Managerial Capabilities, Marketing Capabilities, Business Strategy, and Firm Performance in Family and Non-Family Businesses in a sub-Saharan African Economy

Abstract

This study examines how the impact of the interactions between organizational capabilities (managerial and marketing) and business strategy on performance differs between micro and small family and non-family businesses. We use data from 207 family business and 293 non-family businesses from Ghana, and a hierarchical linear regression analysis to tests our hypotheses. The findings indicate that while family businesses benefit more by leveraging managerial capabilities in pursuing the cost leadership strategy, non-family businesses benefit more by leveraging marketing capabilities in implementing the differentiation strategy. Implications are presented.

Keywords: managerial capabilities; marketing capabilities; firm performance; micro and small family businesses; business strategy; sub-Saharan Africa

Introduction

Family businesses (FBs) are widely acknowledged to play an important role in economies all over the world (Acquaah 2011). Despite the importance of FBs to many economies, their survival rate is very low compared with non-family businesses (NFBs). The situation is even more acute in sub-Saharan Africa (SSA) because of the institutional and economic environments in which FBs undertake their business activities (Acquaah, 2013). The institutional and economic environment in SSA has been dubbed "double-void contexts" by Ofori-Dankwa & Julian (2011) because they are characterized by "institutional voids" (Khanna & Palepu, 1997) and low levels of factors of production such as human, financial and physical resources, and organizational capabilities (Ofori-Dankwa & Julian, 2011). Since FBs are the predominant but also one of the least resource-endowed organizations in SSA, their business activities are significantly affected by the nature of the continent's institutional and economic environment. Yet, the ability of these FBs to create value, become sustainable and contribute to the social and economic development of the continent depends on their capacity to obtain the relevant resources and the capability to pursue the appropriate strategic activities. Numerous empirical studies highlight the relevance of a coherent business strategic actions in creating competitive advantage and enhancing firm performance in emerging economies (e.g., Acquaah & Yasai-Ardekani, 2008; Li, Zhou & Shao, 2009).

Meanwhile, pursuing a coherent business strategy is contingent on the resources and capabilities a firm possesses (Li et al., 2009). In fact, the foundation for implementing a value-creating strategy by a firm is preconditioned on the availability of unique resources and capabilities (Barney, 1991; Lado, Boyd, &

Wright, 1992; Newbert, 2007). The resource-based view (RBV) of the firm asserts that firms gain and sustain competitive advantage by deploying rare, valuable, non-substitutable, and inimitable resources and capabilities in their business activities (Barney, 1991; Peteraf, 1993). Thus, organizational capabilities are needed to pursue appropriate and value-creating strategies that can ensure a sustainable competitive advantage. For instance, Barney and Arikan (2001, p. 94) using the term resources broadly, have observed that "resource-based theory has a simple view about how resources are connected to the strategies the firm pursues." Moreover, Grant (2013), has argued that a firm's organizational capabilities are instrumental to their adaptability to changes in consumers and competitors' behaviors. Leveraging the organizational capabilities for a firm's business strategic activities, therefore, has an enormous potential for enhancing performance (Sirmon & Hitt, 2003).

The strategic management literature is replete with studies that have established a positive relationship between organizational capabilities and firm performance (e.g., Newbert, 2007). Premised on the evidence provided by extant studies, we expect that organizational capabilities can moderate the relationship between business strategy and firm performance of FBs and NFBs. However, copious amount of literature exists to show that the performance and organizational architecture of FBs and NFBs are distinct (Acquaah, 2011; Anderson & Reeb, 2003; Villalonga & Amit 2006). It is, therefore, logical to expect that leveraging organizational capabilities in the pursuit of business strategic actions will not extract the same level of performance benefits for both FBs and NFBs.

The objective of this paper is twofold. First, the paper attempts to examine the interactive effects of organizational capabilities and business strategy on the performance of FBs and NFBs. The strategy literature presents several forms of organizational capabilities that can exist in a firm. In this study, we focus on managerial and marketing capabilities because they "reflect different types of activities that reside in different levels within the firm" (Fortune & Mitchell, 2010, p. 795). While managerial capabilities usually focus on processes that enable a firm to build, utilize, integrate, and reconfigure resources and other organizational activities (Helfat & Peteraf, 2015; Henderson & Cockburn, 1994), marketing capabilities focus on functional processes that enable a firm to deliver the intended value proposition for its target customers and market (Day, 2011). These capabilities are heterogeneous among firms, usually difficult to imitate or transfer and represent two fundamental capabilities firms use to pursue their business strategic actions in their quest for creating competitive advantage and thus enhance performance. Second, this study examines the differences in how the interaction between these two organizational capabilities and business strategy impact performance for FBs and NFBs.

To do this, we focus on micro and small FBs and NFBs in a transition economy in SSA – Ghana. Several reasons motivate the focus on micro and small FBs and NFBs in a SSA transition economy. First, micro and small FBs are not only ubiquitous, but dominate the family business landscape in SSA and also

contribute significantly to national output. Second, little is known about family businesses in SSA, and there is little scholarship concerning the impact of the strategic activities of micro and small FBs in SSA. A review and assessment of family business studies in Africa over a 30-year period (1985-2015) by Acquaah and Eshun (2016) found only 29 publications focusing on family businesses, and out these 29 articles only three (3) focused on the strategic activities of family businesses. Moreover, those studies concentrated on medium-sized and large FBs. The gap is even wider when it comes to exploring the comparative analysis of the interactive effects of organizational capabilities and business strategy on the performance outcomes of micro and small FBs and NFBs, not only in SSA but even globally. In this regard, very few studies have examined the contingent value of organizational capabilities that are related to a firm's strategic impact on organizational outcomes (Lioukas, Reuer, & Zollo, 2016). Clearly, more research is needed in exploring the contingent effect of the possession and leveraging of organizational capabilities in the strategic activities of micro and small FBs, and thus help to advance the RBV of the firm and family business research.

This study, therefore, adds to the existing family business literature in two ways. First, we examine the value of managerial and marketing capabilities in particular organizational and strategic contexts. Specifically, we show that while both managerial and marketing capabilities are valuable for all firms, they vary across different types of organizational forms (FBs vs. NFBs). Second, we show the boundary conditions that determines when particular capabilities will augment the use of particular business strategy to generate greater value for FBs and NFBs. We distinguish between managerial and marketing capabilities and show that managerial capabilities, which involve the "processes that span multiple areas or departments to coordinate, integrate and direct firm activities" (Fortune & Mitchell, 2012, pp. 798-799) could be used in conjunction with both the cost leadership and differentiation strategies to improve performance. However, while marketing capabilities, which embody the functional capabilities the relates to the leveraging of the abilities and knowledge to execute a marketing strategy effectively, could be used in combination with the differentiation strategy to improve performance, it would be detrimental to firm performance when used with the cost leadership strategy.

The rest of the paper is structured as follows: the next section discusses the theoretical background and the hypotheses. We then continue by highlighting the method used to provide evidence on the conceptual framework. In this section, we also present a detailed description of the research context. We present the analysis and the results of the hypotheses. In the final part of the paper we focus on the discussion, findings, and then draws some conclusions useful for practice. The limitations and suggestions for further are also given.

Theory and Hypotheses Development

Resource-Based View

The RBV proposes that a firm's competitive advantage is based on the possession and deployment of resources and capabilities (Barney, 1991; Wernerfelt, 1984). Essentially, the RBV conceptualizes the firm as a bundle of resources and capabilities. The RBV emphasizes that resources and capabilities are heterogeneously distributed across firms, and that resource and capability heterogeneity may persist over time because they are not perfectly mobile across firms (Barney, 1991). Consequently, firms gain competitive advantage on a sustainable basis by accumulating and leveraging idiosyncratic resources and capabilities that are valuable, rare, inimitable, and non-substitutable (Barney, 1991). RBV researchers have, however, distinguished between resources and capabilities. While resources are considered as assets that are either owned and/or controlled by a firm (Amit & Schoemaker, 1993; Barney, 1991), capabilities are seen as a firm's ability to exploit and combine resources, through organizational routines, in order to accomplish its goal (Amit & Schoemaker, 1993). Collis and Montgomery (1994) describe organizational capabilities as the socially complex procedures that determine the efficiency with which organizations are able to transform inputs into outputs. For Day (1994), organizational capabilities are set of skills and collective learning that are exercised by means of organizational processes that enable the integration of functional activities within the organization to achieve higher performance. Organizational capabilities provide the management in a firm the ammunition to make the appropriate decisions regarding its strategic choice. Organizational capabilities also facilitate the building, integrating, interlinking and reconfiguring of internal and external organizational resources (Amit & Schoemaker, 1993; Selnes & Sallis, 2003). Organizational capabilities can take the form of managerial, marketing, human resources, innovative, technological, resource and development, etc. In this study, we focus on organizational capabilities, specifically managerial and marketing capabilities, and explore how the leveraging of a firm's managerial and marketing capabilities impact its strategic actions to create competitive advantage. We further argue that these two types of capabilities not only influence the strategic actions of FBs and NFBs but also interact with the strategic actions of FBs and NFBs to engender differential impact on their performance.

Managerial capabilities: Managerial capabilities could be defined as the processes that allow the leadership in a firm to integrate and coordinate firm resources and activities (Fortune & Mitchell, 2012). Managerial capabilities, therefore, involve the reconfiguration and utilization of firm resources and other capabilities to perform activities for achieving sustainable competitive advantage. Managerial capabilities are, therefore, "the degree to which a firm's corporate management team utilizes its team-embodied complementary yet heterogeneous skills, abilities, expertise and knowledge base that have been developed over time to generate rents" (Acquaah, 2003b: 64). According to Fortune and Mitchell (2012), managerial

capabilities surpass other organizational capabilities because they unify the activities of a firm into a cohesive system. Thus, managerial capabilities provide a firm the capacity to integrate the capabilities arising from technological, marketing, operations, information technology capabilities and human resources, so as to be able to make better use of its human, technical and physical resources by assigning them to areas where they can create higher value to the firm (Acquaah, 2003a). It has also been argued that managerial capabilities are critical in controlling and monitoring organizational systems for executing the strategic actions of a firms (Barney & Hesterley, 2006). Managerial capabilities in particular may be a source of sustained competitive advantage because they are firm-specific, complex, causally ambiguous (Barney, 1991), and also path dependent (Teece, Pisano, & Shuen, 1997). Managerial capabilities are revealed in the form of reputational capability (Acquaah, 2003a), cognitive capabilities (Helfat & Peteraf, 2015), relational capability (Adner & Helfat, 2003; Arregle, Hitt, Sirmon, & Very, 2007), architectural competence (Henderson & Cockburn, 1994), and integrative/integration capabilities (Yeoh & Roth, 1999; Zollo & Singh, 2004). Several studies have shown that managerial capabilities are important and valuable in creating competitive advantage (Acquaah, 2003b; Daily & Dollinger, 1993; Littunen, 2003).

Marketing capabilities: According to Day (1994), marketing capabilities are a firm's endowed competences and skills that are used to identify the opportunities, threats, and changes taking place in its markets and customers, and utilized to deliver value to customers. Day (1994) further classifies marketing capabilities into two types – market sensing and customer-linking capabilities. Market sensing capabilities refer to the ability of a firm to identify the needs of customers and learn from the market such as the development of new products, quickly responding to changes in customer tastes and preferences, and delivering excellent customer service (Day, 2011). Customer-linking capabilities refer to the ability of a firm to develop enduring relationships and work closely with distributors, retailers and customers. Marketing capabilities have also been defined as "the integrative processes designed to apply collective knowledge, skills and resources of the firm to market-related needs of the business, enabling the business to add value to its goods and services, adapt to market conditions, take advantage of market opportunities and meet competitive threats" (Vorhies, 1998: 4). Marketing capabilities are further considered the "accumulated knowledge and skills of the firm's marketing employees that are utilized to create customer satisfying outcomes" (Orr, Bush & Vorhies, 2011: 1074). Marketing capabilities are also seen as firm's repeated patterns of activities to effectively undertake its market-related needs (Chang, Park, & Chaiy, 2010). Marketing capabilities are, therefore, the accumulated knowledge, skills, and expertise embedded in the marketing-related activities and that are used to create value for the firm. The accumulated knowledge, skills, and expertise may be developed in the areas of product development, marketing research, pricing strategy, distribution channels, promotion, and marketing management (Vorhies & Harker, 2000; Vorhies,

Harker & Rao, 1999). A firm's marketing capabilities further show its ability to develop and implement marketing strategy effectively. It has, therefore, been argued that the development of marketing capabilities in micro and small businesses is created as a result of policies and practices that are related to the firm's marketing mix (De Sarbo, Di Benedetto & Song, 2007). The marketing literature recognizes that marketing capabilities may be immobile, not easily imitated, and non-substitutable (Morgan, Vorhies, & Mason, 2009) that could be used to create competitive advantage. Marketing capabilities have been shown to play a critical role in the formulation and implementation of business strategies (Theodosiou, Kehagias, & Katsikea, 2012; Weerawardena, 2003), in addition to enhancing firm performance (Day, 1994; Morgan, Slotegraff, & Vorhies, 2009; Nath, Nachiappan, & Ramanathan, 2010; Slotegraaf & Dickson, 2004; Theodosiou, et al., 2012; Vorhies & Morgan, 2005).

Business Strategy

The capabilities approach argues that if a firm is going to be able to pursue its business strategy successfully, it should be endowed with the necessary capabilities which could be deployed to implement the strategy (Augier & Teece, 2008). The business strategy of a firm describes how the firm develops competitive advantage in an industry relative to its competitors. The various business strategic typologies used in the literature (e.g., Porter, 1980 &1985; Miles & Snow, 1978) focus on the relative emphasis a business places on efficiency (cost-based) versus market effectiveness (differentiation-based). We focus on Porter's (1980) typology in this study because it is one of the most used typologies to depict the business strategic activities of firms in emerging economies (Acquaah & Yasai-Ardekani, 2008; Karabag & Berggren, 2014). According to Porter (1980), a firm can compete and achieve superior performance in an industry by implementing one of three generic strategies: differentiation, cost leadership, or focus (cost leadership or differentiation in a narrow market segment). Thus, cost leadership and differentiation strategies as two distinct ways of achieving competitive advantage and earning superior performance. The differentiation strategy focuses on developing uniqueness around the firm's product or service offerings or creating a perception in the minds of customers and market position that is perceived as being unique industry-wide (Porter, 1980). The cost leadership strategy, on the other hand, emphasizes the creation and maintenance of low cost positions relative to competitors (Porter, 1980). The empirical evidence from the business strategy literature in both FBs and NFBs in emerging economies corroborate the argument that implementation of both cost leadership and differentiation strategies improve performance (Acquaah, 2011; Acquaah & Yasai-Ardekani, 2008; Kim, Nam & Stimpert, 2004; Spanos, Zaralis & Lioukas, 2004).

Interaction of Managerial Capabilities and Business Strategy on Performance

The business strategy literature is replete with studies which shows that business strategy (whether cost-based or differentiation-based) positively influence performance. The capabilities literature also indicates that organizational capabilities such as managerial capabilities influence the strategic activities and performance of firms (Fortune & Mitchell, 2012; Henderson & Cockburn, 1994; Yeoh & Roth, 1999; Zollo & Singh, 2004). The question is, how does managerial capabilities support the pursuit of business strategy to influence performance, and what is the difference of the impact between FBs and NFBs? We argue that while managerial capabilities will augment the impact of business strategy on performance, that impact will be different between FBs and NFBs. Porter (1980) identified some commonly required skills and resources needed by a firm to implement each of the business strategy typologies successfully. The skills and resources for the cost leadership strategy focus on making the firm more efficient in its overall operations and activities. They include process engineering skills, ability to constantly supervise employees, ability to evaluate and control the workforce, products design skills for efficient manufacturing, ability to access large pool of capital, and access to distribution systems that reduces cost. For the differentiation strategy, the skills and resources focus on elevating the quality of products and services, and reputation of the firm in the marketplace. They include strong marketing capabilities, product engineering skills, product development skills, corporate image and reputation, customer service (Porter, 1980). Because managerial capabilities allow a firm's leadership to integrate, coordinate, and direct the firm's resources and activities for effective utilization, a firm with stronger managerial capabilities will not only be able to acquire the necessary skills and resources, but also utilize it to pursue the requisite business strategy successfully than a firm with weaker managerial capabilities. Thus, in both FBs and NFBs, the stronger the managerial capabilities, the greater the impact of business strategy on performance.

However, we argue that even though the interaction between managerial capabilities and business strategy (cost leadership and differentiation) will have a positive influence on performance for both FBs and NFBs, the performance benefit will be different for both organizational forms. For the impact of the interaction between managerial capabilities and cost leadership on performance, we argue that the performance benefit will be higher for NFBs than FBs. The reason is that compared to NFBs, FBs have lower managerial capacity that could be used to integrate and coordinate activities that would result in controlling costs tightly, reviewing detailed reports periodically, and/or designing incentive-based system based on rewarding employees for meeting strict targets. Although FBs possess some inherent capabilities that could be leveraged to pursue the cost leadership strategy, they are deficient in managerial capabilities when compared to NFBs. The leadership team of most FBs are dominated by family members and this limits the endowment of the quality of the managerial capabilities in the firm (Bertrand & Schoar, 2006). This is accentuated in SSA where there is shortage of managerial expertise and there exist considerable

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uncertainty in the labor market. Thus, there is limited pool of potential recruits for managerial positions. If even, the FBs are able to recruit non-family managers, there are risks with respect to expropriation of resources (Lee, Lim, & Lim, 2003) and/or succession problems due to nepotism, parental altruism and family conflicts (Lubatkin, Ling, & Schulze, 2007; Shukla, Carney, & Gedajlovic, 2014). Consequently, in FBs, the family may not be able to supply the firm with enough talented employees to manage key operations necessary for creating efficiency. The restricted nature of the managerial resource pool supplied by the family means that the family may not have enough qualified managers to operate the business successfully unless they recruit non-family employees to fill key positions (Dyer, 2006). For many reasons FBs also find it difficult to attract, reward, and retain high quality professionals (Barnett & Kellermanns, 2006). Thus, family members who are incompetent may be placed in key positions and this may jeopardize the firm's ability to leverage its managerial capabilities to pursue the cost leadership strategy and thus improve performance when compared with NFBs. While recruitment and retention of skilled managerial personnel have been identified as one of the main internal issues of concern to FBs; the same cannot be said about NFBs. NFBs have the capability and to the financial resources to recruitment qualified personnel, while FBs usually rely on inexperienced managerial personnel who happen to be just family members. What this means is that FBs may lack the requisite managerial capabilities and expertise to build, integrate, and reconfigure resources and competencies effectively to pursue the cost leadership strategy to gain a higher level of competitive advantage when compared with NFBs. We, therefore, hypothesize that:

> *Hypothesis 1: The positive impact of the interaction between managerial capabilities and cost leadership strategy will be stronger for NFBs than FBs.*

Despite the challenges for FBs in obtaining and maintaining the requisite managerial capabilities for their strategic activities, the characteristics inherent in FBs allow them to utilize the limited managerial capabilities embedded in the organizations to accumulate and deploy resources for pursuing the differentiation strategy. We, therefore, argue that in terms of the impact of the interaction between managerial capabilities and differentiation strategy on performance, the performance benefit will be higher for FBs than NFBs. FBs possess a familial advantage that is created as a result of the interaction between the family and the business, and this has been described by Habbershon and Williams (1999) as the "familiness" of the firm. This distinctive familiness advantage is caused by the presence of the family in the structures of power, their experiences, and the affinity between the existing culture in the family and the culture within the business (Klein, Astrachan, & Smyrnois, 2005). This unique advantage is clearly nonexistent in NFBs and propels FBs to use their managerial capabilities to orchestrate and espouse the uniqueness in the products and services they offer in their markets. In sub-Saharan Africa in particular, the collectivistic culture allows FBs to develop social relationships and connections with their external

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constituents. Because FBs are known to have the trust, integrity and commitment to maintain those relationships (Intihar & Pollack, 2012; Miller, Lee, Chang, & Le Breton-Miller, 2009), they are able to rely on those relationships to utilize their managerial capabilities to improve product and service quality, create brand awareness, offer excellent customer service, and even advertise the products and services, which are all hallmarks of the differentiation strategy. Thus, the unique characteristics of FBs their endowment of managerial capabilities could be leveraged to integrate the resources and activities that are required to pursue the differentiation strategy better than NFBs. Thus, we hypothesize that:

> *Hypothesis 2: The positive impact of the interaction between managerial capabilities and differentiation strategy on performance will be stronger for FBs than NFBs.*

Interaction of Marketing Capabilities and Business Strategy on Performance

As indicated earlier, a firm's marketing capabilities are the knowledge, skills and abilities it possesses that enable it to create value for its customers (Day, 2011). Marketing capabilities are important in the pursuit of business strategy because it involves the leveraging of a firm's marketing knowledge and expertise to deliver unique and compelling value propositions for target customers (Orr, et al., 2011). However, the orchestration of marketing capabilities is more suited to the implementation of the differentiation strategy than the cost leadership strategy. This is because the skills and resources required for the implementation of the differentiation strategy include strong marketing (including advertising and promotion) capabilities, firm image and reputation, and strong customer service (Porter, 1980, 1985). We, thus, argue that for both FBs and NFBs, marketing capabilities would augment the implementation of the differentiation strategy, while it would be detrimental to the implementation of the cost leadership strategy. Nevertheless, we expect that there would be a significant difference on how marketing capabilities interact with business strategy to influence performance for FBs and NFBs.

Some of the unique characteristics of FBs when compared with NFBs include the existence of cohesive clan cultures with a long-term employee-hiring orientation (Miller & Le Breton-Miller, 2005); the ability to propagate trust, and inspire and motivate non-family employees to commit to the firm for a long-term; the strong desire to develop customer relationships and demonstrate flexibility in their business activities (Tokarczyk, Hansen, Green, & Down, 2007) reputational capital and the ability to engender trustworthiness (Tagiuri & Davis, 1996); and the capability to develop social relationships and have the veracity to commit to those relationships (Miller et al., 2009). These characteristics will allow FBs to leverage their marketing capabilities in implementing the differentiation strategy more than NFBs. In fact, FBs would be able to develop and utilize more market sensing and customer-linking capabilities than NFBs because of their desire and ability to interact with customers and also develop customer loyalty through relationships. This would allow for the formation of a bond of trust, and more customized client-oriented

services to be offered to customers (Le Breton-Miller & Miller, 2006). Moreover, FBs would be able to use their reputational capital and the attribute of trustworthiness to orchestrate the utilization of their marketing capabilities to implement the differentiation strategy better than NFBs. This is because FBs would be effective in branding their businesses and leveraging the trust customers have for them, and thus the "capacity to collect, disseminate and use market-based information" (Guenzi & Triolo, 2006: 975) in pursuing the differentiation strategy. Again, FBs may be able to constantly survey the marketplace and customers to make subtle changes to their product or service mix in an effort to better serve customers and thus able to use their marketing capabilities to pursue the differentiation strategy more than NFBs. We, therefore, hypothesize that:

> *Hypothesis 3: The positive impact of the interaction between marketing capabilities and differentiation strategy will be stronger for FBs than NFBs.*

Since marketing capability facilitates the deployment of market-based skills and competencies for creating value for customers, it would not enhance a firm's performance when it is leveraged to implement the cost leadership strategy. This is because the cost leadership strategy emphasizes efficiency and cost reduction with the objective of becoming the lowest cost producer or service provider in a particular market (Porter, 1980). However, the leveraging of marketing capabilities to pursue the cost leadership strategy would increase the cost for a firm's strategic activities, and this will hinder its competitiveness in the market in addition to its performance. In fact, the common organizational requirements for pursuing the cost leadership strategy such as tight cost and overhead control, and the minimization of costs in areas such as advertising and service, are incompatible with the utilization of marketing capabilities. Thus, the interaction of marketing capability and cost leadership strategy will not be beneficial for both FBs and NFBs.

Again when FBs are compared to NFBs, FBs are more likely to use and integrate their marketing capabilities in the pursuit of the cost leadership strategy than NFBs. The familiness characteristic of FBs encourages the development of close connections with customers and this will foster the leveraging of both market sensing and customer-linking capabilities, which is costly when a firm is pursuing the cost leadership strategy. The strong sense of loyalty, integrity, and commitment to customers by FBs (Habbershon, Williams, & Macmillan, 2003; Miller et al., 2009) would encourage market-related activities such as promotion, advertising, and marketing research. This would prevent FBs from minimizing their interactions with their customers, thus increasing their cost of doing business. At the same time, FBs may not have the financial resources to invest in the activities that would lead to obtaining large market shares and avoiding marginal customers. Moreover, the inexperienced and sometimes the unskilled nature of the management, especially in FBs in sub-Saharan Africa, will make it difficult for them in paying close attention to cost control in all areas of business activities, which is crucial in pursuing the cost leadership

strategy. It follows from the above argument that FBs would be less likely to integrate their marketing capabilities with the cost leadership strategy when compared with NFBs. We therefore expect that the interaction between marketing capabilities and the cost leadership strategies will hurt FBs more than NFBs. We formally state the hypothesis as follows:

> *Hypothesis 4: The negative impact of the interaction between marketing capabilities and cost leadership strategy will be stronger for NFBs than FBs.*

Methods

The hypotheses were tested with data collected from a convenience sample of 1000 micro and small FBs and NFBs operating in Ghana. Since micro and small FBs and NFBs in Ghana are homogeneous and operating largely in informal sectors of the economy, a sample size of 1000 is considered to be large and representative. To qualify to be selected as micro and small FBs or NFBs, managers were asked to indicate the number of their employees. Based on this criterion all firms that have less than thirty employees were considered for the survey.

Data for the study were collected through a survey questionnaire. The researchers and a team of graduate teaching assistants personally visited the companies to administer the questionnaire over a period of three weeks. To ensure the credibility of the responses on the survey questionnaire, the managers were asked to put an official company stamp on the surveys or attached their complementary cards. The managers were also assured that any information they provide would be treated with strict confidentiality, and under no circumstances would their names or their company names be mentioned in any part of the research paper. Out of the 1000 questionnaires that were distributed, 677 were returned for a response rate of 67.7 percent, which is considered very high compared with most studies. The 677 responses were made up of 321 FBs and 356 NFBs. However, some of the questionnaires were not fully completed so the minimum total number of questionnaires that were usable for the analyses was 500, of which of 207 were FBs and 293 were NFBs. The discussion of the criteria for determining FBs and NFBs is presented in the measurement of variables section below.

Non-Response Bias, Reliability and Validity Checks

We examined the data for non-response bias by comparing early and late respondents (i.e., the first week respondents and the third week respondents of the surveys) in terms of the number of employees, age of the firms, and the organizational capabilities and business strategy constructs. No significant differences were found between the early and late respondents. Thus, non-response bias is not a significant issue in the data for the study (Armstrong & Overton, 1977). We further examined the reliability and validity of the constructs. We used two methods for test for the reliability of the constructs: (1) the Cronbach's Alpha (α)

coefficients and (2) the Composite Reliability (CR). The Cronbach α coefficients of the measures ranged from 0.707 to 0.939, which is an indication that all constructs are reliable. Moreover, the Criterion Reliabilities (CR) for each of the constructs from a Confirmatory Factor Analysis (CFA) indicated that they were all higher than 0.70 indicating good reliabilities for the constructs (See Table 1). The CFA was further used to examine the convergent and discriminant validities of the constructs. Convergent validity was met because for all the measurement items in each of the constructs, the standardized loadings were large (greater than 0.50) and significant on their respective factors. Discriminant validity for the constructs were examined by ensuring that the fit indices from the CFA models were satisfactory for each construct. First we examined the fit indices for all the constructs. All the models used for the constructs suggest good fit as indicated by the indices – the Goodness of Fit Index (GFI), Comparative Fit Index (CFI), and the Non-Normed Fit Index (NNFI) were all greater than the recommended minimum, while the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Error of Residuals (SRMR) were also lower than the recommended maximum. Second, we examined the Average Variance Extracted (AVE) for each of the constructs from the CFA. According to Fornell and Larcker (1981), the AVEs for each of the constructs should be higher than the squared correlations of each of the constructs with other constructs. With the exception of cost leadership construct, all the AVEs were higher than the squared correlations of each of the constructs with other constructs (See Table 2) showing good discriminant validities for most of the constructs (Fornell & Larcker, 1981). The summary results of the CFA are presented in Table 1 and the discriminant validity analysis in Table 2.

*******************INSERT TABLES 1 AND 2 ABOUT HERE***********************

Measurement of Variables

Managerial capabilities (α= 0.868) was measured with six items adapted from Spanos and Lioukas (2001). The items are (a) skills and expertise in developing a clear operating procedures to run the business successfully; (b) ability to allocate financial resources to achieve the firm's goals; (c) ability to coordinate different areas of the business to achieve results; (d) ability and expertise to design jobs to suit staff capabilities and interest; (e) skills and expertise to design jobs to suit staff capabilities and interest; and (f) ability to attract and retain creative employees. Respondents were then asked to indicate the extent to which are able undertake the managerial capabilities items of their firm relative to their competitors over the last three years on a 7-point scale ranging from (1) "much weaker" to (7) "much stronger". We then conducted a confirmatory factor analysis (CFA) on the items to examine the discriminant validity of the managerial capabilities construct. The fit measures indicated a good fit with the observed covariance matrix:

$\chi^2 = 49.52$ (d.f.=7; p =0.000); RMSEA = 0.098; CFI = 0.984; GFI = 0.976; NNFI = 0.965; SRMR = 0.029; as indicated in Table 1.

Marketing capabilities (α=0.843) was measured with six items adapted from Morgan, Vorhies, and Mason (2009) and Vorhies and Harker (2000), which focus on the leveraging of some of the key marketing-related activities for creating value for target customers. The items are: (a) developing marketing information about specific customer needs; (b) pricing the firm's products and services and monitoring prices in the market; (c) designing products that can meet customer needs; (d) focusing on customer recruitment and retention; (e) controlling access to distribution channels; and (f) providing better after sales service capabilities. Respondents were then asked to indicate the extent to which are able undertake the marketing capabilities items of their firm relative to their competitors in the same product or service lines over the last three years on a 7-point scale ranging from (1) "much weaker" to (7) "much stronger". We also conducted a CFA on the marketing capabilities items to examine the discriminant validity of construct. The fit measures indicated a good fit with the observed covariance matrix: $\chi^2 = 6.83$ (d.f.=9; p =0.000); RMSEA = 0.100; CFI = 0.997; GFI = 0.966; NNFI = 0.956; SRMR = 0.040; as shown in Table 1.

Business strategy was measured with ten (10) items from the theoretical and empirical literature on business strategy using Porter's (1980) typology (e.g., Dess & Davis, 1984; Campbell-Hunt, 2000; Kotha & Vadlamani, 1995). The business strategy variables were made up of two dominant strategic orientations – cost leadership strategy and differentiation strategy. The respondents were asked to assess the extent to which they have placed emphases on the various competitive activities over the past three (3) years on a 7-point scale ranging from (1) "much less" to (7) "much more. *Cost leadership strategy* (α=0.707) was measured with four (5) items: (a) offering a broad range of products/services; (b) operating efficiencies; (c) offering competitive pricing for products/services; (d) forecasting sales growth in the market; and (e) control of operating and overheads costs. *Differentiation Strategy* (α= 0.845) was measured with five (5) items: (a) developing new products/service offerings; (b) upgrading or refining existing products/services; (c) innovativeness in marketing products/services; (d) advertising and promotion of products/services; and (e) building brand and company identification. The CFA conducted on the items measuring the cost leadership strategy ($\chi^2 = 2.55$ (d.f.= 5; $p = 0.636$); RMSEA = 0.01; CFI = 0.999; GFI = 0.998; NNFI = 0.996; SRMR = 0.012) and differentiation ($\chi^2 = 160.28$ (d.f.=5; $p = 0.000$); RMSEA = 0.12; CFI = 0.909; GFI = 0.900; NNFI = 0.978; SRMR = 0.069) strategy constructs indicated a good fit with the observed covariance matrix as shown in Table 1.

Interactions of business strategy and organizational capabilities: To obtain the interaction variables, the business strategy variables (cost leadership and differentiation) and the organizational capabilities variables (managerial and marketing) were centered or de-meaned and the variables were multiplied. For example, the interaction of differentiation strategy and marketing capabilities was created

by multiplying the centered variables of differentiation strategy and marketing capabilities. According to Aiken and West (1991), centering the variables before interacting them reduces the possibility of multicollinearity among variables in the estimation process.

Firm performance (α = 0.939) was measured subjectively and operationalized through a multi-item scale that includes sales growth, profit growth, productivity growth, net profit and sales revenue. For all the items, managers were asked to rate their companies' actual performance relative to the companies planned performance over the past three years. This approach is a significant deviation from how subjective performance is measured in existing studies. In most of the existing studies respondents were asked to indicate their firm's performance relative to competition which is viable for samples drawn from medium and large businesses where information about competitors are readily available. In such a situation, it is possible for managers to assess their companies' performance relative to competitors. In a transition economy such as Ghana, however, it is difficult for micro and small businesses operating mostly in the informal economy to know the performance of their competitors since access to such information is not published. Most of micro and small businesses are not registered so getting information about their performance is difficult. All the performance items were measured on a 7-point scale ranging from (1) "much less" to (7) "much more". Subjective performance measures have been widely used in strategy-related research in emerging economies (Acquaah & Yasai-Ardekani, 2008; Acquaah et al., 2011). A CFA was conducted on the items to examine the discriminant validity of the firm performance construct. The fit measures indicated a good fit with the observed covariance matrix: χ^2 = 9.50 (d.f.=5; p =0.090); RMSEA = 0.039; CFI = 0.999; GFI = 0.994; NNFI = 0.997; SRMR = 0.008; as indicated in Table 1. A composite measure from the average of the five items was used to operationalize firm performance.

Family businesses: Although several definitions of FBs have been offered by various authors (e.g., Anderson & Reeb, 2003), this study adopted Acquaah's (2011) definition of FBs. Accordingly, a family business is defined in this study as "a business owned and controlled by a specific family, and where family members are involved in the business' management and decision-making processes" (Acquaah, 2011: 113). Therefore, to identify the micro and small FBs and NFBs, the owner/managers and directors were asked to answer the following two questions by responding "Yes" or "No": (a) Do you consider this business to be a family business? and (b) Do you have at least one director and/or an employee in the business who is a family member? Firms that provided an affirmative response to both questions were considered FBs, while the others were considered NFBs. Smith (2006) used a similar approach for selecting family controlled manufacturing SMEs in Australia. Consequently, FBs were measured as a dummy variable, where all the units that responded "Yes" to the two posed questions were coded 1, and all the others were coded 0. This principle was then used to split the sample into FBs and NFBs sub-groups for analyses.

Control variables: Variables which have been found to influence the performance of micro and small businesses were included in the analyses. The variables were firm age and firm size. Firm age was measured as the number of years the business has been in operation, using the following categorical method for coding: 1-5 years = 1; 6-10 years = 2; 11-15 years = 3; 16-20 years = 4; more than 20 years = 5. Firm size was measured as the number of employees in each firm. This was also measured using categorical measures for coding as follows: 1-5 employees =1; 6-10 employees = 2; 11-15 employees = 3; 16-20 employees = 4; 21-30 employees = 5.

Results

Tables 3 provides the descriptive statistics, while Tables 4 provides the correlation matrix of the variables for the combined sample respectively. Significant positive correlations exist among the business strategy variables (i.e., between cost leadership and differentiation) and organizational capabilities variables (i.e., managerial capabilities and marketing capabilities) respectively. There were also significant correlations between the business strategy variables and the organizational capabilities variables. As would be expected, there should be positive correlations among these variables. However, we tested to see if the strength of correlations between the main constructs (business strategy and organizational capabilities) will lead to multicollinearity problems using the variance inflator factor (VIF). The results suggested that the collinearity problems were minimal with the maximum VIF of a variable in all the models being only 5.26 which is below the maximum limit of 10 suggested by Netter, Kutner, Nachsheim and Wasserman (1996) (See Tables 5, 6a & 6b).

*************** INSERT TABLES 3, 4, 5, 6a & 6b ABOUT HERE****************

Table 5 provides the standardized results of the hierarchical linear regression analysis for the combined sample. The purpose was to examine the general impact of the interaction between organizational capabilities and business strategy on firm performance for the combined sample. Model 1 in Table 5 is the baseline model which includes three control variables – firm age, firm size, and family business. The results show that firm age ($\beta = 0.09, p < 0.05$) and firm size ($\beta = 0.26, p < 0.01$) were significant and positively related to performance, while family business was not significant. This result indicates that in the sample older and larger businesses performed better than younger and smaller respectively, while business type (FBs vs NFBs) did not influence performance. In Model 2, we included the business strategy variables to investigate their effect on performance while controlling for firm age, firm size, and business type (FBs vs

NFBs). The results in Model 2 show that both the cost leadership ($\beta = 0.17, p < 0.01$) and differentiation ($\beta = 0.42, p < 0.01$) strategies are positive and significantly related to performance.

In Model 3, we added the organizational capabilities variables (managerial capabilities and marketing capabilities) to the variables in Model 2. The results show that while differentiation strategy and managerial capabilities were positive and significantly related to performance ($\beta = 0.22, p < 0.01$ for differentiation strategy; and $\beta = 0.20, p < 0.01$ for managerial capabilities), cost leadership strategy lost its significance and marketing strategy was not significantly related to performance. We reversed the way the variables were entered into Models 2 and 3. In Mode 2 we entered the organizational capabilities variables instead of the business strategy variables. The results, not shown in Table 5, indicated that both managerial and marketing capabilities were positive and significantly related to performance ($\beta = 0.23, p < 0.01$ for marketing capabilities; and $\beta = 0.32, p < 0.01$ for managerial capabilities). However, the pattern of the results and the coefficients of variables, and significance levels were the same when the business strategy variables were included with a model which already had the organizational capabilities variables. The interaction between the organizational capabilities variables and the business strategy variables were included in Model 4 to ascertain the general direction of the interaction variables. In the first part of the hypotheses we have posited that managerial capabilities x cost leadership strategy; managerial capabilities x differentiation strategy; and marketing capabilities x differentiation strategy will have a positive impact on performance; while marketing capabilities x cost leadership strategy will have a negative impact on performance. The results indicate that while managerial capabilities x cost leadership strategy ($\beta = 0.22, p < 0.01$) and marketing capabilities x differentiation ($\beta = 0.19, p < 0.01$) are positive and significantly related to performance, managerial x differentiation strategy ($\beta = -0.15, p < 0.05$) and marketing x cost leadership strategy ($\beta = -0.18, p < 0.01$) were negative and significantly related to performance, even with the significance of differentiation strategy ($\beta = 0.37, p < 0.01$ and managerial capabilities ($\beta = 0.23, p < 0.01$). Thus the results of the relationship between marketing capabilities x differentiation and performance was contrary to our expectations.

Tables 6a and 6b present the results for the FBs and NFBs subgroup analyses respectively, that were estimated to test hypothesized relationships. The results in Models 2a and 3a, and 2b and 3b in Tables 6a and 6b respectively for FBs and NFBs are consistent with those from the overall sample. The results for the hypotheses are in Models 4a for FBs and 4b for NFBs in Tables 6a and 6b respectively. These results are reproduced in Table 7 to test for the differences in the beta coefficients. Hypothesis 1 states that the positive impact of the interaction between managerial capabilities and cost leadership strategy on performance will be stronger for NFBs than FBs. The results indicate that while the beta coefficient for the

interaction between managerial capabilities and cost leadership strategy is positive and significant for FBs ($\beta = 0.22, p < 0.01$), it was positive but not significant for NFBs ($\beta = 0.06, p < 0.01$). A t-test comparing the two beta coefficients (Cohen and Cohen, 1983: 56; see Table 7) indicated that they are significantly different ($t = 4.87, p < 0.01$) and stronger for FBs. Thus, Hypothesis 1 was not supported.

Hypothesis 2 states that the positive impact of the interaction between managerial capabilities and differentiation strategy on performance will be stronger for FBs than NFBs. The beta coefficients for the interaction between managerial capabilities and differentiation strategy for both FBs and NFBs are negative, but while it is not significantly related to performance for FBs ($\beta = -0.15, p > 0.10$), it is marginally significant for NFBs ($\beta = -0.14, p < 0.10$). A t-test comparing the betas indicated that the coefficients were not significantly different ($t = -0.15; p > 0.10$) indicating that Hypothesis 2 was not supported. In Hypothesis 3, we posit that the positive impact of the interaction between marketing capabilities and differentiation strategy on performance will be stronger for FBs than NFBs. The beta coefficients for the interaction between marketing capabilities and differentiation strategy for both FBs and NFBs are positive, but while it is not significantly related to performance for FBs ($\beta = 0.11, p > 0.10$), it is significantly related to performance for NFBs ($\beta = 0.23, p < 0.05$). A t-test comparing the betas indicated that the coefficients were significantly different ($t = -1.77; p < 0.05$) and stronger for NFBs indicating that Hypothesis 3 was also not corroborated. Hypothesis 4 states that the negative impact of the interaction between marketing capabilities and cost leadership strategy on performance will be stronger for FBs than NFBs. The results indicate that while the beta coefficient for the interaction between marketing capabilities and cost leadership strategy is negative and significantly related to performance for FBs ($\beta = -0.33, p < 0.01$), it was positive but not significantly related to performance for NFBs ($\beta = 0.01, p > 0.10$). A t-test comparing the two beta coefficients indicated that they are significantly different ($t = -5.01, p < 0.01$) and stronger for FBs, implying that FBs suffer more from the interaction of marketing capabilities and cost leadership strategy than NFBs. Thus, Hypothesis 4 was corroborated.

******************** **INSERT TABLE 7 ABOUT HERE********************

Discussion and Conclusion

The objective of this study is to examine the interactive effects of organizational capabilities and business strategy on the performance of micro and small FBs and NFBs and also to compare the impact of the interactive effects on performance between FBs and NFBs. We focus on two types of organizational capabilities – managerial and marketing; and the business strategies of cost leadership and differentiation. We surmised that the impact of the interactions between managerial capabilities and cost leadership strategy, managerial capabilities and differentiation strategy, and marketing capabilities and differentiation

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strategy will be positively related to performance for both FBs and NFBs; while the interaction between marketing capabilities and cost leadership strategy will negatively impact performance for FBs and NFBs. Specifically, it was hypothesized that while the impact of the interaction between managerial capabilities and cost leadership strategy on performance will be stronger for FBs than NBs; the impact of the interactions between managerial capabilities and differentiation, and marketing capabilities and differentiation strategy on performance will be stronger for FBs. It was also hypothesized that the negative impact of the interaction between marketing capabilities and cost leadership strategy will hurt FBs more than NFBs. These hypotheses were tested using survey data collected from 500 micro and small businesses – 207 FBs and 293 NFBs – from Ghana.

The findings from the overall sample indicate that both FBs and NBFs benefit from the interactions of managerial capabilities and cost leadership strategy, and marketing capabilities and differentiation strategy, but are hurt by interacting managerial capabilities and differentiation strategy, and also marketing capabilities and cost leadership strategy in Ghana. It was surprising to see that the interaction between managerial capabilities and differentiation strategy, in general, hurt the performance of these micro and small FBs and NFBs. These findings suggest that leveraging organizational capabilities to implement business strategy will be profitable, but there may be considerable detrimental effects to these micro and small businesses if they do not match the appropriate organizational capabilities with the type of business strategy they intend to implement. The subgroup analyses, however, show that the impacts of the interactive effects of organizational capabilities and business strategy on performance for FBs and NFBs are different from the findings from the overall sample. The findings, however, indicated that while the impact of the interaction between managerial capabilities and differentiation strategy on performance was negative for both micro and small FBs and NFBs in Ghana, the performance implication was not different between the two types of businesses. This may imply that both FBs and NFBs which are micro may lack the managerial capabilities needed to effectively implement the differentiation strategy. This finding may be due to the fact both FBs and NFBs do not have the managerial capacity to integrate skills and activities required for performing the activities implementing the differentiation strategy delivering products or services with unique features, offering exceptional service, and/or relying on reputation and image of the businesses.

The findings further show that while FBs benefit from interaction between managerial capabilities and cost leadership strategy, NFBs do not (see Table 7). Implementing a cost leadership strategy did not influence performance for both FBs and NFBs; however, FBs are able to leverage the skills and expertise in their managerial capabilities to effectively implement the cost leadership strategy to enhance performance. Our expectation was that NFBs would be able to leverage their superior managerial capabilities compared to that for FBs to better benefit from the cost leadership strategy. This finding is because the cost leadership strategy is not complicated and does not require intensive resources to

implement. Although FBs in Ghana may rely on family members for managerial positions because of the shortage of managerial expertise and the inability to recruit quality non-managerial personnel for resource reasons, they are nonetheless able to use their limited managerial capabilities to engender efficiency in the strategic organization of their activities. It should be noted that firms that pursue the cost leadership strategy are required to just attempt to create a product or service that have comparable features and value to those of their rivals (Porter, 1980). FBs may also find it easier to enforce the characteristics of cost leadership such as tight control of costs and overheads, minimization of operational costs, close supervision of employees to reduce labor costs, and reduced input costs (Acquaah, 2011; Barney & Hesterley, 2006). This finding is interesting given that managerial capabilities are also beneficial to both FBs and NFBs. Our findings show the utility of the utilization of managerial capabilities in successfully implementing the cost leadership strategy by FBs relative to NFBs.

At the same time, while NFBs benefit from the interaction of marketing capabilities and differentiation strategy, FBs do not. In fact, the findings show that the differentiation strategy has a positive impact on performance for both FBs and NFBs. However, NFBs are able to utilize their marketing capabilities more effectively in supporting critical activities such market-sensing and customer-linking required for implementing the differentiation strategy better than FBs. The strategy literature is very clear about the importance of having and leveraging marketing capabilities for implementing the differentiation strategy to gain competitive advantage in the market (Grant, 2013). The findings indicate that NFBs are good in doing that than FBs because they are able to use their customer-linking capabilities in building trusted relationships with their customers with superior resources. These micro and small NFBs may also be more skilled in using informal methods of communicating with their customers (Kelliher & Reinl, 2009) about the uniqueness of the products or services. Moreover, the micro and small FBs may not be able to leverage their marketing capabilities to make use of the local market knowledge in promoting and advertising their products and services because of resource constraints. Thus, FBs were not able to orchestrate their unique characteristic of familiness in using their marketing capabilities in successfully implementing the differentiation strategy when compared with NFBs.

The findings, further, indicate that although micro and small NFBs do not benefit from interacting marketing capabilities with the cost leadership strategy, for micro and small FBs, it is not a good idea to use marketing capabilities to implement the cost leadership strategy in Ghana. It has not only been argued but also shown that leveraging marketing-related activities in the pursuit of business strategy is costly (Acquaah & Yasai-Ardekani, 2008; Porter, 1980; Spanos et al., 2004). This is because using marketing capabilities by a firm involve devoting significant amount of resources to understanding customers tastes and preferences, and the market (Day, 2011; Theodosiou, 2012), and then undertaking intensive marketing activities, advertising and promotions in implementing its strategy. Since the cost leadership

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strategy is an efficiency-oriented, cost control, and no-frills strategy, it does not require the leveraging of a high level of marketing-oriented resources for its success. In fact, firms who devote more marketing resources to the implementation of the cost leadership strategy would lose their competitive edge in the market since thy may have to charge higher prices in other to break-even. The findings indicate that the micro and small FBs in Ghana may have devoted the limited marketing resources they have to the implementation of the cost leadership strategy, thus increasing their costs of doing business and rendering them uncompetitive in the market. It may also imply that FBs lack the marketing capabilities required for controlling cost which are the hallmarks of implementing the cost leadership strategy.

Limitations and Future Studies

As with any research study, this study has some limitation that should be considered when interpreting the findings. First, we used subjective measures of performance instead of objective measures. Objective performance measures would have been preferable but because we studied small and medium sized FBs and NFBs all of them were privately-owned so it was difficult to obtain objective performance information from them. However, several studies have shown that subjective performance measures could be used as valid substitutes for objective performance measures when objective measures are not available or difficult to obtain (e.g., Wall et al., 2004). Second, we used responses from only one respondent from each of the FBs and NFBs. Obtaining responses from multiple respondents from the small and medium-sized businesses would have been desirable, however, we were unable to get multiple respondents from the SME FBs and NFBs to complete the questionnaires. Although single informants have been used effectively in strategy research in Africa, we encourage the use of multiple respondents per business if it is feasible. Third, the design of the study is cross-sectional, which prohibits the drawing of cause-and-effects relationships between the independent variables and performance. Clearly, the use of longitudinal data would allow us to confidently draw causal inference from the findings and could further contribute to this line of research. However, we may rule reverse causation from the findings since theoretically, it is very difficult to argue that firm performance is related to the interaction of organizational capabilities and business strategy. Fourth, since we used data from only one country, our ability to generalize the findings to other emerging economies is limited. However, the similarity in the economic and institutional environment of other African countries to Ghana may allow for the generalizability of the findings to these countries.

Conclusion

In conclusion, this study informs this fascinating area of research by showing that the interactions of different types of organizational capabilities and business strategy have different impact on performance

for FBs and NFBs in Ghana. Specifically, managerial capabilities allow FBs to benefit from the implementation of the cost leadership strategy, while marketing capabilities allow NFBs to benefit from the pursuit of the differentiation strategy. The implications from these findings stipulate a contingency approach to implementing competitive strategies for both micro and small FBs and NFBs in Ghana. For both FBs and NFBs, they can purse the differentiation strategy successfully without the use of managerial capabilities, since leveraging managerial capabilities to pursue the differentiation strategy will be detrimental to their performance. Since FBs benefit more from the implementation of a cost leadership strategy when they use their managerial capabilities, it would be advisable for FBs to always use their managerial capabilities to implement the cost leadership strategy. On the other hand, NFBs benefit more from the differentiation strategy when they use their marketing capabilities to implement that strategy. Thus we recommend NFBs to focus their attention on utilizing their marketing capabilities in implementing the differentiation strategy. We will, however, caution these micro and small FBs and NFBs to not use their marketing capabilities in implementing the cost leadership strategy since it harms their performance. Future research should examine these relationships in other transition economies, especially in other African countries, so as to deepen our understanding of how FBs and NFBs use organizational capabilities to pursue various business strategic orientations in order to enhance performance. This would help in providing us with rich insights into the leveraging of managerial and marketing capabilities in the strategic activities of FBs and NFBs.

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Table 1: Confirmatory Factor Analysis

Construct and Items	Standardized loadings	t-values
Cost Leadership Strategy [α = 0.707; CR = 0.768; AVE = 0.403]		
Offering broad range of products/services	0.58 (fixed)	
Ability to achieve operating efficiencies	0.81	7.67
Offering competitive pricing for products/services	0.61	6.96
Forecasting market growth in sales	0.54	7.66
Control of operating and overheads costs	0.60	7.94
Fit Statistics: χ^2 = 2.55 (d.f.= 4; p =0.636); RMSEA = 0.01; CFI = 0.999; GFI = 0.998; NNFI = 0.996; SRMR =0.012		
Differentiation Strategy [α = 0.843; CR = 0.845; AVE = 0.523]		
Innovation in marketing products/services	0.77 (fixed)	
Upgrading or refining existing products/services	0.74	17.48
Developing new product/service offerings	0.73	17.26
Advertising and promotion of products/services	0.67	15.64
Building brand and company identification	0.70	16.37
Fit Statistics: χ^2 = 160.28 (d.f = 5; p = 0.000); RMSEA = 0.12; CFI = 0.909; GFI = 0.900; NNFI = 0.817; SRMR = 0.069		
Marketing Capabilities [α = 0.843; CR = 0.846; AVE = 0.483]		
Developing market information about specific customer needs	0.83 (fixed)	
Pricing the firm's products and services and monitoring prices in the market	0.67	16.70
Designing products that can meet customer needs	0.76	19.49
Focusing on customer recruitment and retention	0.52	12.52
Controlling access to distribution channels	0.64	16.06
Providing better after sales service capability	0.71	18.07
Fit Statistics: χ^2 = 6.83 (d.f.= 9; p =0.000); RMSEA = 0.10; CFI = .974; GFI = 0.966; NNFI = 0.956; SRMR = 0.040		
Managerial Capabilities [α = 0.868; CR = 0.871; AVE = 0.532]		
Skills and expertise in developing a clear operating procedures to run the business successfully	0.69 (fixed)	
Ability to allocate financial resources to achieve the firm's goals	0.71	15.62
Ability to coordinate different arears of the business to achieve results	0.76	17.18
Ability and expertise to design jobs to suit staff capabilities and interest	0.77	17.33
Skills and expertise to design jobs to suit employee capabilities and interests	0.81	17.42
Ability to attract and retain creative employees	0.62	13.75
Fit Statistics: χ^2 = 49.52 (d.f.= 7; p =0.000); RMSEA = 0.098; CFI = 0.984; GFI = 0.976; NNFI = 0.965; SRMR = 0.029		
Firm Performance [α = 0.939; CR = 0.939; AVE = 0.754]		
Sales growth	0.90 (fixed)	
Profit growth	0.88	31.23
Productivity growth	0.84	28.63
Net profit	0.88	31.42
Sales Revenue	0.84	28.74
Fit Statistics: χ^2 = 9.50 (d.f.=5; p =0.090); RMSEA = 0.039; CFI = 0.999; GFI = 0.994; NNFI = 0.997; SRMR = 0.008		

Notes: CR=Composite Reliability; AVE = Average Variance Extracted; RMSEA = Root Mean Square Error of Approximation; IFI = Incremental Fit Index; GFI = Goodness of Fit Index; NNFI = Non-Normed Fit Index; and SRMR = Standardized Root Mean Square Error.

Table 2: Discriminant Validity Analysis

Constructs	1	2	2	4	5
1. Cost Leadership Strategy	**0.403**				
2. Differentiation Strategy	0.372	**0.523**			
3. Marketing Capabilities	0.397	0.410	**0.483**		
4. Managerial Capabilities	*0.423*	0.372	0.450	**0.532**	
5. Firm Performance	0.212	0.314	0.240	0.270	**0.754**

Values in the diagonal are Average Variance Extracted (AVE) for the constructs.
Values in cells are the Square Correlations among the Constructs

Table 3: Descriptive Statistics

	N	Mean	Median	Std. Dev.	Min	Max
Firm Age [a]	604	2.11	2.00	1.14	1.00	5.00
Firm Size [b]	607	2.43	2.00	1.41	1.00	5.00
Family business	640	0.42	0.00	0.49	0.00	1.00
Cost leadership Strategy	609	4.72	4.80	0.88	1.80	7.00
Differentiation Strategy	611	4.13	4.20	1.19	1.00	7.00
Marketing Capabilities	608	4.53	4.67	1.01	1.17	7.00
Managerial Capabilities	627	4.69	4.67	0.92	1.33	7.00
Firm Performance	598	4.56	4.60	1.07	1.60	7.00

[a] Firm Age: 1-5 years = 1; 6-10 years = 2; 11-15 years = 3; 16-20 years = 4; More than 20 years = 5.
[b] Firm Size: 1-5 employees = 1; 6-10 employees = 2; 11-15 employees = 3; 16-20 employees = 4; 21 - 30 employees = 5.

Table 4: Correlation Matrix of Variables

Variables	1	2	3	4	5	6	7	8
1. Firm Age								
2. Firm Size	0.23**							
3. Family Business	0.01	0.09*						
4. Cost Leadership Strategy	0.01	0.14**	-0.02	**0.403**				
5. Differentiation Strategy	0.06	0.30**	-0.03	0.61**	**0.523**			
6. Marketing Capabilities	0.02	.019**	-0.02	0.63**	0.64**	**0.483**		
7. Managerial Capabilities	0.05	0.21**	-0.02	0.65**	0.61**	0.67**	**0.532**	
8. Firm Performance	0.15**	0.27**	-0.02	0.46**	0.56**	0.49**	0.52**	**0.754**

Significance tests (2-tailed): $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$.
Values in the diagonal are Average Variance Extracted (AVE) for the constructs.

Table 5: Regression Analysis for Overall Sample[1]

Variables	Model 1 β (t-value)	Model 2 β (t-value)	Model 3 β (t-value)	Model 4 β (t-value)	VIFs
Age	0.09 (2.08) *	0.09 (2.33) *	0.09 (2.50) **	0.08 (2.35) *	1.11
Size	0.26 (5.88) **	0.08 (1.93) +	0.06 (1.55)	0.06 (1.60)	1.25
Family Business[2]	0.05 (0.54)	0.05 (0.64)	0.03 (0.45)	0.05 (0.74)	1.04
Cost Leadership		0.17 (3.87) **	0.04 (0.74)	0.03 (0.63)	2.33
Differentiation		0.42 (9.11) **	0.35 (6.24) **	0.37 (6.51) **	2.73
Managerial Capabilities			0.23 (4.46) **	0.23 (4.53) **	2.31
Marketing Capabilities			0.02 (0.28)	0.05 (6.25)	3.21
Managerial x Cost leadership				0.22 (3.70) **	4.79
Managerial x Differentiation				-0.15 (-2.23) *	4.77
Marketing x Cost leadership				-0.18 (-2.93) **	4.04
Marketing x Differentiation				0.19 (3.04) **	4.05
Adjusted R^2	0.074	0.349	0.375	0.395	
Δ *Adjusted R^2*		0.275	0.026	.020	
F-statistic	13.165**	54.811**	44.020**	30.202**	
N	521	500	500	500	

Significance tests (2-tailed): $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$.
[1] Standardized coefficients.

Table 6a: Regression Results for Family Businesses

Variables	Model 1a β (t-value)	Model 2a β (t-value)	Model 3a β (t-value)	Model 4a β (t-value)	VIFs
Age	0.16 (2.39) *	0.12 (2.00) *	0.11 (1.77) +	0.08 (1.37)	1.05
Size	0.15 (2.13) *	0.03 (0.53)	0.04 (0.67)	0.05 (0.78)	1.12
Cost Leadership		0.19 (2.49) **	0.06 (0.62)	0.10 (1.14)	2.39
Differentiation		0.35 (4.52) **	0.22 (2.38) *	0.23 (2.49) *	2.51
Managerial Capabilities			0.20 (2.22) *	0.23 (2.51) *	2.37
Marketing Capabilities			0.13 (1.32)	0.07 (0.68)	3.09
Managerial x Cost leadership				0.39 (3.74) **	5.14
Managerial x Differentiation				-0.15 (-1.20)	5.26
Marketing x Cost leadership				-0.33 (-3.29) **	4.37
Marketing x Differentiation				0.11 (1.16)	4.81
Adjusted R^2	0.041	0.268	0.288	0.332	
ΔAdjusted R^2		0.227	0.020	0.044	
F-statistic					
N	230	216	207	207	

Significance tests (2-tailed): $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$.

Table 6b: Regression for Non-Family Businesses

Variables	Model 1b β (t-value)	Model 2b β (t-value)	Model 3b β (t-value)	Model 4b β (t-value)	VIFs
Age	0.02 (0.41)	0.05 (1.12)	0.07 (1.41)	0.07 (1.50)	1.22
Size	0.34 (6.15) **	0.11 (2.28) *	0.08 (1.55)	0.07 (1.41)	1.39
Cost Leadership		0.16 (3.04) **	0.03 (0.52)	0.02 (0.25)	2.36
Differentiation		0.46 (8.26) **	0.48 (6.87) **	0.50 (7.23) **	3.03
Managerial Capabilities		.	0.26 (4.29) **	0.26 (4.33) **	2.32
Marketing Capabilities			-0.11 (-1.46)	-0.08 (-0.99)	3.58
Managerial x Cost leadership				0.06 (0.80)	4.82
Managerial x Differentiation				-0.14 (-1.78) +	4.69
Marketing x Cost leadership				0.004 (0.06)	4.01
Marketing x Differentiation				0.23 (3.38) **	3.72
Adjusted R^2	.114	0.419	0.457	0.475	
ΔAdjusted R^2		0.305	0.038	0.018	
F-statistic	22.13 **	55.84 **	42.02 **	27.39 **	
N	329	305	293	293	

Significance tests (2-tailed): $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$.

Table 7: Comparative Analysis and Hypothesis Testing Results from Tables 6a & 6b

	Family Businesses (Model 4A)	Non-Family Businesses (Model 4B)	Difference	Hypotheses
	β (t-value)	β (t-value)	4A – 4B (t-value)	
Age	0.08 (1.37)	0.07 (1.50)		
Size	0.05 (0.78)	0.07 (1.41)		
Cost Leadership	0.10 (1.14)	0.02 (0.25)		
Differentiation	0.23 (2.49) *	0.50 (7.23) **		
Managerial Capabilities	0.23 (2.51) *	0.26 (4.33) **		
Marketing Capabilities	0.07 (0.68)	-0.08 (-0.99)		
Managerial x Cost Leadership	0.39 (3.74) **	0.06 (0.80)	0.33 (4.87) **	Not Supported
Managerial x Differentiation	-0.15 (-1.20)	-0.14 (-1.78) +	-0.01 (-0.15)	Not Supported
Marketing x Cost Leadership	-0.33 (-3.29) **	0.01 (0.06)	-0.34 (-5.01) **	Supported
Marketing x Differentiation	0.11 (1.16)	0.23 (2.75) **	-0.12 (1.77) *	Not Supported

Significance tests (one-tailed for t-test of differences): $+ p < 0.10$; $* p < 0.05$; $** p < 0.01$.

The formula for the *t*-test which conducted to verify the difference between the betas of the Family businesses and Non-family businesses' subgroups is as follows. The *t*-test is a one-tailed test.

$$t = \frac{\beta_1 - \beta_2}{\sqrt{\dfrac{SSE_1 + SSE_2}{N_1 + N_2 - 4} \; X \; \dfrac{\sum X_1^2 + \sum X_2^2}{(\sum X_1^2)(\sum X_2^2)}}}$$

d.f. $= N_1 + N_2 - 4$

Where β is the beta or standardized coefficient, *SSE* is the sum of squared errors, *X* is the interaction between organizational capability (managerial or marketing) and business strategy (cost leadership or differentiation), *N* is subgroup sample size, and 1 and 2 are the Family and Non-family businesses' subgroups respectively.