets by choosing the appropriate time path flows (experience curves) over a period. To explain this logic their research used a bathtub analogy.

The organisation holds a level of resources like a bathtub holds water at a certain level. The inflow of water comes from the tap to increase the tubs water level. To decrease the level, the water outflows through the plug hole. The water level in the tub represents the stock of resource, the inflow tap represents the inflow of resources, and the outflow represents the natural erosion of relevant resources. Table 4.1. shows an example of R&D as a resource.

Resource stock / level of water in the bath	Inflow of resource	Outflow of resource
R&D	Financial capital	Know-how depreciation
Reputation	Advertising	Brand awareness

Table 4.1. R&D as a resource in the bathtub metaphor.

The flows of resources can be adjusted instantaneously but the stock level cannot (Dierickx and Cool 1989). Just like a bathtub, the taps can be turned on and off, the outflow prevented, and the water level will not change instantaneously. Thus, it takes consistent inflows over time to build stocks of resources to create strategic resources to be executed in a strategy. Referring to table 4.1. Reputation as a stock cannot be instantly bought, however advertising, that serves as an inflow, can be instantly bought. The outflow, brand awareness, depreciates over time.

A concluding point to Dierickx and Cool (1989) was the idea of critical asset stocks, that cannot be traded, substituted, or imitated by competitors. Several characteristics determined this time-diseconomies (time taken to replicate the resource), asset mass efficiencies, interconnectedness of asset stock, asset erosion, and causal ambiguity. This idea strengthens the rationale for first mover advantage and competitive position because regardless of attainability, the viability of attainment matters. A strategy is not viable if the costs outweigh the benefits, thus, the RBV considers the relativity of resources for strategy. Implicit of resource relativity is time.

Building on the relativity of resources, Barney (1986a) presented the idea of strategic factor markets (SFM). SFM places importance on accurate expectations, building on the role of opportunity in growth of the firm (Penrose and Penrose 1958: 41). Simply,

organisations with accurate expectations of resources possess higher strategic fitness for several reasons.

Firstly, an organisation with accurate expectations will not overestimate returns and suffer economic loses. Secondly, it will not pay for overpriced assets and suffer the winner's curse. This occurs in situations when assets are overpriced because of their anticipated abnormal returns. Thirdly, an organisation with the capability to identify an asset with abnormal returns, demonstrate higher strategic fitness in the process of identification.

Therefore, SFM rules out any expectation of abnormal returns to be irrational and therefore the only explanation can be luck. Barney (1986a) introduced the idea of luck that occurs when a resource brings about abnormal returns that were unanticipated. The research strengthens the argument for luck by providing several examples of luck rather than rationality to explain strategizing. Firstly, the gap between anticipated and the actual required resources experienced in project management. Secondly, the failed acquisition (combination or recombination) of resources required for implementation because not every organisation successfully executes implemented and this must be due to their different resources. Thirdly, inaccurate expectations generate irrational behaviour that leads to the failure of the organisation. Therefore, the logic of perfect markets is relative to organisational uniqueness and luck (Barney 1986a).

Focusing on the former, organisational uniqueness is based on the organisation's history and unique customers. Both factors combined, block the unfolding of competitive dynamics in perfect markets based on economic rationality (Barney 1986a). From a potential entrant's perspective, high barriers to entry increase costs and reduce the potential economic return (Wernerfelt 1984). Reducing the competitive dynamics by reducing the number of entrants.

From existing incumbent's view, a lack of profit maximising occurs because of inaccurate expectations due to a lack of competitors. A lack of competitors leads to reduced ideals of behaviour because of the lack of substitutability from alternatives (Barney 1986b). This allows monopolistic profits to occur and obscures the financial resources to compete for these lucrative profits because capital markets do not perceive the relations with unique customers or share the organisation's history.

Barney (1991) built on the RBV to create the valuable, rare, inimitable, and nonsubstitutable (VRIN) criteria to perceive the value of the organisation's resources. This study aimed to extend the internal view of the organisation, responding to the simplification gap identified within existing environmental models. Existing environmental models proposed organisations were homogeneous (Barney 1986b). The gap was based on the idea that in a homogenous set of organisations resources would be used similarly and produce similar results. Instead, resource heterogeneity perceives organisations to adopt different strategies based on their relative strengths and weaknesses to generate different results.

Furthermore, Barney (1991) argued that resources are not perfectly mobile strengthening the ideas of previous studies (Penrose and Penrose 1958; Wernerfelt 1984). This argument was based on two reasons. Firstly, the existence of first mover advantage, if it did not organisations have perfectly mobile resources. Perfect resources mean any strategy would be inimitable by the second mover and therefore produce competitive parity. Secondly, the existence of business groups allows efficient co-ordination of resources across multiple organisations. The same argument resulted in the conception of value chains (Porter 1985) and social capital (Granovetter 1995).

Counter intuitively, Barney (1991) argued if resource homogeneity and perfect mobility existed no industry would be deemed attractive or unattractive. Instead, heterogeneity allows an organisation to isolate valuable resources (relative to the chain) and exploit them in a particular strategy. SCA is the ideal strategy to exploit resources and is only possible when resources meet a certain criterion: valuable, rare, imperfectly imitable, and non-substitutable.

Valuable resources are the strategically equivalent in the sense they are usually substitutable and result in competitive parity with fellow incumbents. Rare resources are also possessed by competitors in the industry (Barney 1991). This resource is rare in so far that it generates SCA alongside a few other competitors, who possess an equivalent resource.

Imperfectly imitable resources become more difficult to define and are dependent upon satisfying one or a combination of the following conditions:

'a) the ability of the a firm to obtain a resource is dependent upon historical conditions, b) the link between the resources possessed by the firm is causally ambiguous, or/and c) a firm's sustained competitive advantage is socially complex' (Barney 1991: 117).

The identified conditions overlap in several ways. Firstly, they all co-exist in the same temporal process and emerge from the management's tacit knowledge and shared

experience. Secondly, it is unexpected for an organisation to possess an awareness of its whole social network (considering all the stakeholders) and therefore the conditions of inimitability remain ambiguous.

The final criteria, non-substitutability occurs when organisations have resources that are not substitutable. Barney (1991) explained resources are valuable in their function and equivalents, substitutions may not be the same per se but are the same in their function within the organisation. Therefore, for non-substitution to occur the resources must not be replaceable by function.

Barney (1991) categorised resources into physical, human, and financial. It defined SCA not only by a long period of calendar time but based on its inimitability regardless of efforts from competitors. Barney (1991) identified the potential issues with applying the framework such as the role of informal planning, machines/artificial intelligence, information flow, and positive reputations.

One way of explaining the ambiguity of inimitability is through social capital. An organisation's social capital imperfectly imitable and is synonymous with the accrued cost of bonding between agents and principles in agency theory. Social capital is discussed in more detail following the RBVs broader application to FBR.

#### 4.2.2. Application in family business research

The heterogeneous resources explained by the RBV have been applied in FBR to create the term "Familiness". The idea of "Familiness" began when Habbershon and Williams (1999a) conceptually clarified some differences between family and non-family business. It used the RBV as a theoretical basis to illustrate the family member's behaviours in family businesses. Habbershon and Williams (1999a) aimed to address the complexity of family business as a source of SCA, rather than rid this complexity from the picture as done by previous studies. Thus, the concept of "Familiness" is an SCA over non-family businesses through the possessed resource in the form of family members.

However, the content of the construct remained ambiguous, labelled a bunch of "idiosyncratic competencies" by Habbershon and Williams (1999a) referring to the point of SCA being socially complex (Barney 1991). Sirmon and Hitt (2003) a conceptual contribution of "Familiness". The resource of "Familiness" is made up of human capital, social capital, survivability capital, patient capital, governance structure and costs (Sirmon and Hitt 2003). Claiming each form of capital combines creating "Familiness". This can be either negative or positive for the business.

Sharma (2008) proposed the construct of "Familiness" has four dimensions social, human, financial, and physical resource. The study emphasised social capital as the most developed and more development is required within the other three dimensions. Sharma (2008) applied a systems perspective to illustrate the transfer of stock between the resources. Like the bathtub analogy, these stocks are not instantaneous and there is a need to be balanced across the levels of the four resources to avoid collapse of the family business.

Furthermore, the transfer of capital varies depending on the conditions of the situation (Sharma 2008). In some situations, stocks between the family and business will be transferred and vice-versa. For example, family bonds of reciprocity may take place over generations (Sharma 2008). An example is the endowments children receive from the business that may not need repaying until they are adults (Sharma 2008). A possible negative effect of this flow is free riding, as the process requires two reciprocal individual actors across multiple generations (Sharma 2008). Recent research created a "Familiness influence factor scale" (FIFS) to measure the level of "Familiness" (Frank, et al. 2017). However, the scale does not explain whether "Familiness" as a positive or negative affect on the business. Neither does it explain how the phenomenon occurs, both empirical questions that require answering (Weismeier-Sammer, et al. 2013).

### 4.3. Social capital theory

Given the positive affect the family has on the business from the "Familiness" perspective and the presence of SEW from an agency-systems perspective, both perspectives share the value of social bonds, the third theoretical perspective. This section outlines social capital theory and its application in FBR.

#### 4.3.1 Definition and background

Social capital is a broad theory used in different disciplines (Adler and Kwon 2002; Inkpen and Tsang 2016; Nahapiet and Ghoshal 1998). Within the discipline of business, social capital is concerned with the impact social relations have on resource use within the organisation.

Social capital is an asset and unlike a physical one, it cannot be easily traded (Coleman 1988) and is known as the invisible asset of the organisation (Adler and Kwon 2002: 36). Therefore, social capital is often missing from the balance sheet unlike other physical assets. To appreciate its social complexity, it is worth thinking about the theories broader purpose.

Social capital theory emerged out of an evaluation of a social development project. Banfield (1958) found social relations affected the state of the community directly and indirectly. It found a direct affect was the enforced power structures that maintained exploitative relationships and constrained resources from members of societies. The exploited individuals experienced a negative indirect affect, it lowered their aspirations to follow opportunities and created an ingroup-outgroup aversion of solidarity. The aspirations of individuals were reduced due to the perceived inability to exploit opportunities.

Solidarity was reduced due to the reciprocal attitude of the exploited individuals, who withdrew any effort to improve the social whole because of the way it exploited them. The philosophical underpinnings link individual action and social structure; individual actions have a direct effect on the shape of the structure (Jackman and Miller 1998: 48). In the Banfield (1958) case, the perceived constraint of behaviour maintained the exploitative structure i.e. the social relations maintained inequality.

Bourdieu (1986) progressed the theory separating social capital from economic and cultural capital. The study identified social capital as a prerequisite to economic capital. It then critiqued the ignorance of economic theory for ignoring the value of social capital, supporting the idea of social capital as an asset.

Coleman (1988) described social capital using several characteristics. The first characteristic is named expectations and obligations. Expectations and obligations are based on reciprocity and the exchange of favours when building the network; this creates imaginary accounts between people who add or subtract credit to each other based on the favours they do for one another.

The second characteristic is named information flows. Information flows is the cumulative effect of the circulation of information, a high flowing network increases information. This is based on the limitations of individual attention compared to group attention. A well-connected group is more likely to have group members who can access information from one another. Consequently, due to the value of information, circulation within a network is useful. Thus, a value is placed on communication because it is means to circulate information within the network.

The third characteristic is named norms and sanctions. Norms and sanctions constrain and encourage behaviour of individuals associated with the organisation. This is done through individuals maintaining the status quo and avoiding sanctions by adhering to the status quo.

Additionally, Coleman (1988) introduced closure, intergenerational closure, and multiplex relations. Closure ensures sanctions are upheld and multiplex relations strengthen ties between individuals, when compared to single relations. A multiplex relation occurs when two individuals share more than one relational context. For example, employees who have children who go to the same school and live in the same neighbourhood. Intergenerational closure upholds norms and sanctions, the study used the example of children attending the same school enforce the shared norms through communication between parents.

The theory emerged widely in social studies (Jackman and Miller 1998; Portes 1998; Putnam 1993; Woolcock 1998). Putnam (1993) used the concept to explain how communities are negatively impacted by self-interest and calls for its use in policy to encourage communal behaviours. It is of interest for political science because it explains the use of trust in communities (Jackman and Miller 1998). For instance, the higher the number of multiplex relations between individuals, the higher the level of trust experienced between them. Jackman and Miller (1998) claimed the literature had not moved beyond broad claims based on little evidence, such as how economic capital is undermining social capital; consequently reducing prosperity in communities (Putnam 1993).

Attention from business scholars emerged when Granovetter (1995) used the concept to address the simplicity of economic rationality. The study addressed the incomplete logic of rationality, claiming social relations affect activity as much as rationality. The study introduced the idea of business groups that share social capital, extending their rational capacity through the utilisation of their network.

In doing so, an alternative explanation to market logics emerged. The alternative explanation is based on the affective exchange of information. Barney (1986a) introduced the idea of business groups as organisations who attempted to manipulate the industry structure to their advantage by combining resources for monopolistic control. In an industry, business groups undermine competition through blocking the unfolding of competitive dynamics (Barney 1986a; Wernerfelt 1984).

Further development of the internal social relations began to explain why one organisation performs better than another (Barney 1991; Nahapiet and Ghoshal 1998). A conceptual explanation for SCA through social capital proposed that it supports the conditions to create knowledge (Nahapiet and Ghoshal 1998). The creation can be explained through the role of internal social relations. Strong internal

social relations generate and transform information into knowledge (Inkpen and Tsang 2005; Leana, et al. 1999; Nahapiet and Ghoshal 1998). This is also known as bonding social capital (Hernández-Carrión, et al. 2017) and is way to explain the imperfect inimitable ambiguous linkages between managers (Barney 1991).

Another form of SCA is formed from external social relations, also known as bridging social capital (Hernández-Carrión, et al. 2017). Astute use of the external social relations exploits structural holes that occupy the cluster of relations that surround the organisation. An advantage occurs through the organisations ability to recognise opportunities created by brokering information (Burt 1992: 47).

Inkpen and Tsang (2005) proposed social capital should be highly visible when observing from the business level. Visibility lowers as the structure of the organisation shrinks, implying the crux of social capital is between management team, who appropriate social capital through shared experience. Payne, et al. (2011) explained the need for multilevel analysis to explain the phenomenon to a greater extent. Furthermore, De Clercq, et al. (2013) proposed the best level is an small and medium sized (SME) organisations because the limited structure enables the owner to exercise the internal/bonding social capital.

#### 4.3.2. Application in family business research

Social capital attempts to explain how social relations affect the organisation in the form of SCA. One effect is strong relations support the conditions for the creation of knowledge (Nahapiet and Ghoshal 1998). This has been applied in FBR to create the term FSC. It originated as an extension of the proposition of "Familiness" and builds on the idea of SCA derived from the involvement of the family (Habbershon and Williams 1999c). Sirmon and Hitt (2003) and Dyer (2003) superseded "Familiness" with the application of FSC however, recent studies have mixed results.

Recent work on social capital frames family networks as disadvantageous for entrepreneurs (Burt 2019: 33). Alternatively, Rooks, et al. (2016) found family ties to overrule rural constraints creating stronger social capital when compared to urban entrepreneurs' social capital. The study concluded with the question of why family ties are so strong? The study speculated it could be because of the years of socialising and extra commitment, referring to previous work by Arregle, et al. (2007).

Arregle, et al. (2007) applied social capital theory in FBR as a way of explaining "Familiness" and proposed specific processes created by FSC that lead to competitive advantage. The first process of FSC is the influence family members have on the business due to them occupying key roles. Especially in SMEs because the owner and manager is usually the same person aligning with the relevance of social capital in SMEs (De Clercq, et al. 2013). Sirmon and Hitt (2003) claimed FSC is unusually effective in developing the human capital for the next generation.

The second process of FSC is the influence family members have on the identity and rationality of the organisation. Identity and rationality of family members influence the business as they occupy key positions to express their characteristics and values. The third process is the human resource practices of the organisation that are self-perpetuated. Arregle, et al. (2007) proposed employees who share the same values and goals of the organisation are more likely to be promoted, perpetuating existing values and characteristics. Leana, et al. (1999) spoke about reciprocal norms and the idea of likeness, people will gravitate towards like-minded people.

The final process is the increased survivability of the business. This relates to external social capital and is due to the apparent overlap with stakeholders. Sirmon and Hitt (2003) claimed the family is deeply embedded within the business and its stakeholders creating strong social ties. These social ties increase FSC building more effective relationships with suppliers, customers, and support organisations i.e., the external cluster of relations. This indirectly garners more resources from their constituencies and networks. A social benefit of this is thought to be regional development (Basco 2015).

Furthermore, the dimensions of social capital have been applied to FSC. The dimensions proposed by Nahapiet and Ghoshal (1998) explain FSC (Arregle, et al. 2007; Nahapiet and Ghoshal 1998; Pearson, et al. 2008; Sirmon and Hitt 2003).

Pearson, et al. (2008) clearly articulate each dimension. The cognitive dimension is created through long term goals, minimal opportunistic behaviour, as well as a shared purpose, history, and vision. The structural dimension is created by the pattern and strength of ties. Especially due to the existence of these ties outside and before the creation of the business.

The relational dimension is thought to be more intense in a family business; the trust is assumed to be resilient rather than fragile. Norms focus on openness, cooperation, teamwork, and collective actions within the family. Identification relates to the individual being part of the collective and the family identity is assumed to be strong, fostering enhanced motivation. Arregle, et al. (2007) proposed FSC to be one of the most powerful enduring forms of social capital. The study asserted the more stability a family has, the more positively it influences the organisations social capital. This begins to unpack the social complexity of inimitability required for SCA. Table 4.2. shows the key articles identified in connection with FSC.

numework.			
Author	Journal	Citations <sup>3</sup>	Article Type
	Journal of		
Arregle, et al. (2007)	Management Studies	1591	Conceptual
	Entrepreneurship,		
Pearson, et al. (2008)	Theory and Practice	832	Conceptual
	Entrepreneurship,		
Dyer (2003)	Theory and Practice	684	Conceptual
	Entrepreneurship,		
Chua, et al. (2003)	Theory and Practice	400	Literature Review
	Entrepreneurship,		
Sharma (2008)	Theory and Practice	246	Conceptual

Table 4.2. The family business studies that have used social capital as a theoretical framework.

It shows most of the work has been conceptual, despite the calls for in-depth studies (Arregle, et al. 2007; Pearson, et al. 2008). More recently, Herrero (2018) reasserted that FSC creates SCA keeping the conversation relevant to FBR. It is unsurprising FSC has not developed if in-depth qualitative studies have not been undertaken (Chapter 2) and adds to the rationale for the need of a grounded theory study (GT) to theoretically clarify the phenomenon.

# 4.4. An integrated framework

Thus far, this chapter has introduced the three main theories of FBR. System-agency theory disentangled the sub-systems of the phenomenon that is driven by the objective of transgenerational wealth. The application of the RBV led to the creation of "Familiness" that leads to SCA (Habbershon and Williams 1999b). Finally, the application of social capital theory explained FSC and its role in achieving SCA.

Despite these efforts, the phenomenon of family business remains a substantive area suitable for GT (Locke 2000). This is because FBR is still developing and can be likened to a child in the acquisition of new language. Aitchinson (1987) introduced a three-stage framework for how children make meaning in their vocabulary: labelling, packaging, and network building. Table 4.3. identifies each stage and the relevant characteristics.

<sup>&</sup>lt;sup>3</sup> based on search results from google scholar on the 29/07/2020

Stage	Identification		
Labelling	- Associating sounds with objects in the world around the child		
_	- Linking words to things		
	<ul> <li>Understanding the concepts of labels</li> </ul>		
Packaging	Starting to explore the extent of the label – often the stage during		
	which overextensions and under extensions occur more frequently		
Network	- Making connections between the labels they have developed.		
building	<ul> <li>Understanding opposites and similarities, relationships, and contrasts.</li> </ul>		

 Table 4.3. Aitchinson (1987) model of children's acquisition of language.

Research of a phenomenon can be explained using the analogy of a child's development. The research community becomes aware of the phenomenon and adopts words to describe interpretations of the surrounding world. The efforts to acquire language develops through the application of different theories to label and package the key characteristics based on specific interpretations. Signals of packaging issues appears to be the case in FBR, given the overlap of the three theories, despite scholars proclaiming the maturity of the topic (Holt, et al. 2010; Litz, et al. 2011; Pérez Rodríguez and Basco 2011; Xi, et al. 2013; Zahra and Sharma 2004).

Table 4.4. applies the Aitchinson (1987) model of language acquisition to FBR development. The left-hand column shows the stage of meaning creation in the language acquisition. Each column represents one of the FBR theories and its features. The labelling row represents stage one, the unique label attached to the phenomenon. It has a list of associated words, packaging the phenomenon into terms. The first stage labelling characterises the initial studies during the first period the identified different concepts (Sharma, et al. 1996). This was progressed during the second period that engaged in more packaging activities through the use of theory (De Massis, et al. 2012). The theory packaged concepts that overlap and contradict one another other.

Therefore, this period is needs to appropriately package the concepts into a theory to progress into the networking stage. Similar to a child as it begins to recognise the grouping of concepts, such as tigers, elephants, and monkeys are all animals as a concept (Aitchinson 1987). Currently, overextensions occur through overgeneralisation of affects because they are not fully understood and under extensions are due to the lack of knowing precisely which aspects are important. Instead, they are grouped together and labelled as an inimitable resource or idiosyncratic competencies. Furthermore, heterogeneities generate opposites and

similarities, relationships, and contrasts. The remainder of this section details the overlaps and contradictions in FBR that lead to the need for GT.

Stage of	Resource based	Social capital theory	Systems-agency	
meaning	view		theory	
creation.				
Labelling	"Familiness"	FSC	SEW	
Packaging	Idiosyncratic	Processes and	Dimensions of SEW	
	competencies	dimensions of FSC		
Network	Unclear outcome (+/-).			
building	• Automatic assumption that a family business possesses unique			
	characteristics.			
	The evidence used.			
	• Optimal states and/or conditions for the characteristics to thrive.			
	When/why/how conditions might change.			
	Absence of contextual factors.			
	• Overlap of survivability capital, patient capital, and social capital			

Table 4.4. The language acquisition of family business research.

### 4.4.1. Overlaps

All three theories overlap in relation to the affected areas of the business, the use of the family power, experience, and culture (F-PEC) scale, the interpretation of patient capital, the overextension due to use of assumptions and criticisms of empirical evidence.

Firstly, the affected areas of the business are where the theories overextend and overlap. Cruz et al (2011) claim SEW influences: strategic management in the experience of succession, professionalisation, and human resource practices. This overlaps with the processes of FSC: family members influencing the rationality of the organisation, privileged positions of family members, and human resource practices.

A second overlap is the importance of stakeholder relationships. In SEW they are affected by stakeholder management and corporate social responsibility. This is like a process of FSC that claims the overlap in stakeholders leads to increased survivability. SEW and FSC both acknowledge the influence on external relationships.

Importantly, the theories overlap in language used to express these concepts. For example, dimensions of SEW are family control and influence, renewal of family bonds through dynastic succession, binding social ties, family member's identification with the business, and emotional attachment. These are synonyms of characteristics of the relational, cognitive, and structural dimensions of FSC. For example, family control and influence as well as the renewal of family bonds through dynastic

succession is synonymous with the shared history and long-term vision of the business.

Furthermore, the binding social ties from SEW is like the structural dimension of FSC. The structural dimension includes a strong pattern of ties and ties outside of the business. This also overlaps with the idiosyncratic competencies of "Familiness" from the RBV. Family members identification with the business and emotional attachment of SEW overlaps with the relational dimension of FSC.

In addition, strengthening the idea of overlap is the common use of the F-PEC scale. "Familiness", FSC, and SEW adopt the F-PEC scale to measure parts of each construct. Frank, et al. (2017) used it in the FIFS scale. Berrone, et al. (2012) recommended the adoption of it to measure the level of SEW. Sanchez-Ruiz, et al. (2019) used it to measure some of the dimensions of FSC.

As a common denominator the F-PEC scale measures the generation number, number of family members, and the proportion of ownership a family has in the organisation (Klein, et al. 2005). Therefore, the internal characteristics have been linked but their affect is not fully understood. Internal characteristics have potential influencing factors: family stage, firm size, and firm hazard (Schulze and Kellermanns 2015). Furthermore, potential influencing contextual factors extend to national culture, ethnicity, and demography (Bhalla, et al. 2009). For example, ethnicity may be important because a minority group may have different behaviours to a non-minority group, due to increased interdependence and interaction. Thus, FSC stakeholder overlap may be stronger compared to a family business from an ethnic majority due to close knit communities (Bhalla, et al. 2009).

SEW and "Familiness" overlap and share the same interpretation of patient capital. Patient capital is an aspect of "Familiness" which associates itself with the objective of longevity of the family business. In contrast, SEW use it as the explanation for engaging in pro-environmental behaviours (Berrone, et al. 2012).

Paradoxically, assumptions are subtly used to overextend the knowledge claims. Sirmon and Hitt (2003) claimed organisations must have sufficient levels of efficiency, complementariness, novelty, and lock-in (with buyers) before "Familiness" can exist. Habbershon and Williams (1999c) acknowledged the external factors (market and competitive context) could affect the idiosyncratic bunch of imitable resources comprising the concepts. Therefore, the use of assumptions is at the FBR researcher's convenience and is used to overextend knowledge claims without clarifying the meaning of the phenomenon of family business.

Furthermore, there are shared issues in the empirical evidence used to support the theories. Sampling issues are evident in the research from Berrone, et al. (2010a). The study used the 5% ownership criteria for a family business; thus, the certainty of their claim is doubted. Also, the study did not acknowledge that the businesses in the sample were in fact rural businesses. Schulze and Kellermanns (2015) support this thinking and expressed their doubt of the claims made in the previous study (Berrone, et al. 2010a). In regards to "Familiness", researchers have been unable to collect complete significant results and could not be validated (Hauck, et al. 2016a). Therefore, a research technique such as grounded theory (GT) is appealing because of its ability to comprehensive information, addressing assumptions to resolve some of the identified overlaps and overextensions.

#### 4.4.2. Contradictions

The contradictions within FBR are due to competing explanations in the core propositions and the use of survivability capital. Ambiguity surround heterogeneities and optimal conditions confuse the meaning of the phenomenon. Firstly, the theories compete for explanation on whether the family has a positive or negative affect on the business. "Familiness" and FSC explain the involvement of family as a mechanism for SCA. Whereas SEW explains the involvement of family as a mechanism threatening the business's survival. The competing explanations block theoretical clarity.

A second contradiction is due to SEW and "Familiness", they differ in their interpretation of survivability capital. In SEW, it is a consequence of the family keeping control and preserving the business when economic signs indicate failure. Using a negative connotation referring it to the antecedent of the permanent state of failure. Whereas for "Familiness", survivability capital has a positive connotation and contributes to SCA. Therefore, the interpretation of survivability capital is a contradiction and signals the need for theoretical clarification.

Furthermore, recent work identified three levels of FSC: identifiable, instrumental, and indistinguishable (Sanchez-Ruiz, et al. 2019). Sanchez-Ruiz, et al. (2019: 351) recommended future work should explore when and why their FSC configuration might change and aligns with the need to understand the optimal requirements for SEW. Thus, FBR would develop with comprehensive information to appropriately

package SEW and "Familiness" to identify optimal conditions. This matters because SEW may not apply to all family businesses, for example it may only apply to shortterm orientated families (Newbert and Craig 2017). Not applying to all family businesses has two implications. Firstly, it is significant for the learning, skill, and development needs of businesses. The different from non-family and the same as non-family must be differentiated. Secondly, FBR becomes self-defeating if it continues to empirically research short-term orientated families who are no different to non-family businesses.

Furthermore, Discua Cruz, et al. (2013) and Estrada-Robles, et al. (2020) adopted a qualitative approach but used included young organisations (who have a short history); and thus are short-term orientated families because they are in the start-up phase. This disabled any chance of exploring the history of interactions. Additionally, Carr, et al. (2011) measured internal FSC but similarly included young organisations and unsurprisingly did not yield significant insights. According to social capital theory, a period of stability is required to build a history of interactions for the cognitive and relational dimensions. Therefore, a study that considers the history of interactions is necessary and more likely to exist in older family businesses, aligning with the need to consider the generation number.

FBR has produced research stating that family businesses are different in many ways. However, like an infant acquiring new language, it still needs to appropriately package the theory to achieve impartial meaning and proceed to the networking stage. One way of appropriately packaging is to acquire the relevant vocabulary of family businesses from related people. Multi-generational family business owners are likely to possess this vocabulary and forms the rationale for a GT study. Multigenerational family business owners can be found in rural UK agricultural businesses. This research adds to FBR by answering the research question: How does the family affect rural family businesses?

### 4.5. Chapter summary

This chapter has outlined the three main theories used in FBR. It has defined and provided the background of each theory. The first part integrated systems theory with agency theory. This has been applied in FBR the creating the ideas of transgenerational wealth, a unified system, and SEW. The second part included the RBV that has progressed the rhetoric of strategic management. This has been applied in FBR with the explanation that family businesses have a SCA due to the involvement of family members creating the term "Familiness". This was extended by
social capital theory by the conceptualisation of FSC and the relative dimensions and processes.

All three were then evaluated to judge the phenomenon's development. It identified overlaps and contradictions. This led to two research gaps, the need to resolve the competing explanations as well as the need to fully understand the internal characteristics. FBR research is in a state of language acquisition in the development of a credible rhetoric, this research aims contribute to this by using a GT study explained in the next chapter.

# Chapter 5. Methodology

This chapter presents the methodology used to achieve the research aims and answer the research questions. The next chapter includes a temporal description of the grounded theory (GT) method to illustrate how it happened, this chapter details each component of the method. Table 5.1. shows a data summary of this research.

Family business	Genera tion number	Size	Number of family members	Speciality	Number of family members interviewed	Number of interviews
Organisation A	3	120	13	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	2	3
Organisation B	3	50	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	2
Organisation C	6	130	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	2
Organisation D	3	140	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	2
Organisation E	4	130	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation F	4	200	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation G	5	15	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	2
Organisation H	4	57	7	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation I	6	200	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation J	3	200	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	2	2
Organisation K	3	200	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation M	2	30	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation N	4	150	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation O	7	200	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	2	2
Organisation P	6	150	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation Q	3	3	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation R	4	5	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	3
Organisation S	4	20	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation T	3	25	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation U	5	9	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation V	1	9	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation W	4	16	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation X	6	12	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation Y	6	75	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Organisation Z	4	100	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	1	1
Total/Average	4	89	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	28	35

Table 5.1. The primary data summary of the research.

The table shows the sample used to collect the data. The sample (excluding the pilot) was made up of 28 participants from 25 family businesses. The data (excluding the pilot) was collected during 35 semi-structured intensive interviews and generated over 237,000 words in 526 pages of single-spaced transcripts. The data was analysed and qualitatively coded.

This chapter begins by presenting an analysis of the different research strategies used by recent studies from the field of business. Recent articles (2016-2019) of several 4\*/4 journals were analysed, the analysis was guided by the research onion metaphor (Saunders, et al. 2012). This includes the different research philosophies that might be used in management research. It includes the reasoning that might be used in research approaches such as deductive, inductive, and abductive reasoning. As well as, the different research approaches, detailing qualitative, quantitative, and mixed method approaches. The decisions form the research design process and common practical choices a researcher faces. The purpose, design, the criteria for research quality must align to create good research.

The researched used an inductive, exploratory GT study and this follows an overview of the research design. This research design combined with a pragmatic philosophical position. The approach is justified through rationale for why this was the most appropriate compared to other potential options.

The third section includes a detailed description of the sampling strategy and the rationale for why this was the most effective way to answer the research questions. The first part describes the purposeful sampling used in the research, identifying the homogeneous group of family farms as the most appropriate participants to answer the research questions. The second part considers the sample size, this was determined by previous studies and data saturation. It also details the process used to identify the organisations and presents how they were approached.

The fourth section of the chapter describes the data collection technique used. Firstly, it describes how semi-structured interviews were the most appropriate choice for the research because it aligned with the exploratory nature of the research. It presents the interview technique, intensive interviewing, and the interview questions, explaining the rationale for why the questions were included. The final part of the section describes the use of business websites and memo-writing as alternative forms of data collection.

The penultimate section presents the data analysis process used. The data analysis used a qualitative coding strategy divided into five phases: pilot, exploratory, progressive, optimal, and the analytical pull. Firstly, it details the process and rationale for qualitative coding and the subsequent parts describe each phase of coding. The final part of the section details the development of reflexive thinking and writing throughout the research. The final section summarises the chapter.

## 5.1. Research strategies in management

This section discusses the essential characteristics of a research project and outlines the options for a management study. Saunders, et al. (2012) research onion analogy is a guiding structure, and each layer is discussed. Figure 5.1. presents a diagram of the research onion. When undertaking management research, it is worthwhile spending time considering the most appropriate research strategy for the situation, contemplating each layer of the research onion.

Figure 5.1. The research onion of the possible methodological decisions (Saunders, et al. 2012: 126).



## 5.1.1. Understanding research philosophy

The first layer of the research onion is research philosophy, the assumptions used when viewing the world (Saunders, et al. 2012). The assumptions form a paradigm, which typically has two core components the ontology and epistemology.

The ontology is the nature of reality; this predominantly tends to select between an objective or subjective reality. At one extreme is the objective reality; existing outside and independent to social actors (Saunders, et al. 2012). Specifically for management studies, in an objective world aspects of management are clearly defined functions and structures assumed to be similar in all organisations (Saunders, et al. 2012).

Alternatively, a subjective reality views the world as the consequence of the actions and perceptions of social actors (Saunders, et al. 2012). In a subjective world the aspects of management can be understood by researching details of the managers i.e. social actors and the reality occurring behind this i.e. actions and perceptions (Saunders, et al. 2012). This spectrum is continuously revised, Lincoln, et al. (2018) in their latest revision refine objectivity as a belief in a single identifiable reality. Whereas, a subjective researcher believes realities exist in the mental constructions of the person who holds them (Lincoln, et al. 2018).

The ontology is linked to the epistemology, which defines what is acceptable knowledge in the field of study. At one extreme, the positivist perspective beliefs in an observable reality; for them knowledge constitutes in the identified causal relationships and regularities to create law like generalisations (Saunders, et al. 2012). For positivists, aspects of management are observed to identify causal relationships and regularities. Consequently, producing good and correct management based on sound research can be found and generalised to all organisations.

At the other extreme is interpretivism, this is the belief that reality is too complex to have simple causal relationships and regularities because humans as social actors have differences that need to be understood (Saunders, et al. 2012). Therefore, management from this perspective should be researched by interpreting each situation in its own way. To achieve this language and the symbolic meanings of interactions must be understood before any conclusions can be drawn (Saunders, et al. 2012).

Ontologies and epistemologies combine to create paradigms. Usually, the belief of a subjective reality is combined with an interpretive perspective creating constructivism. At the opposite end is the belief in an objective reality combined with the positivist perspective creating positivism. In between are paradigms which attempt to combine the two such as post positivism, realism, and critical theory.

Post positivism holds onto the positivist traditions but concedes to the idea of not absolutely knowing instead approximating due to undiscovered variables and incomplete data (Lincoln, et al. 2018). From this paradigm, aspects of good management might be discovered, but are subject to continuous revision. This is because the variables affecting the situation have yet to be discovered.

Critical theory and realism combine the objective reality with the interpretive researcher who has their own agenda, values and bias (Lincoln, et al. 2018; Saunders, et al. 2012). This is more pragmatic and understands research philosophy to be a continuum rather than a dichotomy (Saunders, et al. 2012). The common

aspect of these paradigms is the ability to understand the researcher's experiences, senses, and perceptions alongside the practicality of the situation.

Beyond the constructivism end of the spectrum, is the post-modernist paradigm which questions everything. This is viewed as quite a radical position perspective because it undermines some research practices. This is because the perspective questions how any research can be undertaken without being influenced by the researchers who are so invested in the process (Lincoln, et al. 2018: 140).

#### 5.1.2. Understanding research approaches

Once the research philosophy has been decided, the next layer of the research onion is the reasoning behind the research. The research approach has three options: deductive, inductive, or abductive reasoning. Abduction being the combination of inductive and deductive reasoning.

Deductive reasoning is drawing conclusions derived from a set of premises (Saunders, et al. 2012). Conclusions based on premises are confirmed or denied based on hypothesis testing. A theory is a set of premises subjected through rigorous hypotheses testing (Saunders, et al. 2012). Going to the original example, a hypothesis could be good management is linked with the manager's number of years' experience.

The first step in deductive reasoning is to create premises based on existing literature (Saunders, et al. 2012). Premises suit the positivist paradigm as the conditions are objective regularities in an observable reality. If the hypothesis is confirmed within the premises, the theory holds true and conclusions are drawn. From the example, the expected conclusion would be the higher number of years' experience correlates with the level of good management. However, a criticism of deductive reasoning is the tautological statements, new ideas are not created; deductive reasoning only confirms what the researcher hypothesises to be true (Reichertz 2013). In this case, the researcher hypotheses a good manager has many years' experience, this makes them a good manager.

In contrast, inductive reasoning formulates ideas within an observed set of conditions and formulates a set of premises during data analysis (Saunders, et al. 2012). The conclusions drawn here are limited to the set of conditions observed; suiting a constructivist paradigm because it relies on interpreting the reality and constructing a set of propositions or theory. However, a criticism of inductive reasoning is that it does not create new ideas because it draws on existing ideas to support the argument for its truth (Reichertz 2013).

Returning to the example of good management and experience. Instead of hypothesising, inductive reasoning would collect data on good managers. From the data collected and analysed a proposition of good management would be induced. It might be that good managers tend to have more years' experience. This claim would be subject to the mangers included in the study.

Apparently, the only way to present a new idea is through abductive reasoning (Reichertz 2013), regardless of the sequence of reasoning. For example, it could be induction followed by deduction or vice versa. This suits management research because it can present an idea and then justify it through testing the idea, or vice versa (Saunders, et al. 2012).

5.1.3. Understanding quantitative, qualitative, and mixed method approaches The next layer of the research onion is deciding upon one of three research approaches: quantitative, qualitative, and mixed methods. The distribution of research approaches in highly ranked management journals over the last 3 years in the following journals were analysed: Academy of Management, Administrative Science Quarterly, Journal of Management Studies, Journal of Business Venturing and Entrepreneurship Theory and Practice.

Table 5.2. presents the analysis of the research approaches identified. The analysis is based on 885 articles published in the journals specified. The table shows a dominance of quantitative studies (58%).

Research approach	Quantity	%
Quantitative	509	58
Qualitative	161	18
Conceptual	60	7
Mixed method	52	6
Literature review	45	5
Other	58	7
Total	885	100

Table 5.2. The top five research approaches used in management research.

Quantitative methods use numeric data and suit a positivist philosophy and deductive reasoning (Saunders, et al. 2012). When considering quantitative data, it is important to recognise whether it is measuring objective phenomenon i.e. years of management

experience or a quantitative measure of a subjective phenomenon i.e. the motivation of managers (Saunders, et al. 2012).

Quantitative data is analysed through various statistical techniques. The statistical techniques are usually coupled with probability sampling to ensure generalisability (Saunders, et al. 2012). Referring to the example of the organisation, the organisation is well managed when a highly experienced manager is present. A high number of years' experience is significantly positively correlated with good management. With a large enough sample to be representative, this claim can be generalised to all organisations.

A qualitative approach uses non-numerical data which researchers can interpret and draw meanings from (Saunders, et al. 2012). This suits a constructivist paradigm and a typical objective here is to draw inference from the data through appropriate data analysis. The sample size depends on the access to participants and the ability of the researcher to build rapport (Saunders, et al. 2012). Access can be difficult to attain because managers are usually busy people. The rapport partly determines the likelihood of extracting sensitive data and thus affecting the quality of the research, hence the subjectivity.

It is important to note generalisability is not sought here and findings are usually relevant to the setting. This aligns with the subjective ontology that all organisations are different and thus so are the requirements of a good manager. The example of using qualitative data would be interviewing good managers exploring what makes them competent. This creates a construction of reality explaining the phenomenon of good management within a specified context.

Mixed methods combines quantitative and qualitative approaches creating space for the mid-range research philosophies such as critical realism (Saunders, et al. 2012). Combining quantitative and qualitatively orientated data collection and data analysis techniques can be very time consuming. On the contrary, they are thought to be ideal for management research because abductive logic can be applied.

## 5.1.4. Understanding research purpose

Once the philosophy, reasoning and approach has been considered, the next layer of the onion is the research design. The research design depends on the purpose of the study, usually exploratory, descriptive, or explanatory.

Exploratory studies aim to gain new insights into a phenomenon of interest generating a more precise nature of it (Saunders, et al. 2012). Usually, these studies gradually

become more focused as the research progresses (Saunders, et al. 2012). Management research can benefit from this by understanding the influencing factors in a situation. This approach might be flexible and adaptable to change (Saunders, et al. 2012).

Descriptive studies aim to gain an accurate picture of situations, it might be an extension or precursor to exploratory interest (Saunders, et al. 2012). However, accurate descriptions must be present before explanations can be drawn (Saunders, et al. 2012). Management research can benefit from this by exploring or explaining good management in accurate depictions. The purpose of explanatory research includes causal relationships between variables (Saunders, et al. 2012). In turn, this can help prove or disprove propositions; returning to the example, it can help determine how good management works.

## 5.1.5. Understanding research design

The research design combines philosophy, reasoning, approach, and purpose of the research. Practicality, this means making choices within a set of constraints (McGrath 1981). The constraints make research problematic due to the nature of the questions asked, the aim is not to solve problems but to minimise them by choosing particular strategies (McGrath 1981). The constraints are generally time, access, and resources. Alignment between the combinations is fundamental, three popular aligned designs are outlined below.

The first design combines quantitative approach, quantitative data collection techniques (survey, experiment, or panel data/archival research), a positivist philosophy, deductive reasoning, and the purpose of explanation. The aim of the data is likely to generalise the findings. Table 5.3. presents the analysis of quantitative designs identified in management research.

Quantitative technique	Quantity	%
Secondary	312	62
Survey	91	18
Experiment	45	9
Longitudinal survey	15	2
Multiple timepoint surveys	9	2
Other	42	8
Total	509	100

Table 5.3. The top five quantitative data collection techniques used in management research.

The table shows a dominance of archival data as a source of data for quantitative studies at 62% followed by surveys at 18% and experiments at 9%. This might be

due to the convenience when thinking about access and the certainty of clear results this type of research delivers.

The second design combines a qualitative approach (case study, ethnography, action research, grounded theory or narrative inquiry), qualitative data collection techniques, (i.e. interviewing as the most popular data collection technique (Brinkman 2018)), a constructivist philosophy, inductive reasoning, and the purpose of exploration or description. The results of the research are likely to be limited to the sample. Table 5.4. presents the analysis of qualitative designs identified in management research. The table shows case studies as the most popular at 35%, closely followed by interviews at 31%, and then ethnographies at 19%.

Table 5.4. The top five qualitative data collection techniques used in management research.

Qualitative technique	Quantity	%
Case studies (multiple techniques)	55	35
Interviews	49	31
Ethnographies	29	19
Secondary data	11	7
Observations	4	3
Other	8	5
Total	161	100

The third design is a mixed method approach and combines qualitative and quantitative data collection methods, a critical realist paradigm, abductive reasoning, the purpose of description, and exploration or explanation. The purpose depends on the reasoning sequence (inductive-deductive/deductive-inductive). Generally, mixed method designs aim to identify new phenomena and explain how they work or vice versa. Table 5.5. presents the analysis of mixed method designs identified in management research. Mixed methods have diverse designs rather than one dominate design; each study seemed to combine a mixture of techniques in no order.

Table 5.5. The top five mixed method data collection techniques used in management
research.

Quantity	%
12	23
4	8
4	8
2	4
2	4
2	4
24	46
52	100
	12 4 4 2 2 2 2 2 2 4

The three designs are the general designs found in management research. Each strategy has its strengths and weaknesses depending on the research objectives and questions. It is worth noting the third is recognised as the most appropriate for management studies but uncommon due to time constraints (Saunders, et al. 2012).

## 5.1.6. Understanding research quality

A final consideration of the research onion is the assessment of research quality. The research design determines the criteria used to evaluate the quality of the research. Quantitative research is standardised whereas qualitative research is less obvious. For quantitative research the criteria of quality are reliability, construct validity, internal validity and external validity (Saunders, et al. 2012). Reliability concerns replication, if the research was repeated would it produce the same findings (Saunders, et al. 2012).

Validity is another characteristic of quantitative research quality. Construct validity ensures the measurements used measure the construct it proclaims to (Saunders, et al. 2012). This can be justified through the same measure being used in previous studies. Internal validity ensures the proposed correlation between two variables is accurate, this can be ensured by appropriate statistical testing (Saunders, et al. 2012). External validity is whether the results relate to other groups; this can be ensured through sample sizes and assuming generalised behaviours rather than heterogeneous behaviour (Saunders, et al. 2012). In a sound design adhering to the former points, the only remaining check would be to protect against participant error, participant bias, and researcher bias (Saunders, et al. 2012).

Assessment of qualitative research involves a different criteria of quality, Tracy (2010) formulated eight criteria for qualitative research: worthy topic, rich rigor, sincerity, credibility, resonance, significant contribution, ethical and meaningful coherence. There is not a single way of achieving each of these criteria; each piece is evaluated according to the communities of practice that surround the research (Saunders, et al. 2012), since each community has its own shared language. Furthermore, a standardised criterion of quality would defeat the purpose of qualitative research (Gioia, et al. 2013; Lincoln, et al. 2018; Tracy 2010).

## 5.2. Research approach

This section presents the approach used to answer the research question. Figure 5.2. illustrates the decisions within a range of possibilities that were considered during the research design.



Figure 5.2. A decision tree of the research strategy.

## 5.2.1. Philosophical alignment of the research design

A subjective view of reality suited the study for three reasons. The first was exploration contributed to the progressive coherence of family business research (FBR). An exploratory the business generated new meanings that were relatively unknown before the study.

'Exploratory studies are used to gain new insights into phenomena, to ask questions, and to assess the phenomena in a new light' (Saunders, et al. 2012: 670). This was achieved because it used a subjective approach that aligned with the arguments in the literature. The subjective ontology facilitated an exploration of the heterogeneities of social groups rather than assuming homogeneity. Family businesses are known to pursue non-economic objectives that are ambiguous (Gomez-Mejia, et al. 2011). Therefore, inductive reasoning was suitable to address the ambiguities. Detailing how the family social capital (FSC) affected the family businesses suited induction to see empirically if there was an affect.

The study presents a full picture of the specified setting. A full picture considered previous theoretical perspectives: systems theory, resource-based view (RBV), and social capital theory. The perspectives and the primary data recognised how the family relations affect the business and theoretically clarified how family businesses are different from non-family businesses. The phenomenon of family business and FBR is a relatively new substantive area, hence the need for new insights (Locke 2000).

Secondly, a subjective view was suitable because it was easier to acknowledge the internal characteristics. The subjective philosophy within a qualitative approach allowed the detail of the actor's actions and circumstances. This was enabled an indepth study of the internal perspective of family businesses. Considering the family effect is socio-behavioural, the subjective ontology permitted articulation of shared language and the related heterogeneities. Whereas, in an objective ontology, their uniqueness would have been more difficult to capture because it assumes all organisations are similar. Whereas this approach allowed articulations of the invisible aspects of the phenomenon based on lived experience.

Thirdly, the unit of analysis of small and medium sized enterprises (SMEs) (next section) allowed the social capital of family members to be a strategic resource. Consequently, brokers could be asked to explain who benefits from the current arrangement, within the boundaries of the network. In hindsight, an objective view of the world would have assumed all organisations to be similarly detailed and well structured (Saunders, et al. 2012). Which is problematic because social capital as a strategic resource in SMEs compared to large organisations is different (section 3.2.4). A subjective ontology presented the opportunity to analyse the whole network surrounding a unit of analysis within a specified setting without the assumption of similarity.

The specified setting, the agriculture industry, led to the identification of the contexts most important factors. This led to the unexpected outcome of the problems facing rural family businesses. This finding would not have been possible through testing a predetermined hypothesis based on deductive reasoning.

## 5.2.2. Pragmatism

The approach relied on a philosophical alignment between the research design and the phenomenon. This was achieved by maintaining a pragmatic position, this views facts and values as linked rather than as separate (Charmaz 2014a).

"... Pragmatism is a doctrine of meaning, a theory of truth. It rests on the argument that the meaning of an event cannot be given in advance of experience" (Denzin and Lincoln 2018: 314).

Within this paradigm scientific truth is relative and assessed through empirical work (Charmaz 2014a). Specifically, the truth in the constructed findings of this research cannot extend beyond the situation interpreted, aligning with the subjective ontology.

The sampling strategy and data collection technique aligned pragmatically because they were the most appropriate to represent the reality of phenomenon. The data collection technique that positioned participants as the experts and were central to the GT method (Charmaz 2014a).

The perceptions of the participants were captured through the data collection technique (section 5.4.). Interviewing captured their interpretation of their experiences. Within this pragmatic perspective it was important to maintain the view of a fluid indeterminate reality (Denzin and Lincoln 2018). The participant's experience of their organisation was subject to their perceptions which are continuously influenced (see section 5.4.). The findings were constructed from the meanings, values and beliefs accessed through data collection and analysis.

## 5.2.3. Grounded theory approach

GT is an inductive qualitative approach which induces theory/assertions from the data it collects (Charmaz 2014a). It was first developed by Glaser and Strauss (1967). Their research topic was one seldom studied, how the process of death was managed. Consequently, their circumstance induced a need for them to apply inductive reasoning. The circumstance at the time was most people died in hospital yet the management process behind it was unknown. It was unknown because this had not previously been the case, hospitals were assumed to be a place to get better

rather than to die. Therefore, the premise of GT was who better to ask but the people who were engaged in this phenomenon, the hospital managers in their natural setting.

The popularity of their method led to a widespread adoption in qualitative research. Locke (2000) introduced grounded theory to management research and outlined how it can be used in developing new substantive areas. This fits with the progression of FBR as the exploration of a new substantive area.

To align with the exploratory nature of the research, GT was used to develop new insights. The time-consuming, intensive and reflective method (Saunders, et al. 2012) allowed the exploration of social relationships within the context of a family business. Interpreting the extent to which social relations had an impact on social actors' lives in their natural (Charmaz 2014a). The data collection and analysis explored the shared language, codes, and values of the participants. The interpretive coding approach captured the actor's actions and inductive reasoning allowed emergent themes from the data analysis.

Adopting GT involved making the decision whether to adopt a positivistic GT or a social constructivist GT. Charmaz (2014a) presented the two along a spectrum and it's important to distinguish between the two. The objectivist GT is at one end of the spectrum and the constructivist GT at the opposite. The variants have differences in assumptions, objectives and implications for research analysis (Charmaz 2014a). The assumptions are concerned with the reality, data, findings, and the positions of the researcher.

Regarding reality, objectivists assume an external and independent reality from the researcher (Charmaz 2014a). Whereas a constructivist researcher assumes multiple realities. The constructed reality of the research participants is one of many and is influenced by the other fundamental assumptions.

The assumption regarding data for the objectivist GT is a discovery of the unknown. Under this assumption methods are applied to extrapolate data of the external reality (Charmaz 2014a). At the other extreme is the constructivist GT, interpreting through interaction with others. Under this assumption using the data to form a constructed reality whilst remaining open to the idea of other existing realities.

The assumptions regarding findings for the objectivist is unproblematic (Charmaz 2014a), so long as it is reliable and meets the validity standards (Saunders, et al. 2012) (Section 5.2.6.). In contrast, the constructivist are similar to Lincoln, et al. (2018) in the view of findings as partial, situational and pragmatic. From this

perspective, this is influenced by the observer's position. A further difference occurs because the constructivist recognises values, priorities, positions, and actions which influence the researcher and the researched. However, for the objectivist both the research and the researcher are neutral and value free.

The objectivist GT aims to achieve context free, parsimonious, abstract generalisations that transcend historical and situational locations (Charmaz 2014a). Constructivist GT aims to interpret the historical situational data and the range of interpretations. While, adhering to the credibility, originality, resonance and usefulness principles (Charmaz 2014a); overlapping with the guidelines outlined in the section on qualitative quality (Tracy 2010) (section 5.1.6.).

Finally, the implications for data analysis generate fundamental differences. For the objective GT data analysis is an objective process and uses reflexivity as a data source under the authoritative analytical skill (voice) of the researcher (Charmaz 2014a). In contrast, the constructivist GT subjectively analyses data and co-constructing with the research participants combined with a high level of reflexivity (section 5.6.5) (Charmaz 2014a). Considering the above, a constructivist grounded theory was selected and aligned with the research philosophy.

## 5.3. Sampling strategy

The sampling strategy ensured the research questions were answered. The sampling strategy mattered for data collection and ensured the right participants were included in the research. A carefully thought-out sampling strategy was essential for the data analysis, due to the interdependence between the sample size and data saturation.

## 5.3.1. Purposeful sampling

Saunders, et al. (2012) encourages the use of purposeful sampling when the researcher is faced with any of the following limitations: it would be impractical to survey the whole population or budget/time constraints prevent surveying the entire population. Therefore, to find the specific identified participants, a purposeful sampling strategy was followed.

'Purposeful sampling is a non-probability sampling procedure in which the judgement of the researcher is used to select cases that make up the sample' (Saunders, et al. 2012: 678).

Purposeful sampling aligned philosophically because it was pragmatic. Pragmatic because it was designed with practical consideration and with the option to revise once data collection commenced (Emmel 2013).

In probability-based sampling biased sampling through design is considered a weakness because it seeks to generalise; whereas in purposeful sampling, biased sampling techniques is a strength (Patton 2002). This applies to exploratory studies because it targets specific people that deliver information-rich cases to generate deep insights (Patton 2002), in this case on the phenomenon of family business.

Patton presented 12 combinable purposeful sampling strategies (Guest, et al. 2006); this strategy targeted two criteria group homogeneity and within group heterogeneity. The participants possessed distinct characteristics to meet this criteria (Patton 2002). The first characteristic was group homogeneity.

# 'Homogeneous sampling focuses on one particular subgroup in which all sample members are similar' (Saunders, et al. 2012: 288).

Group homogeneity was selected to minimize variation (Langley 1999). This was achieved by ensuring the participants identified as a family business, similar by size and industry. Specifically, three characteristics, family owned small and medium sized organisations (SMEs) found in the agriculture industry.

The first characteristic of the groups homogeneity was to be identify as a family business based on the definition from the Instituted for family business (IFB):

'between zero and 249 employees and a single owner, or multiple owners, and self identifies as a family business, that is, one which is majority owned by members of the same family' (IFB 2019b: 6).

The second characteristic of group homogeneity was to be found within the agricultural sector. A single industry was targeted because the participants were connected to the same external cluster of relations. This similar characteristic aligned with the importance of the subjective ontology. The subjective ontology valued participants construction of their own realities. Thus, being from the same industry meant they had a shared external reality, to some extent. Consequently, any variations were likely to be due to different internal characteristics.

The third characteristic of the group's homogeneity was the size, the selection of SMEs as a unit of analysis increased the visibility of FSC. The smaller structures of SMEs meant the visibility of FSC was more likely in comparison to large organisations. An SME in comparison to a large organisation, limited the size of the internal network and increased the likelihood of capturing the strong interpersonal relations between employees and family members. The family members were more likely to know a large proportion of their employees increasing the likelihood of social capital.

The second characteristic of the sample was group heterogeneity.

'Heterogeneous or maximum variation sampling uses your judgement to choose participants with sufficient diverse characteristics to provide the maximum variation possible in the data collected' (Saunders, et al. 2012: 287).

The heterogeneous sampling was essential to adequately answer the research question because it assured multivocality. Multivocality was generated through having multiple perspectives on the same phenomenon, which can only be gained through enough participants (Tracy 2010). This was ensured by selecting multiple organisations who identified as SME family businesses in at least their second generation. The rationale to specify ensured the data collected related to the phenomenon. This allowed the heterogeneity of the phenomenon to unfold for two reasons.

Firstly, the participants offered a multi-generational aspect and experience of living in an established family business. Multigenerational family businesses are older and more experienced adding rich data regarding the phenomenon. Especially, the depth of family history helped articulate the phenomenon of interest.

Secondly, the family businesses included are in the small percentage who make it past the first generation, only 30% are believed to do so (EFB 2012). Therefore, using participants from multigenerational family businesses helped fill the gap on the limited next generation family member research (Garcia, et al. 2019: 225). Next generation family members have grown up in a different environment in comparison to first generational entrepreneurs.

An original intention of interviewing multiple family members from the same family was abandoned for two reasons. Firstly, the number of participants willing to do so was very low and was received with a high level of suspicion, decreasing the practicality of the research. This explained the absence of this kind of research in FBR.

Secondly, of the three family businesses where multiple family members were accessible the research had the potential to be harmful and cause embarrassment, upset as well as pain to the participants which would have been unethical (Saunders, et al. 2012). The first organisation had different ideas on the staff members and whether to continue being loyal to employees or make redundancies. The second organisation had tensions about the key decisions due to the ownership structure hierarchy. The third organisation had a difference in perceptions of fairness in the

organisation's top-level decision-making processes. Therefore, it remains an aim for future work.

#### 5.3.2. Sample size

The sample size was important in the research, it ensured credibility (Charmaz 2014a; Tracy 2010) and rich rigor (Tracy 2010). Sample size interlinks with data saturation because without enough participants data saturation cannot be reached, this ultimately determines the quality of the research. The sample size in this research was determined through two considerations.

Firstly, a purposeful sample and the researcher with a head full of theories combined with a case full of abundant data to see the nuances and complexity is a recipe for saturation (Tracy 2010). Guest, et al. (2006) recommended saturation could be done with 12 participants from a purposeful sample. Whether there was enough data to support significant claims depends on rich rigor (Tracy 2010). The data analysis demonstrates rich rigor (section 5.5).

Secondly, analysis of previous studies allowed a benchmark of CABS 4\*/4 standard. Table 5.6. includes a summary of analysed articles, the journal, and the numbers of organisations included in the study. The table indicates an average number of 20 organisations included in the qualitative samples identified and serves as a benchmark for qualitative management research.

#### 5.3.3. Identifying the organisations

Furthermore, another factor influencing sample size was the number of organisations identified and their willingness to take part in the study. To identify the organisations databases were searched, FAME and Endole. One advantage of using the databases was their inclusion of financial information, the names of the shareholders and the associated companies. This helped scope potential participants by providing contact details, an estimated generation number, an estimated number of family members, and the relevant background information.

The following metrics were applied: industry, size, and age. This ensured the organisations were family businesses in the agriculture industry and in at least their second generation. Organisation year of incorporation set to at least 1992. The reason being the average length of tenure for a business owner was 26 years (Leach and Bogod 1999); therefore any organisation older than this was likely to be a second generation family business.

	Studies	Average number of
Journal	identified	organisations included
Family Business Review	71	17
Strategic Journal Management	26	23
Academy of Management	43	18
Administrative Science Quarterly	30	27
Journal of Business Venturing	18	27
Entrepreneurship Theory and Practice	11	6
Total / average	199	20

Table 5.6. The average number of organisations included in the samples of qualitative studies from relevant academic journals.

For practical reasons, the initial search applied the universities local region as a metric reducing it to organisations found within Yorkshire. The initial search identified 31 results from the FAME database. Due to the low response rate, this result was not going to generate a large enough sample to produce quality research. Therefore, the search was broadened to include the whole of England and delivered 126 results from the FAME database and 141 results from the Endole database. This generated extra resource consumption through travel time to access the participants. This added a layer of complexity to data collection.

In addition, due to low response rates, the business index Yelp was used to search and identify farms. This index does not include business information and is not as good as the previously identified databases. The search term "farmers" was inputted into their directory delivering thousands of results. Additionally, attending the Yorkshire Agriculture Society (YAS) event and contacting the National Farming Union (NFU) helped identify more organisations.

## 5.3.4. Approaching the organisations

The organisations were approached in writing. A letter was written describing the research process and politely asking for participation assuring anonymity and confidentiality. In the initial attempt, a single (head) family member was approached, due to assuming the oldest was the most senior. The letters before they were sent are pictured in appendix A. Due to a low response rate, all the family members were then written too, generating a higher response rate.

The anonymity and confidentiality were ensured by removing specifics when necessary. Specifics such as the location, industry type, and actual names were replaced with imitations in the presentation of the findings. The research process was explained to participants and informed consent was obtained. The ethical guidelines were recommended by the University's ethical committee.

## 5.4. Data collection technique

Interviewing was used as the qualitative data collection technique. Figure 5.3. illustrates how the interviews were used iteratively with data analysis throughout the research process. On the left-hand side is the stage of data analysis (detailed in section 5.5). Pragmatically, this aligned with the sampling strategy and subjective ontology. Also due to the difficulty of recruiting, participants were collected over time allowing full interactions between data analysis and collection.

## 5.4.1. Semi-structured interviews

The difficulty in finding hard to reach participants placed significant importance on the interview questions asked. The questions asked depends on the type of interview conducted. There are many typologies relating to interview techniques that overlap considerably (Saunders, et al. 2012). This research identified three types of interviews generally used in management research: unstructured, semi-structured and structured.

Unstructured interviews were not used because they are suited to narrative inquiry and guided by a couple of questions (Brinkman 2018). They were ruled out here because they were considered too ambiguous and might not have led to data saturation within the research constraints (Guest, et al. 2006). Structured interviews were ruled out because they are based on standardised questions, unlikely to facilitate exploratory knowledge creation through conversations (Brinkman 2018).

Therefore, semi-structured interviews were selected because they aligned with the rest of the research design. They provided detail, context and background material for the study (Saunders, et al. 2012). This aligned with the subjective ontology and allowed exploration of the phenomenon.

A semi-structured interview facilitates exploration because of the level of depth the conversations achieved.

'A semi-structured interview is defined as an interview with the purpose of obtaining descriptions of the life world of the interviewee in order to interpret the meaning of the described phenomena' (Brinkman and Kvale 2015: 6)

Brinkman (2018) in a revision of this definition described the following key terms in more detail: purpose, descriptions, lifeworld, and interpretation of meaning.

Figure 5.3. An illustration of how the interviews were used during the research process (Charmaz 2014a: 88).



Purpose was used to differentiate the interview from everyday conversations; instead the interview had a purpose in part to serve producing knowledge (Brinkman 2018). In this case the participant's thoughts, feelings, and attitudes they articulated were based on their personal experiences.

Descriptions were obtained to produce real life examples rather than abstract reflections, conceptualisations or theorisations (Brinkman 2018). The gap explained in the literature review sat between reality and the existing heavy conceptual of the phenomenon. Therefore, the exploration of the participant's lived experience was guided by the questions determined by the pilot study and some existing conceptualisations.

Lifeworld, according to Husserl (1970) is the importance of the participant's lived experience. Lived experience is the living reality as humans experience it. Second to this reality are scientific studies, that are undertaken because they are perceived to be meaningful to the lived experience (Brinkman 2018). In this case, the participant's lived experience of the phenomenon was valuable because it revealed the nuances, patterns, and complexities.

Interpret the meaning for Brinkman (2018) related to multivocality and a temporal aspect of the interviews. Multivocality is needed for rigor and was achieved by indepth analysis (section 5.6.). The in-depth analysis reflects in-depth collection, each are two parts of one whole.

The temporality aspect considered the fact that interview participants are affected by what precedes and exceeds them, their past and future (Brinkman 2018). The rationale of selecting participants from multigenerational family businesses allowed exploration of the past and future. The exploration of the past was enabled because of the long histories relating to the phenomenon. The exploration of the future was enabled because of the anticipated long-term ties.

More narrowly, interview participants were considered to be 'authors of their own utterances' (Brinkman 2018: 581). Butler (2009) asserted the need to consider the interview participant's external and internal forces that affect them. The external influence could be the time of day, the weather or kind of week they are having. Internal forces could be their natural ability to speak, their emotional state or their cognitive ability to remember events.

Additionally, interviews were perceived as an opportunity to help interview participants to think allowed and think about things they have not previously thought about (Saunders, et al. 2012: 378). Giving them space and time to make sense of their situation, something not uncommon during interviews (Brinkman 2018).

Additionally, the interview was a suitable form of data collection due to the practical advantages of the interview. Once scheduled the interview did not require too much time or effort from the participant (Saunders, et al. 2012). It was up to the researcher to travel to the rural area and prepare the questions.

Furthermore, participants were experienced business owners who had an abundance of business language skills. However, it did rely upon the ability of the researcher to build trust in a short space of time for the interviewee to feel like opening up and letting the researcher into the participant's world (Brinkman 2018). The way they interact with the participant determined the quality and significance of the data collected (Saunders, et al. 2012); to do this an intensive interviewing style was selected.

#### 5.4.2. Intensive interviewing

Intensive interviewing is the most popular approach within GT (Charmaz 2014a).

'Intensive interviewing is a one sided conversation which explores the research participant's perspective of their experience' (Charmaz 2014a: 84).

This offered several advantages, the first was it allowed exploration by facilitating unanticipated areas and implicit views (Charmaz 2014a). A second advantage was the position of power the interview participant held. This was because of the constructivist GT placed a high value on the research participant's perspective. In turn, the participants felt a sense of appreciation and value hence intensive interviewing allowed:

'Research participants to be experts, reflect on earlier events, share significant experiences and teach the interviewer how to interpret them' (Charmaz 2014a: 69).

This aligned with the constructivist epistemology and subjective ontology because it allowed participants to build their own responses and bring new meanings to the phenomenon (Saunders, et al. 2012: 378). Aligning with Brinkman (2018), this approach valued participants who reciprocated and gave very detailed descriptions generating rich data.

'Rich data will give you solid material for building significant analysis. Rich data are detailed, focused, and full. They reveal participants' views, feelings, intentions and actions, as well as the contexts and structures of their lives' (Charmaz 2014a: 24).

The research questions were answered because of rich data. Rich data provided enough depth to generate new insights into the phenomenon. The participants were heavily involved with experienced family businesses; they were multigenerational and could draw on many stories and insights that were unexpected to the researcher. The researcher had to be actively engaged in the interview and probe repeatedly. Additionally, multivocality ensured a range of perspectives were included rather than a homogeneous range of experiences.

## 5.4.3. Interview questions

The interview questions were an essential part of the data collection and data analysis process. This was due to the finite time with participants alongside the importance of collecting focused data. The interview questions were sourced from the pilot interviews and the concepts from the literature. Table 5.7. shows the research questions, the rationale prior to the main period of data collection and data analysis.

Literature prior to data collection	Interview question
Cognitive dimensions of family social	When was the earliest experience of
capital	working in the business?
Relational dimensions of family social	How many other family members work
capital	for the business?
Structural dimensions of family social	What is your relationship with them?
capital	How do you usually make decisions?
Processes of family social capital	What are the three main challenges or
	changes in the future?
	Who is involved?
	How will you approach it?
	What are the three main challenges you
	have dealt with during your time in the
	business?
Cognitive of family social capital	How did you deal with each one?
Structural dimensions of family social	
capital	Who was involved?
Relational of family social capital	What did you learn?

Table 5.7. The interview questions and the related literature before data collection.

Interview questions were important because they ensured data saturation. In hindsight, if the interview questions did not set the focus and boundaries of the data collected, continuous probing would have created continuous accumulation and categories creating a rhizome of data (Guest, et al. 2006). Whereas the questions guided the conversation to some extent.

The key was maintaining a balance between the exploration of topics to facilitate indepth discussions and not asking too many questions decreasing the likelihood of data saturation within the boundaries of the research (Guest, et al. 2006). However, because the interviews were semi-structured, it permitted the opportunity to probe at meanings to add depth and significance to the data obtained (Saunders, et al. 2012: 378). In the spirit of GT and intensive interviews, deviations from the interview questions were encouraged if the participant felt that it was useful. The types of questions asked were who, what, how, and when questions.

'What questions can be used to specify the topic, how questions reveal the sequence of events in the situations and when questions allow the addition of conditions under which the event occurs' (Charmaz 2014a: 94).

The "when" questions related to the temporal aspect of the phenomenon i.e., childhood. The "what" and the "how" questions allowed exploration of the internal

characteristics, the founding story of the business and what was important to the participant. Additionally, how they expect things to be in the future and what they thought would be important in the future. The "who" questions helped when researching the external perspective because it helped identify the network.

The interview questions began by participants talking about early experiences because it seemed to excite them to reflect on and share their past and discuss happy and sad times they spent with their parents. This really helped discuss the family side of the business rather than the objective functions of the organisation.

The language of the interview questions was consciously aimed to be simple as possible for the participants. The theoretical terminology was different from everyday language and not understood by the research participants. The response depended on the participant and their level of depth. Their level of depth depended on several factors outlined in this section. For example, the participant's mood, how busy they were, whether they trusted the researcher and if rapport was built with the researcher. Trust and rapport were achieved in most cases because positive signals from the interviewee were visible. The signals were the offering of food, coffee, produce and an open invitation to return for a second interview if practically possible.

#### 5.4.4. Other forms of data collection

Both primary and secondary forms of data collection were helpful for scoping potential participants. The first secondary form of data was financial information, as mentioned in the sampling section, the databases searched supplied information on revenue, assets, liabilities, the number of family members on the board (both active and deceased) and the related organisations.

A second form of secondary information was the company websites. This helped gain some context of the organisation and the current activities or service offerings it provided. It helped identify the organisation as a family business because it was not uncommon for the homepage of the website to describe the family's history and current state.

A final form of data collection was a primary form, memo-writing. Memo-writing was used to create memos in preparation for reflexive thinking (section 5.5.6.). Memo-writing is essential for the researcher to analyse the data and situation (Charmaz 2014a). Memo-writing was done variably but always attempted before and after the interviews with varying levels of success. This depended upon the researchers

feelings and intuitions at the time (Charmaz 2014a); memos were captured on a notepad.

## 5.5. Data analysis

This section details the analysis of the data collected. The interviews were recorded and transcribed in all cases except two due to the suspicion of participants. The analysis technique used was coding. Coding is one way of analysing data, not the only way (Saldaña 2016). When considering data analysis, it is worthwhile acknowledging some criticisms of qualitatively analysing data.

The first criticism, qualitative research does not meet the high standards validated for scientific advancement (Gioia, et al. 2013). Unlike quantitative methods, qualitative methods have not got a standardised criteria to guarantee the quality of the research (Tracy 2010) (5.1.6.). Qualitative research places importance on subjective value judgements when evaluating the quality and contribution of the work. This may explain the difficulty when publishing because editors may be unaware of how to judge the research (Gioia, et al. 2013) or have up to date knowledge on the subject area. However, the editor's job can be made easier with transparency and a robust justification of the research.

Nevertheless, qualitative method experts claim quality criticisms are illogical because a standardised criteria removes the interpretive inductive nature of qualitative research (Lincoln, et al. 2018). To address the ongoing debate, many studies present different ways of demonstrating rigor in qualitative research. This research synthesised guidelines from previous studies (Charmaz 2014b; Gioia, et al. 2013; Tracy 2010; Tracy 2019).

The second criticism is separating the act of qualitative data analysis from journalism. Qualitative research is sometimes criticized for exaggerated knowledge claims based on one or two interesting participant (Gioia, et al. 2013). Rigor and transparency were ensured and is shown with photo evidence included in appendix B. Alongside evidence of interpretation in appendix C,D,E, and F based on guidelines from Tracy (2019). This was necessary to maintain alignment with the rest of the research design process. Additionally, the qualitative nature of GT is to discover new insights by looking outside (or inside) of the box and in a pursuit of the unexpected. Therefore, a capacity to think divergently and perceive what is barely visible is a strength and not a weakness of the research.

## 5.5.1. Qualitative coding

The rationale for using coding aligns with the rationale for using interviews, it represents the participant's actions, thoughts, feelings, and views on the phenomenon of interest. Especially, *in vivo* coding because it is the words of the participants (Saldaña 2016), who were the experts of the phenomenon. This was important due to the relevance of shared language. Coding the participants expert language allowed new insights to emerge, that were absent from the literature.

The purposeful sampling was important for the coding process for multiple reasons. Firstly, the empirical setting created group homogeneity (business and industry) this made comparisons clear, patterns recognisable, and to some degree a shared reality. This was achieved through coding similarities between participants and was only possible because participants were from the same industry.

Secondly, the purposeful sampling facilitated different interpretations of the same experiences allowing multivocality. The heterogeneous aspect of the purposeful sample facilitated descriptions of significant nuances. These nuances were only recognised due to the fine grain analysis of the data.

Thirdly, the data collection technique of intensive interviewing made the coding process practical as participants all spoke a shared language. They were able to clearly share their interpretations of their experiences in a common language. The assumption was used that people are knowledgeable agents, hence 'people in organisations know what they are trying to do and can explain their thought, intentions, and actions' (Gioia, et al. 2013: 17). The interview questions helped provide structured discussions, so categories emerged from this, and clear comparisons of participant's interpretations of the phenomenon were clear.

The data analysis followed five stages: pilot, exploratory, progressive, optimal, and the analytical pull. This approach, typical in qualitative research, used a combination of many different approaches considered. However, the exploratory nature of the research meant integration of multiple approaches were necessary. This helped to avoid a manufactured standardised data analysis process (Gioia, et al. 2013).

The coding strategy for the data analysis is shown in figure 5.3. The arrows on the left-hand side shows stage of data analysis, this is a modification of the process recommended by Charmaz (2014a). This integrated methods from Gioia, et al. (2013) and Charmaz (2014a). This process began generating first order codes that led to second order themes that led to aggregate dimensions (Gioia, et al. 2013).

The pilot phase generated the interview questions and preliminary categories. This was followed by the exploratory phase. This phase concentrated on the participants words creating first order codes and tentative categories (exploratory phase). The progressive phase generated a high number of second order themes and tentative aggregate dimensions. The optimal phase produced less second order themes, which led to data saturation, crystallizing aggregate dimensions.

The findings are set out with a chapter dedicated to each research question. Each chapter presents a short literature review of the concept the findings relate to. Followed by three aggregate dimensions, each with three second order themes. Tables of quotes of the first order codes are included in the relevant second order theme. A summary of how each second order theme related to the existing literature is included in the findings.

A data reduction process was applied to produce focused findings. This involved including the categories most important in the tables presented in the finding's chapters. For example, succession was important but has already been covered in a huge amount of literature on family business. Therefore, it was important to acknowledge the connection to a theme but did not contribute enough to develop a new insight. The strength of the iterative process between data analysis was the time between interviews to reflect. Reflection helped take account of the existing data, existing literature and how they integrate to answer the research question.

## 5.5.2. Pilot phase

The grounded theory technique used a pilot a stage of interviewing and during this phase several interviews from family businesses and non-family businesses were analysed using coding. Coding is an interpretive act and the coding manual offers 33 variations of coding (Saldaña 2016). Therefore, to ensure exploration, openness and flexibility were maintained; a wide range of coding variations were applied during this phase. The coding techniques applied were in vivo, descriptive, social, values and emotion coding.

The outcome of this coding process was a more focused idea of the research and was reflected in the interview questions presented in section 5.4.3. It focused the sample into multigeneration family businesses since the multigenerational family business included in the pilot possessed deeper insights. This set up the subsequent phases of data collection and analysis iteration.

## 5.5.3. Exploratory phase of coding

During the exploratory phase, the first order codes were created; also known as the first cycle of coding.

'First cycle coding methods are organised into seven broad subcategories, but remember that several of these methods overlap slightly and can be compatibly "mixed and matched" or eclectically coded for application in one particular study (Saldaña 2016: 80).

This phase included the first eight interviews and it was important to remain open and not be too prescriptive (Charmaz 2014a). This exploration confirmed in vivo or first order codes to be the most effective form of coding that clearly represented the participant's worlds and experiences. The main aim here was to maintain the integrity of first order codes (informant-centric) (Gioia, et al. 2013). This enabled first order codes and tentative second order themes to emerge. Appendix B includes photo evidence of the exploratory phase.

## 5.5.4. Progressive phase of coding

The boundaries between phases were blurred, but the transition into the progressive phase in this study began after the first eight interviews. The signal of this shift was the categories strengthened through a comprehensive compilation of first order codes, it began the process of organising the first order codes into second order themes (theory-centric) (Gioia, et al. 2013). In other words, it signalled emergent areas of theoretical interest (Charmaz 2014a).

Additional, references to acquaintances of participants strengthened categories because even if they did not possess direct experience, they knew someone who did. This added to the research's credibility because it enabled thick descriptions to be made (Tracy 2010). Thick descriptions were enabled because the behaviours discussed all shared and confirmed by other actors in the same context. At this point, there were enough participants voicing different opinions on similar topics to create a good level of multivocality (Tracy 2010).

Additionally, links to the theoretical concepts began to show as the categories strengthened. The number of in vivo codes generated at this stage was 2,000 first order codes. Appendix B includes photo evidence of the progressive stage.

## 5.5.5. Optimal phase of coding

The signals of the transition into the optimal stage of coding started after 19 interviews. This was recognised because the responses of interview participants at this phase could be anticipated, probes in the interviews confirmed many earlier

identified categories. This signalled credibility of the research (Tracy 2010). Credibility was identified by member reflections:

'Occasions that I call "member reflections" allow for sharing and dialoguing with participants about the study's findings, and providing opportunities for questions, critique, feedback, affirmation, and even collaboration' (Tracy 2010: 844).

The member reflections increased confidence in the categories; this phase continued using *in vivo* coding to capitalise on the insight of the expert participants. This is beginning of theoretical coding (Charmaz 2014a) and creating the aggregate dimensions (Gioia, et al. 2013). Appendix D includes photo evidence of coding at the optimal stage.

The first signal of being in this stage is the recognition of data saturation. Data saturation is 'the stage when additional data provides few, if any, new insights' (Saunders, et al. 2012: 669). Guest, et al. (2006) and Charmaz (2014a) suggest data saturation can be reached after 12 interviews, in this case 35 interviews were conducted. Saturation in the researcher's self was recognised after 22-24 interviews but further interviews were pursued due to natural insecurities during qualitative research. This is when new codes do not generate new categories, instead the new nodes support existing categories, thickening description.

Tracy (2010) proposes it can be a positive signal to ensure rigor and multivocality by stating the number of interviews. Figure 5.4. shows a graph illustrating the accumulation of nodes over the data collection and analysis period. The final five interviews were not included because they were final follow-up interviews that did not generate new categories. Final follow-up interviews confirmed existing categories rather than provided new insights. The Y-axis represents the accumulation of nodes, the X-axis includes the interview number chronologically.

Figure 5.5. shows the number of new categories create during the data collection and analysis period. The Y-axis shows the number of new categories created; the X-axis shows the interview number. It is important to note interview 12 and 13 did not create new categories because the participants did not allow the interview to be recorded and therefore did not yield a documented insight.

Both charts serve to increase the transparency of the research process. Data saturation was recognised as the number of categories deceased during the optimal stage; no categories were generated in the final six interviews (not including the five follow up interviews).



Figure 5.4. A bar chart showing the number of in vivo codes generated throughout the interviews.

Figure 5.5. A bar chart showing the number of new categories created throughout the interviews.





Following data collection and analysis iterations, the analytical pull finished theoretical coding and clarified links between the categories and enabled theoretical centrality. This analytical pull assessed theoretical centrality and began making connections to the literature. The final piece of data analysis solidified the connections between second order codes and consequently the aggregate dimensions emerged (Gioia, et al. 2013). The end results are presented in the findings chapters, prior to this is a chapter explaining the reality of the GT process.

## 5.5.7. Additional data analysis

Additional data analysis was conducted through reflexivity, this section describes the understanding of reflexivity as a practice and its relationship to the discipline.

'Reflexivity is an awareness of the researcher's role in the practice of the research and the way this is influenced by the object of the research, enabling the researcher to acknowledge the way in which he or she affects both the research process and outcomes' (Haynes 2013: 72).

This was especially relevant when analysing the data to understand why participants said what they said (Brinkman 2018); this helped provoke thoughts about the family's underlying reality.

Furthermore, researchers should interrogate themselves as part of the research process and accept that knowledge is impartial (Lincoln, et al. 2018). This impartiality was explored reflexively by analysing the memos collected and linking the possible ideas to existing theory. Existing theory are likened to the subject's credible voices. These multivocalities between existing theory is likened to participants in a qualitative piece of data, the voices are core members of the scientific community (Lincoln, et al. 2018).

## 5.6. Chapter 5 summary

This chapter outlined how the research questions were answered. The methodology was formed after consideration of the approaches used in management research. The analysis showed a dominance of quantitative often coupled with a positivistic objective philosophy. A low number of qualitative studies exist, often coupled with an interpretive subjective philosophy.

The literatures justified a GT study to fully explore the phenomenon of family business. It used a constructivist approach that aligned with a subjective ontology with the purpose of exploration. The purposeful sample ensured the different views of reality each SME rural family business were captured. The method used purposeful sampling and identified the appropriate participants through a homogenous and heterogeneous group sampling. A homogeneous group criterion was applied using three characteristics. The three characteristics of this were participants fit the definition of a family business, occupied the same industry, were SMEs. The shared definition ensured similarity of all lived experience, the shared industry allowed a shared reality, and the similar size allowed the relevant phenomenon to be visible.

This was combined with an in-group heterogeneous criterion which captured the variations of phenomenon. This was achieved by targeting family businesses in at least their second generation. This allowed a long enough history to have an established internal characteristics and external ties to explore. The diversity of views within the sample recognised the nuances of the phenomenon.

Interviews were used as a data collection technique. This involved intensive interviewing with specific interview questions based on results from the pilot and some concepts from the literature. An intensive technique captured rich data and maximised the participant's input.

The views expressed in the interviews were analysed using coding. This captured the subjective reality of the participant's world and their actions. Coding techniques were applied with consideration of the latest guidelines on quality coding for qualitative researchers to avoid criticism of the lack of rigor.

Coding was undertaken in phases becoming more focused throughout the research. The iterative process between data collection and data analysis directed the focus. This first phase after the pilot study was called the exploratory phase, within this, the coding was exploratory, and codes were compiled to make tentative themes.

The progressive stage focused by building on the tentative themes. Within this phase the aggregate dimensions of the internal and external perspectives began to form.

The optimal phase recognised data saturation, this occurred when the codes failed to create many new categories, especially the last half a dozen interviews. This was an indication that saturation was reached. The final stage was the analytical pull that resulted in the findings chapters following an explanation of how the GT process occurred.

## Chapter 6. Grounded theory in practice

This chapter outlines how the grounded theory (GT) methodology was executed. The first part of the chapter describes the appropriateness of the researcher for this GT study, this is due to the business academic background and the lived experience of the phenomenon. This is not uncommon for researchers who use GT (Charmaz 2014a; Star 2007; Tracy 2019).

The remainder of the chapter describes each stage of the research: the pilot, the exploratory, the progressive, the optimal, and the analytical pull. Each part illustrates the coding process and the creation of categories. This purpose of this is to increase the transparency of the GT study. It includes the aggregate number of categories per stage, adding transparency to GT process. Addressing concerns associated with transparency of qualitative research (Tracy 2010).

## 6.1 Appropriateness of the researcher

The good research has two essential components rigor and interest. GT is described as a resource intensive process (Saunders, et al. 2012). Glaser and Strauss (1965) both experienced the phenomenon of interest for their pioneering study. Charmaz (2014a) favours the relational connection, proclaiming it drives the research to commit the required resource. Some would argue that the act of research generally is resource intensive, irrespective of whether it is GT or not. Nevertheless, a case is made that researcher experience of the phenomenon generated curiosity leading to the GT study. A timeline of the researcher's past decade is included in figure 6.1. The timeline illustrates that the researcher has undergone an iterative process between business theory found in academic programmes and lived experience. This lived experience supports the assertions of Star (2007) and Charmaz (2014a).

The academic background is one of the factors driving data saturation in qualitative research (a researcher with a head full theories) (Tracy 2010). A head full of theories helped during data analysis to relate to the participants experience, awareness of these theories was built during the academic programmes of study that had over 30 assessed modules on business theory. The programmes allowed a process of critically evaluating and applying popular business theories. Moreover, it helped find the positioning of the research because on one programme the widely accepted grand theories of business management provided a broad overview. In contrast, the other taught entrepreneurship theories.

This research extended theory the theory of entrepreneurship through the phenomenon of family business, a perpetuation of entrepreneurship. The research concentrated on multigenerational family SME rural businesses and proved to operate in the space between corporate business management and entrepreneurship.

Period	Experience	Reflection
2010- 2011	Undergraduate business management program for one year.	Very limited understanding of academic research.
2011	Family business created with father and sister.	A large investment of financial, human, and social capital.
2012- 2015	BA(Honours) Business management programme.	Working in the family business during the summer and winter breaks.
2015- 2016	MSc Enterprise and Entrepreneurship studies.	Being taught the theories on growing a business.
2016- 2017	Full time experience in the family business.	Unsuccessfully applying the theories from the programme due to incomprehensible factors.
2017- 2020	PhD programme on the phenomenon of family business.	Conceptualising the phenomenon of family business as the subsequent stages of successful entrepreneurial venturing.

Figure 6.1. The researcher's decade of academic development and lived experience of a family business.

However, during the GT method, specific phases were experienced and are detailed in figure 6.2. This meant iteratively moving between data collection, data analysis, and the literature. The main periods that spent most of the time engaging with the literature were the initial and last stage of the research. During the last stage, the specific research questions were developed, and are presented at the end of this chapter. The next section presents the different stages of the research. The phases of the research were documented throughout to illustrate this process. Each phase built different categories and quotes are included to illustrate the recognition of the
respective categories. Recoding previous interviews helped find support for new categories, this retrospection meant the interviews were coded multiple times.

Period Stage		Reflection
2017- 2018	Literature review and the creation of the first transfer document.	The literature was focused on Socio-Emotional Wealth and Familiness.
2018	Pilot interviews with family business owners.	At this point the researcher was quite focused on strategizing, environmental
2018	Submission of the second transfer document.	jolts, and Familiness.
01/2019- 04/2019	The exploratory phase.	Development of categories. No literature development.
05/2019- 08/2019	The progressive phase.	Some idea of the final findings.
09/2019- 01/2020 The optimal phase.		Interview answers were predictable.
01/2020- 10/2020 The analytical pull.		The research focused on family social capital.
11/2020- 02/2021 The conclusion of the research.		Integrated theory of family business.

Figure 6.2. The timeline of the research process.

## 6.2 Pilot Interviews

Given the researcher's appropriateness to the method, a typical GT study starts with pilot interviews. The purpose of this process is to spark a moment of serendipity (Charmaz 2014b). This is the "aha" moment, at this point the research discovers something very interesting which can be the basis for further interview questions.

The moment of serendipity during this research was during an interview with a multigenerational family business owner, who produces and sells handmade Italian ice cream from several ice-cream vans. This business was an innovation of tis time and has a large amount of physical assets machinery to produce ice cream, several ice creams vans, and the premises to produce it. It has been built up from Italian immigrants who arrived in the post-war period.

The interview triggered the moment of serendipity, which had several facets, the first was on business change, and in this case how the business has not changed in a long time. Hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version] (*Participant Pi1*).

This signalled the importance aligning with external changes and created the set of interview question relating to change and the management of it. The quote also links to tradition and the importance of the multigenerational aspect. External change has made it more difficult to run the business, for example:

# *'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participant Pi1).*

This was combined with the commitment to the family business. The participant felt the need to keep going despite external signals to change or adapt the business model. Hence:

# *'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participant Pi1).*

This generated the questions around rational decision making and actively making changes in the business. In this case, it was recognised that the previous generation still had an influence on the strategy of the organisation despite being deceased. Family stories reinforced the paralysis of decision making, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Pi1*).

That moment was made more interesting because of the resistance to change, this did not seem to be socio-emotional wealth (SEW) because it was the opposite of wealth, it was emotionally draining, hence:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant Pi1*).

The serendipity raised question of the role of age in the business strategy and how the business transformed from a lucrative business to a struggling business. Hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version] (*Participant Pi1*).

This stimulated the importance of external change and the internal mechanics of the business and shaped the interview questions and literature review. One factor of the internal mechanics recognised here was the early experience category, hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Pi1*).

Due to restrictions in space, every category found in the pilot interviews cannot be illustrated. The categories that were found are listed in table 6.1, the categories at this stage were loosely defined.

5 5	
External change	Internal change
Changes in place	The role of age
Wholesalers	Commitment
Supermarkets	Early experience
Staff	Exclusion
Regulation	Family atmosphere
Competition	Outside experience
Customers	Avoidance
Refrigeration	Unpaid work

Table 6.1: Categories created during the pilot interview phase of the GT study.

External factors form the left-hand column and internal factors form the righthand column. The factors identified deviated from the main frameworks identified in Chapter 4. SEW mentioned the state of permanent failure but with the intention to transfer the business into the next generation, whereas this case did not. Neither did it relate to "Familiness" or family social capital (FSC). This shaped the interview questions and the concepts for the main study. The concepts from the literature after the pilot phase are included in table 6.2.

Concept	Category type
Environmental jolts	External
Strategizing	Internal
Resource based view of "Familiness"	External and Internal
Family social capital	
Systems theory of "Familiness"	

Table 6.2. The concepts included in the literature review are the pilot interviews.

The pilot study was the basis of the rationale for multigenerational family businesses due to their deep insights on the phenomenon.

## 6.3 Exploratory phase

The first interview of the exploratory phase was a family business at the opposite end of the spectrum. It very much prided itself on the desire to remain a family business rather than discouraging next generational family businesses from entering the business. This period involved eight interviews and commenced the first cycle of coding. The first category was building on the value of outside experience by discussing the benefits of it, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version] (*Participant 1A*).

This was from a senior generation family member, and a junior family member from the same business spoke about their outside experience, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version] (*Participant 1B*).

Further participants spoke about the value of outside experience, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version] (*Participant 1E*).

This linked to the idea of coaching the next generation, the following quote illustrates a couple of senior generation's perspectives on why outside experience is important:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant 1A*).

As well as outside experience and coaching the next generation, the exploratory phase identified more of the early experience category, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant 1C*).

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant 1D*).

The exploratory phase helped develop categories, all of them are not illustrated due to space constraints but are summarised in table 6.3. At this point of the research new insights from the literature were not discussed simply to the abundance of information supplied from the data collection. This ensured the research was grounded in the data rather than the literature.

External	Internal
Uncertainty of Brexit	Family members entering the business
Positive outcome of brexit	Life events
Negative outcome of brexit	Outside experience
Advantages if Europe	Early experience
Disadvantages of Europe	Connecting with stakeholders
Reactions of brexit	Creating a family atmosphere
Civil structure and landscape	Including and encouraging the next generation
Consumer Behaviour	Support from the extended family
Buyer's	Commitment
Regulations	Confidence and trust in the next generation
Social, Skillset	Contact and dynamic
Employee expectations	Development
Employees	The previous generation
European employees	The role of age
Packaging	Complacency and contention
Data / Digitalisation	Different path
Automation	Exclusion
Renewable energy	

Table 6.3. Categories created during the exploratory phase of the GT study.

## 6.4 Progressive phase

The progressive phase built on the exploratory phase by detailing variations of existing categories whilst generating new ones. The creation of new categories in GT is not an isolated process, its retrospective and involves going back to earlier interviews to verify new insights. For example, listening to the previous generation became clear in this phase, during an interview with a senior generation family member talking about external changes, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participant I1).

This was retrospectively evident when earlier interviews were recoded. Another category created during this phase was the inclusion and encouragement of the next generation. This emerged when a senior generation family member reflected on the previous generation's ability to step back and allow the next generation to grow. Hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant K1*).

The early experience was further detailed, for example some people had only every been conscious of the farm because it was and remains their home:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (participant I1).

A summary of the categories created during this phase is included in table 6.4.

Ŭ	
External	Internal
Transport	Pressure to keep it going
Location	Historic
Weather	Conflict of the previous generation
Pollution	Listening to the parent's experience
Plants	Other aspects
Animals	Rules and structure
Land restrictions / exemptions	Combining and splitting resources

Table 6.4. Categories created during the progressive phase of the GT study.

Towards the end of this stage the answers to the interview questions became predictable. But, to achieve thick description and validate the findings, more interviews were conducted in the optimal phase.

## 6.5 Optimal stage

The final interviews took place in the optimal stage. The answers to the interview question were predictable and the analysis was not generating new categories, but existing categories were further detailed. For example, outside experience was not just attained through full time employment, another participant describes the idea of joining a professional institutional support group to help develop the business. Hence:

'The biggest learning experience for us was when we was part of the [professional institution] and in the [professional institution] we all shared our information, everybody knew what you turned over, what your GP was, what your NP was, you felt like you were sort of privileged really to be able to access that sort of information from other people, because you went to see the business and then you saw what their figures were so you could kind of understand that business better because you knew their profit and loss and how they were turning over and how they were doing it. You could see with your own eyes, what they were doing well and what they were not so good in...' (Participant X1).

Also, the inclusion and encouragement of the next generation became more detailed, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant V1*).

In addition, it described future changes in subsidies and their potential impact on agriculture, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Z1*).

The categories created in this section are included in table 6.5. At this point a judgement was made that data saturation was reached, as explained in section 5.5.5. New categories were not emerging and the answers to the interview questions were predictable. At this point, a few more interviews to clarify the findings were conducted to clarify the researcher's perspective.

External	Internal
Subsidies	Questioning the next generation
Industry players	

Table 6.5. Categories created during the optimal phase of the GT study.

## 6.6 The analytical pull

The final stage of the GT process was the analytical pull. It combined all the categories and solidified the aggregate dimensions each category belonged to forming an integrated theory formed of three perspectives: temporal, internal, and external. The categories at the start of this stage are included in table 6.5, they were transformed during the conceptual leap. The conceptual leap created the integrated framework, the contribution of this study.

The first step used the existing literature and connecting categories to create the aggregate dimensions, forming the three perspectives. The temporal perspective was applied and combined with the literature included thus far in this document and sent to a senior scholar who had a look at it. The feedback from the scholar was:

"Familiness / Social Capital / SEW – While you briefly make a case to focus on the former and not on the latter two constructs, I am not sure this is necessary as it gets the reader distracted from your arguments. Personally, seeing the current literature, I would be more inclined to build on the 'family social capital' segment as the temporality that you bring in seems to be the next natural step in knowledge development." (Senior family business scholar).

External	Internal
Uncertainty of Brexit	Family members entering the business
Positive outcome of brexit	Life events
Negative outcome of brexit	Outside experience
Advantages if Europe	Early experience
Disadvantages of Europe	Connecting with stakeholders
Reactions of brexit	Creating a family atmosphere
Civil structure and landscape	Including and encouraging the next generation
Consumer Behaviour	Support from the extended family
Buyer's / Industry players	Commitment
Regulations	Confidence and trust in the next
	generation
Social, Skillset	Contact and dynamic
Employee expectations	Development
Employees	The previous generation
European employees	The role of age
Packaging	Complacency and contention
Data / Digitalisation	Different path
Automation	Exclusion
Renewable energy	Questioning the next generation
Transport	Pressure to keep it going
Location	Historic
Weather	Conflict of the previous generation
Pollution	Listening to the parent's experience
Plants	Other aspects
Animals	Rules and structure
Land restrictions / exemptions	Combining and splitting resources
Subsidies	

Table 6.5. Total categories developed during data collection.

This focused the researcher into reading further into FSC, finding the arguments included in the presentation of findings and discussion. Ultimately the analytical pull involved was driven by answering the following research questions:

- 1) How does temporality affect family social capital in rural family businesses?
- 2) How does internal family social capital affect rural family businesses?
- 3) How does the external family social capital affect rural family businesses?

Figure 6.3. includes the categories related to the temporal perspective. Figure 6.4. includes related categories to the internal perspective. Figure 6.5. includes the categories related to the external perspective. All these were combined and reiterated. Some categories were merged, and others were excluded from the analytical process. This was a judgement of balance, was the claim sufficiently grounded in evidence with whether it contributed to the literature. This process was iterative and further revisions are always possible.

		Exploratory	%	Progressive	%	Optimal	%
	Connecting with stakeholders			10	2.9	20	2.2
_	Creating a fmaily atmosphere			4	1.1	21	2.3
Formation	Early experience			13	3.7	85	9.3
mat	Including and encouraging the						
For	next generation			17	4.9	46	5.0
	Support from extended family			4	1.1	11	1.2
	Taking responsibility			3	0.9	21	2.3
	Commitment			71	20.4	123	13.5
e	Confidence and turst in next						
anc	generation			63	18.1	101	11.1
Maintenance	Contact and dynamic			31	8.9	41	4.5
lain	Development			0	0.0	48	5.3
2	Previous generation			0	0.0	63	6.9
	The role of age			37	10.6	40	4.4
	Complacency and contention			35	10.1	86	9.4
Decay	Different path			0	0.0	16	1.8
Dei	Exclusion			28	8.0	91	10.0
	Life events			11	3.2	25	2.7
	Prssure to keep it going			21	6.0	73	8.0
		0	0	348	100	911	100

Figure 6.3. Categories relating to the temporal perspective.

#### Figure 6.4. Categories relating to the internal perspective.

-							
		Exploratory	%	Progressive	%	Optimal	%
JC JC	Outside			64	20.06	158	22.16
Expe rienc e	Historic			69	21.63	158	22.16
b0	Conflict of previous generations			33	10.34	79	11.08
ding	Listening to parents experience			143	44.83	219	30.72
Shared lerstano	Other aspects			42	13.17	42	5.89
Shared Understan	Rules and Structure			32	10.03	96	13.46
pur	Combining Splitting resources	0		0	0.00	48	6.73
<u>ر</u>	Questioning the next generation	0	0	0	0.00	71	9.96
		0	0	319	100	713	100.00

This process created the final findings that are presented in the forthcoming chapter. The analytical pull structured the findings into the temporal, internal, and external perspective of FSC. The discussion chapter pulls these three perspectives together into an integrated theory of family business. A literature review extending Chapter 4 on the internal and external forms of social capital aims to position the findings as close as possible to the related literature.

Relative	Catagony	, Accumulative codes					
Position	Category	Exploratory	%	Progressive	%	Optimal	%
1	Technology	44	24.7191	212	35.69024	256	33.1606
2	Economics and Buyers	12	6.741573	186	31.31313	198	25.6476
3	Ecological	10	5.617978	85	14.30976	95	12.305
4	Social and staff	36	20.22472	52	8.754209	88	11.3989
5	Legal with subsidies	45	25.2809	24	4.040404	69	8.93782
6	Political	31	17.41573	35	5.892256	66	8.54922
		178	100	594	100	772	10

Figure 6.5. Categories relating to the external perspective.

## 6.7 Chapter summary

This chapter has described the process of the GT study. It emphasised the importance researcher's appropriateness to undertake the GT based on lived experience and academic programmes. It then explained the pilot phase of the research that shaped the interview questions. Following this, it described the three main iterations of data collection and analysis. It included quotes that first recognised categories and the aggregate categories created during each period. The penultimate section described the final part of the research, the analytical pull. This part involved turning the categories into meaningful contributions to knowledge that are presented in the forthcoming chapters.

## Chapter 7. Family social capital temporality

This chapter presents a perspective recognising the temporality of family social capital (FSC) and answered the research question: How does temporality influence FSC? Three related dimensions emerged from the data analysis to answer this question. The perspective builds on some aspects of the literature review, primarily the bathtub analogy (Dierickx and Cool 1989). The bathtub analogy asserts resources cannot be acquired instantaneously, like the water level in a bathtub, inflow of water is required to raise the level and outflows of water lowers the level. Similarly, FSC has certain inflows and outflows. The findings from the research expand the thinking of FSC as a resource. The chapter begins by outlining the findings and the related existing literature.

The three dimensions presented are the cultivation, the preservation, and the decay. The cultivation of FSC considers the inflow experiences when FSC is forming. The preservation considers experiences that maintain a level of FSC, so the benefits are felt. The decay of FSC considers the outflow experiences when FSC is unlikely to sustain. Figure 7.1. presents the structure of the chapter.

Figure 7.1.	The structure	of chapter seven.
-------------	---------------	-------------------

2nd order themes	Aggregate dimension	Contributions			
Family atmosphere	]	7.4.1. Family business literature:			
Early experience	7.1. Cultivation	The temporality of family social capital using the bathtub			
Inclusion and encouragement	]	analogy.			
Reduction					
Power dynamics	7.2. Preservation	7.4.2. Social capital literature: The influence of human factors in social capital theory.			
Expected changes	]	in social capital theory.			
Generating skills	]	7.4.3. Rural entrepreneurship			
Generating ideas	] 7.3. Decay	literature: Explanation of performance difference between rural and urban businesses. The			
Generating connections		importance of life events.			

Each subsequent section presents the aggregate dimension and the relevant second order themes. The subsections present each theme's first order codes followed by its connections to the existing literature. Further evidence of the interpretation for the dimensions of the temporality of FSC is included in appendix C.

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The penultimate section discusses the contributions made to the literature. The first part explains the contribution to the family business research (FBR), a perspective that recognises FSC is not instantaneous and takes time to form, in doing so it applies the bathtub analogy to FSC. A further contribution is the empirical evidence shows the benefits can easily be lost through the decay of FSC. Therefore, this research helps explain why variation occurs and extends previously studies that have measured FSC (Carr, et al. 2011; Sanchez-Ruiz, et al. 2019).

The second contribution relates to the social capital literature. Firstly, this research acknowledges the role of the individual in the social system. A view was taken that individual circumstance determines the level of social capital by multiple uncontrollable factors. For example, once social capital is created, it can be destroyed by life events.

Secondly, this research found evidence to further the debate on motivation of social capital. Evidence whether social capital is sourced from external group pressures or individuals' internal drivers is offered. Thirdly, evidence relates to closure and addresses the potential negative impact of a high level of closure (Adler and Kwon 2002). This study found having a justified belief in fellow family members helped avoid the negative aspects associated with a high level of closure.

The third contribution relates to the rural business literature. This study recommends a focus on the health of key managers. This is more important in rural areas because key managers are difficult to replace compared to urban areas, according to the literature. The final section summarises the chapter.

## 7.1 The cultivation of family social capital

This section presents the first aggregate dimension and first stage of FSC: the cultivation of FSC. Figure 7.2. presents a diagram of the dimension, the second order themes and the tables of first order codes. The cultivation has three second order themes: creating a family atmosphere, early experience, and encouraging the next generation. Cultivation forms FSC until it reaches a sufficient level for the processes and dimensions to become effective.

#### 7.1.1. Creating a family atmosphere

The first second order theme, creating a family atmosphere, is based on themes relating to first order codes of what constitutes a family. The themes are a value of the family history, marriage, and having multiple siblings in the business. Table 7.1. includes the first order codes and supporting quotes.



Figure 7.2. The  $1^{st}$  aggregate dimension cultivation, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.

Table 7.1. The 1<sup>st</sup> order codes and supporting quotes related to the creation of a family atmosphere.

Quotes	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (Participant F2)'.	Family
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (participant C1).	history
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (Participant C1).	
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (Participant P1).	
[Redacted due to sensitivity and confidentiality issues: contact author for full	Manulana
version]' (Participant Y1).	Marriage
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (Participant O1).	Including
[Redacted due to sensitivity and confidentiality issues: contact author for full	•
version]' (Participant A1).	siblings
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]' (Participant O1).	Alignment
[Redacted due to sensitivity and confidentiality issues: contact author for full	U
version]' (Participant A1).	in thinking

A value of family history places an importance on how the business started; an appreciation of where the business came from. The study found a value of family history is kept in sentimental objects such as family portraits (dating back to the 1800's). During the interviews, the participants would bring items to help illustrate the story of the business history. A sentimental item is described by the participant:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant F2*).

The findings show stories of their parent's ventures remembered by participants, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (participant C1).

Another relevant aspect to the creation of a family atmosphere is marriage. Marriage in this study was a source of resource to grow the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

The findings show that marriage as a source of support was a reference point in the next generation as they reflect on the business's history, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Y1*).

This study found an extension of this was the inclusion of siblings, this formed the network of family members included in the business that were used as an extra resource, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant O1*).

The combination of marriage, siblings, and a value of family history helps create a family atmosphere, the effects of it are expressed by a participant:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant G1*).

This study found a value of family history, marriage, help from siblings, and feeling the benefits of working with family all help build a family atmosphere which helped cultivate FSC.

7.1.2. Existing work related to creating a family atmosphere

The theme has been previously discussed in FBR. Gersick, et al. (1997) found that marriage starts a cycle of a new family. This is relevant because it builds on the idea of appropriation, a marital relationship is combined with a working relationship. Appropriation has been mentioned in FBR (Discua Cruz, et al. 2013; Estrada-Robles, et al. 2020; Jones and Li 2017; Yu, et al. 2019). Estrada-Robles, et al. (2020) found family was a source of financial and human capital, contributing to the work on "Familiness" (Sharma 2008).

The relational dimension of FSC identified shared history and purpose as central characteristics (Pearson, et al. 2008). I found the family atmosphere is relevant because it creates a purpose, a prerequisite for the relational dimension of FSC. Undoubtedly, this atmosphere in the family system is transferred to the business

system, as discussed by Gersick, et al. (1997). I found the family members feel a sense of purpose and belonging in the family business, they saved artifacts and memoirs to preserve family traditions. Similarly, Bloemen-Bekx, et al. (2019) found that sharing stories about the family history is a good mechanism to nurture affective commitment.

In additional, Bird and Zellweger (2018) compared spousal teams to sibling teams. They found the former having higher levels of trust, identification, and mutual obligations i.e., a strong relational dimension. I found the same, you choose your partner but not your siblings, so there is a naturally chemistry pulling spouses together this is not the same as the relational pull of siblings. However, more research is required to strengthen this argument because of the role of culture, in some cases the spouse is arranged by the family. Nevertheless, this evidence strengthens the argument of the relational dimension of social capital existing in family businesses and that specific events must occur to create this atmosphere.

7.1.3. The early experience of family members

Early experience is based on the family members involvement in the business at an early age. Table 7.2. presents the first order codes and supporting quotes. A clear articulation of this is:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant J1*).

This study found early experience to place the business in the family members consciousness, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant M1*).

The findings show that early experience was relevant no matter the age of the participant. This sheds light on how impressionable early experience remained in the participants memory, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

Code
Earliest
memory
Lasting
impression
Life lesson
Variations
of the tasks

Table 7.2. The 1<sup>st</sup> order codes and supporting quotes related to the early experience of family members.

This study found early experience to be appreciated by the participants, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

This 'rubs off with the kids' means they absorb the content of the conversation providing them with knowledge of the business without the next generation realising it. Interestingly, this study found the size of the organisation shaped the depth of learning that was experienced. A participant from a larger organisation experienced a broader range of activities, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

Whereas a participant from a smaller organisation had less variation of experience:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant T1*).

Early experience was held in the participants memory regardless of age and was contingent upon the size of the organization.

7.1.4. Existing work related to the early experience of family members

Early experience was recognised in FBR before the concept on FSC. Ward (1987) recognised early experience as an important feature to encourage the next generation to consider the family business as a possible career. Recent work finds similar ideas and contributes to other areas, for example Verbeke and Kano (2012) categorised early experience as experience gained in the firm before any formal contracting. More recently, Jaskiewicz, et al. (2015) found childhood involvement as an important characteristic of family businesses in Germany.

I found early experience to be relevant to the dimensions of FSC. The early experience gives individuals access to the business and this exposure creates knowledge. Theoretically, a condition for creating knowledge in the form of access to information (Nahapiet and Ghoshal 1998). I found this forms the cognitive dimension

of FSC inside the mind of the family members from childhood. This develops the shared history between family members before they are even old enough to be classed as an employee. In addition, this overlaps with the relational dimension of FSC because it forms some attachment to the business from an early age.

7.1.5. Including and encouraging the next generation

Including and encouraging the next generation, is including next generation family members in the functioning of the business. This study found formal and informal ways of inclusion. Table 7.3. includes the first order codes and supporting quotes.

This study found informally the next generation were included in discussions about the business outside of the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

This study found formal inclusion to be offering the next generation a job after they have completed their education and/or outside experience:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

Encouragement in this study is a form of direction and guidance from the senior generation. This study found an effective way to do this is through questioning, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant A1*).

Quote	Code
TRedacted due to sensitivity and confidentiality issues: contact author for full	Informal
version]'	inclusion
TRedacted due to sensitivity and confidentiality issues: contact author for full	Formal
version]'	Inclusion
	Encourage
	the
	younger
	people in
[Redacted due to sensitivity and confidentiality issues: contact author for full version]	the
	business
TRedacted due to sensitivity and confidentiality issues: contact author for full	Size of the
version]'	business

Table 7.3. The 1 <sup>st</sup> order codes and supporting quotes related to the encouragem	ent
of the next generation.	

The findings show a limitation to inclusion and encouragement is the size of the business. For example, one participant recognised the size of their business helps this process:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

However, this study found size may not be a barrier if the enthusiasm for the inclusion of siblings persists, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant U1*).

This helps cultivate FSC by attempting to increase the number of family members in the business.

7.1.6. Existing work related to including and encouraging the next generation Similarly, the inclusion and encouragement of the next generation was recognised in FBR before the concept of FSC. Firstly, Ward (1987: 58) found family businesses encouraged the informal inclusion of children through discussion outside of the business i.e. the kitchen table. Then, Gersick, et al. (1997) built the systems perspective with the entering of new family members as a key pre-requisite to move into a developed family business rather than a founder start-up. Bridging the gap between entrepreneurship and formal business.

More recently, De Massis, et al. (2014) distinguished the willingness of the next generation must be present for activation of 'particular family behaviour' (the effects of FSC). Furthermore, Garcia, et al. (2019) identified verbal encouragement as a desired parental behaviour for successful next generation leadership.

I think for successful inclusion and the encouragement of the next generation needs to be based on a business that is large enough. This ensures the next generation are involved for their individual benefit rather than for the means of the business. A business means would be to save labour cost and help the business remain viable for the senior generations benefit. The good family businesses include the next generation for the right reasons. This build will be built upon in the next stage of FSC, preservation.

## 7.2. The preservation of family social capital

This section presents the second aggregate dimension, the preservation of FSC. The preservation has three second order themes: commitment, belief in the next generation, and the role of age. Figure 7.3. is a diagram of the dimension, the second

order themes, and the tables of first order codes. Once cultivated, the preservation helps sustain FSC and its advantages for the business.

7.2.1. The commitment of family members

Commitment is the desire to continue working for the business. Table 7.4. includes the first order codes and supporting quotes. The study found commitment expressed by family members in multiple ways. One way is by not considering the idea of selling the business, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant D1*).

The findings show another way commitment was expressed, in the shared responsibility for working in the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant M1*).

Figure 7.3. The  $2^{nd}$  aggregate dimension preservation, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.



The findings show commitment is both formal and informal. For example, a formal way is to take a business decision to remain a family business:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

An example of informal commitment is:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant U1*).

Commitment, whether informal or formal, helps preserve FSC.

Quote	Code
	Consideration
Redacted due to sensitivity and confidentiality issues: contact author for full	the next
version]'	generation
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	No exit plan
Redacted due to sensitivity and confidentiality issues: contact author for full	Shared
version]'	responsibility
fRedacted due to sensitivity and confidentiality issues: contact author for full	Formal
version]'	commitment
fRedacted due to sensitivity and confidentiality issues: contact author for full	Informal
version]'	commitment

Table 7.4. The 1<sup>st</sup> order codes and supporting quotes related to the commitment of family members.

7.2.2. Existing work related to the commitment of family members

Commitment has been recognised greatly in FBR (Gersick, et al. 1997: 127; Miller and Le Breton-Miller 2005: 98). Yu, et al. (2012) identified commitment as one of the 34 most studied variables in family business. A recent study found that commitment was one of the internal governance mechanisms to nurture affective commitment of the next generation (Bloemen-Bekx, et al. 2019).

I found commitment helps strengthen the dimensions of FSC because it ensures family members are present inside the business. Presence in the business, strengthens the cognitive dimension because from a strategic point of view the human capital of the family member is bound to the business. This may be good when the human capital is a surplus of the market value, because the family member is able to make good decisions for the business. This relates to the ability of the next generation to perform in specified roles to ensure prosperity (De Massis, et al. 2014). Therefore, a committed family member leads to improved strategic decision making.

This observation extends thinking on the RBV (Penrose and Penrose 1958), because it shows a successful management team is not only based on shared experience. It requires a level of intellectual capital and encouragement of the next generation to express this. This relates to the senior and junior generation dynamic. To do so, a belief in the next generation is required. Equally, it may be a bad thing in some situations. For example, when human capital is below the market value and older managers hold onto their position in the business.

#### 7.2.3. The belief in the next generation

A belief in the next generation is the previous generations belief in the ability of the next generation. Table 7.5. includes the first order codes and the supporting quotes.

Table 7.5. The 1 <sup>st</sup> order codes and supporting quotes related to the	belief in the next
generation.	

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Certain
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Uncertain
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Justified
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Risk taking
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Risk averse

A stronger belief might be based on the next generations circumstance, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

Alternatively, a weaker belief might be due to the uncertainty surrounding the next generation, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

The findings show a stronger belief tends to be justified which emerged as the next generation grows inside the business:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

This study found when the belief is strong enough, it permitted the senior generation to take risks on the next generation, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant E1*).

However, this study found it was not the case in all the participants as some were more risk averse, regardless of their belief in the next generation, when asked about providing capital for the next generation through borrowing money a participant responded:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

The belief in the next generation varied upon strength and justification, sometimes it encourages risk taking behaviour.

7.2.4. Existing work related to the belief in the next generation

Recent studies recognised the role of belief in the next generation in family businesses. Bloemen-Bekx, et al. (2019) found appraisals for individual development

helped foster affective commitment of the next generation. Additionally, Garcia, et al. (2019) proposed parental support and assistance generates more engagement in the next generation.

I think, based on the findings, a belief is important to preserve the benefits of FSC. As proclaimed by the perspective of social capital, the belief fosters knowledge creation that leads to sustainable competitive advantage (SCA). The belief ensures multiple conditions of knowledge creation. Firstly, the anticipation of the value of information and secondly, the motivation of this in the knowledge creation aspect of the business. It provides access to parties' information and information combination capabilities, giving the next generation opportunities to form their own knowledge. Thus, it leads to intellectual capital and SCA for family businesses.

#### 7.2.5. The role of age

The role of age is the awareness to the inevitable physiological process of life. Table 7.6. includes the first order codes and supporting quotes. The role of age emerged when considering the future states of the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

This study found the role of age is affected by the perception of the amount of time it will take to transfer organisation specific knowledge. For example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Y1*).

The study found the perceptions towards the older generations as sources of knowledge, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant T1*).

Table 7.6. The 1 <sup>st</sup> order codes and supporting quotes related to the	role of aging.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Life cycle
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Knowledge transfer
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Perception of the older generation
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Perception of the younger generation

Reciprocating this, is the older generation being satisfied in developing the next generation, hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

An awareness to the role of age helps preserve FSC through a perception of the valuable resources of the older generations and the knowledge transfer between generations.

#### 7.2.6. Existing work related to the role of age

The role of age has been somewhat recognised in FBR. Ward (1987) discussed the importance of age profiling in family businesses proposing that too many family members over 55 potentially creates a stagnant organisation, whereas the reverse scenario proposing family members aged 25-35 created a dynamic organisation. The study of life cycles is required because of the long tenure of family members (Bika, et al. 2019; Davis and Tagiuri 1989; Huang, et al. 2019; Zahra and Sharma 2004).

I support this argument and find an awareness to this is what maintains the benefits of FSC. This is not only based on the senior generation; it also is a requirement of the junior generation to understand and create a mutual understanding. This is looked at in more detail in the next chapter, but thus far, the evidence shows the awareness of the role of age helps to conditions for knowledge creation. Firstly, the combination capability of information and secondly, the motivation to engage in exchanging information. Conditions for knowledge creation are the benefits of social capital (Nahapiet and Ghoshal 1998).

Furthermore, the role of age is emerging in the wider entrepreneurial literature recently when exploring the motivations of older entrepreneurs. A recent study finds affective motivation through socialisation i.e. mentoring were important motives for older entrepreneurs (Stirzaker, et al. 2020). This may be more important in rural businesses, where skilled employees and managers are more difficult to find and people move less, the senior members of this community should possess more social capital and human capital to build up the junior members (Raffiee and Byun 2020: 40).

## 7.3. The decay of family social capital

This section presents the third aggregate dimension, the decay of FSC. The decay has three second order themes: different path, exclusion, and life events. Figure 7.4. is a diagram of the dimension, the second order themes, and the tables of first order

codes. Once cultivated, if not preserved FSC decays. This study found decay of FSC is apparent when the processes of FSC became ineffective.

7.3.1. A different path

The findings show the decay of FSC occurs when family members follow other opportunities outside of the family business, taking a different path. Table 7.7. includes the first order codes and supporting quotes.

A different path is likely due to different career interests. For example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

This study found the absence of family members leaves a problem for succession or lack of, hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant I1*).

This shows decaying FSC due to family members not entering the business.

Figure 7.4. The  $3^{rd}$  aggregate dimension decay, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.



## Table 7.7. The 1<sup>st</sup> order codes and supporting quotes related to a different path.

Quote	Code
Redacted due to sensitivity and confidentiality issues: contact author for full	Other
version]'	opportunities
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Succession problems

### 7.3.2. Existing work related to a different path

A well-known logic in FBR is one of agency theory, thinking that family businesses place family members in privileged positions even if they are incapable and unwilling (Cruz, et al. 2010; Liu, et al. 2010; Molly, et al. 2010). I found this is not always the case and parents respect their children's desires, an important characteristic of keeping the family business healthy (Ward 1987).

Without incoming family members, the FSC decays. An absence of family members means an inability to generate family particular behaviours (FSC processes) (De Massis, et al. 2014). I also found in some cases an absence of family members leaves an absence of the FSC, meaning no knowledge creation through family members, and no organisational advantage. However, this tends not to be a problem for the family because they respect the next generation's desires. It can be a problem for the business system if this transition is not managed correctly. To do so, family members in key positions must be replaced by competent non-family members. This problems relates to the broader issue identified as a global succession crisis (Garcia, et al. 2019). In addition, this is more of a problem for rural businesses that may not be able to find talented employees.

#### 7.3.3. The exclusion of family members

Exclusion occurs when the senior generation have ideas about who can and cannot enter the family business. Table 7.8. includes the first order codes and supporting quotes.

Table 7.8. The 1<sup>st</sup> order codes and supporting quotes related to the exclusion of family members.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]	Size of the organisation
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Avoid conflict
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Partner selection
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Undesirable

The findings show one reason for excluding family members is due to the size of the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant R1*).

The findings show another reason could be to avoid conflict based on the behaviour of previous generations, hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant M1*).

This study finds another reason may be due to the family members selection of a partner, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

Additionally, the study found a reason for exclusion is simply to cease becoming a family business because being a family business is not desirable, hence:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant W1*).

6.3.4. Existing work related to the exclusion of family members

Exclusion has already been studied in FBR, Ward (1987: 154) having too many family members provided the rationale for exclusion, because it was likely to cause conflict. Recently, Kubíček and Machek (2020) recommended avoiding conflict in succession by adopting affective governance processes rather than exclusion.

However, it may be sensible to limit the number of family members relevant to the business size. I think and have seen when too many young people are in the family business, the high level of FSC may be counterproductive. One way to deal with this is to keep it down one line of descent, reducing the inflow of family members. However, this sustains the business but not necessarily the FSC or the family's health. I think it is a balancing act because too few family members will not cultivate or preserve FSC, meaning there is no SCA.

#### 7.3.5. The life events of family members

Life events contributed to the decay of FSC, through expected and unexpected death, illness, and divorce. Table 7.9. includes the first order codes and supporting quotes. One life event was illnesses that removed family members from the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant I1*).

Some illnesses discussed were not included because participants asked them not to be, but it stopped the family members from entering the business. The findings show another event that caused decay of FSC was death, for example: [Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participant R1).

Additionally, this study found that divorce can prevent the next generation from entering the business, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant O1*).

This study found that divorce negatively impacted the business financially:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

This study found that life events absorbed financial resources of the business, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

Table 7.9. The 1<sup>st</sup> order codes and supporting quotes related to the life events of family members.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Alzheimer's
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Death
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Divorce
"Redacted due to sensitivity and confidentiality issues: contact author for full	Absorbing
version]'	resources

7.3.6. Existing work related to the life events of family members

It is assumed that family members have a long-term commitment to the business, and this is positive when they are all concentrated on the same goal. However, I found that the more family members increase the chances of multiple life events impacting the business. Naturally, life events are inevitable for everyone, and because family members rely on the business as their source of income and future prosperity, they rely on it financially to cover the costs of these events. In some cases, they may prioritise the family over the business. In a situation with more family members, it means more life events will happen (illness, death, divorce etc.). Whereas a nonfamily business may not be impacted to the same extent by managers life events because they are replaceable.

Llanos-Contreras, et al. (2019) discussed life shocks and link this to Socio-emotional wealth (SEW) instead of social capital theory. I think life events sometimes counterbalance the advantages of FSC. Additionally, this could be perpetuated in rural areas due to fewer employees available in the local labour markets.

However, knowledge claims on this area are in their infancy, it appears very little work has been undertaken as to how life-events of family members effect the business. Mental illness has been recently mentioned in the literature (Miller, et al. 2020), although this study is not based on empirical evidence. Meanwhile, the majority of the literature covers the positive effects family members have on the family business (Estrada-Robles, et al. 2020; Sharma 2008), whereas I offer empirical evidence of the negative affect family has on the business.

### 7.4. Discussion

This section discusses the contributions to FBR, social capital, and the rural business literature.

#### 7.4.1. Family business research

The main contribution to FBR is the temporality of FSC. The best way to explain this is through the bathtub analogy, proposed by Dierickx and Cool (1989). This original analogy is extended and synthesised with previous efforts that have measured the levels of FSC. I propose different levels occur because FSC is not instantaneous and consequently the levels vary over time. FSC is dynamic and affected by specific themes that lead to cultivation, preservation, or decay of FSC.

Figure 7.5. shows a visual representation of how the temporality of FSC integrate with the various levels of FSC. The level of water in the bathtub represents the levels identified in the taxonomy of FSC (Sanchez-Ruiz, et al. 2019). The taxonomy identified three levels: instrumental, indistinguishable, and identifiable. The different levels in the bathtub represents the different levels of the taxonomy.

The inflow tap is the cultivation of FSC and forms FSC up to a sufficient level. Preservation occurs to maintain the sufficient level, measured as the instrumental level. Then, decay is represented as the outflow and drains the FSC below the sufficient level.

FSC cultivation represented as the inflow tap begin and generate low levels of FSC, the identifiable and indistinguishable levels. The level increases to the instrumental level after a period of inflow and the occurrence of FSC preservation. Preservation sustains this level and the benefit of SCA is achieved. Alternatively, FSC decays due to the outflow, returning to an identifiable or indistinguishable level. In order for a family firm to hold SCA it must be at an instrumental level (Sanchez-Ruiz, et al. 2019).



Figure 7.5. The bathtub analogy of family social capital.

I addressed the complexity of FSC filling the gap identified for how and when FSC occurs. FSC is a manifestation of "Familiness" and therefore this answer extends to show when "Familiness" is likely to occur. Detailing this reality is important to address the overgeneralisations found in FBR.

In addition, it furthers the understanding of the benefits of FSC alongside the decay of FSC. Therefore, this explanation is coherent with O'Boyle, et al. (2012) who could not explain why mixed results occurred when testing whether family businesses outperform nonfamily businesses. I think it is because the level of FSC (performance) depends on the FSC stage and only can be known by evaluating specific temporal details of the family business. It addresses the assumption of every family business possessing the same level of FSC as a static resource. Instead, it is immobile and subject to time to enable FSC cultivation and preservation, this is represented in the bathtub analogy.

## 7.4.2. Social capital literature

Social capital explains the relationships between individuals that can reveal aspects of reality that otherwise remain invisible (Adler and Kwon 2002: 36). This study has contributed by recognising important factors. This study shows social relationships decay through individuals in the network taking a different path, being excluded,

and/or suffering from life events. This details previous labelling of the loss of social capital being due to non-use or abuse (Adler and Kwon 2002). I think showing this reality is important to capture the human element of business management and that a high performing business is the ideal, but much harder to acquire, even harder to maintain. An honest reflection of this is required to understand the different skill, education, and development needs of businesses.

Furthermore, the preservation of FSC aligns with the accepted logic that to sustain effective social capital investment and maintenance is required (Adler and Kwon 2002; Bourdieu 1986; Leana, et al. 1999). I share the view of it being formed over time and the link to experience. Previous studies that measured the experience of members of a sports team and found more experienced members play a more important role (Fonti and Maoret 2016).

The second contribution is the motivations behind the individual actors. The literature is not clear on whether the motivation of social capital is an individual intrinsic value or induced by the group (Adler and Kwon 2002; Rooks, et al. 2016). This forms two dominant views, the perspective of motivation being purely individual driven by the rationale pursuit of career enhancement (Adler and Kwon 2002). This contrasts with another perspective, motivation is from the collective driven by a shared destiny, common identity, and a commitment to a community (Putnam 1993).

I found evidence of truth in both perspectives. It found family members were motivated by individual career advancement this served their individual system but not the family or business system, from the unified systems perspective. This evidence is based on taking a different path causing the decay of social capital, crediting the first perspective.

However, I found evidence to support motivation based on a shared destiny and common identity occurred in family members who expressed altruistic values. In this state commitment acts to preserve social capital. This makes both perspective credible, but it is important to remember that the group system may be negatively affected if individual members who are unhappy and demotivated.

Thirdly, this study contributes to the discussions about closure. The social capital literature articulates unjustified belief in the group's individual members (Coleman 1988). Instead of favouring the internal members, I found evidence to the contrary. The belief in the next generation had to be justified and based on the family members performance and not solely because they were a family member. This extends the

idea that social capital provides justified opportunity because the senior members will test the junior members, supporting previous research (Burt 1997).

#### 7.4.3. Rural business literature

The rural business literature identified limitations of rural businesses compared to urban businesses based on fewer employees, suppliers, and potential customers. I found evidence to perpetuate these limitations. Rural businesses included in this study experienced life events that impacted the human capital resource. This negatively impacted the level of potential high skilled employees.

Alternatively, I found marriage brings human capital into the business, skills used that are would not have been attained without paying a salary, whereas a spouse helps willingly. This contributes by extending the literature, that previously problematises the capacity of businesses when recruiting skilled employees. Rural locations may be better served when employees are resourced from close ties rather than using the market mechanism. Spouses sometimes want the life benefits of living in a rural area.

Furthermore, other studies have found no difference in the performance of rural and urban businesses. I think this could be due to the positive impact of FSC when it is cultivated and preserved. In doing so, rural family businesses tend to have managers entering the business with "in-situ" knowledge based on early experience. Therefore, an argument can be made that family members are the most qualified candidates to run the business. If this is the case, it contributes to the argument that rural businesses have different education, skills, and development needs compared to urban businesses. This study fulfils the call for a rural business qualitative study (Tiwasing, et al. 2019).

## 7.5. Chapter 7 summary

This chapter has introduced the evidence to answer the research question asked how does temporality influence FSC? This was achieved by presenting three aggregate dimensions: the cultivation, the preservation, and the decay of FSC.

The penultimate section of the chapter presented the contributions this study made to the literature. Answering the research question generated several contributions to FBR. The main contribution was detailing the temporality of FSC and applying the bathtub analogy to explain the temporality of FSC. The temporality of FSC identified the stage for the optimal level, at this level FSC supports the conditions for knowledge creation and thus SCA. In addition, the evidence contributed to the social capital literature. Detailing how the human factors influence the phenomenon of social capital and addressed some theoretical simplifications. Furthermore, it presented the contributions to the rural business literature connecting the influence of the family to rural business characteristics. The next chapter builds on the bathtub analogy and introduces the internal FSC.

# Chapter 8. Internal family social capital

The last chapter presented the temporality of family social capital (FSC) using the bathtub analogy. The resource of FSC takes time to form, in a process of cultivation until it reaches a sufficient level, and then it is preserved. In the passage of time, FSC can continue to be preserved or decay reducing to an insufficient level and seizing its use as a resource.

This chapter extends the bathtub analogy by explaining it is not just the level of water that matters, the temperature of the water also counts. This chapter presents the internal FSC (iFSC) as the hot water in the bathtub. The next chapter presents the external FSC (eFSC) as the cold water in the bathtub. Like a bath if the water is too hot or too cold it is unusable. Therefore, for FSC a balance between eFSC and iFSC is required to create the optimal temperature that delivers sustainable competitive advantage (SCA). Figure 8.1. shows the picture of the bathtub.



Figure 8.1. The bathtub analogy for internal family social capital. Internal FSC

This chapter presents the internal FSC (iFSC) answering the research question how does iFSC affect rural family businesses? Unlike the last chapter, this chapter starts by giving a brief overview of the internal social capital literature. The purpose is explaining the phenomenon of internal social capital to position the findings as close as possible to the existing literature.

It then presents the aggregate dimensions that emerged from the data. The iFSC is presented through three aggregate dimensions, expressed in the equation below:

*iFSC* = *Volume(V) x Density(D) x Diameter(Di)* 

Volume (V) represents the number of family members in the business. Density (D) represents the generation number of the business. Diameter (Di) represents the number of active generations in the business. All three combined represent the temperature of the water in flowing into the bathtub. Figure 8.2. includes a diagram of the chapter structure. The subsequent sections present each dimension and the related second order themes. The sub sections present the second order themes and relates them to existing literature. Appendix D includes further evidence of interpretation for the dimensions of iFSC and appendix E includes evidence for supporting the conditions for knowledge creation.

Figure 8.2. The structure of chapter eight.

8	.1. Internal social capital literature r	review
2nd order themes	Aggregate dimension	Contribution
Number of family members	8.2. Volume	8.5.1. Internal family social capital unpacks the variations of the family business system
Succession practices		
Conflict management		
Generation number	8.3. Density	8.5.2. The internal family social capital supports the conditions for knowledge creation
Growth paths		
Previous business practices		
Active generations	8.4. Diameter	8.5.3. The importance of key staff in rural areas.
Coaching the next generation		
Listening to the previous generation		

The penultimate section discusses the contributions to the literature. Section 8.5.1. presents the contributions made to family business research (FBR). The first contribution to the literature is the presentation of the iFSC and helps unpack the heterogeneity of family business (Jaskiewicz and Dyer 2017). The iFSC helps differentiate different types of family businesses and does within the sample included in this study.

A second contribution is how the iFSC supports the conditions for knowledge creation, it represents the relational and cognitive dimensions of social capital. The iFSC equation provides a relative numerical value reflecting the temperature of the water, a family's characteristics generates different relative numerical values. The logic is the larger the numerical score, the greater the advantage. However, this is not so simple, because if the numerical value is too high the water is too hot and the business suffers, the alignment between the family and business system is not unified. The next chapter extends the bathtub analogy further extending this logic by considering the eFSC.

The contributions made to the social capital literature were the iFSC, which can apply to non-family organisations. In addition, its contributions by showing how the internal social capital represents the cognitive and relational dimensions and support the conditions for the creation of knowledge. The final part discusses the contributions to the rural business literature, which offers iFSC as an alternative to the existing typologies. The final section summarises the chapter.

## 8.1. Internal social capital literature

This chapter focuses on iFSC a perspective that represents the family system in the business, which acts as a resource to achieve SCA. The substance of this theoretically is based on internal social capital, also known as bonding social capital. It is 'a resource reflecting the character of social relations within the organisation' (Leana, et al. 1999: 538).

This section presents the cognitive and relational dimension of social capital (Nahapiet and Ghoshal 1998); it does not present the structural dimension because the level of interaction and closure in a family system is assumed to be high, the structure of social networks relates more to the next chapter that considers the relations external to the family system. This section concludes with some unanswered questions that align with the questions surrounding the phenomenon of family business.

### 8.1.1. Cognitive dimension

The cognitive dimension is the shared language and systems of meaning (Nahapiet and Ghoshal 1998). Shared language, interpretations, representations, meanings, and narratives create efficiencies in the exchange of information. Efficiency is gained by reducing the process time to disseminate information across the group, high closure processes information quicker than open groups due to their level of interaction and interdependence.

In addition, from this perspective, a shared language influences the perception of events (Nahapiet and Ghoshal 1998). Events discussed through language increase or decrease individual awareness to details of the events compared to when experienced individually. Therefore, higher levels of internal social capital leads to higher quality of the information exchanged, preserving the important events and disregarding non-important events. A history of interactions strengthens the cognitive dimension through the accumulation of stories. A long history creating a high level of shared language is associated with internal social capital shared between the group.

Furthermore, a characteristic of the cognitive dimension is the appropriable organisation (Coleman 1988). This occurs when multiplex relationships exist, due to the overlap of individuals in multiple contexts. The existence of multiplex relationships multiplies the opportunities to develop communication and a shared language.

#### 8.1.2. Relational dimension

The relational dimension of social capital as norms, identification, trust, and obligations (Nahapiet and Ghoshal 1998). From this perspective, norms are expectations that aim to constrain or motivate individual behaviour for the benefit of the group. Norms i.e. the unwritten rules are impersonal and are due to the standards of the group whereas obligations are personal to (and between) the individual(s) (Coleman 1988). This relates to the standards required for the individual and family systems to function in the unified systems perspective (Habbershon, et al. 2003); the obligations of the individual and the norms of the group should align to reach the standard required for the system to function (Churchman 1968). Implying a misalignment would result in a dysfunctional system that would negatively impact business performance.

Identification provides the individual with an attachment to the group influencing their behaviour towards the group (Nahapiet and Ghoshal 1998). Trust provides the advantage because it increases the size and speed of information processed between individuals within the group. Trust builds over time through co-operation; heightened trust increases the amount of information that can be processed aggregately.

A further advantage is the efficiency in processing uncodified information (Nahapiet and Ghoshal 1998). Internal social capital allows uncodified information to be accepted based upon the trust of the individual sharing it rather than evaluating it on
its own merit. This is because, in a trusting group information is interpreted by one member and then exchanged amongst others as valid information, the first interpretation acts as a collective filter. This creates efficiencies of information dissemination within the group. Obligations act as social credits between individuals of the same group and this is reinforced by mutual reciprocity (Coleman 1988). Reciprocity encourages individuals to share more because they expect valuable information in return. Aggregately, this increases information sharing within the group. This is assumed to be high among family members who have been sharing information between one another throughout their lifetimes (Arregle, et al. 2007).

#### 8.1.3. Knowledge creation

Internal social capital generates conditions that facilitate knowledge creation. Table 8.1. shows four conditions that create knowledge (intellectual capital). The table shows how each dimension supports each condition. Organisational advantage occurs when knowledge is effectively exploited. Effectively exploited knowledge is likely to lead to innovation.

Table 8.1. The required conditions for creating knowledge and the role of each dimension (Nahapiet and Ghoshal 1998).

Condition for the creation of knowledge	Dimension of social capital		
	Structural	Cognitive	Relational
Access to parties for information	•	•	•
Exchange combination capability		•	
Anticipation of the value of combination			•
Motivation to engage in combination capacity			•

The cognitive dimension enables the creation of knowledge by allowing access to parties for information and exchange combination capability (Nahapiet and Ghoshal 1998). From this perspective, the internal cluster of relations embed the knowledge and knowing adaptability that can be accessed from other members of the group. This knowledge is tacit, context specific, and sustained through collectives in the form of stories. Shared language and codes form embeddedness and collectives. This has been described as "in-situ" knowledge in a previous family business succession study (Giovannoni, et al. 2011).

Shared language is important because it is a means to exchange information. Increased shared language increases the combination capability. At its simplest, language facilitates the ability to exchange information. Low levels of shared language separate individuals' ability exchange access one another's "in-situ" knowledge. A simple example is communication between two people speaking different languages; the difference in language separates them and the worlds they inhabit. Raffiee and Byun (2020) explored the translating of social capital between internal and external hires, the study found it takes quite some time to develop knowledge exchange between employees. This is relevant to family business particularly when the new generation enters the business, shared language facilitates the exchange and access to knowledge.

Increasing this complexity is whether internal shared language operates in a more nuanced way (Nahapiet and Ghoshal 1998). The language differences are more nuanced, for example in the community of scientists who specialise in different methodologies i.e., quantitative vs qualitative may find it difficult to exchange knowledge. Despite a shared subject language, they adopt different meanings and representations of knowledge and thus limit knowledge exchange.

Furthermore, language overlap is required to share ideas and a positive benefit of this is more diversified knowledge (Nahapiet and Ghoshal 1998). Specifically, language is important for influencing perception; codified language categorises sensory data into perceptual categories providing a frame of reference for interpreting the environment. Family members are important here and are assumed to occupy key positions influencing the rationality of the organisation (Arregle, et al. 2007).

Within this perspective, communication through language can be information embedded into a narrative. Narratives help the combination of information and its transfer because narratives cut across different contexts and time periods, embedding "in situ" knowledge (Giovannoni, et al. 2011). Thus, a narrative can be a powerful form for creating and exchanging meaningful views. On the contrary, language can be ineffective because it may exclude significant details or filter out events for which terms do not exist, limiting the use of narratives.

The relational dimension supports the following two conditions: the anticipation of the value and the motivation for the combination of information (Nahapiet and Ghoshal 1998). Within this perspective, a high level of trust increases the level of information exchanged and the level of co-operative interaction. Simultaneously, a high level of trust provides a belief that others within the system will behave in a certain way. Others are expected to act with good intent, are reliable, and have a high level of perceived openness. Increasing a willingness to experiment with new information, increasing the likelihood of innovation.

Furthermore, from their perspective norms control actions and build a consensus of the social system. Norms are powerful but fragile (Coleman 1988), however the expectations bind and ensure members co-operate. Coupled with norms is the ingroup identification with one another. Increased identification increases the likelihood of individuals exchanging information and anticipating a value of this interaction. Simply because the interaction is expected to provide information. Therefore, norms and identification provide motivation to combine information and increases access to information.

From this perspective, obligations and expectations provide a commitment to undertake an activity. Particularly because obligations act as a credit slip; individuals in the network do each other favours for a favour in return. Therefore, obligations and expectations implicitly provide a motivation to exchange information in the expectation of receiving future information. Similar rationale has been applied in studies that explored the psychological contract (Rousseau 2001).

The two dimensions and how they create knowledge are useful for organisations in providing SCA. However, there is an optimal balance between the cost of investing to maintain relationships and the value of the knowledge created (Adler and Kwon 2002; Bourdieu 1986; Leana, et al. 1999). A family business is a good context to extend the theory of internal social capital because the internal relations are anticipated to be more extreme than a non-family business context. Family businesses are assumed to be one of the strongest forms of social capital (Arregle, et al. 2007).

Additionally, valuable knowledge creation is conditional upon accurate subjective judgements of what is valuable knowledge. Subjective judgements based on the beliefs, norms, opportunity, motivation, and ability of the individuals making up the organisation (Adler and Kwon 2002). This is appealing in a family business because of the power dynamics between parents and children. Adler and Kwon (2002) claimed sub-optimal knowledge development may occur due to senior members favouring internal members rather than external members without fair assessment.

furthermore, internal social capital is useful in small and medium sized organisation (SME) research. Perkins, et al. (2017) sought the link between idea generation and particularities of SMEs. Fonti and Maoret (2016) identified the importance of experienced group members in a team context.

In contrast, Leana, et al. (1999) insisted too much internal social capital may stop individuals from taking risks, absorbing new information and adapting to change. Additionally, too much internal social capital may bring diminishing returns (McFadyen and Jr. 2004) and too much may lead to network constraint (Burt 2019). Therefore, despite its claims for organisational advantage, there is evidence to suggest this is not the case. Thus, understanding how the internal FSC affects rural family business can contribute to this area of knowledge.

## 8.2. Volume

This section is the first of three that presents the findings that explore iFSC. It presents the first aggregate dimension, the volume of iFSC. The volume has three second order themes: the number of family members in the business, conflict management, and succession practices. Figure 8.3. is a diagram of the dimension, the second order themes and the tables of first order codes.

## 8.2.1. The number of family members

The first second order theme is the number of family members. This study found the number of family members working in the business was relatively high, medium, or low. Table 8.2. shows the first order codes and supporting quotes related to the number of family members.

Figure 8.3. The 1<sup>st</sup> aggregate dimension volume, the 2<sup>nd</sup> order themes, and the tables of 1<sup>st</sup> order codes.



Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	High
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Medium
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Low
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Negative anticipation
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Positive anticipation

Table 8.2. The 1<sup>st</sup> order codes and supporting quotes related to the number of family members.

An example of a high number of family members is:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participants A1).

An example of a relatively medium number is:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant D1*).

An example of a relatively low number is:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant Q1*).

Additionally, this study found the anticipation of family members tended to be positive or negative. A negative example is:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant I1*).

A positive example is:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant K1*).

8.2.2. Existing work related to the number of family members

The number of family members has for a long time been considered an important characteristic in FBR. Klein, et al. (2005) introduced the F-PEC scale to calculate the family influence on the business. One of the factors included within the experience dimension was the number of family members included in the business. Holt, et al. (2010) ruled out any prospective link between the number of family members and "Familiness".

I found the number of family members to be useful. Additionally, I found the anticipation of incoming family members is useful and connects to the succession crisis of the next generation (Garcia, et al. 2019). Also, the number of incoming family

members can be anticipated, so the inflow of iFSC is somewhat predictable. This relates to the cultivation of FSC because of the number of family members being included in the business. I think that, returning to the bathtub metaphor, too many family members may make the water too hot, although this depends on the size of the business. The size of the business relates to eFSC the focus of the next chapter.

In the literature, it is claimed currently fewer people tend to be joining their family businesses (Garcia, et al. 2019). Therefore, this implies there is going to be a scarcity of FSC. Sanchez-Ruiz, et al. (2019) acknowledged the number of family members and linked it to the structural dimension of FSC (pattern and strength of ties).

8.2.3. The conflict management of family members

Conflict management is required when conflict arises. Table 8.3. shows the first order codes and supporting quotes related to conflict management. This study found conflict arises for several reason, one being the implementation of new ideas, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant M1*).

This study found another source of conflict to be related to decision making, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant O1*).

This study found one way of managing the conflict is to create a physical barrier between the senior generation and the business, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant G1*).

Alternatively, this study found rather than moving premises it may be more practical to give the senior generation a project, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant C1*).

Quote	Code
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Implement ideas
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Decision making
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Physical barrier
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Distraction
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Odd number
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Non-exec

Table 8.3. The 1<sup>st</sup> order codes and supporting quotes related to the conflict management.

Furthermore, this study found another way of conflict resolution is a democratic decision-making process that considers everyone's point of view, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant G1*).

However, this study found when an even account generates an equal vote the involvement of a non-executive chairman helps, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant 1A*).

Therefore, having resolutions to conflict reduces the likelihood of the volume having a negative impact on the business.

8.2.4. Existing work related to the conflict management of family members Conflict is a well-known topic in FBR (Eddleston, et al. 2019; Sharma, et al. 1996). Ward (1987: 154) recognised conflict resolution to be critical when the number of senior family members was high, implying a high number of family members in one generation maybe a negative thing. I found this may not be the case, conflict could occur irrespective of the number of family members. However, I found the more important factor is the management of conflict, rather than the occurrence of it. I found conflict from previous generations shape different ways of managing conflict in the current generation. For example, the one line of descent to avoid conflict is based on past conflict resolution.

Kubíček and Machek (2020) recently analysed the most relevant 88 articles of family business conflict and presented an input, process, and output model. They recognised a lack of theoretical grounding in conflict studies by identifying 41 of the 88 reviewed articles with a lack of theoretical base. I found that experience of previous conflict, informed conflict management, implying a pathological aspect of conflict.

In relation to iFSC, Arregle, et al. (2007) outlined the increased potential of conflict in family businesses is likely due to the existence of FSC. I found the family members had a different attitude towards family members compared to regular employees, because they were able to speak unprofessionally to one another. They had no professional filter. This can increase conflict by chance due to two contexts exists rather than one compared to a non-family organisation (Arregle, et al. 2007).

I found the physical location could be used as a barrier for conflict management. In some cases, moving the family members away from the business increased the space for individual family members. This highlights the importance of proximity in conflict management, which may be different in urban and rural businesses.

## 8.2.5. Succession practices

Succession practices clarify the process of transferring the business to the next generation. Table 8.4. shows the first order codes and supporting quotes related to succession practices.

This study found one type of practice to be buying the business from the senior generation, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant I1*).

Alternatively, this study found another approach to be distributing an equal share irrespective of the family members experience in the business, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant D2*).

This study found another practice where consideration of family members experience determined the share, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant 1A*).

Alternatively, this study found the practice of division, this is where the business is divided and distributed to each family member providing each with their own share of capital to invest, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant P1*).

This study found cases of informal succession practices and unfortunately it had a negative impact on the business when the senior generation die, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]" (*Participant Q1*).

Therefore, this study found a good succession practice reduced the likelihood of volume having a negative impact on the business.

Table 8.4. The 1<sup>st</sup> order codes and supporting quotes related to the succession practices.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Buying the business
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Equal distribution
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Fair distribution
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Divided distribution
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	No succession plan

#### 8.2.6. Existing work related to the succession practices

Succession has long been a key topic of FBR. Sharma, et al. (1996) found 36 articles published on succession defining it as a process rather than a moment. Ward (1987: 129) presented advice on succession relative to the number of family members, a high number should put the business first and a low number should put the family first. More recently, a typology of succession practices was produced based on 383 succession from six countries (IFB 2019b; Porfírio, et al. 2019). But the success of the different configurations was not observed.

I found that the success of succession practices depended on the type of business observed. By type, I mean size and whether it was business to business (BB) or a business to consumer business (BC). Specifically, in this case a farming attraction (BC), farm shop (BC), or supplier of supermarkets (BB). Succession planning was more likely in larger organisations.

More importantly, the link between succession and iFSC already exists (Arregle, et al. 2007; Carr, et al. 2011). Arregle, et al. (2007) linked succession to iFSC proposing it leads to better succession outcomes and provides a base to endure negative succession events. I found a succession practice manifests the relational and cognitive dimension of FSC. This is because the relational dimension binds the two

generations together through strengthening obligations, trust, identity, and norms. Sometimes this is done through a legally binding document (shares of the company), this helps the formalise the purpose for the family members, providing motivation to consider the future of the business.

# 8.3. Density

This section presents the second aggregate dimension, the density of iFSC. The density has three second order themes: the generation number, growth paths, and previous business practices. Figure 8.4. shows a diagram of the dimension, second order themes and tables of first order codes.

Figure 8.4. The 2<sup>nd</sup> aggregate dimension density, the 2<sup>nd</sup> order themes, and the tables of 1<sup>st</sup> order codes.



8.3.1. The generation number of the business

The first second order theme is the generation number, this study found family businesses who were in relatively high, medium, or low generation numbers. Table 8.5. shows the first order codes and supporting quotes related to the generation number.

An example of a high generation number is:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

An example of a relatively medium generation number is:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

An example of a low generation number is:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant F1*).

Table 8.5. The 1<sup>st</sup> order codes and supporting quotes related to the generation number of the business.

Quote	Codes
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	High
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Medium
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Low

This study found the generation number was important for assessing the density of iFSC. The higher the generation number the more growth paths and previous business practices the business was likely to have experienced.

8.3.2. Existing work related to the generation number of the business

The consideration of the generation number is considered by Klein, et al. (2005) who included the generation number on the experience dimension of the F-PEC scale. Variations of the generation number are sometimes specified in samples but are seldom considered in detail. Chapter 2 described the lack of consideration of the generation number relating to the family business. I found that this was a point of discussion during data collection and helped unpack the variation because the higher the generation number, the higher the growth paths and previous business practices.

I found more interesting findings because of the high number of generations included in the sample. Whereas, Carr, et al. (2011) and Sanchez-Ruiz, et al. (2019) both used first generational family businesses. In contrast, Jaskiewicz, et al. (2015) records the most impressive known sample with an average generation number of 11.

However, business size comes influences both generation number and the number of businesses involved. The average number of employees included in the sample were 89 employees (Chapter 5). Therefore, I found a variation of growth paths and previous business practices existed to be explored. Whereas, in the organisations with an average of five employees, who have not grown are unlikely to have changed drastically, and these are the type of businesses included from previous studies (Carr, et al. 2011; Jaskiewicz, et al. 2015; Sanchez-Ruiz, et al. 2019). I found the higher the generation number the more characteristics of the cognitive and relational dimensions of FSC occurred. 8.3.3. The growth paths of the business

Growth paths inform family members to what has worked in the past and capture previous entrepreneurial efforts. Table 8.6. shows the first order codes and supported quotes related to growth paths.

The larger the business the more growth paths were experienced. This study found one growth path to be acquisitions, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participants M1*).

This study found another growth path, vertical integration of the supply chain, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Y1*).

This study found another growth path to be incremental diversification, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant J1*).

This study found another growth path to be radical diversification, for example:

Table 8.6. The 1<sup>st</sup> order codes and supporting quotes related to the growth paths of the business.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Acquisition
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Vertical integration
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Incremental diversificati on
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Radical diversificati on
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Investing in efficiency

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant K1*).

This study found another growth path is investment in physical capital to improve efficiency, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant N1*).

This study found multiple growth paths: acquisition, vertical integration, incremental and radical diversification, and capital investment.

8.3.4. Existing work related to the growth paths of the business

I found the previous strategies were more relevant in higher growth businesses. This implies that they are more likely to try and test new ideas. Glover and Reay (2013) outlined four types of family farms: business diversifiers, debt maximisers, sacrificers, and compromisers. I support this finding because I saw diversifiers, debt maximisers (investing in machinery). But I did not find specific Sacrificers and compromisers. Instead, I saw less growth orientated family farms which were more passive and accepting of change but afraid to change themselves, like the business included in the pilot study. Whereas the more growth orientated participants were actively anticipating change and not afraid to change their business strategy.

Pearson, et al. (2008) proposed shared history to be part of the cognitive dimension of iFSC. Similarly, Arregle, et al. (2007) asserted the privileged positions of family members enabled a process of iFSC in the development of the business due to family members influencing the organisations rationality. I found growth paths acted as a mechanism that influenced family members and therefore influenced the businesses' rationality. I would say this is how the cognitive dimension stores knowledge that is accessible for the next generations. I think it is a consequence of being growth orientated and seeking new experience rather than continuing to do the same thing. Although, I did see a balance between acknowledging and preserving the strengths of the business, for example knowing how to grow a particular crop along with trying new things. I think that many of the organisations were cautious in new ventures, but not afraid of change.

## 8.3.5. Previous business practices

Previous business practices are old ways of working that change for external reasons, discussed in the next chapter on eFSC. Table 8.6. shows the first order codes and supporting quotes. This section focuses on the previous business practices and their

impact on the business. One previous business practice relates to managing people, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant A1*).

Table 8.7. The 1<sup>st</sup> order codes and supporting quotes related to the previous succession practices.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Management
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Sales
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Production

This research found another business practice to be related to sales approaches, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant R1*).

The research found previous business practices relating to production, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

Previous business practices tended to relate to management, sales, or production.

8.3.6. Existing work related to the previous business practices

Previous busines practices relate the iFSC processes lead to the development of the rationality of the organisation (Arregle, et al. 2007). I found family members remembering previous practices helped them compare to current and possibly future research practices. This links to growth paths because shows that to achieve growth, it may mean to change the way things are done. This contrasts to FBR that discusses family businesses may resist change (Calabrò, et al. 2018).

Also, FBR emphasises the importance of a shared history between family members (Pearson, et al. 2008). I found the shared memory can influence decision making. Some decisions were based on the memory of how the business used to be, it is a privilege of family members but required them to engage in reflexivity. I found awareness to be of great importance as well as the power of narrative in shared language, because can include or exclude significant details. Thus, it relates to business growth theory in the idea of inherited resources (managers experience) providing direction for expansion by producing new combinations of previously used resources (Penrose and Penrose 1958). I found that the businesses with more

previous business practices were more likely to recombine previous business practices to generate potential new ventures.

# 8.4. Diameter

This section presents the third aggregate dimension, the diameter of iFSC and is shown in figure 8.5. The diameter has three second order themes: the number of active generations in the business, coaching the next generation, and listening to the previous generation.

Figure 8.5. The 3<sup>rd</sup> aggregate dimension diameter, the 2<sup>nd</sup> order themes, and the tables of 1<sup>st</sup> order codes.



# 8.3.1. The number of active generations in the business

The first second order theme is the number of active generations. The study found large, medium, or small diameters. Table 8.8. shows the first order codes and supporting quotes related to the number of active generations.

An example of a large diameter is three active generations, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant B1*).

A medium diameter is two active generations. For example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (participant M1).

And a small diameter is just one active generation. For example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant U1*).

Generally, a larger diameter potentially creates more space for coaching the next generation and listening to the previous generation.

Table 8.8. The 1<sup>st</sup> order codes and supporting quotes related to the number of active generations in the business.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Large
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Medium
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Small

8.3.2. Existing work relating to the number of active generations in the business

FBR has previous researched the number of generations working in the business. Ward (1987: 33) described the difficulty of synchronising the family member's age profile with the natural evolution of the product lifecycle. I found this to be increasingly difficult as product life cycles are shortening.

I found family members being in situations that exhibited a lack of growth. The next generation are important because the relative skills change with the industry over time and it is important for the next generation to absorb the new skills. Whereas, the senior generation are less able to absorb new skills and therefore the family business becomes as previously described a stagnant organisation (Ward 1987).

I found having more active generations reduced the likelihood of becoming stagnant. Recent literature on transgenerational entrepreneurship expressed the importance of having multiple generations active in the business (Clinton, et al. 2020; Diaz-Moriana, et al. 2018; Gamble, et al. 2020). I found the more active generations, the higher the capacity to share language and values strengthening the cognitive and relational dimensions of social capital.

8.3.3. Coaching the next generation

Coaching the next generation is the advice and guidance of the senior generation to the junior generation. Table 8.9. shows the first order codes and supporting quotes related to coaching the next generation.

Coaching the next generation involves asking the next generation to solve business problems, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant A1*).

The transfer of knowledge can be explained by questioning the next generation, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant A1*).

This study found coaching the next generation involved the next generation having a goal in mind, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant G1*).

This study found a lack of coaching led to frustration, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

This study found coaching the next generation involved asking the next generation to solve business problems, and asking the next generation for direction, and a lack of this is led to frustration.

Table 8.9. The 1<sup>st</sup> order codes and supporting quotes related to coaching the next generation.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]	Solving problems
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Direction
[Redacted due to sensitivity and confidentiality issues: contact author for full version]	Frustration

## 8.3.4. Existing work related to coaching the next generation

FBR claims FSC influences the organisation's identity and rationality (Arregle, et al. 2007; Pearson, et al. 2008). I found evidence of this being an effective way to sustain this through coaching the next generation. Coaching the next generation provides stability, interaction, closure, and interdependence; which are the antecedents of iFSC (Arregle, et al. 2007; Nahapiet and Ghoshal 1998; Pearson, et al. 2008). I found it adds the capacity for shared language and values. For example, it transfers the narrative of the business. In turn, supporting conditions for knowledge creation through the combination capability of information, a motivation to do this, and an anticipation of the value of doing this (evidence of interpretation found in appendix E).

Sanchez-Ruiz, et al. (2019: 16) discussed the potential structural alteration of ties occur by involving the next generation. I unpack the link by identifying the importance of coaching the next generation to secure a positive impact on the business rather than an automatic place in a privileged position.

## 8.3.5. Listening to the previous generation

Listening to the previous generation is how the junior generation receive the advice and guidance of the senior generation. Table 8.10. includes the first order codes and supporting quotes of listening to the previous generation.

It involves listening to the successes and failures, taking lessons from both. This study found it is important for the active listening because passive listening may generate an uncritical next generation creating problems for them, for example:

"[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Q1*).

On the other hand, this study found examples of listening to the previous generation that solved business problems, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

This study found that listening to the previous generation can motivate the next generation, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant F1*).

This study found, a larger diameter led to a longer time span of memories for the family members to draw on, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant O1*).

This study found listening to the next generation needed to be critical to avoid being misled, helped solve busines problems, generated motivation, and interest. Also, that the larger the diameter the longer the timespan of the possible memories to draw on.

Table 8.10. The 1<sup>st</sup> order codes and supporting quotes related to listening to the previous generation.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Mislead
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Problem
	solving
[Redacted due to sensitivity and confidentiality issues: contact author for full version]	Motivation
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Time
	span

## 8.3.6. Existing work related to listening to the previous generation

Effectively communicating with the next generation is important in a family business (Davis, et al. 1997; Sharma, et al. 1996; Ward 1987). Carr, et al. (2011) measured iFSC historic experience with scales of knowledge sharing, and I found similar connections between experience and how this is shared between the generations. Jaskiewicz, et al. (2015) called it the role of imprinting when developing the next generation.

More recently, Barbera, et al. (2018) progressed the conversation by moving on from imprinting. The study claimed storytelling to be an important part of anticipating futures. I found the same, and it links to the importance of the historic narrative in family businesses that can omit or include significant details. I found active listening of the next generation to be a key feature for utilising past success stories. I found it gives access to a wider time span leading to more organisational knowledge because it includes previous endeavours.

## 8.5. Discussion

This section explains the contributions made to FBR, social capital, and the rural business literature.

## 8.5.1. Family business research

I contribute to FBR by offering the iFSC to articulate the variations of family businesses, contrary to the non-family and family dichotomy proposed in previous studies. The variations of iFSC help unpack the heterogeneity of family businesses (Jaskiewicz and Dyer 2017). Figure 8.6. shows the three dimensions of the iFSC and their characteristics. This adds meaning to the packaging of the phenomenon of family business.

A second contribution is the extension of the logic of bathtub metaphor introduced in the last chapter, extending the original work by (Dierickx and Cool 1989). The last chapter introduced FSC as a flowing resource. This chapter looks adds a condition that the temperature of the water is important, not only the level. Specifically, the iFSC is presented as the hot water tap in the bathtub. The temperature of this water is likened to the relative score of iFSC, this can be calculated by using the following equation:

*iFSC* = *Volume(V) x Density(D) x Diameter(Di)* 



Figure 8.6. The dimensions of the internal family social capital Volume

The variations that unpack the heterogeneity of the iFSC can have a varying impact on the business. If the water is too hot it is unusable. Table 8.11. shows the variations of iFSC in the businesses included in the sample.

I suggest the larger iFSC temperature gives the higher benefits of FSC (Arregle, et al. 2007). The final column in the table calculates whether the family business has a larger or smaller score than the sample average. This unambiguously states the linkages that exist in family businesses (Habbershon and Williams 1999c). This extends the original proposition that claimed SCA was due to casual ambiguous linkages in the top management team (Barney 1991). It also removes the overgeneralisation of the knowledge claims.

Naturally, it would make sense that too much iFSC would be too high becomes detrimental to the business, but conclusive evidence could not be drawn. I found an instance of this to be the case when the act of preserving such a high temperature of iFSC breeds ignorance to the customer and employee relations. This analogy is further developed in the next chapter.

Family business	Number of family members	Generation	Number of active generations	iFSC relative numerical value	Larger or smaller than the sample average
Organisation A	13	3	3	117	Larger
Organisation I	6	6	3	108	than
Organisation W	6	6	3	108	average
Organisation T	6	5	3	90	
Organisation H	7	4	3	84	
Organisation O	5	6	2	60	
Organisation V	5	4	3	60	
Organisation C	3	6	3	54	
Organisation X	4	6	2	48	
Organisation G	4	5	2	40	
Organisation Q	4	4	2	32	Smaller
Organisation B	5	3	2	30	than
Organisation S	5	3	2	30	average
Organisation D	4	3	2	24	
Organisation E	3	4	2	24	
Organisation F	3	4	2	24	
Organisation M	3	4	2	24	
Organisation K	3	3	2	18	
Organisation Y	2	4	2	16	
Organisation L	5	2	1	10	
Organisation R	2	4	1	8	]
Organisation N	1	7	1	7	]
Organisation J	1	3	1	3	
Organisation P	1	3	1	3	]
Organisation U	1	1	1	1	]
Total/Average	4	4	2	40	Average

Table 8.11. The relative levels of iFSC in the participants included in the sample.

## 8.5.2. Social capital literature

FSC is considered to be one of the strongest forms of social capital (Arregle, et al. 2007) and therefore I contribute to the literature by offering insights into how social capital generates SCA. I identified how family members affect the conditions for knowledge creation previously requested by Pearson, et al. (2008: 951). Table 8.12. shows how the conditions for knowledge creation are affected by the temporal and internal FSC. Appendix E adds evidence to support my interpretation, that difficult to capture explicitly and inductively.

The evidence of interpretation (appendix E) shows the stronger relational and cognitive dimensions based on high iFSC leads to a higher access to parties for information, between family members. High iFSC leads to enhanced exchange

combination capability due increased levels of shared language. Manifesting in the long-time span and listening to the previous generation provides more instances of stories told.

Condition for the creation of	Internal			Temporal		
knowledge/ intellectual capital	Volume	Density	Diameter	Cultivation	Preservati on	Decay
Access to parties for information	~		~	<b>√</b>		×
Exchange combination capability		~			~	×
Anticipation of the value of combination			~	<b>√</b>	~	×
Motivation to engage in combination capacity	✓	✓		~		×

Table 8.12. The conditions for knowledge creation and the related FSC characteristic.

High iFSC offers higher anticipation of value of combination, specifically the future success by providing direction manifesting in coaching the next generation. The motivation to engage in combination capacity increases when listening to the previous generation. The access to parties enhances the information through knowledge of previous business practices and growth paths illustrating how management, sales, and production skills continuously change.

The iFSC strengthens the cognitive and relational dimensions of social capital in three ways pertaining to each dimension of iFSC. The first way is the cognitive dimension strengthens from a higher generation number. A higher generation number leads to a higher number of growth paths and previous business practices. Basically, the more the family experiences, the more stories can be told. Conditional upon a diversity of experience, this enhances the shared language and codes of meaning. This supports the claims that more experienced members of a group play a more important role (Fonti and Maoret 2016).

Secondly, the number of active generations strengthens both the cognitive and relational dimension. The strengthened cognitive dimension occurs from having a high level of active generations. This leads to higher occurrence of coaching of the next generation and listening to the previous generation. This is likely to embody more "in-situ" knowledge within the shared language, codes, and shared representations of meaning. I found that senior generations shared stories and offered advice to junior

generations beyond retirement. This was conditional upon listening to the senior generation from the junior generation's perspective. A willingness to listen to the senior generation's opinion enables access to different time periods and a genuine motivation to share information.

The number of active generations enhances the relational and cognitive dimensions. The relational dimension because coaching and listening often require emotional states that require trust, identity, norms, and loyalty between the generations. I found it required a mutual respect between the junior and senior generation and if not, the coaching process would by undermined.

Thirdly, the higher number of family members, the stronger the relational dimension because more conflict management and succession practices are required. This enhances the ability to recover from conflict and encourages closeness. The higher number of family members provides more opportunities for communication, strengthening the cognitive dimension. Communicating regularly is likely to enhance shared language through the exchange of stories. Proximity and sharing the same space regularly increase the likelihood of this.

On the contrary, a limitation of this knowledge claim is in the case of too much iFSC, represented as the water being too hot, if too many family members are employed in the business relative to the size of the business (employee and customer relations in the next chapter). This is because it may be a distraction from the business system and relates to the importance of group size in SMEs (Perkins, et al. 2017). I think the importance of the number of family members relates to the size of the business. For example, if there are too many family members in the same proximity, I do not think that is healthy for the business system. I found that family members acted more productively when they had their own established responsibilities (space).

## 8.5.3. Rural business literature

This chapter contributes to the rural business literature by explaining how rural family businesses may possess an advantage over other organisational forms. It showed how a long attention span informs how the land has been used in a consistent way over generations. Furthermore, the iFSC could serve as an alternative typology to the existing ones. This typology can be used to assess the level of knowledge creation in family farms and if used properly iFSC can be a source of advantage for family farmers.

# 8.6. Chapter 8 summary

This chapter has shown how iFSC affects the family business. It began by introducing the internal social capital literature. This was presented using three aggregate dimensions: volume, density, and diameter.

The final section presented the contributions to the literature. The contribution to FBR the iFSC to explain the heterogeneity of the family businesses. This extended the bathtub metaphor illustrating iFSC as a hot water tap that requires an optimal temperature to be effective. Too hot and it could burn the business and too cold it becomes frozen and ineffective.

The contribution to social capital literature was how the iFSC supported the conditions for knowledge creation and strengthened the relational and cognitive dimensions of social capital. The final section synthesised the findings with the rural business literature and added an alternative typology when analysing family farmers.

# Chapter 9. External family social capital

The first findings chapter focused on the temporality of family social capital (FSC) and introduced the bathtub analogy to illustrate the temporality of the resource, originally used to show how resources are not instantaneous (Dierickx and Cool 1989). The second findings chapter extended this analogy to illustrate that the level of water is not the only important factor, but also the temperature of the water counts. It used this analogy to represent internal family social capital (iFSC) as hot water in the bathtub and a sufficient temperature is required to achieve sustainable competitive advantage (SCA), not too hot and not too cold.

This chapter completes the bathtub analogy by introducing external family social capital (eFSC) as the cold water in the bathtub. It is cold opposed to hot because it considers the non-family relations of the business, also known as the business system. Whereas the hot water represented the inner family relations, also known as the family system. Figure 9.1. illustrates the role of eFSC in the level of FSC in the business.



Figure 9.1. The bathtub analogy for external family social capital.

In doing so, it answers the research question how does eFSC affect rural family business? The first section of the chapter outlines the literature related to external social capital. This introduces ties, brokers and structural holes that exists in networks. It introduces the importance of industry setting and synthesises the existing literature with the family business research (FBR) discussed thus far. It introduces the

eFSC presented by three aggregate dimensions: the employee relations, the customer relations, and the outside experience of family members. Like the two previous findings chapters the codes, themes and dimensions presented in this chapter emerged from the data. The eFSC is expressed in the equation below:

#### eFSC

= Employee relations (E) x Customer relations (C) x Outside Experience (O)

The subsequent sections present the three aggregate dimensions and the related second order themes. The sub sections present the second order themes and relates them to existing literature. Further evidence of interpretation is included in appendix F. Figure 9.2. shows the structure of the chapter.

Figure 9.2. The structure of chapter nine.

9.1 External social capital literature review			
2nd order themes	Aggregate dimension	Contributions	
Reduction in required employees			
Communication	9.2. Employee relations	8.5.1. The removal of some family social capital processes	
Value			
Consolidation of customers			
Power dynamics	9.3. Customer relations	8.5.2. a social capital observation of how industry concentration removes the capacity to innovate	
Expected changes			
Generating skills			
Generating ideas	9.4. Outside experience	8.5.3. Empirical work supporting the innovativeness of rural businesses	
Generating connections			

The penultimate section discusses the contributions to the literature. The first part explains the contributions to FBR. The first contribution is the recognition of how outside experience strengthens eFSC. The second contribution is the negative impact technological developments have on eFSC. The cause of the negative impact is a reduction of connections from reduced interactions between customers and employees. Thus, this removes the overlap with stakeholders that once led to the increased survivability of the business. The second contribution is recognising the benefits outside experience can bring to reduce structural holes and make connections with relevant others. The second part explains the contributions made to the social capital literature. The first contribution is how the advancements in technology widen structural holes disconnecting customers and employees. This creates a situation with fewer opportunities. This is supported by the shift in power dynamics with other brokers, particularly powerful buyers in the network.

The third part discusses the contributions made to the rural business literature. The first is recognising the pressure from supermarkets, that is being perpetuated by technological development and market forces. Rural business already has poor access to skilled employees, markets, and infrastructure making them susceptible to exploitation, it seems that supermarkets have more substitutions to wield power in their own favour. It presents structural hole theory to explain this reality. The final section summarises the chapter.

## 9.1. External social capital literature

This section explains external (bridging) social capital and the potential impact it has on organisations. The external social capital perspective primarily focuses on the structural dimension of social capital, above the relational and cognitive dimensions. Focusing on the structural dimension disentangles the cluster of relations that surround the organisation. The cluster of relations can be broken down into individual ties. Ties are important in the transfer of information and access to other ties. Opportunities emerge in the form of structural holes. The industry setting is relevant because structural holes exist in networks that form industries (Burt 1997), the nature of these relationships can encourage or constrain innovation (Lundvall, et al. 2002; Walker, et al. 1997).

#### 9.1.1. Ties

Nahapiet and Ghoshal (1998) explained that the structural dimension of social capital is made up of the pattern and strength of ties. Ties are connections, both formal and informal, between individuals. The pattern and strength of ties are influenced by interdependence, time, interaction, and closure. Ties in a regular structured pattern of interaction are strong ties. Strong ties are highly interdependent, stable over time, highly interactive and possess a high level of closure.

The structural dimension specifically for external social capital is characterised by open structures with low density due to infrequent patterns of interaction. Whereas, high density relates to closure and emerges through repeating interactions (Coleman 1988) and a high level of overlap, likely in a family. Hernández-Carrión, et al. (2017)

associate professional and institutional networks with low density, due to fewer interactions and lower proximity.

Ties are characterised by density, hierarchy, and size (Burt 2019). Hierarchy acts as an indirect form of power based on the connection's connectivity. Hierarchy considers the number of more powerful contacts the connection possesses. Density is the amount of contact between contacts within the network, dense ties have multiple network overlaps. Size is the number of connections a person has at one time. A large network is associated with high connectivity and a small network with low connectivity.

Ties in a network offer two kinds of advantage: information benefits and control benefits. Providing information generates three forms of advantages: breadth, timing, and arbitrage (Burt 2019). Breadth provides a diverse level of information and is generated from a high level of circulation. Circulation is based on a high number of social contacts between different people. The speed of circulation is based on timing. Timing is the flow of information enabling learning from activities, and arbitrage is the trustworthiness of the opinion i.e., the accuracy/reliability of the information.

Weak ties are beneficial because they provide a breadth of information (Burt 1992). The more social contacts in the network, the higher the number of information sources. However, exposure to information is not sufficient enough to transform the information into knowledge (Burt 2019). Another consideration is the cost of transformation, turning information into knowledge (Nahapiet and Ghoshal 1998).

Furthermore, a process of recognising the potential value of information can help mitigate the cost of acquisition. Recognition of the potential value of information is needed because the sources of information are not always useful. This is compounded by the idea of a large network comprises high number of contacts accruing large costs in comparison to a small network.

With this in mind, Burt (1992) introduced a framework to categorise ties into redundant and non-redundant sources of information. Redundant ties provide the same information as many other people in the network. Non-redundant ties are the individuals who provide valuable information not possessed by others. Table 9.1. presents the framework arranging ties by weak/strong and information as redundant and non-redundant.

Redundancy is due to the nature of contact, interdependence, and interactions, it is assumed strong ties would share information regularly. Due to the constraints of

information sharing, the time spent on close ties reduces potential sources of new information. In contrast, weak ties allow more non-redundant information. Due to the fewer interactions and interdependencies with a larger number of ties. This increases the access and diversity of the information available, increasing the likelihood of recombination to create knowledge (Nahapiet and Ghoshal 1998) and exploit structural holes (Burt 1992).

Table: 9.1. The expected arrangement of a social network based on the framework (Burt 1992).

	Potential value of information	
Ties	Redundant information	Non-redundant information
Weak ties	Many	Some
Strong tie	Some	Rare

## 9.1.2. Structural holes

Structural holes exist within relations that possess sources of non-redundant information but are not connected. Burt (1992) explained how structural holes relate to the network and information advantages:

'Structural holes are like a buffer, like an insulator in an electric circuit. People on either side of a structural hole circulate different flows of information between people, and control the projects that bring together people from opposite sides of the hole' (Burt 2000: 353).

Structural holes often occur when organisations concentrate on their own activities, weak ties escape the organisation's immediate periphery. Thus, external social capital claims non-redundant ties provide superior access to information (Adler and Kwon 2002). This occurs in a network of brokers, who identify and utilise non-redundant ties known as alters (Kwon, et al. 2020).

Information brokers have previously been called "tertius gaudens" (Burt 1992: 46); these are players in a network who capitalise on structural holes. They have a capacity to identify sources of non-redundant information. They are also known as the third who benefits during negotiation. Information is the substance transferred between ties; the competent brokers can identify useful ties. This is important because relations require the finite resources of time and effort (Adler and Kwon 2002; Bourdieu 1986; Leana, et al. 1999). The competency of employees in brokerage positions produce more ideas than employees in closed positions (Burt 2004), implying a level of creativity and competency in time spend networking is required.

Therefore, opportunities exist for brokers who are able to identify and exploit structural holes between alters in a network (Kwon, et al. 2020). Opportunities emerge in leveraging information or when two competing individuals pursue the same relationship are leveraged against each other. For example, two suppliers seeking the same customer. Structural holes are the setting for "Tertius strategies" (Burt 1992). The application of "tertius strategies" elicits additional information from contacts, who will cooperate for their own preferences. Considering this, a key competence of a broker is understanding how the information and preferences can be played against one another.

Information is the substance and varies depending on its accuracy, ambiguity, and distortion. The strategies bring together players who have comparable resources and are willing to negotiate with the broker (Burt 1992). The information benefits of access, timings, and referrals are variables of any "Tertius strategy".

Timing provides the advantage of receiving information early (Burt 2019). Referrals provides the advantage in legitimately provided by close contacts endorsing the broker and the information distributed (Burt 2019). Access adds a layer of complexity, from this two types of structural holes are identified, primary holes based on direct contacts, easily accessible and secondary holes based on indirect contacts, accessed through another person (Burt 1992).

Another consideration for strategic application for the process of exploiting structural holes is the depth of the hole. Burt (1992) explained the depth of a structural hole represents the ease of exploitation for control and information benefits. When the hole is deep between two individuals, the benefits are high because substitutions are inaccessible.

The depth of the structural hole depends on two aspects, the first is the substitutability of brokers, which can be none or many. The second is the cohesion between players, which can be none or strong. Table 9.2. shows a typology of structural hole depth.

Equivalent ties to clusters	Cohesion between players (brokers/alters)	
	None	Many
None	Hole	Shallow
Strong	Deep hole	No hole

Table 9.2. The depth of a structural hole between two players.

The most lucrative structural hole occurs when no cohesion or substitution exists. If there are no substitutions or cohesion between contacts, the broker is free to impose demands. The ability to exploit deep structural holes is a strategic resource that is valuable, rare, inimitability, and non-substitutability framework for SCA (Barney 1991).

Burt (1992) explained an alternative scenario that compliments monopolistic markets (Wernerfelt 1984). If the alter is in collusion with substitute alters, the colluding party of alters stop the unfolding of structural holes and are free to impose demands on the brokers. Within the structural hole the biggest threat to a broker is alter withdrawal, that essential dissolves the network (Burt 1992).

#### 9.1.3. Industry setting

Social capital is perceived as a source of innovation due to the role of information between ties and the idea of structural holes (Lundvall, et al. 2002). The industry setting is important because it represents the cluster of relations involved in the business. Customers, competitors and suppliers form external social capital, providing sources of non-information used for innovation (Lundvall, et al. 2002; Walker, et al. 1997).

Interestingly, the nature of the network is dynamic and depends on the state of the industry (Walker, et al. 1997). Burt (1992: 86) observed multiple industries and the occurrence of structural holes between and within them over a long period. A long period was required to avoid observing short term disturbances.

Burt (1992) measured the structural holes by calculating the market share of the top four firms, creating a term called constraint concentration. When the constraint concentration is high the level of structural holes were low, due to fewer transactions in the market (Burt 1992: 91). The higher concentration of buyers decreased profit margins due to the constraint enabled from the lack of substitutions. The structural hole measurement calculated by the number of firms in the market and their market share.

The limited substitutions constrained businesses due to the volume of goods bought by fewer buyers. A consequence of a high concentration was increased stability due to the handling of a high volume of goods required planning and investment rather than impulse and entrepreneurship, implying the importance of network formation. The power of the large buyers provided suppliers with planned high-volume orders. The reverse was true, the lower concentrated industries resulted in a low level of constraint that was characterised by higher profit margins, more transactions, and lower volume per transaction. The structural holes occur at the intersection of relations, it is their exploitation what creates inequality among organisations (Burt 1992: 186). Walker, et al. (1997) discussed the uneven distribution of networks, the extreme being monopolistic markets (Porter 1985; Wernerfelt 1984). Walker, et al. (1997) found the industry's stage in the industry life cycle to be influential. The early positioning of businesses in the formation of the network usually placed them in a brokering position to exploit structural holes. This is due to the early incumbent's tacit knowledge of the industry.

Furthermore, structural autonomy is where the existing incumbents have a greater control in the structure, inertia works against change because it may mean the connected buyers and suppliers lose their autonomy. Thus, resistance to change and a preference for past practices perpetuate existing incumbents position (Burt 1992: 195). Knowledge push creates change by pushing the frontiers of science forward (Tidd and Bessant 2014: 234). But structural autonomy antagonises knowledge push and potentially explains why scientific breakthroughs don't all successfully commercialise (Westland 2008).

In addition, technological changes induce changes in market relations (Burt 1992: 194). The displacing of old industries is the core of Schumpeterian logic (Schumpeter and Backhaus 1934). An unanswered empirical question is how frequently the levels of structural autonomy change over an industry's life cycle. Existing work has concentrated on entrepreneurs (Burt 2019; Butticè, et al. 2017; Rooks, et al. 2016) but not older, early incumbent organisations that are fixed in an existing network. Therefore, the context of multigenerational family agribusinesses in the UK was an interesting context to see what affect external social capital had on the business.

Furthermore, the call for future studies is to conduct a sector study to know more about external social capital (Carnabuci and Diószegi 2015: 898). Previously, Zavyalova, et al. (2016) used an industry perspective to observe social capital and called for future studies to consider where and when social capital may be important. Also, the question of what makes a network effective remains relatively unknown (Hernández-Carrión, et al. 2017). Kwon, et al. (2020) recommended future studies to take a perspective considering the whole network and how brokers change over time. An SME organisation is appropriate because the owner/manager represents the organisations social capital as a strategic resource (Hernández-Carrión, et al. 2017). The family agribusiness sector aligned with the calls from the literature and next three sections present the findings related to eFSC.

## 9.2. The employee relations

This section presents the first aggregate dimension, changes in employee relations. Figure 9.3. shows the dimension, second order themes and tables of first order codes.

Figure 9.3. The  $1^{st}$  aggregate dimension employee relations, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.



The dimension has three second order themes: the reduction in the required employees, communication change, and increased value of employees.

## 9.2.1. The reduction of the required employees

Reduction of employees relates to the reduced number of employees. Table 9.3. includes the first order codes and supporting quotes. This study found a reduced number of employees has occurred due to technological advances in the business, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant J1*).

This reduction is anticipated to continue, for instance:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Z1*).

However, this process is slow due to the difficulty of implementing automation, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant I1*).

Additionally, this study found a decrease in contact time with the remaining employees, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

Furthermore, this study found a shift from local recruitment to European country recruitment, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

Table 9.3. The 1<sup>st</sup> order codes and supporting quotes related to the reduction of the required employees.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Technological advance
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Continuation
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Challenges
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Contact time
[Redacted due to sensitivity and confidentiality issues: contact author for full	European
version]'	recruitment

Overall, this study found fewer employees were required due to increased automation. This is expected to continue, despite automation is proving difficult to implement. The study also finds employees spend less time at work and they tend to be recruited from Europe rather than locally.

## 9.2.2. Existing work related to the reduction of the required employees

I found a reduction of employees because they were replaced by and not retained. For family businesses to retain employees with similar characteristics and values, it must have employees. In contrast, to remain competitive they must invest in machinery to become more efficient. Current technological change is affecting the likelihood of this FSC advantage, in the form of retaining employees, to exist.

Additionally, another consequence of reducing employees is the potential source loss of innovation. Employees are considered to be a source of innovation through the combination of information, they are non-redundant sources (Lundvall, et al. 2002). Whereas a machine is the outcome of innovation not the source of innovation. Thus, the information a machine provides is fixed and is not processed with human imagination. Furthermore, locally recruited employees embed the family businesses in rural communities (Basco 2015). However, I found in some places the opposite, employees are recruited from Europe. Thus, this removes the overlap with stakeholders that ensured the survivability of the organisation (Arregle, et al. 2007; Basco 2015). Furthermore, a recent study speculated a possible disruption to future European recruitment (Phillipson, et al. 2020), which I found this would be a problem for the family businesses included in the sample.

#### 9.2.3. The different forms of communication

Employee relations describe the different forms of communication that emerge to manage employees. Table 9.4. includes the first order codes and the supporting quotes. Communication between employees and participants have changed. This study found employees were replaced by devices to report information, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participants P1*).

In another way, this study found information communication technology (ICT) replaced social interaction when managing employees, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant D1*).

This study found the importance of formal communication has increased, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant B1*).

This study found the emergence of regulation around managing employees, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant B1*).

This study found devices and ICT replacing the social interactions with employees. Also, a shift in the importance of communication and the emergence of regulation on how to manage employees.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Devices
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Software
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Increased formal communication
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
-	Regulation

Table 9.4. The 1<sup>st</sup> order codes and supporting quotes related to the different forms of communication.

9.2.4. Existing work related to the different forms of communication

Employees are viewed as a source of innovation because they provide local information (Jack 2005; Lundvall, et al. 2002). However, in some cases I found employees have been replaced by software and information, reducing the density and pattern of social relations (structural dimension), a prerequisite for combination capability of information to create knowledge. Furthermore, if family members manage employees with the software it decreases the level of interaction giving fewer opportunities to exchange ideas.

# 9.2.5. The value of employees

The value of employees is the business owner's sentiment towards good high performing employees. Table 9.5. includes the first order codes and supporting quotes.

of employees.	Table 9.5. The 1 <sup>st</sup> order codes and supporting quotes related to the increased value	
	of employees.	

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Difficult to find
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Development
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Long term employees

This study found participants anticipated difficulty in finding new employees, for example:
'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant T1*).

Despite difficulties in finding staff, the importance of staff was high, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant 1C*).

Also, participants expressed longer social relations with employees because they valued them:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant B1*).

This study found the difficulty of finding employees, the importance of them, how to develop them, and the value of long-term employees to participants.

9.2.6. Existing work related to the value of employees

I found many participants had difficulties finding employees despite their importance to the business. Employee recruitment is an expected problem of rural businesses (Finke and Bosworth 2016). However, given the importance of good employees to remain innovative (Rothwell 1977), I found family businesses wanted to retain the employees once found. It is unsurprising that family members end up in key roles due to the lack of alternatives because of the difficulty finding employees.

## 9.3. The customer relations

This section presents the second aggregate dimension, customer relations. This dimension has three second order themes: consolidation of customers, power dynamics, and expected change. Figure 9.4. shows the dimension, second order themes and tables of first order codes.

#### 9.3.1. The consolidation of customers

The consolidation of customers is based on the reduced number of customer relations. Table 9.6. includes the first order codes and supporting quotes. The number of customers has reduced, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Z1*).

This study found, the relations with customers used to be more frequent and customers were closer by proximity, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant W1*).



Figure 9.4. The  $2^{nd}$  aggregate dimension customer relations, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.

This change may lead to depleted communities, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant R1*).

In contrast, some participants prefer the new structure, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Z1*).

Cutting out all the middlemen significantly reduced the number of customer farmers interact with. This theme found a consolidation of customers due to the emergence of supermarkets. The concentration of customers meant farmers were no longer bound by proximity because supermarkets buy all the products and redistribute them around the UK. Therefore, this study found depleted communities, and in some cases a preference for the new structure.

Table 9.6. The 1<sup>st</sup> order codes and supporting quotes related to the consolidation of customers.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Increased
	concentration
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Access to markets
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Decreased smaller customers
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Limited options

## 9.3.2. Existing work related to the consolidation of customers

FSC overlap with stakeholders apparently increases the survivability of the business (Arregle, et al. 2007). In contrast, I found a loss of ties, especially as the buyer's industry concentration increased (Burt 1992). This somewhat answers the importance of when and where social capital occurs. I found it manifested in a smaller network as the buyer's increased their market share.

Furthermore, the loss of ties reduces the input of non-redundant information. The number of sources of information in the new network is significantly less when compared to the number of sources of information in the old network, when wholesalers existed. The old network provided deep structural holes providing opportunities for entrepreneurial behaviour such as selling new crops. The new network removes the ties, and the opportunities because the big buyers are only interested in volume, limiting innovation to process innovation.

Moreover, I found the loss of ties meant the social network has been depleted, aligning with previous studies (McElwee, et al. 2017; Putnam 1993). McElwee, et al. (2017) conceptualised community depletion based on the eradication of resources creating social problems. I found the lack of community reduced closure, a prerequisite of social capital (Coleman 1988).

#### 9.3.3. The power dynamics of customers

The second theme of customer relations is the change in power dynamics. Table 9.7. includes the first order codes and supporting quotes. This study found participants recognised a change in power dynamics, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant Z1*).

This study found the changed power dynamic may create tension, for instance:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

This study found a source of this tension maybe due to extra pressure on participants business models, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant V1*).

This study found adding pressure was customer expectations, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant I1*).

This study found as a response some participants would actively avoid working with supermarkets, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant S1*).

This study found some participants who avoided supermarkets started farming attractions alongside their farming activities and saw an increase in customers, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

Table 9.7. The 1<sup>st</sup> order codes and supporting quotes related to the power dynamics of customers.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Less power
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Tension
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Pressure
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Expectations
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Vulnerable
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Alternative

This study found an increase of customer power created tension and pressure for farmers. In addition, customer expectations increased expectations. To deal with this situation, some farmers avoided supermarkets, and instead entered the tourism industry. All these aspects contribute to the power dynamics of customer relations.

9.3.4. Existing work related to the power dynamics of customers

Existing studies have documented the imbalance of power in the agriculture value chain (Burch and Lawrence 2005; McMichael 2013). I found this relates to the theory of structural holes. A reduced number of buyers of crops has increased customer concentration, giving supermarkets structural autonomy. This is enabled by supermarkets being able to substitute UK farms with European (EU) farms. Their decision making is characterised by profit maximisation. For example, if a farm can produce cheaper products abroad then rationally, they are the supermarkets preferred choice and they have no obligations to UK farmers.

Thus, to remain competitive, I found farms are doing more for the same amount of money, they are increasing in volume to maximise economies of scale for the

supermarkets, who prefer to buy in bulk. However, to continue to remain competitive machinery is required that requires financial capital. This represents an industry with a high level of constraint. If the investments are not made, another supplier is available for supermarkets.

Rothwell (1977) identified a needs pull innovation as a characteristic of global innovation systems, but Lundvall, et al. (2002) warns how these global innovation systems undermine social capital. I found the needs pull innovation of supermarkets to provide widely available year-round low-cost food is at expense of the environment. In a purely economic situation, the situation is not problematic. But recent pressure from scientists to reduce carbon emissions (Benton 2020) means supermarkets should integrate the sustainability of buying locally. Therefore, the environment aligns with the social capital logic towards reducing emissions and supporting UK farmers.

Furthermore, study found the supermarkets hold the customer information as a result, participants have lost contact with the consumers. The gap between producer and consumer has widened and this may result in less innovation capability because of the inability to share knowledge with customers (Lundvall, et al. 2002; Willem and Scarbrough 2016).

As an alternative, Phillipson, et al. (2020) identified different strategies rural businesses may pursue, rather than changing their business to meet the supermarkets needs. I found the attraction strategy was popular amongst respondents as a response to external pressures imposed by supermarkets. This is a testament to the entrepreneurial activity of farmers previously discussed by McElwee (2006).

#### 9.3.5. The expected change

The expected change includes the anticipated change expressed by participants. Table 9.8. includes the first order codes and supporting quotes.

- able die. The the order bedde and eupperling quetee related to the expected change	
Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	New channels
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	New territories
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	New products
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	New schemes

Table 9.8. The 1<sup>st</sup> order codes and supporting quotes related to the expected change.

The relationship with customers is anticipated to change because of e-commerce, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant O1*).

Furthermore, future customer relations are thought to reverse preferring imperfect but environmentally friendly source foods, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant V1*).

This study found participants anticipated customer relations in new territories are likely in the future, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

Additionally, this study found governments to be encouraging participants to create new forms of income through schemes, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

This study found the expected change is due to e-commerce, changing expectations, new territories, new products, and new government schemes.

9.3.6. Existing work connected to the expected change

Expected change in customer relations creates new opportunities (deep structural holes) for businesses, and requires new investment into social networks (Adler and Kwon 2002). This situation could generate huge entrepreneurial opportunities.

McElwee (2005) recognised the change in farmers' strategic orientations refocusing on energy, tourism, and house sales as different sources of income. I found farmers to be quite dynamic when generating revenue. The main problem was that the volume supermarkets demanded drastically outweighed alternative sources of income. However, it depended on the objectives of the businesses, as previously discussed some participants actively avoided supermarkets. Additionally, Chirico, et al. (2011) proposed family businesses would look specifically for family businesses when franchising abroad; yet I found an indifference of participants in dealing with family or non-family businesses.

# 9.4. The outside experience of family members

This section presents the third aggregate dimension, outside experience. Figure 9.5. shows the dimension, second order themes and tables of first order codes. It is acquired by family members experience outside of the business and helps recognise structural holes. This dimension has three second order themes: generating skills, ideas, and connections.

Figure 9.5. The  $3^{rd}$  aggregate dimension outside experience, the  $2^{nd}$  order themes, and the tables of  $1^{st}$  order codes.



## 9.4.1. The generation of skills

The generation of skills can be gained through outside experience, this varies depending on the type of experience. Table 9.9. includes the first order codes and supporting quotes.

This study found that management experience generates skills for people management, hence:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant S1*).

This study found another type of experience was attending the relevant courses to develop specific skills, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant T1*).

Also, this study found more experience out of the business generated professional skills, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant K1*).

This study found skills developed from outside experience were integrated into the business through marriage, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant W1*).

Overall, the study found a range of skills developed from a variation of outside experiences.

## 9.4.2. Existing work related to the generation of skills

I relate the generation of skills to support the combination capability in the process of knowledge creation (Appendix E). This occurs because knowledge has been acquired out of the business and brought back then utilised by the key managers, the family members. This relates to Penrose and Penrose (1958: 51) who explained the relevance of personal experience in a management team, it provides skills to help the business grow and innovate. I found family members who gained experience and then joined the management team performed because they had skills gained from outside experience.

Sardeshmukh and Corbett (2011) claimed general work experience to be detrimental and management experience to be advantageous. I found time outside the business is beneficial, regardless of what it is, but acknowledge a professional skill has more value than general skills. In relation to the rural business literature, McElwee (2005) identified professional management as a necessary skill for family farmers. In alignment with this, I found outside experience is a good wat to generate professional management skills.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
version	Management
	skills
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Leadership skills
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Professional skills
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Previous career

Table 9.9. The 1<sup>st</sup> order codes and supporting quotes related to the generation of skills.

## 9.4.3. The generation of ideas

The generation of ideas is the evidence that outside experience helps stimulate ideas. Table 9.10. includes the first order codes and supporting quotes. This study found the generation of ideas came in various situations.

Table 9.10. The 1<sup>st</sup> order codes and supporting quotes related to the generation of ideas.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full	Different
version]'	business
	models
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Different
	context
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Different way of
	doing things
[Redacted due to sensitivity and confidentiality issues: contact author for full	
version]'	Disappointment

This study found one situation is seeing different business models in similar contexts, for instance:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant T1*).

Alternatively, this study found the reverse situation, seeing similar business models in a different context. For example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant A2*).

This study found generating ideas can be done in a formal setting through an official program, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant X1*).

This study found that participants often gained different perspectives on how things are done, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (Participant A2).

This study found participants who did not have outside experience expressed disappointment, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

Overall, this theme found outside experience generated ideas by finding models in a similar context or the same business model in a different context. In addition, it found this can be done in a structured program. This provided an understanding more than one way of thinking exists and to avoid rigid perspectives. In addition, participants who did not have outside experience expressed disappointment.

## 9.4.3. Existing work related to the generation of ideas

Jaskiewicz, et al. (2015) found outside experience benefitted the business by exposing family members to the latest practices. I found participants adapted their business models incrementally by imitating similar business models they have seen in different contexts or different business models in the same context. It may counter the constraints imposed by supermarkets. This supports the assertion claiming family businesses prefer to incrementally innovate (De Massis, et al. 2015). I found that the continuous access to similar businesses helped progress their own businesses. Additionally, this supports McElwee (2005) because it shows evidence of how the necessary opportunity skills are developed.

## 9.4.5. The generation of connections

The third second order theme is generating connections, the evidence that suggests outside experience helps generates connections that can be used as non-redundant information. Table 9.11. includes the first order codes and supporting quotes.

Quote	Code
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Joining governing bodies
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	Helping communities
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	School friends
[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
	Previous jobs

Table 9.11. The 1<sup>st</sup> order codes and supporting quotes related to the generation of connections.

This study found outside experience generates connections in various ways. One way is by joining governing bodies, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant H1*).

This study found another way of generating a connection was helping communities during societal crises, hence:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant P1*).

Furthermore, another way of generating a connection is through the next generation's education. For example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant C1*).

The findings show that the connections made tend to be long term, for example:

'[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participants Q1*).

Additionally, the study found that previous jobs helped generate connections, for example:

[Redacted due to sensitivity and confidentiality issues: contact author for full version]' (*Participant E1*).

This study found generating connections was done through joining governing bodies, helping communities, and the children's education.

9.4.6. Existing work related to the generation of connections.

I found generating connections is a way of identifying deep structural holes, building on the existing literature, it gave access to alters who possessed non-redundant information. The exchanges occurred in a setting absent of hierarchy and low in density (not every day) such as governing body meetings, community gatherings, or charity events. This details literature that identified external social capital to be influenced by networks constraints, density, and hierarchy (Burt 2000).

McElwee (2005) recognised the importance of social network skills for family farmers, this study shows how they are developed. Newbery, et al. (2015) surveyed members of local business associations findings members, who outgrew the small business status and owned large businesses continued to a member of the associations. I extend this by explaining why this is the case; these interactions can help counter the forming of structural holes. Counter structural hole strategies involve family members making connections outside of their own business and direct customers.

# 9.5. Discussion

The section explains the contributions made to FBR, social capital, and rural business literature. The findings articulate the bathtub analogy with eFSC representing the

cold-water inflow. If the water is too cold the bathtub, will become too cold and unusable. Consequently, the unusable FSC will contribute towards SCA.

#### 9.5.1. Family business research

The two main contributions to FBR involves the use of outside experience, supporting and improving theoretical propositions. Firstly, outside experience connecting to Sanchez-Ruiz, et al. (2019) who measured the successor's level of outside experience as a factor of FSC. I found that outside experience helps to generate skills, ideas, and connections and increasing the level of FSC.

Furthermore, I found the outside experience extends beyond family members to employees. Exposure to information helps them understand how the business relates to other businesses. Both forms of outside experience of family members and employees adds credit to the proposition formed by Arregle, et al. (2007):

# FSC influences the development of a family business's organisational social capital through social network overlaps (Arregle, et al. 2007: 82).

This ensures a constant source of connections occur and renew for the business to utilise non-redundant information. The use of outside experience enhances the strategy of the organisation and the likelihood of exploiting structural holes.

This proposition is disproved due to the loss of customers and employees. I recognised the loss of customers over time. The loss reduced the pattern and strength of ties with the external world. Consequently, this reduced the chance of appropriating non-information through network overlaps. The loss of communities reduced the rural advantages FSC offers regional development (Basco 2015).

#### 9.5.2. Social capital literature

The contributions to the social capital literature relate to ties, structural holes, and industry setting discussed earlier in the literature. I found changing relations with customers and employees removes structural holes. The loss of community bonds has a negative impact on the potential opportunities gained through bridging relations with people outside the business. This removes potential structural holes because less brokers and alters are on the circuit.

Additionally, I found the introduction of supermarkets caused the loss of communities. I found it shifts the power dynamics and undermines the value of social capital (Lundvall, et al. 2002). The increased power of supermarkets allows them to become the brokers who can implement "tertius strategies" to manipulate farmers or substitute them with international competitors. The consequence of this is yet to be seen. But, it promotes an awareness to the larger picture, or the whole network (Kwon, et al. 2020).

From a strategic perspective, I found the power of supermarkets is perpetuated by their connections with EU suppliers. This provides them with a larger number of alters. Consequently, farmers with a lack of substitute buyers, due to the volume of a single crop, based on specialisation, face a high level of restraint. This is intensified by the cost of equipment increasing to remain competitive. Under a high level of constraint, the capacity to pursue innovate and introduce new products or change customers decreases because of the financial capital and payback periods.

In addition, this is coupled with the human capital and tacit knowledge belonging to the crop that is being grown, aligning with the relativity of strategizing (Wernerfelt 1984). Therefore, strategic directions have a pathological nature, shaped by past investments. This makes strategic thinking difficult to uproot and to go down a different path if a business is socially, financially, and intellectually invested.

On the other hand, outside experience encouraged the connection of generations and increased brokers competencies of exploiting structural holes (Burt 1997). This helped counteract the pressure from supermarkets by incrementally moving away from high dependent situations. I found outside experience helped this process and can be integrated into family business strategy to act as a strategic resource.

From a broader perspective, this study shows how social capital theory is affected by technology. In this context, technology reduced the social interactions with customers and employees, it removed access to parties for exchanging and combining information to either, create knowledge or exploit structural holes. This relates to Bourdieu (1986) who identified social capital and economic capital as separate forms. I observed that environmental interests aligned with social capital rather than economic capital.

This reflects a broader trend of technological change and economies of scale are concentrating power a few large companies. In this context the increasing economic forms of capital acquired for large supermarkets has introduced efficiencies that have decreased social forms of capital and increased environmental degradation in the uniformity of crops (Benton 2020).

#### 9.5.3. Rural business literature

The discussion and contributions to the social capital relate to the contributions of to the rural business literature. I found the economic expansion of supermarkets has an environmental impact through increased uniformity of crops grown; this reduces biodiversity (Benton 2020) and ties into the United Kingdom's (UK) productivity crisis (BEIS 2017).

I found mixed evidence to support the idea that rural SMEs are thought to have a greater productivity compared to urban SMEs (Phillipson, et al. 2019; Tiwasing, et al. 2019). The increased productivity is due to increased automation, depleting social capital and gaining higher yield from the land, depleting natural capital. Therefore, it aligns with thinking that economic capital has come at the expense of social and environmental capital (Rogers, et al. 2012).

I found, on the one hand, an idea that productive sustainable business ventures could be achieved through renewable energy programmes, local produce through a local farm shop, farm attractions to increase community wellbeing. Whilst, on the other hand, I found a continuous investment in high-tech farming will eventually prevail as sustainable through continuous improvements.

Nevertheless, it supports the need for farmers to diversify. In regards to whether rural businesses are innovative, this study found rural family businesses will actively seek new customers rather than tolerate the pressures imposed by supermarkets; aligning with recent previous work by De-Rosa, et al. (2018).

This is relevant to Phillipson, et al. (2020) who called for more opportunities based on recombining capital. However, this study found this to be difficult due to the customer concentration and reduction of employees. This reduced the combination capability required for the generation of knowledge and thus innovation. In addition, the limitations of the natural capital will always be a factor in rural businesses compared to urban businesses.

# 9.6. Chapter 9 summary

This chapter has answered the research question how does the eFSC affect rural family businesses. It used to extend the bathtub analogy by presenting eFSC as the cold water tap, if the levels of eFSC deplete too much the bathtub will become too cold and unusable. Illustrating it is not only the level of FSC or the iFSC, but also the eFSC that is important to consider when thinking about FSC as a resource for SCA.

The final section presented the contributions to the literature. The contribution to FBR was the dissembling of the FSC process the overlap with stakeholders due to

changes in technology and the industry. This was unthought of in previous conceptual contributions.

The contributions to the social capital literature was how technological change can fill and form structural holes, answering calls from Kwon, et al. (2020) for a whole network perspective. The contribution to the rural business literature was the external perspective of social capital recognising a potential economic problem for family farms. Supermarkets as network brokers have increased in power over time meaning family farms had fewer opportunities related to food production. It also explained the lack of productivity in the industry and the growing environmental pressures.

# Chapter 10. Contributions, future work, and limitations

This chapter summarises the last three chapters of findings and explains the contributions made to the literature, practice, and policy. Specifically, to the literature, the research contributes theoretically, empirically, and methodologically. The theoretical contribution is the integrated framework of family business, synthesising the last three chapters explaining the family social capital (FSC) bathtub analogy. This helps family business research (FBR) by synthesising previous applications of systems-agency theory, resource-based view (RBV), and social capital theory.

This research makes a methodological contribution because it used a grounded theory (GT) method transparently and rigorously. This can be used by researchers in the future in other topics in a similar position to FBR. A reflective note is offered by the researcher in retrospect of completing a GT study.

The empirical contribution to FBR and rural business literature responds to the call for more in-depth qualitative studies. This empirical study builds on conceptual studies and strengthens the argument for researching the phenomenon of family business. The empirical evidence strengthens the argument that family businesses have different skill, education, and development needs.

The second section of the chapter presents the contributions to practice. This asserts the integrated framework can be applied to as a diagnostic tool to assess family businesses to help them understand their internal family social capital (iFSC), external family social capital (eFSC), and the anticipated inflow and outflow through temporal assessment. This is a tool to identify the relevant education, learning, and skills to develop their business.

The third section of the chapter presents the contributions to policy. The first part explains the recommendations for family business policy. This is to implement outside experience schemes for next generation family members. This addresses the first initiative mentioned in the introduction 'identifying relevant education, training and skills needs [of businesses]' (CABS 2018). The second part explains the recommendations for rural businesses. This is to find alternative land uses and to find ways to export. This addressed the second initiative mentioned in the introduction 'identifying relevant education, training and introductions for rural businesses. This is to find alternative land uses and to find ways to export. This addressed the second initiative mentioned in the introduction 'intra and organisational processes and systems to support innovation' (CABS 2018).

The penultimate section of the chapter recommends future work and the limitations. This is to build on this theory to understand how it relates to other concepts related to the phenomenon. The final section summarises the chapter.

# 10.1. Contributions to the literature

This section explains the theoretical, methodological, and empirical contributions. Chapter 4 identified FBR at a stage of development similar to a child in language acquisition (Aitchinson 1987) and identified the need for meaning for appropriate packaging and network building for theoretical clarification. Table 10.1. shows how this research has addressed the identified characteristics of the packaging and networking stage for FBR.

Stage	Before research	After research
Stage 2: Packaging	<ul><li>SEW,</li><li>"Familiness"</li><li>FSC</li></ul>	10.1.1. Theoretical contribution: The integrated theory of family business.
	Unclear outcome (+/-)	• 10.1.1. Theoretical contribution: It can be either, a positive or
	• Automatic assumption that a family business possesses unique characteristics.	negative outcome depending on the balance of iFSC and eFSC, represented in the bathtub analogy.
3: Network building	The evidence used.	<ul> <li>10.1.2. Methodological contribution: expert interviews of multigenerational family businesses generating new insights.</li> </ul>
Networ	• Optimal states and/or conditions for the characteristics to thrive.	<ul> <li>10.1.1. Theoretical: preservation of FSC and the optimal balance of iFSC and eFSC.</li> </ul>
Stage 3:	Absence of contextual factors.	<ul> <li>10.1.3. Empirical contribution: participants from a single industry illustrating the eFSC change in customer and employee relations.</li> </ul>
	<ul> <li>When/why/how conditions might change.</li> </ul>	<ul> <li>10.1.1. Theoretical: temporality of FSC, imbalance of iFSC and eFSC.</li> </ul>
	Overlap of survivability capital, patient capital, and social capital	Future research and limitations.

Table 10.2. The FBR development from the contributions of this research.

# 10.1.1. Theoretical contribution

The crux of the theoretical contribution is the integrated framework, clarifying the phenomenon of family business. This somewhat resolves the competing explanation situation in FBR. The integrated theory of family business extends the bathtub analogy from the work of Dierickx and Cool (1989). The integrated framework is presented in figure 10.1.

This research found FSC as a strategic resource builds over time. This makes the phenomenon temporal, and three stages explain this. The three stages of FSC are cultivation, preservation, or decay. Within the bathtub analogy, cultivation is the inflow of water, preservation maintains the water level, and decay is the outflow of water. One snapshot measurement of FSC (water) levels has previously been undertaken by Sanchez-Ruiz, et al. (2019).



This research extends the bathtub analogy by considering the temperature of the water. This is determined by the hot and cold inflows, like preparing a bath, the water cannot be too hot or too cold. water. The hot water represents the iFSC and the cold water represents the eFSC. The aim of a family business is to get the balance the iFSC and eFSC. This enables FSC to be used as a resource gaining sustainable competitive advantage (SCA) and successful transgenerational wealth transfer driven by SEW.

This extends the unified systems perspective Habbershon, et al. (2003) through detailing what is meant by the family system and business systems. The iFSC represents the inner mechanics of the family system and the eFSC represents the inner mechanics of the business system. The optimal balance for a family business is achieved when a balance exists between eFSC and iFSC. This should be preserved by the family.

In addition, this extends socio-emotional wealth (SEW) theoretically because it details how social capital is used in the business. This research proposes when the water is too hot it is detrimental for the business and is likened to the state of permanent failure recognised by SEW (Gómez-Mejía, et al. 2007a). When the water is too cold is likened to the families who are no different from non-family businesses, a likely situation in short-term orientated families (Schulze and Kellermanns 2015).

Furthermore, the anticipation of incoming family members can inform whether the business needs to grow to accommodate new family members. If not, the business will have too much iFSC and not enough eFSC. This adds a dynamic assessment of the family businesses position.

Furthermore, this research shows how both iFSC and eFSC are supportive of the conditions for knowledge creation (Nahapiet and Ghoshal 1998). The evidence of interpretation is shown in appendix E. It shows the optimal conditions when iFSC thrives and supports the conditions for knowledge creation in various forms.

The eFSC supports the conditions in the providing family members with the sources of non-redundant information. Therefore, eFSC helps recognise structural holes to be exploited and the occurrence of fewer opportunities within existing customer and employee relations. This is due to the changing nature of industries over time (Burt 1992) and product life cycles (Barney 1986a; Barney 1986b; Porter 1985; Wernerfelt 1984), both align with the role of aging.

A strategy to counteract this outside experience of the next generation helps. It helps be providing new skills, ideas, and connections that can be used in the business strategy when the next generation join the top management team (Penrose and Penrose 1958). This creates new sources of non-redundant information and structural holes.

Thus, when considered as one, this integrated framework details what is meant by "Familiness" providing SCA (Habbershon and Williams 1999b). Unpacking the inimitable complex social processes through the temporal FSC, iFSC, and eFSC. The optimal blend of the three provides a family business with SCA, extending the original proposition by Barney (1991).

## 10.1.2. Methodological contribution

This research makes a methodological contribution because it used GT. It demonstrated rigor and transparency of the method throughout the research. This contributes methodologically because it can be used in other topics that are at a similar stage of development.

The GT method is an inductive qualitative study offering rich data. More of this is needed in FBR and management research, this research adds to the small amount of identified qualitative studies using primary data. The rich data generated by indepth interviews offered experience of experts as business owners and was unassuming and data driven. The researcher offers a reflexive note:

"I enjoyed the GT method because of the appeal of serendipity driven by my own personal experience. I have seen places I would not have seen if it were not for using a GT method. I think this has benefitted me as a researcher compared to using other methods, because of intensive interviewing, which is best done in person. I am extremely fortunate to have found a unique context in proximity for purposeful sampling. I think premeditation of variance in the sample this is crucial for the GT method. Another crucial point is experiencing intensive data collection and analysis, I was lucky that FBR required a GT method, it required the rich data for comprehensive information to build on the conceptual studies, whereas a more developed topic may have been more informed and difficult to justify. Also, I acknowledge the limitations of this method and liken it to the interviewer as a traveller. I have many journeys ahead to collect more stories and broaden my knowledge. I would couple a GT method with a passion for the phenomenon of interest, because of the countless hours spent with the data and inside your own thoughts trying to work out what is going on."

This research contributes a GT methodology adding to the existing research to extend the language of FBR. This method enabled multiple theories to be considered at one time, qualitative research revolves around the researcher with a head full of theories and intense data collection (Tracy 2010). In addition, it adds to the diversity of FBR in its objective of progressive coherence.

## 10.1.3. Empirical contribution

The research contributes empirically to FBR through the sample. The sample included multigenerational family businesses, the average generation number was 4, higher than previous most empirical studies in FBR. This helped address the overgeneralisation issue identified in Chapter 4 due to empirical research using young organisations. In doing so it was able to clarify some ambiguities of the phenomenon, such as the optimal states and unknow contextual factors. It proposes for any family business to experience SEW, "Familiness", or FSC a period of cultivation is required and therefore is not an instantaneous resource.

Also, the research contributes empirically because the sampling was sensitive to contextual factors. The insensitivity of previous studies did not consider contextual factors. This was achieved because the participants were from a single industry. The single industry was the agribusiness industry in the UK, a unique context to gather rich data. This exploration of the phenomenon was based on rich data. Rich data was collected, analysed, and compared to the existing literature to generate the theoretical contribution.

The research empirically contributes to the social capital literature by responding to calls for qualitative approaches that consider early incumbent businesses, older organisations rather than younger organisations in an industrial setting (Burt 2019; Butticè, et al. 2017; Rooks, et al. 2016). It allowed exploration of the whole social capital theory requested by (Kwon, et al. 2020), expanding thoughts on what makes a network effective (Hernández-Carrión, et al. 2017).

The research empirically contributed to the rural business literature adding an indepth qualitative study (Bosworth and Bat Finke 2019; Finke and Bosworth 2016; Salemink, et al. 2017; Strijker, et al. 2020). This helps understand the position of agribusiness in the sustainability situation (economic vs. environmental objectives). The empirical data shows a myriad of different factors that influence this situation making it extremely complex. Identifying the urgency required for research to solve the problems discussed in sustainability research (Benton 2020).

# 10.2. Contributions to practice

The contributions to practice involve assisting the objectives of CABS (2018). The integrated framework assesses the temporal stage of FSC, the iFSC, and the eFSC. This considered together helps identify the learning needs for family businesses.

From a strategy point of view, it can be used as a tool for family businesses to plan and make inform decisions, such as whether they should stay a family business, based on their anticipated inflow of family members. This is unlikely if they are experiencing preservation and have next generation family members entering the business, so long as the number of family members is proportionate to the number of customers and employees.

Alternatively, if they are experiencing decay and no members are entering the business, they should seize being a family business sooner rather than later. In this situation they should sell the business and can assist them to retain the financial value

of the business. If they do not want to sell the business, they must find appropriate staff to replace exiting family members.

The iFSC perspective evaluates family businesses based on the number of family members, the generation number, and the number of active generations. It helps identify them providing an understanding of their iFSC. If iFSC is high, they are likely to be learning more affectively. For example, a high iFSC might assist in the exploration of the previous business practices and growth paths to unravel potential strategic options. This information can be disseminated by coaching the next generation and listening to the previous generation.

The eFSC perspective evaluates the customer relations, employee relations and the outside experience of next generation family members. This can identify the level of constraint on the business, and if so, outside experience may be necessary, if next generation family members are available. Outside experience helps the next generation of skills, ideas, and connections outside of the family businesses periphery. Using outside experience to learn new skills and connections can help avoid stagnation.

A contribution for rural business practice is to assess whether structural holes are narrowing or widening, based on the level of constraint in the relevant industry. This can help for opportunity recognition and help farmers network. Narrowing structural holes may create connections in places previously unthought of leading to ideas for the business, possibly generated through outside experience. Whereas, widening structural holes may be unavoidable due to technological or industry change, in this case the rural business may be avoid high risk investment by diversifying into other areas.

# 10.3. Contributions to policy

The research makes several recommendations for policy regarding family business and rural business in an attempt to improve their productivity and resolve the productivity crisis (BEIS 2017) in the United Kingdom (UK).

## 10.3.1. Family business

The contribution to policy for family businesses is recognising the different education, skills, and development needs of family businesses (CABS 2018). This policy helps generate outside experience. The multigenerational family businesses included in the sample benefited from outside experience. To help other family businesses maintain

their healthy state and grow, a policy assisting and encouraging exchange between family members is required.

The family member exchange policy is focused on the next generation, and helps the next generation acquire outside experience and has two benefits. Firstly, it creates an opportunity to develop learning, education, and skills for the next generation. Secondly, it creates new links between the family businesses, increasing their network and social capital. Some sensitivity to avoid a conflict of interests will be applied. But the businesses could be matched based on their aspirations meaning different or similar industries or geography, based on their preferences. This could lead to collaboration and complementary strategies in the future. This could be incentivised by governments offering tax benefits for family businesses to exchange members of the next generation for placements. In identifying different education, skills, and development needs this will help improve their productivity as called for by the Business, Innovation, and Energy Department (BEIS) (Graham 2014).

#### 10.3.2. Rural business

The research produces three recommendations for policies connected to rural businesses. All of the recommendations respond to the Government's request for businesses to export more due to the negative balance of payments (ONS 2018). Sustainability concerns are considered due to the occurrence of global warming.

The current situation shows that larger rural businesses adopt a strategy aimed at increasing efficiency due to external market pressures imposed by supermarkets. The long-term viability of this may be difficult given the limitations of natural capital i.e., the land. In this case, the supermarket's power has increased, consequently increasing the level of constraint on rural businesses.

The rural businesses already have a disadvantage due to arguments outlined in the literature, fewer employees, customers, and opportunities. Adding to this, the subsidy policies currently supporting rural businesses are about to be removed (Downing and Coe 2018). This is about to be replaced with the "public money for public goods" policy (Gove 2018).

Therefore, if the Government want to protect farmers and their food security a policy to generate domestic business is recommended. One recommendation is an inwardlooking policy to encourage supermarkets to buy from local businesses instead of importing produce. This could be achieved by imposing restrictions on the amount of food a single organisation (supermarket) can impose each year, increasing domestic demand and thus supporting local produce.

This policy has several advantages. Firstly, it intends to reduce the negative balance of payments and provide local farmers with more opportunities. Secondly, it helps sustainability because buying local will reduce the total distance travelled from field to folk. Thirdly, it increases the biodiversity of the crops grown in the UK (Benton 2020).

Alternatively, if the Government is not concerned with food security, a second policy recommends schemes to encourage new uses of the rural land. The new use of land can address the energy crisis and assist the aim to be energy neutral by 2050 (Government 2019). The land could be used for forestry, solar farms, or wind turbines. This can off-set carbon emissions, introducing forestry payments for converting land into forests and public walkways. Public walkways act as a public good and serve as a contribution to help the current mental health crisis.

A third policy is to generate international business. It would focus on recreating/recombining the resources to serve new markets would increase exports. Helping farmers to export is a viable option (Phillipson, et al. 2020). This research showed farmers were able to generate ideas, connections, and skills through outside experience. By stimulating exports through international family member exchange programme (same as previously mentioned), a positive impact would be a reduction in increased exports reducing the imbalance of payments.

# 10.4. Future work and limitations

This presents the several directions for future work and several limitations of the research.

# 10.4.1. Future work

The future work will focus more on the bathtub analogy, answering what the optimal states. Specifically, the eFSC, what is the likely flow and what influences the flow such as product life cycle, industry concentration, policy/institutional, spatial, legal factors. This will help understand whether different business environments suit different eFSC temperatures. For example, if the industry concentration is high, then fewer new customers can be anticipated, and it may be better to gain outside experience in a different industry.

Secondly, building on this research quantifying the integrated theory is the natural next step of knowledge. To achieve this the numerical value of eFSC needs to be

identified and calculated. Then, both iFSC and eFSC, and the temporal flow can be quantified and comparisons between organisations can be made. However, further questions of the number of customers, employees, and level of outside experience need to be answered in a larger sample. This could then calculate the numerical value, or temperature of the bathwater and identify what the optimal conditions to generate SCA.

Thirdly, more information on iFSC can be sought, aligning with the need for emotions research in FBR. iFSC is represented by the hot water tap, this can be further explored in terms of knowing what is too hot, too much and related to the level of eFSC for the optimal level. This will expand the current levels of FSC identified by previous research (Sanchez-Ruiz, et al. 2019). This will help detail more specifics about the family business configurations in FBR.

Fourthly, the way the iFSC, eFSC and temporality affect innovation in a family business is an interesting area. Finally, the direction concentrates specifically on the agricultural sector and more about how the technologies are adapted and how the decision-making process of whether to invest in technologies is worthwhile. This would include a case study research design and could be part of a knowledge trading partnership (KTP program).

## 10.4.2. Limitations

The research has several limitations. The first limitation is the lack of responses from participants. The sample strategy involved sending 100's of letters to target participants (appendix A). A low response rate followed the sending of letters, a few responded and refused to participate, and even fewer agreed to participate. This limited the number of participants accessed and the quantity of data generated. Nevertheless, enough was found because data saturation was reached in the optimal phase of coding. Data saturation was recognised through the lack of new codes being generated. This led to limited knowledge claims for eFSC (mentioned in future work), the numerical value of eFSC could not be calculated and is saved for future endeavours.

The second limitation is the inability to interview multiple family members (section 5.3.4.). When multiple family members were interviewed potential contradictions were noted in interpersonal relationships. Even though this would have made a very interesting study and detailed the iFSC in greater detail it, in the future this is a potential area to develop.

Another limitation was not interviewing any supermarkets. A finding of this inductive research was recognising the influence supermarkets had on participants personal lives. On reflection, it is acknowledged as a limitation because it would have helped to get a customer's point of view as brokers of structural holes, to check their awareness of this. This would have helped understand social relations from both perspectives and may have led to richer insights.

# 10.6. Chapter 10 summary

This chapter has summarised the contributions made to the literature, practice, and policy. The contributions to the literature were theoretical, methodological, and empirical. The theoretical contribution lies in the integrated framework extending the bathtub analogy. This enabled synthesis and extension of existing theory specifically systems theory, RBV, and social capital theory. Furthering the language acquisition of FBR.

The methodological contribution was due to the use of GT. GT enabled gathering of rich data and led to deep insights that is rare in management research. The empirical contributions appealed to FBR, social capital, and rural business literatures.

The chapter discussed the contributions to practice and policy. It contributes to practice in the application of the integrated framework as a template to assess the state of a family business. It contributes to policy offering several policies for the UK Government to assist family businesses and rural businesses, attempting to alleviate the productivity crisis (BEIS 2017).

The penultimate section acknowledged the further work and limitations of the business. The further work aims to detail more of the integrated framework detailing it and then increasing its generalisability and applicability. The limitations are due to the limited participants and the need for more data to strengthen knowledge claims.

# Chapter 11. Conclusion

This research set out to understand the phenomenon of family business in more detail for the development of family business research (FBR). It adopted a grounded theory (GT) method and created an integrated theory of family business explaining the phenomenon by extending previous work, using empirical evidence, and acquiring new language. This clarifies theoretically that the phenomenon of family business is distinct. The integrated theory is useful and supports the Chartered Association for Business schools (CABS) research objectives in supporting the United Kingdom (UK) Government with several initiatives.

The first initiative is to help identify the different education, skill, and development needs of UK businesses (CABS 2018). The integrated theory offers an assessment tool for family businesses. It analyses their internal family social capital (iFSC), also known as the family system. As well as their external family social capital (eFSC), also known as the business system. It also considers the temporality of family social capital (FSC). All three combined can be a resource that delivers sustainable competitive advantage (SCA) (Habbershon and Williams 1999b). The integrated theory details the relationships found in the business and illustrates their relative stage. This develops the phenomenon of family business by adding to the understanding of what makes it unique, the overlap of the family and business system (Gersick, et al. 1997). This in-depth understanding enables the learning, skill, and development needs to be identified and acquired.

The second initiative is to help identify inter and intra organisational processes that support innovation (CABS 2018). This was done by explaining how social relationships provide non-redundant information that contribute to the creation of knowledge, leading to SCA. It explained how this changes over time due to the empirical setting of the research enabling a whole perspective of the industry (network) (Kwon, et al. 2020). This identifies the importance of staying up to date with changes from the outside world and identifies the process of acquiring non-redundant information.

This was done in a rural setting an fulfilled the identified intertextual research gap. This research filled this gap by considering rural family businesses and FBR. It identified the three most popular theories in FBR and the need to develop theoretical language, like a child acquiring new language (Aitchinson 1987). Existing research used agency theory, resource-based view (RBV), and social capital theory. FBR packages concepts into socio-emotional wealth (SEW), "Familiness", and FSC. In turn, creating a competing explanation situation due to the overextensions, overgeneralisation, overlap and contradictions of existing theory.

The theoretical overextensions and overgeneralisations were not helped by existing empirical research that seldom considered the generation number of the family business. Thus, the insights generated were limited because the methods were not sensitive to the complexity of the phenomenon.

Therefore, it was important to pursue a GT method, because it enabled purposeful sampling to interview multigenerational family business owners as experts of the phenomenon. Thus, a deliberate iterative process between data collection, data analysis, and reviewing the existing literature was performed. Chapter 6 explained the different phases of the research and how the categories developed over time. This led to a final analytical pull that brought all the categories together synthesising with existing theory and creating the integrated framework.

The integrated framework extended the bathtub analogy of strategic resources (Wernerfelt 1984). The first part introduced the temporality of FSC. The temporality of FSC identified the resource was not instantaneous and in fact certain events must take place to cultivate FSC. This is followed by a stage of preservation, that helps preserve the resource, once it reaches a sufficient instrumental level, to become a resource that generates SCA (Sanchez-Ruiz, et al. 2019). Alternative or eventually a process of decay occurs due to certain factors.

The bathtub analogy was extended to include the matter of temperature. Temperature is adjusted due to the hot and cold-water taps. Internal FSC (iFSC) represents the hot water tap and the family system of the business. A bath that is too hot is unusable, the research proposes neither is a business with too much iFSC. The balance between the stocks of resources has previous been discussed (Sharma 2008). This research extends this by detailing the factors of the iFSC: the number of family members, the generation number, and the number of active generations.

External FSC (eFSC) represents the cold water tap and the business system. A bath with too cold water is not good either, neither is a business without sufficient eFSC. This changes over time and needs rejuvenating using outside experience of next generation family members. The co-existence and balance of iFSC and eFSC creates an optimal temperature of the bath. The is preserved at a certain level to ensure it can be used as a resource to deliver SCA. However, an exploration of eFSC is needed in future research.

This research extends the understanding of the phenomenon of family business and contributes theoretically. Chapter 10 identified the contributions to theory, practice, and policy. It contributes theoretically introducing the integrated theory of family business. It contributes methodologically due to the in-depth interviews used in GT, that are relatively rare in management research. It contributes empirically because it used a unique sample and shed light on issues such as sustainability and the economic mechanism behind supermarkets.

This research contributes to practice with the application of the integrated framework to use as a tool for family business strategy. The contributions to policy were contingent on UK Government initiatives but each one was aimed to improve productivity. The limitations of the research and directions for future work were discussed.

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## Appendices



# Appendix A. Letters to participants



Appendix B. Coding Rigor







### Appendix B figure 2. Images of coding during the progressive phase.

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Appendix B figure 3. Images of coding during the optimal phase.





# Appendix C. Evidence of Interpretation for the temporality of FSC

Appendix C. Table 1. Evidence of the interpretation for the cultivation of FSC.

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Appendix C. Table 2. Evidence of the interpretation for the preservation of FSC.

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#### Appendix C. Table 3. Evidence of the interpretation for the decay of FSC.

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В	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
С	<ul> <li>[Redacted due to</li></ul>	<ul> <li>"[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]"	version]'
D	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>	[Redacted due to
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
E	<ul> <li>[Redacted due to</li></ul>	<ul> <li>"[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]"	version]'
F	<ul> <li>[Redacted due to</li></ul>	[Redacted due to	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
G	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>	[Redacted due to
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
Н	<ul> <li>[Redacted due to</li></ul>	<ul> <li>"[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
I	<ul> <li>[Redacted due to</li></ul>	[Redacted due to	[Redacted due to
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:

	1	contact author for full		contact author for full		contact author for full
		version]'		version]'		version]'
J	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
К	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]"	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
М	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
N	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
0	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ρ	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]"	•	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Q	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
R	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
S	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Т	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
U	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	•	"[Redacted due to sensitivity and confidentiality issues: contact author for full version]"	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
V	•	[Redacted due to sensitivity and	•	[Redacted due to sensitivity and	•	[Redacted due to sensitivity and

	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
W	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'
Х	<ul> <li>[Redacted due to</li></ul>	<ul> <li>"[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]"	version]'
Y	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>	<ul> <li>[Redacted due to</li></ul>
	sensitivity and	sensitivity and	sensitivity and
	confidentiality issues:	confidentiality issues:	confidentiality issues:
	contact author for full	contact author for full	contact author for full
	version]'	version]'	version]'

# Appendix D. Evidence of interpretation for the iFSC

Organ isation	Number of family members	Conflict management	Succession practices
A	13	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
В	5	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
D	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
E	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Η	7	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
I	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
K	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Μ	3	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ν	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
0	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ρ	1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Q	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
R	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
S	5	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

Т	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
U	1	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
V	5	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
W	6	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Х	4	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
Y	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

Appendix D Table 2. Evidence of the interpretation of the density of iFSC.

. Orga nisati	Generati on number	Growth paths	Previous business practices
A	3 <sup>rd</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
В	3 <sup>rd</sup>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
С	6 <sup>th</sup>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
D	3 <sup>rd</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
E	4 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	4 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	5 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Н	4 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
I	6 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	3 <sup>rd</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
K	3 <sup>rd</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	2 <sup>nd</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
М	4 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>

Ν	7 <sup>th</sup>	[Redacted due to sensitivity and confidentiality issues: contact author for	[Redacted due to sensitivity and confidentiality issues: contact author
		full version]'	for full version]'
0	6 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
_	_	confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
Р	3 <sup>rd</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
Q	4 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
R	4 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
S	3 <sup>rd</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
Т	5 <sup>th</sup>	[Redacted due to sensitivity and	<ul> <li>[Redacted due to sensitivity and</li> </ul>
		confidentiality issues: contact	confidentiality issues: contact
		author for full version]'	author for full version]'
U	1 <sup>st</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
V	4 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
W	6 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
1		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
Х	6 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
1		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'
Y	4 <sup>th</sup>	[Redacted due to sensitivity and	[Redacted due to sensitivity and
1		confidentiality issues: contact author for	confidentiality issues: contact author
		full version]'	for full version]'

#### Appendix D Table 3. Evidence of the interpretation of the diameter of iFSC.

Organi sation	Number of active generation s	Listening to the previous generation	Coaching the next generation
A	3	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
В	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	'[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	3	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>	<ul> <li>[Redacted due to sensitivity and confidentiality issues: contact author for full version]'</li> </ul>
D	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
E	2 (3)	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	2	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

		(Dedeeted due to a 1111)	<b>ID</b> - de stand dura ta a dividir d
Н	3	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
<u> </u>	+	full version]'	full version]'
I	3	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
L	<u> </u>	full version]'	full version]'
J	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
Κ	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
_	<u> </u>	full version]'	full version]'
L	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
	1	confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
Μ	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
Ν	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
0	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
Ρ	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
L	<u> </u>	full version]'	full version]'
Q	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
R	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
S	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	L	full version]	full version]'
Т	3	[Redacted due to sensitivity and	[Redacted due to sensitivity and
		confidentiality issues: contact author for	confidentiality issues: contact author for
	<u> </u>	full version]'	full version]'
U	1	[Redacted due to sensitivity and	[Redacted due to sensitivity and
-		confidentiality issues: contact	confidentiality issues: contact author for
		author for full version]'	full version]
V	3	[Redacted due to sensitivity and	[Redacted due to sensitivity and
-		confidentiality issues: contact author for	confidentiality issues: contact author for
		full version]'	full version]'
W	3	[Redacted due to sensitivity and	[Redacted due to sensitivity and
	<b>_</b>	confidentiality issues: contact author for	confidentiality issues: contact author for
		full version]'	full version]'
Х	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
	-	confidentiality issues: contact author for	confidentiality issues: contact author for
	1	full version]'	full version]'
Y	2	[Redacted due to sensitivity and	[Redacted due to sensitivity and
	-		
1	-	confidentiality issues: contact author for	confidentiality issues: contact author for
I	_	confidentiality issues: contact author for full version]'	confidentiality issues: contact author for full version]'

Appendix E. Evidence of interpretation of the impact FSC has on the conditions for knowledge creation.

Appendix E Table 1. Evidence of the interpretation of FSC giving access to information to support knowledge creation.

Org	Εv	ridence
A	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
В	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
D	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
E	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
H	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
l	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

К	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
L	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
М	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
N	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
0	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
Ρ	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
Q	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
R	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
S	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
Т	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	
U	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'	

V	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
W	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
X	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Y	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

Appendix E Table 2. Evidence of the interpretation of the combination capability to support knowledge creation.

Org	Evidence
A	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
В	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'     [Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
D	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Е	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Н	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
1	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Κ	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	• [Redacted due to sensitivity and confidentiality issues: contact author for full version]'

	1	
М	٠	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ν	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
0	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
Р	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
Q	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
R	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
S	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
Т	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
U	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
V	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
W	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
Х	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
Υ	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]

Appendix E Table 3. Evidence to support the interpretation of the anticipation of value for knowledge creation.

Org	1	idence
A	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
В	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
D	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Е	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
G	٠	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Н	٠	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
1	٠	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
K	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Μ	٠	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ν	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
0	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Ρ	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Q	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
R	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
S	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Т	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
U	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
V	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
W	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Х	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Υ	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'

Appendix E Table 4. Evidence to support the interpretation of motivation to combine information.

Org Evidence

Α	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
L	<u> </u>	
В	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
С	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
D	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
<u> </u>	<u> </u>	Dedected due to constituity and confidentiality issues, contact with a far full years and
E	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
-	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
F		
G	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
Н	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]
	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
J	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version] [Redacted due to sensitivity and confidentiality issues: contact author for full version]
K	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version] [Redacted due to sensitivity and confidentiality issues: contact author for full version]
L	•	[Redacted due to sensitivity and confidentiality issues: contact author for full version]'
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# Appendix F. Evidence of interpretation for the eFSC

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#### Appendix F. Table 2. Evidence of the interpretation of the EFSC customer relations.

<u> </u>	Consolidation of	Power dynamics	Expected change
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#### Appendix F. Table 3. Evidence of the interpretation of the eFSC outside experience.

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