

**NO CONSENSUS IN SIGHT:
AN ANALYSIS OF TEN YEARS OF FAMILY BUSINESS
DEFINITIONS IN EMPIRICAL RESEARCH STUDIES***

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Family business (FB) scholars often criticize the fact that FB research has not yet developed a commonly accepted definition of what constitutes an FB. At the same time, the literature lacks empirical evidence for this claim. Hence, we collected all empirical FB research articles published between 2002 and 2011 in the five leading FB research journals to examine the types of FB definitions used in the literature and to determine how their usage relates to bibliographical and methodological contextual factors. The resulting 238 articles were analyzed in terms of their underlying approaches to defining FBs. Our paper provides empirical support for the notion that FB research has not yet found a commonly accepted definition of FB. Most definitions can be classified as being rooted in the components-of-involvement approach (44% of all evaluated articles), in the essence approach (21%), or in a combination of the two (33%). We also find that the type of FB definition used in empirical research in our sample is significantly

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associated with the publication outlet, the continent of data collection, the number of authors and the stock market listing status of analyzed firms.

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INTRODUCTION

Several academic publications (e.g., Shanker and Astrachan, 1996; IFERA, 2003; Chrisman *et al.*, 2005; Lau, 2010; Kraus *et al.*, 2011) show that the majority of businesses in both Europe and North America can be classified as family businesses (FBs). For instance, a study published by IFERA (2003) reported that 96% of all US companies are FBs. The percentage of FBs in Europe lies between 60% (e.g., in France or Germany) and 80% (Cyprus, Finland and Greece) according to the same study. The corresponding figures for South America are between 65% (Argentina) and 90% (Brazil). Furthermore, FBs are estimated to generate 40% of the US gross domestic product. In Europe, the IFERA (2003) study suggests that the percentage of the GDP generated by FBs is between 35% (Poland) and 65% (Spain).

However, transnationally measuring and comparing the true economic power of FBs is difficult because the authors' criteria for inclusion in the FB category have significant effects (Mroczkowski and Tanewski, 2007). Although FB research has grown enormously in the last 20 to 30 years, FB researchers usually agree that FB research still lacks a common definition of what constitutes an FB (Bird *et al.*, 2002; Degadt, 2003; Hiebl *et al.*, 2012; Lau, 2010; Gedajlovic *et al.*, 2012; Dawson and Mussolino, 2014). This lack of common definition not only makes many FB studies non-comparable but may also yield conflicting results, as seen in a study conducted by Miller *et al.* (2007): Their analyses suggest that an FB definition that also classifies first-generation sole traders as FBs led to the result that FBs were found to

perform better than non-FBs. However, after removing these first-generation sole traders from the FB group, the effect could no longer be observed.

As early as in 1989, Handler (1989, p. 258) claimed that “defining the family firm is the first and most obvious challenge facing family business researchers.” More than 20 years later, a survey of 80 family business scholars by Litz *et al.* (2012) came to the conclusion that 54% of the responding academics thought that there was little or no consensus on the exact definition of FBs in FB research. However, there appears to be at least some agreement that two broad approaches to FB definitions may be distinguished in the current literature: (1) definitions based on components of family involvement in the business (the so-called “components-of-involvement (COI) approach”) and (2) definitions based on the essence of FBs (Basco, 2013; Chrisman *et al.*, 2005). In addition to these two broad types, the F-PEC scale – a definition approach combining elements of the COI and essence approaches (Klein *et al.*, 2005) – represents another important approach to defining FBs. We will discuss the two basic approaches and the F-PEC scale below in more detail and also refer to them in our empirical analyses.

Even though papers that focus on these different approaches to defining FB (e.g., Sharma *et al.*, 1997; Astrachan *et al.*, 2002; Sharma, 2004; Chrisman *et al.*, 2005; Chrisman *et al.*, 2010) usually motivate their work using the above-discussed non-existence of a commonly accepted definition, they do not offer empirical evidence for this claim. Only Chua *et al.* (1999) present some evidence of the widely differing definitions used in the literature on FBs. However, from their analysis, it is not clear which approaches are more common in the literature and why different definitions of family businesses are used. The present paper therefore aims to survey empirical FB research for frequently used types of definitions and contextual factors that are associated with the usage of these types of definitions. This survey is performed by

analyzing empirical FB research papers published between 2002 and 2011 in leading journals that regularly feature FB research. To be clear at the outset, for the purpose of this paper, we use the term “contextual factors” to represent bibliographic or methodological facts about the analyzed papers. For instance, such contextual factors include the year of publication, the publication outlet or the basic empirical approach (quantitative, qualitative or mixed methods). We include such contextual factors in our study in order to analyze whether some types of FB definitions are more common in certain kinds of studies or research outlets. This may in turn yield valuable advice for FB scholars when designing their studies or trying to publish them in certain journals and pondering about appropriate FB definition approaches. The selection of contextual factors in our study was inspired by recent literature review papers in the FB literature (e.g., Hiebl, 2013; Kontinen and Ojala, 2010; Pukall and Calabró, 2014), which also regularly analyze such factors.

This paper contributes to the extant literature in several ways. It provides empirical evidence that no prevailing definition of FBs has been established in empirical FB research published in the leading international journals in the field. FB researchers can therefore refer to our paper to support the claim that there is no consensus in FB research with regard to FB definitions. Moreover, to the best of our knowledge, our study is the first to analyze associations between bibliographical and methodological contextual factors and the choice of FB definition types. We show that the choice of FB definition is strongly associated with the journal of publication. Additional associations were found between the type of FB definition applied and the geographical continent of data collection, the number of authors for the FB research paper and the stock market listing status of the firms analyzed.

The rest of the paper proceeds as follows. Section 2 reviews the above-mentioned dominant approaches in the current literature to FB definitions. It starts with the COI approach in

section 2.1, followed by the essence approach (section 2.2) and the F-PEC scale (section 2.3). In chapter 3, we describe the sample and the methodology used in our study. Section 4 presents the results of this study, comprising a descriptive analysis of frequently used types of FB definitions in the empirical literature (section 4.1) and an analysis of the associations between FB definition types and contextual factors (section 4.2). The paper concludes with a discussion and implications for research in section 5.

APPROACHES TO DEFINING FAMILY BUSINESSES

Components-of-Involvement Approach

In FB research, the COI approach, also called the demographic approach (Basco 2013), is one of the most frequently mentioned and used approaches to defining family businesses and distinguishing them from non-FBs (Chrisman *et al.*, 2005). In this approach, the primary characteristic that classifies a firm as an FB is a family's involvement in the company, which is measured by its influence on the business through ownership, management and/or governance (Zellweger *et al.*, 2010; Mazzi 2011).[†] An advantage of the COI approach lies in the relative ease with which the definitions – based solely on family share ownership, management and governance, possibly spanning generations or already inherited – can be applied in research (Chua *et al.*, 1999).

Chrisman *et al.* (2005) and Pearson *et al.* (2008) criticized the COI approach because it considers a family's involvement to be sufficient to define a company as an FB and does not consider why the strategic processes of a firm are affected by a family's involvement or what types of advantages over non-FBs are thereby generated. Zellweger *et al.* (2010) therefore see

[†] Although succession across generations is sometimes mentioned as another component of the COI approach, we decided to assign it to the essence approach described below. The reasons for this decision are explained in the next sub-section.

the COI approach only as the first and simplest step towards defining an FB. Furthermore, they argued that the elements of the COI approach only measure the potential of a family to influence a company, but not their actual influence.

A further problem with the COI approach in practice is that firms with the same degree of family involvement as calculated using COI-based definitions may not necessarily all define themselves as FBs or all as non-FBs (Chrisman *et al.*, 2003). Moreover, there are no generally recognized thresholds for each of the components of the COI approach. Different values due to differing COI-based definitions of FBs are therefore used in different research papers, which limits the comparability of these papers' results on FBs (Garcia-Castro and Casasola, 2011; Siebels and Knyphausen-Aufseß, 2012).

Essence approach

Another method that is often used to define FBs in research is the essence approach (or intention-based approach according to Mazzi, 2011). The primary difference between FBs and non-FBs according to this approach is not a family's involvement in a company, but its behavior and aspiration to be an FB (Chrisman *et al.*, 2005; Mazzi, 2011; Dawson and Mussolino, 2014). Chua *et al.* (1999, p. 24) underlined the need for essence-based approaches in FB research by asserting that “[t]he components merely make the essence possible. The existence of the components may be necessary but not sufficient; they must have been used to create the essence that makes the business distinct from non-family firms.” Essence-based approaches thus focus on whether an FB exhibits typical FB behaviors and/or whether the family members involved consider the company to be an FB and wish to retain this status (Chrisman *et al.*, 2005; Mazzi 2011); for this reason, we assigned succession planning and the succession of generations to the essence (and not the COI) approach in the present study.

The gravest disadvantages of the essence approach are its difficult operationalization when compared with the COI approach (except when using self-evaluation as the single requirement in a study with primary data), its lack of impartiality when using self-evaluation, and the problem of determining and measuring the essence of a company because the vision and behavior of a firm cannot be measured as easily as, for example, a family's share of ownership (Chua *et al.*, 1999; Mazzi, 2011; Basco, 2013).

F-PEC Scale

The F-PEC scale combines elements of the COI and essence approaches and was introduced by Astrachan *et al.* (2002) to compensate for the individual weaknesses of each approach. Critics, however, note that – just like COI-based approaches – the F-PEC scale may capture the involvement of a family in an FB, but it fails to capture the essence of FBs (Rutherford *et al.*, 2008). The F-PEC scale consists of three dimensions for measuring a family's influence on the decisions and behavior in a company: power, experience and culture.

Power, the first dimension, basically comprises common operationalizations of the COI approach (involvement of a family in the ownership, management, and/or governance of a company). According to Astrachan *et al.* (2002), when measuring a family's influence through management or governance positions, not only their direct influence (members who are actually part of the family) should be considered but also their indirect influence (members who were appointed by family members). Moreover, according to advocates of the F-PEC scale, the legal, political and economic regulations of some countries in terms of the composition of the management and the supervisory board should also be considered when measuring the level of family influence (Astrachan *et al.*, 2002; Klein *et al.*, 2005; Mazzi, 2011). Experience, the second dimension, includes the experience gained within a company through the number of (i) contributing family members, (ii) generations in the company and

(iii) past successions across generations. It is assumed that every handover across generations leads to an increase in knowledge and experience within a company (Astrachan *et al.*, 2002; Klein *et al.*, 2005; Mazzi, 2011). Culture, the third dimension, indicates both the extent to which the family's and the company's visions and values coincide as well as the perceived company affiliation of the family (Astrachan *et al.*, 2002; Klein *et al.*, 2005; Mazzi, 2011).

The F-PEC scale aims to measure a family's involvement in a company and to make it comparable with the measurement of family involvement in other companies. The biggest advantage of the F-PEC scale over the COI and the essence approaches lies in its removal of the dichotomy between FBs and non-FBs. The scale does not aim to analyze whether a given company is an FB or not, but to what extent it is an FB because the level of family influence is measured on a continuous scale (Sharma, 2004; Cliff and Jennings, 2005; Rutherford *et al.*, 2008).

METHODS

To survey the FB definition approaches used in empirical FB research and the contextual factors of FB-definition choice, we constructed a sample consisting of all empirical research[‡] studies of FBs that were published between 2002 and 2011 in the leading international journals publishing FB research.[§] These journals are Entrepreneurship Theory and Practice (ETP), Family Business Review (FBR), Journal of Business Venturing (JBV) and Journal of Small Business Management (JSBM). In addition, the Journal of Family Business Strategy (JFBS), founded in 2010, was also taken into account because it specializes in FB research

[‡] By “empirical research”, we refer to both quantitative and qualitative empirical research approaches. In our study, we therefore include papers based on various data generation approaches such as archival, survey, field studies or case studies.

[§] When starting to collect data for our study in 2012, we restricted our sample to studies published between 2002 and 2011 because a sample covering ten years of empirical FB studies seemed to be sufficiently large to draw conclusions on current trends in FB definitions in empirical studies.

and is already well established in the FB research community (Astrachan and Pieper, 2013). This selection of journals was made based on the lists of journals with the highest numbers of published and cited FB articles according to Bird *et al.* (2002) and Debicki *et al.* (2009). Furthermore, Chrisman *et al.* (2010, p. 10) also noted that “[t]hese four journals [ETP, FBR, JBV, and JSBM] account for a large portion of the research in family business and are generally regarded to be among the most appropriate outlets for family business studies”. This approach yielded a total of 238 FB studies published between 2002 and 2011 in the five journals mentioned above. A list of these 238 FB studies is displayed in the appendix. Bibliographical information on the 238 articles included in our study can be obtained from the reference list of this paper (the corresponding 238 articles are marked with an asterisk). The distribution of the 238 articles in terms of journal and year of publication can be obtained from Table 1.

Table 1. Article distribution across journals and years

Year	ETP		FBR		JBV		JFBS		JSBM		Total	
	#	%	#	%	#	%	#	0%	#	%	#	%
2002	2	10%	12	60%	4	20%	0	0%	2	10%	20	8%
2003	1	6%	9	50%	6	33%	0	0%	2	11%	18	8%
2004	2	13%	9	56%	2	13%	0	0%	3	19%	16	7%
2005	4	17%	12	52%	1	4%	0	0%	6	26%	23	10%
2006	3	14%	13	59%	2	9%	0	0%	4	18%	22	9%
2007	0	0%	15	60%	4	16%	0	0%	6	24%	25	11%
2008	6	25%	11	46%	0	0%	0	0%	7	29%	24	10%
2009	4	21%	12	63%	1	5%	0	0%	2	11%	19	8%
2010	8	20%	16	40%	2	5%	11	28%	3	8%	40	17%
2011	0	0%	12	39%	3	10%	15	48%	1	3%	31	13%
Total	30	13%	121	51%	25	11%	26	11%	36	15%	238	100%

These 238 articles were analyzed in terms of 17 characteristics including elements of the underlying FB definition approach as well as contextual factors. These 17 characteristics were then used to create 17 variables, which we later used to identify clusters of FB definition approaches as well as for analyses of how contextual factors are associated with FB definition

approaches. The variables were initially coded by this paper's first author and then checked for accuracy and consistency by this paper's third author. For an overview of the 17 variables, see Table 2, which also lists their basic levels of measurement and variable descriptions.

For the analyses of associations between contextual factors and FB definition types, we used the Chi-square test. This test has some requirements for the underlying cross-tabulated data. Most importantly for our analyses, to apply the Chi-square test correctly, the following condition must be fulfilled: no more than 20% of the expected counts are less than 5 and all individual expected counts are 1 or greater (Cochran, 1954; Sprent and Smeeton, 2007).

As some variables described in Table 2 were very fine-grained and therefore resulted in many different categories (e.g., the variable "Year of publication" resulted in ten different categories for ten different years), the data were not in line with the above-mentioned conditions for the Chi-square test, as in many cases, more than 20% of the expected counts would have been less than 5. Therefore for the association analyses, for rather fine-grained variables, we consolidated some categories. For instance, we consolidated the ten years of the variable "Year of publication" into three time frames (2002-2005, 2006-2009, 2010-2011). Despite such consolidation, the conditions for applying the Chi-square test would still not be fulfilled in some cases. For these cases, we relied on the Fisher Freeman Halton test, which calculates the exact probabilities based on the generalized hypergeometric distribution and therefore has no special assumptions for the expected counts (Sprent and Smeeton, 2007).

Table 2. List of Variables

Variable	Level of Measurement	Description
Year of publication	Metric	Shows the year of publication.
Journal of publication	Nominal	Indicates in which journal the article was published.
Number of authors	Metric	Shows the number of authors.
Gender of authors	Nominal	Indicates whether the author/author groups were male, female or mixed.
Methodology	Nominal	Shows whether the analyzed article contained a quantitative study, a qualitative study or both.
Time frame	Nominal	Indicates whether the study was longitudinal, cross-sectional or both.
Source of data	Nominal	Indicates whether the study used primary data, secondary data or both.
Continents of the study	Nominal	Shows the continents where the companies analyzed in the study are located (Africa; Australia; Asia; Europe; North America; South America)
Comparison of FB and non-FB	Dichotomous	Indicates whether there was (“yes”) a comparison of FB and non-FB in the study or not (“no”).
Industry sector of the analyzed companies	Nominal	Shows the industry sector of the companies analyzed in the study (primary only; secondary only; tertiary only; primary and secondary; secondary and tertiary; or all sectors).
Size of the analyzed companies	Nominal	Shows the size of the analyzed companies according to the classification of the European Commission (2003) (S only; M only; L only; S and M; S, M and L; or M and L).
Stock market listing status of the analyzed companies	Nominal	Indicates whether all (“yes”), only some (“some”), or none (“no”) of the companies analyzed were listed on the stock market.
Ownership requirements	Nominal	Indicates if there was an ownership requirement for classifying a company as FB and which type of ownership was required.
Management requirements	Nominal	Indicates if there was a management requirement for classifying a company as FB and which type of management was required.
Governance requirements	Nominal	Indicates if there was a governance requirement for classifying a company as FB and which type of governance was required.
Succession	Dichotomous	Indicates whether succession was seen as a requirement for classifying a company as FB (“yes”) or not (“no”).
Self-evaluation	Dichotomous	Indicates whether self-evaluation was seen as a requirement for classifying a company as FB (“yes”) or not (“no”).

RESULTS

Descriptive analysis

The 238 articles were screened with respect to the 17 variables described above (see Table 2). Although the total sample consisted of 238 articles, the number of valid cases relating to some variables was smaller because of missing data. In one case (continent(s) of the study), the number of valid cases (252) was higher than the number of articles (238) because some studies analyzed companies located on different continents. As seen in Table 3, the studies in our sample were predominantly quantitative (74.4%), cross-sectional (69.3%) and used primary data (55.9%). Most studies addressed companies located in Europe (42.1%) or North America (41.7%).

When we analyzed the sample, it quickly became clear that there was no single prevailing FB definition in the leading international journals in the field. The first result of our study is therefore that the authors of FB research articles (continue to) use a variety of FB definitions in their empirical studies. Thus, we scanned the 238 articles for some identifiable clusters of FB definitions. To be identified as distinct cluster of FB definitions, we looked for similarities in the papers' definition approaches, which resulted in a preliminary list of potential clusters. We further required that at least 5% (12 papers) of the papers in our sample would fall into each respective cluster, which led to the consolidation of some preliminary clusters and to the final list of clusters. Again, this clustering exercise was first performed by the paper's first author and then checked by the paper's third author.

From this analysis, seven clusters/types of FB definitions emerged, organized along the dimensions ownership, management, governance, self-evaluation, succession planning, and/or combinations thereof, as seen in Table 4. Furthermore, we then classified these definition types as being more in line with (i) COI-based approaches, (ii) essence-based approaches or

(iii) mixed approaches. In addition to these seven types of FB definitions, some analyzed articles (in total: 4, or 2% of analyzed articles) did not specifically disclose their underlying FB definition. As their number is very small and would have led to further problems with Chi-square test requirements (see section above), we excluded these four papers from the analyses of contextual factors and FB definition types.

Among the seven types of FB definitions identified in this study, self-evaluation as an FB by the respondents of the study or the disclosure of succession planning was the single most frequently used type (in 51 of 238 articles, see Table 4). The criteria of ownership, management and governance were applied in 41 cases. In summary, our study shows that most FB articles (44%) used COI-based definitions, followed by mixed COI- and essence-based definitions (33%) and purely essence-based definitions (21%). Interestingly, only 13 papers (5%) relied on variations of the F-PEC scale.

Table 3. Descriptives

Variable	Categories	Frequency (valid)		Valid Cases
		Absolute	Relative	
Year of publication	2002	20	8.4%	238
	2003	18	7.6%	
	2004	16	6.7%	
	2005	23	9.7%	
	2006	22	9.2%	
	2007	25	10.5%	
	2008	24	10.1%	
	2009	19	8.0%	
	2010	40	16.8%	
	2011	31	13.0%	
Journal of publication	ETP	30	12.6%	238
	FBR	121	50.8%	
	JBV	25	10.5%	
	JFBS	26	10.9%	
	JSBM	36	15.1%	
Number of authors	1 author	39	16.4%	238
	2 authors	82	34.5%	
	3 authors	78	32.8%	
	4 authors	30	12.6%	
	5 authors	5	2.1%	
	6 authors	3	1.3%	
	7 authors	1	0.4%	
Gender of authors	Male	98	41.2%	238
	Female	42	17.6%	
	Mixed	98	41.2%	
Methodology	Qualitative only	32	13.4%	238
	Quantitative only	177	74.4%	
	Mixed	29	12.2%	
Time frame	Cross-sectional	165	69.3%	238
	Longitudinal	68	28.6%	
	Both	5	2.1%	
Source of data	Primary	133	55.9%	238
	Secondary	74	31.1%	
	Both	31	13.0%	
Continent(s) of the study	Europe	106	42.1%	252
	North America	105	41.7%	
	Asia	20	7.9%	
	Australia	12	4.8%	
	South America	5	2.0%	
Comparison of FB and non-FB	Yes	94	42.0%	224
	No	130	58.0%	
Industry sector of the analyzed companies	Primary only	4	2.4%	169
	Secondary only	30	17.8%	
	Tertiary only	9	5.3%	
	Primary & secondary	5	3.0%	
	Secondary & tertiary	50	29.6%	
	All sectors	71	42.0%	

Table 3. Descriptives (continued)

Variable	Categories*	Frequency (valid)		Valid Cases
		Absolute	Relative	
Size of the analyzed companies	S only	24	15.7%	153
	M only	3	2.0%	
	L only	12	7.8%	
	S & M	57	37.3%	
	S, M & L	42	27.5%	
Stock market listing of the analyzed companies	M & L	15	9.8%	80
	Yes	31	38.8%	
	No	27	33.8%	
	Some	22	27.5%	
Ownership requirements	Without a concrete threshold	105	59.7%	176
	Ownership threshold for a single family	58	24.4%	
	Other criteria	13	5.5%	
Management requirements	Management controlled by a single family	88	62.9%	140
	At least 1 family member in management	24	17.1%	
	2 or more managers are family members	19	13.6%	
	>50% controlled by at least 2 family members	1	0.7%	
	Management controlled by a family or small number of families	4	2.9%	
	CEO is from the family	3	2.1%	
	Founder or family members within senior management	1	0.7%	
Governance requirements	Controlled by a family or small number of families	54	64.3%	84
	2 or more officers/directors have family relationship	14	16.7%	
	At least 1 family member in BOD	13	15.5%	
	Founding family members or descendants are in BOD	2	2.4%	
	Chairman of the board is family member	1	1.2%	
Succession	Yes	53	91.4%	58
	No	5	8.6%	
Self-evaluation	Yes	95	96.0%	99
	No	4	4.0%	

* S = small; M = medium-sized; L = large; BOD = board of directors

Table 4. Types of FB definitions

Type	Description	Number of articles	Approach
1	Ownership requirements only	26	
2	Combinations of ownership, management and governance requirements, but not all three requirements included in definition	38	COI-based 105 (44%)
3	Ownership, management and governance requirements	41	
4	Self-evaluation as an FB and/or succession planning	51	Essence-based 51 (21%)
5	Combination of one/more COI requirement/s and self-evaluation	29	Combination of COI and essence 78 (33%)
6	Combination of one/more COI requirement/s and succession planning	32	
7	Combination of one/more COI requirement/s combined with self-evaluation and succession planning	17	
	Not specified/available	4	None 4 (2%)

Analysis of contextual factors

Possible associations between the seven types of FB definitions identified above and twelve contextual factors for the corresponding articles (year of publication, journal of publication, number of authors, gender of authors, methodology, source of data, time frame, continent(s) of the study, industry sector of the analyzed companies, comparison of FB and non-FB, stock market listing of the analyzed companies, size of the analyzed companies) were then tested using Chi-square tests or Fisher Freeman Halton tests. For eight out of the twelve tested contextual factors, no significant association with FB definition types could be identified. In contrast, based on our analyses, the contextual factors “journal of publication”, “continent(s) of the study”, “number of authors” and “stock market listing of the analyzed companies” appear to be significantly associated with FB definition types. Detailed cross-tabulations of FB definition types and these latter four contextual factors can be obtained from Tables 5 to 8.

One of the significant associations with the type of FB definition used could be found for the contextual factor “journal of publication” (see Table 5). For this analysis, we organized the

five analyzed journals into two groups: the first group includes FBR and JFBS and represents journals solely devoted to research on FBs, while the second group contains the other three journals (ETP, JBV, JSBM) in our sample, which are more broadly interested in entrepreneurship and small businesses and do not exclusively publish FB research. According to our analysis, it appears that the two journals exclusively interested in FB research (FBR, JFBS) prefer more complex and rigorous definitions: in our sample for these two journals, combined definitions consisting of COI and essence elements such as FB definition type 5 (combination of one/more COI requirement/s and self-evaluation) or type 6 (combination of one/more COI requirement/s and succession planning) could be found more often than in the broader entrepreneurship/small business journals (ETP, JBV, JSBM). In contrast, in these broader entrepreneurship/small business journals, purely essence-based FB definitions (for instance, relying on respondents' self-evaluation of their FB status or their intention to realize family-internal succession) are more frequent than in FBR and JFBS.

An additional significant association with FB definition type could be found for the contextual factor "continent(s) of the study". Here, it appears as though empirical FB research studies relying on data from European countries rely on essence-based definitions (FB definition type 4) less often than studies built on data from North America or the rest of the world (see Table 6). In contrast, FB research studies based on European data appear to more often rely on COI-based FB definitions (especially FB definition types 1 and 3) compared to studies from other parts of the world. Also the "number of authors" showed a significant association with FB definition types. Our analysis (see Table 7) suggests that smaller teams of authors (1-2 authors) more often use COI-based definitions (FB definition types 1-3), while large teams of authors (3 or more) rely more often on essence-based FB definition approaches (type 4) or approaches applying combinations of COI and essence (types 5-7). Eventually, we also found that the stock market listing of the analyzed companies is significantly associated

with FB definition type. Here, our findings suggest that FB research samples solely built upon stock market listed companies use COI-based approaches more often (FB definition types 1-3), whereas FB research investigating non-stock market listed firms or mixed samples of listed and non-listed firms more often relies on essence-based FB definition approaches or approaches utilizing a combination of the COI and essence approaches (see Table 8).

Table 5. Chi-squared analysis of journal of publication and FB definition type

Journal/Type	COI-based				Essence-based				Combination of COI and essence				Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	#	%
FBR or JFBS	15	10%	20	14%	27	19%	24	17%	25	17%	23	16%	11	8%	145	100%
ETP, JBV or JSBM	11	12%	18	20%	14	16%	27	30%	4	4%	9	10%	6	7%	89	100%
Sum	26	11%	38	16%	41	18%	51	22%	29	12%	32	14%	17	7%	234	100%
Chi-squared:	15.30				p-value:				0.018							

Table 6. Chi-squared analysis of continent(s) of the study and FB definition type

Continent(s) of the study/Type	COI-based				Essence-based				Combination of COI and essence				Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	#	%
North America	7	7%	22	21%	12	11%	26	25%	9	9%	20	19%	9	9%	105	100%
Europe	16	16%	9	9%	25	24%	15	15%	25	24%	8	8%	5	5%	103	100%
Others	4	10%	5	13%	8	21%	10	26%	5	13%	4	10%	3	8%	39	100%
Sum	27	11%	36	15%	45	18%	51	21%	39	16%	32	13%	17	7%	247	100%
Chi-squared:	32.03				p-value:				0.001							

Table 7. Chi-squared analysis of number of authors and FB definition type

Number of authors/Type	COI-based				Essence-based				Combination of COI and essence				Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	#	%
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
1-2 authors	21	18%	20	17%	17	15%	24	21%	12	10%	12	10%	11	9%	117	100%
3 authors	5	6%	9	12%	17	22%	21	27%	10	13%	15	19%	1	1%	78	100%
4 or more authors	0	0%	9	23%	7	18%	6	15%	7	18%	5	13%	5	13%	39	100%
Sum	26	11%	38	16%	41	18%	51	22%	29	12%	32	14%	17	7%	234	100%
Chi-squared:	26.65		p-value:				0.009									

Table 8. Fisher Freeman Halton analysis of stock market listing of the analyzed companies and FB definition type

Stock market listing of the analyzed companies/Type	COI-based				Essence-based				Combination of COI and essence				Totals			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	#	%
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
All analyzed companies listed	8	26%	7	23%	12	39%	1	3%	0	0%	3	10%	0	0%	31	100%
No analyzed company listed	2	7%	3	11%	4	15%	10	37%	5	19%	2	7%	1	4%	27	100%
Some of the analyzed companies listed	3	14%	1	5%	4	20%	5	24%	3	14%	4	19%	1	5%	21	100%
Sum	13	16%	11	14%	20	25%	16	20%	8	10%	9	11%	2	3%	79	100%
Fisher Freeman Halton test:					p-value:				0.002							

DISCUSSION AND IMPLICATIONS

This paper has addressed the following questions: which FB definitions are used in empirical FB research and which contextual factors affect the use of various FB definitions? Our study provides an overview of the commonly used definitions for FBs in the leading international journals in this field and empirically supports the notion that no generally accepted definition of FBs prevails in the foremost international FB research journals. Instead, many different definitions were identified. These definitions are rooted in the COI approach (44% of all evaluated articles), in the essence approach (21%), or in a combination thereof (33%). The most frequently used FB definitions in the analyzed period and journals were based on the requirements “self-evaluation as an FB and/or succession planning” (type 4 in our study, essence-related) and “ownership, management and governance requirements” (type 3, COI-related). Regarding the usage of concrete FB definition concepts from the literature as described in section 2, we found that the F-PEC scale, for example, its components, or other concepts were used only in approximately 5% of the studies.

Given these results, we conclude that in empirical FB research, no consensus on the definition of what constitutes an FB is in sight. Our empirical analysis of the actual application of various types of FB definitions in leading FB journals therefore complements the more conceptual work on FB definitions (e.g., Chua *et al.*, 1999; Astrachan *et al.*, 2002; Klein *et al.* 2005) by adding empirical evidence for the belief that FB research has still not found a commonly agreed upon definition of what constitutes an FB. The broad variety of types of FB definitions used in the empirical literature also does not raise much hope that a uniform standard definition of FBs will emerge in the near future. However, such a standard definition may not be desirable to support research on a variety of types of FBs. For instance, our analysis has revealed that research on stock market listed FBs more often uses COI-based definition approaches. Such research often relies on large and publicly available datasets

(including objective performance data) on listed FBs. For such large datasets, it may simply not be feasible to assess the essence as an FB for all of these firms because such endeavors usually require more in-depth information about the respective firms than “just” knowing about family involvement in ownership, management and governance like in COI-based approaches. So for future FB research, it might be of interest to not aim for a unique FB definition but to work towards creating standard FB definitions for certain types of studies (e.g., a standard FB definition for quantitative research on listed FBs relying on archival data vs. another FB definition for research on privately held FBs using qualitative research approaches). Creating such standard definitions for methodological subfields of FB research may help to at least make FB studies within such subfields more comparable than today.

Apart from the stock market listing of analyzed firms, our study also suggests that the choice of FB definition type depends on the journal of publication. Thus, one implication for FB researchers from this study might be that it can be important to understand and consider the correlation between the type of FB definition used and the desired journal of publication; it may not be useful to employ, for instance, a complex combined COI- and essence-based FB definition if the target journal prefers rather easy-to-evaluate COI-based types.

In terms of the limitations of our study, it should be mentioned that we concentrated on the five journals that regularly publish the highest number of studies and the most-cited articles on FBs. Further, the time frame of our study was limited to ten years. It cannot be ruled out that deviations from our results could occur if the time frame and the number of analyzed journals were expanded. The results of our study should therefore be tested by further research. Additionally, it should be mentioned that all data analyzed in the study were drawn from published journal articles, so it is possible that written statements on FB definitions or contextual factors were understood imperfectly by us.

APPENDIX

Appendix 1. List of 238 empirical FB studies included in this paper's analyses

Abdellatif et al. (2010)	Chang et al. (2008)	Garcia-Castro and Casalo (2011)
Achtenhagen et al. (2010)	Chen and Hsu (2009)	Garcia-Ramos and Garcia-Olalla (2011)
Aidis and Van Praag (2007)	Chrisman et al. (2002)	Getz and Petersen (2004)
Allouche et al. (2008)	Chrisman et al. (2004)	Goel et al. (2011)
Anderson et al. (2005)	Chua et al. (2003)	Goldsby et al. (2005)
Andersson et al. (2002)	Chua et al. (2004)	Granata and Chirico (2010)
Aragón-Sánchez and Sánchez-Marin (2005)	Chua et al. (2011)	Graves and Thomas (2006)
Arasli (2002)	Claver et al. (2009)	Graves and Thomas (2008)
Aronoff (2004)	Cole and Johnson (2007)	Gubitta and Gianecchini (2002)
Arosa et al. (2010a)	Coleman (2007)	Gulbrandsen (2005)
Arosa et al. (2010b)	Combs et al. (2010)	Haber and Reichel (2007)
Au and Kwan (2009)	Cooper et al. (2005)	Haberman and Danes (2007)
Barnett et al. (2009)	Craig and Dibrell (2006)	Hall and Nordqvist (2008)
Bartholomeusz and Tanewski (2006)	Craig and Moores (2006)	Hatum and Pettigrew (2004)
Basco and Rodríguez (2009)	Craig and Moores (2010)	Haugh and McKee (2004)
Basco and Rodríguez (2011)	Craig et al. (2008)	Hienberth and Kessler (2006)
Beck et al. (2011)	Curimbaba (2002)	Holt et al. (2010)
Bettinelli (2011)	Danes and Olson (2003)	Howorth et al. (2004)
Bhagavatula et al. (2010)	Danes et al. (2002)	Iacobucci and Rosa (2010)
Birley (2002)	Danes et al. (2008)	Irava and Moores (2010)
Bjuggren et al. (2011)	Danes et al. (2009)	Jaskiewicz et al. (2005)
Bjuggren and Palmberg (2010)	Davis et al. (2010)	Jones et al. (2008)
Bjursell (2011)	Dawson (2011)	Jorissen et al. (2005)
Blanco-Mazagatos et al. (2007)	De Clercq and Rius (2007)	Karra et al. (2006)
Block (2010)	De Kok et al. (2006)	Kellermanns and Eddleston (2006)
Block et al. (2011)	Denison et al. (2004)	Kellermanns et al. (2008)
Blumentritt (2006)	DeNoble et al. (2007)	Khavul et al. (2009)
Blumentritt et al. (2007)	Dibrell and Moeller (2011)	Kim and DeVaney (2003)
Bocatto et al. (2010)	Distelberg and Blow (2011)	King (2003)
Bonilla et al. (2010)	Ducassy and Prevot (2010)	Kisfalvi (2002)
Bradford (2007)	Dyer and Mortensen (2005)	Klein et al. (2005)
Bradley and Roberts (2004)	Dyer and Whetten (2006)	Kodithuwakku and Rosa (2002)
Braun and Sharma (2007)	Eddleston and Kellermanns (2007)	Koiranen (2002)
Brewton et al. (2010)	Eddleston et al. (2008)	Kontinen and Ojala (2011)
Brun de Pontet et al. (2007)	Ehrhardt and Nowak (2003)	Kotey and Folker (2007)
Cadieux (2007)	Ensley (2005)	Kowalewski et al. (2010)
Cadieux et al. (2002)	Ensley and Pearson (2005)	Lambrecht (2005)
Carlson et al. (2006)	Fahed-Sreih and Djoundourian (2006)	Lambrecht and Lievens (2008)
Carmon et al. (2010)	Feito-Ruiz and Menéndez-Requejo (2010)	Lee (2006a)
Carr et al. (2010)	Feltham et al. (2005)	Lee (2006b)
Carrasco-Hernandez and Sánchez-Marin (2007)	Fernández and Nieto (2005)	Levie and Lerner (2009)
Cascino et al. (2010)	Fiegner (2005)	Lindow et al. (2010)
Casillas et al. (2010)	Fitzgerald and Muske (2002)	Littunen (2003)
Casillas et al. (2011)	Fitzgerald et al. (2010)	Livingston (2007)
Cater and Justis (2009)	Gagne et al. (2011)	López-Gracia and Sánchez-Andújar (2007)
Cater and Schwab (2008)	Galbraith (2003)	Madrid-Guijarro et al. (2009)
Cegarra-Navarro and Wensley (2009)	Gallo et al. (2004)	Mahéroul (2004)
Chaganti and Greene (2002)	Garcia-Alvarez et al. (2002)	Mahto et al. (2010)

Appendix 1. List of 238 empirical FB studies included in this paper's analyses (continued)

Marshall et al. (2006)	Sciascia and Mazzola (2008)
Martinez et al. (2007)	Sharma et al. (2003a)
Masurel and Van Montfort (2006)	Sharma et al. (2003b)
Mazzola and Marchisio (2002)	Short et al. (2009)
Mazzola et al. (2008)	Sieger et al. (2011)
Memili et al. (2010)	Sirmon et al. (2008)
Memili et al. (2011)	Smyrnios et al. (2003)
Menzies et al. (2007)	Sonfield and Lussier (2004)
Meuleman et al. (2009)	Sorensen et al. (2008)
Micelotta and Raynard (2011)	Sorenson et al. (2009)
Mickelson and Worley (2003)	Stamm and Lubinski (2011)
Miller and Le Breton-Miller (2010)	Stavrou et al. (2005)
Miller et al. (2003)	Steier and Miller (2010)
Molly et al. (2010)	Steijvers and Voordeckers (2009)
Morris et al. (2010)	Stockmans et al. (2010)
Munoz-Bullón and Sanchez-Bueno (2011)	Thomas (2002)
Murphy (2002)	Tokarczyk et al. (2007)
Murphy (2005)	Tsai et al. (2006)
Murray (2003)	Tsang (2002)
Muske and Fitzgerald (2006)	Tsao et al. (2009)
Mustakallio et al. (2002)	Ucbasaran et al. (2003)
Naldi et al. (2007)	Uhlener (2005)
Niehm et al. (2008)	Vallejo (2009)
Niemelä (2004)	Venter et al. (2005)
Niskanen et al. (2010)	Vera and Dean (2005)
Nordqvist and Melin (2010)	Verhees and Meulenbergh (2004)
O'Boyle et al. (2010)	Verheul et al. (2005)
Olson et al. (2003)	Vilaseca (2002)
Oswald et al. (2009)	Voordeckers et al. (2007)
Parada et al. (2010)	Weismeier-Sammer (2011)
Peterson and Distelberg (2011)	Welsh and Raven (2006)
Pieper et al. (2008)	Wennberg et al. (2010)
Pittino and Visintin (2011)	Werbel and Danes (2010)
Prencipe et al. (2008)	Westhead and Howorth (2006)
Puryear et al. (2008)	Westhead et al. (2005)
Randøy and Goel (2003)	Wiklund and Shepherd (2009)
Royer et al. (2008)	Winter et al. (2004)
Runyan et al. (2008)	Wu et al. (2007)
Rutherford et al. (2006)	Yang (2010)
Rutherford et al. (2008)	Yilmazer and Schrank (2006)
Sacristán-Navarro and Gómez-Ansón (2007)	Zachary et al. (2011)
Sacristán-Navarro et al. (2011a)	Zahra (2003)
Sacristán-Navarro et al. (2011b)	Zahra (2005)
Salvato and Melin (2008)	Zahra et al. (2004)
Santiago (2011)	Zahra et al. (2008)
Sardeshmukh and Corbett (2011)	Zellweger et al. (2011)
Schröder et al. (2011)	
Schulze et al. (2003)	

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