

Article

Family Firms and Sustainability. A Longitudinal Analysis

Carlos de las Heras-Rosas *  and Juan Herrera * 

Department of Economics and Business Administration, Universidad de Málaga, 29071 Málaga, Spain

* Correspondence: chr@uma.es (C.d.l.H.-R.); juanherrera@uma.es (J.H.)

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Abstract: Two-thirds of the world's private companies are family owned. It is an organizational model that, despite the arrival of large corporations, remains and is still totally in place. The survival of these organizations is not easy, and is conditioned by multiple factors. The research that addresses the sustainability of family businesses is numerous and has been conducted from multiple disciplines. This document investigates the trends in scientific production related to family businesses and their sustainability, using bibliometric techniques and SciMAT software. A total of 286 articles were analysed between 2003 and 2019 from the journals indexed in the Web of Science (WoS). The results suggest that, although there is a growing interest in the study of the sustainability of family businesses, there is instability in the centrality of the topics, which denotes the existence of a wide margin of development. The most influential and trend-setting themes emerge mainly concentrated in three lines: those that analyse factors that drive sustainability, such as *socio-emotional wealth* and *stakeholders*; those interested in knowing about methods or practices that favour sustainability, such as *CSR*, *performance*, *management* or *innovation*; and those that investigate factors that endanger survival, mainly intergenerational *succession* processes. The contribution of this work is that, through bibliometric techniques, it sheds light on the groups of topics that condition the sustainability of family businesses, which will help the scientific community in the orientation of future work in this field of research.

Keywords: family firms; sustainability; CSR; socio-emotional wealth; succession; SciMAT

1. Introduction

Family businesses have been and continue to be an interesting subject of study for researchers around the world [1]. The turnover represented by these organisations and their importance in the economy is remarkable. Providing concrete data on their importance in the global economy is risky, mainly due to the large number of definitions of family businesses that exist and how these classifications would alter the results. In fact, the European Union (EU) in its Report on Family Businesses in Europe of June 2015 [2], already warns that there are more than 90 definitions of family businesses and proposes the need to arrive at an official definition for the EU.

Regardless of the number of definitions or approaches used to define the family business, the importance of these organisations to the economic and social fabric is clear. According to the International Family Enterprise Research Academy (IFERA), approximately two-thirds of private enterprises are family owned [3]. This business model represents 90% of the global business environment and contributes about 50% of the Gross National Product and employment [4–6]. The vast majority of companies listed in Europe, Africa, Latin America and Asia are family businesses [7–10]. Family businesses contribute significantly to wealth creation [11] and to stabilizing employment by maintaining a more socially responsible position than non-family businesses.

However, research on the sustainability of family businesses is relatively new, and we could indicate that it is somewhat confusing because of the multiple dimensions it presents. Sustainability in this type

of business has been defined as those concerns related to continuity, perseverance, monitoring and control exercised by the family in pursuit of business prosperity [12–14]. Other researchers focus more on what they call “sustainability practices”, which include actions related to the transparency and values of the company, internal audits, respect for the environment, relationships with both suppliers and customers or consumers, and interaction with the community, all focused on strengthening the viability of the company [15]. Sharma and Henriques [16] define sustainability practices as the search for the prosperity of the organization in the context of the external environment.

Although research on business in general and sustainability has been intensively treated from different disciplines and by multiple authors, the number is significantly less when it refers to family businesses [17,18], where the concept of sustainability is not clear [19]. There are strong discrepancies about the nature of these two concepts and whether the sustainability of family businesses really forms a field of study on its own. In fact, the potential of family businesses to adopt sustainability practices has recently been discussed [20], where it is analysed whether the relationship between the family business and sustainability practices has a positive character and helps the viability and longevity of the business [21] or, on the other hand, family businesses, due to their particular characteristics, operate in an incompetent manner which is detrimental to the interested parties, from shareholders to the employees themselves and, consequently, diminishes the possibilities of success [4,22].

With the aim of shedding light on the evolution of research related to sustainability in the field of family businesses, the purpose of this work is, on the one hand, to find out how the term *sustainability* has been related to other terms over time and, on the other, to detect the issues that have led the trends in research related to family businesses and sustainability. To do this, bibliometric techniques based on co-word evaluation will be used and publications that address family businesses and sustainability together will be analysed, without discriminating against any theoretical orientation.

1.1. Literature Review

1.1.1. Family Firms

There is a great deal of research on family businesses and it has been published in a growing number of publications over the last decade. It is mainly distinguished by the multitude of topics associated with the study of family businesses from very different approaches. There is no widely accepted definition of a family business, although they are essentially characterised by the important role played by family members in the organisation’s business processes [23]. The broadest definitions of family business focus on measuring the degree to which the family dynamics of the owners influence the behaviour of the managers [24]. Other researchers narrow the definition further, indicating that a family business is considered to be one in which the ownership and majority control of the enterprise resides in a single family or that at least two family members are involved in the management of the enterprise [25]. It is not the intention of this paper to go into detail on the different definitions of family businesses which, as mentioned above, present multiple interpretations, depending on the focus of the research, the size of the company, the economic sector or even the geographical location of the company (please refer to Westhead, P. and Howorth, C. 2007 [26], Gersick, K.E., et al. 1997 [4], Astrachan, J. et al., 2002 [27]).

Broadly speaking, research on family businesses has mainly been directed at distinguishing family businesses from non-family businesses [28–30], where a large number of comparative studies have been carried out between these two types of company: ways of managing innovation and organisation [31–34]; parameters related to the age of the company, geographical location and technology used [35]; or studies aimed at analysing specific issues in the context of the family business. These include studies of the behaviour of family businesses with respect to the different factors that make up the internal and external environment of the company [36], as well as their relationship with the enterprise [37,38], among others.

There are also papers aimed at discussing the characteristics of family businesses, such as succession [39,40]. Family businesses do not form a homogeneous group, which is why some authors have also made classifications on the types of family businesses, distinguishing for example those that are listed and those that are not, by the different performance they present [41]. The influence of gender on the management of family businesses has also been addressed [42,43], as well as the study of ownership couples and the sustainability of the company over time [44].

The owners of these organizations are faced with the tasks of initiating, maintaining and bringing prosperity to their business. They also have to ensure a balance between the management of the company, control of property and family values, which can create tensions within the organisation's management [45]. Family businesses, in addition to the usual economic motivations of any enterprise, are distinguished by the pursuit of objectives more conducive to sustainable development [46,47], job retention and lower-risk investments [48], among others.

Another theme expressed in the study of this type of company is that related to business orientation and profit management, particularly in comparison with non-family businesses. CSR orientation has been widely considered from different approaches [49–52], as well as other factors such as socio-emotional wealth and social capital [30,53] or a pro-environmental attitude [47,54,55]. The orientation of family firms toward international markets has also been addressed [56–59], where it is related to maintaining firm values and controlling external affiliates [60].

Family identity [61], the climate and quality of family relations [62–64], family capital [65–68], cultural heritage between generations [69,70] or experience [71] appear as variables in the search for organizational success. In the literature, there are different ways of dealing with succession [72–75] which, among other factors, can be moderated by the local culture, thus causing differences in the succession processes of Western family businesses with respect to Eastern ones [76]. The factors mentioned have a common link: the search for the sustainability of the family business.

As can be seen in the previous paragraphs, research on family businesses can be divided into three fundamental groups: those based on definitions and the evolution of this type of business, those that make comparisons with respect to non-family businesses, and, finally, those that analyse a characteristic of family businesses. The study of sustainability or sustainable practices in family businesses also presents a high number of approaches, often difficult to compare because of the different interpretations made of the two concepts that concern us, family business and sustainability.

1.1.2. Sustainability in Family Firms

Among the research published on sustainability and family businesses, we can highlight the work of Le Breton-Miller and Miller in 2016 [20], which analyses the positive or negative relations that a family business has with sustainability due to its particular characteristics.

On the one hand, this type of company is distinguished by the desire to transmit a healthy business to future generations, which leads to decisions aimed at ensuring the permanence of the company and in most cases translates into business success. The intergenerational aspirations of family businesses enhance stability and good relations with the community and other stakeholders [17,77]; in the same way, the family's reputation is at stake when they run businesses, so entrepreneurs take care of aspects of social responsibility even without being aware of it [78].

On the other hand, some of the characteristics that distinguish family businesses, such as the decision making established within the family environment, can become a negative factor for the sustainability of the company—family disputes, inheritances, a greater number of owners with sentimental ties, etc. [4,22]

Other authors have highlighted the perspective of social-emotional wealth (SEW) [14,79,80], whereas with other topics the impact of SEW on the sustainability of the company is not clear. The emotional bond and the search for social welfare can positively or negatively influence the company's performance, either through protectionism or by not taking the risks necessary for growth and sustainability [81].

Another approach found in the study of sustainability in this type of business is the relationship between long-term orientation and family ownership [82,83]. The prospect of giving up and continuing the business for future generations can positively influence the sustainability practices adopted by the company [12,13].

Once again, we are faced with a problem of complex analysis: in family businesses, economic objectives compete with non-economic ones, and this is compounded by the different types of family businesses, the socio-emotional component they present, and the various ways in which sustainability can be addressed [84,85].

1.1.3. Other Bibliometric Studies

One of the reasons that prompted us to carry out this research on family business and sustainability was the extensive scientific production that addresses these two concepts, where a large sample of adjacent topics emerge that foster this relationship. Scientific production in this field has grown in recent years but, as mentioned above, there are no definitions and the relationships between these two concepts are not clear. Prior to this longitudinal analysis, other bibliometric studies have been carried out that have helped to understand the scientific literature and to establish this field of knowledge.

Debicki, B. et al. (2009) [18] carried out a complete diagnosis of family businesses in the new century, in a search for definitions and characteristics. Wright, M. and Kellermans, F. (2011) [1] developed an interesting framework that clarifies and organizes the field of study on family businesses, while recognizing the difficulty in developing a theory of family business. This study confirms the difficulty in defining the family business, and delves into the importance of the different generations, as well as the economic and non-economic motivations faced by entrepreneurs of this type of business.

The sustainability of this type of company and its long-term orientation have been considered in the work of Brocardo et al. (2019) [19] and in the research of Brigham et al. (2014) [21], respectively. Other studies address other research issues related to family businesses. Entrepreneurship was analysed by López-Fernández et al. (2016) [86], although the research focuses on the relationship between entrepreneurship and family businesses, this systematic review reflects the lack of a foundation for issues related to family businesses.

Other authors have made interesting reviews of the literature focusing on some of the peripheral issues that characterize family businesses, which in one way or another are related to the sustainability and sustainable practices of these organizations. Jiang, Kellermans (2015) provide a psychological and social approach, where they investigate the socio-emotional wealth (SEW) in family members. The analysis of sustainable practices and their relationship with business success in SMEs was discussed by Lopez-Pérez et al. [87]. This quantitative analysis describes the moderating role of family businesses in sustainable practices and the influence that these practices have on the corporate reputation, brand image or financial value of the company. Studies on CSR in family businesses are not very numerous, although in the literature reviews there is some consensus that it is necessary to rely on theoretical frameworks such as the Theory of Management and the Theory of Socio-Emotional Wealth (please see Lopez-Pérez et al. [87]).

Finally, Xi, J. et al. (2015) [88] publishes a comprehensive review of the literature on the research topics of family businesses, which links to the purpose of this article. It identifies up to five thematic groups on research in this type of company, where other highly interesting bibliometric studies are also analysed, focusing on the most influential articles.

The research analysed shows the lack of standardisation or homogeneity in the position of family businesses with regard to sustainability, which indicates how the inclination towards sustainable development (social, economic and environmental) and corporate social responsibility are associated with the success of the organisation [89], which is making it a strategic function incorporated into the organisation's values [90].

As previous research on family businesses and within this field on sustainability shows, to undertake a bibliometric review of a family business means facing a large number of approaches

nourished by multiple dimensions: gender, innovation, organization and orientation of the company, relationship with the environment, corporate social responsibility, human resource management, location, type of activity, longevity, market development, internationalization, succession or transition.

The purpose of this document is to provide a review of the research on the family business from the point of view of its sustainability. The structure of this document contains three distinct parts. In the introduction, a review has been made of the different research trends that have linked the sustainability of family businesses with some moderating factors. Subsequently, a quantitative analysis is made using indicators of activity in publications on family businesses and sustainability, where the most prolific authors and publications in recent decades are detailed, among other data. Finally, a longitudinal analysis divided into three stages is carried out, which will make it possible to discover the different approaches to sustainability in family businesses based on the published research. Thus, this work provides a relational perspective on issues related to sustainability in family businesses, which, as far as the authors are aware, has not been used so far in the terms offered by the methodology used, and which may help future research interested in providing knowledge about this approach.

2. Methods

This research aims to understand trends in scientific production on family businesses, focusing mainly on business sustainability. For the analysis of the scientific literature related to the chosen topic, a bibliometric analysis is used, where the publication is used as a basic unit. Bibliometric analysis allows us to examine the bibliographic material from an objective perspective that makes it possible to organize the information within a specification of fields [91]; therefore, this metric analysis of the literature makes it possible to analyse the details of the main research topics within a domain and the relationships between them at the micro level, generating useful information for researchers who evaluate scientific activity [92,93].

The following analysis is divided into two main parts; a quantitative review of scientific production by means of activity indicators and a detailed analysis by means of relationship indicators. The collection, observation and study of the selected articles will provide researchers with a complete view of the publications related to family businesses, not only in terms of quantity and topics addressed but also in relation to research trends in the analysis of the sustainability of family businesses. The combination of quantitative techniques and the study of relationships elaborated in this article offers a wide detail of what the scientific production related to the sustainability of family businesses has meant.

2.1. Materials

On 7 January 2020, a search is made in the Web of Science (WoS) database [94]. The search parameters used are defined with respect to the central themes of this article, Sustainability and Family Firms. The search is configured as follows: “family business” or “family firm” or “family company” or “family Enterprise” and “sustainability”. The year of publication is not limited, although articles published in 2020 are discarded in order to make a more appropriate comparison by year. The search is limited to papers included in Science Citation Index Expanded (SCI-EXPANDED) and Social Sciences Citation Index (SSCI). The area of knowledge is not restricted, due to the multiple approaches from which the sustainability of family businesses has been researched. The first step of this research is to select articles related to family businesses and sustainability, both in the title, the abstract and the keywords of the articles available in the database. The wide variety of terms used to define a company made it necessary to use the words: business, firm, company and enterprise. In order to restrict the search and adapt it to the objective of this research, the coincidence with the concept of sustainability was included.

The collection selected 298 articles from the Web of Science (WoS) database. Each individual author then made a quick reading of the title and abstract of the selected manuscripts. With this first filter, those articles that were not in line with the subject matter were discarded. Once the previous analysis carried out by the two authors was pooled, the sample selected for this bibliometric analysis

was established at 286 articles. Although in other studies it is usual to concentrate the analysis on the articles with the greatest impact, in this case, none of them were discarded. This way, all the areas of knowledge that have dealt with the sustainability of family businesses are included and, in addition, recent research that may mark a trend and that has not yet reached its maximum dissemination is not overlooked.

The study of the sustainability of family businesses has evolved over the years, as we will see in the following sections. A descriptive statistical analysis is carried out, where the indicators of research activity are represented. Then, longitudinal and strategic maps and thematic networks are drawn up to analyse research trends over the years and the evolution of the topics.

The distribution of published documents regarding family businesses and sustainability over the years is described by means of a longitudinal analysis. To facilitate understanding and group the manuscripts in similar time frames, three periods have been established: 2003–2009, 2010–2014, and 2015–2019. This distribution establishes a minimum number of documents in each period that allows the longitudinal and strategic maps, as well as the thematic networks, to be carried out with guarantees.

2.2. Software

The analysis and representation of longitudinal maps, strategic maps and thematic networks has been carried out through SciMAT software. The unit of analysis used has been keywords. For this research, it was convenient to use both the keywords that came from the author's document and the keywords from the source. The construction of the thematic networks has been based on co-occurrences. To normalize the network, the equivalence index was used as a measure of similarity. The single centre clustering algorithm has been used to create the maps and thematic networks.

A longitudinal map is used to represent the evolution of literature (Figure 1—left). This allows us to observe in a graphic way which themes have been formed along the prefixed periods and which has been their evolution in time. The name of the label that represents the cluster is that of the term with the greatest centrality, which does not mean that all the documents are related exclusively to that term, but that it is the one that has had the greatest presence and in a more intense way among those that are related. To make this representation, the longitudinal map uses spheres that symbolize the predominant themes or clusters and their size varies according to the number of documents. The representation of the evolution of the themes is represented with solid lines, when the themes that are joined share the name, or the name of one of them is part of the network of the other. They are linked with broken lines when there are elements of the thematic network that they share; however, none of these elements takes the name of the main theme.

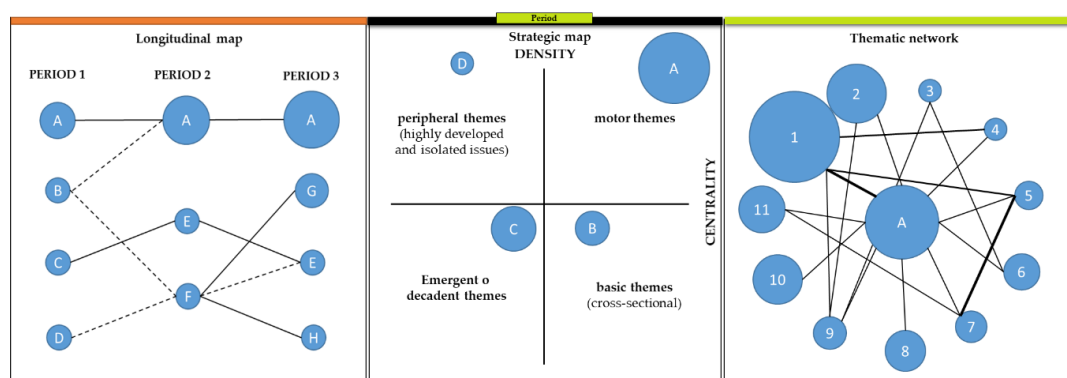


Figure 1. Example of a longitudinal map, strategic map and thematic network. A, B, C, . . . , H represent different clusters; 1, 2, 3, . . . , 11 represent members of the thematic network. Source: Prepared by the authors, based on Cobo (2011) [95].

A strategic map represents the clusters formed by the different topics that originate around a central theme in a period of time. The clusters are symbolized by a sphere, which has a greater or lesser size depending on the volume of the indicator it represents, which can be documents, quotations or the H-Index of the theme. The name of the cluster is that of the most central theme. The strategic maps are divided into four quadrants (Figure 1—centre). In the upper right quadrant, the motor themes are represented. They are well developed and have the greatest centrality and density, and therefore project the trends in the field of research. The basic themes are located in the lower-right quadrant; they have strong centrality, but not enough density. They tend to be transversal and generic themes. In the upper-left quadrant are the peripheral themes. They are the opposite of the basic themes in terms of the level of centrality and density. They have a low degree of centrality, but a high degree of density. They are usually very specialized themes. Their importance within the field of research is usually not relevant. Finally, in the lower-left quadrant, there are the topics considered emerging or decadent. They have a low degree of density and centrality. Their relevance is related to the evolution of the topics in the following periods.

On the other hand, the thematic networks represent the cluster and its relations with other topics (Figure 1—right) using the keywords of the primary documents, these are those that contain at least two keywords of the thematic network [95].

To better understand how a cluster or theme would be represented, for example, in the case of theme A (Figure 1), we can see, through the longitudinal map, what its evolution has been over the established periods. It can be seen that it has been present in all periods and that it has even increased its presence through the increase of documents (sphere size). Then, the strategic map (Figure 1—centre), conjugating its centrality and the density of its relations, would represent what type of theme it is; motor theme, basic theme, peripheral or emergent/decadent. In the case of theme A, it would be a motor theme, therefore, this one together with the themes that belong to its network (Figure 1—right), can be considered to mark the trend of the research field in that period. Finally, the graph that represents the thematic network, in the case of Theme A (Figure 1—right), is seen to be the most central, although in this case it is not the one with the greatest number of documents (sphere size), which as can be seen is theme 1.

3. Results

3.1. Activity Indicators in the Literature on the Sustainability of Family Businesses

The number of annual publications relating Family Business and Sustainability has increased significantly in recent years. The sample analysed consists of 286 articles, the first of which appeared in 2003. Of these first three articles from 2003, “The impact of the family and the business on family business sustainability” published in the *Journal of Business Venturing*, by Olson et al. [96], with 221 citations, currently the third most cited article in the search. In this research, the authors identify which strategies can be used by families to increase the success of both their business and their family, and where they conclude that the family has a greater effect on the business than the business on the family [96].

Another research that stands out for the number of citations is “Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance”, published in the *Journal of Management Studies* in 2008, by the authors: Eddleston, K.A.; Kellermanns, F.W. and Sarathy, R. [64]. This research coincides in some aspects with that of Olson et al. in 2003 [96], where they link the success of the company to good understanding within the family, also indicating that strategic planning is more important in family businesses because of their lower capacity for innovation.

From 2008 onwards, scientific production related to Family Businesses and Sustainability began to increase significantly (Figure 2), reaching 46 articles in one year in 2019. It is important to point out the volume of production generated in 2010, 32 articles, which represents an increase of more than

300% with respect to 2009 when nine articles were registered. This increase coincides with the greater incidence of the economic crisis that began in 2008. Researchers' interest in studying the sustainability of companies is also growing, and family businesses play an important role in supporting employment and social sustainability [97,98].

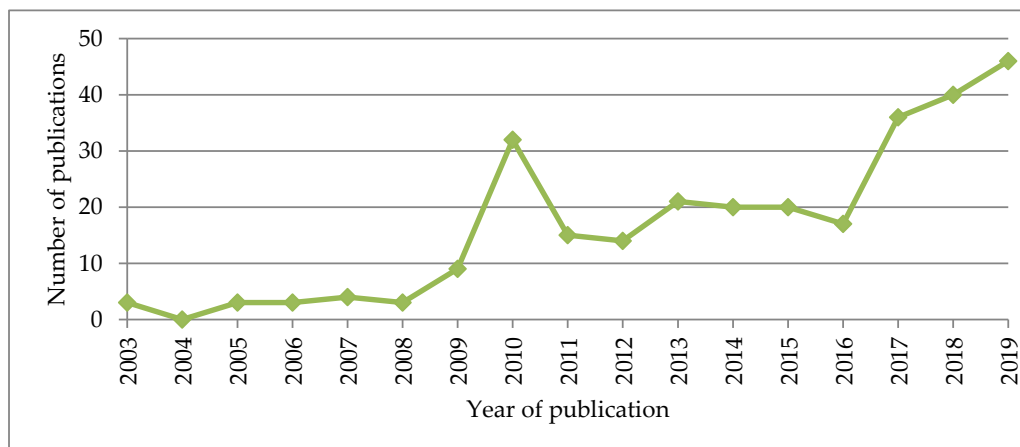


Figure 2. Publications over time on Family Firms and Sustainability (n = 286). Source: Prepared by the authors on the basis of Web of Science (WoS) data.

In the first period analysed (2003–2009), research is characterized by approaches more related to the organization and management of the family business [26,99], and where sustainability begins to be addressed by researchers through analysis and case studies [100,101]. In the sample examined in this period, the study of succession for the sustainability of the family business has not yet been strongly developed. The second period (2010–2014) describes an uneven growth of publications on family businesses, with the 32 publications registered in 2010 in WoS being particularly noteworthy. In this second stage, research related to organisation [30,102], sustainability and succession [69] in family businesses is more present. The third period (2015–2019) presents the greatest growth in the sample studied. From 20 articles registered in 2015, the sample will grow to 46 in 2019. The topics covered in this very productive period are multiple, although the most recurrent theme is succession in family businesses [103], with more than 22% of the articles registered in this period. The analysis of the succession processes described in the documents of this period is linked to other terms such as innovation [104,105], company sustainability [106] and orientation toward CSR [50]

A total of 656 authors have participated in the 286 articles analysed. The scientific production in this field is quite distributed; most of the authors appear in one or two articles at the most, although there are a number of researchers who are more active with respect to the search parameters carried out. Table 1 shows the authors with the greatest number of publications and those most cited by other research.

Table 1. Authors who have published two or more articles on Family Firms and Sustainability and have been cited ten or more times.

Author	Number of Articles	Year of Publication Last Article	Cited by
Danes, Sharon M.	17	2019	696
Haynes, George	6	2016	251
Stafford, Kathryn	6	2013	540
Fitzgerald, Margaret A.	4	2017	52
Amarapurkar, Sayali	3	2009	190
Lee, Yoon G.	3	2017	18

Table 1. Cont.

Author	Number of Articles	Year of Publication Last Article	Cited by
Heck, Ramona Kay Z.	2	2008	335
Kellermanns, Franz W.	2	2009	304
Zellweger, Thomas	2	2013	150
Lee, Jinhee	2	2009	145
Sharma, Pramodite	2	2011	122
Sharma, Sanjay	2	2011	79
Short, Jeremy C.	2	2017	64
Zachary, Miles A.	2	2017	64
Fang, Hanging	2	2018	57
Vrontis, Demetris	2	2019	59
Payne, G. Tige	2	2015	55
De Massis, Alfredo	2	2019	54
Schrank, Holly L.	2	2010	53
Brewton, Katherine	2	2010	46
Basco, Rodrigo	2	2017	38
Gudmunson Clinton	2	2013	22
Dangelico, Rosa Maria	2	2019	19
Hernandez-Perlines, Felipe	2	2018	17
Gavana, Giovanna	2	2017	15
Gottardo, Pietro	2	2017	15
Misello, Anna Maria	2	2017	15
Veltri, Stefania	2	2017	10
Venturelli, Andrea	2	2017	10

Source: Prepared by the authors on the basis of WoS data.

The most frequently cited documents correspond in some cases to authors not represented in the above list, as their production in this field has not been so numerous, although they have been referenced on quite a few occasions. In this regard, the article published in 2008 “*Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance*” [64] by Eddelston et al., with 225 citations up to January 2020, stands out. Another noteworthy example is the 2003 manuscript, “*The impact of the family and the business on family business sustainability*” by Olson et al., discussed above with 221 citations [96] and the 2013 paper by Zellweger et al. entitled “*Why Do Family Firms Strive for Nonfinancial Goals? An Organizational Identity Perspective*” [107] which has been cited a total of 146 times.

With regard to the journals with the greatest presence in research on Family Businesses and Sustainability, it can be commented that the set of 286 articles analysed in this work have been published in 180 journals, with *Sustainability* standing out above the rest with 20 publications and *Business Strategy and the Environment* with eight edited documents.

Table 2 shows a list of the journals that have published the most research within the selected sample regarding Family Firms and Sustainability. Most of the journals belong to the first and second quartile of their thematic category. In cases where a journal presents several classifications according to thematic areas, the one corresponding to this research has been chosen.

Table 2. Journals on Family Firms and Sustainability.

N.	Journal	Q1	Q2	Q3	Q4	Total Items	%	FirstDoc.	LastDoc.
1	Sustainability		X			20	7.0%	2017	2019
2	Business Strategy and the Environment	X				8	2.8%	2016	2019
3	Journal of Family Business Management		X(*)			7	2.4%	2011	2018
4	Journal of Family And Economic Issues			X		6	2.1%	2005	2017

Table 2. Cont.

N.	Journal	Q1	Q2	Q3	Q4	Total Items	%	FirstDoc.	LastDoc.
5	Journal of Family Business Strategy		X			5	1.7%	2013	2019
6	Journal Of Business Ethics	X				5	1.7%	2003	2018
7	Family Business Review	X				5	1.7%	2009	2017
8	Entrepreneurship Theory and Practice	X				5	1.7%	2009	2015
9	Int. Jour. of Entrepreneurial Behaviour and Research		X			4	1.4%	2005	2018

Source: Prepared by the authors on the basis of WoS data. X(*) Scopus.

Sustainability, whose first volume appears in 2009, is the magazine that has published the most documents regarding Family Businesses and Sustainability, with 20 articles between 2017 and 2019, representing 7% of the total published in WoS. The rest of the publications have a lesser presence in this subject, which indicates that few magazines have specialised specifically in this area. It also gives us an idea of how this subject is represented from multidisciplinary approaches given the importance of family businesses in the economy.

3.2. Content Analysis

3.2.1. Evolution of Keywords

The first step carried out within the content analysis is to find out how keywords have evolved. The continuity of a keyword over the years, its evolution towards other concepts, its overlapping, or the appearance and disappearance of the same, will allow an analysis of the conceptual and thematic evolution of published research on family businesses and sustainability. The publications of the sample selected for this topic are distributed over a total of 17 years. As mentioned above, the design of the periods involves a compromise between the number of publications and the length of the period. In recent years there has been a considerable increase in the number of publications in most of the thematic areas. In our case, this increase in research is also visible. The three defined periods are somewhat unbalanced in terms of the number of documents. However, the software used allows a weighting checker to be applied which enables the analysis to be carried out reliably and rigorously. The distribution of documents in each period of the sample is shown in Table 3.

Table 3. Periods and number of documents per period.

NO.	Period	N. of Documents
1	2003–2009	25
2	2010–2014	102
3	2015–2019	159

Source: Prepared by the authors on the basis of SciMAT data.

The analysis of the keywords in each period, and their evolution over time, is reflected in Figure 3, prepared according to the methodology of Price, D. and Gürsey, S. [108]. Each period is represented by a circle, inside which the number of keywords it contains appears. The arrow joining the first period with the second, and the second with the third, indicates the number of keywords they share, and the stability index appears in parentheses. For example, in periods 2 and 3 there are 130 common keywords, and the stability index is 0.51. The arrows that are oblique in each circle (period) represent those keywords that do not appear in the next period. The arrows that enter obliquely in each circle (period) represent those new keywords that appear in that period. The number of keywords in each period has increased from 133 in the first period to 473 in the third. The transition between the second and third period shows a higher rate of stability, suggesting a greater strengthening of the vocabulary in research related to family firms and sustainability [95].

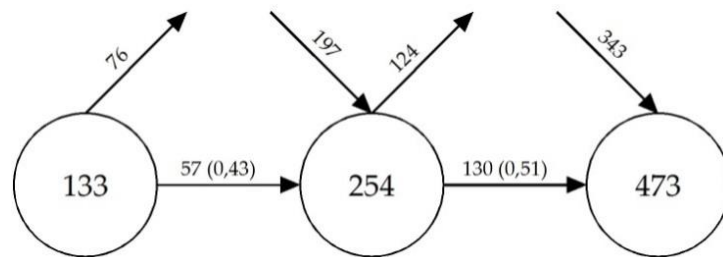


Figure 3. Keywords between periods. Source: Prepared by the authors on the basis of SciMAT data.

3.2.2. Longitudinal Analysis

After analysing the progress of keywords, the research focuses on how the literature on sustainability in family businesses has evolved. To do this, the longitudinal map is used (Figure 4). This longitudinal map allows us to observe graphically what topics have been formed over the established periods and how they have evolved over time.

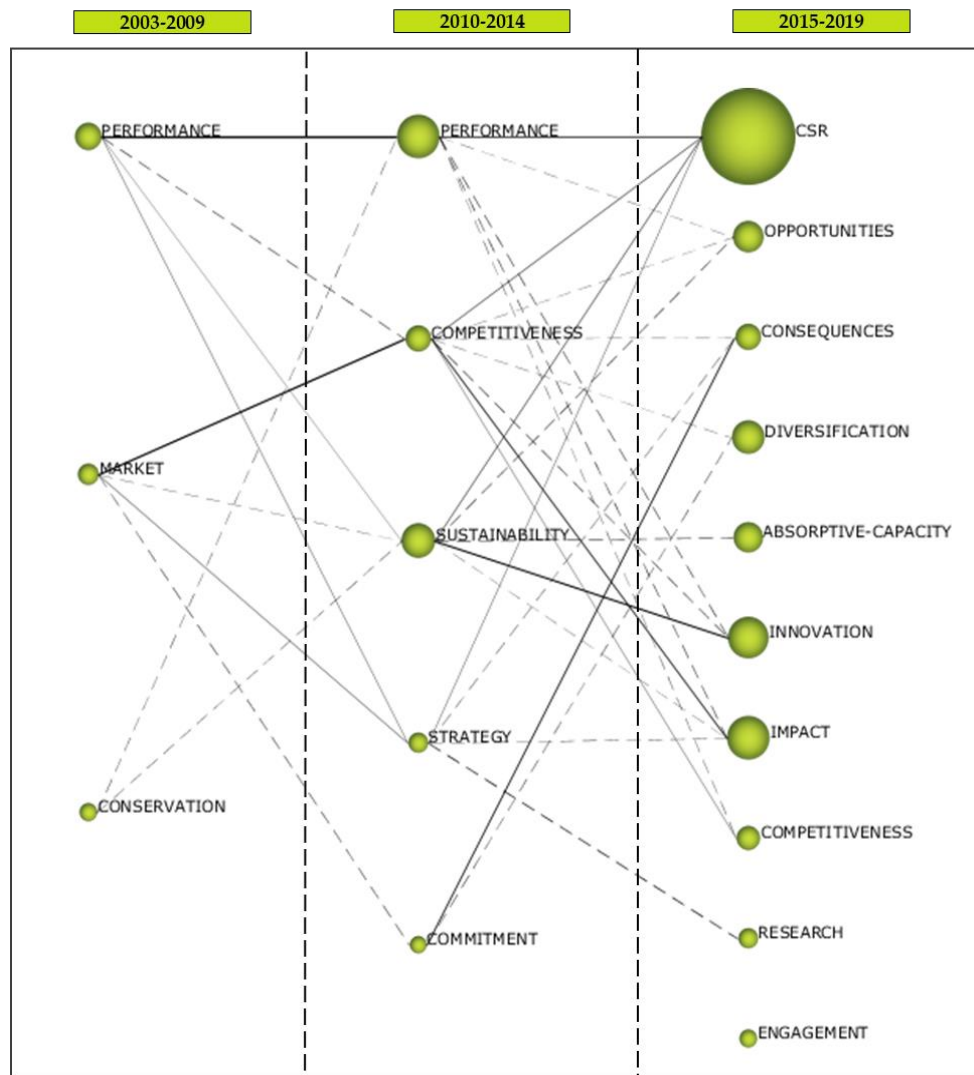


Figure 4. Evolution of the themes of Primary Documents. Source: Prepared by the authors on the basis of SciMAT data.

In a first approximation to the longitudinal analysis of the research field related to family businesses, it can be seen that its evolution is certainly convoluted. Except for *performance*, which persists between the first and second periods and *competitiveness*, which has continuity between the second and third periods, the rest has evolved to different themes, that is, the centrality of the following cluster was dominated by a different theme from its predecessor. This instability of the themes over time confirms that the field of research has a certain immaturity and therefore needs further development.

As for the analysis of the periods, the first one (2003–2009) is characterized by a weak literary production in which only 18 documents are found (Table 4) and, as shown in the longitudinal map (Figure 4), they are concentrated in three themes: *performance* (11 documents), *market* (5 documents) and *conservation* (2 documents). Undoubtedly, the predominant theme is *performance* which, in addition to having the largest number of documents, remains with the same centrality in the following period. However, certain themes that were grouped together around its network have been evolving towards other clusters, such as *sustainability*, *strategy* or *competitiveness* in the second period (2010–2014), or *CSR*, *opportunities*, *innovation* or *competitiveness* in the last period (2015–2019). In the case of the *market*, due to the low volume of documents, there is a concentration of topics with a very low density, which is staged with the immediate evolution to other topics such as *competitiveness*, *sustainability*, *strategy* or *commitment*. *Conservation* does not remain the main theme for the rest of the periods.

Table 4. Cluster period 2003–2009.

Name	Centrality	Centrality Range	Density	Density Range	Documents	Citations	H-Index
<i>Performance</i>	125.87	1.00	117.86	1.00	11	895	9
<i>Market</i>	94.79	0.67	107.05	0.67	5	488	4
<i>Conservation</i>	35.10	0.33	23.89	0.33	2	171	2

Source: Prepared by the authors on the basis of SciMAT data.

In the second period (2010–2014), *performance* grows both quantitatively—by recording almost three times as many documents (from 11 to 27)—and in qualitative terms—by going from an H-index of 9 to 13 in this period (Table 5). Even so, as in the previous period, it evolves for the next period towards other clusters such as *opportunities*, *innovation*, *impact*, *competitiveness* and *CSR*, losing its centrality definitively in favour of the latter (Figure 4). Two other important themes of this period are *competitiveness* and *sustainability*, which register 10 and 18 documents, respectively (Table 5). In the case of the former, in addition to remaining the main theme of the cluster in the next period, it is evolving towards *CSR*, *opportunities*, *consequences*, *diversifications*, *innovation* and *impact*. In the case of *sustainability*, it is evolving towards *CSR*, mainly, and others such as *opportunities*, *absorptive capacity* and *innovation* (Figure 4).

Table 5. Cluster period 2010–2014.

Name	Centrality	Centrality Range	Density	Density Range	Documents	Citations	H-Index
<i>Performance</i>	93.21	1.00	31.64	1.00	27	745	13
<i>Competitiveness</i>	77.24	0.80	20.32	0.80	10	272	6
<i>Sustainability</i>	66.09	0.60	12.10	0.60	18	266	7
<i>Strategy</i>	25.91	0.20	9.78	0.40	4	73	2
<i>Commitment</i>	27.82	0.40	4.17	0.20	1	4	1

Source: Prepared by the authors on the basis of SciMAT data.

In the last period (2015–2019), the most relevant topics are *CSR*, *opportunities*, *diversification*, *absorptive capacity*, *innovation* and *impact*. In the case of *CSR*, *impact* and *innovation*, by their number of documents (79, 27 and 25, respectively) and, in qualitative terms, by their number of citations and H-index (Table 6). The rest, as explained below, are being forged as clusters with a high level of centrality and density, which positions them as topics that can set a certain trend in the field of research into the sustainability of family businesses.

Table 6. Cluster period 2015–2019.

Name	Centrality	Centrality Range	Density	Density Range	Documents	Citations	H-Index
CSR	173.24	1.00	52.33	1.00	79	357	11
Opportunities	103.35	0.90	14.87	0.60	15	59	3
Impact	98.28	0.80	8.60	0.40	27	99	5
Innovation	94.90	0.70	10.88	0.50	25	207	9
Diversification	90.17	0.60	18.44	0.80	17	84	4
Absorptive capacity	79.32	0.50	29.21	0.90	14	53	4
Consequences	77.87	0.40	15.51	0.70	10	16	3
Competitiveness	57.89	0.30	3.88	0.10	8	34	3
Engagement	26.40	0.20	4.63	0.20	2	12	2

Source: Prepared by the authors on the basis of SciMAT data.

3.2.3. Analysis of Strategic Maps by Period

Strategic maps are used in each period to identify the most important issues that set the trend and project the scientific field on the sustainability of family businesses (Figure 5).

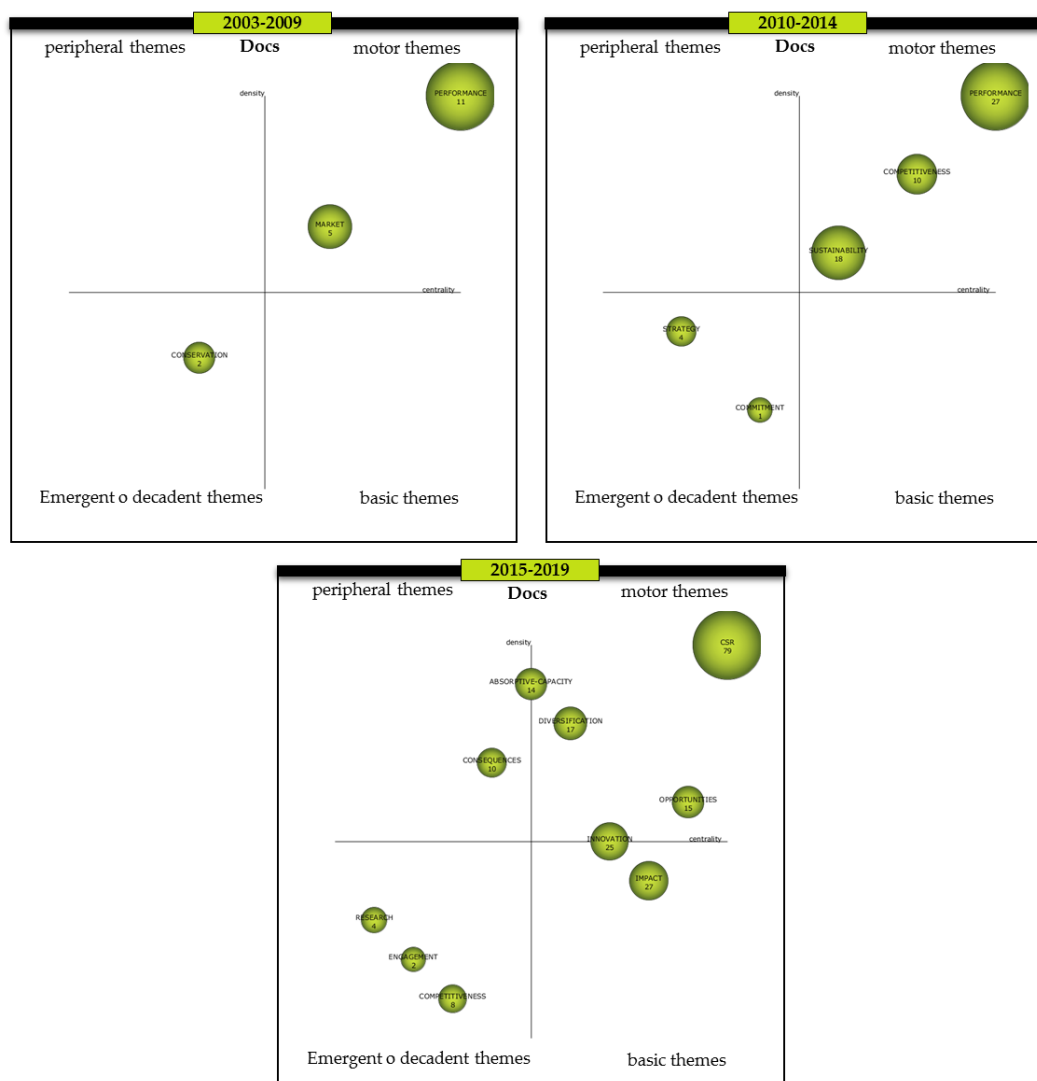


Figure 5. Strategic Maps Primary Documents by period: 2003–2009; 2010–2014; 2015–2019. Source: Prepared by the authors on the basis of SciMAT data.

For the first period (2003–2009), the driving themes were *performance* and *market* (Figure 5). The scarce production of this period is concentrated in these two themes, fundamentally in *performance*, which brings together more than half of the documents and with the maximum possible range of density and centrality (Table 4). On the other hand, *market*, due to the fact that the field of research under study is still in a precarious and not very advanced phase, represents a concentration of topics that are being broken down in subsequent periods, which means that, although it is a driving force, it does not in itself offer a projection of research trends for future periods.

In the second period (2010–2014), the driving themes are *performance*, *competitiveness* and *sustainability* (Figure 5). *Performance* continues to be the most important driving theme, maintaining its density and centrality ranges at 1. In the case of *competitiveness*, which evolves directly from *market*, it increases its density and centrality, and becomes one of the main driving themes for this period. Finally, *sustainability*, which comes from *performance*, creating its own cluster with related themes, is also consolidated as a driving theme, but with less centrality and density than the previous ones, however, it registers an important number of documents (Table 5).

For the third period (2015–2019), the driving themes are *CSR*, *opportunities*, *innovation*, *diversification* and *absorptive capacity* (Figure 5). In the case of *CSR*, its evolution comes from several themes; however, it is *competitiveness* that gives it its name. It is maintained with the maximum degree of centrality and density, contains the largest number of documents (79), and the highest levels of quality, citations and H-index (Table 6). In the case of *innovation*, which comes directly from *sustainability*, it has lost a certain degree of density (from 12.10 to 10.88), but its degree of centrality has increased (from 0.60 to 0.70), placing it at the limit of the driving and basic issues. This means that, although it is an important topic in the field of research—it also has a high qualitative level in terms of the number of citations and H-index—it is not sufficiently developed and is, therefore, less likely to lead some kind of research trend. With respect to the themes of *opportunities*, *diversification* and *absorptive capacity*, they have not evolved directly from any theme from the previous period, that is, they are linked by a broken line (Figure 4). However, they have been generated as driving themes, in the case of *opportunities* with a high degree of centrality and, in the case of *diversification* and *absorptive capacity* with a degree of density, also relatively high.

3.2.4. Thematic Network on Sustainability by Period

One of the objectives of this work is to try to understand the relationships of *sustainability* with other issues over time. To achieve this purpose, the thematic networks of this term are analysed in the three periods established in the methodology.

In the first period (2003–2009), *sustainability* was part of the cluster *performance*, which in turn was considered to be the main driving theme of this period (Figure 5). As can be seen in Figure 6, *performance* is the theme that has the greatest centrality; however, it is *sustainability* that supports the greatest number of documents (size of the sphere). In this network, in which all these issues are related to *performance*, there are other networks among the different members forming their own network. In the case of *sustainability*, in this period it has been mainly related to issues such as *ownership*, *performance*, *strategy*, *entrepreneurship* or *industry*, among others (Figure 6—right). This result suggests that the publications of this period, when they researched each of the previous topics, related it to sustainability. In that sense, it is interpreted that in this period, sustainability has been linked to aspects related to the company's objectives from the strategy and, above all, the performance.

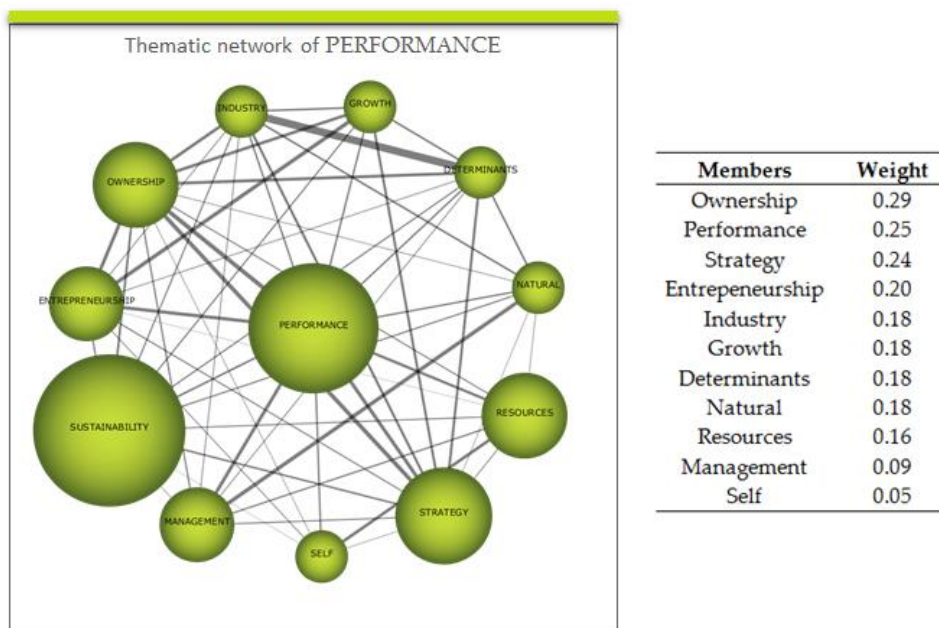


Figure 6. Sustainability network members 2003–2009. Source: Prepared by the authors on the basis of SciMAT data.

In the second period (2010–2014), *sustainability* formed its own cluster. In this case, although it was a driving theme, it did not enjoy much density, nor was it central enough to lead research with the focus on family businesses and sustainability. This means that, although all the documents in the sample included the term sustainability and therefore spoke of it in one way or another, in this period, the sense of it was weaker in favour of performance that maintained its leadership (Figure 5). The main themes related to sustainability were *succession, perspective, finance, community* or *corporate*, among others (Figure 7). This is the first and only period in which *succession* is strongly related to the *sustainability* issue. On the other hand, with respect to the previous period, the most relevant is the relationship with innovation, although very weak.

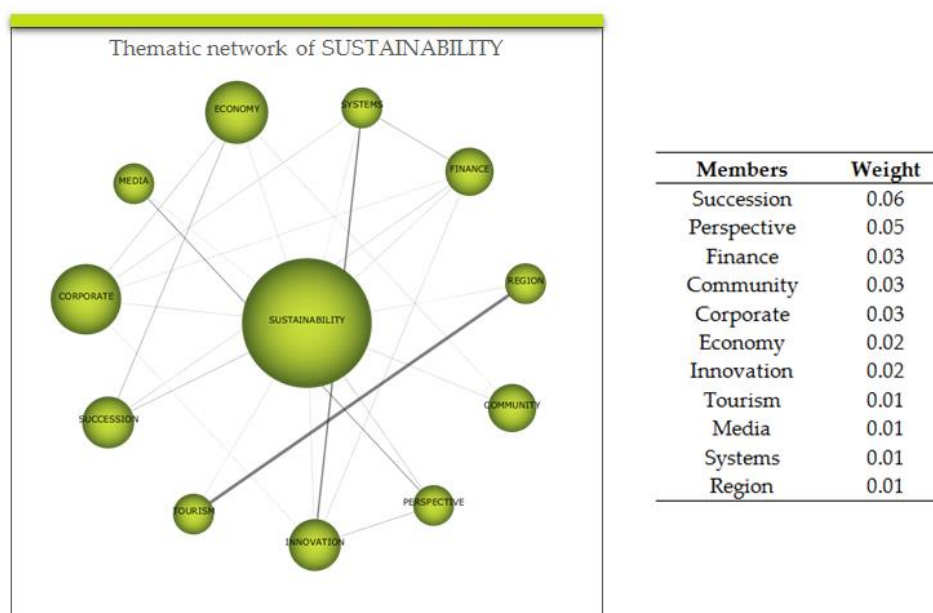


Figure 7. Sustainability network members 2010–2014. Source: Prepared by the authors on the basis of SciMAT data.

In the third and last period (2015–2019), *sustainability*, as happened in the first period, has not managed to create its own cluster. It has become part of the CSR network that, in this period, has relieved *performance* from leading research related to sustainability in family businesses (Figure 5). The main topics related to *sustainability* were *CSR*, *social-emotional wealth*, *management*, *performance*, *strategy* or *stakeholders*, among others (Figure 8). In this last period, the emergence of *CSR* and *social-emotional wealth* as the main allied issues is relevant. In the case of *CSR*, it is a subject usually related to sustainability in business organisations in general. Another particularly relevant issue is the role of stakeholders in sustainability and which, in this period, are more strongly related. On the other hand, those issues that relate sustainability to management, performance or ownership, among others, reappear.

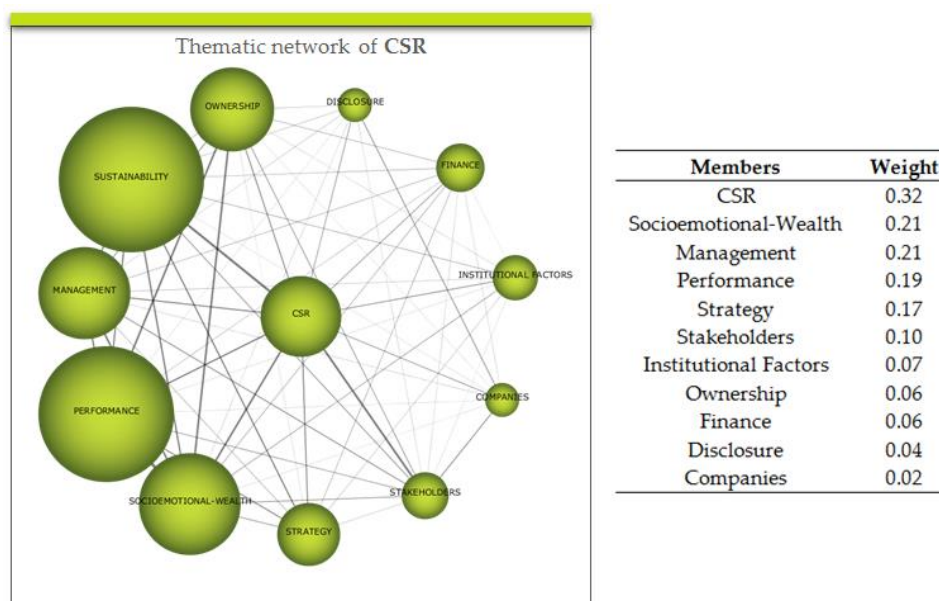


Figure 8. Sustainability network members 2015–2019. Source: Prepared by the authors on the basis of SciMAT data.

3.2.5. Thematic Networks of the Driving Topics Per Period

This section aims to address another of the objectives of this work. The aim is to analyse those clusters that have set the trend in research on family businesses and sustainability. To do so, it focuses on locating the driving issues which are, as explained above, those that—due to the density of their relationships with other topics, as well as the centrality they occupy within those relationships—have the greatest presence in the documents published in that period.

If we go into the longitudinal analysis in the period 2003–2009, *performance* gives the name to the main cluster and it is highlighted by its centrality, the H-Index, as well as by the number of documents where it appears, also doubling in citations to the next cluster *market*. The network of topics related to the main cluster of this period (Figure 9) contains a wide variety of topics that in turn maintain strong links between them. The most significant topics associated with this cluster are *strategy*, *ownership*, *management*, *entrepreneurship* and *sustainability*, among others, although other topics are included that also appear in later years.

The period 2003–2009 concentrates the most cited articles in the entire sample, which may be logical since they have been published for longer, but also reveal what the initial trends have been in this area. The documents with the greatest impact within the analysis carried out in the period 2003–2009 are as follows: “*The impact of the family and the business on family business sustainability*” by Olson et al. [96], where a study is carried out that relates the success of the business to the distribution of time between family and business of the owners; “*Family Capital of Family Firms Bridging Human, Social, and Financial Capital*” by Danes, S.M., Stafford, K., Haynes, G., Amarapurkar, S. [109],

analysing the short- and long-term sustainability of family businesses, pointing out family capital as key to this objective; and “Types’ of private family firms: An exploratory conceptual and empirical analysis”, by Westhead, P. and Howorth, C. [26], which identifies up to seven types of family businesses and highlights the importance of the experience and business knowledge of these organisations for local economic development.

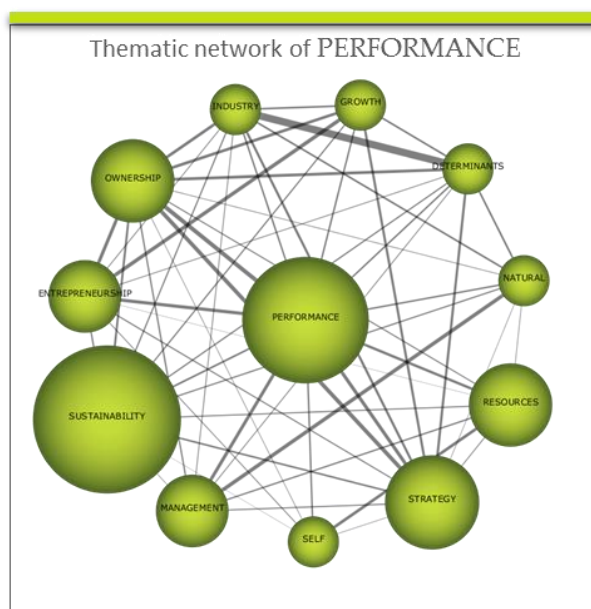


Figure 9. Thematic network of the main cluster 2003–2009. Source: Prepared by the authors on the basis of SciMAT data.

In the period 2010–2014, the driving themes are *sustainability*, *competitiveness* and *performance*. The most significant cluster for its centrality and density continues to be *performance*, presenting 27 associated documents, with 745 citations from other research. It is important to point out how the clusters *sustainability* and *competitiveness* burst in this period, with 28 documents between them and a little more than 500 citations. The thematic network of the *performance* cluster (Figure 10) continues to be the most complete, where *sustainability* no longer appears to form its own cluster. The themes of *ownership* and *interpenetration* continue to be intensely related, and the works highlight the importance of these factors in the sustainability of the family business. The topics of *culture* and *social-emotional wealth* appear in this cluster, which will continue in the third period and become more relevant.

The studies of greatest impact in this period (2010–2014) are as follows: “Why Do Family Firms Strive for Nonfinancial Goals? An Organizational Identity Perspective” by Zellweger et al. [107], analysing the importance of non-financial objectives of family firms, where both family and company reputation interact in beneficial or detrimental ways; “Drivers of Proactive Environmental Strategy in Family Firms” by Sharma, P. and Sharma, S. [61], in which a study is carried out on family businesses and the Proactive Environmental Strategy (PES); “Corporate Social Performance and Innovation with High Social Benefits: A Quantitative Analysis” by Wagner, M. [98], which relates the link between family businesses and Corporate Social Performance (CSP), Corporate Social Responsibility (CSR) and innovation.

In the last period analysed (2015–2019), although *performance* remains one of the main themes appearing in 66 documents, it ceases to have the greatest centrality in favour of *CSR*, and stands out as the main actor giving its name to the cluster and standing out from the rest of the thematic groupings. The density values, the number of documents, as well as the citations received (Table 6), make the *CSR* cluster the main one in this period, although there are other topics that also gain enough notoriety, mainly due to the high number of documents in these years. The cluster’s thematic network (Figure 11) presents a wide number of emerging issues that are related to *CSR* and to each other. With respect to

previous periods, the topics related to *sustainability*, *performance*, *socio-emotional wealth*, *management*, *ownership* and *strategy* have evolved considerably. The high number of topics dealing with family businesses and their sustainability have appeared in recent years, including other aspects that were not so noticeable before.

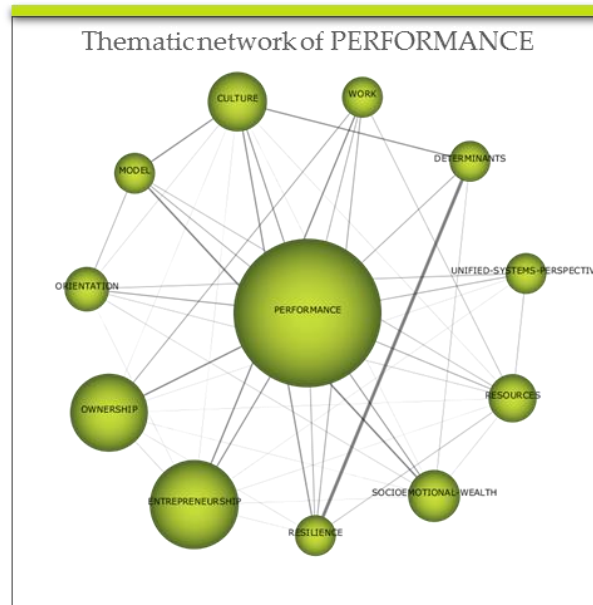


Figure 10. Thematic network of the main cluster 2010–2014. Source: Prepared by the authors on the basis of SciMAT data.

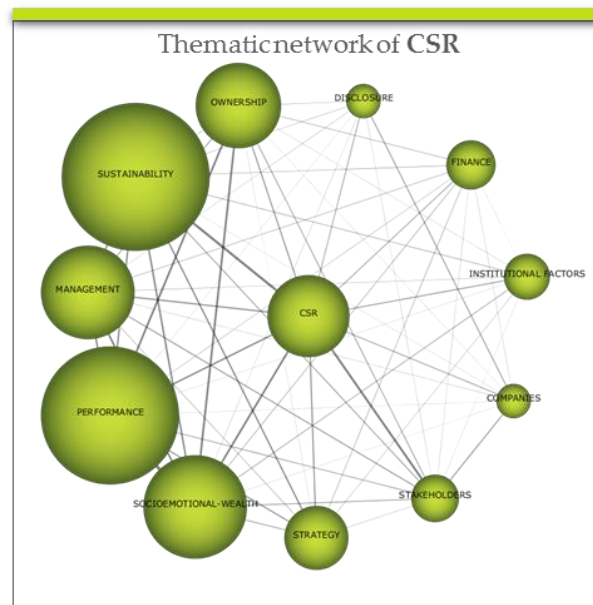


Figure 11. Thematic network of the main cluster 2015–2019. Source: Prepared by the authors on the basis of SciMAT data.

In this last period analysed, the number of citations in the articles is lower; even so, it is necessary to highlight some research that stands out from the rest: *“The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies”* by Suess-Reyes, J. and Fuetsch, E., [104], which carries out a systematic review of succession, innovation and sustainability in family businesses in the primary sector; *“Family business and regional development-A theoretical model of regional familiness”*

by Basco, R. [110], which analyses how family businesses are rooted in regional development. Finally, it is necessary to comment on the work of Le Breton-Miller, I. and Miller, D. [20] entitled “*Family firms and practices of sustainability: A contingency view*”, which discusses the potential of family businesses to adopt corporate sustainability practices.

In addition to the main CSR cluster, in the rest of the clusters of motor topics *opportunities* and *innovation*, other important topics arise, which are reflected in the number of documents that deal with them, but as they are new, they still do not form their own cluster. This is the case of *succession*, *environment* and *internationalization*, among others.

4. Conclusions

The family business is of great importance in the economic fabric of societies. They present unique characteristics that have been described in a large number of investigations. This bibliometric analysis has shown that scientific production has been very varied, where in just over 15 years, almost three hundred publications have been recorded in WoS, in which 656 authors have participated, in 180 journals from different scientific disciplines.

Family businesses have intrinsic peculiarities that the literature has tried to study. A large number of studies have carried out comparative analyses between family and non-family businesses, with the aim of identifying their advantages and disadvantages. With respect to family businesses, from the point of view of sustainability, research has evolved to include a variety of approaches. A longitudinal analysis of the relationships of *sustainability* with other issues suggests that, initially, there was a proliferation of work related to *ownership*, *performance*, *strategy* or *entrepreneurship* and, later, sustainability was first related to *success* to a greater extent and also to *innovation*. Finally, the term *sustainability* has been related in documents that have investigated topics such as *CSR*, *socio-emotional wealth*, *management* or *stakeholders*, among others.

Although the literature on family businesses begins in the 20th century, it is not until the first decade of the 21st century that it becomes interested in aspects related to the sustainability of family businesses. The first article registered in WoS related to this topic dates back to 2003; “The impact of the family and the business on family business sustainability” published in the *Journal of Business Venturing*, by Olson et al. [96], with 221 citations, is a first reference, where special importance is given to the effect that the family has on the company and vice versa. These first works analysed in the first period of the chosen sample (2003–2009) dealt mostly with issues related to the organisation and management of family businesses, usually compared to non-family businesses, where the analysis of sustainability was based mainly on case studies. Between 2003 and 2009, the study of company performance is the most visible theme in the research, where it is beginning to be related to other factors such as *Sustainability*, *Entrepreneurship*, *Organization* and *Management*.

In the second period analysed (2010–2014), even though it is two years less than the previous period, there is a notable increase in the number of publications, from 25 documents between 2003 and 2009, to 102 documents in these five years. Sustainability is positioned as a leading topic, together with the study of the competitiveness models of family businesses, as well as their performance, topics that have remained present in subsequent years. In this phase, in addition to the three driving themes, *Performance*, *Sustainability* and *Competitiveness*, basic themes such as *Entrepreneurship*, *Ownership*, *Culture*, *Orientation* and *Socio-emotional wealth* appear, which will demonstrate their continuity in the third period.

The third period described (2015–2019) presents 159 documents, which is more than 50% more than the previous cycle. The driving theme of this phase is the CSR, which stands out notably from the other thematic groupings. This increase in publications generates an unprecedented wealth of research on family businesses. Related to the CSR, a large group of emerging topics that were developed in previous years burst onto the scene. They appear as driving topics *Absorptive capacity*, *Diversification*, *Opportunities* and *Innovation*, the thematic networks of these leading topics describe new lines of research and promote others that appeared in previous years. The development of research on CSR and

family businesses is influenced by a high number of documents on other subjects such as *Sustainability*, *Performance*, *Socio-emotional wealth* or *Management*. In the background are other lines of research that may be strengthened in the future, such as the study of the internationalisation of family businesses, their relationship with the environment or succession processes, which have been transversally related to a large part of the topics dealt with.

The wide and varied number of themes that accompany the analysis of the sustainability of family businesses can be grouped into three fundamental lines: those that investigate factors that drive sustainability, such as *socio-emotional wealth* and *stakeholders*; those oriented towards knowledge of methods to favour sustainability, such as *CSR*, *performance*, *management*, *innovation*, and those that analyse the factors that endanger the continuity of this type of business, such as intergenerational succession processes.

This study has highlighted the growing interest of the scientific community in research on family-owned businesses, providing a relational perspective on the issues that have to do with sustainability in this type of business, and that can help future research interested in providing knowledge on this approach.

It must be recognized that this work is not without its limitations. On the one hand, it should be noted that the 286 articles selected come only from the Web of Science (WoS) database, without considering other databases that could expand the sample of publications. Other studies published in non-academic journals, monographs or books have not been taken into account either. On the other hand, the inevitable narrowing of the search terms based on labels, beyond other types of conceptual and theoretical considerations, makes the exclusion of possible publications of interest irremediable. Nevertheless, the authors considered the size and coherence of the sample with the objective of the research to be satisfactory.

Finally, the wide range of classifications of family firms and interpretations of sustainability, leads us to suggest future research on the main issues found in this study that accompany family firms and sustainability, limiting the research by type of family business, sector of activity, size, longevity, or geographical location, among others.

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References

1. Wright, M.; Kellermanns, F. Family firms: A research agenda and publication guide. *J. Fam. Bus. Strategy* **2011**, *2*, 187–198. [CrossRef]
2. European Parliament. Report on Family Businesses in Europe (2014/2210 (INI)). Available online: https://www.europarl.europa.eu/doceo/document/A-8-2015-0223_ES.html#title1 (accessed on 10 March 2020).
3. IFERA. Family businesses dominate: International family enterprise research academy (IFERA). *Fam. Bus. Rev.* **2003**, *16*, 235–240. [CrossRef]
4. Gersick, K.E.; Davis, J.; Hampton, M.M.; Lansberg, I. *Generation to Generation: Life Cycles of the Family Business*; Harvard Business School Press: Boston, MA, USA, 1997.
5. Upton, N.; Teal, E.J.; Felan, J.T. Strategic and business planning practices of fast growth family firms. *J. Small Bus. Manag.* **2001**, *39*, 60–72. [CrossRef]
6. Hernandez Fernandez, L. Essential competences for small and medium family enterprises: A model for business success. *Rev. Cienc. Soc.* **2007**, *13*, 249–263.

7. Acquaah, M. Management control systems, business strategy and performance: A comparative analysis of family and non-family businesses in a transition economy in sub-Saharan Africa. *J. Fam. Bus. Strategy* **2013**, *4*, 131–146. [[CrossRef](#)]
8. Chrisman, J.; Memili, E.; Misra, K. Nonfamily managers, family firms, and the winner's curse: The influence of noneconomic goals and bounded rationality. *Entrep. Theory Pract.* **2014**, *38*, 1–25. [[CrossRef](#)]
9. García-Ramos, R.; García-Olalla, M. Board characteristics and firm performance in public founder- and nonfounder-led family businesses. *J. Fam. Bus. Strategy* **2011**, *2*, 220–231. [[CrossRef](#)]
10. Singal, M.; Gerde, V. Is diversity management related to financial performance in family firms? *Fam. Bus. Rev.* **2015**, *28*, 243–259. [[CrossRef](#)]
11. Astrachan, J.H.; Shanker, M.C. Family businesses' contribution to the US economy: A closer look. *Fam. Bus. Rev.* **2003**, *16*, 211–219. [[CrossRef](#)]
12. James, H. Owner as manager, extended horizons and the family firm. *Int. J. Econ. Bus.* **1999**, *6*, 41–55. [[CrossRef](#)]
13. Lumpkin, G.; Brigham, K. Long-term orientation and Intertemporal choice in family firms. *Entrep. Theory Pract.* **2011**, *35*, 1149–1169. [[CrossRef](#)]
14. Memili, E.; Fang, H.; Koç, B.; Yildirim-Öktem, Ö.; Sonmez, S. Sustainability practices of family firms: The interplay between family ownership and long-term orientation. *J. Sustain. Tour.* **2018**, *26*, 9–28. [[CrossRef](#)]
15. Schmidt, F.; Zanini, R.; Korzenowski, A.; Schmidt, R.; Benchimol, K. Evaluation of sustainability practices in small and medium-sized manufacturing enterprises in Southern Brazil. *Sustainability* **2018**, *10*, 2460. [[CrossRef](#)]
16. Sharma, S.; Henriques, I. Stakeholder influences on sustainability practices in the Canadian forest products industry. *Strateg. Manag. J.* **2005**, *26*, 159–180. [[CrossRef](#)]
17. Berrone, P.; Cruz, C.; Gomez-Mejia, L.; Larraza-Kintana, M. Socioemotional wealth and corporate responses to institutional pressures: Do family-controlled firms pollute less? *Adm. Sci. Q.* **2010**, *55*, 82–113. [[CrossRef](#)]
18. Debicki, B.; Matherne, C.; Kellermanns, F.; Chrisman, J. Family business research in the new millennium: An overview of the who, the where, the what, and the why. *Fam. Bus. Rev.* **2009**, *22*, 151–166. [[CrossRef](#)]
19. Broccardo, L.; Truant, E.; Zicari, A. Internal corporate sustainability drivers: What evidence from family firms? A literature review and research agenda. *Corp. Soc. Responsib. Environ. Manag.* **2019**, *26*, 1–18. [[CrossRef](#)]
20. Le Breton-Miller, I.; Miller, D. Family firms and practices of sustainability: A contingency view. *J. Fam. Bus. Strategy* **2016**, *7*, 26–33. [[CrossRef](#)]
21. Brigham, K.; Lumpkin, G.; Payne, G.; Zachary, M.; Sharma, P.; Salvato, C.; Reay, T. Researching Long-Term Orientation: A Validation Study and Recommendations for Future Research. *Fam. Bus. Rev.* **2014**, *27*, 72–88. [[CrossRef](#)]
22. Eddleston, K.; Kellermanns, F. Destructive and productive family relationships: A stewardship theory perspective*. *J. Bus. Ventur.* **2007**, *22*, 545–565. [[CrossRef](#)]
23. Chua, J.; Chrisman, J.; Sharma, P. Defining the family business by behavior. *Entrep. Theory Pract.* **1999**, *23*, 19–39. [[CrossRef](#)]
24. Lansberg, I.S.; Perrow, E.L.; Rogolsky, S. Family business as an emerging field. *Fam. Bus. Rev.* **1988**, *1*, 1–8. [[CrossRef](#)]
25. Rosenblatt, P.C.; de Mik, L.; Anderson, R.M.; Johnson, P.A. *The Family in Business: Understanding and Dealing with the Challenges Entrepreneurial Families Face*; Jossey-Bass: San Francisco, CA, USA, 1985.
26. Westhead, P.; Howorth, C. "Types" of private family firms: An exploratory conceptual and empirical analysis. *Entrep. Reg. Dev.* **2007**, *19*, 405–431. [[CrossRef](#)]
27. Astrachan, J.; Klein, S.; Smyrniotis, K. The F-PEC scale of family influence: A proposal for solving the family business definition problem. *Fam. Bus. Rev.* **2002**, *15*, 45–58. [[CrossRef](#)]
28. Chen, S.; Chen, X.; Cheng, Q.; Shevlin, T. Are family firms more tax aggressive than non-family firms. *J. Financ. Econ.* **2010**, *95*, 41–61. [[CrossRef](#)]
29. Basco, R. 'Where do you want to take your family firm?' A theoretical and empirical exploratory study of family business goals. *Bus. Res. Q.* **2017**, *20*, 28–44. [[CrossRef](#)]
30. Achleitner, A.; Günther, N.; Kaserer, C.; Siciliano, G. Real earnings management and accrual-based earnings management in family firms. *Eur. Account. Rev. Account. Report. Fam. Firms* **2014**, *23*, 431–461. [[CrossRef](#)]

31. Diéguez-Soto, J.; Martínez-Romero, M. Family involvement in management and product innovation: The mediating role of R & D strategies. *Sustainability* **2019**, *11*, 2162. [[CrossRef](#)]
32. Sharma, P.; Salvato, C. Commentary: Exploiting and exploring new opportunities over life cycle stages of family firms. *Entrep. Theory Pract.* **2011**, *35*, 1199–1205. [[CrossRef](#)]
33. Yew, J. Tacit knowledge and generational change: The china factor, enterprise development and malaysian chinese family SMEs in traditional food production. *China Rep.* **2020**, *56*, 103–128. [[CrossRef](#)]
34. Sun, Y.; Sun, X.; Wang, W. Research on sustainable develop of Chinese family enterprise based on independent innovation ability. In Proceedings of the 19th International Conference on Industrial Engineering and Engineering Management: Management System Innovation, Changsha, China, 1 January 2013; Springer: Berlin, Germany, 2011; pp. 651–658. [[CrossRef](#)]
35. Ardito, L.; Petruzzelli, A.; Pascucci, F.; Peruffo, E. Inter-firm R&D collaborations and green innovation value: The role of family firms' involvement and the moderating effects of proximity dimensions. *Bus. Strategy Environ.* **2019**, *28*, 185–197. [[CrossRef](#)]
36. Villalonga, B.; Amit, R. How do family ownership, control and management affect firm value. *J. Financ. Econ.* **2006**, *80*, 385–417. [[CrossRef](#)]
37. Zahra, S.A. Entrepreneurial risk taking in family firms. *Fam. Bus. Rev.* **2005**, *18*, 23–40. [[CrossRef](#)]
38. Naldi, L.; Nordqvist, M.; Sjöberg, K.; Wiklund, J. Entrepreneurial orientation, risk taking, and performance in family firms. *Fam. Bus. Rev.* **2007**, *20*, 33–47. [[CrossRef](#)]
39. Cucculelli, M.; Micucci, G. Family succession and firm performance: Evidence from Italian family firms. *J. Corp. Financ.* **2008**, *14*, 17–31. [[CrossRef](#)]
40. Ali, A.; Chen, T.Y.; Radhakrishnan, S. Corporate disclosures by family firms. *J. Account. Econ.* **2007**, *44*, 238–286. [[CrossRef](#)]
41. van Essen, M.; Carney, M.; Gedajlovic, E.R.; Heugens, P.P.M.A.R.; van Oosterhout, J. Do U.S. Publicly-Listed Family Firms Differ? Does It Matter? A Meta-Analysis. *Acad. Manag. Best Paper Proc.* **2011**, *1*, 1–2.
42. Lee, Y.; Danes, S.; Shelley, M. Work roles, management and perceived well-being for married women within family businesses. *J. Fam. Econ. Issues* **2006**, *27*, 523–541. [[CrossRef](#)]
43. Al-Dajani, H.; Bika, Z.; Collins, L.; Swail, J. Gender and family business: New theoretical directions. *Int. J. Gender Entrep.* **2014**, *6*, 218–230. [[CrossRef](#)]
44. Amarapurkar, S.; Danes, S. Farm business-owning couples: Interrelationships among business tensions, relationship conflict quality, and spousal satisfaction. *J. Fam. Econ. Issues* **2005**, *26*, 419–441. [[CrossRef](#)]
45. Wang, Y.; Poutziouris, P. Leadership styles, management systems and growth: Empirical evidence from UK owner-managed SMEs. *J. Enterprising Cult.* **2010**, *18*, 331–354. [[CrossRef](#)]
46. Uhlener, L.; Berent-Braun, M.; Jeurissen, R.; Wit, G. Beyond size: Predicting engagement in environmental management practices of Dutch SMEs. *J. Bus. Ethics* **2012**, *109*, 411–429. [[CrossRef](#)]
47. Doluca, H.; Wagner, M.; Block, J. Sustainability and environmental behaviour in family firms: A longitudinal analysis of environment-related activities, innovation and performance. *Bus. Strategy Environ.* **2018**, *27*, 152–172. [[CrossRef](#)]
48. Pushkarskaya, H.; Marshall, M. Family structure, policy shocks, and family business adjustment choices. *J. Fam. Econ. Issues* **2010**, *31*, 414–426. [[CrossRef](#)]
49. Giovanna, C.; Alfredo, D.; Lucio, C. Corporate social responsibility: A survey among SMEs in Bergamo. *Procedia-Soc. Behav. Sci.* **2012**, *62*, 325–341. [[CrossRef](#)]
50. Iaia, L.; Vrontis, D.; Maizza, A.; Fait, M.; Scorrano, P.; Cavallo, F. Family businesses, corporate social responsibility, and websites. *Br. Food J.* **2019**, *121*, 1442–1466. [[CrossRef](#)]
51. Hernández-Perlines, F.; Rung-Hoch, N. Sustainable entrepreneurial orientation in family firms. *Sustainability* **2017**, *9*, 1212. [[CrossRef](#)]
52. Iyer, V.; Lulseged, A. Does family status impact US firms' sustainability reporting? *Sustain. Account. Manag. Policy J.* **2013**, *4*, 163–189. [[CrossRef](#)]
53. Kotlar, J.; Fang, H.; De Massis, A.; Frattini, F. Profitability goals, control goals, and the R&D investment decisions of family and nonfamily firms. *J. Prod. Innov. Manag.* **2014**, *31*, 1128–1145. [[CrossRef](#)]
54. Huang, Y.-C.; Ding, H.-B.; Kao, M.-R. Salient stakeholder voices: Family business and green innovation adoption. *J. Manag. Organ.* **2009**, *15*, 309–326. [[CrossRef](#)]

55. Kallmuenzer, A.; Nikolakis, W.; Peters, M.; Zanon, J. Trade-offs between dimensions of sustainability: Exploratory evidence from family firms in rural tourism regions. *J. Sustain. Tour.* **2018**, *26*, 1204–1221. [[CrossRef](#)]
56. Cristiano, E. Internationalisation and corporate governance in family businesses: A case study. *Int. J. Bus. Perform. Manag.* **2018**, *19*. [[CrossRef](#)]
57. Mitter, C.; Emprechtinger, S. The role of stewardship in the internationalisation of family firms. *Int. J. Entrep. Ventur.* **2016**, *8*, 400–421. Available online: <https://www.inderscience.com/info/inarticle.php?artid=82220> (accessed on 7 July 2020). [[CrossRef](#)]
58. Kuo, A.; Kao, M.; Chang, Y.; Chiu, C. The influence of international experience on entry mode choice: Difference between family and non-family firms. *Eur. Manag. J.* **2012**, *30*, 248–263. [[CrossRef](#)]
59. Carvalho, L.; Williams, B. Let the cork fly: Creativity and innovation in a family business. *Int. J. Entrep. Innov.* **2014**, *15*, 127–133. [[CrossRef](#)]
60. Tegmeier, S.; Classen, C. How do family entrepreneurs recognize opportunities? Three propositions. *Rev. Int. Bus. Strategy* **2017**, *27*, 199–216. [[CrossRef](#)]
61. Sharma, P.; Sharma, S. Drivers of proactive environmental strategy in family firms. *Bus. Ethics Q.* **2011**, *21*, 309–334. [[CrossRef](#)]
62. Adendorff, C.; Halkias, D. Leveraging ethnic entrepreneurship, culture and family dynamics to enhance good governance and sustainability in the immigrant family business. *J. Dev. Entrep.* **2014**, *19*. [[CrossRef](#)]
63. Van Der Merwe, S.P. Determinants of family employee work performance and compensation in family businesses. *South Afr. J. Bus. Manag.* **2009**, *40*, 51–63. [[CrossRef](#)]
64. Eddleston, K.; Kellermanns, F.; Sarathy, R. Resource configuration in family firms: Linking resources, strategic planning and technological opportunities to performance. *J. Manag. Stud.* **2008**, *45*, 26–50. [[CrossRef](#)]
65. Reay, T.; Jaskiewicz, P.; Hinings, C. How family, business, and community logics shape family firm behavior and “rules of the game” in an organizational field. *Fam. Bus. Rev.* **2015**, *28*. [[CrossRef](#)]
66. Gavana, G.; Gottardo, P.; Moisello, A. The effect of equity and bond issues on sustainability disclosure. Family vs. non-family Italian firms. *Soc. Responsib. J.* **2017**, *13*, 126–142. [[CrossRef](#)]
67. Mzid, I.; Khachlouf, N.; Soparnot, R. How does family capital influence the resilience of family firms? *J. Int. Entrep.* **2019**, *17*, 249–277. [[CrossRef](#)]
68. Dominici, A.; Boncinelli, F.; Marone, E. Lifestyle entrepreneurs in winemaking: An exploratory qualitative analysis on the non-pecuniary benefits. *Int. J. Wine Bus. Res.* **2019**, *31*, 385–405. [[CrossRef](#)]
69. Cherchem, N. The relationship between organizational culture and entrepreneurial orientation in family firms: Does generational involvement matter? *J. Fam. Bus. Strategy* **2017**, *8*, 87–98. [[CrossRef](#)]
70. Pikkemaat, B.; Peters, M.; Bichler, B. Innovation research in tourism: Research streams and actions for the future. *J. Hosp. Tour. Manag.* **2019**, *41*, 184–196. [[CrossRef](#)]
71. Stafford, K.; Bhargava, V.; Danes, S.; Haynes, G.; Brewton, K. Factors associated with long-term survival of family businesses: Duration analysis. *J. Fam. Econ. Issues* **2010**, *31*, 442–457. [[CrossRef](#)]
72. Botella-Carrubi, M.D.; González-Cruz, T.F. Context as a provider of key resources for succession: A case study of sustainable family firms. *Sustainability* **2019**, *11*, 1873. [[CrossRef](#)]
73. Lušňáková, Z.; Juričková, Z.; Šajbidorová, M.; Lenčéšová, S. Succession as a sustainability factor of family business in Slovakia. *Equilibrium. Q. J. Econ. Econ. Policy* **2019**, *14*, 503–520. [[CrossRef](#)]
74. Hidayah, S. Succession role of indigenous and non-indigenous family business in Indonesia to achieve business sustainability. In *Proceedings of the 16th International Symposium on Management (INSYMA 2019)*. Manado, Indonesia; Atlantic Press: Paris, France, 2019; pp. 214–217. [[CrossRef](#)]
75. Porfírio, J.; Carrilho, T.; Hassid, J.; Rodrigues, R. Family business succession in different national contexts: A Fuzzy-Set QCA approach. *Sustainability* **2019**, *11*, 6309. [[CrossRef](#)]
76. Wang, Y.-Z.; Lo, F.-Y.; Weng, S.-M. Family businesses successors knowledge and willingness on sustainable innovation: The moderating role of leader’s approval. *J. Innov. Knowl.* **2019**, *4*, 188–195. [[CrossRef](#)]
77. Koironen, M. Over 100 years of age but still entrepreneurially active in business: Exploring the values and family characteristics of old Finnish family firms. *Fam. Bus. Rev.* **2002**, *15*, 175–187. [[CrossRef](#)]
78. Cretu, A.; Brodie, R. The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Ind. Mark. Manag.* **2007**, *36*, 230–240. [[CrossRef](#)]

79. Gómez-Mejía, L.; Haynes, K.; Núñez-Nickel, M.; Jacobson, K.; Moyano-Fuentes, J. Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills. *Adm. Sci. Q.* **2007**, *52*, 106–137. [[CrossRef](#)]
80. Gómez-Mejía, L.R.; Cruz, C.; Berrone, P.; De Castro, J. The bind that ties: Socioemotional wealth preservation in family firms. *Acad. Manag. Annu.* **2011**, *5*, 653–707. [[CrossRef](#)]
81. Patel, P.; Chrisman, J. Risk abatement as a strategy for R&D investments in family firms. *Strateg. Manag. J.* **2014**, *35*, 617–627. [[CrossRef](#)]
82. Chrisman, J.; Chua, J.; De Massis, A.; Frattini, F.; Wright, M. The ability and willingness paradox in family firm innovation. *J. Prod. Innov. Manag.* **2015**, *32*, 310–318. [[CrossRef](#)]
83. De Massis, A.; Kotlar, J.; Chua, J.; Chrisman, J. Ability and willingness as sufficiency conditions for family-oriented particularistic behavior: Implications for theory and empirical studies. *J. Small Bus. Manag.* **2014**, *52*. Available online: <http://search.proquest.com/docview/1756519504/> (accessed on 7 July 2020). [[CrossRef](#)]
84. Cennamo, C.; Berrone, P.; Cruz, C.; Gomez-Mejia, L. Socioemotional wealth and proactive stakeholder engagement: Why family-controlled firms care more about their stakeholders. *Entrep. Theory Pract.* **2012**, *36*, 1153–1173. [[CrossRef](#)]
85. Cruz, C.; Larraza-Kintana, M.; Garcés-Galdeano, L.; Berrone, P. Are family firms really more socially responsible. *Entrep. Theory Pract.* **2014**, *38*, 1295–1316. [[CrossRef](#)]
86. López-Fernández, M.; Serrano-Bedia, A.; Pérez-Pérez, M. Entrepreneurship and Family Firm Research a Bibliometric Analysis of an Emerging Field. *J. Small Bus. Manag.* **2016**, *54*, 622–639. [[CrossRef](#)]
87. López-Pérez, M.; Melero-Polo, I.; Vázquez-Carrasco, R.; Cambra-Fierro, J. Sustainability and business outcomes in the context of SMEs: Comparing family firms vs. non-family firms. *Sustainability* **2018**, *10*, 4080. [[CrossRef](#)]
88. Xi, J.; Kraus, S.; Filser, M.; Kellermanns, F. Mapping the field of family business research: Past trends and future directions. *Int. Entrep. Manag. J.* **2015**, *11*, 113–132. [[CrossRef](#)]
89. Baumgartner, R.J. Managing corporate sustainability and CSR: A conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corp. Soc. Responsib. Environ. Manag.* **2014**, *21*, 258–271. [[CrossRef](#)]
90. Babiak, K.; Trendafilova, S. CSR and environmental responsibility: Motives and pressures to adopt green management practices. *Corp. Soc. Responsib. Environ. Manag.* **2011**, *18*, 11–24. [[CrossRef](#)]
91. Albort-Morant, G.; Ribeiro Soriano, D. A bibliometric analysis of international impact of business incubators. *J. Bus. Res.* **2016**, *69*, 1775–1779. [[CrossRef](#)]
92. Chen, G.; Xiao, L. Selecting publication keywords for domain analysis in bibliometrics: A comparison of three methods. *J. Informetr.* **2016**, *10*, 212–223. [[CrossRef](#)]
93. Rey-Martí, A.; Ribeiro Soriano, D.; Palacios Marqués, D. A bibliometric analysis of social entrepreneurship. *J. Bus. Res.* **2016**, *69*, 1651–1655. [[CrossRef](#)]
94. WoS Database Available from the Spanish Foundation for Science and Technology. FEYCT. Available online: <https://www.recursoscientificos.fecyt.es/> (accessed on 7 January 2020).
95. Cobo, M. SciMAT: Software Tool for the Analysis of the Evolution of Scientific Knowledge. Proposal for an Evaluation Methodology. Ph.D. Thesis, University of Granada, Granada, Spain, 2011.
96. Olson, P.D.; Zuiker, V.S.; Danes, S.M.; Stafford, K.; Heck, R.K.; Duncan, K.A. The impact of the family and the business on family business sustainability. *J. Bus. Ventur.* **2003**, *18*, 639–666. [[CrossRef](#)]
97. Fitzgerald, M.A.; Haynes, G.W.; Schrank, H.L.; Danes, S.M. Socially responsible processes of small family business owners: Exploratory evidence from the national family business survey. *J. Small Bus. Manag.* **2010**, *48*, 524–551. [[CrossRef](#)]
98. Wagner, M. Corporate social performance and innovation with high social benefits: A quantitative analysis. *J. Bus. Ethics* **2010**, *94*, 581–594. [[CrossRef](#)]
99. Niehm, L.; Swinney, J.; Miller, N. Community social responsibility and its consequences for family business performance*. *J. Small Bus. Manag.* **2008**, *46*, 331–350. [[CrossRef](#)]
100. Wei, Y.; Li, W.; Wang, C. Restructuring industrial districts, scaling up regional development: A study of the Wenzhou Model, China. *Econ. Geogr.* **2007**, *83*, 421–444. [[CrossRef](#)]
101. Janjuha-Jivraj, S. The sustainability of social capital within ethnic networks. *J. Bus. Ethics* **2003**, *47*, 31–43. [[CrossRef](#)]

102. Siakas, K.; Naaranoja, M.; Vlachakis, S.; Siakas, E. Family businesses in the new economy: How to survive and develop in times of financial crisis. *Procedia Econ. Financ.* **2014**, *9*, 331–341. [[CrossRef](#)]
103. Cavicchioli, D.; Bertoni, D.; Pretolani, R. Farm succession at a crossroads: The interaction among farm characteristics, labour market conditions, and gender and birth order effects. *J. Rural. Stud.* **2018**, *61*, 73–83. [[CrossRef](#)]
104. Suess-Reyes, J.; Fuetsch, E. The future of family farming: A literature review on innovative, sustainable and succession-oriented strategies. *J. Rural. Stud.* **2016**, *47*, 117–140. [[CrossRef](#)]
105. Vrontis, D.; Bresciani, S.; Giacosa, E. Tradition and innovation in Italian wine family businesses. *Br. Food J.* **2016**, *118*, 1883–1897. [[CrossRef](#)]
106. Anglin, A.; Reid, S.; Short, J.; Zachary, M.; Rutherford, M.; Payne, G.; Carr, J. An Archival Approach to Measuring Family Influence: An Organizational Identity Perspective. *Fam. Bus. Rev.* **2017**, *30*, 19–36. [[CrossRef](#)]
107. Zellweger, T.; Nason, R.; Nordqvist, M.; Brush, C. Why do family firms strive for nonfinancial goals? An organizational identity perspective. *Entrep. Theory Pract.* **2013**, *37*, 229–248. [[CrossRef](#)]
108. Price, D.; Gürsey, S. Studies in scientometrics I: Transience and continuance in scientific authorship. *Ciênc. Inform.* **1975**, *4*, 27–40.
109. Danes, S.; Stafford, K.; Haynes, G.; Amarapurkar, S. Family capital of family firms: Bridging human, social, and financial capital. *Fam. Bus. Rev.* **2009**, *22*, 199–215. [[CrossRef](#)]
110. Basco, R. Family business and regional development—A theoretical model of regional familiness. *J. Fam. Bus. Strategy* **2015**, *6*, 259–271. [[CrossRef](#)]



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