How do Finance Managers shape family firms?

A look at those non-family managers, who drive reporting innovation and family firm performance

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Although our knowledge on the finance function in family firms (FFs) has advanced in recent years, little is known about how individual actors with specific traits adjust accounting systems in a particular corporate set-up to purposefully trigger organizational change. I conduct qualitative, interpretive research on seven German family-owned firms with newly-hired non-family Finance Managers (FMs) that either altered or maintained their management reporting (MR). In this study, I develop an inductive process model of the relationship among accounting contexts, FMs' traits, accounting change (AC) and organizational responses to AC. The emergent framework uncovers the dynamics between non-family finance experts and family business (FB) environments and identifies modifications of MR as well as reactions to these. Additionally, my findings reveal previously unreported characteristics of FMs and unnoticed environmental contingencies, and hence provide important future research directions.

Introduction

The FB literature has traditionally been focused on two governance mechanisms: the board and strategic planning. To date, few studies have dealt with the role of management accounting (MA), MA practices or AC in family-owned companies (Heinicke, 2018). Most works on these topics reported on the dissemination of strategic MA practices, as well as the organizational and environmental contingencies determining their implementation. This literature noted that FFs – as compared to non-family firms (NFFs) – made less use of innovative accounting tools, and designed and applied them differently (Helsen, Lybaert, Steijvers, Orens & Dekker, 2017). Concurrently, studies have indicated that family-controlled entities intend to professionalize their governance structures to face demanding situations such as growth, internationalization or succession (Howorth, Wright, Westhead & Allcock, 2016). In this regard, non-family FMs – who possess both the expert know-how and the motivation to drive AC – have been attributed a key role in implementing formalized controlling tools (Huerta, Petrides & O'Shaughnessy, 2017). Lastly, well-designed MA instruments were shown to improve the performance of family-owned companies (Upton, Teal & Felan, 2001).

While previous literature recognizes the importance of non-family finance experts in shaping accounting tools, it nonetheless primarily emphasizes systems and their significance to value generation in FFs. By emphasizing systems rather than individuals, research might be missing how FMs, General Managers (GMs), family members and other key players shape and engage with these systems in a particular environment (Rizza & Ruggeri, 2018). Scholars still know relatively little about how individual actors execute the finance function and produce outcomes, i.e., MA practices that form the basis of executive decision-making and management actions and, hence, superior performance (Hiebl & Li, 2018). Future studies have thus been asked to place individual actors as well as their characteristics and (differing) abilities in relation to AC and performance at the center – while also considering contextual factors (e.g., Acquaah, 2013). My study therefore puts forward three research questions: *Which non-family FMs initiate AC in which corporate set-ups? How do these managers modify the accounting tools that they find at their employers? Which responses does a change of these tools trigger and how exactly does this translate into superior performance?*

Given the nascent knowledge about dynamics and underlying drivers of the renewal of MA practices, I adopt a qualitative, interpretive approach to address these questions. I follow the tenets of systematic, inductive research from Gioia, Corley and Hamilton (2013) to ensure rigor in my research design and execution. I investigated how MR has been altered (or maintained) by newly hired non-family FMs in seven privately-held German FFs. I conducted 19 interviews with key informants from all participating firms. My research design allowed me to compare the perspectives of each member and to discern patterns of AC across organizational contexts. Further, by deliberately limiting myself to just one tool, MR, I was able to analyze the dimensions of change in detail. The process model that emerged from my findings reveals a number of key components and processes undergirding AC and resulting organizational responses.

This work makes three contributions. First, I develop an empirically grounded framework modeling the renewal of MA practices in family-controlled entities that includes the perspective of multiple organizational participants and addresses antecedents, change processes and outcomes. This model helps me to point out that accounting tools are situated, which suggests a more fragmented conception of these instruments than is often portrayed in the literature. Second, I review a particular professionalization process involving non-family actors in detail, examining *how exactly* such experts establish formal financial control mechanisms, and under *which* conditions these specialists drive firm success (El-Masri, Tekathen, Magnan & Boulianne, 2017). By examining "embedding" traits of non-family FMs, I shed new light on under-researched key variables further explaining heterogeneity among FB performance. Further, I answer recent calls for more research on the characteristics of successful non-family executives in FFs (Waldkirch, 2020). Third, I study a tool (MR) that has received comparatively little attention. Preceding research has either dealt with strategic MA instruments (e.g., budgets) or the entire portfolio of these instruments applied by a corporate (Feldbauer-Durstmüller, Duller & Greiling, 2012). I am aware of no strong theoretically based empirical examinations of the organizational change that comes with introducing or refining MR in FBs – this is odd given that MR is the "bread-and-butter-business" of accountants and shapes executives' field vision.

Finally, the relationship between finance professionals, organizational contexts, MR and performance is more than just a theoretical puzzle; it is also a practical concern for many family-controlled entities trying to increase transparency and to make better decisions in an environment that is becoming continuously more dynamic and complex.

Theoretical Context

Management Accounting in Family Firms

Previous researchers focused on the unique nature of financial accounting, MA and auditing in FFs. The majority of studies examined financial accounting, while only few studies scrutinized

MA questions in the context of FBs. Scholars acknowledge that while the number of publications on accounting in FFs has been steadily growing, MA issues remain understudied (Kapiyangoda & Gooneratne, 2021).

A few authors argued that, particularly, in small and medium-sized family-owned entities decision-making processes are centralized, so that classic agency-problems (type I) do not exist and, hence, there is a limited need for formal control mechanisms (some have even reasoned that social control mechanisms are a distinctive resource of FFs). However, a majority of works highlighted the presence of specific agency-costs (entrenchment, type II) and the consequent need for control mechanisms in FBs (Songini & Gnan, 2015).

Concurrently, management control systems (MCS) – i.e., systematic applications of MA practices, which are used in conjunction with other forms of controls (e.g., boards) to achieve organizational goals – have been highlighted as powerful agency-control-mechanisms. FFs with more formalized control systems show clearer managerial responsibility of organizational activities and delegation of responsibility to specialized functions. MR provides organizational participants with a common language to communicate efficiently across departments, to direct attention, to diffuse values, knowledge and plans, as well as to interpret actions and outcomes, which will eventually create trust between the family and its employees and support managers to build confidence in their job roles (Konstantinos, Junaid & Shahzad, 2012). MR generates information needed for taking timely, fact-based decisions and is central to strategy-making, as this system shapes the process of strategy emergence and supports the implementation of deliberate strategies. Thereby, it facilitates corporate expansion and recurrent reconfiguration of capabilities, as well as helps firms to sustain competitive advantages through critical growth junctures and in the midst of turbulent environmental conditions (Peters, Gudergan & Booth, 2019). Lastly, MCS can strengthen an organization's memory and can thus contribute to avoiding serious consequences of a sudden loss of key members in times of uncertainty (e.g., in case of succession) (Senftlechner & Hiebl, 2015). Consequently, these tools – if well designed and functioning – should help to raise a firm's performance and to limit its down-side risks (conversely, FFs without suitable MA practices may hamper the usefulness of accounting information, and thus impair the success of the business in the long-run). Still, despite advantages of these instruments and a need for them being obvious, most scholars find that FFs use (sophisticated) MCS to a lesser extent than NFFs (Lopez & Hiebl, 2015).

Non-family Finance Managers and Accounting Change

ACs – i.e., the introduction and advancement of MCS –are used to revitalize understandings of control and performance in family-owned corporations. They allow managers to cope with new demands of the firm and its environment, to alter dysfunctional or outdated organizational routines or to steer a business back on the road to success (Dello-Sbarba & Marelli, 2018). Introducing new or intensifying existing MA practices is often interpreted as a first step towards the professionalization of a family-owned entity (Duller, Feldbauer-Durstmüller & Mitter, 2011). The professionalization-literature has focused on the integration of external managers in FFs; the employment of non-family experts seems to speed up (or even start) professionalization (Polat, 2021). The delegation of management activities to non-family executives leads to a higher degree of formalization, as non-family executives do not possess the tacit knowledge of the firm that family members do and are not protected by family ties; they have thus a personal interest in setting up structures to gain formal information and being able to explain their decisions to the family. Further, they will drive innovation in the field of MCS to show that their employment is justified (Giovannoni, Maraghini & Riccaboni, 2011).

Literature suggests that non-family FMs introduce and develop MCS to better manage sales, earnings, cash-flows, business risks, lending and investments. As partly outlined above, FFs managed by CFOs, who are members of the owning family, were shown to use fewer strategic MA instruments than NFFs; however, there was no significant difference found between FFs with external CFOs and NFFs (Feldbauer-Durstmüller et al., 2012). By taking responsibility for professionalizing MCS, non-family experts can improve their position in the company and increase their influence on key decisions. FMs are often referred to as “second-in-command” and were found to be the second most powerful actor within FFs in some case studies (Gao, Masli, Suh & Xu, 2019). They are “most directly responsible for a firm’s financial health” and “as important as the CEO for major decisions” (Chadwick & Dawson, 2018). As a result, non-family FMs were shown to have a significant, positive effect on the performance of FFs; FFs with a non-family FM were also found to perform better than NFFs (Caselli & Di Giuli, 2010). Through AC, non-family FMs establish longstanding relationships with external capital providers and help to improve the company’s bank ratings – thereby enhancing FFs’ chances to source equity and debt on beneficial terms (Glyptis, Hadjielias, Christofi, Kvasova & Vrontis, 2021). FFs with external CFOs also make use of more sophisticated cash management, lending and financial risk management products. Financial institutions impose less credit constraints on these firms, which translates into higher growth opportunities. Professional finance experts were further shown to increase survival rates, operating sales growth and returns on capital employed, and to support their companies to deliver on defined strategies such as internationalization (Barbera & Hasso, 2013).

However, authors stressed that only properly integrated (“embedded”) external FMs were able to positively impact FFs. The introduction of more formal MCS by non-embedded, non-family finance experts was shown to lead to conflicts with other FF managers, who were still used to more informal, person-centered governance (Jazayeri, Wickramsinghe & Gooneratne, 2011). Consequently, some authors suggest that the (in)effective integration of non-family CFOs might explain performance differences among FFs (Amat, Carmona & Roberts, 1994).

Triggers and Barriers to Accounting Change Initiated by Non-family Finance Managers

Family owners might not even consider the proposed AC if the FM is not deemed a sufficiently competent and influential actor (Huerta et al., 2017). Environmental conditions (e.g., growing environmental uncertainty, institutional pressures such as new accounting rules), company specificities (e.g., growth and increasing firm size, external shareholders, TMT and board configuration, internal changes such as succession, internationalization or new technologies), traits of owners and family GMs (e.g., family- vs. business-orientation, family goals, classic vs. family-specific agency-costs, generational characteristics, education), characteristics of non-family FMs (e.g., know-how, professional experience, interpersonal skills, position/ hierarchical level) and the relationship between the family and its employees (e.g., trust, CEO-CFO-relationship) have a considerable impact on the choice of MCS in FFs.

In line with the arguments of some authors, FBs may be well placed to excel without the use of formalized control systems – due to centralized decision-making, social control mechanisms and, hence, the absence of typical agency-costs. Scholars find that firms exhibiting high levels of mutual trust show a lower demand for mechanisms to coordinate and control. The same holds true for companies, in which the founding family is still involved in the TMT (since family ties and social networks can serve as a means to pass on orders to employees) (Kallmuenzer, Strobl & Peters, 2018).

However, environmental dynamics and internal transformation usually favor the institutionalization and intensification of MA practices in family-owned entities, as MCS can play a key role in managing the increased organizational complexity, coordination and communication needs and risks of a situation (Mitter, Duller, Feldbauer-Durstmüller & Neubauer, 2014). Smaller FFs make less use of formalized MCS (than NFFs of the same size) (Speckbacher & Wentges, 2012), as the efficiency advantages of entrepreneurial management and a personal way of communicating still prevail. Leaders can use “guts” to effectively make decisions “on the back of an envelope” (Huerta et al., 2017). Hence, these companies employ more traditional costing methods and give less priority to planning or budgeting techniques. Concurrently, studies indicate that FFs tend to professionalize MCS alongside growth – to address an increase in complexity due to larger firm size and in agency-conflicts due to increasing involvement of non-family personnel (Dekker, Lybaert, Steijvers & Depaire, 2015). These companies prepare formal budgets, which serve as a benchmark for actual performance and management compensation. Ultimately, large FFs' use of advanced MA techniques conforms to their use by NFFs (Hiebl, Feldbauer-Durstmüller & Duller, 2013).

For the same reasons, external shareholders, internationalization and new technologies should enforce sophisticated MCS. ACs may also be triggered as firms move through the different stages of their lifecycles (Mitter & Hiebl, 2017). Especially, succession is named by many scholars as a driver of advanced MA practices: Giovannoni et al. (2011) – using a single case study approach portraying an Italian FF – showed that the process of succession brought about a greater reliance on specific MCS that were capable of transferring the founder's vision, priorities and knowledge throughout the organization and across generations.

Further, well-educated FMs foster the professionalization of MCS in FFs. The implementation of advanced control mechanisms requires specific know-how that usually comes from academic training. However, as Hiebl (2014) finds in his multi-case-study built on interviews with executives and board members of German FFs and NFFs, family owners rather seek to integrate non-family finance experts with professional experience (long tenure) and "technical" accounting know-how – in both companies with and without a dominant owner – to enrich the firm's resource pool. Same-industry experience is also highly valued, as affluent families expect CFOs with same-industry experience to integrate into the organization more quickly. Moreover, family owners stress personal fit (with the owners *and* the company), cultural competence, long-term orientation and mediation skills as important traits of professional FMs. Non-family executives need "an understanding of the family's goals and meanings" and should try to "balance business concerns with family dynamics" (Hall & Nordqvist, 2008). External finance experts with a good fit will gain powerful positions with extensive discretion within the firm; this will allow them to contribute to the FF's development as a promoter of AC. For instance, a non-family FM on the board and the institution of a CFO position are positively related to the adoption of formal managerial mechanisms (Hiebl, 2017).

Lastly, professional managers' impact on FFs is also contingent on the families' goals and characteristics. Scholars argue that FBs in their first as well as fifth and later generation are more likely to employ more advanced MA tools. While the extensive use of MCS in the founding generation can be explained by the fact that external capital providers require founders to deal with the high level of information asymmetry that characterizes entrepreneurial finance situations, later generations will have to be more innovative, constantly adapting to changes in their environments, to sustain the same level of growth and financial prosperity as did their ancestors; they will thus also innovate with regard to control systems. Further, agency-costs are likely to increase over time, e.g., as non-family managers are gradually integrated into the firm or as conflicts among family members (and other shareholders) become more likely; accordingly, mechanisms need to be introduced to align interests among shareholders and between shareholders and managers (Pearson & Marler, 2010).

Additionally, the families' goals and interests may influence whether they act as key agents in promoting new MCS or become obstacles to the process of change (Sentuti & Cesaroni, 2020). Family-oriented clans with the goal of having full control of the firm, striving for long-term growth of the company value, as well as financial flexibility are less likely to employ non-family managers introducing advanced accounting tools; conversely, families with the goal of decreasing financial risks or overcoming financial distress, who plan a family-internal succession, will be more likely to do so (Senftlechner & Hiebl, 2015). Generally, the dominant clan must also have some affinity for using MA information, in order to let the non-family CFO drive professionalization of MCS (Hiebl & Mayrleitner, 2019).

Depending on environmental conditions, company specificities, traits of owners and family GMs and their own characteristics, the non-family FM will be either more concerned with the "traditional" bookkeeping tasks or involved in driving AC, thereby shaping FFs' understanding of control and performance. While many studies have indicated that FFs' strategic and financial viability is optimized, if non-family FMs and family GMs are heading the firms (Gordini, 2016), other publications hint at the fact that *choosing* adequate MCS and *using* these MCS adequately in day-to-day management (and resulting effects on performance) are contingent on the combination of individual characteristics of actors in prominent positions. Low quality relationships between the CFO, CEO and the controlling family may cause the controlling family to not fully leverage the non-family CFO's expertise or to use their informal controlling power over the business to undermine the application of MCS introduced by professional managers; conversely, the non-family FM may act as a rogue agent and hinder necessary AC to secure his role (Ferramosca & Allegrini, 2018).

Taken together, these observations suggest the need for more concentrated focus on the traits and interrelations of non-family FMs, as well as GMs and family owners in particular FF settings – and specifically, a more integrated consideration of actual processes by which they consider, agree on, implement and enact MCS to bring about certain organizational changes.

Methodology

Data Collection

Unlike past studies on AC in family-owned businesses, which mostly applied quantitative research, I took a grounded, interpretative approach relying on qualitative data. Specifically, I based my study on a series of case studies (Eisenhardt & Graebner, 2007). An interpretive research design allows me to give voice to the properly contextualized experiences of actors involved in a process, to further structure these interpretations in light of prior theorizing and to develop an emergent model. Multiple case studies across sectors allow for a broad exploration of the research questions and investigation of various aspects of the phenomenon that may be difficult to achieve in a single case study (Lillis & Mundy, 2005). My unit of study was the individual FF and its FM.

As the German economy provides an interesting research setting (De Massis, Audretsch, Uhlaner & Kammerlander, 2018), I chose enterprises headquartered in Germany; however, I made sure that my sample included various types of organizations (e.g., firms of different size). I followed a sampling strategy aimed at maximizing the likelihood of obtaining meaningful data, e.g., I preferred companies, whose FMs had recently moved to a new post, to deliberately obtain events that were as informative to the purpose of the research as possible. Applying these standards to candidates, I generated an initial list of 27 FFs, of which ten were contacted. Being mindful of Yin's (2017) recommendation on total number of cases, I selected seven cases as the final research sample.

The seven case studies mostly drew on semi-structured interviews with the respective companies' FMs and GMs. Semi-structured interviews ensured that all critical issues were covered, while allowing room for unexpected insights; they also enabled me to better compare the cases. In some cases, subsequent, more structured interviews were held, as themes emerged in the data; this allowed me to identify patterns across informants, (in)consistencies across organizations and relations among concepts (Villena & Gioia, 2018).

Interviews with the *FMs* were conducted in German, via phone in summer and autumn 2021; they took 35 to 45 minutes. They were recorded and subsequently transcribed word-for-word. Any translations for the purpose of this publication were done in a spirit of active reflexive deliberation to limit any impact on the reliability of the study; quotes used were sent to and once again signed off by the respondents. The interviews involved questions about the informants, the evolution of the companies within their industries, key issues within the organization, as well as the role in decision-making and the current state of the MR, the changes to the MR, which the informants already initiated, and those planned for the future (Nag & Gioia, 2012).

Following the interview, the experts were given a structured questionnaire designed to capture their observable experiences and a range of company-specific variables.

To assess the success of the alterations done by the FMs I contacted the same firms' operational business leaders approximately six months after the initial study. Interviews with the *GMs* were also conducted in German, via phone in spring and summer 2022; they took 20 to 25 minutes. Recording, transcription and translations also followed the process laid out above. The interviewees were asked to comment on how the MR evolved during the term of a respective FM and how implemented alterations impacted their organizations.

All interviews held are, once again, detailed in Table 1. Table 2 provides background on the companies and the informants comprising the sample.

[Insert Table 1 here]

[Insert Table 2 here]

I relied on the interviews as the main source of data. However, to increase the rigor in my qualitative research, I collected archival data (e.g., MRs) to triangulate my findings (within and across firms). The archival data also helped me to focus my interviews on specific themes and proved helpful as a tool for engaging informants in discussions (e.g., based on actual reports, I could question FMs more thoroughly on particular dimensions of MR change). Lastly, I also attended a number of meetings between the FM, the GM, as well as other line-level managers, which provided insights into the shared sense-making processes of these executives (i.e., how they took decisions based on information provided by the finance function); detailed notes were taken during these meetings (no recordings were allowed). I constructed the narrative of my findings from a combination of interviews, documents, and observational field notes (Villena & Gioia, 2018).

Data Analysis

I followed Gioia et al.'s (2013) systematic, three-step approach to grounded theory building to build my model. I began by identifying first-order categories within the data (open coding). Then, I searched for relationships among the categories, which allowed me to collapse them into second-order themes (axial coding). Thereby, I focused on both nascent concepts and existing insights on non-family FMs' roles or reporting innovation in FFs "leaping out". Finally, once a workable set of themes and categories was at hand, similar themes were distilled into aggregate dimensions. These steps were not linear but formed a "recursive" procedure – continuing until I had a clear sense of the relationships and additional interviews failed to reveal new relationships. I first analyzed each company in detail and, subsequently, compared emergent categories, themes and dimensions from different companies; I made statements of findings only if I corroborated a given finding across multiple informants (and firms). Eventually, the described procedures led to the generation of a data structure that forms the basis of the emergent model.

I took two steps to ensure the trustworthiness of my data. First, I asked another researcher not involved in the study to challenge my data collection procedures and to assess my coding and labeling. We discussed categories, themes and dimensions until agreement was strong. Second, I carried out "member checks" with informants to ensure that my interpretive scheme made sense to those, who experienced alterations to MCS within their firms (Nag & Gioia, 2012).

The main outcome of my analysis is illustrated by Figure 1 – highlighting the aggregate dimensions, second-order themes and first-order concepts, as well as the relationships between them. Supporting evidence (representative quotations) can be provided upon request.

[Insert Figure 1 here]

Findings

Constitutive Elements

The emergent model comprises four core concepts: The *accounting context* (the environmental, organizational, technical and inter-personal structures finance experts found at their employers), *FM's embedding traits* (the characteristics and skills finance experts brought to the table), *AC* (the alterations to MR that finance experts initiated, if their characteristics fitted the contexts) and *responses to AC* (how the receiving organizations reacted to the adaptations made by the finance experts).

Accounting Context

I found clear patterns of variation in how FMs perceived the environment they were operating in. These accounting contexts had four main themes: *environmental uncertainty* (whether market dynamics called for advanced MCS to guide the company), *corporate structures* (whether the organizational build-up allowed FMs to take their own decisions), *technical set-up* (whether IT enabled or constrained them) and *joint sense-making* (how and by whom key decisions regarding the goals and the management of the company were taken).

Environmental uncertainty. The first facet of accounting context involves the macro- and microeconomic environment the FB is operating in. My interviews with executives and FMs captured a growing importance of MR, if the companies' markets were perceived as volatile and fast-moving. Since my survey took place in 2021 and 2022 "multiple crises" such as the COVID-19-pandemic, the Russian attack on the Ukraine or the consequences of climate change were frequently mentioned by the participants; additionally, the key role of state-of-the-art MCS was highlighted:

> "A couple of years back there was no need for a detailed reporting. The market was growing, the supply chains were working […] This has changed tremendously […] the management accounting department is essential now, so is reporting. We are now asked to provide more numbers more frequently." *(FM A)*

In these difficult times, FMs had more one-on-one-meetings with the GM, put more items on the agenda of the board meetings and worked longer hours. Likewise, the focus of the entire organization shifted from developing products, winning customers and attracting talent to "getting the numbers right" (FM C).

Corporate structures. This aspect of accounting context refers to the larger organizational set-up that the FMs are a part of – notably, whether the FFs they are working for are stand-alones or subsidiaries of larger cooperations. Comparisons among the FFs surveyed showed that FMs – even those working in companies of a similar size – perceived varying degrees of freedom with regard to AC. Respondents filling positions in a subsidiary are embedded in larger corporate structures and subordinated to central finance units, which serve as standard setters. For instance, reporting dates ("the Group is very strict on deadlines" (FM E)) and reporting content ("the Group hardly introduces new KPIs" (FM B)) were frequently predefined. FM F shared his limited impact on accounting innovation:

> "I do not have full control over the reports […] If that was the case, I could leave certain things out, put other things in, but the reports are standardized across the entire Group, and the standard-setter is the finance department at Group-level."

Notable differences were observed for panelists working for stand-alones ("I introduce whatever I think is needed" (FM G)).

Technical set-up. This mode of accounting context captures the technical infrastructure at the firm's disposal, including hardware and software – particularly, ERP systems and specialist software. Further, it encompasses the IT human resources (e.g., number of data scientists) and digital skillset the respective organization is endowed with. Across FFs I found notable variations, learning that the companies' IT set-up – being the key source of information and determining the nature of human interaction – may enable or constrain MR innovation. Well organized data budgets, infrastructure with a lot of computing power and sophisticated software may help non-family FMs to provide recipients with a broader scope of information in a timely manner; additionally, they allow for new ways of interaction between the finance department and its internal customers:

> "I have granted a wider audience access to a fully-automated dashboard. The general manager [...] can access all the information he needs daily. He does not have to come into my office and ask for print-outs anymore." *(FM G)*

However, the IT-set-up may also constrain FMs in seeking further reporting innovation: Established systems may not come with enough flexibility to effectively alter MCS. Changes may be costly and time-consuming:

> "The reporting system is very stable and based on SAP […] This is, however, also a disadvantage, as SAP does not come with the flexibility required for our reporting purposes […] it takes a while to customize the reports. Consequently, for particular analyses, we either have to use Excel or ask the IT department to re-program the SAP-report. […] As a result, we might not be able to start analyzing a pressing problem." *(FM C)*

Joint sense-making. The last element of accounting context represents executive beliefs that are reproduced through interaction with other members of the organization and thus result from shared sense-making processes. While the GMs generally played key roles in shaping corporates' understanding of performance and control, family shareholders, members of the TMT and key employees (e.g., Heads of Sales) had significant influence on setting organizational goals. Joint sense-making was particularly apparent, when larger meetings were held:

> "When it comes to forecasting, you get a better sense of the numbers, if you know how they were derived: Who was the opinion-leader in a meeting? Who defended a certain stand-point? Who just took the numbers as they were?" *(FM E)*

When driving AC some of the sample's FMs had to take preferences of opinion leaders and interpersonal dynamics into account:

> "After some weeks I was aware that I did not have to suggest alterations to the reports without consulting the Head of Sales first. […] It could also make sense to raise a topic if a certain person is not present, as it gives you the chance to have an unbiased, unemotional conversation." *(FM D)*

Finance Manager's Embedding Traits

In line with existing conceptions in the literature, my data affirmed the importance of finance experts' *professional experiences* and *formal education* as characteristics defining how (well) they interpreted their roles as generators of transparency, and thus how they continuously adjusted MR to enable their companies to cope with a certain business environment. However, a third mode of FMs' embedding traits emerged from the data – their *capacity to adapt* to the needs and peculiarities of the respective FB.

Professional experience. The first category of FMs' embedding traits is their professional experience, i.e., tenure, work experience in the field of accounting, related (e.g., banking) and non-related disciplines (e.g., sales), as well as positions held in FFs and NFFs (see Table 2). My data suggests that short-tenured non-family CFOs actively seek opportunities to alter MCS. Conversely, elevated reluctance to change becomes apparent in the statements of some long-tenured finance executives, who preferred to draw on existing reporting structures.

Additionally, FMs with a diverse functional background (e.g., many career milestones) put in a lot of effort to innovate MCS. These finance professionals drew on insights from their past to alter the content of reports:

> "I have a standard report that is very comprehensive […] I use this reporting to have a look at all the variances I have come across in my professional life and that I consider to be important for running a company." *(FM A)*

One of the strong themes emerging from the cases was that experiences at other organizations, especially NFFs, and in output-functions (e.g., sales) facilitate reporting innovation:

> "As a consultant, I was always in sales-mode. I was focused on generating revenues for the company. When I talk to sales-people at our firm today, I keep this in mind – trying to push back a little bit, while at the same time taking their concerns very seriously." *(FM E)*

Formal education. Another central theme of FMs' embedding traits is their level of formal education, i.e., whether the non-family finance expert holds a university degree with a major in finance, economics or accounting, received a business-related vocational training or earned professional qualifications (see Table 2). Highly-educated executives were inclined to switch from rather simple to more advanced MCS – drawing on what they had learned in their studies:

> "I had a great accounting professor back at university […] We had a whole lecture on how to visually design reporting, so that it is read, and the main messages come across. I thought of this when I started my job here." *(FM B)*

Further, non-family CFOs did not only get insights from what they once learned at university, but also from professional trainings they received during their time in office ("When I am at a training […] I take many ideas home and try to apply them" (FM A)). Eventually, these managers made sure that their subordinates were as well well-trained and intended to act as internal consultants rather than "scorecard-keepers". The team that they assembled served as another source of inspiration for highly-educated CFOs.

Adaptive capacity. The last facet of FMs' embedding traits is their ability to adapt to the FFs' peculiarities, i.e., whether they can sense the MA needs of the family, the TMT and other stakeholders, and are willing to satisfy these (rather than following their own ideas). Many participants highlighted that they took their time to develop an understanding of the organization and establish trusted relationships with the relevant actors, before initiating modifications of MCS:

> "At first, we continued to carry out all existing processes as they were [...] then, as a next step, we examined all processes in detail and engaged with the relevant stakeholders to find out, whether these should remain as they were. Then, depending on the feedback, we tried to implement changes." *(FM F)*

Non-family CFOs also reflected on how they aligned to characteristics of information recipients to ensure the messages they wanted to send got through:

> "I work with very pragmatic, hands-on people […] For any sort of change to be accepted, it has to come with an immediate value-added. My colleagues need to be able to understand why a change is needed and how it improves their every-day realities." *(FM C)*

Professional experiences and educational background formed the basis from which initial ideas how to adjust MCS originated; FMs' adaptive capacity served as a filter ensuring the ideas fit the audience.

Accounting Change

My analysis indicated that MCS were introduced and advanced if non-family FMs with specific traits and capabilities operated in FFs featuring certain peculiarities. Four distinct forms of AC were evident in the data: *content* (changes to the type of information transferred), *form* (alterations to how information is transferred), *dates* (changes to when information is transferred), as well as *recipients and providers* (alterations to whom and by whom the information is transferred).

Content. This mode of AC captures those activities resulting in alterations to the report structure, the metrics used, the reference related to a metrics, as well as the way the information is transferred. Financial ratios were employed by the majority of companies studied, followed by operational (e.g., orders) and employee-related figures (e.g., labor-turnover). Most interviewees added (or intended to add) further non-financial measures to the reports to provide a more balanced view of how their organization was progressing. Occasionally, the order of numbers was changed to highlight the most significant developments. Many FMs started to explain (e.g., by noting comments) and evaluate (e.g., by comparing actuals to prior year, forecasted or budget numbers) the subject of the reports (rather than transferring the information in the reports in a purely *factual* manner) and regarded this as the main ‘value-added’ of their posts. Reports were also continuously supplemented by telephone calls and personal meetings; these took place upon request in some firms (D, F), while they were proactively sought by the finance function in others (B, E).

Form. This aspect of AC refers to adjustments to design features of MR, such as size, form or display. In most FFs the report’s size depended on its recipient and purpose. Tables, graphs and commentaries were increasingly employed as displays; only representatives of two companies stated that they used graphs rarely or not at all (A, D). The usage of single elements, once again, strongly depended on the recipient, but also on the interplay of the individual displays (“Many comments can be omitted, as the information is presented in tables in a more structured manner“ (FM E)). A number of FMs set themselves the objective to prepare reports that were a particularly interesting read for the recipients; subtly drawing attention to aspects to be highlighted (e.g., by introducing new shadings and font-sizes that made certain numbers stand out visually). Conversely, some panelists disagreed with the general goal of a targeted presentation (“I cannot make sure that every single addressee understands the report“ (FM A)).

Dates. The third theme of AC concerns alterations to the reporting cycle and release date. Most reports were provided on a monthly basis; however, they were usually complemented by more detailed quarterly or annual analyses, which were, e.g., used for forecasting or budgetary purposes. Many of the sample’s FFs also reported certain KPIs (e.g., sales) on a weekly or daily basis. However, *reporting dates* also depended on the hierarchical and functional background of the recipient. Generally, all FMs strived for reporting the most relevant figures faster and more frequently. Likewise, a desire towards earlier release dates on behalf of the recipients could be noted.

Recipients and providers. The last facet of AC represents modifications to the bodies the reports were addressed to, as well as the departments involved in creating them. The owning family, the supervisory board, the management (first- and second-level) or the holding company were most frequently named as the *recipients* of the reports. Addressees were defined based on strictly hierarchical criteria. There were only a few companies, which specified the recipients both hierarchically and functionally (C, G), or even solely on a functional ground (B). Functional recipients were most often sales departments. External stakeholders received reports only in rare circumstances. Whereas hierarchical recipients did not change, I found that some FMs (C, E) significantly enlarged the group of functional and external receivers – e.g., providing tailored MR to the internal sales, the marketing and the corporate finance department, as well as capital providers (e.g., banks).

Reports were generally *provided* by the MA, accounting and accounts receivable department – with the MA department coordinating the overall exercise. Three companies began to deviate from this norm: The MA departments of companies B and G integrated additional functions (e.g., HR), into the MR creation process. Conversely, the MA department of company D ceased to collaborate with other departments.

Responses to Accounting Change

The existence of new or refined control mechanisms had an effect on some of the companies' internal processes and external interactions. Throughout the interviews, five consistent patterns emerged that provided insight into the organizational responses to AC. Each of these themes, *fact-based way of thinking* (decisions of better quality were taken, as these were based on systematic evaluations of all available facts and alternatives), *increased buy-in* (democratic use of accounting information caused staff to feel more responsible to ask questions and provide answers), *top- and bottom-line improvements* (increased transparency was leveraged to raise revenues and reduce costs), *risk-mitigation* (specific reports were utilized to reduce day-to-day business risks and to navigate through crises) and *enhanced stakeholder communication* (tailored communication material was taken advantage of to present companies in a favorable light towards investors), represented reactions to the non-family FMs' purposeful attempt to steer their employers in certain directions making use of MCS.

Fact-based way of thinking. First, I found that many changes in MR initiated by non-family executives caused a shift from using gut to thoroughly analyzing numbers, clearly pointing out problems and taking decisions in a structured manner. Reporting innovation resulted in a greater proportion of the wide range of strategic options becoming visible to top managers and employees; some participants also stated that they had executed those "new" options contrary to their prior opinions. More formalized decision-making materialized in a rising number of protocols with clear problem statements that pointed out the range of possible solutions and arguments for and against each option. The finance department, which was used to "reporting numbers", became a sought-for sparring-partner to the CEO. Likewise, some GMs stated that the role and perception of FMs hardly driving AC, did not materially improve – those executives rather kept their established (informal) systems of gathering data needed to manage the company:

> "For me, [FM D] stands for stability. He always had a very good idea of how things should be run and has remained true to himself until today […] While I generally think having him as an anchoring point in the company is a big asset, I wonder whether he might become a liability, if the environment we operate in becomes more volatile. […] the most important decisions are still taken without him." *(GM D)*

Increased buy-in. Second, I observed that new MCS were generally used in a more democratic way, with more people receiving the numbers and being allowed (or requested) to comment on them. Multiple ideas emerged among employees on how their companies should evolve. The buy-in of a large fraction of the staff to drive the firms forward – using MR – caused the fact-based way of thinking to spread across some of the organizations. The numbers, notably a selected range of KPIs, were further used to paint a desirable, future picture of the firms – both inspiring employees and providing them with stability, especially during the COVID-19-

crisis (as they understood where the companies were heading in the long-run, and that good progress was made). GM C elaborates:

> "Many people that used to be quiet in meetings, shared their views more often; they also asked more questions. Further, I could tell that employees of lower levels were getting more involved, as my direct reports started mentioning names that I had never heard before."

Top- and bottom-line improvements. Third, the enhanced commercial toolkit introduced by some non-family FMs generated transparency on the drivers of businesses' revenues and costs. E.g., FM B worked out a detailed analysis on market growth rates and suggested prosperous environments to allocate capital. In turn, FM E pointed out that a certain client displayed a very disadvantageous pricing structure and encouraged his sales team to renegotiate terms and conditions. As the quality of numbers improved, operational managers also became more meticulous in how they ran their departments: FM F was invited to quantify the effects of a tender with particular conditions on the rest of the business and was amazed how much better (as compared to previous tenders) the revenue and cost estimates by the account managers had become. Once again, I also found companies in my sample that were disappointed due to the lack of AC initiated by the non-family finance expert ("We still don't understand on which clients we're making money" (GM A)).

Risk mitigation. Fourth, advanced MR introduced by capable non-family finance executives uncovered latent risks and suggested possible mitigants. E.g., FM G started to split revenue and cost positions into the different currencies his company was exposed to and suggested suitable financial instruments for hedging. The benefits of up-to-the-task MCS became particularly apparent in extreme situations, such as the COVID-19-crisis:

> "We faced complete uncertainty […] We really feared that we could not pay wages anymore. We were lucky to have [FM B] in this situation; the finance function adapted to the situation within days. They had a very good understanding of the numbers […] the high level of transparency made everyone confident that we could really manage the crisis." *(GM B)*

Enhanced stakeholder communication. Lastly, the professionalization of MR reinforced many of the sample's FFs good reputation towards banks and other relevant investors. Many companies took the chance to portray themselves as budget-conscious, reliable borrowers using customized reports. Having state-of-the-art MCS and advanced cash management techniques in place was generally regarded beneficial by banks, which believed that companies needed these tools to quickly react to changing environments. Consequently, some of the companies were able to cultivate relationships with external capital providers, secured access to funding at favorable conditions and increased the scope of services commissioned:

> "We have significantly improved our relationships with banks in the last year. We have secured an RCF with [Bank E]; the conditions really improved. […] I think they enjoy working with us much more now, as we learned to provide them with all the numbers, which they need to run their models" *(GM E)*

Conversely, I also found enterprises in my sample that did not increase their "branding efforts" towards the investment community ("We provide banks with as little information as possible" (FM D)).

Linkages among the Key Concepts

A grounded theory must not only specify constituent concepts, but linkages among those concepts. By assimilating the dimensions and themes displayed in Figure 1, a process model becomes apparent (Figure 2).

[Insert Figure 2 here]

The model suggests that non-family FMs with particular traits change reports in specific contexts to bring about organizational changes that lead to enhanced levels of FF performance. Thereby, the accounting context and FMs' embedding traits are recursively interrelated as indicated by the reciprocal arrows interconnecting them. Hence, there is no linear, causal relationship among the dimensions, but they are mutually interdependent (e.g., a company with a weak technological set-up may hire a well-educated FM, who will, at first, be constrained by it; as he continuously helps to improve the IT landscape, he will himself ensure that his efforts to introduce advanced MCS will eventually be enabled by the new set-up). A good fit between FFs' structures and finance experts' characteristics and skills is then an antecedent to alterations to MR, which are directly associated with organizational feedback (linear, causal relationships as indicated by the straight arrows).

Since the reactions to AC are the outcomes of most interest, I trace the two key pathways to either positive responses or no obvious revitalization of the understandings of control and performance. My analysis suggests that enterprises facing volatile markets (five out of seven firms in the sample), which also hired well-educated, non-family FMs with diverse functional backgrounds (four of these five firms) made useful adjustments to MR (all four of these firms). This combination is also reflected in the following observation:

> "With everything he brought to the table, [FM E] was the right person at the right time […] I was amazed how the entire finance function changed upon [his] arrival. We had a look at all the standard tools together, which we had here before, and co-designed new ones. We shifted the focus of the reports to reflect the issues management was really worrying about " *(GM E)*

Conversely, patterns in my data suggested that companies operating in stable economies (two out of seven firms) are more likely to employ long-tenured, non-family finance experts (both of these firms) that will use their extensive experience to gradually improve the current stock of MCS (both of these firms).

Thereby, the technological and organizational set-up, as well as opinion leaders and their interpersonal dynamics may speed up or slow down modifications initiated by the respective professional manager. In turn, a finance executive's own ability to adapt will determine whether he overloads the organization with change (creating a blockage) or provide tailored solutions that are gladly accepted.

Lastly, all four firms displaying a high tendency for finetuning MR along the dimensions of content, form, dates, as well as recipients and providers were able to trigger reactions such as fact-based thinking spreading across the organizations. The linkage becomes apparent in the subsequent quote:

> “Changing the way, we looked at numbers and how we engaged with the finance people during that time, was one of the key aspects, why we have remained financially sound and emerged from the crisis strong and strategically well-positioned.“ *(GM F)*

Alterations of individual dimensions of MR or particular responses to AC could not be linked to specific environmental characteristics or FMs’ traits (neither to a combination of these). Considering that I have not found traces of “false change”, I assume that well-embedded non-family executives are able to tweak the appropriate dimensions (e.g., content, i.e., adding ratings to outstanding receivables) to bring about the reactions needed the most (e.g., increasing awareness of default risk).

Finally, both firms that did not enforce modifications to MR were not found to have triggered a change in organizational participants’ behavior, but rather enforced established routines, highlighting operational efficiency: “Over the last years, we have focused on continuing to do well what we are good at“ (GM D).

Discussion

Insights from the Grounded Model

As pointed out by multiple researchers, investigation of the specific processes by which non-family FMs affect value creation of family-owned entities through AC has been inadequate. My study helps to address this shortcoming by constructing a process model explicating the linkages between the FB context, finance experts' skills and characteristics, accounting professionalization as well as performance (Figure 2). Thereby, I make three contributions: First, I propose a comprehensive framework modelling the renewal of MA practices in family-controlled entities addressing antecedents, change processes and outcomes – adding definitional clarity to concepts that have been more or less salient in previous works (e.g., traits of inventive executives as laid out by the Carnegie scholars) and putting them into context. Second, in the course of developing the grounded model, I came across new facets of known concepts – e.g., I identified corporate structures rather than sheer size as a factor influencing MCS. Third, several new concepts with theoretical implications emerged – e.g., the notion of adaptive capacity as a relevant mode of FMs' embedding traits or the forms of AC.

Like other researchers, I also find that environmental dynamics and internal transformation favor the institutionalization and intensification of MA practices in family-controlled organizations. However, I provide new insights on the endogenous precursors or impediments of AC: While previous studies highlighted that FFs tend to professionalize MCS alongside growth and increasing firm size, I find – in line with some suggestive evidence present in other works (Littkemann, 2002) – that corporate structures (rather than sheer size) are a determinant of a company's set of MCS. Similarly, my emergent findings sharpen our understanding of the interplay between technology and MCS – not only highlighting the fact that new technologies enforce sophisticated MR, but describing how existing technical infrastructure, IT human resources and the digital skillset of an organization can enable or constrain the introduction of advanced accounting tools. Lastly, existing literature focused on the dominant clan's affinity for using MA information and high-quality relationships between the CFO, the CEO and the controlling family as necessary preconditions for professionalization at FFs. Extending these studies, my research shows that a large group of key players and their interactions determine whether a non-family CFO's expertise is fully leveraged.

In line with the theoretical postulates of the Carnegie scholars, tenure, experiences at other organizations and in throughput-functions as well as formal education emerged as “embedding” traits of non-family finance experts from my cases. As suggested in conceptual work and evidenced in other studies, I found that long- (short-)tenured FMs will be less (more) inclined to adopt innovative MR. My findings are also consistent with works arguing that a CFO’s professional experience at NFFs (operating in the same industry) is an antecedent to AC (Gurd & Thomas, 2012). Likewise, I could prove for my sample that – apart from the wealth of experience an executive brings to the table – whether his occupational background is mostly in output- or throughput-functions impacts his tendency to foster the professionalization of MCS. Lastly, I confirmed that high levels of executive (formal) education are positively related to receptivity to innovation. Additionally, I observe that continuously trained FMs embedded in a network of (internal and external) experts facilitate AC.

Perhaps the most interesting concept coming out of this study is adaptive capacity. I expand the notion that non-family executives need “an understanding of the family’s goals and meanings” (Hall & Nordqvist, 2008), have to fit in with the owners and be culturally competent by pointing out that professional accountants have to be(come) aware of GMs’ preferences and adjust MR accordingly (even if they prefer a different set-up). While professional experiences and education increase the range of options FMs can choose from, adaptive capacity ensures that the most suitable MR is chosen.

Further, I found that “well-embedded” FMs gained powerful positions with extensive discretion to promote AC within their firms. I provide the first detailed look at the “new numbers” that gradually changed “ways of doing things” (Burns & Scapens, 2000) by describing in detail how professional accountants *actually* modified MR (revealing the four dimensions of content, form, dates, as well as recipient and providers, which have only been present in parts of the German MA literature (Küpper, 2013)).

Lastly, my analysis identified five types of organizational responses to AC. These have been present as background issues in other studies; the specific notions, however, had not yet been articulated or empirically documented. I observed that reporting information at some "progressive" firms in the sample was used in a more democratic way; this increased the buy-in to steer the business based on the reports and guaranteed that a fact-based way of thinking spread across the companies. Thorough evaluations of available facts and alternatives allowed organizational participants to take efficient decisions and resulted in top- and bottom-line improvements. Further, non-family FMs leveraged MR to improve firms' image towards capital providers, especially banks. Lastly, I found that professional finance experts did not only increase survival rates (Barbera & Hasso, 2013), but generally mitigated risks.

Finally, I was unable to verify whether MCS can strengthen an organization's memory (especially, in case of succession) (Senftlechner & Hiebl, 2015), support FFs to deliver on strategies through the different stages of their lifecycles (Barbera & Hasso, 2013) or enable family-controlled entities to overcome situations of *acute* financial distress (Lutz & Schraml, 2012). I also experienced no "damages" caused by the introduction of formal MCS by non-embedded, non-family finance experts (Gordini, 2016), but rather only found stagnation.

Future Research Directions

My study raises some intriguing directions for future research. By identifying underlying drivers of the renewal of MA practices, as well as their interrelationships, I lay a foundation for expanding the conversation around AC in FBs and highlight that its context is not only complex, but also dynamic. I suggest that longitudinal research designs (looking at fewer firms from a single sector over longer periods of time) should capture the feedback loops between the core concepts of my process model. Future studies may examine how non-family managers are hired, develop their roles and establish trusted relationships. Upcoming works may also try to answer how the non-family CFO's transformational leadership role changes over time (e.g., when family influence is reduced) or depending on the company's life-cycle-stage (e.g., maturity, decline). Finally, scholars may want to challenge whether the relationship between alterations to MR and organizational responses is unidirectional (or rather also recursively interrelated).

As the process model was developed in a German context further research should try to re-examine my findings in other nations or across countries. Although the notion that institutional settings, legal environments, or national cultures influence MCS is supported by several articles, the specific contingency factors have rarely been analyzed (Mayr, 2012). Similarly, new works may dig deeper into the role of (other) pressures from outside the firm affecting the process of AC (e.g., regulatory changes).

In addition, scholars may want to investigate whether there exists an *optimal* MCS set-up maximizing FF performance. This includes developing a more precise understanding of the needs of family owners for specific accounting techniques. Both in-depth single case studies on "extreme" cases (e.g., MCS causing harmful conflicts in family-controlled entities) and quantitative research – carving out which of the aforementioned factors influencing MCS in FFs is the most predominant and discussing whether there is an optimal manifestation of the themes constituting my process model – are considered useful to generalize my findings.

Lastly, scientists may not only want to study MR, but the relations between various control mechanisms and how these transfer different kinds of knowledge and establish structures within FBs (Malmi & Brown, 2008). Moreover, further studies of the requirements for other non-family professionals within the finance function (e.g., the Head of Corporate Finance) might be valuable for both practitioners and academics, as these functional experts might also need distinct skills and characteristics to work well within the FB context (Menz, 2012).

Company	Informants	# of interviews	Mode
A	Head of Management Accounting	1	Phone
	CEO	1	Phone
B	CFO	2	Phone
	CEO	1	Phone
C	Head of Management Accounting	3	Site
	Head of Sales	2	Phone
D	CFO	2	Phone
	Chief Production Officer	1	Phone
E	Head of Management Accounting	1	Site
	CEO	1	Site
F	Head of Accounting	1	Phone
	Head of Main Site	1	Phone
G	Head of Finance & Management Accounting	1	Phone
	CEO	1	Phone

Table 1. Interviews.

Company	Industry	# of employees	Corporate vs. subsidiary	Privately held vs. listed
A	Retail	3,800	Subsidiary	Privately held
B	Consumer Goods	8,000	Subsidiary	Privately held
C	Manufacturing	11,900	Corporate	Privately held
D	Manufacturing	18,200	Corporate	Privately held
E	Manufacturing	12,400	Subsidiary	Privately held
F	Consumer Goods	3,200	Subsidiary	Privately held
G	Manufacturing	3,000	Corporate	Privately held

Table 2A. Company information.

Panelist	Work experience in the industry [in years]	Work experience in the company [in years]	Work experience in the position [in years]
A	12	12	7
B	3	3	1
C	3	3	1
D	9	9	4
E	5	1	1
F	5	5	2
G	12	1	1

Table 2B. FMs' tenure.

Panelist	Career milestones	Experience in output functions [in years]	Experience in other companies [in years]
A	1	0	0
B	3	3	6
C	1	0	0
D	2	0	2
E	3	5	5
F	1	0	0
G	3	6	11

Table 2C. FMs' functional background.

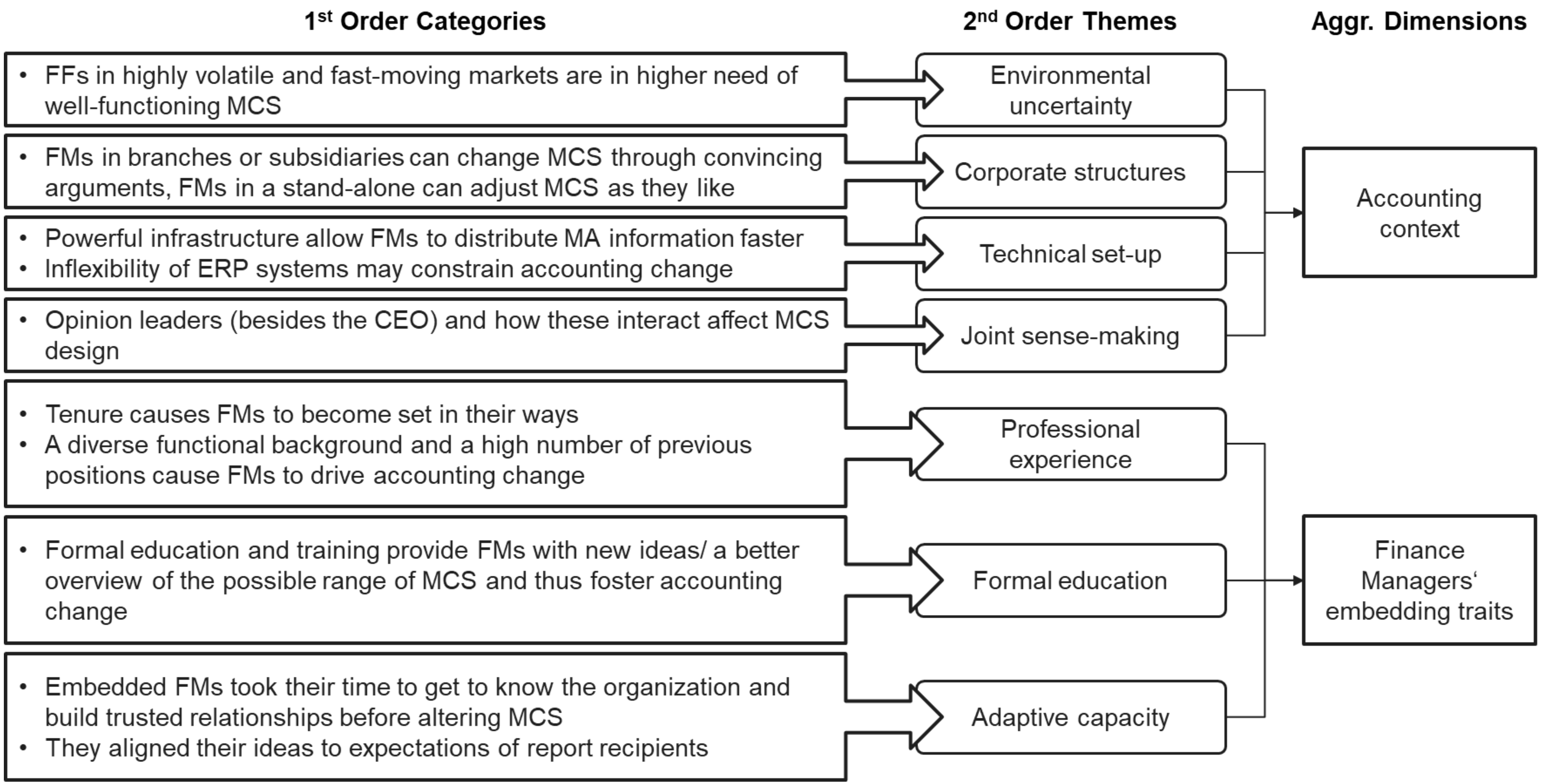
Panelist	Formal, business-related education [in years]	Formal, non-business-related education [in years]	Number of degrees and certificates	Highest academic degree	Specialization
A	8	0	3	Ph.D.	Bus.
B	4	0	1	Master/Dipl.	Bus.
C	7	3	3	Ph.D.	Bus., Eng.
D	4	0	1	Master/Dipl.	Bus.
E	7	0	2	Ph.D.	Bus.
F	7	0	2	Ph.D.	Bus.
G	4	0	1	Master/Dipl.	Bus.

Table 2D. FMs' educational background.

	Company	FM	GM
A	Company A is one of the leading service partners for washroom hygiene solutions, mats and related textile services. As an independently managed subsidiary of a large German multinational cooperation it is mainly present in Europe and China. The company regards itself to be a leader in quality and innovation.	FM A started his career as a group controller of the parent company (5 years) and afterwards took his current post as Head of Management Accounting.	GM A is the subsidiary's CEO.
B	Company B is a multinational brewery company holding a portfolio of diverse alcoholic beverages in mostly European markets. The company is part of a highly decentralized group, organized as a directorate, mainly growing through acquisitions.	FM B started her career as an accountant at an international sports company (3 years). Subsequently she worked for a consulting company specialized in finance and performance management (3 years). She was appointed the company's CFO in 2020 after heading the accounting department for 2 years.	GM B is the company's CEO.
C	Company C is one of the world's leading manufacturers of agri-cultural equipment, focusing mainly on European markets. Grasping market dynamics and innovation to create sustainable value is the company's core principle. Management makes the independence of the operating business lines a key priority.	FM C started heading the company's internal audit department (2 years) and was afterwards appointed Head of Business Unit Management Accounting.	GM C is the Group's Head of Sales.
D	Company D is one of the world leaders in power tools for forestry and construction and owns marketing and sales subsidiaries in more than 160 countries. The company claims to be highly innovative and displays a decentralized structure.	FM D started his professional career in a consulting firm (2 years) and afterwards joined the company as a group controller (5 years). He became the company's CFO in 2017.	GM D is the company's Chief Production Officer.

E	Company E is Europe's second largest player in the ventilation and heating business and operates globally. It focuses on sustainable, long-term growth. The group's structure is characterized by clear responsibilities and flat hierarchies.	FM E started his professional career as a consultant (5 years) (advancing through the ranks of consultant and senior consultant to a manager position). He joined the company as a Head of Regional Management Accounting.	GM E is the company's CEO.
F	Company F is a leading food manufacturer mainly active in Germany and selected European markets. It owns strong and globally recognized candy brands. The company is proud of its long history, upholds high quality standards and focuses on sustainable growth. Its organizational structure is centralized.	FM F joined the company as a group management accountant (3 years) and was nominated to his current post as the company's Head of Accounting afterwards.	GM F heads the company's main site.
G	Company G is an internationally operating specialist manufacturer for pharmaceutical packaging. It strives for long-term growth and remaining independent. The organization is decentralized – with the single business units being flexible in developing and carrying out their own strategies.	FM G first took a post as sales agent at a competitor (6 years). Subsequently he worked as a cost accountant at the same firm (3 years), then headed the cost accounting department for 2 years. He recently joined the company as Head of Finance and Management Accounting.	GM G is CEO and owner of the company.

Table 2E. Qualitative descriptions of sample firms and panelists.


1st Order Categories
2nd Order Themes
Aggr. Dimensions
• FFs in highly volatile and fast-moving markets are in higher need of well-functioning MCS
Environmental uncertainty
• FMs in branches or subsidiaries can change MCS through convincing arguments, FMs in a stand-alone can adjust MCS as they like
Corporate structures
• Powerful infrastructure allow FMs to distribute MA information faster
• Inflexibility of ERP systems may constrain accounting change
Technical set-up
• Opinion leaders (besides the CEO) and how these interact affect MCS design
Joint sense-making
Accounting context
• Tenure causes FMs to become set in their ways
• A diverse functional background and a high number of previous positions cause FMs to drive accounting change
Professional experience
• Formal education and training provide FMs with new ideas/ a better overview of the possible range of MCS and thus foster accounting change
Formal education
• Embedded FMs took their time to get to know the organization and build trusted relationships before altering MCS
• They aligned their ideas to expectations of report recipients
Adaptive capacity
Finance Managers‘ embedding traits

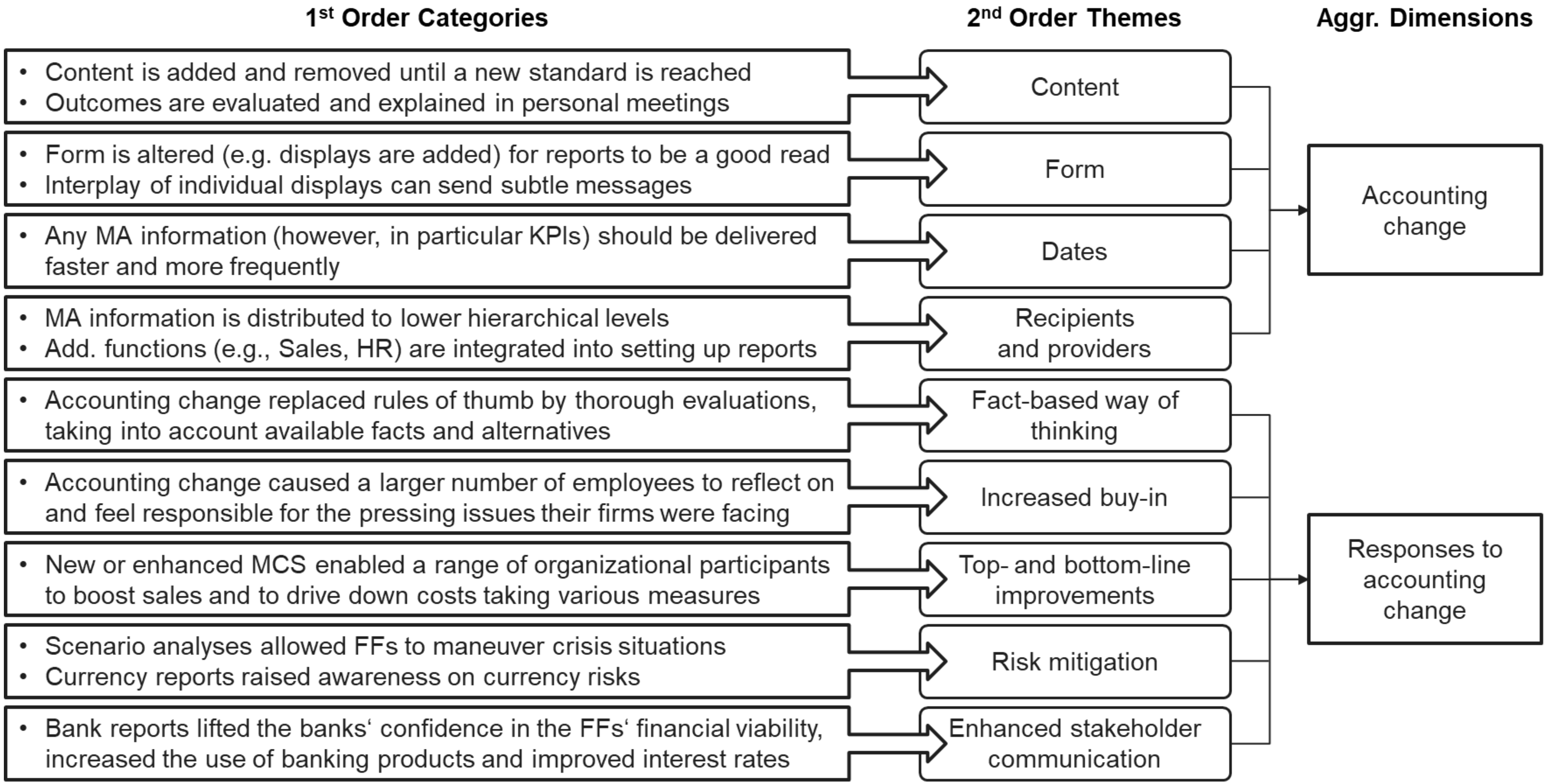


Figure 1. Data structure.

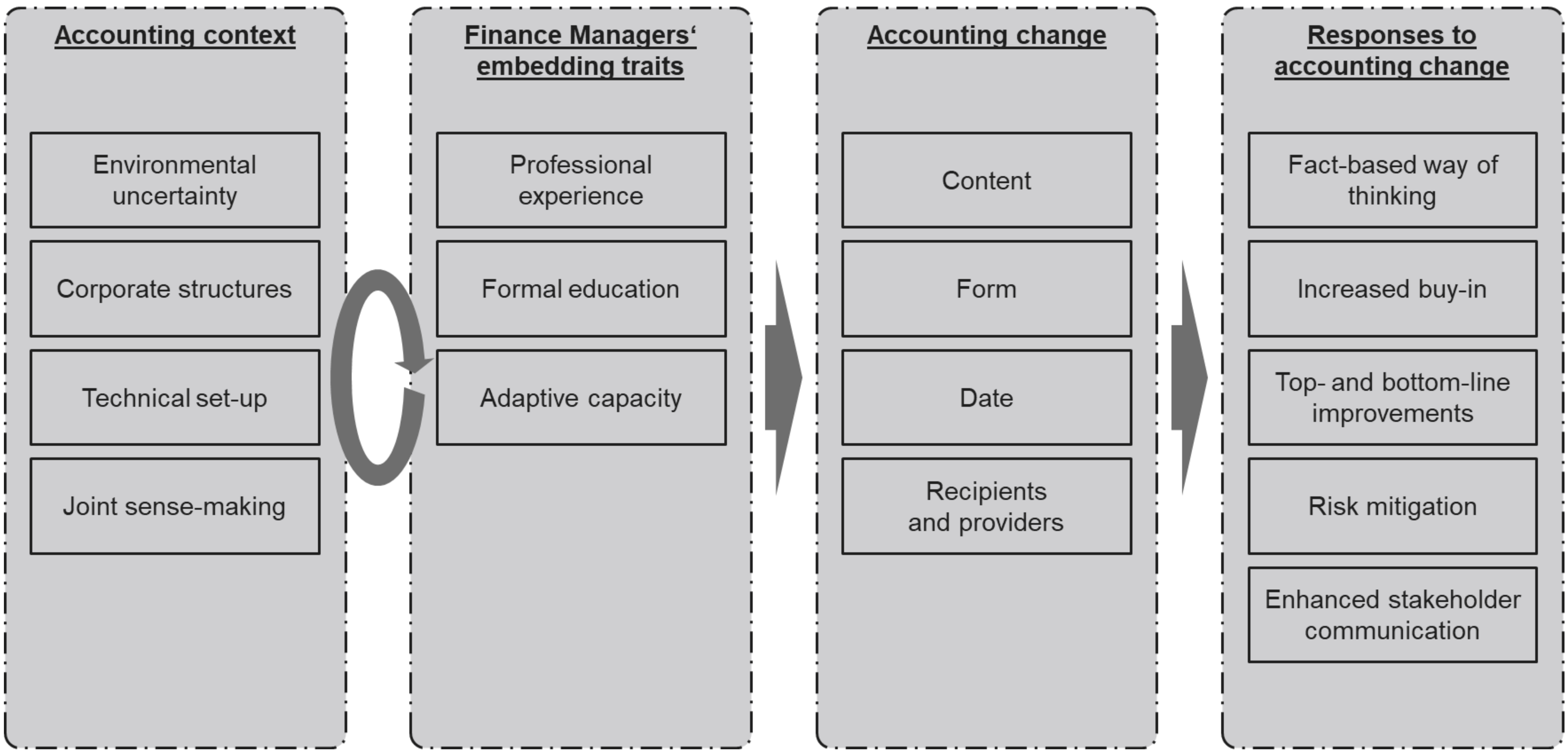


Figure 2. Process model.

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