

Revealing the Tapestry of Control Configurations: Insights from SMEs in Cameroon

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Abstract

Purpose: Imagine control configurations within SMEs in Cameroon as a vibrant tapestry, intricately woven with various threads of managerial practices and systems. The aim of this work is to unravel this tapestry and shed light on the interconnected elements that constitute control configurations in the context of SMEs in Cameroon.

Method: This study is exploratory and thus, follows a qualitative/abduction approach to explore and uncover control practices and contextual variables in SMEs in the Cameroon context and to understand the way they interact in a package. The population of our study is made up of top management team (general managers or chief executive officers, internal and external accountants, management controllers, financial and operational managers) of SMEs in Cameroon. Therefore, semi structured interviews were used on 25 top management teams from 20 SMEs in the cities of Douala, Bafoussam and Limbe for data collection. Data collected were analysed using the Qualitative Comparative Analysis, a set theoretic method designed to compare multiple cases in terms of complex configurations of attributes and outcomes. NVivo 12 and fsQCA software were used as data analysis tools.

Findings: From the analysis, findings revealed six control configurations used by top managers in the Cameroon SMEs labelled as holistic, soft-driven, police-based, semi engaged, mechanistic and formation.

Originality: This study is one of the first in the SME context in Africa. This work explores and uncover the configuration of management control systems operating as a package in SME that leads to superior performance.

Key words: Control configuration, management control package, control effectiveness, internal consistency, external alignment.

Révéler la tapisserie des configurations de contrôle : une étude des PME au Cameroun

Résumé

Objectif : Imaginer les configurations de contrôle au sein des PME au Cameroun comme une tapisserie dynamique, intimement tissée avec divers fils de pratiques et de systèmes de gestion. L'objectif de ce travail est de démêler cette tapisserie et de mettre en lumière les éléments interconnectés qui constituent les configurations de contrôle dans le contexte des PME au Cameroun.

Méthode : Cette étude est exploratoire et suit donc une approche qualitative/abduction pour explorer, découvrir les pratiques de contrôle et les variables contextuelles des PME dans le contexte camerounais et comprendre la manière dont elles interagissent dans un package. La population de notre étude est constituée des équipes de direction (directeurs généraux, comptables internes et externes, contrôleurs de gestion, responsables financiers et opérationnels) de PME au Cameroun. Par conséquent, des entretiens semi-structurés ont été utilisés auprès de 25 équipes de direction de 20 PME des villes de Douala, Bafoussam et Bamenda pour la collecte de données. Les données collectées ont été analysées à l'aide de l'analyse comparative qualitative, une méthode théorique d'ensemble conçue pour comparer plusieurs cas en termes de configurations complexes d'attributs et de résultats. Les logiciels NVivo 12 et fsQCA ont été utilisés comme outils d'analyse des données.

Résultats : Les résultats de l'analyse ont révélé six configurations de contrôle utilisées par les cadres supérieurs des PME camerounaises, qualifiées de holistiques, à conduite douce, basées sur la police, semi-engagées, mécanistes et formatrices.

Originalité : Cette étude est une des premières dans le contexte des PME en Afrique. Ce travail explore et découvre la configuration des systèmes de contrôle de gestion fonctionnant comme un package dans les PME qui conduit à des performances supérieures.

Mots clés : Configuration du contrôle, package du contrôle de gestion, efficacité du contrôle, cohérence interne, alignement externe.

1. Introduction

The phenomenon of Management Control System Packages (MCSP) or MCSs operating in combination does not solely depend on themselves to achieve the expected outcomes. This means that organizations do not just mobilise and use any kind of MCSs as it suits them. The determination of specific MCSs to be used effectively depends on several factors. In other words, for organizations to mobilise a set of control systems and produce results, it is determinant upon how the organization is structured and on the contingent or contextual forces affecting the organization.

Therefore, in a particular organizational structure, a specific set of control systems will only be effective under a particular context. We may be curious to know whether there could exist several specific control systems producing effective outcomes under particular organizational structures and contexts. But the question is, why and on what basis would organizations decide to use a particular set of control systems, of which there might be more productive alternatives? When we try to explore and understand how various MCSPs are used in different organizational structures and contextual situations by different organizations, we say that we are trying to explore and understand the configurational patterns of MCSP in organizations.

It can be said with little or no doubt that the use and design of MCSP are a fascinating topic and of high relevance for top management in guiding and directing the behaviour of their subordinates. On the one hand, it will be an important endeavor trying to understand how Small and Medium-sized Enterprises (SMEs) combine and use a particular MC element as a package and why not equally viable alternatives. Moreover, understanding if organizational structures and situational contexts predict configuration membership and how these vary across different strategic contexts is primordial. On the other hand, specific investigation into the interrelationship of these MCS elements to understand and clarify causes and links of the single MCS elements is vital.

Above all, carrying out such a pressing inquiry in the Cameroonian context, characterized by its social, religious and multicultural diversities, will give rich ground to uncover fundamental control mechanisms and different exogenous and endogenous forces determining the design and use of control configurations.

The idea that Management Controls (MCs) operate as configurations of multiple and interdependent attributes is a historical event (Otley, 1980; Flamholtz et al., 1985; Fisher, 1995; Chenhall, 2003; Malmi and Brown, 2008). Configuration theory describes organizational phenomena through the formation of configurations (Doty et al., 1993), that is, the environment, the organization and their structures are interrelated and can change over time. The underlying key assumption of configuration theory is the tendency for organizational components to group systematically and form limited numbers in terms of time-stable arrangements (Gersick, 1991; Bedford and Malmi, 2015). Configurations result from both endogenous and exogenous forces (Bedford and Malmi, 2015). Exogenous causes, such as competition, and environmental selection, limit the number of viable combinations (Hannan and Freeman, 1989; Bedford and Malmi, 2015), whereas endogenous pressures reflect the active or proactive seeking of a firm to arrangements that follow internally consistent logic (Child, 1972), suggesting that firms are not distributed extensively across contextual and structural traits but rather tend to collocate around a limited number of empirically identifiable patterns (Bedford and Malmi, 2015), and these patterns are assumed to lead to the same outcome (Drazin and Van De Ven, 1985; Meyer et al., 1993; Gresov and Drazin, 1997; Fisher, 1998). From a configuration approach, relationships have been considered in terms of equally effective patterns, that is, configurations (Drazin and Van De Ven, 1985; Gresov and Drazin, 1997, Fiss, 2011).

General MC research has recently focused on configuration theory (e.g. Bedford and Malmi, 2015; Bedford et al., 2016, Kruis et al., 2016; O'Grady and Akroyd, 2016; Cardinal et al., 2018; Berend Van der Kolk, 2019; Einhorn et al., 2021, Santini et al., 2022). These empirical studies showed multiple combinations of MA practices and MCs and the contextual factors that explain outcomes, such as high firm performance. A popular methodological approach in MC configuration research and partly in family businesses is Qualitative Comparative Analysis (QCA) (Einhorn et al., 2021). He documented that

studies in family business research focused on administrative controls, such as governance structure, board, and management composition, and their impact on performance.

Notwithstanding the amazing studies just discussed above, on the one hand, most of them used ideal types of organizational structures and already established control frameworks to identify possible combinations. Spekle (2001) documented that as conceptual constructions, ideal types may not be descriptively accurate in every respect, and observed control configurations may not always fall neatly into pre-defined categories. Therefore, according to Bedford and Malmi (2016), one way to refine and extend conceptual frameworks is by exploring the actual control configurations formed in practice. They further emphasized that empirically derived configurations (taxonomies) could provide more complete descriptions of how control patterns not captured or explained by existing frameworks. They themselves recognized that there were limited empirical observations to draw upon in the MA literature.

Moreover, no such study has ever been attempted in Africa, making the continent a fundamental area for empirical observation. Conceptualizing control systems as configurations, blended with organizational structures and contextual factors in an environment like Africa in general and in Cameroon in particular, will motivate the development of new theories and approaches to studying this key aspect of organizational design. Therefore, because control configurations inherently reflect interdisciplinary concerns, and because such configurations affect the attainment of strategic goals (Cardinal et al., 2018), this work will provide findings and ideas that will fit the interest of a broad audience. This study seeks to explore multiple control configurations and establish the nature of interdependencies amongst MCSP.

This communication is important on two fronts. Firstly, theoretical; this study will contribute to the understanding of MSCP and will provide accounting and control researchers with a new empirical ground for observations to refine and extend existing control frameworks and theory development. More specifically, this work extends control theory by looking at how specific control mechanisms are assembled into recognizable configurations, in a fine-grain approach. Also, by studying SMEs, we will be able to discern how specific control elements are adopted and configured, and takes into account subsequent layers of intertwined and overlaid control systems. This work will provide a richer examination of how individual control elements work together in a blended way to promote organizational goal attainment. Secondly, findings from this study will enable practitioners to design or redesign the relationships in a performance management system in order to effectively match local and overall control needs.

The remainder of this piece of work is organized as follows. The next part, which is the literature review presents past empirical and theoretical studies on control configuration, followed by the justification of the method used to uncover our findings. Next, will be the presentation of findings and their discussion. This study will end with the conclusion, limits and future perspectives.

2. Review of literature

Contingency-based studies have a long tradition in the study of MCS design and have been the main source of knowledge concerning the relationships between an MCS and elements of context (Chenhall, 2003). To analyse variations in the operating conditions of control combinations, a set of contextual factors was identified from prior literature (Bedford and Malmi, 2015).

One thing about the contingency perspective is that organizations must adapt to their contingencies if they are to perform well. Contingent variables identified in earlier forms of research in the organizational literature included technology (Woodward, 1965; Perrow, 1967; Burn and Stalker, 1961), external environment (Duncan, 1972; Khandwalla, 1972), competitive strategy (Porter, 1980; Miles and Snow, 1978), and size (Pugh and al., 1969). Various forms of fit have been used, including the Cartesianism and configurationism (Gerdin and Greve, 2004). Configuration approach has been seen as most appropriate to understand the systematic nature of effective organizations in a broader sense and only a few states of fit between context and structure exist as opposed to continuous state of fit (Gerdin and Greve, 2004).

2.1. Internal Consistency and External Alignment: Two Necessities for Successful Control Configuration

Configuration theory suggests that firms select the internally consistent control structures best suited to contextual conditions. An extensive body of contingency-based research has emphasized significant factors related to the design and use of accounting and other control mechanisms (Chenhall, 2003). Bedford and Malmi (2015) contended that if the empirically derived configurations represented valid groupings, then each unique control combination would be aligned to different firm contexts. They also implied that contextual factors predicted firm membership of control configurations. Such an expectation is at the core of taxonomic construction as, "ultimately, the utility of any classification scheme relies on its ability to generate insight or to advance a predictive task" (Miller, 1996, p. 507).

According to Bedford and Malmi (2015), there were likely to be limitations to predictive capacity. They further argued that, in contrast to the assumptions laid by the contingency research, the associations between control and context were not necessarily linear, symmetric or even continuous. They suggested that internal consistency tended to be favored over external alignment, and that changes in context were not often associated with changes in control structure. Gresov and Drazin (1997) proposed that multiple control configurations could also be able to operate within the same contextual circumstances. The question that arises is why and how firms then choose a particular control configuration under a particular contextual circumstance, when there could be other viable alternatives.

As noted, it is crucial that organizations stabilize around the control configuration that is most effective for a given context (Bedford and Malmi, 2015). These authors inferred that if organizations are not in an optimal position, they would tend to switch to other viable arrangements. To do so, organizations will have to evaluate switching costs and performance benefits of an internally consistent arrangement to ensure that the configuration currently in place represents the most economically viable. Indeed, when the cost of contextual misalignment outweighs the benefits of internal consistency, organizations make the disruptive shift to a new configurational form (Bedford and Malmi, 2015). Organizations are therefore expected to be, on average, in equilibrium (Bedford and Malmi, 2015).

2.2. Patterns of Control Configuration

Organizations are expected to maintain internal consistency even at the expense of superior environmental fit of individual components (Bedford and Malmi, 2015). Therefore, modifying only a few components at a time might "not come at all close to achieving all the benefits that are available through a fully coordinated move, and may even have negative pay-offs" (Milgrom and Roberts, 1995). According to Tushman and Romanelli (1985), though some latitude to adjust arrangements in response to contextual variations exists, peripheral components that are less connected, organizations will actively resist changes that threaten internal consistency. This means that, the design and effectiveness of a particular component, such as accounting, will be associated not only with external conditions, but also with how that component is situated within the broader control package (Bedford and Malmi, 2015).

The understanding of how control mechanisms combined was largely derived from organizational typologies. These typologies described theoretically consistent configurations of structural components and contextual conditions (Bedford and Malmi, 2015). One of the early studies to systematically examine patterns of structure and context was Burns and Stalker (1961). They found out that organizational types represented effective responses to either high or low uncertainty. The formalised and vertical structure of the mechanistic organization was considered suitable in stable environmental conditions, while the informal and lateral structure of the organic organization was more appropriate in dynamic and uncertain settings. After them came Mintzberg (1979, 1989). They built their reasoning on Burns and Stalker (1961) and other early researches into structural diversity (Galbraith, 1973; Lawrence and Lorsch, 1967; Perrow, 1967; Pugh and al., 1969; Thompson, 1967; Woodward, 1965).

Mintzberg described seven configurations, that is, simple structure, machine bureaucracy, adhocracy, missionary structure, professional bureaucracy, divisional form, and political organization. Each configuration was associated with particular environmental and technological conditions and organizational factors such as age and size. Bedford and Malmi, (2015) observed that though the

typologies of Burns and Stalker and Mintzberg offered rich descriptions, they however originated from literatures outside accounting, and as such, they contained limited details on how and why the design and use of accounting mechanisms vary across configurations. Bedford and Malmi, (2015) pointed out that there were however several typologies that addressed more specifically control structures.

Burns and Waterhouse (1975) and Merchant (1981) described two control approaches, that is, administrative and interpersonal, with particular emphasis on budgetary control. The choice of approach was explained in terms of organizational size, diversity, and technological complex firms requiring an administrative control approach. Ouchi (1977, 1979) on his part identified three control strategies, that is, input, behaviour and clan. The preference for either output or behaviour control was a function of information characteristics. If the firms had knowledge of the transformation process, then tasks could be programmed and control accomplished through direct observation and evaluation of behaviors. When the firm had valid and reliable measures of goals, then control was attained by evaluating outputs. If neither antecedent was satisfied, then the firm relied on clan control, developed through input mechanisms such as selection and socialization (Snell, 1992). Spekle's (2001) study drew on transaction cost economics to explain control structure choice. He presented nine types, five of these that is arm's length, machine bureaucratic (action and results oriented), exploratory, and boundary referring to forms of hierarchical control. Vosselman (2002) also employed transaction cost economics to explain the adoption of horizontal control structures. Although horizontal control was not the focus of the present study, Vosselman contrasted these to two hierarchical types, strongly bureaucratic and weakly bureaucratic, which were variations on Mintzberg's machine bureaucracy. Spekle (2001) contented that since ideal types were conceptual contractions, it could not be descriptively adequate in every aspect and observed control configurations could not always fall clearly into pre-defined categories. Therefore, Bedford and Malmi (2015) documented that one way to refine and extend conceptual frameworks was by exploring the actual control configuration formed in practice. That empirically derived configurations (taxonomies) could provide more complete descriptions of how controls tended to combine and reveal alternative control patterns not captured or explained by existing frameworks.

In the above line, some researches were identified in the management accounting literature. Chenhall and Langfield-Smith (1998) provided support for the idea that internally consistent arrangements enhanced firm performance. Moores and Yuen (2001) investigated variation in management accounting systems across organizational life cycle stages, showing how reliance on accounting information varies in response to changes in strategy and organizational complexity, while Henry (2008) on his part constructed a taxonomy of performance measurement systems and analyses contextual variation. According to Bedford and Malmi, (2015), though these studies were informative, they presented limited examinations of how accounting formed part of the wider package of controls. That Moores and Yuen (2001) and Henry (2008) focused their analysis to control structure on the formal information characteristics of accounting and performance measurement system. Also, that Chenhall and Langfield-Smith's (1998) study included a wider array of mechanisms, though many control mechanisms known to be employed at the firm level, such as administrative and socio-ideological controls were excluded (Malmi and Brown, 2008)

To respond to these limits therefore, a number of studies have been identified amongst which the study of Bedford and Malmi (2015), Cardinal and al., (2018), Einhorn and al., (2021), Santini and al., (2022).

Bedford and Malmi (2015) studied how controls commonly combine and the role of accounting within these configurations. To do so, they used planning, measurement, compensation, structure, policies and procedure, and socio-ideological control categories. According to them, these categories comprise a relatively broad conceptualisation of control, similar in intent and coverage to the review by Malmi and Brown (2008). As far as contextual variables are concerned, the comprehensive review by Chenhall (2003) guided their selection. Chenhall detailed the primary factors that influence management control choice: technology, external environment, structure, strategy, size, and national culture. Two were excluded in the study of Bedford and Malmi (2015): structure, because it was conceptualised as part of management control, and culture, as their study was conducted in a single national context. At

the end, their study presented an empirically derived taxonomy of five control configurations used by top managers, labelled as simple, results, action, devolved, and hybrid.

As for Cardinal and al., (2018), they pursued Miller's suggestion related to "replicable configurations" by studying one firm deeply to exhaustively assess its use of control configurations. They studied a single short-haul moving company, analysing the control mechanisms it used during the first 10 years of its operation. By displaying how specific control elements were adopted, overlaid, and intertwined during four different time periods of the focal company, they provided insights that could assist scholars in distinguishing between different configurational patterns presented in holistic perspectives of control. During the period of their study, the company adopted four different control configurations, that is, market, clan, bureaucratic and integrative configurations. Each configuration represented a snapshot in time based on the relative use of control mechanisms drawn from two to six of the following domains: formal input, formal behaviour, formal output, informal input, informal behaviour, and informal output.

Einhorn and al., (2021) on their part investigated the MC package of operational and strategically oriented MA practices, the interactive and diagnostic use of performance management systems, and cultural controls as the key variables characterizing the control configurations in Family Businesses. In addition, they included the contextual factor of firm size, which influenced the adoption of MA practices. The MC packages of the adoption of MA practices, the use of performance management systems, and the emphasis on cultural controls depend on further contextual factors, such as the intensity of the competition. Therefore, they used the advantage of QCA as a case-oriented approach and added further contextual factors, such as the intensity of price and quality competition, the intensity of attention and interpretation of information by top management, and the type of organizational culture, to further explore the resulting MC packages for high-performing Family Businesses. They found that operational MA practices, strategically oriented MA practices, diagnostic use, interactive use, cultural control, price competition, and quality competition were all parts MC packages adopted by high performing Family Businesses.

3. Methodology

Configuration theory suggests that firms select the internally consistent control structures best suited to contextual conditions. An extensive body of contingency-based research has emphasized significant factors related to the design and use of accounting and other control mechanisms (Chenhall, 2003). Bedford and Malmi (2015) contended that if the empirically derived configurations represented valid groupings, then each unique control combination would be aligned to different firm contexts. They also implied that contextual factors predicted firm membership of control configurations. Such an expectation is at the core of taxonomic construction as, "ultimately, the utility of any classification scheme relies on its ability to generate insight or to advance a predictive task" (Miller, 1996, p. 507).

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As noted, it is crucial that organizations stabilize around the control configuration that is most effective for a given context (Bedford and Malmi, 2015). These authors inferred that if organizations are not in an optimal position, they would tend to switch to other viable arrangements. To do so, organizations will have to evaluate switching costs and performance benefits of an internally consistent arrangement to ensure that the configuration currently in place represents the most economically viable. Indeed, when the cost of contextual misalignment outweighs the benefits of internal consistency, organizations make the disruptive shift to a new configurational form (Bedford

and Malmi, 2015). Organizations are therefore expected to be, on average, in equilibrium (Bedford and Malmi, 2015). Below is a table representing the themes and sub-themes of our study:

Table 1: synthesis of our interview guide

N	Theme	Sub-theme
01	Organizational structure of the company	-Nature of decision -Nature of hierachy -Communication channel -Nature of authority -Coordinating mechanisms
02	Contextual situation	-Internal pressures (Internal regulation, management policies, rules and procedures) -External presasures (fiscal presures, external regulation) -External invironment (competition, market condition, external regulation)
03	Management control systems	-Notion of management control -current management control applied in your company -Effectiveness of the applied MCSs -Determination of the effectiveness of control -the behaviour of the set of management control applied within them
04	Control variables	-Company status -Company age -Activity sector

Source: authors

Our interviews took place in the workplace of interviewees. We therefore carried out 25 interviews with top management team (general managers or chief executive officers, internal and external accountants, management controllers, financial and operational managers) (Chapelier, 1994) of SMEs in Cameroon. Also, we were only interested by those SMEs with an accounting system and a control system. The 25 interviews were submitted in 20 SMEs. It should be noted that the snowball sampling method was used. This is a technique used to expand a sample by having participants refer the researcher to other potential participants. It involves starting with a small set of initial participants and then using those participants to identify and recruit additional participants, creating a “snowball” effect as the sample grows. This method was used because of the difficulty in identifying with exactitude the population of our study as we could not at first stance know which SME has an accounting and a control system. Amongst the 20 companies, 11 were small enterprises and 9 were medium sized enterprises. The criteria for the classification of these enterprises were based on the National Institute of Statistics 2016. The indicator that guided our classification was the number of workers. Small enterprises are enterprises that has workers comprised between 6 and 20. On the other hand, medium sized enterprises have workers between 21 and 100 workers (NIS, 2016). We chose the number of workers as distinguishing criteria because the other criteria such as turnover was not given to us by our sample companies. Of these 25 interviews, around 15% of the actors were interviewed more than once and at different times in the evolution of the field work. These 25 interviews lasting from around 35 minutes to 47 minutes 30 seconds per interview (Lallemant et Gronier, 2015). We decided to stop our interviews to 25 because of, firstly, time and resource constraints. Though the saturation point was not yet attained, strict time and budgetary constraints compelled us to cap the

number of interviews conducted. However, we tried so much to collect sufficient data to adequately address the research questions. Secondly, practical considerations, as factors like participant availability, geographic spread and access to the target population necessitated pragmatic decisions about the scope of data collection, even though the ideal of full saturation was not achieved.

Once transcribed, the interviews represented a corpus of more than 95 pages. We would also like to point out here that among our interviews we had four for which we did not obtain any permission for audio recording. We therefore took notes for these and we were able to have two out of the four validated. All of our interviewees were Cameroonians. However, we used the simplified standardised classification system to carry out the coding of interviews. Thus we indicated for each interview, the function of the person interviewed, if the person concerned was the director we use [D], if he or she was an accountant, we codified as [ACC], management controller [MC] and departmental manager [DM]. To respect our commitment to confidentiality, all the names of company and individuals interviewed were anonymized

We used the Qualitative Comparative Analysis in this study. Developed by Ragin (1987, 2000, 2008), this method is a set theoretic method designed to compare multiple cases in terms of complex configurations of attributes and outcomes (Bedford and Sandelin, 2015). They furthered by emphasizing that QCA enables investigation of complex interrelationships between attributes on an outcome, known as conjuncture causation. According to them, conjuncture causation means that in many instances, it is a combination of causal attributes that generate an outcome, i.e, they are independent. In addition, the authors documented that QCA permits analysis of multiple causation or equifinality. This mean that there are several different combinations of attributes that are able to produce the same outcome (Bedford and Sandelin, 2015). Moreover, it allows researchers to investigate causal asymmetry. i.e, to separately examine for example the attributes that leads to high firm performance from those that results in low firm performance. Finally, it provides a method to identify the relative importance of attributes within a configuration (Bedford and Sandelin, 2015).

In contrast to conventional statistics methods which consider associations in terms of variables and correlation, set theoretic methods describe associations in terms of sets and set relations, where, a set refers to an attribute or combination of attributes (e.g, MC practices) and set relations are expressed in terms of logical statements (Thiem and al., 2015).

Researchers investigating MC practices as a package typically used either cluster analysis (e.g, Chenhal and Langfield-Smith, 1998; Moores and Yuen, 2001; Gerdin, 2005; King and Clarkson, 2015; Bedford and Malmi, 2015), or profile deviation analysis (e.g, Govindarajan, 1988; Selto and al., 1995). It is not of long that researchers in organizational literature started applying set theoretic method. In this study, QCA is used because unlike the other methods, which lacks a test statistic to indicate the significance of a cluster solution, QCA contains statistics for coverage (like an R-squared value) and consistency (similar to a P-value) Bedford and al, (2016). Moreover, while the other methods are able to determine which practices within a combination contribute to an outcome, and which are irrelevant. QCA examines the relative importance of MC practices by identifying whether they are core, peripheral or redundant (Fiss, 2011).

More specifically, we made the choice to use processing QSR NVivo 12 software for the content analysis. Normally to follow a QCA, fsQCA or TOSMANA software are used. However, due to the advantages of coding with NVivo software, which is a software than can well be used alongside the QCA, we decided to triangulate this two software to make our results more reflecting of the reality. While NVivo is primarily designed for coding, organizing, and analyzing qualitative data, it can also be utilized to support the QCA process. While NVivo provides useful tools for managing and analyzing qualitative data, it does not have built-in functionalities specifically designed for QCA. Therefore, after conducting the initial stages of data organization, coding, and analysis in NVivo, we typically had to export the relevant data for further QCA-specific analysis using dedicated QCA software, the fsQCA. By combining Nvivo's qualitative data analysis capabilities with specialised fsQCA software, we could leverage the strengths of both approaches to conduct a comprehensive QCA study.

4. Findings

It is critical to remind that the configuration theory has been the theoretical framework underpinning this study. Configuration theory, also known as structural contingency theory, is a theoretical framework used to understand how organizations adapt and configure their internal structures and control mechanisms in response to environmental conditions. It emphasizes the idea that there is no universally optimal organizational design or control system, but rather organizations must align their structures and control mechanisms with their specific environmental circumstances.

When applied to the study of control configurations in SMEs, configuration theory helps explain how these organizations establish and manage control mechanisms to achieve their objectives in different contexts. SMEs often face unique challenges due to their size, limited resources, and dynamic environments. Therefore, understanding how they configure their control systems becomes crucial for their success. Therefore, by studying control configurations in SMEs through the lens of configuration theory, we gain insights into how these organizations design their control systems to achieve a balance between flexibility and coordination, adapt to changing circumstances, and enhance their performance.

4.1. Surgical identification and interpretation of the common patterns and themes that emerges from the analysis of control configurations in SMEs

After coding the various variables of this study using NVivo 12 software as explained in the previous section, we exported the results into an Excel spreadsheet. We then transformed the qualitative variables into quantitative variables by assigning values to them based on their significance. We used a range of 0.33 to represent low significance, 0.67 to represent average significance, and 0.95 to represent high significance. Additionally, we calculated the maximum, average, and minimum values for each variable. Finally, we saved the spreadsheet in comma-delimited format (*.csv), as this is the format recognized by fsQCA.

Next, we opened the fsQCA software installed in our computer, which presented a blank interface. It's important to clarify that fsQCA is a software tool used to set the membership of variables rather than explain their variances. It allows researchers to analyze a large number of cases, even in the thousands. fsQCA focuses on the real-world causal relationships, and like multiple regression analysis, it can account for multiple collinearity and quantitative cases, where it can be done through fuzzy-set comparative quantitative analysis. This analysis is a preferred technique for testing the combination effect because of the unique combination of variables, not conducted for each variable individually, but rather observing the overall data and identifying the complete solutions for the variables, as well as examining the combination of all the independent variables.

Once the software opened, we clicked on the "File" tab in the upper ribbon and selected "Open" to upload our data. We then calibrated our data by going to the "Variable" tab, clicking "Compute," and then selecting "Calibrate" in the dialogue window that opened. On the left side of the dialogue page, we found the original variables, and on the top, there were n1, n2, and n3. Most researchers take n1 as the 95% cut-off, n2 as the 50% cut-off, and n3 as the 5% cut-off. This is exactly what we did, replacing n1 with 0.95, n2 with 0.50, and n3 with 0.05 for each variable. After completing the calibration process, we needed to rename all our variables to proceed.

Next, we ran the necessary condition analysis. We went to the "Analyze" tab and clicked on "Truth Table Algorithm." A dialogue box opened, where we set our outcome variable as "firm performance and success" and added all the other renamed variables. We then clicked on "Show solution cases in output" and "OK." A box appeared where the variables were now converted and calibrated into 0 and 1, indicating the truth table, which shows all the possible configurations of the input variables and all the conditions. We then needed to identify the frequency threshold of the number of cases that would be included against each configuration. We went to "Edit" and clicked "Delete and code." A dialogue box appeared, where the software asked for the minimum number of cases that should belong to a configuration before proceeding to the full analysis. Another consideration was generating the outcome, which we set as a strong output or weak outcome, and determining which configuration led to strong performance. For this, we needed to use a cut-off consistency of 0.8 because it is universally regarded as almost always sufficient to deliver the focal

outcome. The default values were to delete rows with numbers less than 1 and set the outcome variable to 1 for rows with consistency ≥ 0.8 . This process resulted in the variables being shortened down, with only those frequency cut-offs that considered configurations having at least 1 case being retained.

Finally, we proceeded with the sufficient condition analysis by clicking on "Standard Analysis" in the bottom right of the dialogue box. Another small dialogue box opened, showing the intermediate solution. We went with the default condition, where both the present and absent values were selected for analysis, and ran it by clicking "OK." The main page then displayed the output of the fsQCA software, which included the complex solution, the parsimonious solution, and the intermediate solution. Most researchers prefer to use the intermediate solution, as it provides the subset of parsimonious and complete solutions. It is important to note that the output of fsQCA provided us with the raw coverage, unique coverage, and consistency for various combinations.

Consistency measures the degree to which membership in each solution term is a subset of the outcome. It is computed by first calculating the consistency of each case, where a case is consistent if its membership in the solution term is less than or equal to its membership in the outcome. Raw coverage measures the proportion of memberships in the outcome explained by each term of the solution, while unique coverage measures the proportion of memberships in the outcome explained solely by each individual solution term (memberships that are not covered by other solution terms).

To interpret the output of the software, we needed to construct and present those output in a table as shown below.

Table 2: Intermediate solution

Paths	B	O	R	M	U	T	P	S	M	I	S	B	C	C	D	H	D	M	S	E	M	C	C	F	D	E	A	A	A	C	L	P	S	T	C	
	S	B	E	O	N	E	R	A	P	C	L	V	O	E	E	I	Y	E	M	M	I	R	M	I	P	R	1	2	3	P	T	L	E	E	I	
BS*OB*RE ~SA*HI*EM*CM*A2*LT* TE	•	•	•					~								•				•								•							•	
MA*SE*BV*CO*CE*SM *DP*~CM*FI*DP*A1*C P*CI									•		•	•	•	•									~		•	•		•								•
~BS*OB*RE*UN*TE*DY* ~ME*SM *CM*DE*ER*A2*PL*SE	~	•	•		•	•										•	~						•		•	•									•	•
MO*UN*PR*SA*IC*CE* EM*SM*CR*CM*FI*A2 *LT*CI				•	•		•	•		•				•					•	•			•	•	•			•							•	
BS*RE*PR*MA*TE*DE* ME*SM*EM*DE*CM*E R*A3*PL*TE	•	•				•	•		•						•			•	•					•	•	•	•							•		•
OB*RE*~MO*UN*IC*C E*EM* ~MI*~CR*CM*FI*A2*L T*SE	•	•		~	•					•										•	~	~						•						•		•

Source: fsQCA software

RC	CO
0.82689	0.806217
0.672908	0.776213
0.417854	0.960998
0.388618	0.794036
0.547121	0.816445
0.272345	0.702145

Where: BS is balance scorecard, OB objectives, RE reporting, MO motivation, UN unannounced inspection, TE team leader, PR procedure, SA sanctions, MP manager’s presence, IC inventory check, SL servant leader, BV business vision incubation, CO coaching, CE centralised decision, DE democratic decision, HI hierarchical decision, DY dynamic decision, ME memo, SM social media, EM email, MI multiple investment, CR cost of raw materials, CM competition, FI fiscal pressure, DP

decrease in profit margin, ER external regulation, A1 age ranging between 0 to 5 years, A2 age ranging between 5 to 15 years, A3 age ranging between 15 years and above, CP cooperatives, LT private limited companies, PL public limited companies, SE secondary sector, TE tertiary sector, CI commercial sector, RC, raw coverage and CO consistency. The above can be summarize in the table below.

Table 3: Summary of necessary conditions for the outcome

Management devices	Organizational structure	Contextual situations	Control variables
	Authority	Internal	
Balance scorecard	Centralised decision	Multiple investments	Firm status
Objectives	Democratic decision	Decrease in profit margin	Firm age
Reporting	Hierarchical decision	External	Sector of activity
Motivation	Dynamic decision	Cost of raw materials	
Unannounced inspections	Communication channel	Fiscal pressure	
Team leader	Memos	External regulation	
Procedures	Social media		
Sanctions	Email		
Manager's presence			
Inventory checks			
Servant leaders			
Business vision incubator			
coaching			

Source: Authors

We can observe from table 1 above that we could have six paths. Balance score card is positive in two paths and negative in one path and there are three empty cells meaning that there is no presence of independence in three paths, whereas objective is positive in three paths with three empty cells indicating that there is no presence of independence. Moreover, reporting is positive in four paths, absent in two. Motivation is only present in one path, there is one path indicating negative and four absent cells. Unannounced inspection is positive in three path and absent in three cells. Team leader is positive in two paths whereas absent in four cells. In addition, procedure is positive in two paths and absent in four cells. Sanction is positive in only one path, negative in one other and absent in four cells. Manager's presence is positive in two paths and absent in four cells. Also, inventory check is positive in two paths and absent in four others. Servant leader is positive only in one path and negative in five cells. Also, business vision incubation is positive only in one path and absent in five cells. In the same vein, coaching is present in only one path and absent in five cells. Centralized decision is positive in three paths and absent in three cells here. Whereas decentralized decision is only present in one path and absent in five cells. Also, hierarchical decision is positive in only one path and absent in five cells. Furthermore, dynamic decision is positive in only one path and absent in five cells. Memo as a channel of communication is positive in one path, negative also in one path and absent in four cells. More so, social media is present in four paths and absent in two cells. Email is also positive in four paths and absent in two. As regard multiple investment, its present and negative in one path and absent in five cells. Cost of raw materials is present and positive in one path, present and negative in one other path and absent in four cells. Completion is positive in five paths and negative in one, while fiscal pressure in positive in four paths and absent in two. Decrease in profit margin is positive in four and absent in two, while external regulation is present in two and absent in four. We included three types of control variables. i.e, firm age, juridical status and business sector. As far as firm age is concern, age ranging between 1 to 5 years (A1) was present in two paths and absent in four paths while A2

ranging from 5 to 15 years were positive in four paths and absent in two paths. A3, ranging from 15 years and above is present and positive in just one path and absent in all the cells. Moreover, cooperative is present in one path and absent in five cells while private limited company is present in three paths and absent in three. Public limited company is present in two paths and absent in four. Finally, the secondary sector is present in two paths and absent in four paths, while the tertiary sector is also present in two paths and absent in four cells, lastly the commercial sector is also present in two paths and absent in four cells

4.2. Consistency and Coverage

The output includes measures of coverage and consistency for each solution term and for the solution as a whole. Consistency (with sufficiency) measures the degree to which solution terms and the solution as a whole are subsets of the outcome. Coverage measures how much of the outcome is covered (or explained) by each solution term and by the solution as a whole. These measures are computed by examining the original fuzzy data set considering the solution (composed of one or more solution terms). The degree to which cases in the original dataset have membership in each solution term and in the outcome form the basis of consistency and coverage measures.

As regard consistency, a good consistency for a model should be 0.74 and above, if the consistency is below, it is considered as inconsistent. In our case, all the consistencies are above 0.74. The raw coverage should be between 0.25 to 0.65. However, according to some researchers, this range varies and, in our case, we took that range because... we can observe in our case that all apart the first path in within the range. The first path which is 0.8 is above the range which means that it's not a good coverage. However, some researchers set their coverages to be up to 0.8. it all depends on the research question, objective and type of data.

5. Discussion

From the output of the comprehensive analysis provided by the fsQCA software, six control configurations were identified. The results offered insights into the configuration pattern of management control and organizational structure, considering the contextual situation, the age of the company, its legal status, and its sector of activity. It's worth noting that we created a theme for each configuration that best captures the essence of the configuration and aligns with the specific focus of our study or practical application.

The first configuration we called "Holistic" is an interrelation of the balanced scorecard, objectives, reporting, sanctions, hierarchical decision-making, email as a means of communication, competition as an influencing factor, age ranging from 5 to 15 years, having a private limited legal status and operating in the tertiary sector. These components are interconnected and work together to ensure effective control and performance management within SMEs in Cameroon. The FsQCA analysis suggests that these elements are consistent and have a high level of coverage. The provided raw coverage (82.69%) indicates a relatively good explanation of the outcome, and the high consistency (80.62%) implies consistent relationships between the factors and control outcome across cases. Together, this configuration highlights the interrelationships between these control factors in guiding performance, aligning efforts, and driving success in SMEs in Cameroon.

In SMEs in Cameroon, the control configuration encompasses various interconnected factors. The balanced scorecard serves as a framework for setting objectives aligned with the organization's strategy, while reporting mechanisms ensure transparency and accountability by communicating performance information. Hierarchical decision-making structures enable the alignment of decisions with organizational goals, while email facilitates communication and coordination. Sanctions act as control mechanisms to enforce compliance with objectives and standards. Additionally, competition as an external factor influences the organization's drive to set ambitious objectives and adapt to market conditions. This configuration pattern is applicable only to organizations whose age ranges from 5 to 15 years. We know that firm age influences its needs, capabilities, and priorities. Findings suggest that SMEs in Cameroon who implement the Holistic configurational pattern have the age range mentioned above. Additionally, the private limited legal status relates to the configuration pattern of management control, implying that the identified configuration pattern is applicable and relevant within this legal framework. Also, the tertiary sector, which indicates that the companies operate in

the service sector, is mentioned. The FSQCA results suggest that the identified pattern is suitable for companies operating in this sector.

The second configuration we called "Soft-Driven" is the interrelation between the manager's presence, servant leadership, business vision incubator, coaching, centralized decision-making, social media as a communication channel, competition, fiscal pressure, decrease in profit margin, age ranging between 1 to 5 years, cooperative approach, and the commercial sector.

The results of the FSQCA software indicate a configuration pattern of management control in SMEs in Cameroon with a consistency score of 0.776213 and raw coverage of 0.672908. This means that the combination of variables and their configurations analyzed by the software have a high level of consistency and coverage in explaining effective management control practices in SMEs in Cameroon. An effective management control pattern in SMEs in Cameroon includes the presence of managers actively involved in day-to-day operations. This indicates that managers play a crucial role in overseeing and implementing control practices. Servant leadership is an important aspect of the configuration pattern, indicating that leaders who prioritize employee development and support can contribute to effective management control in SMEs. The configuration pattern highlights the importance of fostering a business vision incubator, emphasizing the need for innovative thinking and strategies within the organization. This is mostly for small enterprises who recruit workers and promise to set up a business on their account in some years of work with them. Coaching plays a significant role in the configuration pattern, indicating that providing guidance and support to employees is important for their professional growth and overall organizational performance. These control measures are implemented under a centralized decision-making approach, suggesting that decision-making authority is concentrated at higher levels of the organization. The use of social media as a communication channel is another characteristic of the Soft-Driven configuration pattern. It implies that SMEs leverage digital platforms for internal communication and collaboration, enabling more flexible and decentralized communication practices.

The contextual situation of operating in a competitive market environment is an important factor in the configuration pattern. It suggests that effective management control practices in this type of SMEs should prioritize performance measurement, cost control, and strategic alignment to ensure competitiveness. This configuration pattern also recognizes the impact of fiscal pressure on management control. Effective practices should focus on financial performance monitoring, cost reduction, and resource allocation efficiency. A decrease in profit margin is also considered within this configuration pattern, indicating the need for control practices that address declining profitability through cost reduction, revenue generation, and efficiency improvement. Control variables such as the age of the organizations (1 to 5 years), a cooperative approach (corporation), and operating in the commercial sector are also considered in this configuration pattern. These variables influence the specific implementation of management control practices in SMEs in Cameroon. Overall, this configuration pattern identified by the fsQCA software provides insights into the key variables and their configurations that contribute to effective management control practices in SMEs in Cameroon. Organizations exhibiting the characteristics of this pattern can utilize these results to understand and implement management control practices that align with the identified pattern, leading to improved performance and competitiveness.

The third configuration we entitled "Police-Based" is made up of the balanced scorecard, objectives, reporting, unannounced inspections, team leader, dynamic decision-making, memos, social media, competition, external regulation, age ranging from 5 to 15 years, public limited, and the secondary sector.

The interconnections between elements of this pattern suggest a comprehensive and integrated approach to management control. The balanced scorecard and objectives guide decision-making and performance evaluation. Reporting ensures the flow of information, while unannounced inspections verify compliance and quality. The presence of a team leader facilitates coordination and implementation. The organizational structure, characterized by dynamic decision-making and communication through memos and social media, supports effective control practices. The situational context, including competition and external regulation, shapes the design and implementation of

control systems. Finally, the control variables, such as the age of the organization, being a public limited company, and operating in the secondary sector, influence the specific configuration of management control systems. As organizations mature, control systems evolve to manage increasing complexity, risks, and challenges. Being a public limited company affects the management control systems, as publicly traded organizations have additional reporting and compliance requirements. Overall, these interconnections highlight the complexity and multidimensional nature of management control, emphasizing the need for a holistic approach that considers various factors and their interrelationships when designing and implementing effective control systems.

The fourth configuration we entitled "Semi-Engaged" is made up of motivation, unannounced inspections, procedures, sanctions, inventory checks, centralized decision-making, email, social media, cost of raw materials, competition, fiscal pressure, age ranging between 5 to 15 years, private limited, and the commercial sector.

Motivation is a critical control mechanism that influences employee behaviour and performance. Private limited SMEs in the commercial sector employ various motivational strategies to enhance employee engagement, satisfaction, and productivity. These strategies include rewards, recognition programs, career development opportunities, and a positive work environment to ensure employees are motivated to achieve their targets and contribute to the success of the company. Unannounced inspections are surprise visits or audits conducted to assess compliance with regulations, quality standards, and internal procedures. These inspections help detect deviations, ensure adherence to guidelines, and identify potential operational risks or irregularities. Unannounced inspections promote accountability, transparency, and a culture of compliance within the SMEs. On the other hand, Procedures form an integral part of the control configuration in private limited SMEs in the commercial sector. These documented guidelines outline step-by-step processes and workflows for various activities within the organization. Procedures ensure consistency, efficiency, and compliance with best practices. They help employees understand their responsibilities and perform their tasks effectively. Sanctions are penalties or disciplinary actions imposed in response to noncompliance or misconduct. Private limited SMEs may implement a range of sanctions, such as warnings, fines, suspensions, or termination of employment, to enforce compliance, deter unethical behaviour, and ensure adherence to established rules and regulations. Inventory checks involve monitoring and verifying the quantity, quality, and value of goods or materials held by the SME. Regular inventory checks help prevent stock outs, minimize losses due to theft or damage, and ensure accurate financial reporting. They also support efficient supply chain management and facilitate decision-making related to procurement and sales.

However, for the package of control to be effective, some indispensable factors were necessary. The organization should have a centralized decision-making. This refers to a control configuration where decision-making authority is concentrated in specific individuals or departments within the SME. This approach ensures consistency, efficiency, and alignment with the overall strategic direction of the organization. However, it can limit employee autonomy and creativity in decision-making. Email as a communication channel is commonly used as part of the control configuration in private limited SMEs. It allows for quick, written communication among employees, departments, and external stakeholders. Emails were seen to support documentation, information sharing, and decision-making processes. Social media platforms are also a communication channel in this pattern. These platforms provide a digital space for internal communication, collaboration, and knowledge sharing. SMEs can use social media to facilitate quick and efficient communication, share best practices, disseminate important updates, and foster a sense of community among employees.

Some situational factors like the cost of raw materials were also a necessary condition in this pattern. Monitoring and controlling the cost of raw materials is crucial in the commercial sector. It involves tracking the prices, quality, and availability of raw materials needed for production. Effective cost control measures, such as negotiating favorable contracts, managing inventory levels, and seeking alternative suppliers, help optimize operational efficiency and maintain profitability. Competition and fiscal pressure are also external factors that influence the control configuration in private limited SMEs. SMEs must continually monitor market dynamics, adapt to changing customer demands, and

implement strategies to stay competitive. Fiscal pressure, such as tax obligations and regulatory compliance, requires SMEs to maintain accurate financial records and fulfil their fiscal responsibilities.

Now, control variables in this configuration are the age ranging between 5 to 15 years, private limited status, and operation in the commercial sector. The age range suggests that the SMEs considered are relatively established but still in the growth phase. Private limited indicates that the organization is a privately held company with limited liability. Operating in the commercial sector implies that the SMEs are engaged in activities related to buying and selling goods or providing commercial services.

By incorporating these control elements into their operations, private limited SMEs in the commercial sector can enhance performance, ensure compliance, optimize resource allocation, and effectively navigate competitive and fiscal challenges. Adapting to specific market conditions, continually monitoring and evaluating the control configuration, and fostering a culture of compliance are crucial for sustained success.

The fifth configuration we entitled “**mechanistic**” made of balance scorecard, reporting, procedure, management’s presence, team leader, democratic decision, memo, social media, external regulation, age above 15 years, public limited and tertiary sector.

The balance scorecard is a key control configuration used in SMEs in Cameroon. It involves the measurement and management of performance across multiple dimensions, including financial, customer, internal processes, and learning and growth. The balance scorecard enables SMEs to set objectives, define key performance indicators (KPIs), and monitor progress towards achieving strategic goals. Reporting is an essential control mechanism in SMEs in Cameroon. It involves the collection, analysis, and communication of information about the organization’s performance. Reporting typically includes financial statements, operational metrics, and other relevant data in the Cameroon SMEs. It provides stakeholders with insights into the organization’s financial health, operational efficiency, and progress towards strategic objectives. Procedures form an integral part of the control configuration in SMEs in Cameroon. These are documented guidelines that outline the step-by-step processes and workflows for various activities within the organization. Procedures ensure consistency, efficiency, and compliance with best practices. They help employees understand their responsibilities and perform their tasks effectively. The presence of management within the control configuration reflects the active involvement and engagement of managers in day-to-day operations. In SMEs in Cameroon, managers play a crucial role in decision-making, supervision, and coordination. Their presence ensures effective communication, alignment with strategic goals, and timely resolution of issues. The inclusion of a team leader in the control configuration implies that SMEs in Cameroon emphasise strong leadership at the team level. The team leader is responsible for guiding and coordinating the activities of a specific team or department. They ensure effective collaboration, motivate team members, and facilitate the achievement of team goals.

The control package could be vital in a given organizational structure. Democratic decision-making is a significant aspect of the control configuration in SMEs in Cameroon and in this pattern. It involves involving employees or stakeholders in the decision-making process. This participatory approach fosters employee engagement, empowerment, and a sense of ownership. By considering diverse perspectives, SMEs can make well-informed decisions and increase organizational buy-in.

The use of memos as a control mechanism is prevalent in SMEs in Cameroon. Memos serve as formal written communication within the organization. They convey important information, instructions, policy updates, and announcements. Memos ensure that relevant stakeholders are informed, aligned, and aware of the control measures, changes, or expectations. Social media platforms on the other side are utilized as part of the control configuration in SMEs in Cameroon. These platforms provide a digital space for internal communication, collaboration, and knowledge sharing. SMEs use social media to facilitate quick and efficient communication, share best practices, disseminate important updates, and foster a sense of community among employees.

External regulations and compliance are crucial components of the control configuration in SMEs in Cameroon in this pattern. SMEs are required to adhere to legal, regulatory, and industry-specific standards. Compliance ensures ethical practices, legal conformity, and mitigates risks. SMEs

must stay informed about relevant regulations and implement necessary control measures to maintain compliance. The control variables in the configuration, namely age above 15 years, public limited, and tertiary sector, provide additional context for SMEs in Cameroon. Age above 15 years suggests that the configuration is more applicable to established SMEs with a longer operating history. Public limited indicates that the organization has undergone an IPO, which may introduce additional reporting and transparency requirements. The tertiary sector refers to SMEs operating in service-based industries.

In conclusion, the consistency score of 0.816445 and raw coverage of 0.547121 indicate that this control configuration is internally consistent and covers a significant proportion of SMEs in Cameroon. By adopting this configuration, SMEs can enhance their operational efficiency, performance measurement, decision-making processes, communication, compliance, and leadership practices. It provides a framework for SMEs to align their control measures with strategic objectives, promote transparency, and improve overall organizational effectiveness.

Finally, the sixth configuration we called "**formation**" made of objective, reporting, motivation, unannounced check, inventory check, centralized decision, email, multiple investment, cost of raw materials, competition, fiscal pressure, age ranging from 5 to 15 years, private limited, secondary sector.

Objectives are a fundamental part of the control configuration in this pattern. SMEs in the secondary sector set specific goals to guide their operations and measure their performance. Clear objectives help align employee's efforts, provide a sense of direction, and enable monitoring and evaluation of progress towards achieving desired outcomes. Also, reporting plays a crucial role in the control configuration. It involves collecting, analyzing, and communicating relevant information about the organization's performance. Reporting includes financial reports, operational metrics, and other key performance indicators. Regular and accurate reporting provides insights into the financial health, operational efficiency, and overall performance of the SME. Motivation is an essential control mechanism that influences employee behaviour and performance. It involves creating a work environment that fosters employee engagement, satisfaction, and productivity. Motivational strategies such as recognition, rewards, career development, and a positive work culture help ensure that employees are motivated to achieve their targets and contribute to the success of the SME. Unannounced checks are surprise inspections or audits conducted to assess compliance with policies, procedures, and regulations. They help deter and detect fraud, ensure adherence to quality standards, and identify any potential operational risks or irregularities. Unannounced checks promote accountability, transparency, and a culture of compliance within the SME. Inventory checks on the other hand as already discuss involves monitoring and verifying the quantity, quality, and value of goods or materials held by the SME. Regular inventory checks help prevent stock outs, minimize losses due to theft or damage, and ensure accurate financial reporting. They also support efficient supply chain management and facilitate decision-making related to procurement and sales. Centralized decision-making refers to a control configuration where decision-making authority is concentrated in specific individuals or departments within the SME. This approach ensures consistency, efficiency, and alignment with the overall strategic direction of the organization. However, it can limit employee autonomy and creativity in decision-making. Email communication is commonly used as part of the control configuration in SMEs of this pattern. It allows for quick, written communication among employees, departments, and external stakeholders. Emails support documentation, information sharing, and decision-making processes. However, organizations must ensure that email usage aligns with data protection and security protocols. Multiple investments refer to the allocation of resources by the SME into different projects or ventures. This control configuration allows for diversification and risk management. However, SMEs in Cameroon that engage in this type face lot of difficulties as they will lack the means to carry out simultaneous investments. Cost of raw materials is also another contextual challenge in this pattern. SMEs in Cameroon revealed to face lot of challenges in the cost of their raw materials caused by the Ukraine war, leading to high cost of production, and high prices of final products. Competition and fiscal pressure are external factors that influence the control configuration in SMEs of this pattern. Just like explained previously, SMEs must monitor market dynamics, adapt to changing customer demands, and implement strategies to stay competitive. Fiscal

pressure, such as tax obligations and regulatory compliance, requires SMEs to maintain accurate financial records and fulfil their fiscal responsibilities. The control variables in this configuration are age ranging from 5 to 15 years, private limited, and operating in the secondary sector. The age range suggests that the SMEs considered are relatively established but still in the growth phase.

By incorporating these control elements into their operations, private limited SMEs in the secondary sector can enhance performance, ensure compliance, optimize resource allocation, and navigate competitive and fiscal challenges effectively. Adaptation to specific market conditions and continual monitoring and evaluation of the control configuration are crucial for sustained success.

6. Conclusion

Extant literature on management control configuration provides reach knowledge on how organizations achieve internal consistency and how they implement a number of control systems to obtain superior performance. The understanding of how control mechanisms combined was largely derived from organizational typologies (for example Burns and Stalker (1961), Mintzberg (1979, 1989), Burns and Waterhouse (1975) and Merchant (1981), Ouchi (1977, 1979), Spekle (2001), Vosselman (2002) etc). Bedford and Malmi (2015) observed that these typologies described theoretically consistent configurations of structural components and contextual conditions and though provided reach information, they were limited because the framework of study was outside accounting. Moreover, typologies were considered not to be very good models since ideal types were conceptual contractions, it could not be descriptively adequate in every aspect and observed control configurations could not always fall clearly into pre-defined categories. Therefore, Bedford and Malmi (2015) documented that one way to refine and extend conceptual frameworks was by exploring the actual control configuration formed in practice. That empirically derived configurations (taxonomies) could provide more complete descriptions of how controls tended to combine and reveal alternative control patterns not captured or explained by existing frameworks.

Due to the following, we carried out a study on control configuration where contextual and contemporary variables were analyzed. From the analysis, six control taxonomies were identified labelled as holistic, soft-driven, police-based, semi engaged, mechanistic and formation. We also classify them as taxonomies due to the arguments presented by Bedford and Malmi (2015). He advanced three justifications of taxonomies than ideal types and we abided to.

6.1. *Our configurations vs Bedford and Malmi (2015)*

Taxonomies presented by Bedford and Malmi (2015) used planning, measurement, compensation, structure, policies and procedure, and socio-ideological control categories. According to them, these categories comprise a relatively broad conceptualization of control, similar in intent and coverage to the review by Malmi and Brown (2008). However, findings of our study made us to understand that only few of the control variants provided by Malmi and Brown (2008) are applicable in SMEs in the Cameroon context. From the control frame provided in Malmi and Brown's work, only reward and compensation, policies and procedures, planning were identified to be used in our context. It was discovered that, Malmi and Brown's social control, cybernetic and administrative control are not used in our context. We uncovered some unique control variables identified in our context that with totally different functioning mode to the literature. These control devices are part of the soft-driven taxonomy and are manager's presence, servant leader, business vision incubator, coaching. We gave the label soft-driven because of the nature of the control devices. They are different from other classical systems in engaging the employee to attain his objectives. The manager's presence in self-engages the employee to perform well his task without forceful measures. Servant leaders are those leaders that put the employee at the center of their focus. They don't need management control systems to fulfil the objectives of the organization as managers will do but will be a source of motivation to employees. Business vision incubator is an amazing control device identified in our context. It is a process where the business owner appoints employees and promise to settle them at the end of some years of work. Amazing discovery, right? Coaching is the attitude of always creating awareness in the minds of employees of the importance to meet target. It is a method of conscience awakener, which triggers the employee to be performant in love and respect.

Other control variables identified in our context are, balance scorecard, unannounced inspections, inventory checks. Inventory checks is a system used mostly by commercial SMEs in Cameroon. Findings made us to understand that when companies manage their inventories, they are more or less stable in their supplies, thus, increase in sales and profit. We also discovered that inventory control is a control system used to compensate weaknesses of analytical accounting. In the ascertaining of cost in the process of production, some substances are lost, which cannot be identified by analytical accounting. An example is the production of bread. When bread is processed, some flour may be poured down, which will not be traced by analytical accounting in determining cost of production. Therefore, cost accounting and inventory control are complementary control devices.

As far as contextual variables are concerned, the comprehensive review by Chenhall (2003) guided Malmi and Brown's selection. Chenhall detailed the primary factors that influence management control choice: technology, external environment, structure, strategy, size, and national culture. However, in our context, i.e. SMEs in Cameroon, contextual situations that influence the application of control are very different. We identified multiple investments, fiscal pressures, decrease in profit margin, competition and external regulation. As far as firm size is concerned, we did not take that into consideration because the size of organization was already defined, i.e. small and medium sized. We instead added age, company sector and legal status as control variables as they have great capacity to influence the type of applicable control. We also added the organizational structure of the organization because of the need for internal consistency of control.

Bedford and Malmi (2015) excluded two factors proposed by Chenhall (2003). Structure, because it was conceptualised as part of management control, and culture, as their study was conducted in a single national context. At the end, their study presented an empirically derived taxonomy of five control configurations used by top managers, labelled as simple, results, action, devolved, and hybrid.

6.2. Limits and futures perspectives

Despite the managerial and theoretical relevance of our study, it also presents some limits. Firstly, our study was limited in terms of the sample. Our study was carried out on only 20 SMEs through 25 respondents. There is the question on generalisability as according to the NIS 2016 there are over 2000 SMEs in Cameroon. In the same vein, our study was limited only to three cities in Cameroon (Douala, Bafoussam and Bamenda). The second major limit of this study is the fact that a single approach was used. Through the induction approach, control configurations were revealed. There was no further study following the quantitative approach through the development of questions to test these taxonomies of control on a very large SMEs in Cameroon. Therefore, we have no idea on whether or not these control taxonomies can globally apply. Thirdly, this work faced some challenges with the implementation of a new method of data analysis, the QCA. Also, we faced great difficulties in the manipulation of the fsQCA as software for the analysis. The QCA has not been mobilized in Africa especially in the management accounting literature. One of the first studies in the management accounting literature to have mobilized such method to our knowledge is that of Bedford and Sandelin, 2015. Even at that, their study does not clearly give room for implementation.

In line with the above limits, two future perspectives can be traced. Firstly, future studies should carry out a quantitative study with the control devices of this study, alongside the identified organizational structures, contextual situations and control variables used. This is to verify or test whether these configurations can be applied elsewhere. Secondly, same study should be duplicated in other cities of Cameroon whether other contemporary variables will be uncovered.

References

- Abernethy, M. A, Brownell, P, 1997, « Management control systems in research and development organizations: the role of accounting, behaviour and personnel controls », *Accounting, Organizations and Society*, 22(3), 233-248.
- Abernethy, M. A, Brownell, P, 1999, «The role of budgets in organizations facing strategic change: an exploratory study », *Accounting, Organizations and Society*, 24(3), 189-204.
- Abernethy, M. A, Chua, W. F, 1996, «A field study of control system 'redesign': The impact of institutional processes on strategic choice», *Contemporary Accounting Research*, 13(2), 569–606.
- Abernethy, M. A, Lillis, A. M, 1995, « The impact of manufacturing flexibility on management control system design», *Accounting, Organizations and Society*, 20(4), 241-258.
- Adler, P. S, Borys, B, 1996, «Two types of bureaucracy: Enabling and coercive», *Administrative Science Quarterly*, 41(1), 61-89.
- Anthony, 1965, «*Planning and Control Systems: A Framework for Analysis*», Boston: Harvard Business Press
- Auzair, S. M, 2015, «A configuration approach to management control systems design in service organizations», *Journal of Accounting and Organizational Change*, Vol. 11 Iss 1 pp. 47 – 72.
- Auzair, S. M, Langfield-Smith, K, 2005, « The effect of service process type, business strategy and organizational life cycle on bureaucratic MCS in service organizations», *Management Accounting Research*, Vol. 16 No. 4, pp. 399-421.
- Bedford, D. S, Malmi, T, 2015, « Configurations of control: An exploratory analysis», *Manage. Account. Res.*, <http://dx.doi.org/10.1016/j.mar.2015.04.002>
- Bedford, D. S, Malmi, T, Sandelin, M, 2016, « Management control effectiveness and strategy: An empirical analysis of packages and systems», *Accounting, Organizations and Society*, 51, 12–28.
- Bedford, D. S, Malmi, T, Sandelin, M., 2016, « Management control effectiveness and strategy: An empirical analysis of packages and systems», *Accounting, Organizations and Society*, 51, 12–28.
- Bedford, D. S, Sandelin, M, 2015, « Investigating management control configurations using qualitative comparative analysis: An overview and guidelines for application», *Journal of Management Control*, 26(1), 5–26.
- Bedford, D. S, Sandelin, M, 2015, «Investigating management control configurations using qualitative comparative analysis: An overview and guidelines for application», *Journal of Management Control*, 26(1), 5–26.
- Brignall, S, 1997, « A contingent rationale for cost system design in services», *Management Accounting Research*, Vol. 8 No. 3, pp. 325-346.
- Bruns, J, W. J, Waterhouse, J. H, 1975, « Budgetary control and organizational structure», *Journal of Account Research*, Autumn, 177–203.
- Bruns, J, W. J, Waterhouse, J. H, 1975, « Budgetary control and organizational structure», *Journal of Account Research*, Autumn, 177–203.
- Cardinal, L. B, Sitkin, S. B, Long, C. P, and Miller, C. C, 2018, « The Genesis of Control Configurations during Organizational Founding», *In Organization Design*.
- Chenhall, R, Moers, F, 2015, « The role of innovation in the evolution of management accounting and its integration into management control», *Accounting, Organizations and Society*, vol.47, pp.1-13.
- Chenhall, R. H, Langfield-Smith, K, 1998, « The relationship between strategic priorities, management techniques and management accounting: an empirical investigation using a systems approach», *Accounting Organization Society*, 23 (3), 243–264.
- Child, J, 1972, « Organizational structure, environment and performance: the role of strategic choice, *Sociology*, 6, 1–22.
- Cinquini, L, Tenucci, A, 2010, « Strategic management accounting and business strategy: a loose coupling? », *Journal of Accounting and Organizational Change*, Vol. 6 No. 2, pp. 228-259.
- Dekker, J, Lybaert, N, Steijvers, T, Depaire, B., 2015, « The effect of family business professionalization as a multidimensional construct on firm performance», *Journal of Small Business Management*, 53:516–538.

- Demartini, M. C, Otley, D, 2019, « Beyond the system vs. package dualism in Performance Management Systems design: A loose coupling approach», *Accounting, Organizations and Society*, <https://doi.org/10.1016/j.aos.2019.101072>
- Dent, J. F, 1990, « Strategy, organization and control: some possibilities for accounting research», *Accounting Organization Society*, 15 (1/2), 3–25.
- Duncan, R, 1976, « *The ambidextrous organization: Designing dual structures for innovation*», North Holland, New York, USA.
- Duncan, R. B, 1972, « Characteristics of organizational environments and perceived environmental uncertainty», *Administrative Science Quarterly*, Vol. 17 No. 3, pp. 313-327.
- Einhorn, S, Heinicke, X, Guenther, T.W, 2021, « Management control packages in family businesses: a configurational approach», *Journal of Business Economics*, 91:433–478.
- Einhorn, S, Heinicke, X, Guenther, T.W, 2021, « Management control packages in family businesses: a configurational approach», *Journal of Business Economics*, 91:433–478.
- Ekholm, B. G, Wallin, J, 2000, « Is the annual budget really dead? », *European Accounting Review*, 9(4), 519-539.
- Ferreira, A, Otley, D, 2009, « The design and use of performance management systems: An extended framework for analysis», *Management Accounting Research*, 20(4), 263e282
- Fisher, J. G, 1998, « Contingency theory, management control systems and firm outcomes: Past results and future directions», *Behavioral Research in Accounting*, 10, 47–6.
- Fiss, P, 2007, « A set-theoretic approach to organizational configurations», *Academy of Management Review*, 32, 1180–1198.
- Fiss, P, Sharapov, D, Cronqvist, L, 2013, « Opposites attract? Opportunities and challenges for integrating large-N QCA and econometric analysis», *Political Research Quarterly*, 66, 191–198.
- Fiss, P., 2011, « Building better causal theories: A fuzzy set approach to typologies in organization research», *Academy of Management Journal*, 54, 393–420.
- Flamholtz, E. G, 1983, « Accounting, budgeting and control systems in their organizational context: theoretical and empirical perspectives», *Accounting, Organizations and Society*, 8(2), 153-169.
- Flamholtz, E. G, Das, T. K, Tsui, A. S, 1985, « Toward an integrative framework of organizational control», *Accounting, organizations and society*, 10(1), 35-50.
- Friis, I, Hansen, A, Vamosi, T, 2015, « On the effectiveness of incentive pay: Exploring complementarities and substitution between management control system elements in a manufacturing firm», *European Accounting Review*, 24(2), 241–76.
- Heinicke, A, Guenther, T, Widener, S, 2016, « An examination of the relationship between the extent of a flexible culture and the levers of control system: The key role of beliefs control», *Management Accounting Research*, 33, 25.
- Helsen, Z, Lybaert, N, Steijvers, T, Orens, R, Dekker, J, 2017, « Management control systems in family firms: a review of the literature and directions for the future», *Journal of Economic Survey*, 31:410–435.
- Henri, J-F, 2006a, « Management control systems and strategy: A resource-based perspective», *Accounting, Organizations and Society*, 31(6), 529-558.
- Hiebl, M. R. W, Feldbauer-Durstmüller, B, Duller, C, 2013, « The changing role of management accounting in the transition from a family business to a non-family business», *Journal Accounting Organizational Change*, 9:119–154.
- Kennedy, F. A, and Widener, S. K, 2008, « A control framework: Insights from evidence on lean accounting», *Management Accounting Research*, 19(4), 301–323.
- King, R, Clarkson, P. M, Wallace, S, 2010, « Budgeting practices in small healthcare businesses», *Management Accounting Research*, Vol. 21 No. 1, pp. 40-55.
- Koenig, G, 1993, « Production de la connaissance et constitution des pratiques organisationnelles», *Revue de Gestion des Ressources Humaines*, 9, 4-17.
- Kumar, K, Subramaniam, R, 1997, « Porter's strategic types: differences in internal processes and their impact on performance», *Journal of Applied Business Research*, Vol. 14 No. 1, pp. 107-123.

- Lallemand C, Gronier G, (2015), « Méthodes de design UX, 30 méthodes fondamentales pour concevoir des expériences optimales », 2^e Edition, Éditions Eyrolles 61, bd Saint-Germain 75240 Paris Cedex 05 www.editions-eyrolles.com.
- Langfield-Smith, K, 2008, « *A review of quantitative research in management control systems and strategy*», In C. S. Chapman, A. G. Hopwood, & M. D. Shields (Eds.), *Handbook of management accounting research* (pp. 753–784). Amstredam: Elsevier.
- Lowry, J. F, 1990, « Management accounting and service industries: an exploratory account of historical and current economic contexts», *Abacus*, Vol. 26 No. 2, pp. 159-184.
- Luft, J, Shields, M. D, 2003, « Mapping management accounting: Graphics and guidelines for theory-consistent empirical research», *Accounting, Organizations and Society*, 28(2–3), 169–249.
- Macintosh, N. B, Daft, R. L, 1987, « Management control systems and departmental interdependencies: An empirical study», *Accounting, Organizations and Society*, 12(1), 49–61.
- Malmi, T, 2013, «Management control as a package: the need for international research», *Journal of Management Control*, 23(4), 229-231.
- Malmi, T, Brown, D. A, 2008, « Management control systems as a package: Opportunities, challenges and research directions», *Management accounting research*, 19(4), 287-300.
- Merchant, K. A, Otley, D. T, 2006, « A review of the literature on control and accountability», *Handbooks of management accounting research*, 2, 785-802.
- Merchant, K. A, van der Stede, W. A, 2007, « *Management Control Systems*, Edinburgh Gate», England: Pearson Education Limited.
- Merchant, K. A, Van der Stede, W. A, 2007, « *Management control systems: performance measurement, evaluation and incentives*», Pearson Education.
- Merchant, K. A, Van der Stede, W. A, 2012, « *Management Control Systems: Performance Measurement, Evaluation and Incentives*», third ed. Prentice Hall, London.
- Milliken, F. J, 1987, « Three types of perceived uncertainty about the environment: state, effect and response uncertainty», *Academy of Management Review*, Vol. 12 No. 1, pp. 133-143.
- Mintzberg, H, 1979, « *The Structure of Organizations*», Prentice Hall, Upper Saddle River, NJ.
- Mintzberg, H, 1989, « *Mintzberg on Management: Inside our Strange World of Organizations*», Free Press, New York.
- Moilanen, S, 2012, « Learning and loosely coupled elements of control», *Journal of Accounting and Organizational Change*, Vol. 8 No. 2, pp. 136-159.
- Moores, K, and Yuen, S, 2001, « Management accounting systems and organizational configuration: a life-cycle perspective», *Accounting Organization Society*, 26, 351–389.
- Mundy, J, 2010, « Creating dynamic tensions through a balanced use of management control systems», *Accounting, Organizations and Society*, 35(5), 499-523.
- O’Grady, W, Akroyd, C, 2016, « The MCS package in a non-budgeting organization: A case study of mainfreight», *Qualitative Research in Accounting and Manangement*, 13 (1), 2–40.
- Orton, J. D, Weick, K. E, 1990, « Loosely coupled systems: a reconceptualization», *Academy of Management Review*, 15 (2), 203–233.
- Otley, D, 1980, « The contingency theory of management accounting: achievement and prognosis», *Accounting, organizations and society*, 5(4), 413-428.
- Otley, D, 2016, « The contingency theory of management accounting and control: 1980- 2014», *Management Accounting Research*, 31, pp.41-62.
- Ouchi, W. G, 1977, « The relationship between organizational structure and organizational control», *Administrative Science Quarterly*, 22, 95-113.
- Ouchi, W. G, 1979, « A conceptual framework for the design of organizational control mechanisms», *Management Science*, 25, 833-848.
- Santini, F, Elisei, L, Malmi, T, Scrucca, L, 2022, « Management-control-system configurations in medium-sized mechanical-engineering firms: an exploratory analysis», [Accounting Research Journal](#), vol. 35(6), p 834-853.
- Speklé, R, 2001, « Explaining management control structure variety: a transaction cost economics perspective», *Accounting Organization Society*, 26, 419-441.

- Speklé, R. F, Widener S. K, 2018, « Challenging issues in survey research: Discussion and suggestions», *Journal of Management Accounting Research*, forthcoming.
- Tessier, S, Otley, D, 2012 « A conceptual development of Simon's Levers of Control framework», *Management Accounting Research*, 23(3), 171-185.
- Tiwana, A, 2010, « Systems Development Ambidexterity: Explaining the Complementary and Substitutive Roles of Formal and Informal Controls», *Journal of Management Information Systems*, 27(2), 87-126.
- Van der Kolk, B, 2019, « Management control packages: a literature review and guidelines for public sector research», *Public Money and Management*, DOI: 10.1080/09540962.2019.1592922