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Management Accounting and Management Control in Family Businesses: Past Accomplishments and Future Opportunities

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Structured Abstract

Purpose: Academic interest in the field of management accounting and control in family businesses has increased considerably during the last decade. Family businesses constitute a unique organisational form that apparently faces a lower degree of information asymmetry compared to non-family businesses. In turn, this may limit their need for management accounting and control systems. However, recent reviews of accounting in family businesses have not yet comprehensively reviewed the literature on management accounting and control. The present paper aims to close this gap.

Design/methodology/approach: This review follows the guidelines proposed by Tranfield *et al.* (2003) for conducting a systematic literature review. We have identified 33 relevant articles, which we scanned for findings on the antecedents, configurations and outcomes of management accounting and control in family businesses.

Findings: Management accounting and control seem to be generally less relevant to family businesses than to non-family businesses. Our review suggests, however, that this finding is true primarily for smaller firms, not for larger firms. In family businesses, mutual trust, family-specific goals and the centralisation of power emerge as important antecedents of management accounting and control, but they are also affected by the use of management accounting and control instruments.

Research limitations/implications: We identify a need for more research concerning institutionalisation and the instruments of management accounting and control in family businesses. Future studies on this topic should include more demographic characteristics to isolate the family effect from other corporate governance effects, as this has been disregarded by most extant studies.

Originality/value: This article is the first comprehensive review to provide a synthesis of the literature on management accounting and control in family businesses.

Keywords: Management Accounting, Management Control, Family Business, Family Firm, Family Influence

Paper type: Literature Review

1. Introduction

Over recent decades, interest in the study of family businesses (FBs) has significantly increased in the business and management literature (Bird *et al.*, 2002; Gedajlovic *et al.*, 2012). One reason for this is the assumption that FBs differ from non-family businesses (NFBs) for various reasons. In strategic decision-making, FBs are seen as usually considering a longer time horizon than NFBs because in FBs decisions may affect not only the current but also one or more succeeding generations of the family. Thus, FBs' long-term survivability, which is often considered one of their major goals, may be affected by strategic decisions (James, 1999; Sirmon and Hitt, 2003; Le Breton-Miller and Miller, 2006). For similar reasons, FBs are assumed to place more emphasis on non-financial goals (e.g., keeping the FB alive and in the hands of the family) than do NFBs, and due to an unusually high degree of trust between family members, FBs – especially in their early years – are often characterised by a lower degree of formality than NFBs (Steier, 2001; Sundaramurthy, 2008; Hiebl *et al.*, 2013).

The following FB characteristics, amongst others, have potential influence on management control (MC) and management accounting (MA) systems: (i) FBs' long-term orientation may influence the choice of strategic MA and MC instruments; (ii) FBs' emphasis on non-financial goals may be reflected in their performance measurement and management systems, placing more weight on non-financial goals; and (iii) MA and MC systems may generally be organised more informally due to management positions being held by family members and the resulting trust among management team members. These considerations and calls for a deeper analysis of the topic by Gnan *et al.* (2011) and Prencipe *et al.* (2010) have recently been used by numerous scholars as starting points for investigating the specifics of MC and MA in FBs. However, the research on MA and MC in FBs has been fragmented, and even recent reviews on accounting in FBs (Salvato and Moores, 2010; Songini *et al.* 2013; Prencipe *et al.*, 2014) have focused on single papers and have not comprehensively addressed the extant literature on MA and MC in FBs.

Salvato and Moores (2010), for instance, investigate accounting in FBs as a general field, and their literature review results in only two articles on MA or MC. In their recent reviews, which also focus on accounting in FBs, Songini *et al.* (2013) and Prencipe *et al.* (2014) cover additional papers on MA or MC; however, as our review shows, a substantial number of papers on the topic are not included in their analysis.

Because a comprehensive literature review of the specifics of MA and MC in FBs does not yet exist and would be useful as a basis for further studies, we propose to remedy this situation by surveying state-of-the-art empirical research. Accordingly, we target the field of MA and MC in FBs for a comprehensive literature review. In this review, we aim to provide future researchers with current knowledge of the antecedents, configurations and outcomes of MA and MC in FBs. In addition, we intend to sketch out fruitful future research avenues in this promising field.

For that reason, our goal is to minimise bias and maximise the transparency and reproducibility of our searches and decisions. Rather than use a more traditional approach (Jesson *et al.*, 2011), we thus decided to conduct a systematic literature review from which an evidence base can be developed that captures the state of the art and provides information to understand the reviewer's decisions and procedure (Tranfield *et al.*, 2003; Cook *et al.*, 1997).

This paper constitutes the first comprehensive literature review in the field of MA and MC in FBs. We contribute to the literature by synthesising the available research results, not only from accounting journals but also from other disciplines such as entrepreneurship, small business and general management. Moreover, we highlight a large array of topics for further research. Our review shows that the research questions elaborated by the existing literature are widely scattered and take several perspectives. Most findings appear in only one or two studies. Only the antecedents of MA and MC in FBs, such as informality, centralisation and trust, have been analysed by several studies; however, some of the results differ from each other and therefore require more research for clarification. In addition to trust, other interpersonal values have been largely disregarded, but they do constitute further important antecedents and their analysis may thus be seen as a fruitful avenue for future research. Additionally, we find that several authors fault the literature for having rarely investigated the influence of national or corporate culture. We agree that more demographic characteristics should be taken into account to more precisely determine the effect of family influence on MA and MC. Overall, we can state that empirical research on MA and MC in FBs has soared between 2008 and 2012. With respect to theoretical implications, our review shows that family influence is an important and distinct contingency factor that has not been sufficiently considered sufficiently by most MA and MC studies. Thus, future MA

and MC studies should more closely integrate family influence in theory development and/or control for family influence in empirical studies.

The paper is structured as follows. First, we describe our research methodology. Each step is detailed to allow reconstruction of the results. Second, our findings are separated into formal characteristics and content-related results, followed by a discussion and a conclusion presenting areas of future research opportunities.

2. Methods

The procedure for this literature review was created according to the guidelines suggested by Tranfield *et al.* (2003), who propose to apply methods used in medical science to increase the quality of management reviews. In their seminal article, they find that traditional reviews frequently lack thoroughness and rigour. Traditional narrative approaches to literature reviews are criticised for being favourable to the writer by lacking critical assessments. In contrast, a systematic review is regarded as being of high quality. Its systematic procedure enables the researcher to browse an exhaustive amount of literature in specific fields and sub-fields by minimising bias and fostering reciprocity. Tranfield *et al.* (2003) suggest that this ability should be used to find the maximum available data. They also recommend not only to review literature from a closely defined discipline (e.g., for the present paper, accounting), but also to include perspectives from various disciplines relevant to the topic under review. To conduct our systematic review, we followed a three-stage process that consisted of (i) planning the review, (ii) conducting the review, and (iii) reporting and disseminating the results of the review.

2.1. Planning the Review

The first phase was primarily concerned with defining and clarifying the relevance and subject area of the review (Clarke and Oxman, 2001; Tranfield *et al.*, 2003). This systematic literature review is intended to synthesise our findings and highlight research gaps. In section 1, we explained that a systematic literature review is chosen for the purpose of presenting our findings in a rigorous way. To conduct the systematic review, we prepared the instruments for protocolling our procedure. A list of databases and search engines formed the basis of our research. A systematic analysis of papers

requires a framework that includes both formal and content-related information about the search results to ensure reproducibility (Tranfield *et al.*, 2003; Jesson *et al.*, 2011).

To verify the content-related findings relevant to the present review, we needed to employ a working definition of MA and MC. In order to determine whether the systems or practices studied in the reviewed papers can be classified as MA or MC systems, we relied on the framework developed by Malmi and Brown (2008). Their framework includes a broad array of different control systems, which enabled us to check whether the papers that we found fell within the scope of MA and/or MC systems. The instruments used in MA and MC often coincide, which is why the classification of single instruments as “belonging” either to MA or MC depends on their usage and perspective (Malmi and Brown, 2008). Considering this, we chose not to exclude papers on either MC or MA, but to include both MA and MC in our review to broaden the understanding of MA and MC in FBs. Consequently, and in line with prior literature, which uses “MA and MC systems” as an umbrella term (e.g., Macintosh and Scapens, 1991; Otley and Berry, 1994; Bisbe *et al.*, 2007; Dillard and Roslender, 2011; Hiebl, 2014), we too refer below primarily to “MA and MC systems”.

2.2. Conducting the Review

To facilitate scientific reproducibility, the research scope was narrowed to empirical academic journal articles written in English. In accordance with Tranfield *et al.*'s (2003) suggestion to also include findings from outside the narrow discipline in question, we not only included accounting journals in our literature search but also remained open to findings from other disciplines (such as entrepreneurship or FB). Thus, our findings are based on a broad keyword search in electronic databases. For a systematic procedure, we created a search algorithm that included the following keywords and search conditions (Tranfield *et al.*, 2003). The search algorithm consisted of two parts, the first one describing the area of MA and MC, and the second one describing the business type—in this case, FBs. To be included in our review, papers had to feature at least one term from each part in their title, abstract, or keywords.

The first part of the algorithm was: (“management account*” OR “management control*” OR “managerial account*” OR “managerial control*” OR “control* system*”). The second part was added either with the conjunction “AND” or with a

search-in-results function of the respective search engines. To limit the results to articles relating to FBs, we employed the second phrase: (“family firm*” OR “family compan*” OR “family business*” OR “family enterprise*” OR “family owned firm*” OR “family owned compan*” OR “family owned business*” OR “family owned enterprise*” OR “family led firm*” OR “family led compan*” OR “family led business*” OR “family led enterprise*” OR “family controlled firm*” OR “family controlled compan*” OR “family controlled business*” OR “family controlled enterprise*”). Note that the asterisks in the search phrases were wild cards that allowed various suffixes to be included in our results. For instance, by using the term “management account*”, we could capture both “management accounting” and “management accountant”.

We applied the search algorithm in November 2012 to the following databases: *Elsevier ScienceDirect*, *SciVerse*, *EBSCO Business Source Elite*, *Emerald*, *SAGE Journals*, *SpringerLink*, *ISI Web of Knowledge*, and *Scopus*. After eliminating duplicates, 57 articles remained, which we assessed manually (using the electronic search function) according to the formal requirements: search terms in title, abstract and/or keywords. This systematic double check removed 17 articles from the sample that did not fulfil the formal prerequisites. Eleven of these articles were conference proceedings, indices, books, calls for papers, or magazine articles without references and thus did not qualify as academic articles, although in any case they should have been excluded (W/o Author, 1981; Curatola *et al.*, 2000; Goldstock, 2010; Scott, 2001; Errington and Tranter, 1991; Duller, 2011, 2010a; W/o Author, 2008; Gnan *et al.*, 2011; W/o Author, 1960; Baudoin and Luehlfing, 1997). Three articles were found by the search algorithm even though none of the key terms appeared in their titles, abstracts, or keywords (Cheng and Firth, 2006; Ainsworth and Cox, 2003; Zeitlin, 1976). Another three papers were written in Portuguese (Grande and Beuren, 2011; Petry and Nascimento, 2009; Guerreiro *et al.*, 2008) and were therefore also excluded from further analysis. The remaining 40 articles were reviewed for content-related requirements.

Four of those articles were excluded from our sample due to a lack of empirical research. Two of the four papers are conceptual: one is a review of data and information about the competitiveness of Italy and its role in the world (Onida, 2003), and the other discusses perceptions of the term “family farming” (Errington, 1996). Two of the four articles discarded for content-related reasons are literature reviews. One, by Lau (2010), focuses on various definitions of the term FB. The second literature review, by Salvato

and Moores (2010), examines a broader field of accounting in the area of FBs. Another three articles were found to contain no findings relevant to the focus of this paper, namely, MA and MC in FBs (Cromie *et al.*, 1995; Masulis *et al.*, 2011; Scholes *et al.*, 2008). Thus, 33 articles were included in the final review.

The residual articles were scanned for bibliographical and methodological characteristics as along with findings related to MA and MC in FBs. Because we did not limit our search to articles using any particular research methodology, it seems appropriate to include information on the articles' methodological underpinnings in our review, because underlying research methodology strongly affects the extent to which an article's findings are deemed to be generalisable. For instance, although articles with a qualitative research approach may discover new theoretical and empirical relations and thus yield theoretically generalisable results, their findings cannot usually be readily generalised to a wider population (i.e., statistically generalised) (Ryan *et al.*, 2002). This is why we scanned the 33 articles for their methodological characteristics, such as the basic research methodology (quantitative or qualitative), the geographical area of data collection, how data was collected, the time frame investigated, the underlying sample size, the size of the underlying firms, the informants for data generation and, in the case of quantitative papers, the analytical approach employed. The selection of the article characteristics included in the present review was inspired by review papers on related topics (Wagenhofer, 2006; Kontinen and Ojala, 2010; Pukall and Calabrò, 2014; Hiebl, 2013; Hoque, 2014; Lavia López and Hiebl, 2014) and complemented by the authors. Moreover, because FB research has not yet developed a uniform definition of what constitutes an FB (Astrachan *et al.*, 2002; Dawson and Mussolino, 2014), we also scanned the articles for their underlying definitions of FB. Both the bibliographical and methodological characteristics of the reviewed articles are presented in section 3.

To synthesise the findings of the reviewed articles, in line with suggestions by Tranfield *et al.* (2003) and Jesson *et al.* (2011), both authors read the identified articles several times, extracted the key findings of each article and identified clusters and sub-clusters of research findings. These clusters were then discussed and harmonised. From this process, three larger categories of findings emerged. These three categories were the following: *Antecedents of MA and MC in FBs*, *Configurations of MA and MC in FBs*, and *Outcomes of MA and MC in FBs*. These categories are used in section 4 to present our findings. In this connection, *antecedents of MA and MC in FBs* refers to

findings in the published literature on “factors affecting the adoption on MACS [management accounting and control systems]” (Bisbe *et al.*, 2007, p. 790) in FBs. Note that we focus on FB-specific antecedents and not on other antecedents of MA/MC systems which are already well established in the literature, such as firm size, environmental uncertainty or strategy (Baines and Langfield-Smith, 2003; Luft and Shields, 2003; Bisbe *et al.*, 2007; Lavia López and Hiebl, 2014). For the purpose of this paper, *Configuration of MA and MC in FBs* refers to findings in the literature on the characteristics of MA and MC usage in FBs. In this category, we specifically deal with findings on MA and MC instruments used in FBs and the organisation of MA and MC in FBs, and thus more with the “technical configuration” of MA and MC (Bhimani, 2003). The category *Outcomes of MA and MC in FBs* focuses on findings in the literature which concern effects of MA and MC usage in FBs (Luft and Shields, 2003). According to Chenhall (2003), these outcomes may relate to the use and usefulness of MA and MC systems or to their behavioural and organizational effects. As Chenhall (2003) further noted, these types of outcomes are highly interdependent, which is why in our literature review of MA and MC in FBs, we did not (artificially) assign the outcomes found in the literature to the specific types of outcomes conceptually separated by Chenhall (2003).

3. Characteristics of the articles reviewed

The reviewed articles were published in 28 different journals between 1985 and 2012 (see Table 1). We clustered the journals according to their primary fields of research. The five categories were as follows: *Economic Journals*, *Finance and Accounting Journals*, *Management Journals*, *Entrepreneurship and Family Business Journals*, and *Other Journals*. Most of the reviewed papers were published in the category *Management Journals* (13 journals), followed by *Entrepreneurship and Family Business Journals* and *Finance and Accounting Journals* (seven journals each). The rest of the articles were published in *Economic Journals* (three journals) and *Other Journals* (three journals). The journals *International Journal of Business Research* (four articles), *Family Business Review* and *Critical Perspectives on Accounting* (two articles each) published the largest number of the articles that we reviewed. The remaining journals provided one article each. More articles were published between 2009 and 2012 than in

the preceding twelve years. A closer look at the publishing period disclosed that this tremendous increase started in 2008, which accentuates the topicality of this literature review.

===Insert Table 1 about here===

As discussed in section 2.2, several methodological characteristics of the reviewed papers were analysed. Table 2 presents the *Type of Article*, the *Geographical Area of Data Origin* and the paper's underlying *FB Definition*. We distinguish the type of articles by their research approach, because the conclusions of quantitative studies cannot be directly compared to the conclusions of qualitative studies. The division that considers the geographical area of data origin not only provided information about areas researched but also indicates potential cultural or environmental differences that need to be considered when comparing the reviewed articles' findings. The section *FB Definition* refers to the subfield of this review. In the context of the discussion of the various FB definition concepts, we provide an overview of the most common concepts and observe whether these different approaches lead to different conclusions.

The various categories displayed in Table 3 address information about the methodology used in the articles. The category *Data Collection* is complementary to *Types of Articles* and shows how information was generated. The information about *Time Frame* enables us to allocate the data to a specific time frame and to classify it into longitudinal or cross-sectional data. *Sample Size* is important to affirm significances in quantitative studies and to divide single-case studies from other qualitative studies. Considering the size of the observed firms can show, at most, what types of firms were examined and whether *Firm Size* leads to different conclusions. The categories *Informants* and *Analytical Approach* provide an overview of the common addressees and statistical methods used in the articles reviewed. These categories may endorse the comparison of articles with opposing findings.

3.1. Type of Article and Geographical Area

We analysed *Type of Article* (see Table 2) under two sub-headings: whether articles are based on either a quantitative or a qualitative methodology. If an article relies on a

mixed-methods approach, both sub-categories are marked in Table 2. The sample consists of 18 purely quantitative and 13 purely qualitative studies. Two articles employ a mixed-methods approach and include both quantitative and qualitative research approaches. 26 studies focus on one country, and only 7 papers investigate more than one country. The majority of articles in our sample investigate FBs in Europe¹ (20 articles), followed by FBs in Asia (9 articles) and America (5 articles)².

3.2. Definition of “Family Business”

In the articles examined, the definitions of the term “family business” vary. This is in line with entrepreneurship theory, which states that no clear definition of FB exists (Basu, 2004; Rutherford *et al.*, 2008; Chua *et al.*, 1999). As seen in Table 2, we sub-classified the collected data with respect to the FB definitions in the various approaches as *Ownership*, *Management* and *Self-Perception*. If articles explicitly use several approaches, more sub-categories were marked in Table 2. The column titled *Specific* accommodates further specific concepts beyond the given categories. In articles that take the ownership approach, firms are defined as FBs if a person or family holds a specific percentage of shares, usually at least 20-50%. In cases involving the management-based view, a business falls within the category of FB if it is managed or if the decision process is controlled by a single person or family. In the third sub-category (self-perception), the authors of the papers had asked informants whether the business was perceived as an FB or not. Eleven articles use only the ownership approach, two articles use only the management approach, and two articles use the self-perception approach to define FBs.

===Insert Table 2 about here ===

Another common definition of FBs in our sample (eleven articles) combines the ownership and management approaches. One article (Jorissen *et al.*, 2005) combines the ownership and self-perception approaches. Six articles explicitly use a different concept

¹ In this paper, Europe is defined as the continent of Europe, not the European Union or only the European mainland.

² America is defined as the continent of America, including both North and South America.

to define FBs. One such concept is *Zaibatsu*³, which is the Japanese term for “large conglomerates owned or controlled by a particular family (or clan)” (Batalla, 1999, p. 18). This is a form that is typical of the Asian area and is based on the ownership approach (Batalla, 1999). Another such concept is termed the *Substantial Family Influence* (SFI) concept (Klein, 2000) in Table 2. The SFI concept acknowledges a family’s ownership and the influence of its members on a company’s supervisory and management boards. If a family has some ownership rights and the sum of its relative influences on governance and management is substantial, according to the formula by Klein (2000), the company is defined as an FB. This approach is later included as the power dimension in the concept of Family Influence on Power, Experience, and Culture (F-PEC) (Astrachan *et al.*, 2002, 2005). The F-PEC construct seems to be a “superior” definition of an FB (Lau, 2010, p. 379), but its application requires a considerable amount of information, which is mostly collected via questionnaires. A significant portion of FB studies is based on secondary data. Therefore, in this type of study the F-PEC’s practical applicability is limited (Lau, 2010; Salvato and Moores, 2010). Five reviewed articles use SFI to define the term FB, and all of those articles have collected their data via surveys, not secondary data.

We also analysed whether the underlying FB definition chosen would be associated with different findings for MA and MC. We did so by grouping the articles included in our review into the 6 clusters of similar FB definition approaches described above (ownership-only approach, management-only approach, self-perception-only approach, combined ownership-and-management approach, combined ownership-and-self-perception approach, specific FB-definition concepts). We then looked for trends of conflicting or contradictory findings in articles based on different FB definition approaches. However, except for some conflicts between individual pairs of articles relying on different FB-definition approaches (e.g., Moilanen, 2008 and Giovannoni *et al.*, 2011; Schulze *et al.*, 2001 and Speckbacher and Wentges, 2012), we did not find such broad trends. Thus, we were unable to identify evidence of the underlying FB definition affecting the findings on MA and MC systems in FBs.

³ Batalla (1999) recommends *The Korean Business Conglomerate, Chaebol Then and Now*, by Kang (1996), for further literature on the definition of *Zaibatsu* or its Korean equivalent, “*Chaebol*”.

3.3. Data Collection and Time Frame

The first section of Table 3 shows information about the data collection method, classified into *Survey*, *Interview*, *Secondary Data*, and *Personal Observation*. In our sample, twelve out of 33 articles are based only on a survey, two articles are based only on interviews, and the results of five articles are based only on secondary data. Two studies extend their survey data with the help of secondary data. Three articles, including one quantitative and one qualitative study, add interview data to their survey data. Four interview-based articles enrich their data with secondary data, and one article includes both interview data and personal observations. Three articles are based on interviews, secondary data, and personal observations. Only one article combines survey, interview methods and secondary data (Bloom and Van Reenen, 2007).

The sample consists of longitudinal and cross-sectional studies. The *Time Frame* column in Table 3 refers to the observation periods in the articles of our sample, covering the years from 1792 to 2010. The number of investigations per year increases in the 21st century. Nine articles do not mention any specific research period.

3.4. Sample Size and Firm Size

The sample sizes of the articles range from studies of one business to an international study of 2,951 businesses. For quantitative studies, the sample sizes range from 54 to 2,951 businesses, resulting in an average sample size of 363 businesses. Most of the qualitative articles consider one or two companies in the form of case studies including several interviews.

Several rating criteria for determining firm size are given in the articles. The size of a company is described in terms of turnover, number of employees, or simply by the expressions “small”, “medium”, or “large”. For comparability, we adapted the sizes given by turnover and number of employees and re-evaluated them in accordance with the EU (European Commission, 2003). Excluding the four articles that do not provide any information on the size of the observed companies, 24% of the articles deal only with large businesses, 14% only with medium businesses, and two articles only with microbusinesses. No article deals exclusively with small businesses. 21% of the articles examine small and medium-sized businesses, 21% have obtained their data from medium-sized and large businesses, and two articles observe microbusinesses and small

businesses. Four articles investigate three different business sizes: two papers have observed small, medium-sized and large businesses, and two other papers deal with micro-, small-, and medium-sized businesses. Some of the opposing findings presented in section 4 are based on samples observing firms of different firm sizes; however, no clear tendency is detected to indicate how firm size might affect the respective findings.

===Insert Table 3 about here===

3.5. Informant and Analytical Approach

The second-to-last category in Table 3 provides information about the addressees of survey questionnaires and the interviewees in case studies. The majority of informants are at the top management level (15 articles), followed by a group termed “managers”⁴ (twelve articles). In six articles, the owner or owner-manager of the business is explicitly mentioned as an informant for data collection. The remaining groups are employees (five articles), family members other than the owner-manager (three articles), and expatriates (one article). Fourteen articles do not refer specifically to a certain type of informant.

The “*Analytical Approach*” column in Table 3 primarily refers to quantitative investigations, although some qualitative research also uses descriptive statistics. The statistical tools most frequently employed in the articles reviewed are descriptive statistics, *Chi²-Test*, Mann-Whitney-U-Test (*U-Test*), Kruskal-Wallis-Test (*KW-Test*), Analysis of Variance (*ANOVA*), and regression models. Other statistic instruments are used in only one or two articles each.

4. Findings of the articles reviewed

In this section, we examine our sample for findings regarding MA and MC in FBs, which constitute the status quo of (i) antecedents, (ii) configurations, and (iii) outcomes of MA and MC in FBs. The main findings of each article were extracted and classified into these three categories. The antecedents, the configuration and the outcomes were, in turn, clustered according to the prevailing topics of the findings. In Tables 4, 5 and 6,

⁴ There is no further information about whether the managers belong to top, middle, or lower management.

we summarise the main findings of the reviewed papers and indicate the articles that support or oppose the respective statements.

4.1. Antecedents on MA and MC in FBs

4.1.1. Trust

Five of the papers in our sample address the influence of trust on MA and MC within FBs. Because the findings of those papers are mostly inconsistent with each other, the influence of trust is not clear. The authors agree that trust is a critical antecedent of human relationships within FBs. However, it remains unclear whether trust leads to higher or lower use of MA or MC. The findings describe two levels of trust: one between family and management and the other between the family and management accountants. With respect to the latter, the reviewed papers do not mention whether the manager or management accountant is a family member; with respect to the former, the reviewed articles mainly find that the need for MA may be reduced if the family trusts company management (Moilanen, 2008; Konstantinos *et al.*, 2012; Tsamenyi *et al.*, 2008).

In her case study, Moilanen (2008) observes a large Finnish FB in the dairy branch operating in the Baltic countries. She finds that individuals with a strong social position and power can bridge the gap between MC routines and formal accounting. Furthermore, Moilanen (2008) finds accounting data and formal control schemes to be subservient to the person who enjoys the family's trust. The CEO of this FB describes the balance scorecard as a "fancy word" for reporting (Moilanen, 2008, p. 171). Although MC focuses on personal relationships with persons who have knowledge about operations, financing data seems to be of secondary importance. Moilanen (2008) argues that the family's trust in management stabilises the formal character of MC because the family then believes that management will act in the firm's best interest. In the case study by Moilanen (2008), an area director enjoyed trust and autonomy from the family owners. He built informal relationships with locals and had the most intimate knowledge of operations. Thus, he was able to stabilise the parent company's control over subsidiaries even in changing market situations. The accounting department also relied on his knowledge as a complement to formal reporting. Giovannoni *et al.*'s (2011) findings address a somewhat different situation, which might be the reason for

results that deviate from those of Moilanen (2008). Giovannoni *et al.* (2011) analyse the succession and professionalisation process of a medium-sized Italian FB which grows into a large FB. They show that MA supports knowledge transfer across generations and between owner-family and non-family managers. Moreover, Giovannoni *et al.* (2011) present evidence that increasing complexity (e.g., through succession, professionalisation and growth) creates the need for change and for a more formal control system, even if the family trusts non-family management.

The different findings by Moilanen (2008) and Giovannoni *et al.* (2011) may be due to the specific situations of the firms investigated in their case studies. In the paper by Moilanen (2008), the investigated FB experiences changes in market situations, whereas the FB in the case study by Giovannoni *et al.* (2011) grows in size and changes internally. Combined, these findings may point to internal rather than external challenges prompting growing FBs to build or expand their MA/MC systems. Further, the FBs of these two case studies are located in different countries with different national cultures and business behaviours, which may also be a reason for the different results.

In addition, Moilanen (2008) finds in her case study that the family's trust in the management accountant enables the powerful management accountant to drive professionalisation of the MA system. This findings fits well with the findings of Hiebl *et al.* (2012), who in a survey of management accountants find that management accountants in FBs more often find change-management competency to be an important skill than do their counterparts in NFBs. However, relativising the potential role of non-family finance experts as agents of MA change (Moilanen, 2008; Hiebl *et al.*, 2012), Konstantinos *et al.* (2012) show in their case study of a Greek FB that the family's trust in a non-family CFO may also be abused. In this FB, the non-family CFO was the manager most trusted by the former owner-manager. The CFO drove the informal MA and MC systems. However, implementation of modern MC instruments and integration of other managers through this formalisation would potentially have diminished the CFO's powerful position. Therefore, the CFO tried to ensure that these practices remained unchanged until he was replaced by another CFO. Thus, in the case studied by Konstantinos *et al.* (2012), the non-family CFO hinders rather than fosters the sophistication of the MA system, to avoid the dilution of his power.

Six out of the seven articles referred to in this section are case studies. Thus, differences in the results may be due to differences in each company's situation and the personal characteristics of the key persons involved. However, it can be concluded that the persons enjoying the trust by the FB owners play crucial roles in establishing or developing MA/MC systems. This is particularly true when internal or external circumstances change, which can be the starting point of a change in an FB's MA or MC systems.

4.1.2. Business and Family Objectives

Two results are consistently found in the reviewed articles that concern the influence of business and family objectives on MA and MC. Leenders and Waarts (2003) describe a model dealing with the family and business dimension that influences small and medium-sized FBs' goal orientation. They argue that if the family and the business dimensions do not conflict with each other per se, it is possible to reach family and business goals simultaneously. An FB's tendency towards business orientation or family orientation is reflected in MC usage. Leenders and Waarts (2003) find that increased business orientation (and reduced family orientation) in the decision-making process within an FB increases the importance of the MC system at the expense of conflict-resolving skills. Thus, a side effect of greater business orientation and MC usage is a lower level of conflict resolution skills, because family values are not stressed sufficiently within the FB.

In line with this notion, seven articles conclude that higher levels of family orientation decrease the use of both MA and MC and their relevance within an FB (Leenders and Waarts, 2003; Uddin, 2009; Riordan and Riordan, 1993; Tsamenyi *et al.*, 2008; Schulze *et al.*, 2001; Bloom and van Reenen, 2007; Onome Imoniana *et al.*, 2011). For instance, Schulze *et al.* (2001) enumerate several ways in which altruism affects MC systems in medium-sized FBs. They show that in medium-sized FBs, family managers commonly receive incentive payments, although they do not reach the goals with which they are (usually) coupled (such as a particular level of firm performance). The authors ascribe this phenomenon to (i) senior family generations behaving altruistically and making payments to younger family generations despite their failure to meet targets, or (ii) family members' self-control. Schulze *et al.* (2001) therefore

suggest that FBs invest more in internal control systems to reduce such agency costs based on altruism and/or self-control.

Another effect of greater family orientation is that family members are preferred for promotion (Onome Imoniana *et al.*, 2011; Schulze *et al.*, 2001). Onome Imoniana *et al.* (2011) observe a case in which the financial manager was the finance director's cousin. Before that, she was the secretary to a finance director of a larger company and therefore, had no adequate financial or accounting experience. Similar decisions in staffing and organisation led to "bad" (Onome Imoniana *et al.*, 2011, p. 4) MA and MC systems, which resulted in a debt increase from 36,000.00 USD to 750,000.00 USD. In the case study by Uddin (2009), management showed ideological loyalty to serve the dominant owner family rather than the majority of shareholders. In short, the articles mentioned provide evidence that business and family goals can conflict with each other and that these conflicts are often reflected in the design of small and medium-sized FBs' MA and MC systems.

4.1.3. Organisation

The *Organisation* cluster contains two antecedents concerning MA and MC in FBs for which we were able to find common ground—power and knowledge. Similar to the phenomenon involving a non-family CFO who enjoys the family's trust and tries to preserve his or her power (Konstantinos *et al.*, 2012), owner-managers also avoid measures or instruments that have the potential to dilute their control (Batalla, 1999; Chen *et al.*, 2009). This keeps external financing at a manageable level and avoids mergers and acquisitions. Chen *et al.* (2009) show that owner-managers who maintain power and MC decrease the level of exploitation of FBs' corporate potential. Using the case of a large Asian conglomerate, Batalla (1999, p. 41) demonstrates how to keep control within the family by avoiding "serious divergence of principal-agent interests" through pursuing a steward-like behaviour.

Knowledge centralisation is examined in eight papers (Moilanen, 2008; Konstantinos *et al.*, 2012; Tsamenyi *et al.*, 2008; Uddin, 2009; Goffee and Scase, 1985; Yeung, 1995; Tsang, 2002, Chan *et al.*, 2001). The findings of these papers are broadly consistent, showing that the centralisation of MC increases due to a high level of centralisation of knowledge. Five of these studies are case studies and investigate FBs

in Asian countries. In those studies, centralisation is also explained by national culture declared typical of these countries (Uddin, 2009; Tsamenyi *et al.*, 2008; Tsang, 2002; Yeung, 1995; Chan *et al.*, 2001). Tsang (2002), for instance, describes a case in which strategic knowledge was concentrated within the family of owners. Non-family members were given information only on an operational level. This made family members, especially owner-managers, the key brokers of organisational knowledge and kept MC within the family. Three further papers shed light on this from a corporate-culture perspective (Konstantinos *et al.*, 2012; Moilanen, 2008; Goffee and Scase, 1985). As indicated above, Konstantinos *et al.* (2012) observe an FB whose succeeding family generation wanted to change former MA and MC practices. This was hindered by the non-family CFO, who wanted to maintain his powerful position. Only replacement of the CFO could enable restructuring of the MA and MC practices. Thus, the centralisation of power and knowledge within the family (which may also be partially based on corporate or national culture) emerges from this review as both centralising and limiting the usage of MA and MC practices in FBs.

===Insert Table 4 about here===

4.2. Configuration of MA and MC in FBs

4.2.1. Instruments

Thirteen articles find that the use of MA differs between FBs and NFBs. Their findings mostly do not contradict each other, but the phenomena observed cover a variety of results on the use of MA and MC instruments. First, three papers find no difference between the understanding of MA in FBs and NFBs. In both types of firm, MA/MC are perceived as tools to navigate the business (Becker *et al.*, 2011; Mayr, 2012; Jorissen *et al.*, 2005). Nevertheless, Durendez *et al.* (2011) and García-Pérez-de-Lema and Duréndez (2007) find that MA and MC are less relevant in small and medium-sized FBs than in comparable NFBs. This notion is underscored by the finding that FBs use fewer strategic MA instruments than NFBs (Neubauer *et al.*, 2012; Laitinen, 2008; Becker *et al.*, 2011; Feldbauer-Durstmüller *et al.*, 2012). Neubauer *et al.* (2012) add that FBs tend to use less sophisticated strategic MA instruments (e.g., the balanced scorecard). In numerous studies, the finding that FBs use fewer strategic MA instruments is associated

with FBs being managed by family members. In line with this notion, Speckbacher and Wentges (2012) and Feldbauer-Durstmüller *et al.* (2012) consistently show that if an FB is managed by non-family members, use of strategic MA instruments in FBs is not significantly different than in NFBs. Put differently, the employment of non-family managers might also be interpreted as an antecedent of increased MA/MC use in FBs.

Lower use of strategic MA and MC instruments in FBs is also found to be related to firm size. With increasing FB size, use of these instruments conforms to their use by NFBs (Speckbacher and Wentges, 2012), which suggests that large FBs do not differ much from large NFBs in terms of MA/MC use. This suggests that the analysis of family influence in studies of MA/MC is mainly relevant to small and medium-sized businesses. Further, a distinction between FB generations is identified which suggests that first-generation FBs use more strategic MA tools than do subsequent generations. Conversely, subsequent generation FBs employ more operative MA instruments (Duller *et al.*, 2011).

We find two further results concerning MA/MC instruments in FBs. One paper argues that the greater an FB's corporate governance requirements, the higher the need for strategic MC instruments (Neubauer *et al.*, 2012). This statement is consistent with the findings of the case study by Giovannoni *et al.* (2011), who show that in their case firm, increasing FB complexity and size required a more sophisticated and formalised MA and MC system. In the comparative case study by Tsui-Auch (2003) on two FBs, the larger FB was more likely to employ non-family managers to formalise and professionalise MC practices. This proposition fits well with the survey findings by Feldbauer-Durstmüller *et al.* (2012), which show that larger FBs use strategic MA instruments on a higher level than smaller FBs. Another study examines earnings management in FBs and NFBs (Ghabdian *et al.*, 2012). Earnings, as a performance indicator, are often managed under MC (e.g., executing particular accounting techniques). The results disclose that there is less earnings management found in FBs due to less conflict between principal and agent (Ghabdian *et al.*, 2012).

4.2.2. Institutionalisation

In the papers reviewed, institutionalisation of MA is mostly defined as (the presence of) a separate and specialised department charged with MA tasks. The results of the articles

reviewed suggest that the installation of a separate MA unit is connected to the companies' size and owner characteristics. FBs – especially smaller ones – are less likely to establish a MA unit than are their non-family counterparts (Neubauer *et al.*, 2012), which may be explained by the above-mentioned finding that small and medium-sized FBs attach less importance to MA than do NFBs (Durendez *et al.*, 2011; García-Pérez-de-Lema and Duréndez, 2007). Giovannoni *et al.* (2011) observe in their case study that growth and the associated increase in size result in a higher need for more formal MA and MC practices. Therefore, installation of a specialised MA department is more likely in larger FBs (Neubauer *et al.*, 2012; Feldbauer-Durstmüller *et al.*, 2012). Duller *et al.* (2011) investigate whether there is a relationship between institutionalisation and the FB's generation. The results show a U-shaped trend. This means that first-generation FBs are more likely to install a separate MA unit, as are fifth- and subsequent-generation FBs. Further, they find that a higher proportion of non-family members in executive positions or external providers of capital are the drivers of MA institutionalisation. In summary, the existence of external capital and external (non-family) executives along with increasing firm size and complexity emerge from this review as the main drivers of the installation of a separate MA unit (Neubauer *et al.*, 2012; Feldbauer-Durstmüller *et al.*, 2012).

4.3. Outcomes of MA and MC in FBs

4.3.1. Trust and Informality

The findings of the papers reviewed are somewhat ambiguous on whether informal MA/MC systems influence an FB's efficiency or effectiveness. Two articles provide findings that oppose this notion. The case portrayed by Uddin (2009) demonstrates how the family's reach pervades to control the organisation, even though the organisation is nominally managed by a non-family CEO. The case example researched by Konstantinos *et al.* (2012) shows a non-family CFO enjoying trust by the family and stalling changes and developments in MA and MC. The successors were not able to enforce a new MA and MC system until the non-family CFO was replaced. In addition to these two cases, there is evidence that informal MC may be an FB's strength and competitive advantage. For instance, the study by Speckbacher and Wentges (2012) does not find significant differences in terms of efficiency and effectiveness in FBs

compared to NFBs. They also find that informal MC does not decrease the longevity of an FB (Speckbacher and Wentges, 2012). However, such informal and trust-based MA/MC systems may also have downsides, as shown by Schulze *et al.* (2001). As indicated above, their findings suggest that insufficient usage of formal MA/MC systems may be associated with FB-specific agency costs due to altruism. This way, weak MA/MC systems may, for instance, cause family CEOs to remain too long in the FB and thus harm its performance. Hence, in the current literature, there is mixed evidence on the outcome of informal MA/MC systems in FBs, which warrants further research.

Three case studies show how MA or MC can support trust building among personnel (Giovannoni *et al.*, 2011; Herath *et al.*, 2006; Konstantinos *et al.*, 2012). They demonstrate how MA and MC, either formal or informal, can be used to increase communication and transfer of the founder's knowledge and values. Simultaneously, this increase in communication may lead to FBs' better treatment of employees and finally, to a lower degree of unionisation (Herath *et al.*, 2006; Gulbrandsen, 2009), which is again in the interest of the owner-manager who desires to maintain control. The case by Giovannoni *et al.* (2011) shows how MA supports the professionalisation process related to formal and cultural competences. As a consequence, the founder gains more trust in the personnel and then, he is more inclined to delegate decisions. Konstantinos *et al.*'s (2012) case study highlights that a newly appointed CFO may gain the owners' trust by implementing mechanisms that enable them to manage the FB in a professional way. Herath *et al.* (2006), on the other side, describe a case in a developing country where MC is performed in a more informal way. In that case, the owner family saw corporate culture as an important part of MC. The family gained trust in its personnel through open two-way communication achieved by a less hierarchical, casual atmosphere (e.g., top managers and workers addressed each other by their first name). Thus, the analysis of these papers enables the preliminary conclusion that, although it is unclear whether informality decreases effectiveness or efficiency, MA and MC systems seem to enhance the family's trust in their employees and vice versa.

4.3.2. Centralisation of knowledge and decision-making

One reviewed article addresses the centralisation of control within an FB. Apart from the antecedents that lead to centralisation, Tsang (2002) indicates, based on his multiple case study, that centralisation of MA and MC may bring the advantages of rapid decision-making processes that conform to strategy and a low risk of strategic information leakage. He further mentions that due to centralisation—especially if only one person is privy to most knowledge—FBs may have a “fragile organisational memory” (Tsang, 2002, p. 38). Sudden loss of a key member would have serious consequences for strategic knowledge. Thus, Tsang (2002) argues that it is in an FB’s interest to strengthen its organisational memory. In this regard, the case study results by Giovannoni *et al.* (2011) may point to the notion that the formalisation of MA and MC not only include more people in the MA/MC information loop but also may help to codify formerly centralised knowledge. However, due to the fact that only the (qualitative) paper by Tsang (2002) has discussed the outcomes of centralised MA/MC in FBs, it can be concluded that more research is required to clarify the picture.

===Insert Table 6 about here===

4.3.3. Performance and objectives

One paper finds that the existence of an MA system increases small and medium-sized FBs’ performance (Durendez *et al.*, 2011). Moreover, formal MA systems function as a common language between departments and management. MA is therefore found to have a positive effect on internal communication. It simplifies knowledge transmission in cases involving an FB’s professionalisation and succession (Giovannoni *et al.*, 2011). Duller (2010b) states that the existence of an MA system in an FB does not lead to different decisions or objectives than it does in an NFB. This may be associated with the fact that FBs do not perceive MA differently than do their non-family counterparts (Becker *et al.*, 2011; Mayr, 2012; Jorissen *et al.*, 2005). The outcomes of MA and MC in FBs presented in this section show that they have positive effects on an FB’s internal communication, knowledge transmission and performance. However, our review suggests that MA does not lead to different decisions in FBs compared to NFBs.

5. Conclusions and Implications for Future Research

This paper seeks to summarise the state of the art of MA and MC in FBs. We strive to provide a basis for further research and make available a sample of antecedents, configurations and outcomes gathered from the articles reviewed. The topic of MA and MC in FBs has recently attracted great research interest; since 2008, the number of publications has greatly increased. The majority of antecedents, configurations and outcomes concerning MA and MC are supported by only one or two articles. To corroborate these statements successfully, more qualitative and quantitative research is required. We found contradictory statements mainly in the field of trust, which signals a need for more research for clarification. Although many findings are supported by only one article, a few statements are confirmed by up to seven articles. This literature review shows that the existing literature sheds light on MA and MC in FBs from several perspectives, but at the same time it reveals considerable potential for further research.

From a holistic point of view, it appears that both MA and MC are less relevant in FBs than in NFBs. FBs are characterised by a higher degree of informality, centralisation and reliance on trust than their non-family counterparts. However, most of the articles covering these points are case studies, and thus the notion that MA and MC may be less relevant in FBs than in NFBs needs careful corroboration in order to be statistically generalisable. One reason why the findings differ in parts may also be that they were derived predominantly using case study methods. An important factor to consider in the context of MA and MC research focusing on FBs is that only trust is mentioned, whereas other interpersonal values are disregarded. Hiebl *et al.* (2012) find that management accountants in FBs see themselves as drivers of change. The single case study by Giovannoni *et al.* (2011) describing how a management accountant supports changes in MA and MC during a professionalisation process endorses this notion. However, the case study findings by Konstantinos *et al.* (2012) highlight that an owner family's trust in a non-family CFO may also empower the CFO to hinder such changes. Thus, an interesting future research avenue might be to examine in more detail how leadership or specialist positions influence MA and MC systems in FBs and under what conditions (e.g., support by the family) MA or MC change or professionalisation may occur. Further guiding questions could include the following: Which values support higher or lower use of MA or MC in FBs? Is it possible that from an MA or MC

perspective there may exist optimal corporate governance settings to increase performance or stakeholder value?

Although the notion that national and corporate culture influence MA and MC is supported by several articles, the specific cultural characteristics that influence MA and MC in FBs have rarely been investigated (Feldbauer-Durstmüller *et al.*, 2012; Durendez *et al.*, 2011; Chan *et al.*, 2001). Furthermore, note that the majority of observations were collected in highly developed countries within Europe and Asia, whereas MA and MC in FBs in less developed countries have not yet been studied sufficiently. This is regrettable, because less-developed countries have high economic growth potential, and FBs are very important in those countries. Therefore, research on MA and MC in FBs in developing countries may be a promising and important field of further interest (Tsamenyi *et al.*, 2008; Yeung, 1995; Uddin, 2009; Mayr, 2012).

Most of the outcomes of MA/MC in FBs in the reviewed papers concern interpersonal relationships and informal MC in FBs. By virtue of its intangible nature, informality enforces the problem of knowledge transmission. This raises the question of how knowledge transfer occurs within informal frameworks in FBs (Giovannoni *et al.*, 2011). Thus, questions about antecedents and the impact of loss of information on FBs and the role of MA/MC systems in preventing such losses should be another interesting field of future research (Onome Imoniana *et al.*, 2011; Speckbacher and Wentges, 2012).

Furthermore, Konstantinos *et al.* (2012) see changes in MA and MC as a consequence of changes in executive positions as a fruitful research field. A useful theory in this regard may be upper echelons theory, which posits that organisational choices (such as the design of MA and MC systems) depend on an organisation's top managers and their characteristics (Hambrick and Mason, 1984). Thus, this theory may be used in further research as a theoretical lens when analysing the effect of top management turnover in FBs on MA and MC systems. Although the application of upper echelons theory in MA and MC research is still limited, existing results are promising and indicate that CEO and CFO characteristics may complement organisational characteristics in predicting the design characteristics of MA and MC systems (Hiebl, 2014).

In the general context of contingency factors affecting MA and MC systems in FBs, several authors propose that it would be interesting to focus on demographic

characteristics to isolate the family effect. Jorissen *et al.* (2005) have already touched upon this topic by evaluating the empirical results of prior studies. They conclude that to find the “real” differences between FBs and NFBs, demographic control variables (i.e., firm size in total assets, age and industry) are of high importance. Characteristics such as generation, education, or age of owner-managers, other family members, and employees should also be taken into account (Jorissen *et al.*, 2005; Duller *et al.*, 2011). For instance, Jorissen *et al.* (2005) show that CEOs in FBs are older and have fewer educational degrees than their counterparts in NFBs. Another example would be the findings by Duller *et al.* (2011), who find a U-shaped association between FB generation and the implementation of separate MA units. Moreover, as pointed out above, Speckbacker and Wentges (2012) find an interaction effect between size and family influence on MC usage, indicating that only small FBs tend to differ from NFBs in terms of MC usage. To summarise, future studies in the field of MA and MC in FBs should simultaneously account for the aforementioned findings and antecedents to carve out which of the variables that significantly influence MA and MC in FBs has the greatest explanatory power.

Considering our sample of reviewed articles, the number of quantitative studies is not significantly higher than the number of qualitative studies. However, with respect to individual aspects, the distribution of quantitative or qualitative studies is significantly different. We therefore suggest, for example, more quantitative research on corporate governance in MA and MC in FBs, because all of the articles to address this aspect are based on qualitative research. Moreover, we suggest more qualitative studies on institutionalisation and MA and MC instruments. Table 7 summarises the proposed topics for further research.

===**Insert Table 7 about here**===

The main contribution of this paper is a synthesis of the extant knowledge on MA/MC in FBs and the identification of an array of potentially fruitful avenues for future research avenues. Our review sheds light on the antecedents of MA and MC in FBs, how FBs differ from NFBs in the configuration of MA and MC and what outcomes can be expected from MA and MC in FBs. Clearly, more research and corroboration of results is required in this field, because most of the findings that we

have discovered are based on only one or two articles each. In the areas of instruments and institutionalisation of MA and MC in FBs, more qualitative studies seem necessary. Additionally, the field of corporate governance and MA/MC in FBs needs more quantitative research because demographic characteristics such as firm age, top management education, and gender have not been sufficiently considered. At the same time, this synthesis demonstrates the peculiarities of MA and MC in FBs and underpins the importance of family influence as an important contingency factor for MA and MC research in general.

Our presentation of the state of the art of MA and MC in FBs has some limitations. We included only academic articles, although there may be additional information, for instance, in books and conference papers. All of the reviewed articles were written in English because articles in other languages were ignored or removed from the sample. Because our search is based on electronic databases, our results also depend upon the search engines, and we cannot rule out the possibility of having missed papers that would have further contributed to this review. Finally, as with any review paper, perception and interpretation of results in the published literature are contingent on the authors of the review, which comes with the limitation that other authors might have reported them differently.

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Journal Type	Year of Publication														Total		
	1985	1993	1995	1999	2001	2002	2003	2005	2006	2007	2008	2009	2010	2011		2012	
Economic Journal																3	
Economic and Industrial Democracy												1				1	
International Journal of Economics Science and Applied Research													1			1	
Quarterly Journal of Economics										1						1	
Finance and Accounting Journals																7	
Accounting Forum											1					1	
Critical Perspectives on Accounting												1			1	2	
International Journal of Accounting					1											1	
International Journal of Accounting and Finance											1					1	
Management Accounting Research															1	1	
Qualitative Research in Account & Management											1					1	
Management Journals																13	
Corporate Governance: An International Review												1				1	
European Journal of Management															1	1	
European Management Journal							1									1	
International Journal of Business and Management															1	1	
International Journal of Business Research														1	3	4	
International Journal of Business Strategy														1		1	
Journal of Change Management													1			1	
Journal of Management Studies	1															1	
Management Learning								1								1	
Organization Science					1											1	
Entrepreneurship and Family Business Journals																7	
Family Business Review								1						1		2	
International Journal of Entrepreneurial Behaviour & Research										1						1	
International Journal of Entrepreneurial Venturing														1		1	
International Journal of Management and Enterprise Development									1							1	
Journal of Business Venturing						1										1	
Journal of Small Business Management		1														1	
Other Journals																3	
Area			1													1	
Revista Innovar Journal														1		1	
Southeast Asian Studies				1												1	
Total	1	1	1	1	2	1	2	1	1	1	2	3	3	2	5	7	33

Table 1. Overview of Journal Articles

Authors of Articles	Type of article		Geographical Area of Data Origin	FB Definition			Specific
	Quantitative	Qualitative		Ownership	Management	Self-Perception	
Batalla (1999)		x	Philippines				Zaibatsu
Becker <i>et al.</i> (2011)	x	x	Germany	x			
Bloom and Van Reenen (2007)	x		Europe/USA	x			
Chan <i>et al.</i> (2001)		x	China	x	x		
Chen <i>et al.</i> (2009)	x		East Asia	x			
Duller (2010b)	x		Austria			x	
Duller <i>et al.</i> (2011)	x		Austria				SFI
Duréndez <i>et al.</i> (2011)	x		Spain	x	x		
Feldbauer-Durstmüller <i>et al.</i> (2012)	x		Austria				SFI
García-Pérez-de-Lema and Duréndez (2007)	x		Spain	x	x		
Ghabdian <i>et al.</i> (2012)	x		Iran	x	x		
Giovannoni <i>et al.</i> (2011)		x	Italy	x			
Goffee and Scase (1985)		x	Europe	x			
Gulbrandsen (2009)	x		Norway	x			
Hatun <i>et al.</i> (2010)		x	Argentina	x			
Herath <i>et al.</i> (2006)		x	Sri Lanka	x	x		
Hiebl <i>et al.</i> (2012)	x		Austria				SFI
Jorissen <i>et al.</i> (2005)	x		Belgium	x		x	
Konstantinos <i>et al.</i> (2012)		x	Greece	x			
Laitinen (2008)	x		Finland	x			
Leenders and Waarts (2003)	x	x	The Netherlands	x	x		
Mayr (2012)	x		Slovakia				SFI
Moilanen (2008)		x	Finland/Baltic Countries		x		
Neubauer <i>et al.</i> (2012)	x		Austria/Germany				SFI
Onome Imoniana <i>et al.</i> (2011)		x	Brazil		x		
Riordan and Riordan (1993)	x		USA	x	x		
Schulze <i>et al.</i> (2001)	x		America			x	
Speckbacher and Wentges (2012)	x		Austria/Germany	x	x		
Tsamenyi <i>et al.</i> (2008)		x	Indonesia	x	x		
Tsang (2002)		x	Singapore	x	x		
Tsui-Auch (2003)		x	Singapore	x			
Uddin (2009)		x	Bangladesh	x			
Yeung (1995)		x	South East Asia	x	x		

Table 3. Methodology of the Articles Reviewed

Authors of Articles	Data collection				Time frame	Sample Size		Informants	Analytical Approach
	Survey	Interview	Secondary Data	Pers. Observation		(Firms)	Firm Size		
Batalla (1999)			x		1834-1980	1	L	n.a.	Descriptive Statistics
Becker <i>et al.</i> (2011)	x	x			2008	63/45	S/M/L	Top Executives/Owner	U-Test, W-Test
Bloom and Van Reenen (2007)	x	x	x		2006	732	M	Managers	Descriptive Statistics, Regression
Chan <i>et al.</i> (2001)			x		1792	2	n.a.	n.a.	n.a.
Chen <i>et al.</i> (2009)			x		1998-2005	2951	n.a.	n.a.	Descriptive Statistics, W-Test
Duller (2010b)	x				n.a.	236	M/L	n.a.	Chi ² -Test, Fisher-Test
Duller <i>et al.</i> (2011)	x				2009	479	M/L	CEOs	KW-Test, Fisher's-Exact-Test, U-Test, Jonckheere-Terpstra-Test
Durendez <i>et al.</i> (2011)	x				2003	436	XS/S/M	n.a.	Anova-Test, Descriptive Statistics, KW-Test, Wald-Statistics, White's Test, T-Student Statistics
Feldbauer-Durstmüller <i>et al.</i> (2012)	x				2009	479	M	CEOs	Descriptive Statistics, Fisher's-Exact-Test
García-Pérez-de-Lema and Duréndez (2007)	x				2000	639	S/M	Managers	Descriptive Statistics, Chi ² -Test, Analysis of Variances, Wald Statistics
Ghobadian <i>et al.</i> (2012)			x		2002-2009	62	n.a.	n.a.	Descriptive Statistics, KS-Test, Regression
Giovannoni <i>et al.</i> (2011)		x	x		2007-2010	1	M/L	Managers, Owner, Family Members	n.a.
Goffee and Scase (1985)		x			1979	12	M/L	Top Executives, Management, Owners	n.a.
Gulbrandsen (2009)	x	x			2003	980	S/M/L	n.a.	Descriptive Statistics, Regression
Hatun <i>et al.</i> (2010)		x	x		1989-1999	2	L	Managers, Employees, Family Members	Descriptive Statistics
Herath <i>et al.</i> (2006)		x	x		n.a.	1	L	Managers, Employees	n.a.
Hiebl <i>et al.</i> (2012)	x				2011	254	L	Head of Management Accounting	U-Test
Jorissen <i>et al.</i> (2005)	x				2001	839	>=XS	Top Executives	Descriptive Statistics, Chi ² -Test, U-Test, W-Test, Regression
Konstantinos <i>et al.</i> (2012)		x		x	2003+2005	1	L	Managers	n.a.
Laitinen (2008)	x				2004	145	S/M/L	Top Management	Descriptive Statistics, Regressions
Leenders and Waarts (2003)	x	x			1987-2002	220	S/M	Manager-Owners	Descriptive Statistics, Analysis of Variance, Regression
Mayr (2012)	x				2010	397	S/M	CEOs	Chi ² -Test, Fisher's-Exact-Test
Moilanen (2008)		x	x		2005-2007	1	L	Top Executives, Top Management	n.a.
Neubauer <i>et al.</i> (2012)	x				2009-2010	950	M/L	Management	Chi ² -Test, Fischer's-Exact-Test, KS-Test, U-Test, Regression
Onome Imoniana <i>et al.</i> (2011)			x		n.a.	1	S/M	Top Executives	n.a.
Riordan and Riordan (1993)	x				n.a.	108/293	XS/S	n.a.	Descriptive Statistics, Analysis of Variance
Schulze <i>et al.</i> (2001)	x		x		1995	1376	M	Top Executives	Descriptive Statistics, Regression, Ancova—Test
Speckbacher and Wentges (2012)	x				2004	288	M/L	Top Management	Descriptive Statistics, Regression
Tsamanyi <i>et al.</i> (2008)		x	x	x	1999-2002	1	M	Managers, Employees	n.a.
Tsang (2002)		x			1995-1996	10	L	Managers, Local Managers, Expatriates	n.a.
Tsui-Auch (2003)		x	x	x	1999	2	S/M	Owner, Employee, Family Members	n.a.
Uddin (2009)		x	x	x	n.a.	1	S/M	Employees	n.a.
Yeung (1995)	x		x		1967-1994	112	n.a.	Top Executives	Descriptive Statistics

Table 4. Antecedents of MA/MC in FBs

Antecedents of MA/MC in FBs	Supported by	Opposed by
Trust		
Family's trust in management in FBs decreases the need for MA.	Moilanen (2008), Konstantinos <i>et al.</i> (2012), Tsymenyi <i>et al.</i> (2008)	
Family's trust in management in FBs ensures stability of formal characteristics in MC.	Moilanen (2008),	Giovannoni <i>et al.</i> (2012)
Management accountants of FBs who are trusted by the family are driver of professionalisation in MA.	Moilanen (2008), Hiebl <i>et al.</i> (2012)	Konstantinos <i>et al.</i> (2012)
Business Objectives		
Increased business-orientation in decision-making of management in FBs increases usage and relevance of MC	Leenders and Waarts (2003)	
Higher importance of family-oriented goals in FBs decreases MC usage and/or its relevance.	Tsymenyi <i>et al.</i> (2008), Uddin (2009), Riordan and Riordan (1993), Leenders and Waarts (2003), Schulze <i>et al.</i> (2001), Bloom and Van Reenen (2007), Imoniana <i>et al.</i> (2011)	
Organisation		
Owner-Managers in FBs avoid measures diluting their MC.	Batalla (1999), Chen and Huang (2009)	
Centralisation of knowledge due to corporate and national culture leads to centralised MC in FBs.	Moilanen (2008), Konstantinos <i>et al.</i> (2012), Tsamenyi <i>et al.</i> (2008), Uddin (2009), Goffee and Scase (1985), Yeung (1995), Tsang (2002), Chang <i>et al.</i> (2001)	

Table 5. Configurations of MA/MC in FBs

Configurations of MA and MC in FBs	Supported by	Opposed by
Instruments		
FBs use fewer MA/MC tools than NFBs.	Duréndez <i>et al.</i> (2011), Garcia-Pérez-de-Lema and Duréndez (2007)	
FBs use less strategic MA tools than NFBs.	Neubauer <i>et al.</i> (2012), Laitinen (2008), Becker <i>et al.</i> (2011), Feldbauer-Durstmüller <i>et al.</i> (2012)	
FBs use less sophisticated tools of MA than NFBs.	Neubauer <i>et al.</i> (2012)	
First-generation FBs are more likely to use strategic MA tools than subsequent generation FBs.	Duller <i>et al.</i> (2011)	
Subsequent generation FBs are more likely to use operative MA tools than first-generation FBs.	Duller <i>et al.</i> (2011)	
Family members in executive positions in FBs decrease the use of strategic MA measurements.	Speckbacher and Wentges (2012), Feldbauer-Durstmüller <i>et al.</i> (2012)	
MC discovers less earnings management in FBs than in NFBs.	Ghabdian <i>et al.</i> (2012)	
High requirements of corporate governance in FBs increase the need for strategic MC.	Neubauer <i>et al.</i> (2012)	
Being an FB does not influence the understanding of MA.	Becker <i>et al.</i> (2011), Mayr (2012), Jorissen <i>et al.</i> (2005)	
Growing FB size increases the need for formalisation and professionalisation of MA/MC practices.	Giovannoni <i>et al.</i> (2012), Feldbauer-Durstmüller <i>et al.</i> (2012), Tsui-Auch (2003)	
Institutionalisation		
Larger FB size increases the likelihood of establishing a specialised MA unit.	Neubauer <i>et al.</i> (2012), Feldbauer-Durstmüller <i>et al.</i> (2012)	
FBs are more likely to establish a specialised MA unit when in the fifth or higher generation	Duller <i>et al.</i> (2011)	
FBs are less likely to establish a specialised MA unit than NFBs.	Neubauer <i>et al.</i> (2012)	

Table 6. Outcomes of MA/MC in FBs

Outcomes of MA/MC in FBs	Supported by	Opposed by
Trust and Informality		
MA/MC (formal and informal) in FBs increases the family's trust in staff.	Konstantinos <i>et al.</i> (2012), Giovannoni <i>et al.</i> (2012), Herath <i>et al.</i> (2009)	
Informal MC in FBs does not decrease overall business effectiveness and efficiency.	Speckbacher and Wentges (2012)	Konstantinos <i>et al.</i> (2012), Uddin (2009)
Informal MC in FBs decreases unionisation of employees	Gulbrandsen (2009), Herath <i>et al.</i> (2006)	
Informal MC in FBs does not decrease FBs' longevity.	Speckbacher and Wentges (2012)	
Objectives		
MA in FBs does not lead to different objectives in comparison to NFBs.	Duller (2010)	
Centralisation		
Centralised MC in FBs by family members increases speed of decision-making	Tsang (2002)	
Centralised MC in FBs by family members decreases leakage of strategic information.	Tsang (2002)	
Centralised MC in FBs by family members increases risk of knowledge loss due to lacking transmission of knowledge.	Tsang (2002)	
Instruments		
MA systems increase performance in FBs.	Duréndez <i>et al.</i> (2011)	
Information		
Formal MA systems in FBs increase knowledge transmission and internal communication.	Giovannoni <i>et al.</i> (2012)	

Table 7. Possible Areas for Further Research and Examples of Research Questions

Possible Areas for Further Research and Examples of Research Questions
Informal and formal MA and MC systems in FBs
What are the pros and cons of informal MA and MC in FBs compared to formal MA and MC systems or compared to NFBs?
Do informal MA and MC systems serve as a competitive advantage for FBs? How do high-performing FBs compare to underperforming FBs in terms of informal MA and MC systems?
Which problems arise from self-control of owner-managers in FBs and how may MA and MC contribute to overcoming such problems?
Knowledge transmission and MA and MC systems in FBs
How does the transfer of MC knowledge and tactical knowledge work in FBs with informal MC?
What are the consequences of knowledge losses through informal MA and MC systems in FBs? How may such knowledge losses be overcome?
Corporate governance and MA and MC practices in FBs
How do typical values and standards of FBs influence their MA and MC systems? How do they differ from NFBs in this regard?
How do demographic characteristics of family members influence corporate governance and MA and MC systems of FBs?
Changes in executive positions and MA and MC systems in FBs
How does a change in executives in FBs influence MA and MC systems?
How do manifestations of MC in FBs change before and after generational succession?
How do different management styles in FBs and NFBs influence MA and MC systems?