# The role of Competitive Intensity in a Parallel Mediation Model of Managerial Capability and Performance. Evidence from an Emerging Market Economy

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## Abstract

This paper sought to investigate the conditional indirect relationship between managerial capabilities and performance among SMEs in the Sub-Saharan African economy, considering social capital and entrepreneurial orientation as parallel mediating mechanisms and competitive intensity as boundary conditions within this relationship. Questionnaires were used as tools to obtain primary data from SMEs (n=206). Using bootstrapping (PROCESS MACROS) and hierarchical regression analysis in SPSS, the results demonstrate that entrepreneurial orientation presents a mechanism through which managerial capability influences performance. In contrast, social capital does not mediate this managerial capability-performance relationship. The results further demonstrate that competitive intensity provides various moderation effects such that at high levels of competitive intensity the indirect effect of managerial capability on performance through social capital is weakened and strengthened through entrepreneurial orientation. Therefore, the study provides clarity to the intricate power of interactions of external factors with firm-specific resources.

**Keywords: Managerial capabilities (MC), Social Capital (SC), Entrepreneurial Orientation (EO), Competitive intensity, Performance, SMEs**

## 1.0 Introduction

Uncovered by the works of Barney (1991) and guided by the resource-based view, strategic management scholars have sought to understand the role of organizational capabilities in business performance and the development of competitive advantage. Studies have found the source of firm performance to be those firm-specific idiosyncratic resources that enable differentiation among

competitors such as organizational capabilities (Wernerfelt, 1984). These organizational capabilities comprise those systems and routines that leverage important firm resources, including marketing, IT and managerial capability (MC) (Agyapong, Aidoo, and Akomea, 2021; Vorhies and Morgan, 2005; Teece and Pisano, 2003). Research posits that MC constitute the foundation on which all other firm resources combine to influence performance through its bundling and configuring processes (Penrose, 1959). Although research has done well to provide evidence of the MC-performance relationship, investigations into exactly how certain resources are better leveraged to improve performance remains limited. This study seeks to provide clarity to two important questions that have largely remained unanswered.

Firstly, literature has found that MC constitutes an important firm element without which all other important resources offer no benefit (Sirmon and Hit, 2003). We find that greater attention is placed on MC in resource-dependent models as a result of their organization of firm resources into bundles that generate profit which serve as facilitators of firm growth (Tallman and Fladmoe-Lindquist, 2002). Whereas empirical studies have demonstrated a positive relationship between MC and performance (Carneli and Tishler, 2004; Welter *et al.*, 2013), how this important capability drives performance by giving purpose to other firm resources (Nightingale and Toulouse, 1977) remains largely unexplored. Few studies have used firm-level characteristics as mechanisms through which MC affects performance such as network and relational capabilities (Sreckovic, 2018; Jiang and Liu, 2015), innovation (Kearney *et al.*, 2014), and market orientation (Hooley *et al.*, 2005). Yet, there exist other important firm-specific resources that have not been explored. Two of such resources and capabilities include social capital and entrepreneurial orientation (EO). The consideration of SC is important because of its abundance and bedrock in SMEs in various forms which must be judiciously employed to drive performance. SC is a sum of all firm's internal activities embedded in the continuous interactions, knowledge and information sharing, collective norms, values, and goals which culminate in the ability to create value, increase market share and enhance profitability. Scholars have however failed to investigate the role of social capital in the relationship between MC and performance. In the same vein, and guided by the call by Snow *et al.* (2005), this study examines the mediating role of EO in the MC-performance relationship. This study conceptualizes EO as a "strategic dimension" within which all firms are found (Aidoo, Agyapong, and Mensah, 2020; and Wales, 2015) and comprises innovative, risk-taking, and proactive behaviors. These behaviors require a certain managerial disposition for entrepreneurship and subsequently contribute a high amount of variance in SME performance (Wales, 2016; Covin and Wales, 2019). Research suggests that superior performance is a result of a firm's managerial and entrepreneurial abilities (Agyapong and Acquaah. 2021; Autio *et al.*, 2000); a discovery of prime importance to small and medium scale enterprises across the world, a concept that provides justification for the consideration of EO in a mediating role in the MC-performance relationship.

Secondly, we find that SMEs are saddled with the intense competition; an environmental factor that acts as boundary conditions within which these firms must match their resources to perform. Covin and Slevin (1989) posit that strong competition is the driver of an EO and customer-focused posture which leads to high performance. Research finds that although there is no best and single way to utilize resources in achieving superior performance, firms must ensure that they align and

achieve a strategic fit between their internal dealings and external environment. Guided by the contingency theory, we argue that it remains impossible to effectively investigate causal relationships among firm-specific resources and performance without consideration of those environmental factors (Agyapong, Zamore, and Mensah, 2020; Cui *et al.*, 2005). Thus, this study considers the moderating effect of competitive intensity in these indirect relationships. We argue that the extent of the effect of MC on performance through SC and EO is dependent on competitive intensity such that at a high level of competitive intensity, the effect of SC and EO on performance is enhanced. Thus whereas analysis of the mediating roles of EO and SC are important in MC performance relationship, we examine these relationships under the boundary conditions created by competitive intensity (CI) to acknowledge the complex nature of firm resource links and the overarching effects of environmental factors on these relationships.

To aid this investigation, we consider differentiated firm performance to be an outcome of the integration of idiosyncratic firm-specific resources guided by the resource-based view (Barney, 1991; Peteraf, 1993). In this study, we consider MC as a valuable, rare, and non-substitutable resource that integrates, configures, and bundles firm resources into rent-generating combinations that create enhanced performance through SC and EO. Additionally, we argue that the indirect relationship between MC and performance through SC and EO is contingent upon the CI. This approach is more beneficial than a direct effect relationship since research has found that these contingent relationships explain performance outcomes more accurately (Agyapong, et al, 2020; Lyon *et al.*, 2000). The scarcity of critical resources among SMEs (Andreas, 2009; Acquaah, 2011), especially in developing economies warrants the examination of this model in effort at uncovering a strategic blueprint for effectively utilizing embedded resources to achieve superior performance in the presence of environmental conditions. The basis of investigating this relationship in consideration of market environment conditions - competitive intensity stems from the strategic fit theory which states that the firm's outcome is dependent on the fit or the interplay of its internal resources and capabilities and its external environment (Venkatraman, 1989). We argue that this relationship will not be exhaustively examined without acknowledging the role of the environment and its moderating abilities on the effectiveness of resources (Slater and Narver, 1994).

This study offers numerous contributions to MC and management literature. Firstly, the study provides empirical evidence which broadens the MC's knowledge on its relationships with other firm resources, performance, and the business environment. In so doing, we advance scholarship and provide new perspectives on the construct and how it may be explored to enhance performance. The study demonstrates that varying combinations of resources influence performance differently. We consider the influence of these mediators simultaneously in attempts to extend theory by buttressing the bundling effect of MC on SC and EO in driving performance. Next, we highlight the impact of those boundary conditions created by CI on these mediated relationships. Flowing from the RBV and contingency theory, this study allows us to explore efficient modeling of these existent resources in such a highly competitive market. This allows us to provide novel solutions and perspectives for efficiently leveraging a firm's MC to enhance performance. Thus this study extends theory by examining MC as that important firm capability

that forms that prerequisite for the development of a firm's SC and EO which when integrated and reconfigured enhance performance under the boundary conditions created by CI.

Moreover, whereas proliferation of research on MC exists in the American, European and Asian contexts, the African context has earned little attention. To fill this gap and contribute to testing the generalizability of western theories, we attempt to add to the limited studies with an African perspective (Acquaah and Agyapong, 2015; Fatoki, 2011). Owing to the great benefit such studies provide SMEs across the globe, the fevered economic growth of the Sub-Saharan African region provides further justification for the focus on the African markets, in efforts at fueling the drive to economic growth and development by providing relevant knowledge of these firm-specific resources and their interrelationships. In so doing, this study seeks to extend the scholarship of MC in developing economies so as to provide a balance for all economic and market contexts. Furthermore, although MC remains underdeveloped, the rich collective African cultural context which encourages SC and the fiercely competitive but largely untapped market in sub-Saharan Africa which enables entrepreneurship provides an integrative backdrop for MC research. The rest of the paper is organized as follows: the second section reviews theoretical literature and hypothesis development. The third section discusses the research methodology. The fourth section presents the results of the data. Finally, the last section summarises the major findings and provides recommendations for practice and further studies.

**2.0 Theory and hypothesis development**

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*2.1 Managerial Capability, Social capital, and Performance*

Managerial capability (MC) encompasses those management capacities, processes, and expertise to execute business processes (Graves and Thomas, 2006) which may be categorized into technical, human, and conceptual skills. Firm growth and performance rest on the MC of the firm (Agyapong and Acquaah, 2021; Andersen, 2011), such that it forms the basis under which other firm resources are configured, integrated and deployed toward economic rent creating business activities (Castanias and Helfat, 1991, Agyapong et al, 2021; Acquaah, 2012) in efforts at firm growth (Penrose, 1959). In line with this assertion, scholars have argued that MC forms the basis on which firms create a competitive advantage (Bilkey, 1978).

Studies in attempts to extend the literature, have considered the MC-performance relationship from a systemic perspective and considered other firm resources including network and relational capabilities, innovation and strategies in examining this important relationship. Yet research has failed to consider the role of other vital firm resources and assets in efforts at bridging the gap in the MC-performance literature. One such idiosyncratic, abundant, and important firm-specific resource is SC. The leveraging of SC to influence performance implies that managerial skills through the firm's internal SC help in achieving firm goals.

SC are those shared values and norms among staff in the firm as a result of which cooperation exists (Fukayama, 1995). It is those relationships that enable a firm to function effectively and efficiently (Alder and Kwon, 2003; Leana and van Buren, 1999). Its links to nurturing knowledge creation and sharing, as well as its encouragement of coordination and cooperation among staff makes it valuable at enabling the achievement of firm goals (Taylor, 2007) towards creating a competitive advantage and enhancing performance. They are made up of three dimensions, namely structural, relational and cognitive SC (Nahapiet and Ghoshal, 1998). Structural SC encompasses the quality of communication and extent of knowledge sharing among staff (Adler and Kwon, 2002). Relational SC constitutes the sum of those interrelationships including its history which creates trust and a sense of association that encourages the creation of collective goals (Leane and van Buren, 1999). Cognitive SC consists of the resources which flow from these relationships including shared goals, values, and norms which build up over time (Inkpen and Tsang, 2005) and enhance superior firm performance. Yet Prusak and Cohen (2001) rightly argue that the knowledge of the effect of healthy internal relationships on staff performance is vital but not more so than the making, enabling, and enhancing of these relationships. These cooperative relationships are created and enhanced with the use of those human skills that constitute MC.

We argue that SC is created and developed with those MCs, and enhance firm performance. MC entails those vital firm resources including experience, knowledge, and skills requisite in bundling, configuring, and integrating firm resources (Hooley *et al.*, 2005); one such resource being SC. We posit that SC entails that enabling environment created with MC with the aim of improving interaction, knowledge creation, and flow to drive those shared goals and visions to enhance performance. Taylor (2007) argues that those human resource skills in a firm resting in MC drive the creation of SC in the firm.

We, therefore, argue that MC drives performance through the creation and reconfiguration of SC. Those skills, experiences, and systems that makeup MC are in themselves unable to positively influence performance without the enabling environment found in a firm's SC which helps translate these skills and experiences into output. Thus SC created by MC presents as that conduit through which MC influences performance.

We therefore hypothesize that:

$H_1$: Social capital mediates the relationship between managerial capability and performance


### 2.2 Managerial Capability, Entrepreneurial Orientation and Performance


As pointed out, MC is identified as that building block on which all other firm resources rely to effectively function as important idiosyncratic resources which creates superior performance and competitive advantage. Of equal importance are firm assets, capabilities, and strategic orientation which allow a firm to align itself with its market and goals. One such orientation is EO, which relates to the degree of entrepreneurship, as related to how innovative, proactive, and risk-loving a firm is. EO is a reflection of the manner in which firms operate (Aidoo et al. 2020; Miller, 1983)

categorized into three dimensions. The innovativeness of a firm under EO encapsulates the firm's tendency to engage in and introduce novel ideas, products and services as improvements of existing established processes and systems (Lumpkin and Dess, 1996; Wiklund and Shepherd, 2005). The proactive dimension entails the anticipation of emerging and new market opportunities and the desire to be a first-mover ahead of competitors. Risk-taking entails the extent of risk aversion, and risk-taking activities of firms in their desire to invest resources into ventures that have both possibilities of success and failure (Miller and Friesen, 1982). It depicts the firm's proclivity to venture into nascent areas of Blue Ocean in efforts at discovering great opportunities. Firms adopting a market focused EO mindset are known to enhance performance, increase market share and create a competitive advantage through their strategic positioning using this orientation (Wiklund and Shepherd, 2005; Hamel, 2000). In this study we align with Autio *et al.* (2000) and state that firm performance is influenced by the managerial and entrepreneurial capabilities and behaviors of a firm. This warrants our consideration of EO as that mechanism through which managerial capability drives performance. A firm with an entrepreneurially focused orientation are better able to enhance performance, however these firms are unable to sustainably improve performance without the contribution of managerial experiences, practices and expertise to effectively drive this orientation (Covin and Wales, 2018).

The adoption and integration of EO enables firms efficiently employ their MC to drive superior performance. Strategic management literature and the resource-based view emphasize the important role played by EO as that strategic posture, and behaviors which are entrepreneurial in nature and presents as a vital resource for firm success (Brown *et al.*, 2001). We argue that MC forms that important set of skills which makes this entrepreneurial posture possible and efficient to drive superior performance. This constitutes those important processes, experiences and practices needed to enable a firm efficiently adopt an entrepreneurial posture (Kor *et al.*, 2007) and create entrepreneurial competencies (Hayton and Kelly, 2006) which will yield firm results. Thus we find that MC facilitates EO and activity (Riley *et al.*, 2009).

The bundling and reconfiguration of firm resources by MC in line with the adopted entrepreneurial leanings influence firm performance. Whereas MC is an essential resource, a strategic entrepreneurial posture enables this capability to efficiently bundle, reconfigure and direct other firm resources in specific ways tailored at achieving those firm goals. This is because a firm's EO enable its MC to follow a path dependent pattern in bundling other firm resources towards the achievement of goals.

We therefore hypothesize that:

H2: Entrepreneurial orientation mediates the relationship between managerial capability and performance.


### 2.3 Moderating role of Competitive Intensity

As a factor of environmental hostility, CI explains the fierce competition experienced in the market as a result of the number of rivals coupled with the limited potential opportunities for development

and growth. Literature has long suggested that the effectiveness of organizational resources and characteristics including strategic orientations are contingent upon aspects of the market environment (Slater and Narver, 1994; He and Nie, 2008). In this study we examine the interaction effect of CI on the indirect relationship between MC and performance through SC and EO of SMEs in developing economies. In developing economies, characterized by resource scarcity and underdevelopment (Kock and Guillen, 2001), we argue that CI may either enhance or buffer the indirect relationship.

As social capital constitutes those trust and goal congruence (Tsai and Ghoshal, 1998) benefits from intra-firm relationships, we argue that environmental factors determine the efficacy of this asset to drive performance. This is because whereas social capital is generally beneficial, its integral role is heightened during periods of internal expansions under conditions of less market competitiveness. Under conditions of low competition, a firm's SC is able to effectively influence performance. However, under conditions of intense competition, firms are required to be more market focused to enhance performance and achieve a competitive advantage. Thus when competition is intense characterized by competitor price wars, a firm in a bid to respond to these rival actions focuses its resources on reactive activities and responses. This, reduces the efficiency of its SC to influence performance as information acquired from this resource quickly becomes redundant (Burt, 1997). Moreover, as a result of intense competition the limited resources will begin to be spread across various reactive actions.

We therefore argue that whereas under conditions of low CI, social capital is better able to drive performance, within the boundary conditions created by high levels of CI, this relationship is weakened. Similarly, under conditions of low CI, MC is better able to influence performance through SC, however under high levels of this moderator this relationship is weakened. Thus, a buffering or weakening interaction exists as this conditional indirect relationship is stronger at lower levels than at high levels of CI.

This leads us to hypothesize that:

H3: Competitive intensity moderates the indirect relationship between managerial capability and performance through social capital, such that at high levels of competitive intensity the relationship between social capital and performance is weakened.


With EO being a market-based resource and strategic orientation, we find that it is increasingly impacted by its environment such that market dynamics create new challenges while offering new opportunities for firms to apply their creative skills entrepreneurially (Keh *et al.*, 2007). We therefore highlight the impact of CI on the indirect relationship between MC on performance through entrepreneurial orientation. We argue that under less competitively intense conditions firms are able to successfully operate with existing systems and products made possible by their past experiences and the predictability of the environment. However, in an intense competitive environment, these firms are required to engage in more entrepreneurial ventures including risk-taking, proactive and innovative ventures to remain adaptive in attempts at increasing market share and enhancing performance to remain competitive (Martin and Javalgi, 2016). Thus under

conditions of high CI, a firm with EO is better able to drive performance as it provides first mover advantages flowing from the innovative yet relatively risky and profitable ventures. This provides differentiating benefits to the firm who remains proactive rather than reactive thus creating a competitive advantage. As MC is able to drive performance through EO, it implies that under conditions of CI this indirect relationship will similarly be strengthened. Thus, MC is better able to drive performance through EO under high levels of CI.

This leads us to hypothesize that:

H4: Competitive intensity moderates the indirect relationship between managerial capability and performance through entrepreneurial orientation, such that at high levels of competitive intensity the relationship between entrepreneurial orientation and performance is strengthened.

## 3.0 Method
### 3.1 Data collection procedure

In testing the hypotheses, the study used data collected from senior executives (CEOs) and senior Accounts Officers of manufacturing and service firms in Ghana as a result of the accuracy with which individuals in managerial levels report firm goals and strategies (Covin and Wales, 2018). There are a total of 11,000 registered firms with the National Board for Small Scale Industries (NBSSI) and Association of Ghanaian Industries (AGI) (Asiedu, 2016) of which 500 firms were screened and chosen as the sample size guided by Krejcie and Morgan (1970). The study ensured that these selected firms met the SME criteria of no more than 99. Before the data collection has begun, a formal notice was written to the management of each SME informing them of the study. Recipients were requested to complete a consent form, which explained the purpose of the study, risks and benefits of participating and provided the assurance that data collected would be treated with strict confidence and solely used for academic purposes. Of the 500 selected firms, 426 agreed to participate. In order to reduce common method bias, a time lag and multiple sample source approach (Podsakoff *et al.*, 2003) were employed in the data collection process. Thus data were collected in two phases: phase one (February-March) covered the administration of questionnaires on all independent variables (MC, SC, EO, and CI), with data collected from the CEOs of the firms. 325 completed questionnaires were collected during the first phases. In the second phase (June- July), data on the outcome variable (performance) was collected from the 325 Senior Accounts officers of those firms. However, after several reminders, 235 of those questionnaires were successfully retrieved since 90 of these Senior Account officers were unwilling to participate. After screening the collected data 206 retained responses were used for the analysis.

To further reduce CMB, a number of approaches used in various studies (Agyapong *et al.*, 2016; Podsakoff *et al.*, 2003) were employed. Firstly, objective secondary data was collected pertaining to the firm size and industry to bring about diversity in data sources. Also some scales were reverse coded so that one of responses occasionally did not correspond to a larger effect. Also, respondents were assured of their data protection and anonymity of responses in any published documents.

### 3.2 Measurement of constructs

*Managerial Capabilities: (.837)* Four items adapted from Spanos and Lioukas (2001) were used to measure MC which are captured as firm's competencies consisting of skills, expertise and processes. *Social Capital* (.867) was conceptualized as a multidimensional construct consisting of three dimensions. Measures of the dimensions of the SC construct were adapted from Leana and Pil (2006). The items under these three dimensions however demonstrated unidimensionality owing to their strong associations with each other, illustrated by their loadings on the single factor or latent trait (Hair *et al.*, 2014) in the confirmatory factor analysis (CFA), thereby, justifying the presentation of these dimensions as a single construct. The study treated SC as a latent construct with the three dimensions of SC being treated as a unidimensional variable by averaging their created composites from six retained items. *Entrepreneurial Orientation:* (.850) was conceptualized as a unidimensional construct exhibiting innovativeness, risk-taking, proactiveness, competitive aggressiveness and autonomy. Items used in measuring these dimensions were adopted from studies by Covin and Slevin (1989) and Miller (1983). *Competitive Intensity:* (.715) was measured with four items adapted from Jaworski, and Kohli (1993). *Performance:* (.785) was captured as a multidimensional, made up of financial and operational performance. Four items measuring these dimensions were adapted from Huo (2012). Respondents were entreated to compare their firm's performance with that of their competitors over the past 3 years, representing subjective performance measures used as a result of difficulties in accessing accurately reported accounting information of SMEs firms in developing economies (Hoskisson, *et al.*, 2000). All constructs were measured using a 7-point Likert scale.

Control variables

This study incorporated three control variables, including firm size (measured as the number of employees), firm age (measured as the length of time the firm has been in existence), and firm industry (measured as manufacturing=1 and service=0) to explain their effects on performance. In consonance with previous empirical studies (Stam and Elfring, 2008), this study controlled the three industry and firm related variables owing to their latent effects on organizational performance. They included industry (manufacturing=1 and service=0), firm age (<5=1, others=2) and firm size (logarithmic transformation).

### 3.3 Measurement model analysis

In testing the reliability and validity of the measures used, LISREL 8.8 and the maximum likelihood estimation process was used to perform confirmatory factor analysis (CFA). Table 1 illustrates the list of constructs and their items, their respective sources, standardized factor loadings, t-values and reliability and validity tests as well as model fit indices. The positive loadings and t-values of items confirm the convergent validity of measures employed. Also, with all constructs displaying alpha values >0.70, we find that there is evidence of internal consistency, indicative of good reliability. Furthermore, with the composite reliability and discriminant validity of variables exceeding their respective minimum cut of criteria of 0.7 and 0.5 respectively (Hair *et al.*, 2014; Fornell and Larcker, 1981), we find support for good convergent and discriminant validity.

The psychometric properties of the constructs used in the study display a good model fit, evidenced by the examined fit heuristics. Inasmuch as the parameter estimates exceeded the sample size, the model converged with a proper solution, as evidenced by the various fit indices each above minimum acceptable ranges (RMSEA= 0.068; $\chi2$/DF= (425.75.69/220) =1.93, NNFI= 0.892, CFI= 0.906), SRMR = 0.0551. Guided by Bagozzi and Yi (2012) we conclude that RMSEA < 0.8 demonstrates a good fit. We therefore find evidence of a good model fit.

*********************INSERT TABLE 1 ABOUT HERE*********************

### 3.4 Common method bias

The study used the three model approach by Cote and Buckley (1987) as an ex-post remedy to CMV in addition to the ex-ante remedies. Under this approach three models were estimated, firstly a method only approach where all the items were loaded onto a single latent factor, next a trait only model comprised of each item loading onto its theoretical construct and lastly method and trait model being a combination of the two initial approaches. With respective fit indices being: method only- $\chi2$/DF =1507.83/300 = 5.03; RMSEA = .140; NNFI = .644; CFI = .672 and SRMR=0.099, trait only- $\chi2$/DF =547.52/274= 1.99 RMSEA = .0.070; NNFI = .863; CFI = .885 and SRMR= .0556 and method and trait approach- $\chi2$/DF =464.09/247 = 1.88; RMSEA = .056; NNFI = .875; CFI = .905 and SRMR= .050 we find that trait only and model and trait approaches demonstrate better fit, indicative of the fact that there exist multiple factors in this measurement model. By this we conclude that CMB offers no significant concern in this study.

## 4.0    Structural model analysis

Descriptive statistics and inter-construct correlations of the various variables in the study are illustrated in table 2. The study used PROCESS (Hayes, 2017) in testing direct, indirect and conditional effects of the conceptual model. Model 4 was used in testing the mediating relationships of MC on performance through SC and EO with bootstrap confidence intervals for the hypothesized indirect effects. Model 14 was then used to test whether these indirect relationships were contingent on competitive intensity. Using the multiplicative and mean centered approach introduced by (Aiken and West, 1991). the moderating effect relationship of the model were subsequently analyzed.

*******************INSERT TABLE 2 ABOUT HERE*********************

### 4.1 Model results

The proposed model significantly accounted for 21.9% in variance of SC, 17.7% of EO and performance respectively. We evaluate the hypotheses subsequently. Table 3 represents the direct, indirect and conditional indirect relationships in the model while Figure 2 shows the direct and interaction effects of all predictor variables on performance.

PROCESS model 4 was used to test the hypothesized indirect effect of MC on performance through SC and EO. To test these mediated relationships, we first examined the direct effect of MC on Performance ($\beta = .20$, t = 2.37). Firstly, the study hypothesized (H1) that SC positively mediates the MC-performance relationship. The results lend partial support as we find that though positive ($\beta = .13$, t = 1.57), SC does not significantly mediate the relationship although the total effect of the relationship was significant ($\beta = .26$, t = 3.31). Next, we hypothesized (H2) that EO mediates the MC-performance relationship. We find support for this hypothesis from the results ($\beta = .17$, t = 2.47) and a total effect of ($\beta = .26$, t = 3.31).

In testing the conditional indirect hypotheses, the study used PROCESS model 14. H3 hypothesized that competitive intensity weakens the indirect MC-performance relationship through SC. The results show that at lower levels of the moderator the indirect relationship through SC was stronger with an effect size of .08 than at lower levels with an effect size of -.01. However, we find partial support for this hypothesis as the confidence intervals at both higher and lower levels of competitive intensity are no different from 0 (higher levels CI= -.13 - .09; lower levels CI= -.02 - .19). Next, H4 hypothesized that competitive intensity strengthens the MC-performance relationship through EO. We find that competitive intensity moderates the MC-performance relationship through EO as evidenced by a moderated mediation index of .04. Moreover, at lower levels of competitive intensity the indirect relationship is not significant (Effect= .04, CI=-.05 - .13). However, at higher levels, this indirect relationship is significant (Effect= .13, CI=.03 - .26). We therefore find support for the hypothesis that high levels of competitive intensity strengthen the MC-performance link through EO.

Findings for the conditional indirect relationship through SC and EO are illustrated in Figure 3 and 4 respectively

*******************INSERT TABLE 3 ABOUT HERE****************************

*******************INSERT FIGURE 2, 3 & 4 ABOUT HERE**********************

## 5.0 Discussion and Implications

### 5.1 Discussion

In this study, we sought to examine the mediating roles of (1) social capital and (2) entrepreneurial orientation in the relationship between MC and performance, and (3) the moderating role of competitive intensity in these indirect relationships. These relationships were examined using data collected from 206 SMEs in a developing economy of Ghana. Generally supporting the arguments presented, we uncover insightful relationships that exist among the variables in developed economies.

Hypothesis 1 argued that SC mediates the relationship between MC and performance. Findings indicate that SC mediates the MC-performance relationship although its effect is insignificant; therefore providing partial support for hypothesis one. Although internal social capital has been known to be a basis for enhanced performance in developing markets (Aidoo, Agyapong, and Mensah, 2020; Pretty, 2003), we also find that social capital is a resource which must be invested in. For example, the ability of firms to harness informal resources such as social capital becomes

a critical capability for organizational effectiveness and survival (George et al., 2016; Adomako et al., 2021). However, some of the major challenges that hampers the growth of SMEs sector in Africa is resource constraint that is occasioned by poor infrastructure and institutional void, in supporting the growth of these firms. Such resource constraints affect the ability of SMEs to exploit the social capital for enhanced performance. Therefore, resource scarcity in this context (Chantramonklasri, 1990) prevents firms from developing this social capital resource to serve as a significant conduit through which MC enhances performance.

The study argued in hypothesis 2 that EO also mediates the relationship between MC and performance. We find from the results that EO serves as a mechanism through which MC affects performance in support of the hypothesis. The study, therefore, finds substantial evidence that EO presents as a mechanism that explains the MC-performance relationship of firms in the developing country's market. In line with the assertion of Hayton and Kelly (2006) and Riley *et al.* (2009) we find that MC drives greater EO which in turn drives performance (Lumpkin *et al.*, 2010), thereby transforming EO into that strategic firm resource that enables MC to positively influence performance. This is more so because those MC and EO of a firm are important prerequisites of entrepreneurship and superior performance (Wales, 2015).

The study argued in hypothesis (H3) that competitive intensity moderates the indirect relationship between MC and performance through SC, such that at high levels of competitive intensity the relationship between SC and performance is weakened. Insightful findings in examination of the moderating effect of competitive intensity on MC in support of hypothesis 4 indicate that whereas competitive intensity moderates the indirect MC-performance relationship, the indirect effect of MC on performance is stronger at lower levels of competitive intensity and weaker at higher levels. This implies that competitive intensity imposes a buffering interaction on this relationship. Thus whereas SC, may fail to significantly mediate the MC-performance relationship, this indirect link is stronger at lower levels of competitive intensity. The result is similar to that of Auh and Menguc (2005) who argued that increased competition causes less efficient firm performance among firms who seek to exploit their current resources because the ability of current resources to drive performance in a competitive environment is reduced.

Again, hypothesis (H4) posits that competitive intensity positively moderates the indirect relationship between MC and performance through EO, such that at high levels of competitive intensity the relationship between EO and performance is strengthened. The findings show that at higher levels of competitive intensity, the indirect MC-performance relationship through EO is strengthened. This is in line with findings of Auh and Menguc (2005), which explains that a firm's EO better drives performance in a developing economy during periods of high competition since the innovative, risk-taking and proactive posture will provide first-mover benefits towards creating competitive advantage as a result of the explorative nature of this orientation. Thus whereas EO successfully contributes towards the MC-performance relationship, this mediated relationship will be even more beneficial in highly competitive markets as it becomes a source of differentiation and sustained performance. This is because firms are encouraged to be more explorative and innovative during periods of increased competitive intensity (Aug and Menguc, 2005).

**5.2 Theoretical and managerial implications**

The findings of this study make numerous theoretical contributions to strategic management literature. Firstly, the study extends the empirical evidence which supports the theory that differentiated performance flows from those firm idiosyncratic resources as explained under the resource-based view (Penrose, 1959). By introducing the mediating roles of SC and EO in the positive MC-performance relationship, we demonstrate that although MC significantly influences performance, this effect is explained in part by the available levels of EO. The study further demonstrates that competitive intensity creates those boundary conditions under which these resources affect performance, such that competitive intensity moderates the relationship between MC and performance through SC and EO. Yet, interestingly we find that whereas this effect is positive and enhancing in the indirect relationship with EO, it takes a more buffering position in resource-performance relationships with SC in developing economies. The study, therefore, fills a lacuna in literature and seeks to provide a broader contextual effect of resources on performance. Thus this study provides evidence that will prove valuable at achieving universal generalizability of resource and management theories across the globe.

## 5.3 Managerial implications

In attempting to enhance performance and create competitive advantage firms must consider the strategic application of all available resources, assets, and orientations. The findings provide valuable information and implications for managers towards creating and enhancing superior performance. Firstly, the results, provide evidence of the importance of strategic market-focused firm orientations including SC and EO in driving performance. It is therefore crucial that managers build and foster quality SC among staff as a means to create that trusting environment that fosters knowledge acquisition and sharing and encourages a unified vision, norms, values and achievement of firm goals. Similarly, managers must facilitate an EO as that sets the tone for entrepreneurship and by extension performance. Encouraging and facilitating EO allows a firm to be innovative, proactive, take-risks in its market since this posture and its activities thereof create competitive advantage and enhance performance.

The study provides a blueprint for effectively utilizing and allocating resources during diverse environmental conditions. Managers who intend to fully utilize their social capital may invest in its development, however, firms faced with limited resources may effectively employ their current levels of social capital to drive performance. In periods of intense competition, this resource will be unable to enhance performance since the use of already existent strategies and resources becomes inefficient. Managers may, however, effectively drive performance with the firm's EO. And this orientation which has an explorative disposition becomes even more valuable and enhances performance during times of intense competition.

## 6.0     Limitations and recommendations for future research

Although important insights have been gained from this study, the study was faced with certain limitations that future studies should endeavor to surmount. Firstly, the study used subjective

measures against objective measures for performance. Although objective measures have gained prominence in performance research, substantial evidence exists demonstrating the validity of subjective measures used especially in the context of SMEs. The nature of these firms limits the ability to use objective measures because many of them fail to provide an accurate report on their financial statements for fear of being taxed by the governments. Besides Wall *et al.*, (2004) argues the high correlations present between subjective and objective measures. Secondly, the cross-sectional nature of the data used curtailed the opportunity to draw presumptions on cause and effect relationships. A longitudinal study would provide more vigorous suppositions of existent relationships. Lastly, the study used data from Ghana, a small economy in Sub-Saharan Africa. Although the findings are revealing, they lack ability for generalization among all African or developing economies and therefore generalizing the findings must be done with caution. We advise that future studies must include two or more countries in Africa to achieve generalization.

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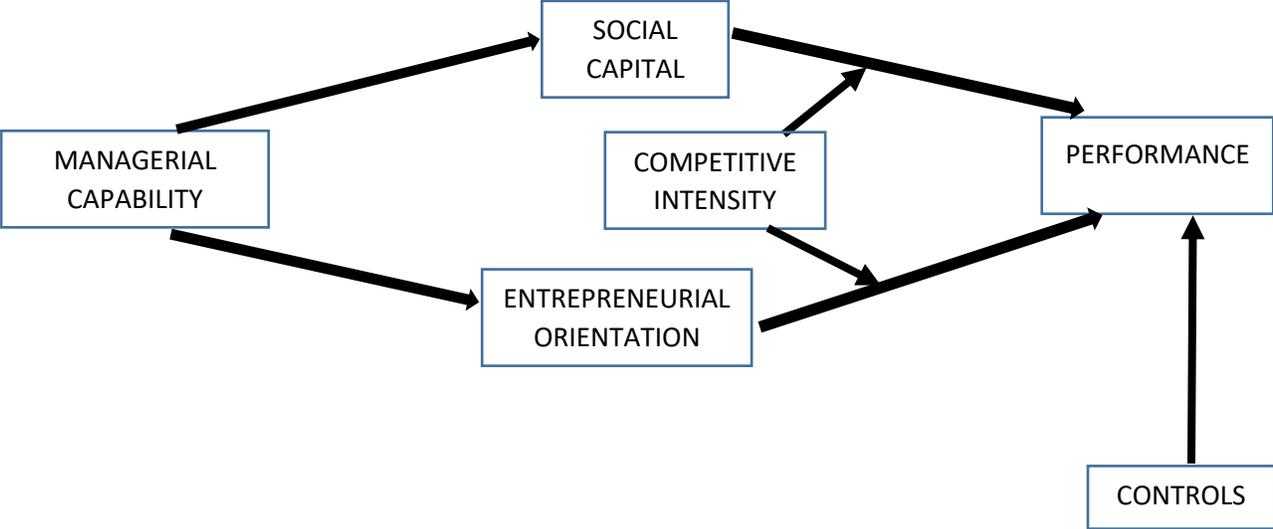
**Figure 1: Conceptual model**
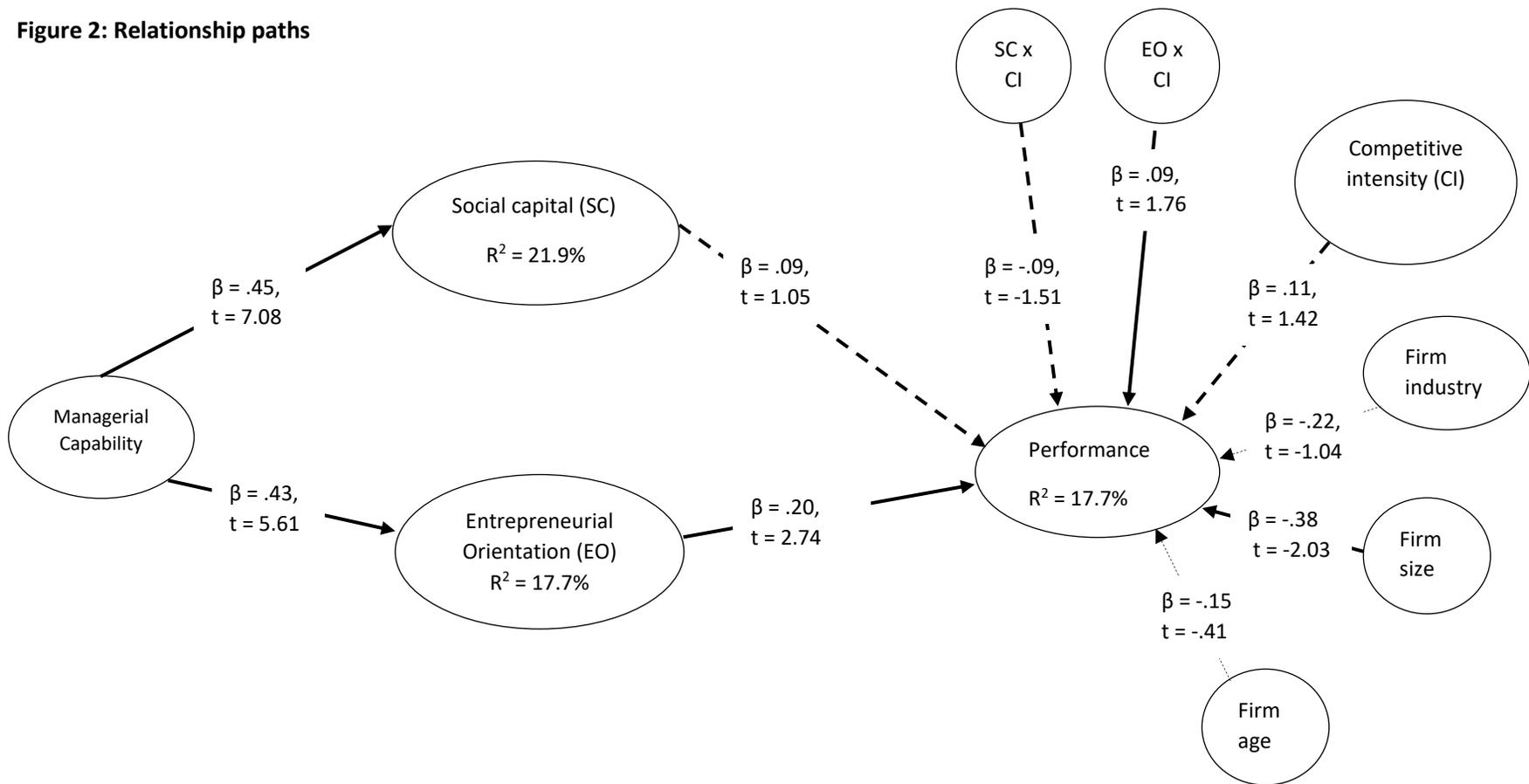
**Figure 2: Relationship paths**



Notes:

1. Broken paths are not significant
2. Path with t-values greater than 1.99 are significant at 5% (2-tailed test)
3. Paths with t-values greater than 2.56 are significant at 1% (2-tailed test)

**Figure 3. Representation of the moderating role of competitive intensity in the indirect relationship between MC and performance, through SC**
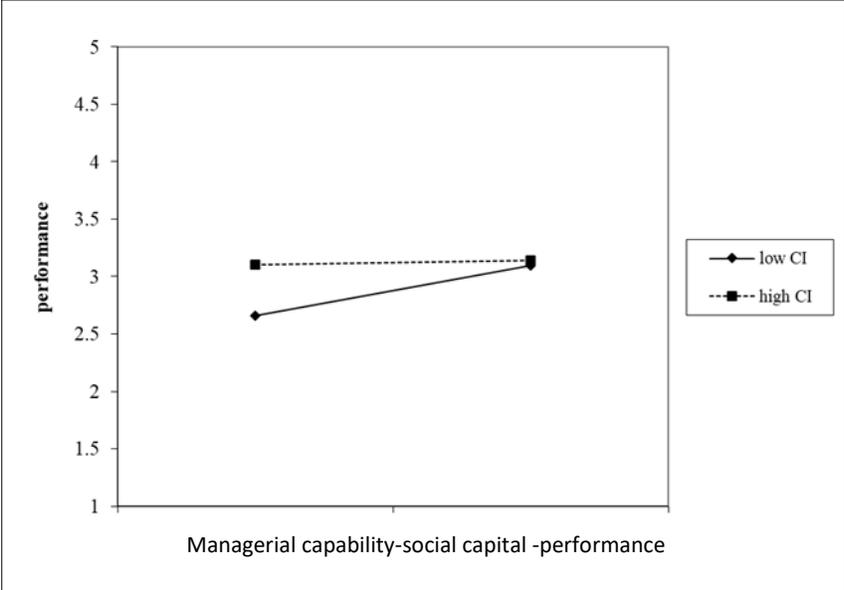


Managerial capability-social capital -performance

**Figure 4. Representation of the moderating role of competitive intensity in the indirect relationship between MC and performance, through SC**
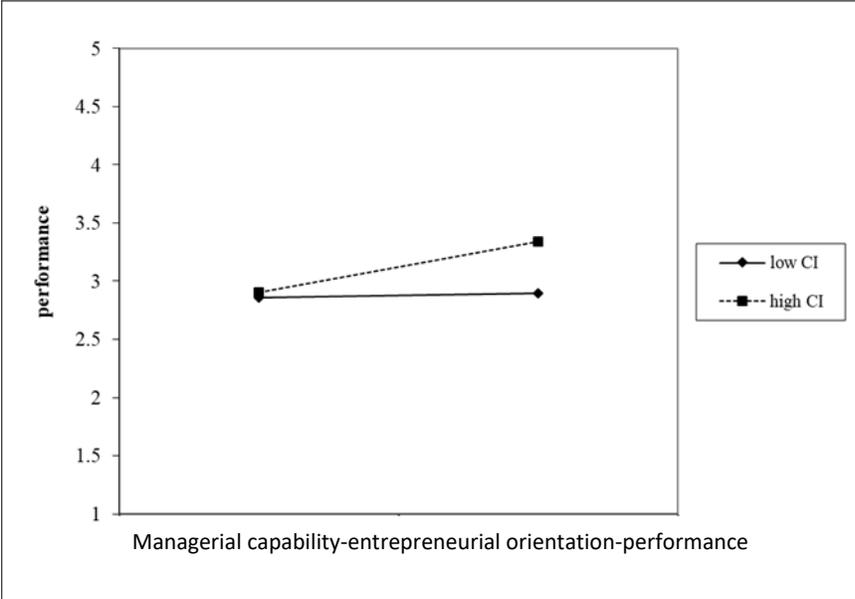


Managerial capability-entrepreneurial orientation-performance

**Table 1: Fit indices of measurement models**

| Item Description | Loadings (t-values) |
|---|---|
| **Entrepreneurial Orientation (Lumpkin & Dess, 2001) α =0.850 CR=.838 AVE=.513** | |
| Adopts a bold, aggressive posture In dealing with decision making situations involving uncertainty | 0.55(fixed) |
| Initiates changes upon which competitors react to | 0.73(7.34) |
| Often identifies future market trends ahead of competition | 0.83(7.80) |
| Aggressively and actively pursues market opportunities ahead of competition | 0.80(7.69) |
| Usually among the first to introduce new operating technologies, administrative techniques and other novel ideas | 0.64(6.82) |
| **Social Capital (Leana & Pil, 2006) α =0.867 CR=.895 AVE=.588** | |
| Staffs engage in open and honest communication with one another. | 0.70(fixed) |
| There is a high level of trust between top management and staff. | 0.76(10.13) |
| Workers in this company are trustworthy. | 0.79(10.48) |
| The workforce of this company shows a great deal of integrity | 0.82(10.81) |
| There is a high level of trust between officers | 0.82(10.78) |
| Workers share the same ambitions and vision for the company. | 0.70(9.31) |
| **Managerial Capability (Spanos and Lioukas, 2001) α =0.837 CR=.891 AVE=.671** | |
| Ability to allocate resources (e.g. financial, employees) to achieve the firm's goals | 0.82(fixed) |
| Ability to coordinate different areas of the business to achieve results | 0.85(14.07) |
| Ability and expertise to design jobs to suit staff capabilities and interest | 0.80(13.06) |
| Ability to implement policies and strategies that achieve results | 0.81(13.18) |
| **Competitive Intensity (Jaworski, and Kohli, 1993) α =0.715 CR=.838 AVE=.566** | |
| Frequency of new products/service introductions | 0.74(fixed) |
| Increase in the number of companies that have access to the same marketing channels | 0.84(11.54) |
| The frequency of changes in government regulations affecting the industry | 0.77(10.67) |
| Increase in the number of major competitors | 0.65(8.89) |
| **Performance (Zou, Taylor and Osland, 1998; Huo, 2012) α =0.785 CR=.810 AVE=.518** | |
| Growth in Market share | 0.77(fixed) |
| Return on Investment (ROI) | 0.77(10.29) |
| Employment Growth | 0.65(8.78) |
| Cost of production/operation | 0.68(9.23) |
| **Goodness of Fit indices** | |

| GROUP | $\chi2$/DF | RMSEA | P-value | NNFI | CFI | SRMR |
|---|---|---|---|---|---|---|
| **EO & SC** | 77.58/43 | 0.063 | 0.00096 | 0.959 | 0.968 | 0.0517 |
| **MC** | 5.66/5 | 0.025 | 0.34094 | 0.998 | 0.999 | 0.0185 |
| **CI & PEF** | 23.93/19 | 0.036 | 0.199 | 0.992 | 0.995 | 0.0312 |
| **Together** | 425.75/220 | 0.068 | 0.000 | 0.892 | 0.906 | 0.0551 |

**Table 2: Descriptive Statistics and Correlations**

|  | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 |
|---|---|---|---|---|---|---|---|---|
| Entrepreneurial orientation | 1 | | | | | | | |
| Social Capital | .233** | 1 | | | | | | |
| Managerial Capability | .295** | .386** | 1 | | | | | |
| Competitive intensity | .233** | .272** | .457** | 1 | | | | |
| Performance | .277** | .332** | .346** | .259** | 1 | | | |
| Industry | -.045 | -.065 | -0.76 | -.122 | -.144* | 1 | | |
| Firm size | -.120 | .043 | -.008 | .060 | .002 | -.352** | 1 | |
| Firm age | -.086 | -.099 | -.136 | -.105 | .151* | .038 | .007 | 1 |
| Mean | 4.681 | 5.300 | 5.333 | 4.859 | 4.893 | .1505 | .218 | .300 |
| SD | 1.195 | 1.013 | 1.004 | 1.189 | 1.102 | .358 | .414 | .211 |

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

**Table 3: Direct, mediation, and moderated mediation results**

| Effect type | Path | Effect | (Boot) SE | (Boot) LLCI | (Boot) ULCI |
|---|---|---|---|---|---|
| Direct[1] | Managerial Capability → Performance | .20[*] | .08 | .04 | .36 |
| Mediation[1] | Managerial Capability → Social Capital → Performance | .06 | .04 | -.01 | .14 |
| | Managerial Capability → Entrepreneurial Orientation → Performance | .06* | .03 | .002 | .013 |
| | Total effect | .26* | .08 | .10 | .41 |
| Moderated mediation[2] | Managerial Capability → (SC × CI) → Performance | .08 | .05 | -.02 | .19 |
| | Managerial Capability →(SC × *low* CI) → Performance | .04 | .04 | -.05 | .12 |
| | Managerial Capability → (SC × *high* CI) → Performance | -.01 | .05 | -.13 | .09 |
| | Managerial Capability → (EO × CI) → Performance | .04 | .05 | -.05 | .13 |
| | Managerial Capability → (EO × *low* CI) → Performance | .09* | .04 | .01 | .17 |
| | Managerial Capability → (EO × *high* CI) → Performance | .13* | .06 | .03 | .26 |

Notes:

[1] Covariates in model of outcome include firm industry, firm size, firm age, and competitive intensity.

[2] Covariates in model of outcome include firm industry, firm size, and firm age.

SC: social capital; EO: entrepreneurial orientation

[*]path significant at 5% (2-tailed test).

Number of bootstrap samples = 5000.